CHAPTER

05

TIME LIMITS/ MAINTENANCE CHECKS

CHAPTER 05
TIME LIMITS/MAINTENANCE CHECKS

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258	May 15/2023	
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205	Sep 15/2021	
R 206	Sep 15/2023	
R 207	Sep 15/2023	
R 208	Sep 15/2023	
209	Sep 15/2021	
210	Sep 15/2021	
211	Sep 15/2021	
212	Sep 15/2021	
213	Sep 15/2021	
214	May 15/2023	
215	Sep 15/2021	
216	Sep 15/2021	
217	Sep 15/2021	

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Subject/Page	Date	COC
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218	Sep 15/2021	
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05-42-06		
201	May 15/2023	
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203	May 15/2023	
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R 206	Sep 15/2023	
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R 208	Sep 15/2023	
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211	Sep 15/2021	
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220	Sep 15/2021	
05-51-01		
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R 203	Sep 15/2023	
R 204	Sep 15/2023	
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R 207	Sep 15/2023	
R 208	Sep 15/2023	
R 209	Sep 15/2023	
R 210	Sep 15/2023	
R 211	Sep 15/2023	
O 212	Sep 15/2023	
05-51-04		
201	Jan 15/2022	
R 202	Sep 15/2023	
R 203	Sep 15/2023	
R 204	Sep 15/2023	
O 205	Sep 15/2023	
R 206	Sep 15/2023	
R 207	Sep 15/2023	
O 208	Sep 15/2023	
A 209	Sep 15/2023	
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05-51-07		
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R 202	Sep 15/2023	
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R 205	Sep 15/2023	
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207	Sep 15/2022	
208	Sep 15/2022	
R 209	Sep 15/2023	
R 210	Sep 15/2023	
R 211	Sep 15/2023	
212	Sep 15/2022	
05-51-08		
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05-51-13		
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05-51-14		
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05-51-15		
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R 202	Sep 15/2023	
05-51-16		
201	Sep 15/2021	
202	Sep 15/2021	
05-51-17		
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202	Sep 15/2021	
R 203	Sep 15/2023	
R 204	Sep 15/2023	
R 205	Sep 15/2023	

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ECCN 9E991 BOEING PROPRIETARY - See title page for details

Subject/Page	Date	COC
05-51-17 (cont)		
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R 202	Sep 15/2023	
R 203	Sep 15/2023	
R 204	Sep 15/2023	
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R 207	Sep 15/2023	
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05-51-19		
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222	May 15/2023	
05-51-21		
201	May 15/2022	
202	May 15/2022	
203	May 15/2022	

Subject/Page	Date	COC
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05-51-24		
201	Sep 15/2021	
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05-51-27		
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R 202	Sep 15/2023	
O 203	Sep 15/2023	
R 204	Sep 15/2023	
205	Jan 15/2023	
R 206	Sep 15/2023	
207	Jan 15/2023	
R 208	Sep 15/2023	
05-51-28		
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05-51-29		
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203	Sep 15/2021	
204	Sep 15/2021	
05-51-31		
201	Sep 15/2021	
202	Sep 15/2021	

Subject/Page	Date	COC
05-51-31 (cont)		
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204	Jan 15/2023	
R 205	Sep 15/2023	
R 206	Sep 15/2023	
R 207	Sep 15/2023	
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R 211	Sep 15/2023	
O 212	Sep 15/2023	
O 213	Sep 15/2023	
O 214	Sep 15/2023	
O 215	Sep 15/2023	
216	Sep 15/2021	
217	Sep 15/2021	
218	Sep 15/2021	
05-51-32		
201	Sep 15/2021	
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05-51-34		
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05-51-35		
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208	May 15/2023	
209	May 15/2023	
210	May 15/2023	

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Subject/Page	Date	COC
05-51-36		
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R 202	Sep 15/2023	
203	Sep 15/2021	
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05-51-42		
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05-51-44		
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05-51-47		
201	Sep 15/2021	
202	Sep 15/2021	
05-51-48		
201	May 15/2023	
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05-51-51		
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207	Sep 15/2021	
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05-51-52		
201	Sep 15/2021	
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05-51-53		
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203	Sep 15/2021	
204	Sep 15/2021	

Subject/Page	Date	COC
05-51-54		
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05-51-56		
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05-51-57		
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05-51-59		
201	Jan 15/2023	
202	Sep 15/2021	
05-51-67		
R 201	Sep 15/2023	
O 202	Sep 15/2023	
R 203	Sep 15/2023	
R 204	Sep 15/2023	
205	Jan 15/2023	
206	Sep 15/2021	
05-51-68		
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R 202	Sep 15/2023	
R 203	Sep 15/2023	
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R 205	Sep 15/2023	
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R 209	Sep 15/2023	
210	May 15/2023	
211	May 15/2022	
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Subject/Page	Date	COC
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05-51-81		
201	Sep 15/2021	
202	Sep 15/2021	
05-51-91		
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208	Sep 15/2021	
05-51-92		
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202	Sep 15/2021	
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204	Sep 15/2021	
05-51-95		
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O 605	Sep 15/2023	
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Subject/Page	Date	COC
05-51-97		
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202	Sep 15/2021	
05-51-98		
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202	Jan 15/2023	
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05-51-99		
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05-55-21		
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Subject/Page	Date	COC
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610	Sep 15/2021	
611	Sep 15/2021	
612	May 15/2023	
05-55-25		
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621	Jan 15/2023	
622	Sep 15/2021	
623	Jan 15/2023	

Subject/Page	Date	COC
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625	May 15/2022	
626	Sep 15/2021	
627	Sep 15/2021	
628	Jan 15/2023	
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658	Sep 15/2022	
659	Sep 15/2022	

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Subject/Page	Date	COC
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661	Sep 15/2022	
662	Sep 15/2022	
663	Sep 15/2022	
664	Sep 15/2022	
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666	May 15/2023	
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05-55-26		
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617	May 15/2022	
618	Sep 15/2021	
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05-55-26 (cont)		
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05-55-46		
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605	Sep 15/2021	
606	Jan 15/2023	
607	Jan 15/2023	

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Subject/Page	Date	COC
05-55-46 (cont)		
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05-55-47		
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R 605	Sep 15/2023	
606	Sep 15/2021	

Subject/Page	Date	COC
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05-56-02		
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Subject/Page	Date	COC
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207	Jan 15/2023	
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05-56-04		
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05-56-05		
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208	Sep 15/2021	
209	Sep 15/2021	
210	Jan 15/2023	

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CHAPTER 05
TIME LIMITS/MAINTENANCE CHECKS

SUBJECT	CHAPTER SECTION SUBJECT	CONF	PAGE	EFFECT
GENERAL TASK CARD INFORMATION	05-00-00		101	SIA ALL
General Task Instructions TASK 05-00-00-800-801			101	SIA ALL
TIME LIMITS/MAINTENANCE CHECKS - MAINTENANCE PRACTICES	05-00-00		201	SIA ALL
Airworthiness Limitation Precautions TASK 05-00-00-910-801			201	SIA ALL
Enhanced Zonal Inspection Program (EZAP) Precautions TASK 05-00-00-910-802			202	SIA ALL
Scheduled Maintenance Task (SMT) - Repair Time Limits TASK 05-00-00-750-801			203	SIA ALL
ZONE 100 - LOWER FUSELAGE - MAINTENANCE PRACTICES	05-41-01		201	SIA ALL
EXTERNAL - ZONAL (GV): Lower Fuselage TASK 05-41-01-210-801			201	SIA ALL
EXTERNAL - ZONAL (GVI): Radome TASK 05-41-01-210-833			206	SIA ALL
INTERNAL - ZONAL (GV): Radome TASK 05-41-01-210-802			208	SIA ALL
EXTERNAL - ZONAL (GVI): Area Forward of Nose Wheel Well TASK 05-41-01-210-834			211	SIA ALL
INTERNAL - ZONAL (GV): Area Forward of Nose Wheel Well TASK 05-41-01-210-803			213	SIA ALL
EXTERNAL - ZONAL (GVI): Area Above and Outboard of Nose Wheel Well TASK 05-41-01-210-835			216	SIA ALL
INTERNAL - ZONAL (GV): Area Above and Outboard of Nose Wheel Well TASK 05-41-01-210-804			218	SIA ALL
INTERNAL - ZONAL (GVI): Nose Landing Gear Wheel Well TASK 05-41-01-210-831			223	SIA ALL

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CHAPTER 05
TIME LIMITS/MAINTENANCE CHECKS

SUBJECT	CHAPTER SECTION SUBJECT	CONF	PAGE	EFFECT
INTERNAL - ZONAL (GV): Electrical and Electronics Compartment TASK 05-41-01-210-805			225	SIA ALL
EXTERNAL - ZONAL (GVI): Electrical and Electronics Compartment TASK 05-41-01-210-836			229	SIA ALL
INTERNAL - ZONAL (GV): Electrical and Electronics Compartment Access Door TASK 05-41-01-210-806			231	SIA ALL
INTERNAL - ZONAL (GV): Forward Cargo Compartment TASK 05-41-01-210-807			233	SIA ALL
INTERNAL - ZONAL (GV): Forward Cargo Compartment - Ceiling Liners Removed TASK 05-41-01-210-808			236	SIA ALL
INTERNAL - ZONAL (GV): Forward Cargo Compartment - Sidewall Liners and Insulation Removed TASK 05-41-01-210-809			239	SIA ALL
EXTERNAL - ZONAL (GVI): Forward Cargo Compartment TASK 05-41-01-210-837			242	SIA ALL
EXTERNAL - ZONAL (GV): Forward Cargo Door Surround Structure Fittings and Stops TASK 05-41-01-210-810			244	SIA ALL
EXTERNAL - ZONAL (GVI): Area Below Forward Cargo Compartment TASK 05-41-01-210-838			246	SIA ALL
INTERNAL - ZONAL (GV): Area Below Forward Cargo Compartment TASK 05-41-01-210-811			248	SIA ALL
EXTERNAL - ZONAL (GVI): Air Conditioning Distribution Bay TASK 05-41-01-210-839			251	SIA ALL
INTERNAL - ZONAL (GV): Air Conditioning Distribution Bay TASK 05-41-01-210-812			253	SIA ALL

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CHAPTER 05
TIME LIMITS/MAINTENANCE CHECKS

SUBJECT	CHAPTER SECTION SUBJECT	CONF	PAGE	EFFECT
INTERNAL - ZONAL (GVI): Keel Beam - Section 43 TASK 05-41-01-210-840			256	SIA ALL
EXTERNAL - ZONAL (GVI): Keel Beam - Section 43 TASK 05-41-01-210-841			258	SIA ALL
INTERNAL - ZONAL (GV): Area Above Center Section Wing Box TASK 05-41-01-210-813			260	SIA ALL
INTERNAL - ZONAL (GVI): Main Landing Gear Wheel Well TASK 05-41-01-210-832			260	SIA ALL
INTERNAL - ZONAL (GV): Pressure Deck Above Main Landing Gear Wheel Well TASK 05-41-01-210-814			262	SIA ALL
EXTERNAL - ZONAL (GVI): Keel Beam Sta 540 to 727 TASK 05-41-01-210-842			264	SIA ALL
INTERNAL - ZONAL (GV): Keel Beam (Part) Sta 540 to 727 TASK 05-41-01-210-815			266	SIA ALL
INTERNAL - ZONAL (GV): Center Section Wing Box TASK 05-41-01-210-816			270	SIA ALL
EXTERNAL - ZONAL (GVI): Aft Cargo Compartment TASK 05-41-01-210-843			273	SIA ALL
INTERNAL - ZONAL (GV): Aft Cargo Compartment TASK 05-41-01-210-817			275	SIA ALL
INTERNAL - ZONAL (GV): Aft Cargo Compartment - Upper Angled Sidewall and Ceiling Panels Removed TASK 05-41-01-210-818			278	SIA ALL
INTERNAL - ZONAL (GV): Aft Cargo Compartment - Sidewall Liners Removed TASK 05-41-01-210-819			281	SIA ALL

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SUBJECT	CHAPTER SECTION SUBJECT	CONF	PAGE	EFFECT
EXTERNAL - ZONAL (GV): Aft Cargo Door Surround Structure Fittings and Stops TASK 05-41-01-210-820			284	SIA ALL
INTERNAL - ZONAL (GV): Aft Cargo Compartment Vacuum Waste Compartment TASK 05-41-01-210-821			286	SIA ALL
EXTERNAL - ZONAL (GVI): Area Below Aft Cargo Compartment TASK 05-41-01-210-844			289	SIA ALL
INTERNAL - ZONAL (GV): Area Below Aft Cargo Compartment TASK 05-41-01-210-822			291	SIA ALL
EXTERNAL - ZONAL (GVI): Aft Cargo Compartment Equipment Bay TASK 05-41-01-210-845			294	SIA ALL
INTERNAL - ZONAL (GV): Aft Cargo Compartment Equipment Bay TASK 05-41-01-210-823			296	SIA ALL
EXTERNAL - ZONAL (GVI): Keel Beam Sta 727 to Sta 743.95 TASK 05-41-01-210-846			298	SIA ALL
INTERNAL - ZONAL (GVI): Keel Beam Sta 727 to sta 743.95 TASK 05-41-01-210-847			298.2	SIA ALL
EXTERNAL - ZONAL (GV): Wing to Body Fairing TASK 05-41-01-210-824			298.4	SIA ALL
EXTERNAL - ZONAL (GVI): Lower Wing to Body Fairing - Forward of Wing Box TASK 05-41-01-210-848			298.7	SIA ALL
INTERNAL - ZONAL (GV): Lower Wing to Body Fairing - Forward of Wing Box TASK 05-41-01-210-825			298.9	SIA ALL
EXTERNAL - ZONAL (GVI): Lower Wing to Body Fairing - Under Wing Box TASK 05-41-01-210-849			298.13	SIA ALL
INTERNAL - ZONAL (GV): Lower Wing to Body Fairing - Under Wing Box TASK 05-41-01-210-826			298.15	SIA ALL

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SUBJECT	CHAPTER SECTION SUBJECT	CONF	PAGE	EFFECT
EXTERNAL - ZONAL (GVI): Lower Wing to Body Fairing - Wheel Well TASK 05-41-01-210-850			298.19	SIA ALL
EXTERNAL - ZONAL (GVI): Lower Wing to Body Fairing - Aft of Wheel Well TASK 05-41-01-210-851			298.21	SIA ALL
INTERNAL - ZONAL (GV): Lower Wing to Body Fairing - Aft of Wheel Well TASK 05-41-01-210-827			298.23	SIA ALL
INTERNAL - ZONAL (GV): Lower Wing to Body Fairing - Aft of Wheel Well TASK 05-41-01-210-828			298.27	SIA ALL
EXTERNAL - ZONAL (GVI): Above Wing, Wing to Body Fairing - Right TASK 05-41-01-210-852			298.29	SIA ALL
INTERNAL - ZONAL (GV): Above Wing, Wing to Body Fairing - Right TASK 05-41-01-210-829			298.31	SIA ALL
INTERNAL - ZONAL (GV): Above Wing, Wing to Body Fairing - Left TASK 05-41-01-210-830			298.33	SIA ALL
EXTERNAL - ZONAL (GVI): Above Wing, Wing to Body Fairing - Left TASK 05-41-01-210-853			298.35	SIA ALL
INTERNAL - DETAILED: Center Wing Rear Spar Vapor Web TASK 05-41-01-211-801			298.37	SIA ALL
ZONE 200 - UPPER FUSELAGE - MAINTENANCE PRACTICES	05-41-02		201	SIA ALL
EXTERNAL - ZONAL (GVI): Upper Fuselage TASK 05-41-02-210-819			201	SIA ALL
EXTERNAL - ZONAL (GV): Flight Control Compartment TASK 05-41-02-210-801			203	SIA ALL
INTERNAL - ZONAL (GV): Flight Control Compartment - Control Stand TASK 05-41-02-210-802			205	SIA ALL

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SUBJECT	CHAPTER SECTION SUBJECT	CONF	PAGE	EFFECT
INTERNAL - ZONAL (GV): Flight Control Compartment - Ceiling Panels and Sidewall Console TASK 05-41-02-210-803			209	SIA ALL
EXTERNAL - ZONAL (GV): Passenger Compartment - Aft of Control Compartment to Forward Entry Door TASK 05-41-02-210-804			217	SIA ALL
INTERNAL - ZONAL (GV): Passenger Compartment - Section 41, Sta 270 to Sta 360 TASK 05-41-02-210-805			219	SIA ALL
INTERNAL - ZONAL (GV): Passenger Compartment - Aft of Control Compartment to Forward Entry Door TASK 05-41-02-210-806			222	SIA ALL
EXTERNAL - ZONAL (GV): Forward Passenger Entry Door Stops, Latches, and Hinges TASK 05-41-02-210-807			224	SIA ALL
EXTERNAL - ZONAL (GV): Forward Galley Service Door Stops, Latches, and Hinges TASK 05-41-02-210-808			226	SIA ALL
EXTERNAL - ZONAL (GV): Forward Passenger Compartment - Sta 360 to Sta 663.75 TASK 05-41-02-210-809			228	SIA ALL
INTERNAL - ZONAL (GV): Forward Passenger Compartment - Sta 360 to Sta 663.75 TASK 05-41-02-210-810			230	SIA ALL
INTERNAL - ZONAL (GV): Forward Passenger Compartment - Sta 360 to Sta 663.75 Wet Areas TASK 05-41-02-210-811			232	SIA ALL
INTERNAL - ZONAL (GV): Forward Passenger Compartment - Sta 360 to Sta 663.75 Dry Areas TASK 05-41-02-210-812			234	SIA ALL
EXTERNAL - ZONAL (GV): Aft Passenger Compartment - Sta 663.75 to Aft Pressure Bulkhead TASK 05-41-02-210-813			236	SIA ALL

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SUBJECT	CHAPTER SECTION SUBJECT	CONF	PAGE	EFFECT
INTERNAL - ZONAL (GV): Aft Passenger Compartment - Sta 663.75 to Aft Pressure Bulkhead TASK 05-41-02-210-814			238	SIA ALL
INTERNAL - ZONAL (GV): Aft Passenger Compartment - Sta 663.75 to Aft Pressure Bulkhead Wet Area TASK 05-41-02-210-815			240	SIA ALL
INTERNAL - ZONAL (GV): Passenger Compartment - Sta 663.75 to Aft Pressure Bulkhead Dry Area TASK 05-41-02-210-816			242	SIA ALL
EXTERNAL - ZONAL (GV): Aft Passenger Entry Door Stops, Latches, and Hinges TASK 05-41-02-210-817			244	SIA ALL
EXTERNAL - ZONAL (GV): Aft Galley Service Door Stops, Latches, and Hinges TASK 05-41-02-210-818			246	SIA ALL
ZONE 300 - EMPENNAGE - MAINTENANCE PRACTICES	05-41-03		201	SIA ALL
EXTERNAL - ZONAL (GV): AREA AFT OF THE PRESSURE BULKHEAD TASK 05-41-03-210-801			201	SIA ALL
INTERNAL - ZONAL (GV): Area Aft of Pressure Bulkhead TASK 05-41-03-210-802			203	SIA ALL
EXTERNAL - ZONAL (GVI): Area Aft of Pressure Bulkhead TASK 05-41-03-210-830			207	SIA ALL
INTERNAL - ZONAL (GV): Stabilizer Torsion Box Compartment TASK 05-41-03-210-803			209	SIA ALL
EXTERNAL - ZONAL (GVI): Stabilizer Torsion Box Compartment TASK 05-41-03-210-831			211	SIA ALL
INTERNAL - ZONAL (GV): APU Compartment TASK 05-41-03-210-804			213	SIA ALL

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SUBJECT	CHAPTER SECTION SUBJECT	CONF	PAGE	EFFECT
EXTERNAL - ZONAL (GVI): APU Compartment TASK 05-41-03-210-832			215	SIA ALL
INTERNAL - ZONAL (GV): Tail Cone TASK 05-41-03-210-805			217	SIA ALL
EXTERNAL - ZONAL (GVI): Tail Cone TASK 05-41-03-210-833			219	SIA ALL
EXTERNAL - ZONAL (GV): VERTICAL FIN AND HORIZONTAL STABILIZER TASK 05-41-03-210-806			221	SIA ALL
EXTERNAL - ZONAL (GV): VERTICAL FIN - DORSAL FIN TASK 05-41-03-210-807			223	SIA ALL
INTERNAL - ZONAL (GVI): Vertical Fin - Dorsal Fin TASK 05-41-03-210-834			225	SIA ALL
EXTERNAL - ZONAL (GV): VERTICAL FIN - LEADING EDGE TASK 05-41-03-210-808			227	SIA ALL
INTERNAL - ZONAL (GV): VERTICAL FIN - LEADING EDGE TASK 05-41-03-210-809			229	SIA ALL
INTERNAL - ZONAL (GV): VERTICAL FIN - LEADING EDGE - HF ANTENNA AREA TASK 05-41-03-210-840			232	SIA ALL
INTERNAL - ZONAL (GV): Vertical Fin - Front Spar to Rear Spar TASK 05-41-03-210-810			235	SIA ALL
EXTERNAL - ZONAL (GV): VERTICAL FIN - FRONT SPAR TO REAR SPAR TASK 05-41-03-210-811			239	SIA ALL
INTERNAL - ZONAL (GV): Vertical Fin - Rear Spar to Trailing Edge TASK 05-41-03-210-812			241	SIA ALL
EXTERNAL - ZONAL (GV): VERTICAL FIN - REAR SPAR TO TRAILING EDGE TASK 05-41-03-210-813			245	SIA ALL
EXTERNAL - ZONAL (GV): RUDDER TASK 05-41-03-210-814			247	SIA ALL

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SUBJECT	CHAPTER SECTION SUBJECT	CONF	PAGE	EFFECT
EXTERNAL - ZONAL (GV): VERTICAL FIN TIP TASK 05-41-03-210-815			249	SIA ALL
INTERNAL - ZONAL (GVI): Vertical Fin - Fin Tip TASK 05-41-03-210-835			251	SIA ALL
EXTERNAL - ZONAL (GV): HORIZONTAL STABILIZER - LEADING EDGE - LEFT TASK 05-41-03-210-816			253	SIA ALL
INTERNAL - ZONAL (GVI): Horizontal Stabilizer - Leading Edge - Left TASK 05-41-03-210-836			255	SIA ALL
EXTERNAL - ZONAL (GV): HORIZONTAL STABILIZER - FRONT SPAR TO REAR SPAR - LEFT TASK 05-41-03-210-817			257	SIA ALL
INTERNAL - ZONAL (GV): HORIZONTAL STABILIZER - FRONT SPAR TO REAR SPAR - LEFT TASK 05-41-03-210-818			259	SIA ALL
INTERNAL - ZONAL (GV): Horizontal Stabilizer - Rear Spar to Trailing Edge - Left TASK 05-41-03-210-819			261	SIA ALL
EXTERNAL - ZONAL (GV): HORIZONTAL STABILIZER - REAR SPAR TO TRAILING EDGE - LEFT TASK 05-41-03-210-820			265	SIA ALL
EXTERNAL - ZONAL (GV): HORIZONTAL STABILIZER - ELEVATOR - LEFT TASK 05-41-03-210-821			267	SIA ALL
EXTERNAL - ZONAL (GV): HORIZONTAL STABILIZER - STABILIZER TIP - LEFT TASK 05-41-03-210-822			269	SIA ALL
INTERNAL - ZONAL (GVI): Horizontal Stabilizer - Stabilizer Tip - Left TASK 05-41-03-210-837			271	SIA ALL
EXTERNAL - ZONAL (GV): HORIZONTAL STABILIZER - LEADING EDGE - RIGHT TASK 05-41-03-210-823			273	SIA ALL

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SUBJECT	CHAPTER SECTION SUBJECT	CONF	PAGE	EFFECT
INTERNAL - ZONAL (GVI): Horizontal Stabilizer - Leading Edge - Right TASK 05-41-03-210-838			275	SIA ALL
EXTERNAL - ZONAL (GV): HORIZONTAL STABILIZER - FRONT SPAR TO REAR SPAR - RIGHT TASK 05-41-03-210-824			277	SIA ALL
INTERNAL - ZONAL (GV): HORIZONTAL STABILIZER - FRONT SPAR TO REAR SPAR - RIGHT TASK 05-41-03-210-825			279	SIA ALL
INTERNAL - ZONAL (GV): Horizontal Stabilizer - Rear Spar to Trailing Edge - Right TASK 05-41-03-210-826			281	SIA ALL
EXTERNAL - ZONAL (GV): HORIZONTAL STABILIZER - REAR SPAR TO TRAILING EDGE - RIGHT TASK 05-41-03-210-827			285	SIA ALL
EXTERNAL - ZONAL (GV): HORIZONTAL STABILIZER - ELEVATOR - RIGHT TASK 05-41-03-210-828			287	SIA ALL
EXTERNAL - ZONAL (GV): HORIZONTAL STABILIZER - STABILIZER TIP - RIGHT TASK 05-41-03-210-829			289	SIA ALL
INTERNAL - ZONAL (GVI): Horizontal Stabilizer - Stabilizer Tip - Right TASK 05-41-03-210-839			291	SIA ALL
ZONE 400 - POWER PLANT AND STRUT - MAINTENANCE PRACTICES	05-41-04		201	SIA ALL
EXTERNAL - ZONAL (GV): POWERPLANT NO. 1 TASK 05-41-04-210-801			201	SIA ALL
EXTERNAL - ZONAL (GV): Engine No. 1 TASK 05-41-04-210-802			203	SIA ALL
EXTERNAL - ZONAL (GV): FAN COWL - ENGINE NO. 1 TASK 05-41-04-210-803			206	SIA ALL

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SUBJECT	CHAPTER SECTION SUBJECT	CONF	PAGE	EFFECT
EXTERNAL - ZONAL (GV): THRUST REVERSER - ENGINE NO. 1 TASK 05-41-04-210-804			208	SIA ALL
EXTERNAL - ZONAL (GV): Thrust Reverser - Engine No. 1 TASK 05-41-04-210-805			211	SIA ALL
EXTERNAL - ZONAL (GV): POWERPLANT NO. 2 TASK 05-41-04-210-806			214	SIA ALL
EXTERNAL - ZONAL (GV): Engine No. 2 TASK 05-41-04-210-807			216	SIA ALL
EXTERNAL - ZONAL (GV): FAN COWL - ENGINE NO. 2 TASK 05-41-04-210-808			219	SIA ALL
EXTERNAL - ZONAL (GV): THRUST REVERSER - ENGINE NO. 2 TASK 05-41-04-210-809			221	SIA ALL
EXTERNAL - ZONAL (GV): Thrust Reverser - Engine No. 2 TASK 05-41-04-210-810			224	SIA ALL
EXTERNAL - ZONAL (GV): Forward Strut Fairing - Engine No. 1 TASK 05-41-04-210-811			227	SIA ALL
INTERNAL - ZONAL (GV): Fan Cowl Support Beam - Engine No. 1 TASK 05-41-04-210-812			229	SIA ALL
INTERNAL - ZONAL (GV): Strut Torque Box - Engine No. 1 TASK 05-41-04-210-813			231	SIA ALL
INTERNAL - ZONAL (GV): Aft Strut Fairing - Engine No. 1 TASK 05-41-04-210-814			234	SIA ALL
EXTERNAL - ZONAL (GV): Forward Strut Fairing - Engine No. 2 TASK 05-41-04-210-815			238	SIA ALL
INTERNAL - ZONAL (GV): Fan Cowl Support Beam - Engine No. 2 TASK 05-41-04-210-816			240	SIA ALL

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SUBJECT	CHAPTER SECTION SUBJECT	CONF	PAGE	EFFECT
INTERNAL - ZONAL (GV): Strut Torque Box - Engine No. 2 TASK 05-41-04-210-817			242	SIA ALL
INTERNAL - ZONAL (GV): Aft Strut Fairing - Engine No. 2 TASK 05-41-04-210-818			245	SIA ALL
ZONE 500 - LEFT WING - MAINTENANCE PRACTICES	05-41-05		201	SIA ALL
EXTERNAL - ZONAL (GV): LEFT WING TASK 05-41-05-210-801			201	SIA ALL
EXTERNAL - ZONAL (GV): WINGLET - LEFT WING TASK 05-41-05-210-802			204	SIA ALL
INTERNAL - ZONAL (GV): WINGLET - LEFT WING TASK 05-41-05-210-803			206	SIA ALL
EXTERNAL - ZONAL (GV): LEADING EDGE TO FRONT SPAR - INBD OF NACELLE STRUT - LEFT WING TASK 05-41-05-210-804			210	SIA ALL
INTERNAL - ZONAL (GV): Leading Edge to Front Spar - Inboard of Nacelle Strut - Left Wing TASK 05-41-05-210-805			212	SIA ALL
EXTERNAL - ZONAL (GV): KRUEGER FLAPS NO. 1 AND 2 - LEFT WING TASK 05-41-05-210-806			217	SIA ALL
INTERNAL - ZONAL (GV): KRUEGER FLAPS NO. 1 AND 2 - LEFT WING TASK 05-41-05-210-807			219	SIA ALL
EXTERNAL - ZONAL (GV): LEADING EDGE TO FRONT SPAR - OUTBD OF NACELLE STRUT - LEFT WING TASK 05-41-05-210-808			221	SIA ALL
INTERNAL - ZONAL (GV): Leading Edge to Front Spar - Outboard of Nacelle Strut - Left Wing TASK 05-41-05-210-809			223	SIA ALL

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SUBJECT	CHAPTER SECTION SUBJECT	CONF	PAGE	EFFECT
EXTERNAL - ZONAL (GV): SLATS NO. 1, 2, 3, 4 - LEFT WING TASK 05-41-05-210-810			228	SIA ALL
INTERNAL - ZONAL (GV): CENTER FUEL TANK - LEFT WING TASK 05-41-05-210-811			230	SIA ALL
EXTERNAL - ZONAL (GV): CENTER FUEL TANK - LEFT WING TASK 05-41-05-210-812			232	SIA ALL
INTERNAL - ZONAL (GV): MAIN FUEL TANK - LEFT WING TASK 05-41-05-210-813			234	SIA ALL
EXTERNAL - ZONAL (GV): MAIN FUEL TANK - LEFT WING TASK 05-41-05-210-814			237	SIA ALL
INTERNAL - ZONAL (GV): SURGE TANK - LEFT WING TASK 05-41-05-210-815			239	SIA ALL
EXTERNAL - ZONAL (GV): SURGE TANK - LEFT WING TASK 05-41-05-210-816			241	SIA ALL
EXTERNAL - ZONAL (GV): DRY BAY - LEFT WING TASK 05-41-05-210-817			243	SIA ALL
INTERNAL - ZONAL (GVI): Dry Bay - Left Wing TASK 05-41-05-210-837			245	SIA ALL
INTERNAL - ZONAL (GV): Flap Support No. 4 - Left Wing TASK 05-41-05-210-818			247	SIA ALL
EXTERNAL - ZONAL (GV): FAIRING FLAP SUPPORT NO. 3 - LEFT WING TASK 05-41-05-210-819			250	SIA ALL
INTERNAL - ZONAL (GV): Fairing Flap Support No. 3 - Left Wing TASK 05-41-05-210-820			252	SIA ALL
EXTERNAL - ZONAL (GV): FAIRING FLAP SUPPORT NO. 2 - LEFT WING TASK 05-41-05-210-821			254	SIA ALL

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SUBJECT	CHAPTER SECTION SUBJECT	CONF	PAGE	EFFECT
INTERNAL - ZONAL (GV): Fairing Flap Support No. 2 - Left Wing TASK 05-41-05-210-822			256	SIA ALL
EXTERNAL - ZONAL (GV): FAIRING FLAP SUPPORT NO. 1 - LEFT WING TASK 05-41-05-210-823			258	SIA ALL
INTERNAL - ZONAL (GV): Fairing Flap Support No. 1 - Left Wing TASK 05-41-05-210-824			260	SIA ALL
EXTERNAL - ZONAL (GV): REAR SPAR TO LANDING GEAR SUPPORT BEAM - LEFT WING TASK 05-41-05-210-825			262	SIA ALL
INTERNAL - ZONAL (GV): REAR SPAR TO LANDING GEAR SUPPORT BEAM - LEFT WING TASK 05-41-05-210-826			264	SIA ALL
EXTERNAL - ZONAL (GV): INBOARD SPOILER NO. 6 - L. WING TASK 05-41-05-210-827			267	SIA ALL
EXTERNAL - ZONAL (GV): INBOARD FLAPS - LEFT WING TASK 05-41-05-210-828			270	SIA ALL
INTERNAL - ZONAL (GV): INBOARD MAIN FLAP - LEFT WING TASK 05-41-05-210-829			272	SIA ALL
EXTERNAL - ZONAL (GV): Rear Spar to T.E. - Outbd of Inbd Flap - Inbd of Fixed T.E. - L. Wing TASK 05-41-05-210-830			274	SIA ALL
EXTERNAL - ZONAL (GV): SPOILERS NO. 1, 2, 3, 4, 5 - LEFT WING TASK 05-41-05-210-831			276	SIA ALL
EXTERNAL - ZONAL (GV): OUTBOARD FLAPS - LEFT WING TASK 05-41-05-210-832			279	SIA ALL
EXTERNAL - ZONAL (GV): FIXED TRAILING EDGE - LEFT WING TASK 05-41-05-210-833			281	SIA ALL

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SUBJECT	CHAPTER SECTION SUBJECT	CONF	PAGE	EFFECT
INTERNAL - ZONAL (GV): FIXED TRAILING EDGE - LEFT WING TASK 05-41-05-210-834			283	SIA ALL
INTERNAL - ZONAL (GV): Fixed Trailing Edge - Left Wing TASK 05-41-05-210-835			286	SIA ALL
EXTERNAL - ZONAL (GV): AILERON - LEFT WING TASK 05-41-05-210-836			288	SIA ALL
ZONE 600 - RIGHT WING - MAINTENANCE PRACTICES	05-41-06		201	SIA ALL
EXTERNAL - ZONAL (GV): RIGHT WING TASK 05-41-06-210-801			201	SIA ALL
EXTERNAL - ZONAL (GV): WINGLET - RIGHT WING TASK 05-41-06-210-802			204	SIA ALL
INTERNAL - ZONAL (GV): WINGLET - RIGHT WING TASK 05-41-06-210-803			206	SIA ALL
EXTERNAL - ZONAL (GV): LEADING EDGE TO FRONT SPAR - INBD OF NACELLE STRUT - RIGHT WING TASK 05-41-06-210-804			210	SIA ALL
INTERNAL - ZONAL (GV): Leading Edge to Front Spar - Inbd of Nacelle Strut - Right Wing TASK 05-41-06-210-805			212	SIA ALL
EXTERNAL - ZONAL (GV): KRUEGER FLAPS NO. 3 AND 4 - RIGHT WING TASK 05-41-06-210-806			217	SIA ALL
INTERNAL - ZONAL (GV): KRUEGER FLAPS NO. 3 AND 4 - RIGHT WING TASK 05-41-06-210-807			219	SIA ALL
EXTERNAL - ZONAL (GV): LEADING EDGE TO FRONT SPAR - OUTBD OF NACELLE STRUT - RIGHT WING TASK 05-41-06-210-808			221	SIA ALL

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SUBJECT	CHAPTER SECTION SUBJECT	CONF	PAGE	EFFECT
INTERNAL - ZONAL (GV): Leading Edge to Front Spar - Outbd of Nacelle Strut - Right Wing TASK 05-41-06-210-809			223	SIA ALL
EXTERNAL - ZONAL (GV): SLATS NO. 5, 6, 7, 8 - RIGHT WING TASK 05-41-06-210-810			228	SIA ALL
INTERNAL - ZONAL (GV): CENTER FUEL TANK - RIGHT WING TASK 05-41-06-210-811			230	SIA ALL
EXTERNAL - ZONAL (GV): CENTER FUEL TANK - RIGHT WING TASK 05-41-06-210-812			232	SIA ALL
INTERNAL - ZONAL (GV): MAIN FUEL TANK - RIGHT WING TASK 05-41-06-210-813			234	SIA ALL
EXTERNAL - ZONAL (GV): MAIN FUEL TANK - RIGHT WING TASK 05-41-06-210-814			237	SIA ALL
INTERNAL - ZONAL (GV): SURGE TANK - RIGHT WING TASK 05-41-06-210-815			239	SIA ALL
EXTERNAL - ZONAL (GV): SURGE TANK - RIGHT WING TASK 05-41-06-210-816			241	SIA ALL
EXTERNAL - ZONAL (GV): DRY BAY - RIGHT WING TASK 05-41-06-210-817			243	SIA ALL
INTERNAL - ZONAL (GVI): Dry Bay - Right Wing TASK 05-41-06-210-837			245	SIA ALL
INTERNAL - ZONAL (GV): Flap Support No. 5 - Right Wing TASK 05-41-06-210-818			247	SIA ALL
EXTERNAL - ZONAL (GV): FAIRING FLAP SUPPORT NO. 6 - RIGHT WING TASK 05-41-06-210-819			250	SIA ALL
INTERNAL - ZONAL (GV): Fairing Flap Support No. 6 - Right Wing TASK 05-41-06-210-820			252	SIA ALL

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SUBJECT	CHAPTER SECTION SUBJECT	CONF	PAGE	EFFECT
EXTERNAL - ZONAL (GV): FAIRING FLAP SUPPORT NO. 7 - RIGHT WING TASK 05-41-06-210-821			254	SIA ALL
INTERNAL - ZONAL (GV): Fairing Flap Support No. 7 - Right Wing TASK 05-41-06-210-822			256	SIA ALL
EXTERNAL - ZONAL (GV): FAIRING FLAP SUPPORT NO. 8 - RIGHT WING TASK 05-41-06-210-823			258	SIA ALL
INTERNAL - ZONAL (GV): Fairing Flap Support No. 8 - Right Wing TASK 05-41-06-210-824			260	SIA ALL
EXTERNAL - ZONAL (GV): REAR SPAR TO LANDING GEAR SUPPORT BEAM - RIGHT WING TASK 05-41-06-210-825			262	SIA ALL
INTERNAL - ZONAL (GV): REAR SPAR TO LANDING GEAR SUPPORT BEAM - RIGHT WING TASK 05-41-06-210-826			264	SIA ALL
EXTERNAL - ZONAL (GV): INBOARD SPOILER NO. 7 - RIGHT WING TASK 05-41-06-210-827			267	SIA ALL
EXTERNAL - ZONAL (GV): INBOARD FLAPS - RIGHT WING TASK 05-41-06-210-828			270	SIA ALL
INTERNAL - ZONAL (GV): INBOARD MAIN FLAP - RIGHT WING TASK 05-41-06-210-829			272	SIA ALL
EXTERNAL - ZONAL (GV): Rear Spar to T.E. - Outbd of Inbd Flap - Inbd of Fixed T.E. -Right Wing TASK 05-41-06-210-830			274	SIA ALL
EXTERNAL - ZONAL (GV): SPOILERS NO. 8, 9, 10, 11, 12 - RIGHT WING TASK 05-41-06-210-831			276	SIA ALL
EXTERNAL - ZONAL (GV): OUTBOARD FLAPS - RIGHT WING TASK 05-41-06-210-832			279	SIA ALL

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SUBJECT	CHAPTER SECTION SUBJECT	CONF	PAGE	EFFECT
EXTERNAL - ZONAL (GV): FIXED TRAILING EDGE - RIGHT WING TASK 05-41-06-210-833			281	SIA ALL
INTERNAL - ZONAL (GV): FIXED TRAILING EDGE - RIGHT WING TASK 05-41-06-210-834			283	SIA ALL
INTERNAL - ZONAL (GV): Fixed Trailing Edge - Right Wing TASK 05-41-06-210-835			286	SIA ALL
EXTERNAL - ZONAL (GV): AILERON - RIGHT WING TASK 05-41-06-210-836			288	SIA ALL
ZONE 700 - LANDING GEAR AND LANDING GEAR DOORS - MAINTENANCE PRACTICES	05-41-07		201	SIA ALL
EXTERNAL - ZONAL (GVI): Nose Landing Gear and Landing Gear Doors (from Ground) TASK 05-41-07-210-801			201	SIA ALL
EXTERNAL - ZONAL (GVI): Nose Landing Gear and Landing Gear Doors TASK 05-41-07-210-806			203	SIA ALL
EXTERNAL - ZONAL (GV): LEFT MAIN LANDING GEAR AND LANDING GEAR DOORS (FROM GROUND) TASK 05-41-07-210-802			206	SIA ALL
EXTERNAL - ZONAL (GV): Left Main Landing Gear and Landing Gear Doors TASK 05-41-07-210-803			208	SIA ALL
EXTERNAL - ZONAL (GV): RIGHT MAIN LANDING GEAR AND LANDING GEAR DOORS (FROM GROUND) TASK 05-41-07-210-804			211	SIA ALL
EXTERNAL - ZONAL (GV): Right Main Landing Gear and Landing Gear Doors TASK 05-41-07-210-805			213	SIA ALL

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SUBJECT	CHAPTER SECTION SUBJECT	CONF	PAGE	EFFECT
ZONE 800 - DOORS (PASSENGER, CREW, CARGO) - MAINTENANCE PRACTICES	05-41-08		201	SIA ALL
EXTERNAL - ZONAL (GV): ENTRY DOORS, SERVICE DOORS, AUTOMATIC OVERWING EXITS, MID-EXIT DOORS, AND CARGO DOORS TASK 05-41-08-210-801			201	SIA ALL
EXTERNAL - ZONAL (GV): FORWARD CARGO DOOR TASK 05-41-08-210-802			203	SIA ALL
INTERNAL - ZONAL (GV): FORWARD CARGO DOOR TASK 05-41-08-210-803			205	SIA ALL
EXTERNAL - ZONAL (GV): AFT CARGO DOOR TASK 05-41-08-210-804			208	SIA ALL
INTERNAL - ZONAL (GV): AFT CARGO DOOR TASK 05-41-08-210-805			210	SIA ALL
EXTERNAL - ZONAL (GV): FORWARD PASSENGER DOOR TASK 05-41-08-210-806			213	SIA ALL
INTERNAL - ZONAL (GV): FORWARD PASSENGER DOOR TASK 05-41-08-210-807			216	SIA ALL
EXTERNAL - ZONAL (GV): AUTOMATIC OVERWING EXIT TASK 05-41-08-210-808			218	SIA ALL
INTERNAL - ZONAL (GV): AUTOMATIC OVERWING EXIT TASK 05-41-08-210-809			220	SIA ALL
EXTERNAL - ZONAL (GV): AUTOMATIC OVERWING EXIT TASK 05-41-08-210-810			222	SIA ALL
INTERNAL - ZONAL (GV): AUTOMATIC OVERWING EXIT TASK 05-41-08-210-811			224	SIA ALL
EXTERNAL - ZONAL (GV): AFT PASSENGER DOOR TASK 05-41-08-210-812			226	SIA ALL

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SUBJECT	CHAPTER SECTION SUBJECT	CONF	PAGE	EFFECT
INTERNAL - ZONAL (GV): AFT PASSENGER DOOR TASK 05-41-08-210-813			229	SIA ALL
EXTERNAL - ZONAL (GV): FORWARD GALLEY SERVICE DOOR TASK 05-41-08-210-814			232	SIA ALL
INTERNAL - ZONAL (GV): FORWARD GALLEY SERVICE DOOR TASK 05-41-08-210-815			235	SIA ALL
EXTERNAL - ZONAL (GV): AUTOMATIC OVERWING EXIT TASK 05-41-08-210-816			238	SIA ALL
INTERNAL - ZONAL (GV): AUTOMATIC OVERWING EXIT TASK 05-41-08-210-817			240	SIA ALL
EXTERNAL - ZONAL (GV): AUTOMATIC OVERWING EXIT TASK 05-41-08-210-818			242	SIA ALL
INTERNAL - ZONAL (GV): AUTOMATIC OVERWING EXIT TASK 05-41-08-210-819			244	SIA ALL
EXTERNAL - ZONAL (GV): AFT GALLEY SERVICE DOOR TASK 05-41-08-210-820			246	SIA ALL
INTERNAL - ZONAL (GV): AFT GALLEY SERVICE DOOR TASK 05-41-08-210-821			249	SIA ALL
ZONE 100 - LOWER FUSELAGE - (EZAP)	05-42-01		201	SIA ALL
Restore: Area Forward of Nose Wheel Well. (EZAP) TASK 05-42-01-100-801			201	SIA ALL
Restore: Areas Behind the Equipment Racks in the Electrical and Electronics Compartment. (EZAP) TASK 05-42-01-100-802			204	SIA ALL
Restore: Area Above and Outboard of Nose Wheel Well. (EZAP) TASK 05-42-01-100-803			208	SIA ALL

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SUBJECT	CHAPTER SECTION SUBJECT	CONF	PAGE	EFFECT
Restore: Areas Behind Ceiling and Sidewall Panels in the Aft Cargo Compartment. (EZAP) TASK 05-42-01-100-804			213	SIA ALL
Restore: Area Aft of Forward Cargo Compartment. (EZAP) TASK 05-42-01-100-805			219	SIA ALL
Restore: Area Below Forward Cargo Compartment. (EZAP) TASK 05-42-01-100-806			221	SIA ALL
Restore: Areas Behind Ceiling and Sidewall Panels in the Forward Cargo Compartment. (EZAP) TASK 05-42-01-100-807			224	SIA ALL
Restore: Area Aft of Aft Cargo Compartment. (EZAP) TASK 05-42-01-100-808			229	SIA ALL
Restore: Area Below Aft Cargo Compartment. (EZAP) TASK 05-42-01-100-809			231	SIA ALL
General Visual Inspection: Exposed EWIS in Main Landing Gear Wheel Well. (EZAP) TASK 05-42-01-210-801			234	SIA ALL
General Visual Inspection: Exposed EWIS in the Forward Cargo Compartment. (EZAP) TASK 05-42-01-210-802			237	SIA ALL
General Visual Inspection: Exposed EWIS in the Electrical and Electronics Compartment. (EZAP) TASK 05-42-01-210-803			242	SIA ALL
General Visual Inspection: Exposed EWIS in the Aft Cargo Compartment. (EZAP) TASK 05-42-01-210-804			246	SIA ALL
Detailed Inspection: IDG, APU Starter/Generator, Battery, and External Power Feeder Wiring/ EWIS. (EZAP) TASK 05-42-01-211-801			251	SIA ALL
Detailed Inspection: External Power Feeder Wiring/ EWIS in the area outboard of Nose Wheel Well. (EZAP) TASK 05-42-01-211-802			256	SIA ALL

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SUBJECT	CHAPTER SECTION SUBJECT	CONF	PAGE	EFFECT
Detailed Inspection: Exposed EWIS in the Center Section Wing Box (EZAP) TASK 05-42-01-211-803			259	SIA ALL
ZONE 200 - UPPER FUSELAGE - (EZAP)	05-42-02		201	SIA ALL
Restore: Aft Passenger Compartment, Wet Areas, Sta 663.75 to Aft Pressure Bulkhead. (EZAP) TASK 05-42-02-100-801			201	SIA ALL
Restore: Aft Passenger Compartment, Dry Area, Sta 663.75 to Aft Pressure Bulkhead. (EZAP) TASK 05-42-02-100-802			203	SIA ALL
Restore: Forward Passenger Compartment, Wet Areas, Sta 360 to 663.75. (EZAP) TASK 05-42-02-100-803			205	SIA ALL
Restore: Forward Passenger Compartment, Dry Area, Sta 360 to 663.75. (EZAP) TASK 05-42-02-100-804			205	SIA ALL
Restore: Areas Aft of Flight Compartment to Forward Entry Door. (EZAP) TASK 05-42-02-100-805			208	SIA ALL
Restore: Area in Flight Compartment from Sta 186 to 211, WL 208 to 232. (EZAP) TASK 05-42-02-100-806			210	SIA ALL
General Visual Inspection: Exposed EWIS in the Flight Compartment excluding exposed EWIS in the P5, P6 and P18 panels. (EZAP) TASK 05-42-02-210-801			212	SIA ALL
Detailed Inspection: Exposed EWIS in the P5, P6 and P18 panels. (EZAP) TASK 05-42-02-211-801			214	SIA ALL
ZONE 300 - EMPENNAGE - (EZAP)	05-42-03		201	SIA ALL
General Visual Inspection: Exposed EWIS in the Tail Cone. (EZAP) TASK 05-42-03-210-801			201	SIA ALL
Detailed Inspection: APU Starter/Generator Power Feeder Wiring/Ignition Leads/ and connected EWIS in the APU compartment. (EZAP) TASK 05-42-03-211-801			203	SIA ALL

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SUBJECT	CHAPTER SECTION SUBJECT	CONF	PAGE	EFFECT
Detailed Inspection: APU Starter/Generator Power Feeder Wiring/EWIS in the area aft of Pressure Bulkhead. (EZAP) TASK 05-42-03-211-802			206	SIA ALL
ZONE 400 - POWER PLANT AND STRUT - (EZAP)	05-42-04		201	SIA ALL
Detailed Inspection: Exposed EWIS in Engine 1 (Engine fan and core sections). (EZAP) TASK 05-42-04-211-801			201	SIA ALL
Detailed Inspection: Exposed EWIS in Engine 2 (Engine fan and core sections). (EZAP) TASK 05-42-04-211-802			204	SIA ALL
Detailed Inspection: Exposed EWIS in the Forward Strut Fairing - Engine No. 1. (EZAP) TASK 05-42-04-211-803			207	SIA ALL
Detailed Inspection: Exposed EWIS in Fan Cowl Support Beam - Engine No. 1. (EZAP) TASK 05-42-04-211-804			210	SIA ALL
Detailed Inspection: Exposed EWIS common to the Strut Torque Box - Engine No. 1. (EZAP) TASK 05-42-04-211-805			212	SIA ALL
Detailed Inspection: Exposed EWIS in the Forward Strut Fairing - Engine No. 2. (EZAP) TASK 05-42-04-211-806			216	SIA ALL
Detailed Inspection: Exposed EWIS in Fan Cowl Support Beam - Engine No. 2. (EZAP) TASK 05-42-04-211-807			219	SIA ALL
Detailed Inspection: Exposed EWIS common to the Strut Torque Box - Engine No. 2. (EZAP) TASK 05-42-04-211-808			221	SIA ALL
ZONE 500 - LEFT WING - (EZAP)	05-42-05		201	SIA ALL
Detailed Inspection: Exposed EWIS in the area from Leading Edge to Front Spar - Inboard of Nacelle Strut - Left Wing. (EZAP) TASK 05-42-05-211-801			201	SIA ALL
Detailed Inspection: Exposed EWIS in the area from Leading Edge to Front Spar - Outboard of Nacelle Strut - Left Wing. (EZAP) TASK 05-42-05-211-802			206	SIA ALL

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SUBJECT	CHAPTER SECTION SUBJECT	CONF	PAGE	EFFECT
Detailed Inspection: Exposed EWIS in the area from Rear Spar to Main Landing Gear Support Beam - Left Wing. (EZAP) TASK 05-42-05-211-803			212	SIA ALL
Detailed Inspection: Exposed EWIS in the area from Rear Spar to Trailing Edge - Outbd of Inbd Flap - Inbd of Fixed T.E. - Left Wing. (EZAP) TASK 05-42-05-211-804			214	SIA ALL
Detailed Inspection: Exposed EWIS in the Center Fuel Tank - Left Wing (EZAP) TASK 05-42-05-211-805			216	SIA ALL
Detailed Inspection: Exposed EWIS in the Main Fuel Tank - Left Wing TASK 05-42-05-211-806			218	SIA ALL
ZONE 600 - RIGHT WING - (EZAP)	05-42-06		201	SIA ALL
Detailed Inspection: Exposed EWIS in the area from Leading Edge to Front Spar - Inboard of Nacelle Strut - Right Wing. (EZAP) TASK 05-42-06-211-801			201	SIA ALL
Detailed Inspection: Exposed EWIS in the area from Leading Edge to Front Spar - Outboard of Nacelle Strut - Right Wing. (EZAP) TASK 05-42-06-211-802			206	SIA ALL
Detailed Inspection: Exposed EWIS in the area from Rear Spar to Main Landing Gear Support Beam - Right Wing. (EZAP) TASK 05-42-06-211-803			212	SIA ALL
Detailed Inspection: Exposed EWIS in the area from Rear Spar to Trailing Edge - Outbd of Inbd Flap - Inbd of Fixed T.E. - Right Wing. (EZAP) TASK 05-42-06-211-804			214	SIA ALL
Detailed Inspection: Exposed EWIS in the Center Tank - Right Wing TASK 05-42-06-211-805			216	SIA ALL
Detailed Inspection: Exposed EWIS in the Main Tank - Right Wing TASK 05-42-06-211-806			218	SIA ALL

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SUBJECT	CHAPTER SECTION SUBJECT	CONF	PAGE	EFFECT
HARD LANDING OR HIGH DRAG/SIDE LOAD LANDING - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)	05-51-01		201	SIA ALL
Phase I Inspection TASK 05-51-01-210-801			203	SIA ALL
Phase II Inspection TASK 05-51-01-210-802			207	SIA ALL
SEVERE OR UNUSUAL TURBULENCE, EXCESSIVE MANEUVER, BUFFET OR SPEEDS MORE THAN DESIGN LIMITS - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)	05-51-04		201	SIA ALL
Severe or Unusual Turbulence, Excessive Maneuver, Buffet, or Speeds More than the Design Limits Conditional Inspection TASK 05-51-04-210-801			201	SIA ALL
HIGH ENERGY STOP/HEAT DAMAGE CONDITION - MAINTENANCE PRACTICES	05-51-07		201	SIA ALL
High Energy Stop TASK 05-51-07-210-801			201	SIA ALL
Heat Damage Inspection (Ammonium Persulfate Solution) TASK 05-51-07-280-801			209	SIA ALL
Tire Removal After Overspeed Landing TASK 05-51-07-000-801			211	SIA ALL
FLAP/SLAT DOWN OVERSPEED CONDITION - MAINTENANCE PRACTICES	05-51-08		201	SIA ALL
Phase I Inspection TASK 05-51-08-210-801			202	SIA ALL
Phase II Inspection TASK 05-51-08-210-802			204	SIA ALL
OVERWEIGHT TAXI - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)	05-51-09		201	SIA ALL
Phase 1 Inspection TASK 05-51-09-212-801			202	SIA ALL
Phase 2 Inspection TASK 05-51-09-210-801			202	SIA ALL

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SUBJECT	CHAPTER SECTION SUBJECT	CONF	PAGE	EFFECT
DRAGGED ENGINE NACELLE/FAN BLADE OUT/ENGINE SEIZURE/THRUST REVERSER AND ATTACH POINTS DAMAGE - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)	05-51-10		201	SIA ALL
Dragged Engine Nacelle/Fan Blade Out/Engine Seizure/Engine and Strut Damage Conditional Inspection TASK 05-51-10-210-801			202	SIA ALL
GALLEY SPILLAGE - MAINTENANCE PRACTICES	05-51-13		201	SIA ALL
Galley Spill Conditional - Inspection TASK 05-51-13-211-801			201	SIA ALL
MERCURY SPILLAGE CONDITION - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)	05-51-14		201	SIA ALL
Mercury Spillage Conditional Inspection TASK 05-51-14-210-801			201	SIA ALL
BRAKE SEIZURE CONDITION - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)	05-51-15		201	SIA ALL
Brake Seizure Conditional Inspection TASK 05-51-15-210-801			201	SIA ALL
FLAT SPOTTED TIRES - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)	05-51-16		201	SIA ALL
Flat Spotted Tires Conditional Inspection TASK 05-51-16-210-801			201	SIA ALL
WHEEL BEARING FAILURE/DAMAGE CONDITION - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)	05-51-17		201	SIA ALL
Wheel Bearing Failure TASK 05-51-17-210-801			201	SIA ALL
Heat Damage Inspection of the Axle TASK 05-51-17-210-802			203	SIA ALL
BIRD/HAIL STRIKE CONDITION - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)	05-51-18		201	SIA ALL
Bird Strike and In-flight Hail Strike Conditional Inspection TASK 05-51-18-210-801			201	SIA ALL

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SUBJECT	CHAPTER SECTION SUBJECT	CONF	PAGE	EFFECT
Hail Strike on the Ground Conditional Inspection TASK 05-51-18-212-801			205	SIA ALL
LIGHTNING STRIKE CONDITION - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)	05-51-19		201	SIA ALL
Phase I Inspection TASK 05-51-19-210-802			203	SIA ALL
Phase II Inspection TASK 05-51-19-210-803			209	SIA ALL
Inspection and Operational Check of Radio and Navigation Systems TASK 05-51-19-710-801			217	SIA ALL
FILIFORM CONDITION ON EXTERIOR DECORATIVE SURFACES (CONDITIONAL INSPECTION)	05-51-21		201	SIA ALL
Filiform Corrosion - (Conditional Inspection) TASK 05-51-21-210-801			201	SIA ALL
HYDRAULIC FLUID REACTION WITH TITANIUM - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)	05-51-22		201	SIA ALL
Titanium Parts Contaminated With Fire-Resistant Hydraulic Fluid Inspection TASK 05-51-22-210-801			201	SIA ALL
CABIN OVERPRESSURE CONDITION - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)	05-51-24		201	SIA ALL
Cabin Overpressurization Conditional Inspection TASK 05-51-24-200-801			201	SIA ALL
EXTREME DUST OR SAND CONDITION - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)	05-51-27		201	SIA ALL
Extreme Dust or Sand Conditional Inspection TASK 05-51-27-210-801			201	SIA ALL
ICE OR SNOW CONDITION - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)	05-51-28		201	SIA ALL
Ice or Snow Condition Maintenance Practices TASK 05-51-28-210-801			201	SIA ALL

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SUBJECT	CHAPTER SECTION SUBJECT	CONF	PAGE	EFFECT
EXCEEDING MAXIMUM NOSE LANDING GEAR TOWING ANGLE OR MAXIMUM TOWING LOAD (CONDITIONAL INSPECTION) - MAINTENANCE PRACTICES	05-51-29		201	SIA ALL
Phase I Inspection TASK 05-51-29-200-801			201	SIA ALL
Phase II Inspection TASK 05-51-29-200-802			203	SIA ALL
VOLCANIC ASH CONDITION - MAINTENANCE PRACTICES	05-51-31		201	SIA ALL
Volcanic Ash Operational Encounter Conditional Inspection TASK 05-51-31-210-801			201	SIA ALL
Volcanic Ash Ground Fallout Conditional Inspection TASK 05-51-31-200-801			217	SIA ALL
TAIL STRIKE/SKID CONDITION - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)	05-51-32		201	SIA ALL
Tail Strike Inspection TASK 05-51-32-210-801			201	SIA ALL
Tail Skid Inspection TASK 05-51-32-210-802			203	SIA ALL
HOT AIR DUCT RUPTURE CONDITION - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)	05-51-34		201	SIA ALL
Airplane Structure Hot Air Duct Rupture Conditional Inspection TASK 05-51-34-210-801			201	SIA ALL
Nacelle Structure Hot Air Duct Rupture Conditional Inspection TASK 05-51-34-200-801			201	SIA ALL
OVERWEIGHT LANDING - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)	05-51-35		201	SIA ALL
Phase I Inspection TASK 05-51-35-210-801			202	SIA ALL
Phase II Inspection TASK 05-51-35-200-801			205	SIA ALL

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SUBJECT	CHAPTER SECTION SUBJECT	CONF	PAGE	EFFECT
WINGLET STRIKE CONDITION - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)	05-51-36		201	SIA ALL
Winglet Strike Inspection Phase I TASK 05-51-36-210-801			201	SIA ALL
Winglet Strike Inspection Phase II TASK 05-51-36-210-802			202	SIA ALL
ENGINE BLADE OUT - EE BAY AND FLIGHT DECK PANELS- MAINTENANCE PRACTICES	05-51-42		201	SIA ALL
Engine Blade Out - General Visual Check TASK 05-51-42-210-801			201	SIA ALL
Engine Blade Out - EE Bay and Flight Deck Panels Inspection TASK 05-51-42-200-801			202	SIA ALL
NACELLE/STRUT PRESSURE RELIEF DOORS OPEN CONDITION - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)	05-51-44		201	SIA ALL
Examine the Nacelle/Strut Structure TASK 05-51-44-200-801			201	SIA ALL
Examine the Pneumatic Ducts TASK 05-51-44-210-801			201	SIA ALL
LANDING GEAR OPERATION ABOVE DESIGN SPEED CONDITION - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)	05-51-47		201	SIA ALL
Landing Gear Operation Above Design Speed Condition, Conditional Inspection TASK 05-51-47-210-801			201	SIA ALL
FUEL IMBALANCE EXCEEDANCE CONDITIONAL INSPECTION - MAINTENANCE PRACTICE	05-51-48		201	SIA ALL
Fuel Imbalance Exceedance - Conditional Inspection TASK 05-51-48-211-801			201	SIA ALL
Extreme High Wind Event - Conditional Inspection	05-51-51		201	SIA ALL
Extreme High Wind Event - Conditional Inspection TASK 05-51-51-200-801			201	SIA ALL

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SUBJECT	CHAPTER SECTION SUBJECT	CONF	PAGE	EFFECT
Heavy Water Spray from Tires During Takeoff and Landing - Conditional Inspection	05-51-52		201	SIA ALL
Heavy Water Spray from Tires During Takeoff and Landing - Inspection/Check TASK 05-51-52-200-801			201	SIA ALL
INTERIOR ICE CONDITION - MAINTENANCE PRACTICES	05-51-53		201	SIA ALL
Interior Ice Removal TASK 05-51-53-210-801			201	SIA ALL
TIRE TREAD LOSS OR TIRE BURST - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)	05-51-54		201	SIA ALL
Tire Tread Loss or Tire Burst Conditional Inspection TASK 05-51-54-210-801			201	SIA ALL
SMOKE OR FUMES IN CABIN - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)	05-51-56		201	SIA ALL
Smoke or Fumes in Cabin (Conditional Inspection) TASK 05-51-56-200-801			201	SIA ALL
ACID SPILLAGE CONDITION - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)	05-51-57		201	SIA ALL
Corrosion Removal After Acid Spills TASK 05-51-57-000-802			201	SIA ALL
GROUND HANDLING EQUIPMENT HITS AIRPLANE OR PART DEPARTS AIRPLANE (CONDITIONAL INSPECTION) - MAINTENANCE PRACTICES	05-51-59		201	SIA ALL
Ground Handling Equipment Hits the Airplane or Part Departs the Airplane Inspection TASK 05-51-59-200-801			202	SIA ALL
AIRFRAME VIBRATION CONDITION - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)	05-51-67		201	SIA ALL
Airframe Vibration - Conditional Inspection TASK 05-51-67-280-801			201	SIA ALL

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CHAPTER 05
TIME LIMITS/MAINTENANCE CHECKS

SUBJECT	CHAPTER SECTION SUBJECT	CONF	PAGE	EFFECT
MAIN LANDING GEAR SHIMMY/VIBRATION - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)	05-51-68		201	SIA ALL
Phase I Inspection TASK 05-51-68-210-801			201	SIA ALL
Phase II Inspection TASK 05-51-68-210-802			205	SIA ALL
CONDITIONED AIR PACK OUTLET DUCT SYSTEM FAILURE - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)	05-51-80		201	SIA ALL
Conditioned Air Pack Outlet Conditional Inspection TASK 05-51-80-210-801			201	SIA ALL
CABIN DEPRESSURIZATION CONDITION - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)	05-51-81		201	SIA ALL
Cabin Depressurization Conditional - Inspection TASK 05-51-81-210-801			201	SIA ALL
EXCESSIVE CABIN PRESSURE LEAKAGE - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)	05-51-91		201	SIA ALL
Cabin Pressure Leak Test TASK 05-51-91-790-801			201	SIA ALL
COLD-SOAKED FUEL FROST - MAINTENANCE PRACTICES	05-51-92		201	SIA ALL
Cold-Soaked Fuel Frost Maintenance TASK 05-51-92-660-801			201	SIA ALL
DRY CHEMICAL FIRE EXTINGUISHER USED - MAINTENANCE PRACTICES	05-51-95		201	SIA ALL
Cleaning After Dry Chemical Fire Extinguisher Used TASK 05-51-95-100-801			201	SIA ALL
MAIN WHEEL WELL CORROSION PROTECTION OF ELECTRICAL CONNECTORS	05-51-96		601	SIA ALL
Electrical Connectors in the Main Wheel Well Detail Inspection TASK 05-51-96-211-801			601	SIA ALL

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SUBJECT	CHAPTER SECTION SUBJECT	CONF	PAGE	EFFECT
External Doors Bonding Jumper	05-51-97		201	SIA ALL
Bonding Jumper - Inspection/Check TASK 05-51-97-200-801			201	SIA ALL
NITROGEN GENERATION SYSTEM (NGS) OXYGEN ENRICHED AIR (OEA) EXHAUST PORT FUEL LEAK CONDITION - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)	05-51-98		201	SIA ALL
Nitrogen Generation System (NGS) Fuel Leak Conditional Inspection TASK 05-51-98-210-801			201	SIA ALL
IN-FLIGHT WINDMILLING - MAINTENANCE PRACTICES	05-51-99		201	SIA ALL
Inspection of the Engine After In-Flight Windmilling TASK 05-51-99-200-801			201	SIA ALL
FOIL-LINED PANELS ON LEFT SIDE OF THE AIRPLANE - INSPECTION/CHECK	05-55-21		601	SIA ALL
General Visual Inspection - Left Wing Leading Edge (MRB 20-155-00) TASK 05-55-21-210-801			601	SIA ALL
Detailed Inspection - Left Wing Leading Edge (MRB 20-169-00) TASK 05-55-21-211-802			605	SIA ALL
Detailed Inspection - Left Strut Fairings (MRB 20-171-00) TASK 05-55-21-211-804			609	SIA ALL
FOIL-LINED PANELS ON RIGHT SIDE OF THE AIRPLANE - INSPECTION/CHECK	05-55-22		601	SIA ALL
General Visual Inspection - Right Wing Leading Edge (MRB 20-155-00) TASK 05-55-22-210-801			601	SIA ALL
Detailed Inspection - Right Wing Leading Edge (MRB 20-168-00) TASK 05-55-22-211-801			604	SIA ALL
Detailed Inspection - Right Wing Leading Edge (MRB 20-169-00) TASK 05-55-22-211-802			606	SIA ALL

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SUBJECT	CHAPTER SECTION SUBJECT	CONF	PAGE	EFFECT
Detailed Inspection - Right Strut Fairings (MRB 20-171-00) TASK 05-55-22-211-804			610	SIA ALL
WIRE BUNDLES ON LEFT SIDE OF THE AIRPLANE - INSPECTION/CHECK	05-55-25		601	SIA ALL
Loop Resistance Test of Wire Bundle - Left MLG Wheel Well (MRB 20-150-00) TASK 05-55-25-280-801			601	SIA ALL
Loop Resistance Test of Wire Bundle - Left MLG Wheel Well (MRB 20-152-00) TASK 05-55-25-280-803			607	SIA ALL
Loop Resistance Test of Wire Bundle - Left MLG Wheel Well (MRB 20-176-00) TASK 05-55-25-280-804			613	SIA ALL
Loop Resistance Test of Wire Bundle - Left Wing to Body Fairing (MRB 20-160-00) TASK 05-55-25-280-805			617	SIA ALL
Loop Resistance Test of Wire Bundle - Left Wing to Body Fairing (MRB 20-161-00) TASK 05-55-25-280-806			623	SIA ALL
Loop Resistance Test of Wire Bundle - Left Wing to Body Fairing (MRB 20-164-00) TASK 05-55-25-280-809			628	SIA ALL
Loop Resistance Test of Wire Bundle - Left Wing to Body Fairing (MRB 20-178-00) TASK 05-55-25-280-810			633	SIA ALL
Loop Resistance Test of Wire Bundle - Left Wing Trailing Edge (MRB 20-156-00) TASK 05-55-25-280-811			638	SIA ALL
Loop Resistance Test of Wire Bundle - Left Wing Trailing Edge (MRB 20-159-00) TASK 05-55-25-280-812			643	SIA ALL
Loop Resistance Test of Wire Bundle - Left Wing Leading Edge (MRB 20-154-00) TASK 05-55-25-280-813			648	SIA ALL
Loop Resistance Test of Wire Bundle - Left Wing Leading Edge (MRB 20-158-00) TASK 05-55-25-280-815			653	SIA ALL

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SUBJECT	CHAPTER SECTION SUBJECT	CONF	PAGE	EFFECT
Loop Resistance Test of Wire Bundle - Left Wing Leading Edge (MRB 20-177-00) TASK 05-55-25-280-816			660	SIA ALL
Loop Resistance Test of Wire Bundle - Left Engine (MRB 20-182-00) TASK 05-55-25-280-817			665	SIA 001-010 PRE SB 737-24-1233
Loop Resistance Test of Wire Bundle - Left MLG Wheel Well (MRB 20-188-00) TASK 05-55-25-280-821			671	SIA ALL
WIRE BUNDLES ON RIGHT SIDE OF THE AIRPLANE - INSPECTION/CHECK	05-55-26		601	SIA ALL
Loop Resistance Test of Wire Bundle - Right MLG Wheel Well (MRB 20-150-00) TASK 05-55-26-280-801			601	SIA ALL
Loop Resistance Test of Wire Bundle - Right MLG Wheel Well (MRB 20-151-00) TASK 05-55-26-280-802			606	SIA ALL
Loop Resistance Test of Wire Bundle - Right Wing to Body Fairing (MRB 20-160-00) TASK 05-55-26-280-805			610	SIA ALL
Loop Resistance Test of Wire Bundle - Right Wing to Body Fairing (MRB 20-161-00) TASK 05-55-26-280-806			615	SIA ALL
Loop Resistance Test of Wire Bundle - Right Wing to Body Fairing (MRB 20-162-00) TASK 05-55-26-280-807			620	SIA ALL
Loop Resistance Test of Wire Bundle - Right Wing to Body Fairing (MRB 20-164-00) TASK 05-55-26-280-809			625	SIA ALL
Loop Resistance Test of Wire Bundle - Right Wing to Body Fairing (MRB 20-178-00) TASK 05-55-26-280-810			630	SIA ALL
Loop Resistance Test of Wire Bundle - Right Wing Trailing Edge (MRB 20-156-00) TASK 05-55-26-280-811			635	SIA ALL
Loop Resistance Test of Wire Bundle - Right Wing Trailing Edge (MRB 20-159-00) TASK 05-55-26-280-812			640	SIA ALL

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SUBJECT	CHAPTER SECTION SUBJECT	CONF	PAGE	EFFECT
Loop Resistance Test of Wire Bundle - Right Wing Leading Edge (MRB 20-154-00) TASK 05-55-26-280-813			645	SIA ALL
Loop Resistance Test of Wire Bundle - Right Wing Leading Edge (MRB 20-157-00) TASK 05-55-26-280-814			650	SIA ALL
Loop Resistance Test of Wire Bundle - Right Wing Leading Edge (MRB 20-158-00) TASK 05-55-26-280-815			655	SIA ALL
Loop Resistance Test of Wire Bundle - Right Wing Leading Edge (MRB 20-177-00) TASK 05-55-26-280-816			662	SIA ALL
Loop Resistance Test of Wire Bundle - Right Engine (MRB 20-182-00) TASK 05-55-26-280-817			667	SIA 001-010 PRE SB 737-24-1233
Loop Resistance Test of Wire Bundle - Right MLG Wheel Well (MRB 20-183-00) TASK 05-55-26-280-818			673	SIA ALL
Loop Resistance Test of Wire Bundle - Right Wing to Body Fairing (MRB 20-189-00) TASK 05-55-26-280-822			678	SIA ALL
EMPENNAGE WIRE BUNDLES - INSPECTION/CHECK	05-55-46		601	SIA ALL
Loop Resistance Test of Wire Bundle - Tailcone Access Compartment (MRB 20-165-00) TASK 05-55-46-280-801			601	SIA ALL
Loop Resistance Test of Wire Bundle - Tailcone Access Compartment (MRB 20-166-00) TASK 05-55-46-280-802			606	SIA ALL
Loop Resistance Test of Wire Bundle - Tailcone Access Compartment (MRB 20-167-00) TASK 05-55-46-280-803			614	SIA ALL
Loop Resistance Test of Wire Bundle - APU Compartment (MRB 20-174-00) TASK 05-55-46-280-804			619	SIA ALL
Loop Resistance Test of Wire Bundle - Rudder Control Actuator (MRB 20-180-00 and 20-181-00) TASK 05-55-46-280-807			624	SIA ALL

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CHAPTER 05
TIME LIMITS/MAINTENANCE CHECKS

SUBJECT	CHAPTER SECTION SUBJECT	CONF	PAGE	EFFECT
Loop Resistance Test Wire Bundle - Vertical Stabilizer (MRB 20-184-00) TASK 05-55-46-280-808			631	SIA ALL
PRESSURE VESSEL WIRE BUNDLES - INSPECTION/CHECK	05-55-47		601	SIA ALL
Loop Resistance Test of Wire Bundle - LRRA (MRB 20-153-00) TASK 05-55-47-280-801			601	SIA ALL
HIRF/LIGHTNING - FQIS WIRING AND BONDING - INSPECTION/CHECK	05-55-54		601	SIA ALL
FQIS Wiring And Bonding - Inspection TASK 05-55-54-200-801			601	SIA ALL
FQIS - Out Tank Connectors - Electrical Bonding Resistance Check TASK 05-55-54-200-802			610	SIA ALL
FQIS Wiring And Bonding - Fault Isolation TASK 05-55-54-810-801			615	SIA ALL
BOND RESISTANCE MEASUREMENT - MAINTENANCE PRACTICES	05-56-01		201	SIA ALL
Bond Resistance Measurement TASK 05-56-01-760-801			201	SIA ALL
LOOP RESISTANCE TESTER (LRT)- MAINTENANCE PRACTICES	05-56-02		201	SIA ALL
LRT Lid Standard Measurement TASK 05-56-02-200-801			201	SIA ALL
ExLRT Standard Measurement TASK 05-56-02-200-802			207	SIA ALL
HIRF/LIGHTNING LOOP RESISTANCE MEASUREMENT - MAINTENANCE PRACTICES	05-56-03		201	SIA ALL
Loop Resistance Measurement TASK 05-56-03-200-801			201	SIA ALL
HIRF/LIGHTNING - JOINT RESISTANCE MEASUREMENT - MAINTENANCE PRACTICES	05-56-04		201	SIA ALL
Joint Resistance Measurement TASK 05-56-04-200-801			201	SIA ALL

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CHAPTER 05
TIME LIMITS/MAINTENANCE CHECKS

SUBJECT	CHAPTER SECTION SUBJECT	CONF	PAGE	EFFECT
LOOP RESISTANCE MEASUREMENT AND JOINT RESISTANCE MEASUREMENT - MAINTENANCE PRACTICES	05-56-05		201	SIA ALL
Loop Resistance and Joint Resistance Measurement			201	SIA ALL
TASK 05-56-05-200-801				

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GENERAL TASK CARD INFORMATION

1. General

A. All Tasks Contained are for Scheduled Maintenance Tasks Only.

TASK 05-00-00-800-801

2. General Task Instructions

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) Tasks are complete procedures for specific maintenance requirements.

B. Instructions

(1) Make sure that you do all the steps to the end of the task.

(2) Obey all of the safety precautions.

——— END OF TASK ———

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TIME LIMITS/MAINTENANCE CHECKS - MAINTENANCE PRACTICES

1. General

A. This procedure has these tasks:

(1) Airworthiness Limitation Precautions

(2) Enhanced Zonal Inspection Program (EZAP) Precautions

(3) Scheduled Maintenance Task (SMT) Repair Time Limits

TASK 05-00-00-910-801

2. Airworthiness Limitation Precautions

A. General

(1) Critical Design Configuration Control Limitations (CDCCLs)

(a) All occurrences of CDCCLs found in this chapter of the AMM are identified by this note after each applicable CDCCL design feature:

1) NOTE: CDCCL - Refer to the task: Airworthiness Limitation Precautions, TASK 05-00-00-910-801, for important information on Critical Design Configuration Control Limitations (CDCCLs).

(b) Design features that are CDCCLs are defined and controlled by Special Federal Aviation Regulation (SFAR) 88, and can be found in the Special Compliance Items/Airworthiness Limitations document. CDCCLs are a means of identifying certain design configuration features intended to preclude a fuel tank ignition source for the operational life of the airplane. CDCCLs are mandatory and cannot be changed or deleted without the approval of the FAA office that is responsible for the airplane model Type Certificate, or applicable regulatory agency. A critical fuel tank ignition source prevention feature may exist in the fuel system and its related installation or in systems that, if a failure condition were to develop, could interact with the fuel system in such a way that an unsafe condition would develop without this limitation. Strict adherence to configuration, methods, techniques, and practices as prescribed is required to ensure the CDCCL is complied with. Any use of parts, methods, techniques or practices not contained in the applicable CDCCL must be approved by the FAA office that is responsible for the airplane model Type Certificate, or applicable regulatory agency.

(2) Airworthiness Limitation Instructions (ALIs)

(a) All occurrences of fuel tank system ALIs found in this chapter of the AMM are identified by this note after each applicable ALI inspection feature:

1) NOTE ALI - Refer to the task: Airworthiness Limitation Precautions, TASK 05-00-00-910-801, for important information on airworthiness limitation instructions (ALIs).

(b) Inspection features that are ALIs are defined and controlled by Special Federal Aviation Regulation (SFAR) 88, and can be found in the Special Compliance Items/Airworthiness Limitations document. These ALIs identify inspection features related to fuel tank ignition source prevention which must be done to maintain the design level of safety for the operational life of the airplane. These inspection features are mandatory and cannot be changed or deleted without the approval of the FAA office that is responsible for the airplane model Type Certificate, or applicable regulatory agency. Strict adherence to methods, techniques and practices as prescribed is required to ensure the ALI is complied with. Any use of methods, techniques or practices not contained in these ALIs must be approved by the FAA office that is responsible for the airplane model Type Certificate, or applicable regulatory agency.

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B. Critical Design Configuration Control Limitations (CDCCLs)

SUBTASK 05-00-00-910-001

> **WARNING** OBEY THE MANUFACTURER'S PROCEDURES WHEN YOU DO MAINTENANCE THAT HAS AN EFFECT ON A CDCCL. IF YOU DO NOT OBEY THE PROCEDURES, IT CAN INCREASE THE RISK OF A SOURCE OF FUEL TANK IGNITION. INJURIES TO PERSONNEL, AND DAMAGE TO EQUIPMENT CAN OCCUR IF THERE IS A FIRE OR EXPLOSION.

(1) Make sure that you follow the procedures for items identified as CDCCLs.

C. Airworthiness Limitation Instructions (ALIs)

SUBTASK 05-00-00-910-002

> **WARNING** OBEY THE MANUFACTURER'S PROCEDURES WHEN YOU DO MAINTENANCE THAT HAS AN EFFECT ON AN ALI. IF YOU DO NOT OBEY THE PROCEDURES, IT CAN INCREASE THE RISK OF A SOURCE OF FUEL TANK IGNITION. INJURIES TO PERSONNEL, AND DAMAGE TO EQUIPMENT CAN OCCUR IF THERE IS A FIRE OR EXPLOSION.

(1) Make sure that you follow the procedures for items identified as ALIs.

END OF TASK

TASK 05-00-00-910-802

3. Enhanced Zonal Inspection Program (EZAP) Precautions

A. General

(1) Enhanced Zonal Analysis Procedure (EZAP) and associated Electrical Wiring Interconnection System (EWIS)

(a) Enhanced Zonal Analysis Procedure (EZAP) is an analytical procedure required by Part 25, Appendix H, Section H25.5(a)(1) that identifies the physical and environmental conditions contained in each zone of an airplane, analyzes the effects of these conditions on electrical wiring and components, and assesses the possibilities for smoke and fire. The end result of the analysis are inspection and restoration tasks in the form of EWIS ICA.

(b) Electrical Wiring Interconnection System (EWIS): means any wire, power feeder, wiring device, or combination of these, including termination devices, installed in any area of the airplane for the purpose of transmitting electrical energy, including data and signals, between two or more intended termination points. EWIS is defined in full by 14 CFR section 25.1701.

(c) The Zonal Inspection Program includes a general visual and, if required, physical check of the general condition and security of attachment of the accessible systems and structures items contained in defined zones. This includes checks for degradation such as chafing of tubing, loose duct supports, damage to wiring and connected EWIS, cable and pulley wear, fluid leaks, electrical bonding, general condition of fasteners, inadequate drainage, etc., and general corrosion, not covered in the MSG-3 analysis. The zonal inspection is not intended as a quality assurance after maintenance check for determining proper reassembly of systems, components, structures, or powerplants. The zonal program packages a number of General Visual (GV) Inspections into one or more zonal inspections. The program includes any GV inspection tasks required to assure security of attachment and general condition of any system or structural items within the zone.

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(2) Equivalent Tools, Fixtures, Test Equipment, and Consumable Materials

(a) When the procedures in this manual identify tools, equipment, and consumable materials, you can use equivalent alternatives. If you use alternative tools, equipment, or consumable materials, make sure that they give the same results and are as safe to the parts and personnel as the tools, equipment, or consumable materials specified in the procedure.

B. References

Reference	Title
20-60-07-910-801	Protection of the EWIS During Maintenance (P/B 201)

C. Protection of EWIS During Maintenance, Repair and Alterations

SUBTASK 05-00-00-910-003

WARNING

OBEY THE MANUFACTURER'S PROCEDURES WHEN YOU DO EZAP MAINTENANCE, OR MAINTENANCE THAT HAS AN EFFECT ON EWIS. IF YOU DO NOT OBEY THE PROCEDURES, IT CAN INCREASE THE RISK OF AN IGNITION SOURCE FOR FIRES. INJURIES TO PERSONS, AND DAMAGE TO EQUIPMENT CAN OCCUR.

(1) Make sure you follow the procedures for items identified as EZAP.

(2) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-910-801.

END OF TASK

TASK 05-00-00-750-801

4. Scheduled Maintenance Task (SMT) - Repair Time Limits

A. General

(1) The frequency of this check may be reduced to allow repair time for fault corrective action, provided the check interval plus the time for fault corrective action does not exceed the repair time limit specified in this procedure.

NOTE: For Example: R = 150 FH - Q, where “R” is the repair time limit for corrective action, and “Q” is the scheduled maintenance task check interval.

(a) Repair time limit 150 FH: Scheduled maintenance task check interval (Q) of 150 FH, if faults are found, corrective action for fault is required immediately (R = 0 FH). Scheduled maintenance task check interval (Q) of 70 FH allows repair time limit for fault corrective action (R) of 80 FH.

(b) Repair time limit 3000 FH: Scheduled maintenance task check interval (Q) of 70 FH allows repair time limit for fault corrective action (R) of 2930 FH.

(c) Repair time limit MMEL: Refer to the MMEL for deferral. Scheduled maintenance task check interval (Q) of 150 FH, if faults are found, MMEL deferral for corrective action for fault is applicable.

B. References

Reference	Title
73-00-00-700-801-G00	Scheduled Maintenance Task for Short-Time Fault Interrogation (P/B 501)
73-00-00-700-802-G00	Scheduled Maintenance Task for Long-Time Fault Interrogation (P/B 501)

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C. MAX Display System (MDS) - Scheduled Maintenance Task (SMT) Messages

SUBTASK 05-00-00-750-001

(1) For allowable repair time limits, see Table 201.

Table 201/05-00-00-993-801 Scheduled Maintenance Task - Repair Limits

SMT Message	Repair Time Limit
PACK CONTROL CHANNEL L PACK CONTROL CHANNEL R	150 FH 150 FH
PACK RAM AIR SENSOR L PACK RAM AIR SENSOR R	150 FH 150 FH
TEMP ZONE CTRL AFT CAB TEMP ZONE CTRL CONT CAB TEMP ZONE CTRL FWD CAB	3000 FH 3000 FH 3000 FH
BLEED CTRL CARD L BLEED CTRL CARD R	3000 FH 3000 FH
BLEED FAMV RVDT L BLEED FAMV RVDT R	150 FH 150 FH
BLEED PM SENSOR 1 L BLEED PM SENSOR 1 R	3000 FH 3000 FH
BLEED PRSOV CTRL L BLEED PRSOV CTRL R	150 FH 150 FH
BLEED TM SENSOR 1 L BLEED TM SENSOR 1R BLEED TM SENSOR 2 L BLEED TM SENSOR 2 R	150 FH 150 FH 150 FH 150 FH
TAKEOFF CONFIG FLAPS	150 FH
AIR / GROUND SENSOR PSEU ARINC BUS	150 FH 150 FH
GEAR XFER HYD QTY SIGNAL	MMEL 32–51–02
MLG L UP SENSOR MLG R UP SENSOR	150 FH 150 FH
TAILSKID CONTROL	MMEL 32–71–01
DOOR R ENG RUN RLY	3000 FH
ENG X EEC C1*[1]	TASK 73-00-00-700-801-G00 *[2]
ENG X EEC C2*[1]	TASK 73-00-00-700-802-G00
ENG X REVERSER SENSOR	300 FH
ENG X REVERSER INTERLOCK	300 FH

*[1] For allowable repair time limits for ENG X EEC C1 and ENG X EEC C2 SMT messages, see the applicable AMM Task.

*[2] If both EEC software are version 5.2 or higher, Scheduled Maintenance Task for Short-Time Fault interrogation is not required prior to each ETOPS departure. This task is still required per the scheduled maintenance task requirements in the Maintenance Planning Data (MPD) document to check for EEC Short-Time faults.

END OF TASK

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ZONE 100 - LOWER FUSELAGE - MAINTENANCE PRACTICES

1. General

A. This procedure have the tasks for the internal and external zonal inspections.

TASK 05-41-01-210-801

2. EXTERNAL - ZONAL (GV): Lower Fuselage

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
110	Subzone - Body Station 130 to Station 396
120	Subzone - Body Station 396 to Body Station 540
130	Subzone - Body Station 540.00 to Body Station 727.00
140	Subzone - Body Station 727.00 to Body Station 1016.00

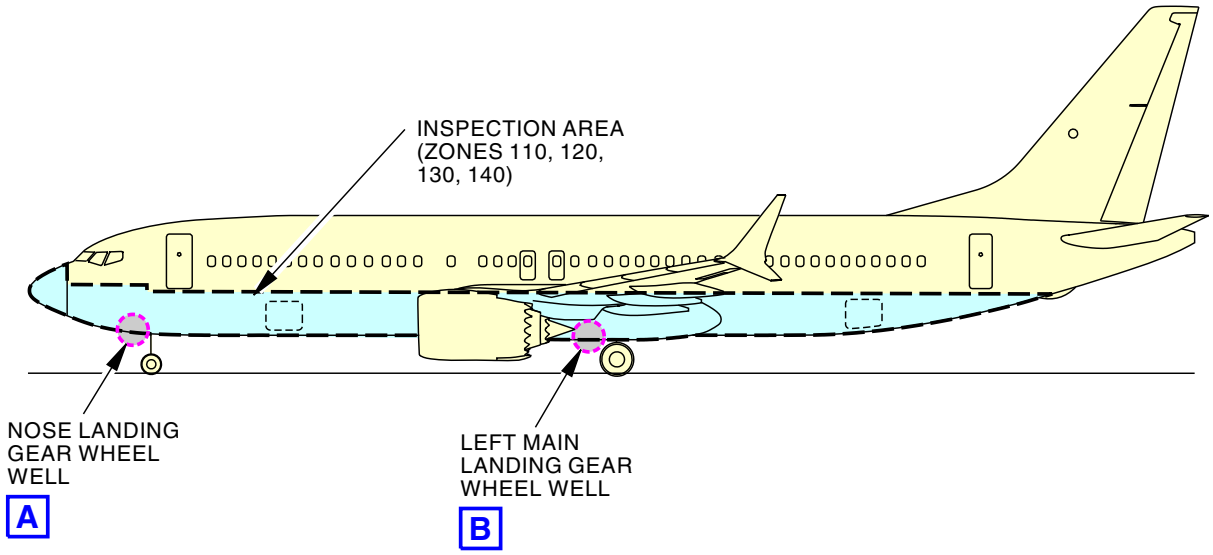
B. Zonal Inspection

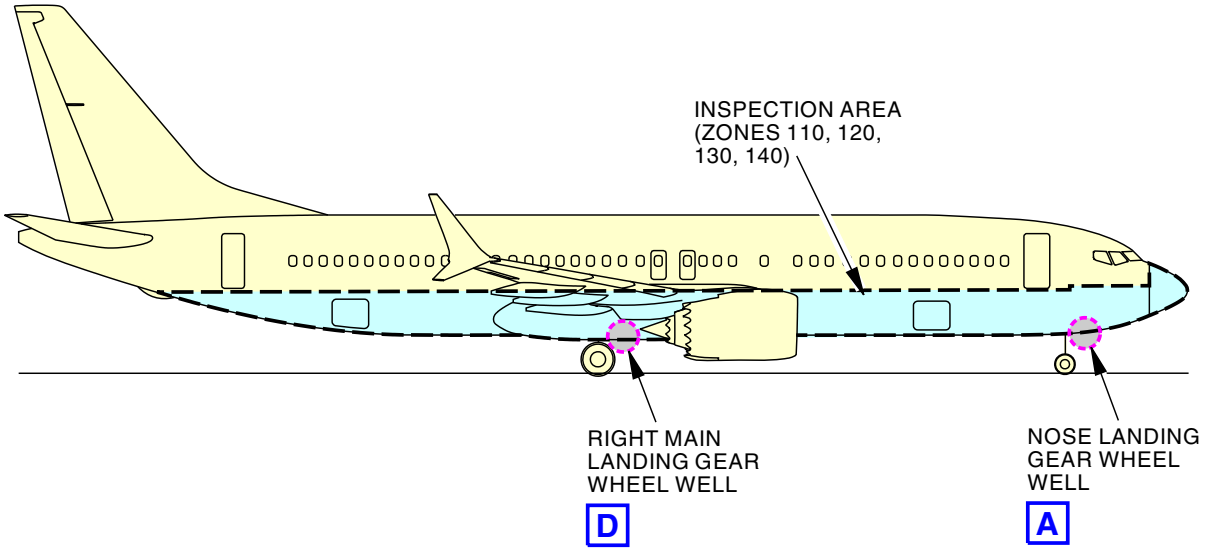
SUBTASK 05-41-01-210-001

(1) Perform an external zonal inspection (GVI) of the lower fuselage. The nose landing gear wheel well and main landing gear wheel well are also included. Inspection is accomplished from the ground, without the use of stands or ladders. No additional access panels required.

——— END OF TASK ———

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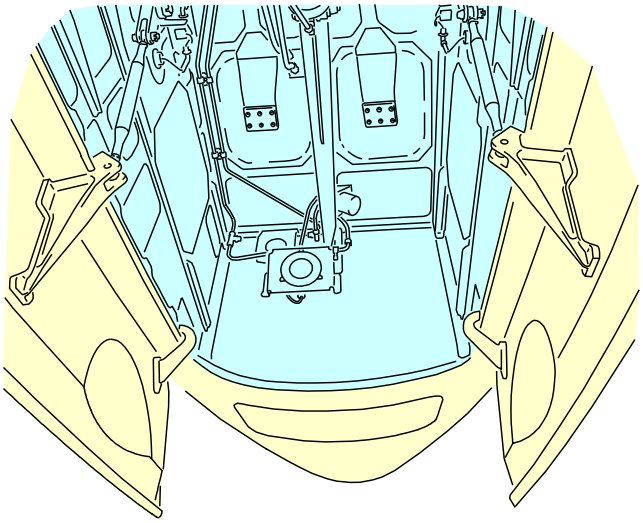




2410072 S00061524872_V2

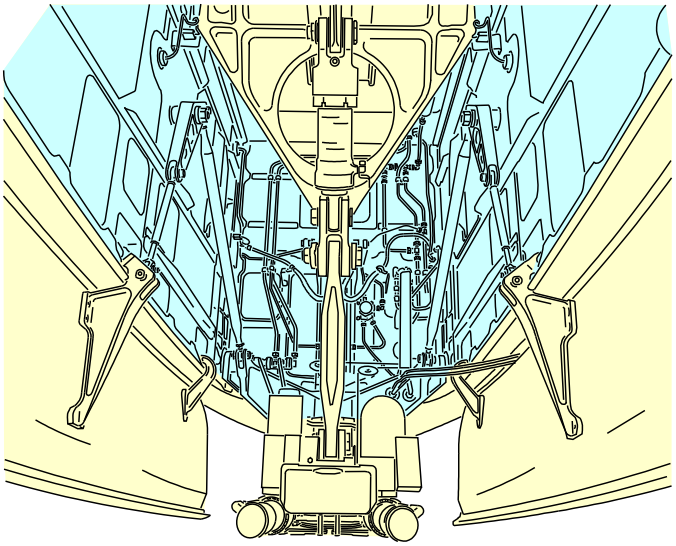
Lower Half of Fuselage General Visual (External)
Figure 201/05-41-01-990-801 (Sheet 1 of 4)

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**NOSE LANDING GEAR WHEEL WELL
(VIEW IN THE FORWARD DIRECTION)**

A



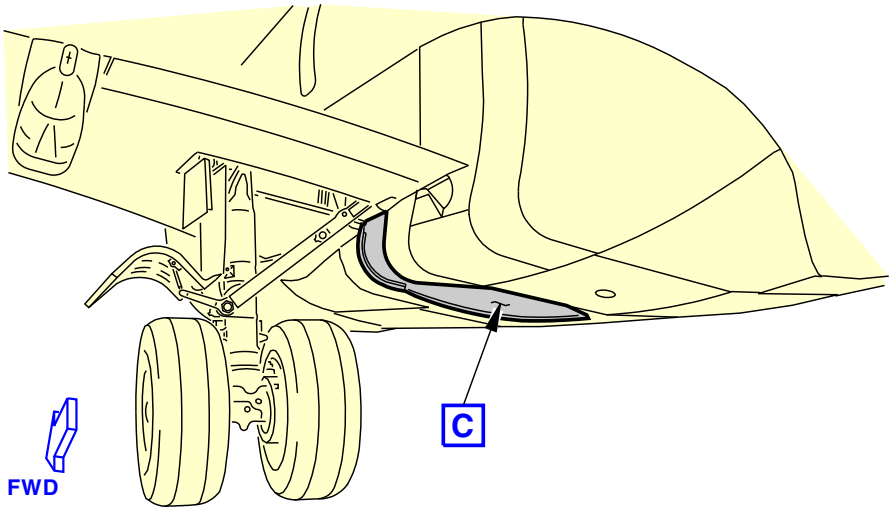
**NOSE LANDING GEAR WHEEL WELL
(VIEW IN THE AFT DIRECTION)**

A

2410073 S00061524873_V1

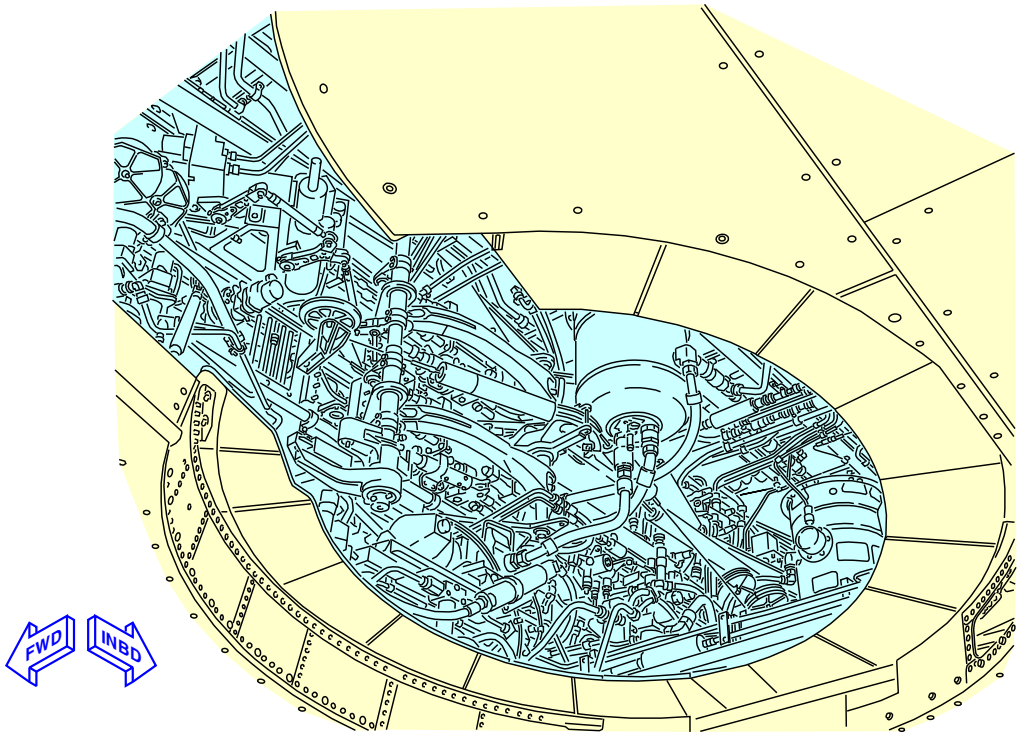
**Lower Half of Fuselage General Visual (External)
Figure 201/05-41-01-990-801 (Sheet 2 of 4)**

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LEFT MAIN LANDING GEAR WHEEL WELL

B

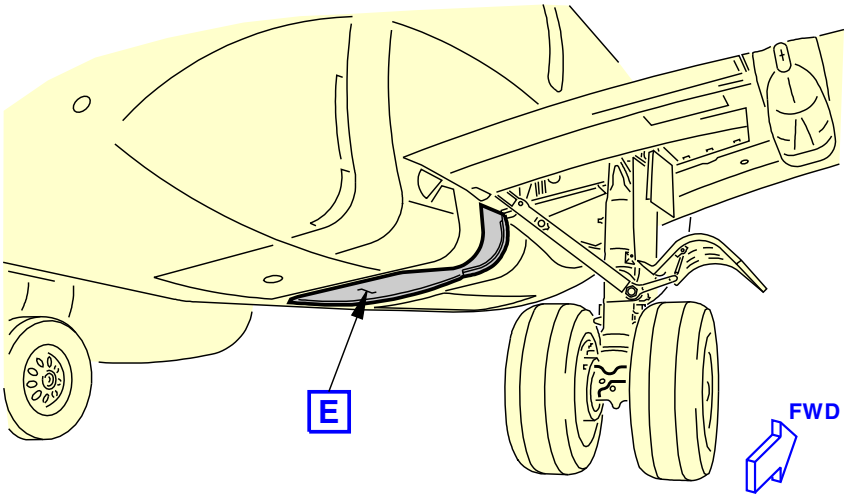


C

2410074 S00061524874_V1

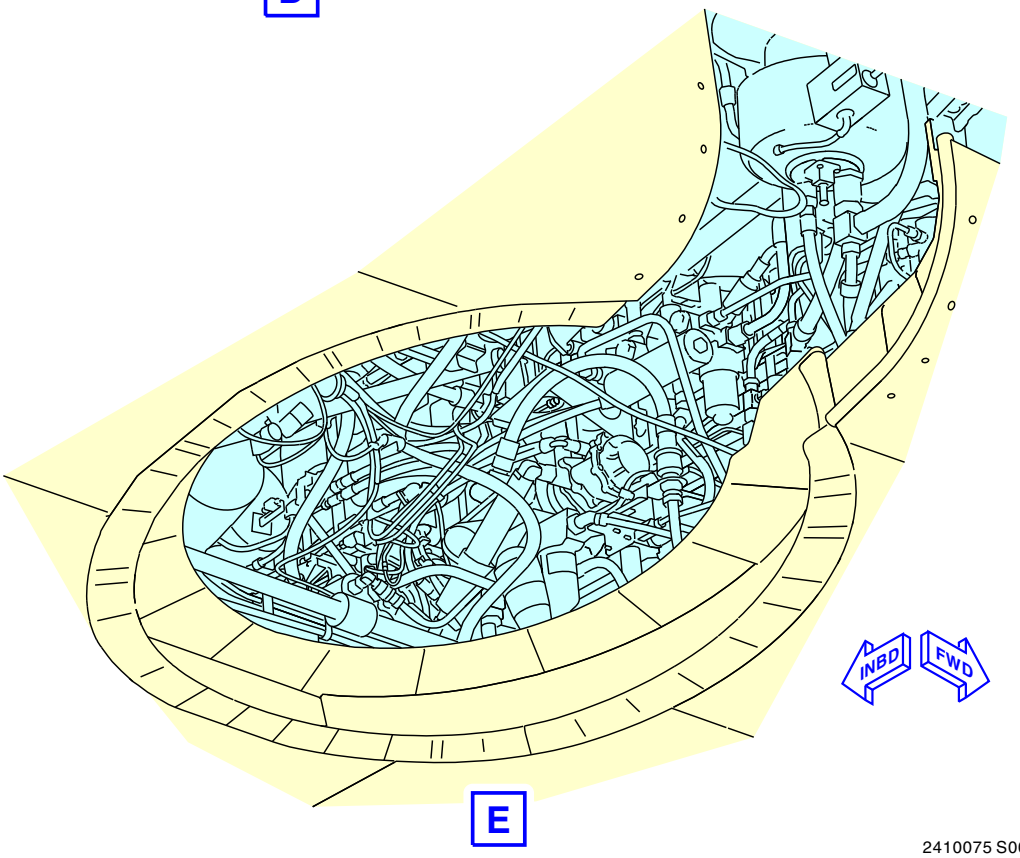
Lower Half of Fuselage General Visual (External)
Figure 201/05-41-01-990-801 (Sheet 3 of 4)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



RIGHT MAIN LANDING GEAR WHEEL WELL

D



2410075 S00061524875_V1

Lower Half of Fuselage General Visual (External)
Figure 201/05-41-01-990-801 (Sheet 4 of 4)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-01-210-833

3. EXTERNAL - ZONAL (GVI): Radome

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
111	Radome

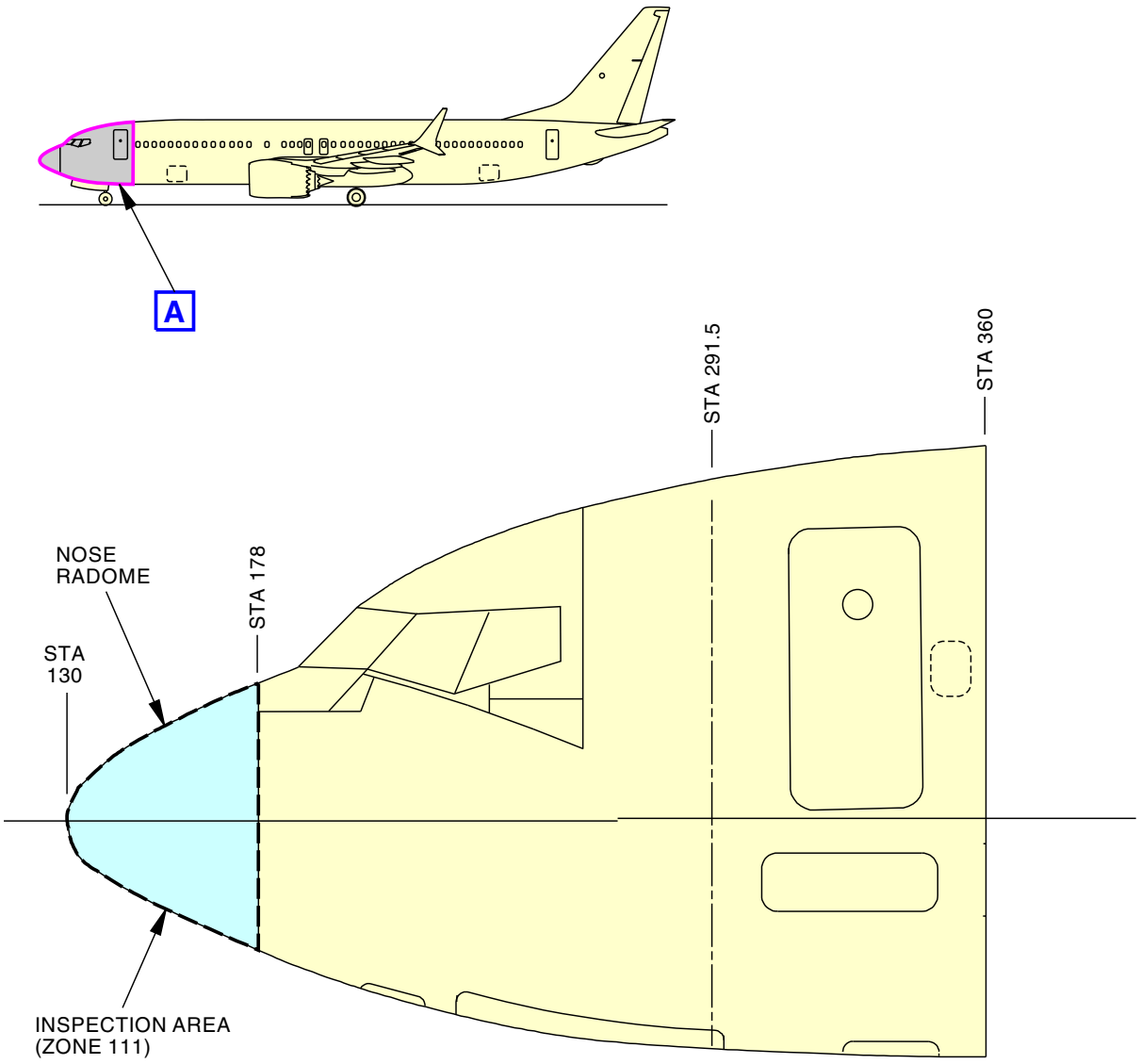
B. Zonal Inspection

SUBTASK 05-41-01-210-034

(1) Do a General Visual Inspection of the radome.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



2545589 S0000601073_V1

Radome General Visual External
Figure 202/05-41-01-990-831

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-01-210-802

4. INTERNAL - ZONAL (GV): Radome

(Figure 203)

NOTE: This procedure is a scheduled maintenance task.

A. References

Reference	Title
53-52-00-010-801	Nose Radome Open (P/B 201)
53-52-00-410-801	Nose Radome Close (P/B 201)

B. Location Zones

Zone	Area
111	Radome

C. Zonal Inspection

SUBTASK 05-41-01-010-001

(1) Do this task: Nose Radome Open, TASK 53-52-00-010-801.

SUBTASK 05-41-01-210-002

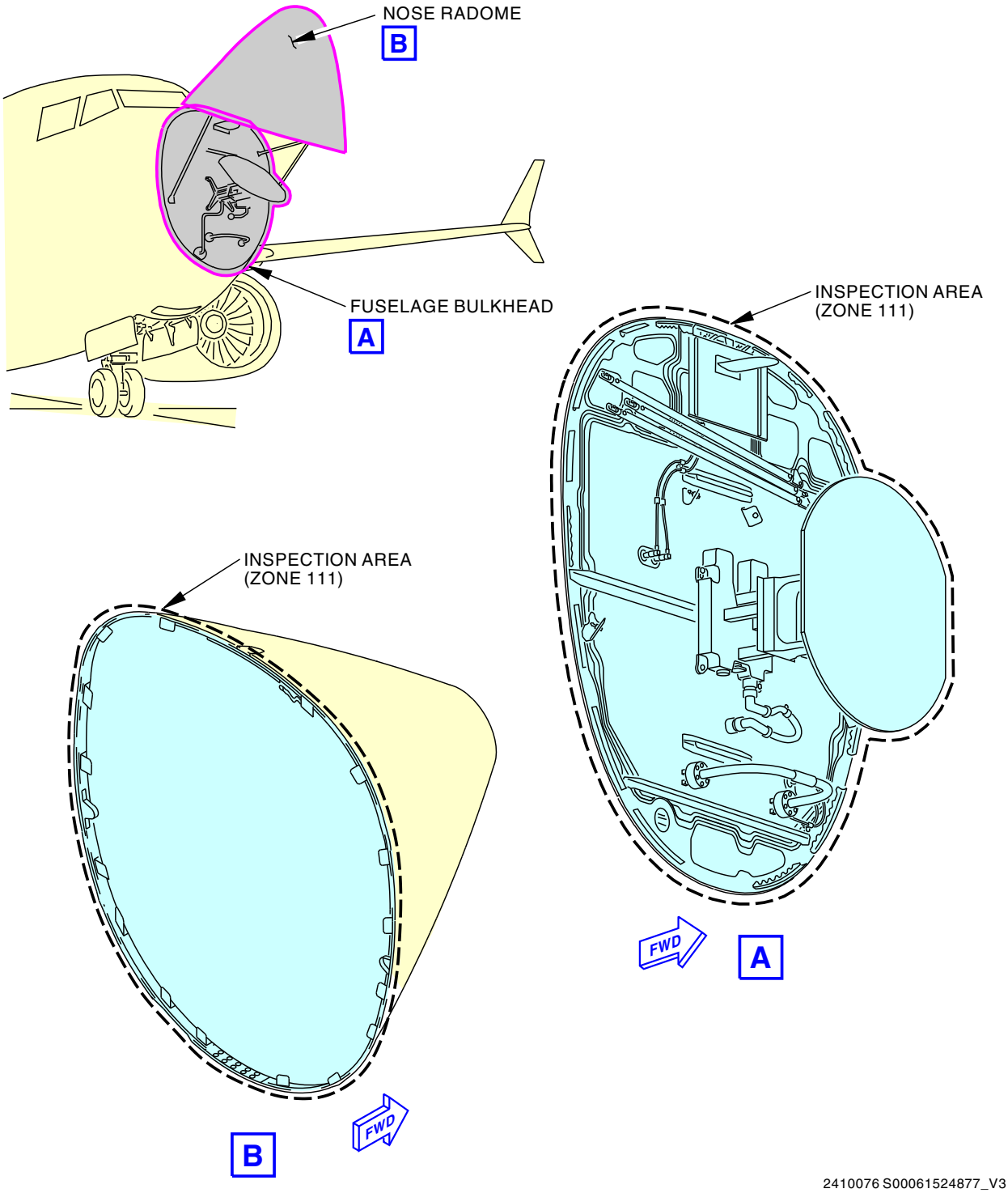
(2) Do a zonal inspection of the internal area of the nose radome.

SUBTASK 05-41-01-410-001

(3) Do this task: Nose Radome Close, TASK 53-52-00-410-801.

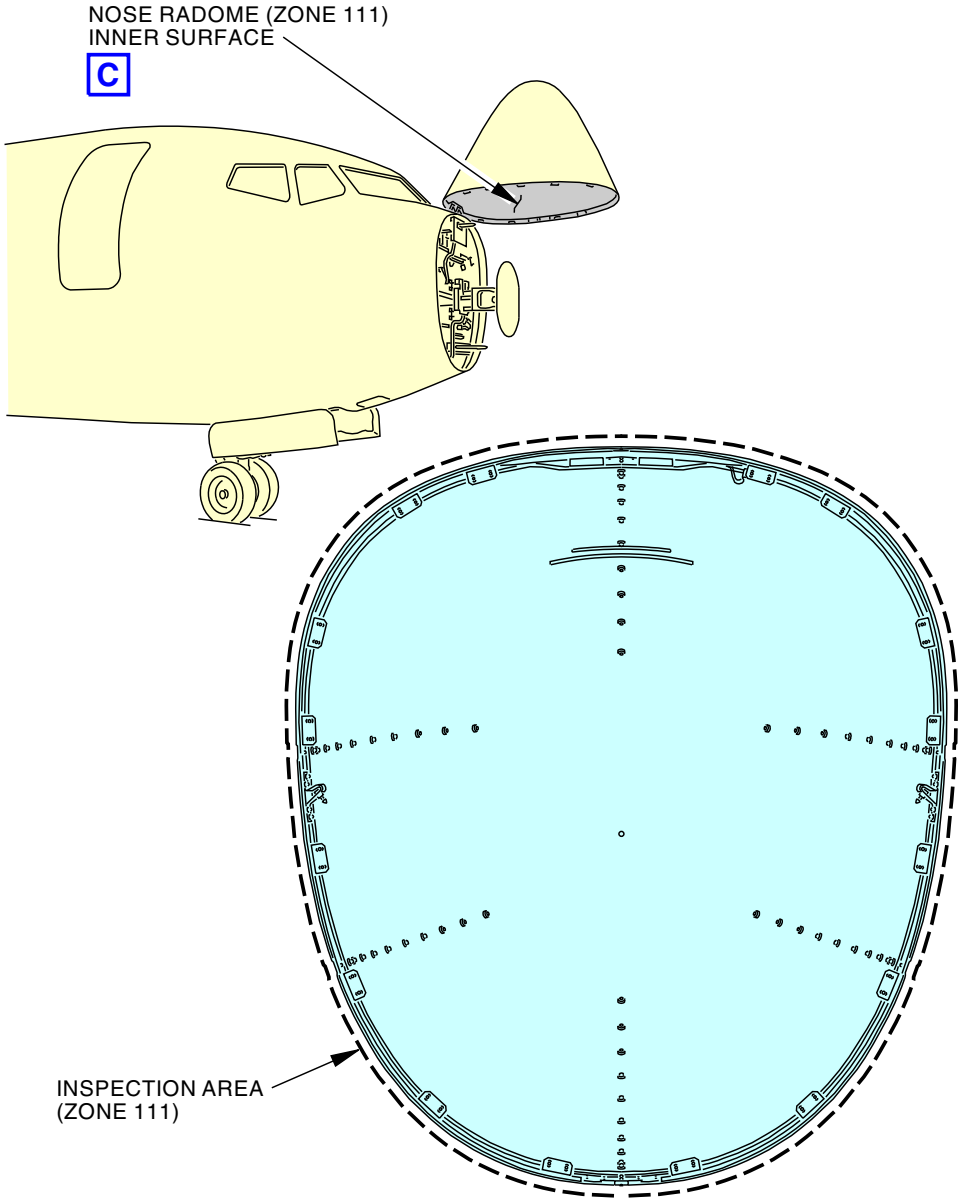
——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Nose Radome (Internal) General Visual Inspection
Figure 203/05-41-01-990-802 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



2809305 S0000645882_V1

Nose Radome (Internal) General Visual Inspection
Figure 203/05-41-01-990-802 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-01-210-834

5. EXTERNAL - ZONAL (GVI): Area Forward of Nose Wheel Well

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
112	Area Forward of Nose Landing Gear Wheel Well

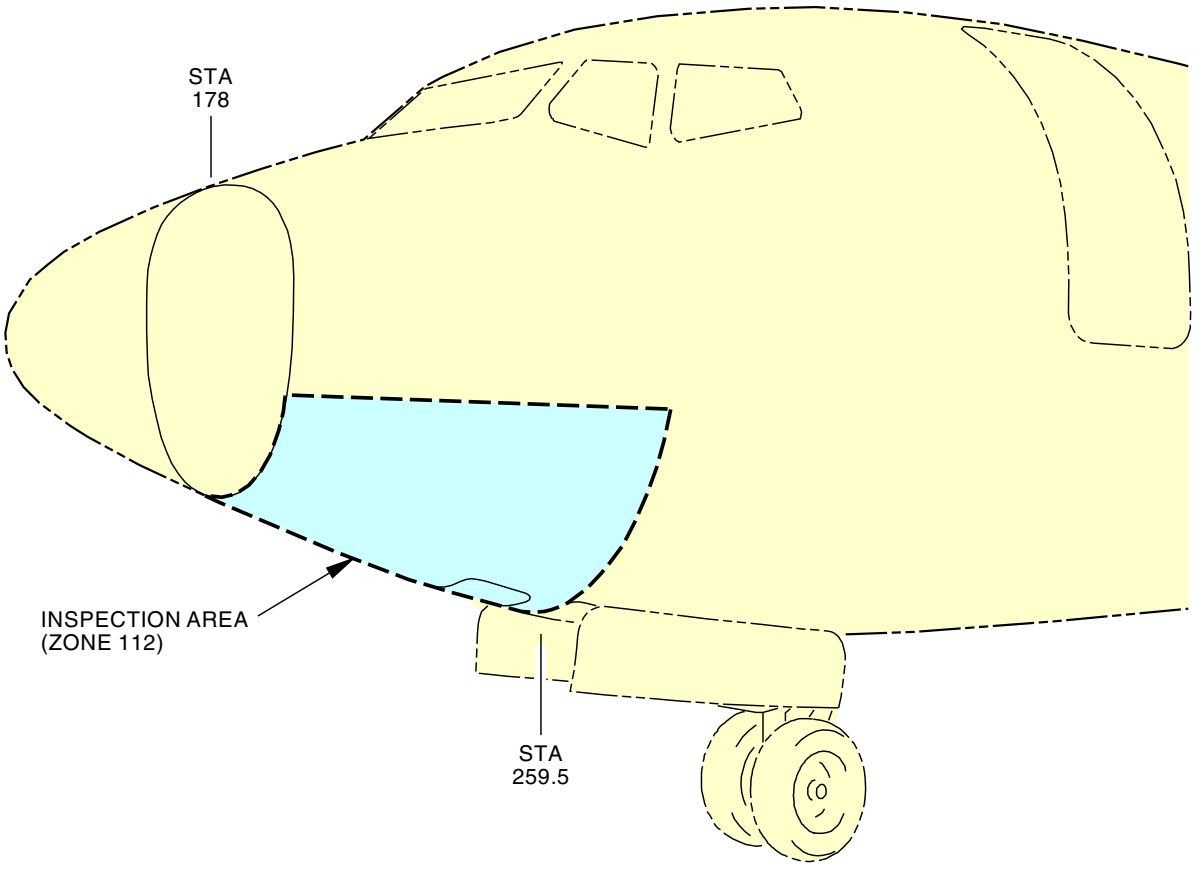
B. Zonal Inspection

SUBTASK 05-41-01-210-035

(1) Do a General Visual Inspection of the Area Forward of the Nose Wheel Well.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



2545592 S0000601076_V1

Area Forward of the Nose Wheel Well General Visual Inspection External
Figure 204/05-41-01-990-832

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-41-01-210-803

6. INTERNAL - ZONAL (GV): Area Forward of Nose Wheel Well

(Figure 205)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This Zonal inspection procedure satisfies the required EZAP-derived Zonal inspection requirement for this zone.

B. References

Reference	Title
05-00-00-910-802	Enhanced Zonal Inspection Program (EZAP) Precautions (P/B 201)
20-60-07-910-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
112	Area Forward of Nose Landing Gear Wheel Well

D. Access Panels

Number	Name/Location
112A	Forward Access Door

E. Zonal Inspection

SUBTASK 05-41-01-010-002

(1) Open this access panel:

Number	Name/Location
112A	Forward Access Door

SUBTASK 05-41-01-210-003

(2) Do the zonal inspection following the procedures in Enhanced Zonal Inspection Program (EZAP) Precautions, TASK 05-00-00-910-802.

(3) Perform an internal zonal inspection (GV) of the area forward of the nose wheel well - Section 41, Sta 178 to Sta 224.8. (EZAP)

SUBTASK 05-41-01-910-002

(4) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-910-801 for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

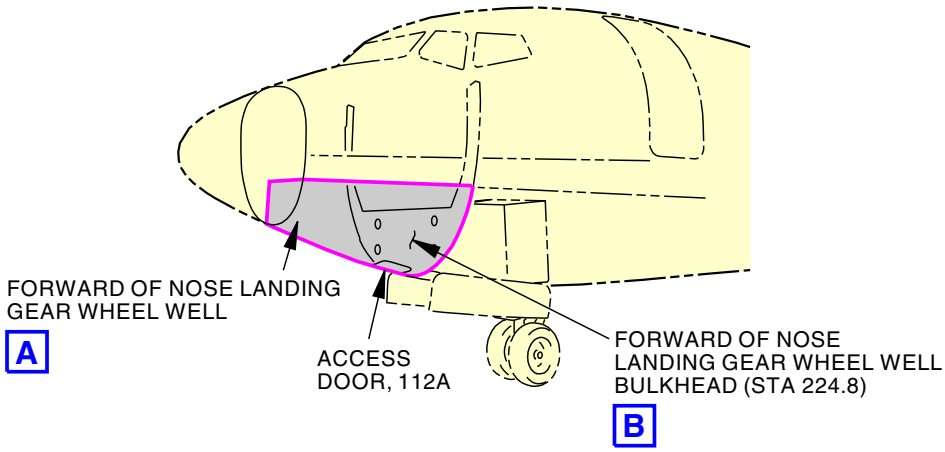
SUBTASK 05-41-01-410-002

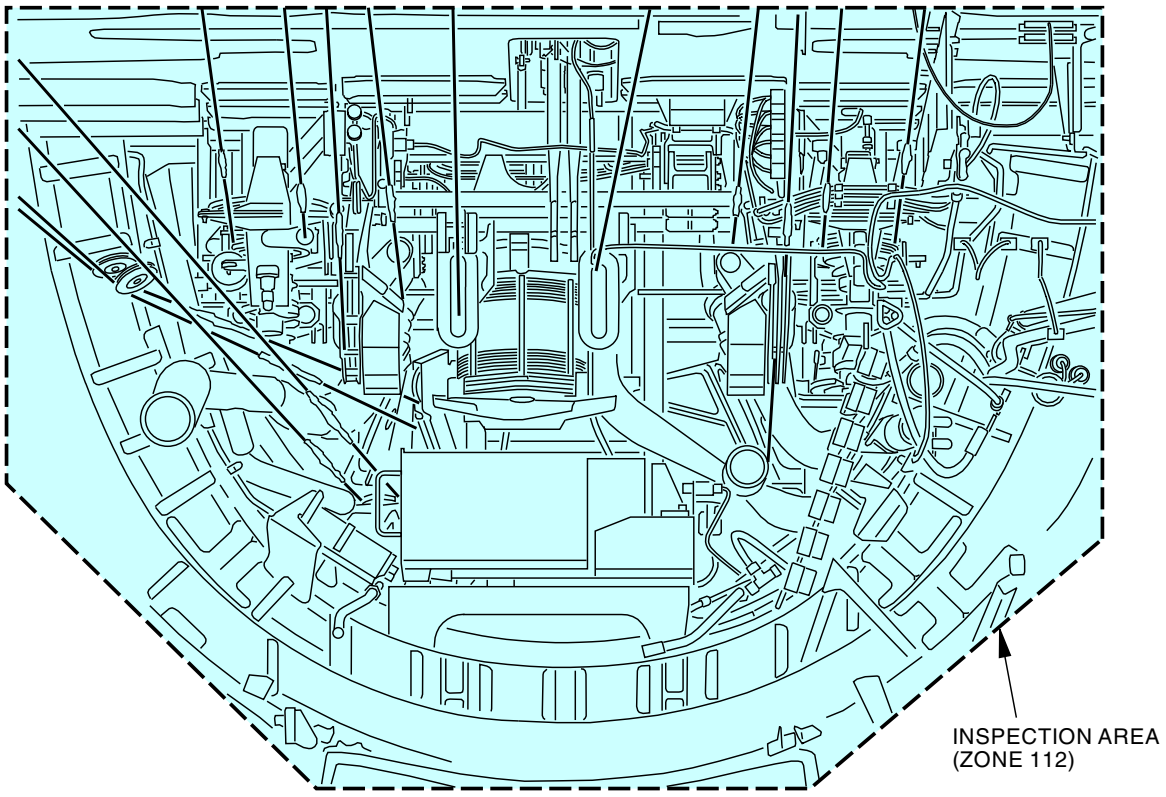
(5) Close this access panel:

Number	Name/Location
112A	Forward Access Door

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details





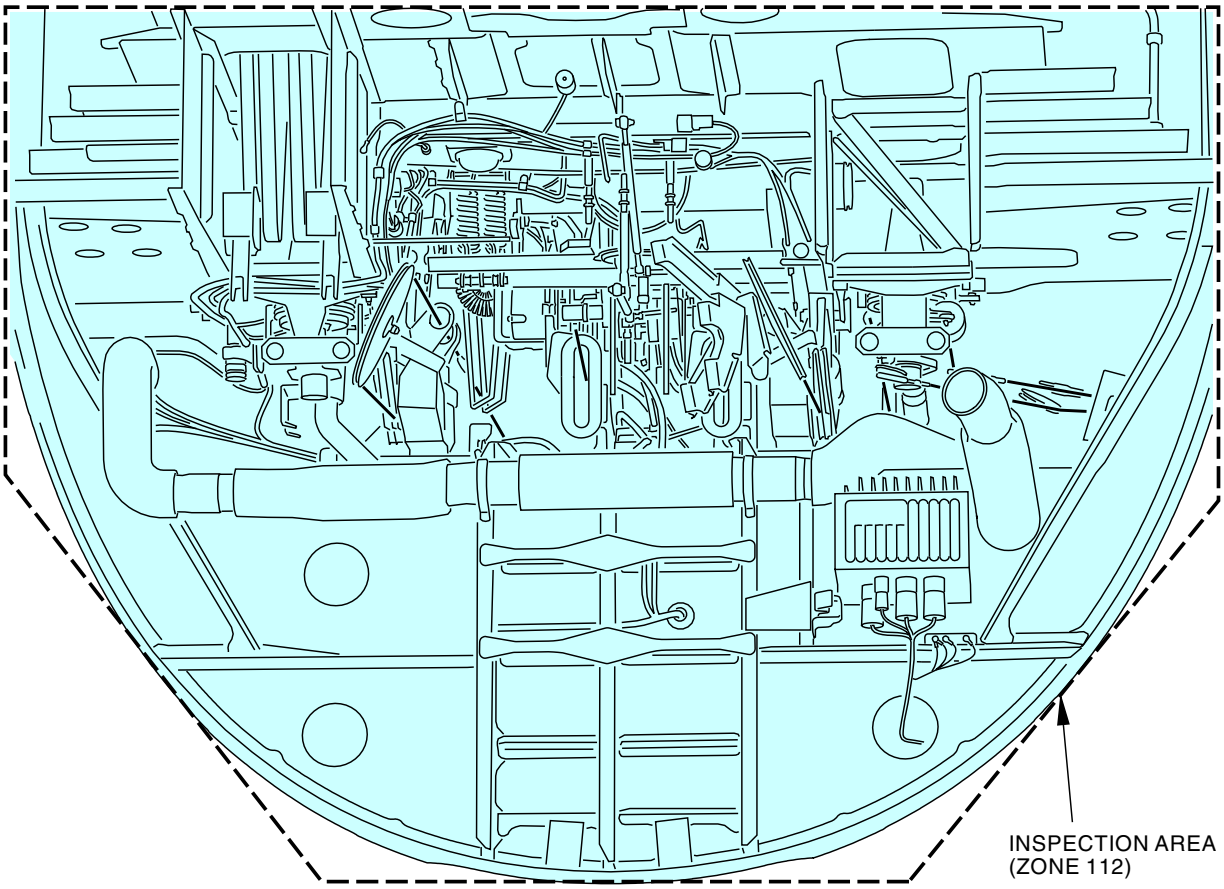
FORWARD OF NOSE LANDING GEAR WHEEL WELL (VIEW IN THE FORWARD DIRECTION)

A

2410077 S00061524879_V1

Forward of Nose Landing Gear Wheel Well General Visual (Internal)
Figure 205/05-41-01-990-803 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



**FORWARD OF NOSE LANDING GEAR WHEEL WELL BULKHEAD (STA 224.8)
(VIEW IN THE AFT DIRECTION)**

B

2410078 S00061524880_V1

**Forward of Nose Landing Gear Wheel Well General Visual (Internal)
Figure 205/05-41-01-990-803 (Sheet 2 of 2)**

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-01-210-835

7. EXTERNAL - ZONAL (GVI): Area Above and Outboard of Nose Wheel Well

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
113	Area Above and Outboard of Nose Landing Gear Wheel Well - Left
114	Area Above and Outboard of Nose Landing Gear Wheel Well - Right

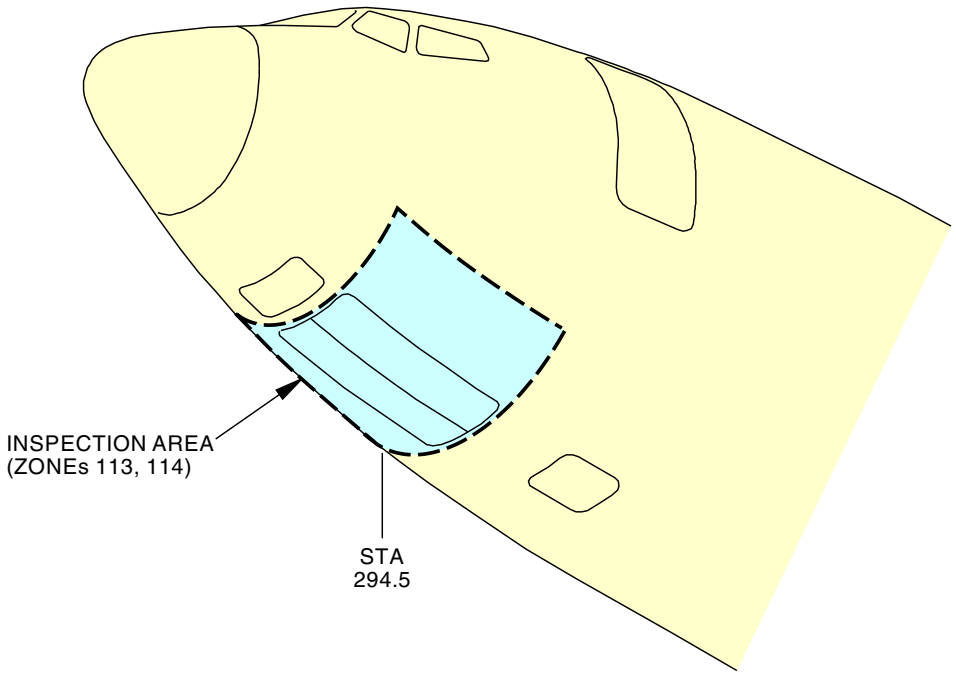
B. Zonal Inspection

SUBTASK 05-41-01-210-054

(1) Do a General Visual Inspection of the area above and outboard of the nose wheel well.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



2545597 S0000601086_V1

Area Above and Outboard of Nose Wheel Well General Visual (External)
Figure 206/05-41-01-990-853

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-41-01-210-804

8. INTERNAL - ZONAL (GV): Area Above and Outboard of Nose Wheel Well

(Figure 207)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This Zonal inspection procedure satisfies the required EZAP-derived Zonal inspection requirement for this zone.

B. References

Reference	Title
05-00-00-910-802	Enhanced Zonal Inspection Program (EZAP) Precautions (P/B 201)
05-51-91-790-801	Cabin Pressure Leak Test (P/B 201)
20-60-07-910-801	Protection of the EWIS During Maintenance (P/B 201)
53-14-01-020-801	Nose Wheel Well Access Panels Removal (P/B 401)
53-14-01-420-801	Nose Wheel Well Access Panels Installation (P/B 401)

C. Location Zones

Zone	Area
113	Area Above and Outboard of Nose Landing Gear Wheel Well - Left
114	Area Above and Outboard of Nose Landing Gear Wheel Well - Right

D. Access Panels

Number	Name/Location
113AC	Fwd Nose Wheel Well Upper Access Panel
113AW	Forward Nose Wheel Well Panel
113BW	Forward Nose Wheel Well Panel
114AC	Fwd Nose Wheel Well Upper Access Panel
114AW	Forward Nose Wheel Well Panel
114BW	Forward Nose Wheel Well Panel

E. Zonal Inspection

SUBTASK 05-41-01-010-003

(1) Open these access panels:

Number	Name/Location
113AC	Fwd Nose Wheel Well Upper Access Panel
113AW	Forward Nose Wheel Well Panel
113BW	Forward Nose Wheel Well Panel
114AC	Fwd Nose Wheel Well Upper Access Panel
114AW	Forward Nose Wheel Well Panel
114BW	Forward Nose Wheel Well Panel

(a) Do this task: Nose Wheel Well Access Panels Removal, TASK 53-14-01-020-801.

SUBTASK 05-41-01-210-004

(2) Do the zonal inspection following the procedures in Enhanced Zonal Inspection Program (EZAP) Precautions, TASK 05-00-00-910-802.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(3) Perform an internal zonal inspection (GV) of the area above and outboard of the nose wheel well. (EZAP)

SUBTASK 05-41-01-910-003

(4) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-910-801 for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

SUBTASK 05-41-01-410-003

(5) Close these access panels:

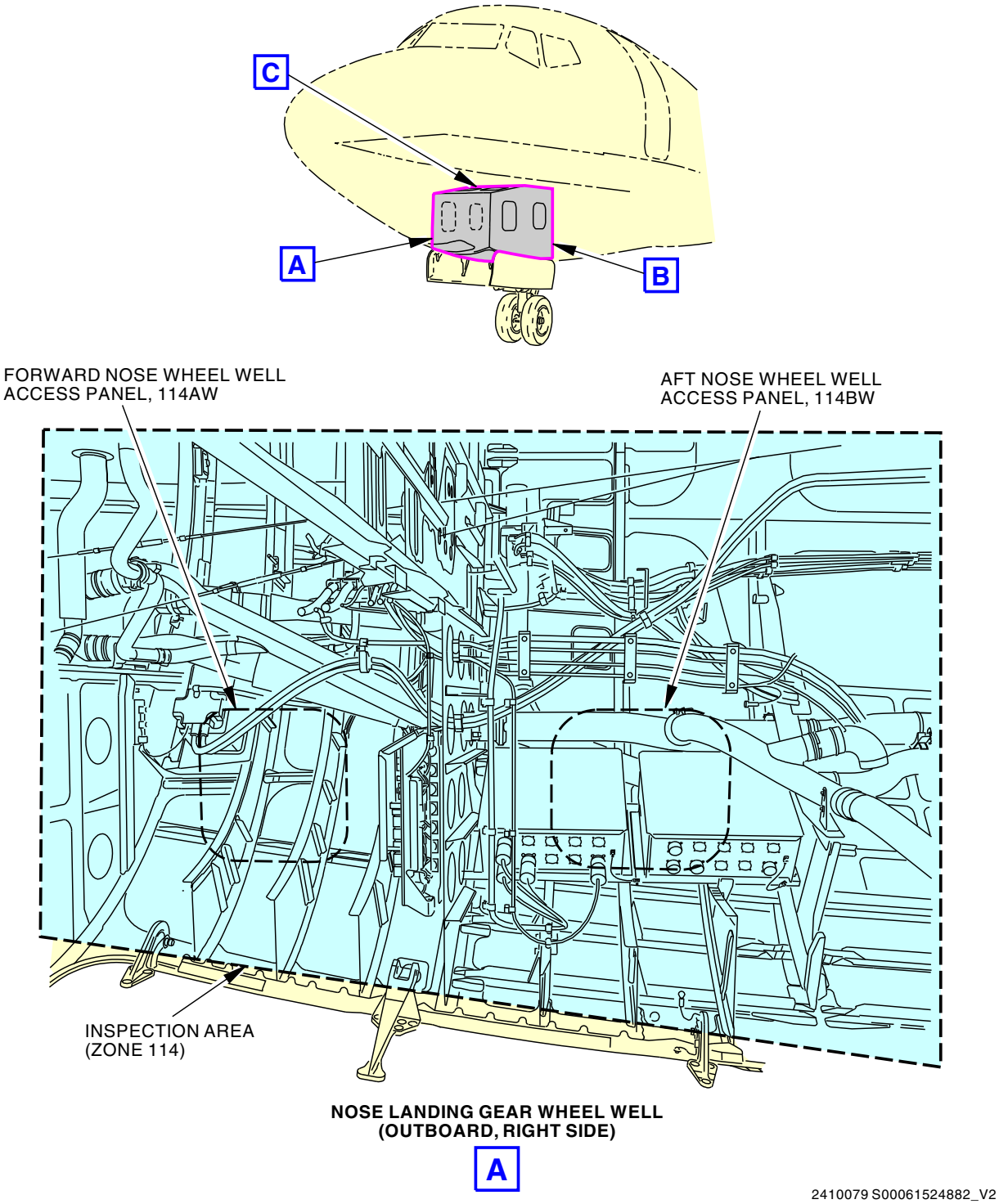
Number	Name/Location
113AC	Fwd Nose Wheel Well Upper Access Panel
113AW	Forward Nose Wheel Well Panel
113BW	Forward Nose Wheel Well Panel
114AC	Fwd Nose Wheel Well Upper Access Panel
114AW	Forward Nose Wheel Well Panel
114BW	Forward Nose Wheel Well Panel

(a) Do this task: Nose Wheel Well Access Panels Installation, TASK 53-14-01-420-801.

(b) Do this task: Cabin Pressure Leak Test, TASK 05-51-91-790-801.

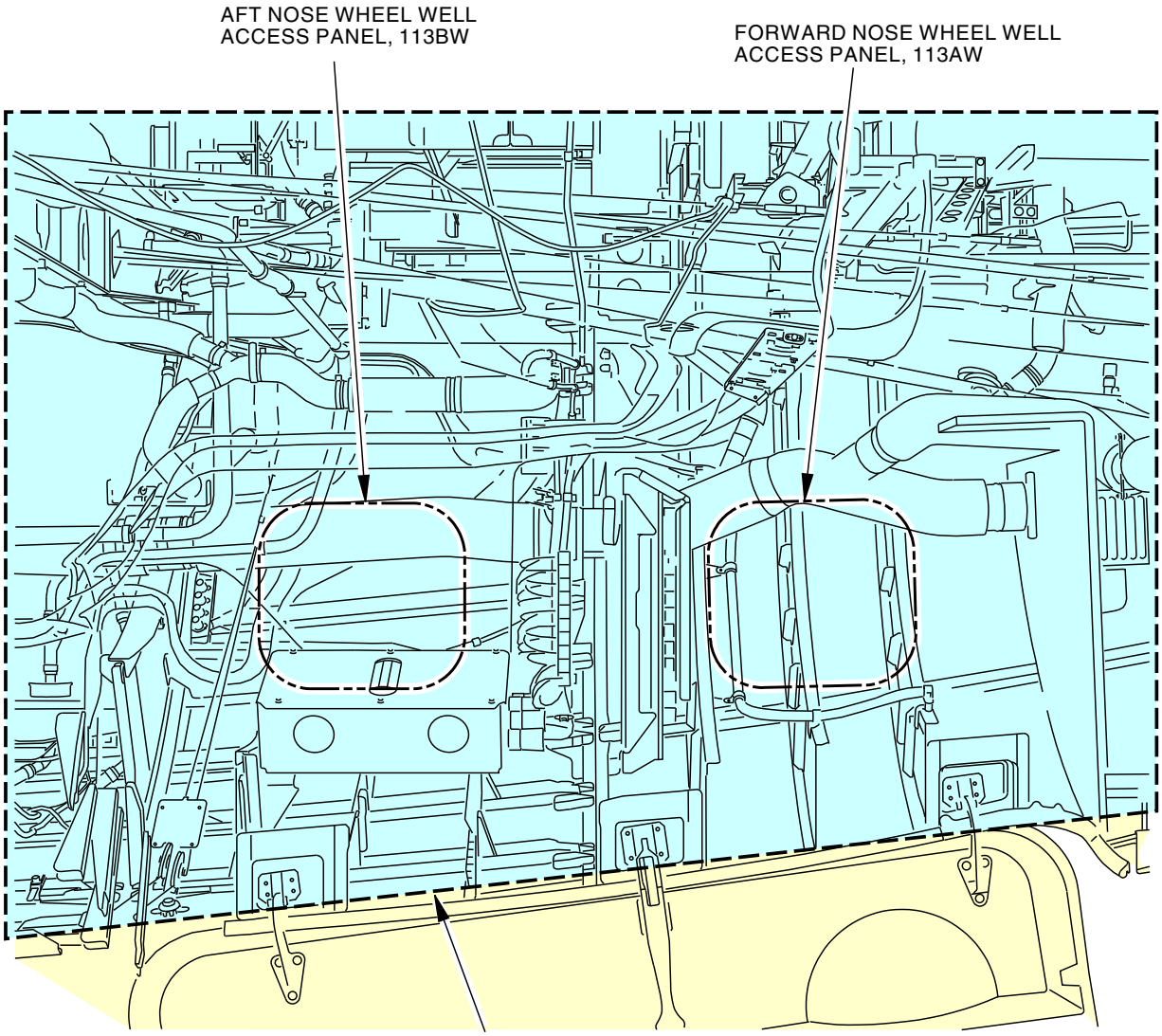
——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Above and Outboard of the Nose Landing Gear Wheel Well General Visual (Internal)
Figure 207/05-41-01-990-804 (Sheet 1 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



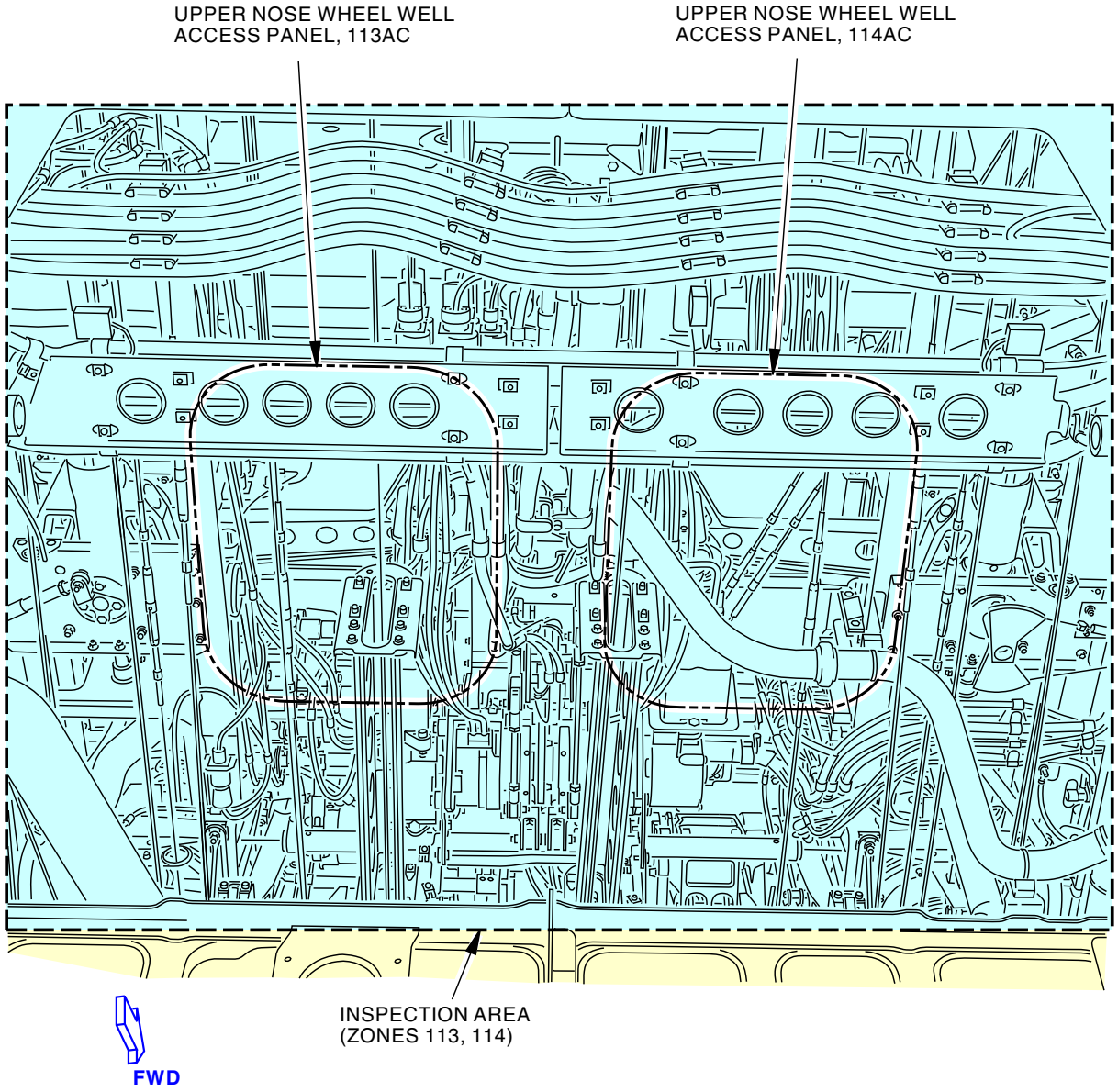
**NOSE LANDING GEAR WHEEL WELL
(OUTBOARD, LEFT SIDE)**

B

2410080 S00061524883_V1

**Above and Outboard of the Nose Landing Gear Wheel Well General Visual (Internal)
Figure 207/05-41-01-990-804 (Sheet 2 of 3)**

ECCN 9E991 BOEING PROPRIETARY - See title page for details



**ABOVE THE NOSE LANDING GEAR WHEEL WELL
(VIEW IN THE UP DIRECTION)**

C

2410081 S00061524884_V1

**Above and Outboard of the Nose Landing Gear Wheel Well General Visual (Internal)
Figure 207/05-41-01-990-804 (Sheet 3 of 3)**

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-41-01-210-831

9. INTERNAL - ZONAL (GVI): Nose Landing Gear Wheel Well

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This Zonal inspection procedure satisfies the required EZAP-derived Zonal inspection requirement for this zone.

B. References

Reference	Title
05-00-00-910-802	Enhanced Zonal Inspection Program (EZAP) Precautions (P/B 201)
20-60-07-910-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
115	Nose Landing Gear Wheel Well - Left
116	Nose Landing Gear Wheel Well - Right

D. Zonal Inspection

SUBTASK 05-41-01-210-032

(1) Do the zonal inspection following the procedures in Enhanced Zonal Inspection Program (EZAP) Precautions, TASK 05-00-00-910-802

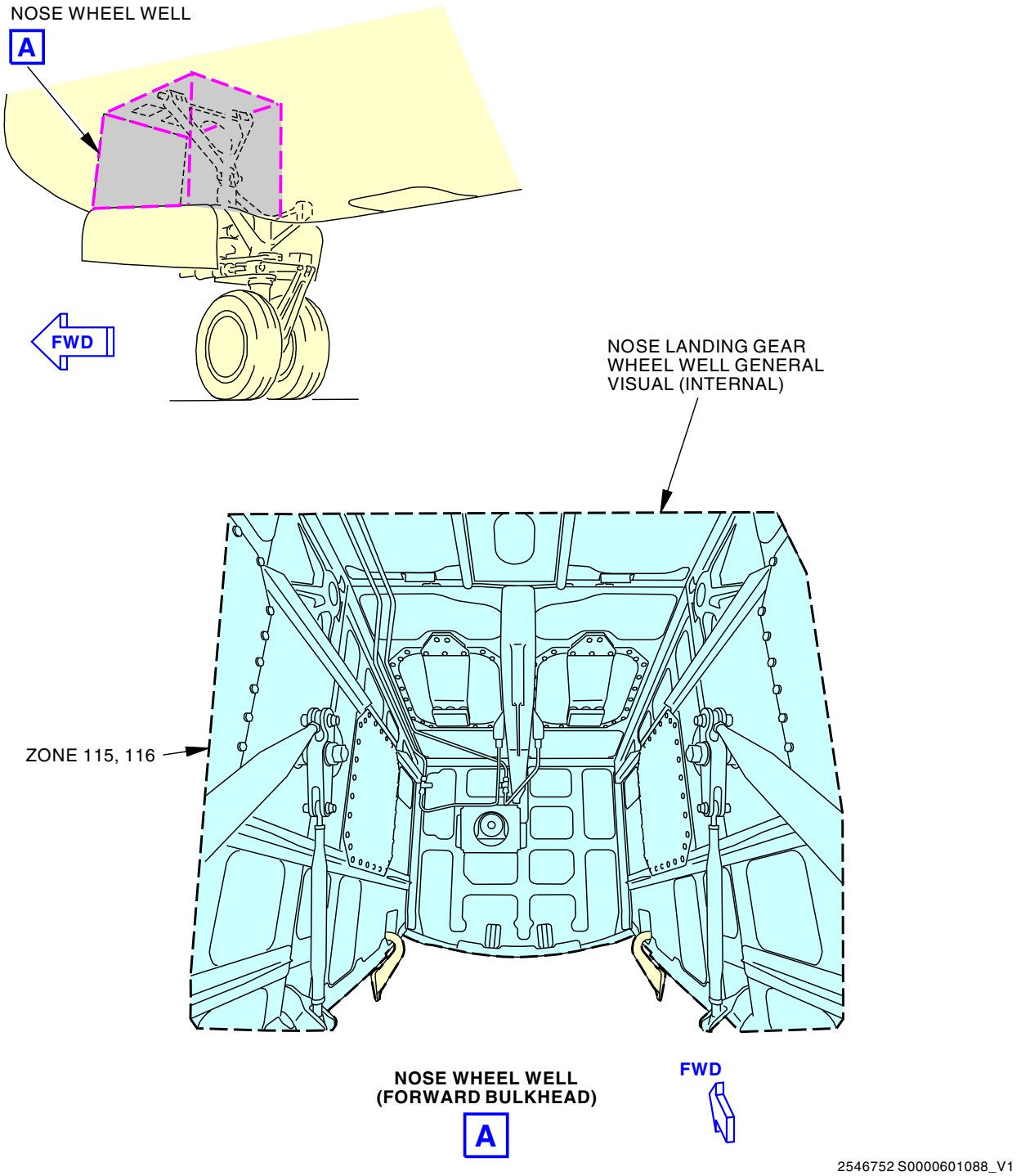
(2) Perform an internal zonal inspection (GVI) of the nose landing gear wheel well. (EZAP)

SUBTASK 05-41-01-910-014

(3) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-910-801 for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Nose Landing Gear Wheel Well General Visual (Internal)
Figure 208/05-41-01-990-833

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-41-01-210-805

10. INTERNAL - ZONAL (GV): Electrical and Electronics Compartment

(Figure 209)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This Zonal inspection procedure satisfies the required EZAP-derived Zonal inspection requirement for this zone.

B. References

Reference	Title
05-00-00-910-802	Enhanced Zonal Inspection Program (EZAP) Precautions (P/B 201)
20-60-07-910-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
117	Electrical and Electronics Compartment - Left
118	Electrical and Electronics Compartment - Right

D. Access Panels

Number	Name/Location
117A	Electronic Equipment Access Door
117BL	Forward Airstair Door

E. Zonal Inspection

SUBTASK 05-41-01-010-004

(1) Open these access panels:

Number	Name/Location
117A	Electronic Equipment Access Door
117BL	Forward Airstair Door

NOTE: Forward airstair drip pan access panel must be removed if airstair installed. Access panel 117BL is only for airplanes with airstairs installed.

SUBTASK 05-41-01-210-005

(2) Do the zonal inspection following the procedures in Enhanced Zonal Inspection Program (EZAP) Precautions, TASK 05-00-00-910-802.

(3) Perform an internal zonal inspection (GV) of the electrical and electronics compartment. (EZAP)

SUBTASK 05-41-01-910-004

(4) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-910-801 for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

SUBTASK 05-41-01-410-004

(5) Close these access panels:

Number	Name/Location
117A	Electronic Equipment Access Door

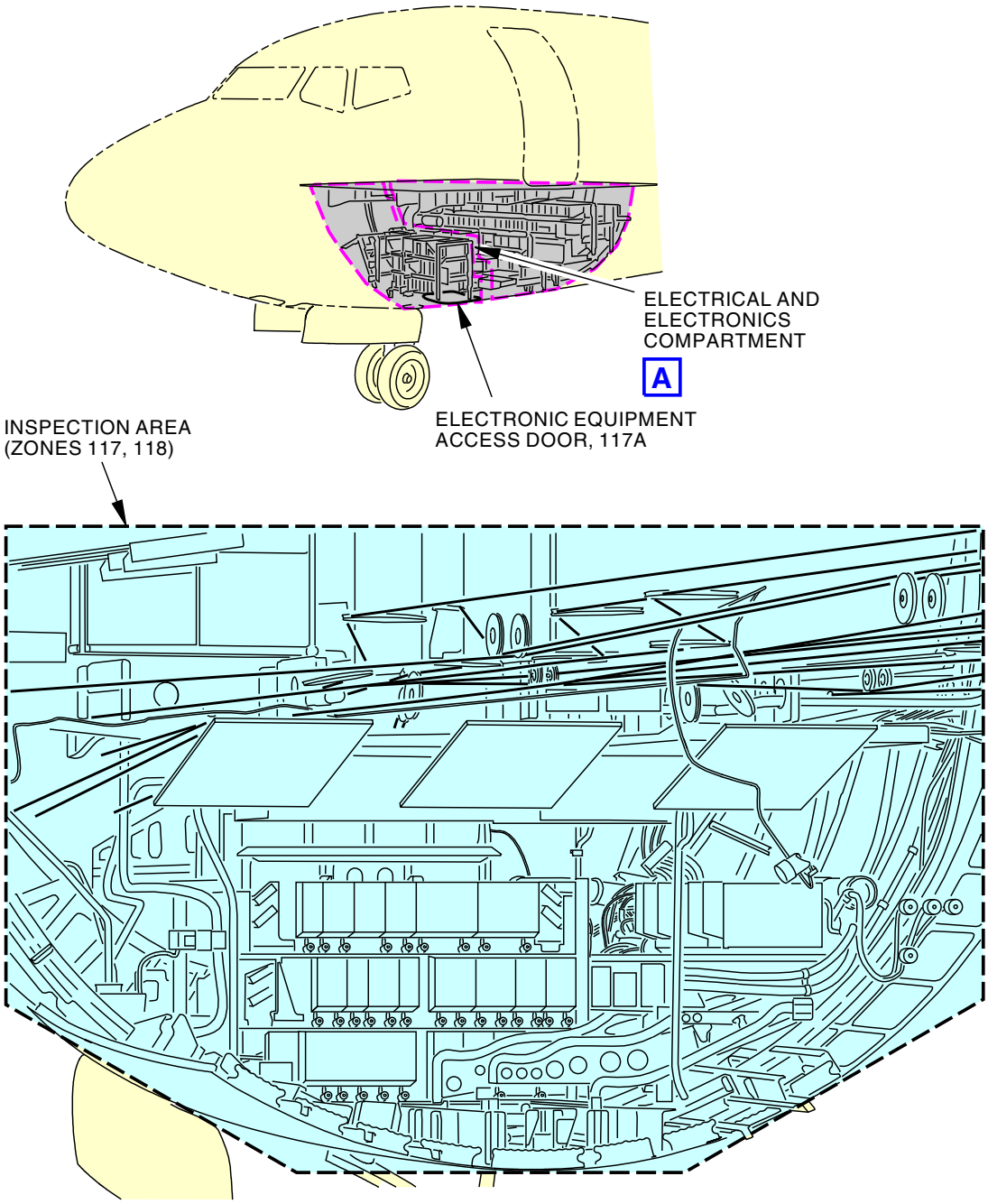
ECCN 9E991 BOEING PROPRIETARY - See title page for details

(Continued)

Number	Name/Location
117BL	Forward Airstair Door

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details



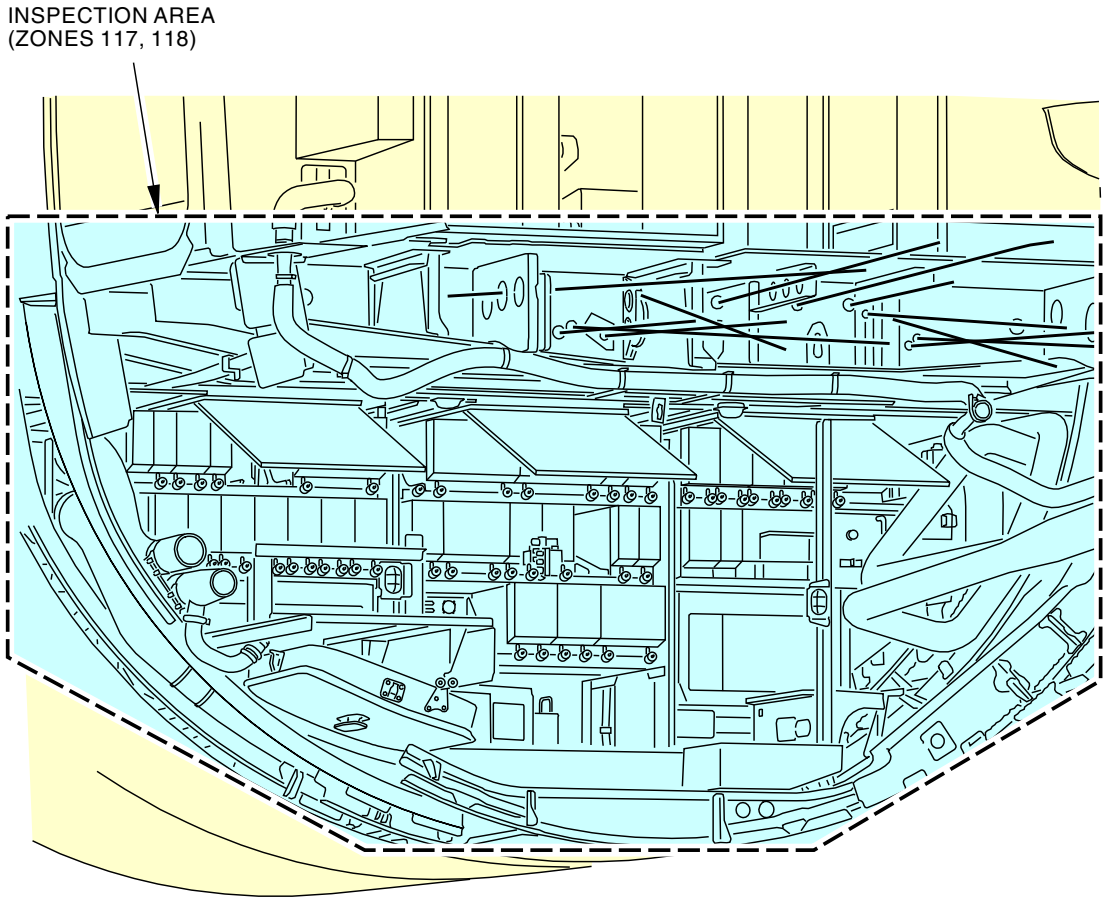
ELECTRICAL AND ELECTRONICS COMPARTMENT
(VIEW IN THE FORWARD DIRECTION)

A

2410082 S00061524886_V1

Electrical and Electronics Compartment General Visual (Internal)
Figure 209/05-41-01-990-805 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



**ELECTRICAL AND ELECTRONICS COMPARTMENT
(VIEW IN THE AFT DIRECTION)**

A

2410083 S00061524887_V1

**Electrical and Electronics Compartment General Visual (Internal)
Figure 209/05-41-01-990-805 (Sheet 2 of 2)**

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-01-210-836

11. EXTERNAL - ZONAL (GVI): Electrical and Electronics Compartment

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
117	Electrical and Electronics Compartment - Left
118	Electrical and Electronics Compartment - Right

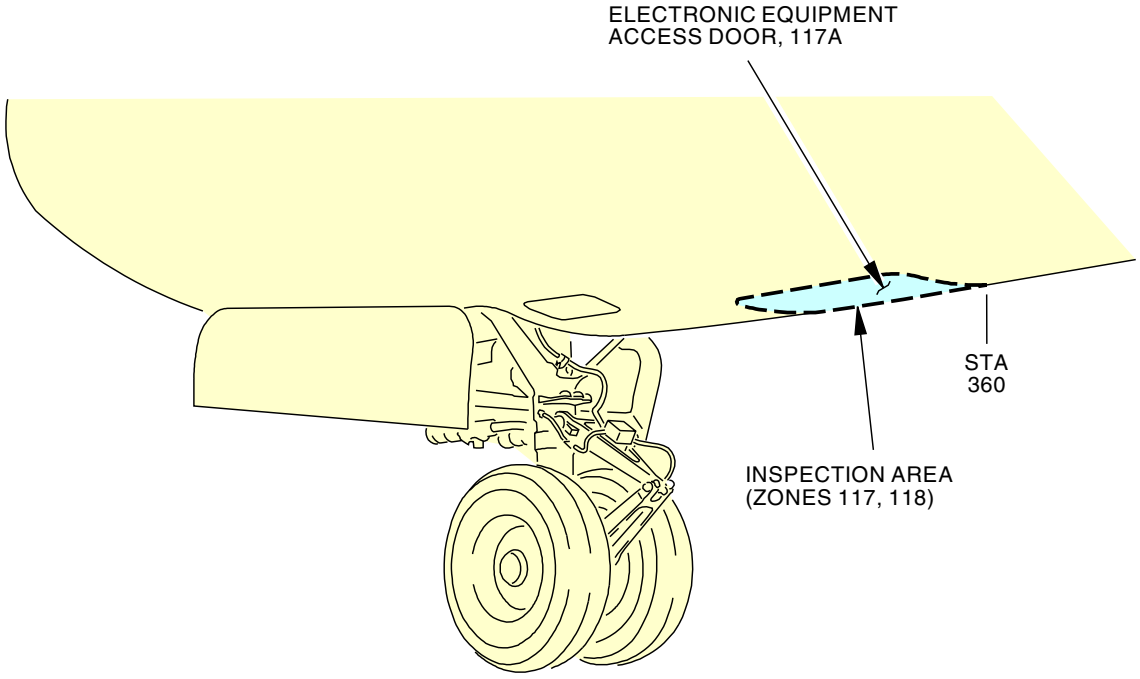
B. Zonal Inspection

SUBTASK 05-41-01-210-036

(1) Do a General Visual Inspection of the Electrical and Electronics Compartment.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



2545608 S0000601089_V1

Electrical and Electronics Compartment General Visual External
Figure 210/05-41-01-990-834

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-01-210-806

12. INTERNAL - ZONAL (GV): Electrical and Electronics Compartment Access Door

(Figure 211)

A. Location Zones

Zone	Area
117	Electrical and Electronics Compartment - Left
118	Electrical and Electronics Compartment - Right

B. Access Panels

Number	Name/Location
117AW	Equipment Access Door Cover

C. Zonal Inspection

SUBTASK 05-41-01-010-005

(1) Open this access panel:

Number	Name/Location
117AW	Equipment Access Door Cover

SUBTASK 05-41-01-210-006

(2) Do a General Visual inspection of the electrical and electronics compartment access door.

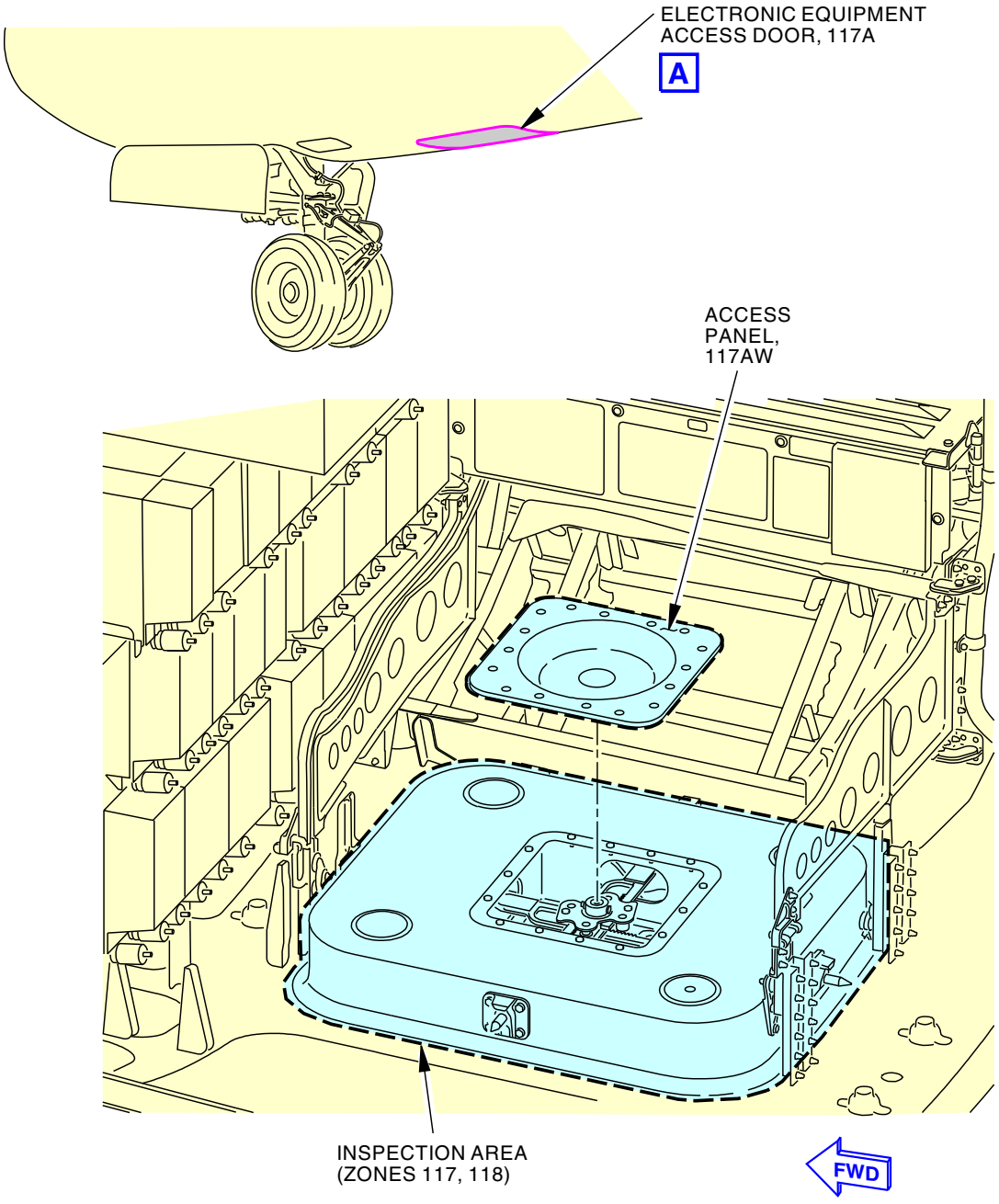
SUBTASK 05-41-01-410-005

(3) Close this access panel:

Number	Name/Location
117AW	Equipment Access Door Cover

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



ELECTRICAL EQUIPMENT ACCESS DOOR, 117A

A

2410084 S00061524889_V1

Electrical Equipment Access Door General Visual (Internal)
Figure 211/05-41-01-990-806

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-01-210-807

13. INTERNAL - ZONAL (GV): Forward Cargo Compartment

(Figure 212)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
121	Forward Cargo Compartment - Left
122	Forward Cargo Compartment - Right

B. Access Panels

Number	Name/Location
821	Forward Cargo Door

C. Zonal Inspection

SUBTASK 05-41-01-010-006

(1) Open this access panel:

Number	Name/Location
821	Forward Cargo Door

NOTE: No Cargo liners removed.

SUBTASK 05-41-01-210-007

(2) Do a General Visual inspection of the forward cargo compartment - Section 43, Sta 396 to forward cargo compartment aft bulkhead.

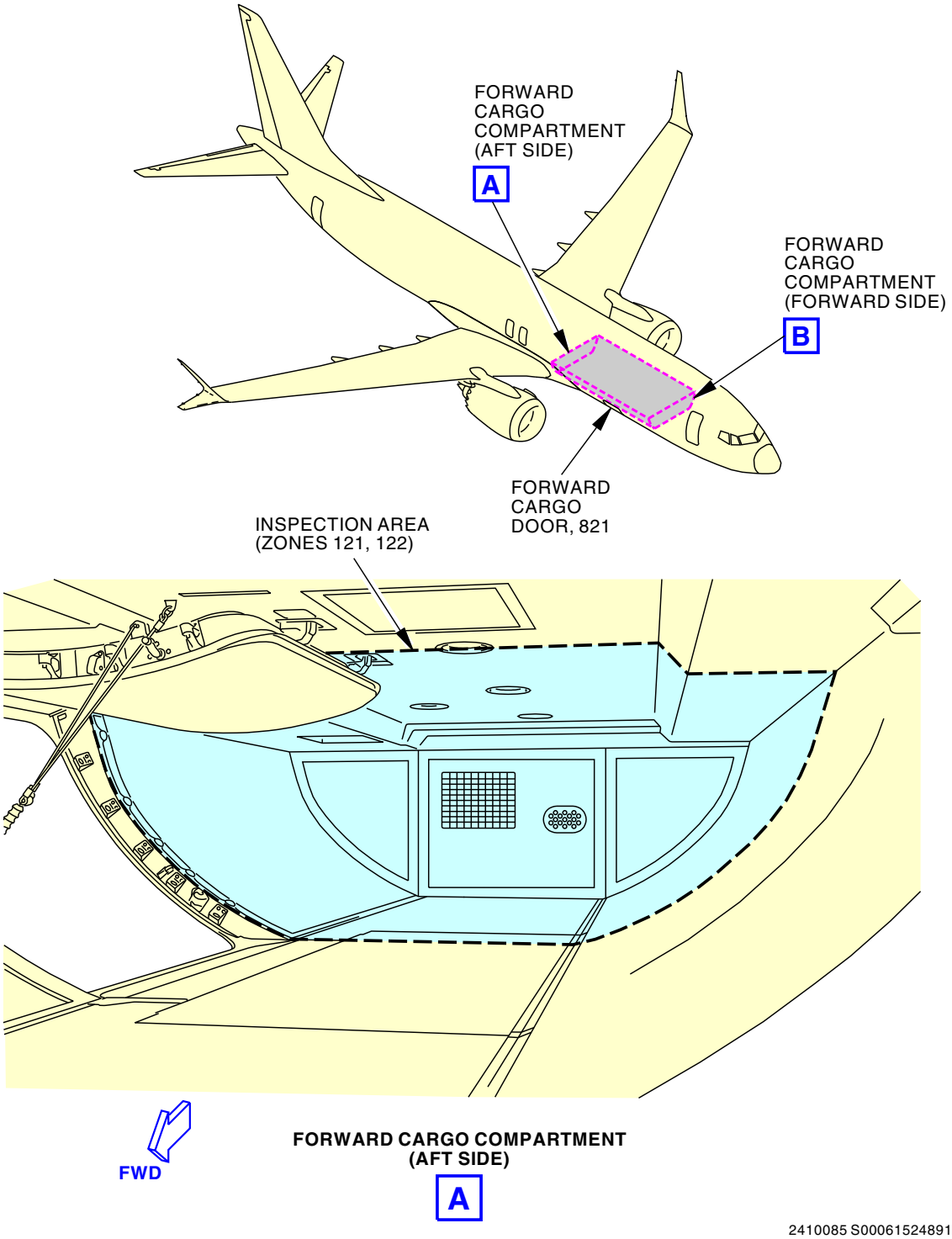
SUBTASK 05-41-01-410-006

(3) Close this access panel:

Number	Name/Location
821	Forward Cargo Door

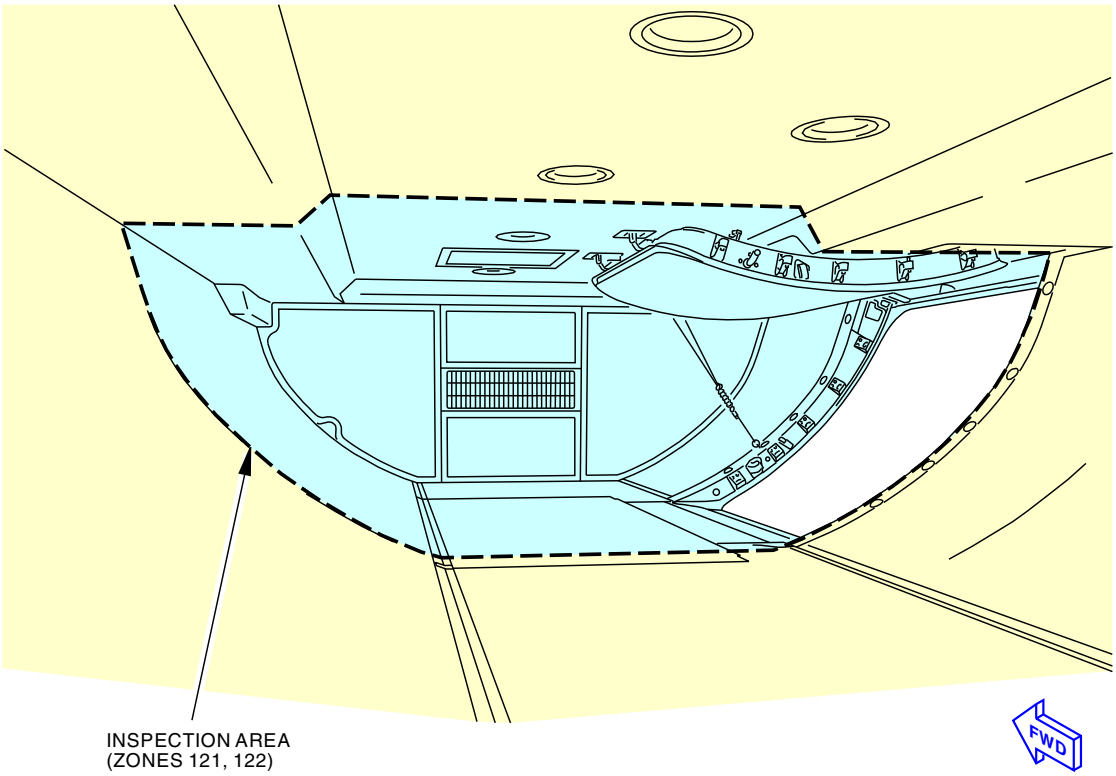
END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Forward Cargo Compartment General Visual (Internal)
Figure 212/05-41-01-990-807 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



**FORWARD CARGO COMPARTMENT
(FORWARD SIDE)**

B

2410086 S00061524892_V1

**Forward Cargo Compartment General Visual (Internal)
Figure 212/05-41-01-990-807 (Sheet 2 of 2)**

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-41-01-210-808

14. INTERNAL - ZONAL (GV): Forward Cargo Compartment - Ceiling Liners Removed

(Figure 213)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
121	Forward Cargo Compartment - Left
122	Forward Cargo Compartment - Right

B. Access Panels

Number	Name/Location
821	Forward Cargo Door

C. Zonal Inspection

SUBTASK 05-41-01-010-007

(1) Open this access panel:

Number	Name/Location
821	Forward Cargo Door

NOTE: Ceiling panels removal required.

SUBTASK 05-41-01-210-008

(2) Do a General Visual inspection of the area above the forward cargo compartment - Section 43, Sta 396 to forward cargo compartment aft bulkhead.

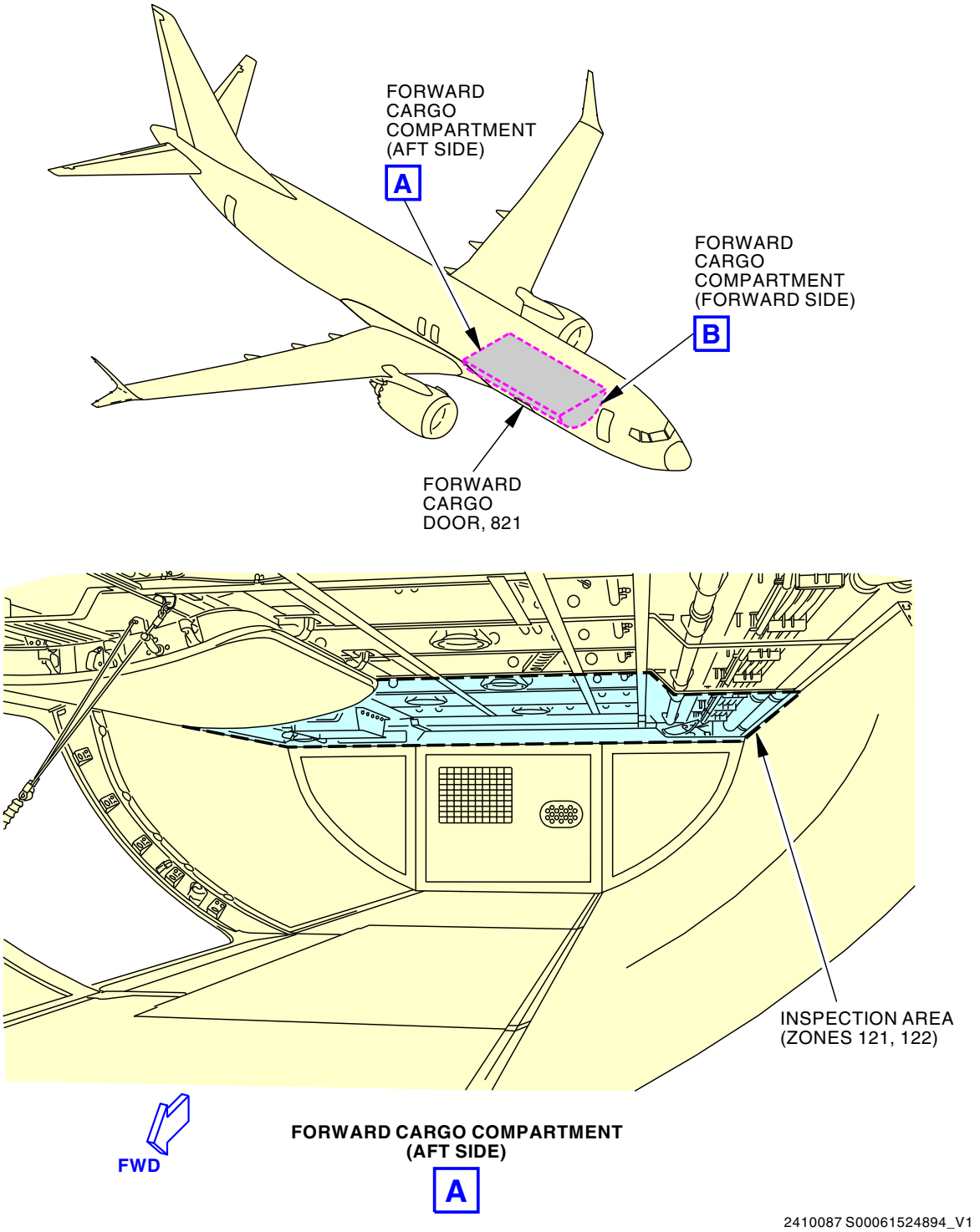
SUBTASK 05-41-01-410-007

(3) Close this access panel:

Number	Name/Location
821	Forward Cargo Door

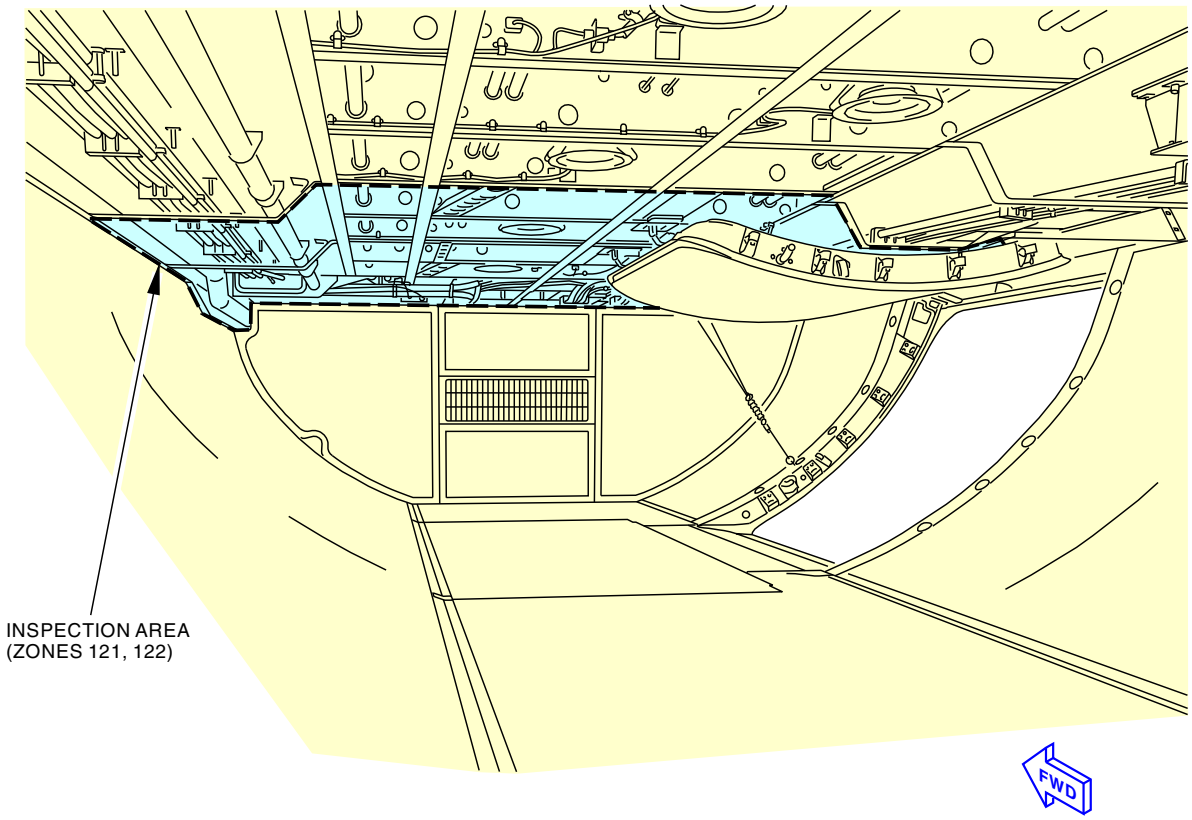
END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Forward Cargo Compartment General Visual (Internal) (Ceiling Liners Removed)
Figure 213/05-41-01-990-808 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



**FORWARD CARGO COMPARTMENT
(FORWARD SIDE)**

B

2410088 S00061524895_V1

**Forward Cargo Compartment General Visual (Internal) (Ceiling Liners Removed)
Figure 213/05-41-01-990-808 (Sheet 2 of 2)**

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-01-210-809

15. INTERNAL - ZONAL (GV): Forward Cargo Compartment - Sidewall Liners and Insulation Removed

(Figure 214)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
121	Forward Cargo Compartment - Left
122	Forward Cargo Compartment - Right

B. Access Panels

Number	Name/Location
821	Forward Cargo Door

C. Zonal Inspection

SUBTASK 05-41-01-010-008

(1) Open this access panel:

Number	Name/Location
821	Forward Cargo Door

NOTE: Sidewall panels removal required.

SUBTASK 05-41-01-210-009

(2) Do a General Visual inspection of the forward cargo compartment - Section 43, Sta 396 to forward cargo compartment aft bulkhead.

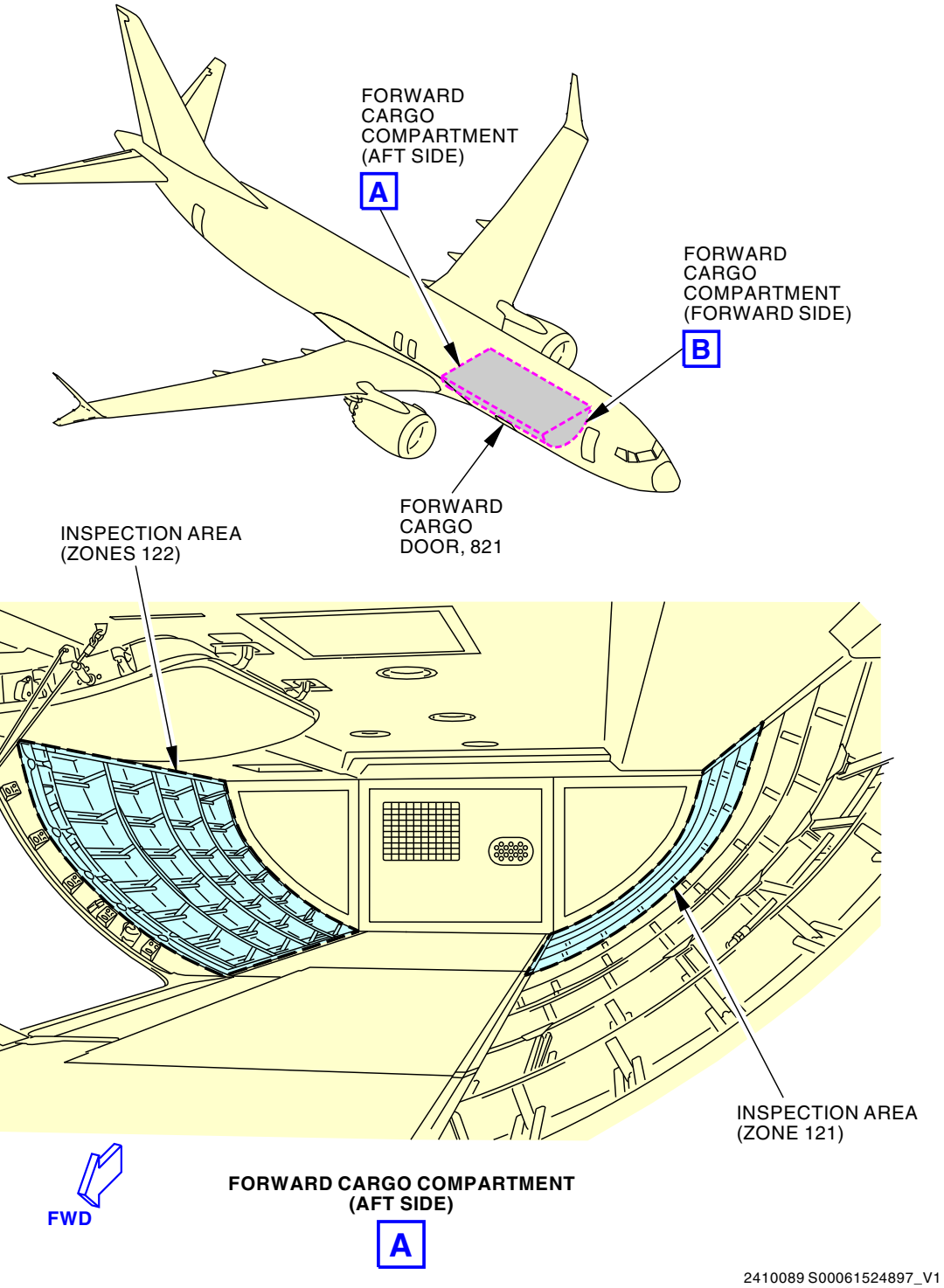
SUBTASK 05-41-01-410-008

(3) Close this access panel:

Number	Name/Location
821	Forward Cargo Door

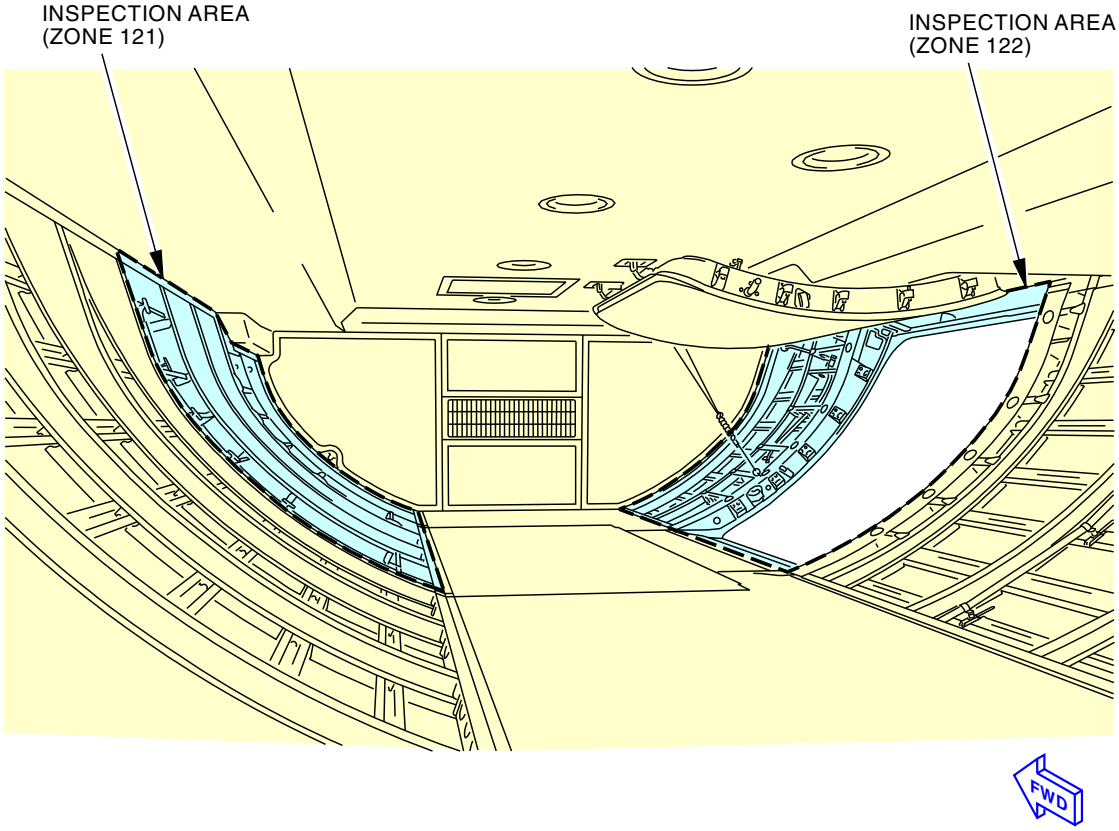
END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Forward Cargo Compartment General Visual (Internal) (Sidewall Liners and Insulation Removed)
Figure 214/05-41-01-990-809 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



**FORWARD CARGO COMPARTMENT
(FORWARD SIDE)**

B

2410090 S00061524898_V1

**Forward Cargo Compartment General Visual (Internal) (Sidewall Liners and Insulation Removed)
Figure 214/05-41-01-990-809 (Sheet 2 of 2)**

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-01-210-837

16. EXTERNAL - ZONAL (GVI): Forward Cargo Compartment

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
121	Forward Cargo Compartment - Left
122	Forward Cargo Compartment - Right

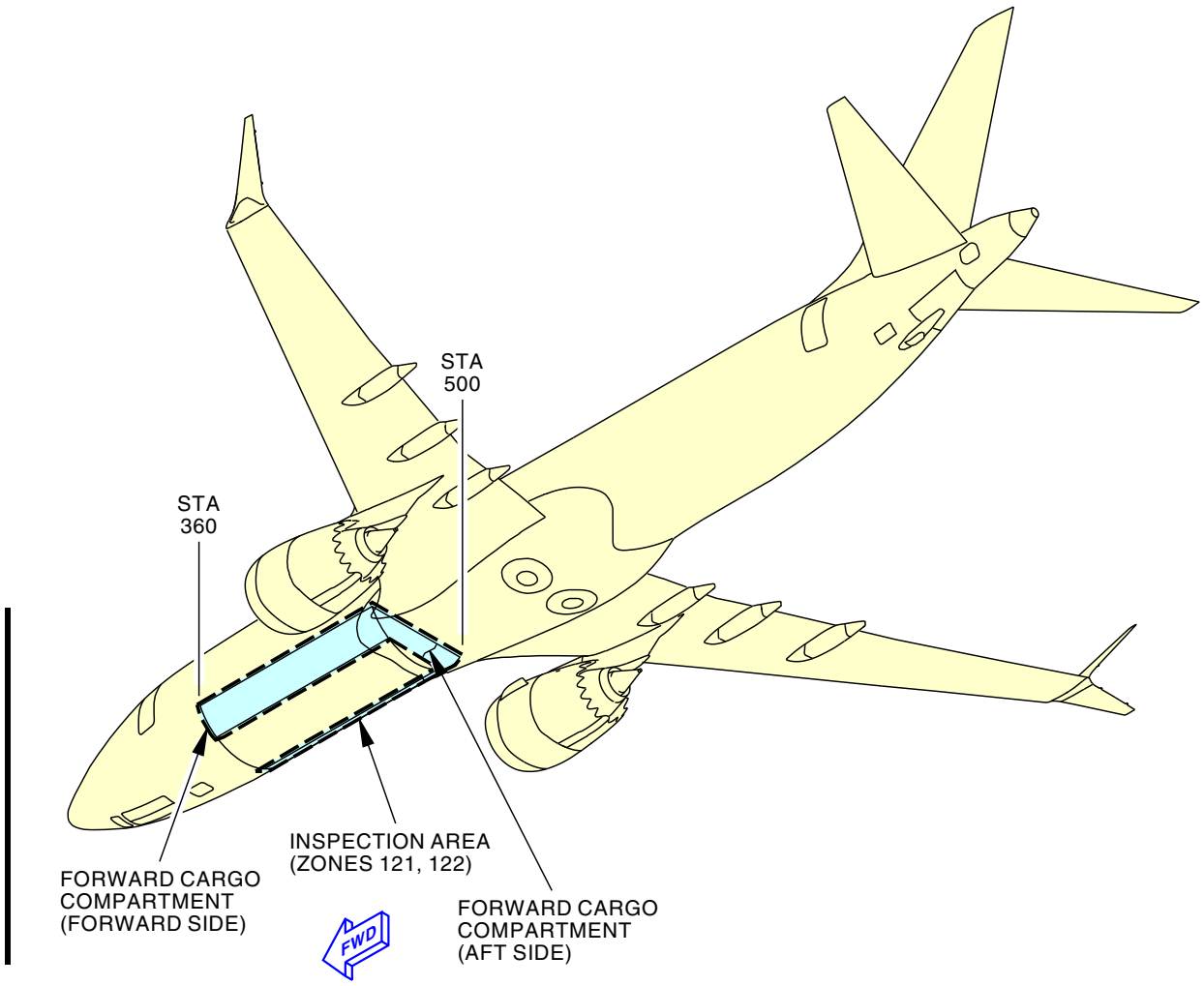
B. Zonal Inspection

SUBTASK 05-41-01-210-037

(1) Do a General Visual Inspection of the forward cargo compartment.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



2545610 S0000601091_V2

Forward Cargo Compartment General Visual (External)
Figure 215/05-41-01-990-835

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-01-210-810

17. EXTERNAL - ZONAL (GV): Forward Cargo Door Surround Structure Fittings and Stops

(Figure 216)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
122	Forward Cargo Compartment - Right

B. Access Panels

Number	Name/Location
821	Forward Cargo Door

C. Zonal Inspection

SUBTASK 05-41-01-010-009

(1) Open this access panel:

Number	Name/Location
821	Forward Cargo Door

SUBTASK 05-41-01-210-010

(2) Do a General Visual inspection of the forward cargo door surround structure fittings and stops - Section 43, Sta 460.

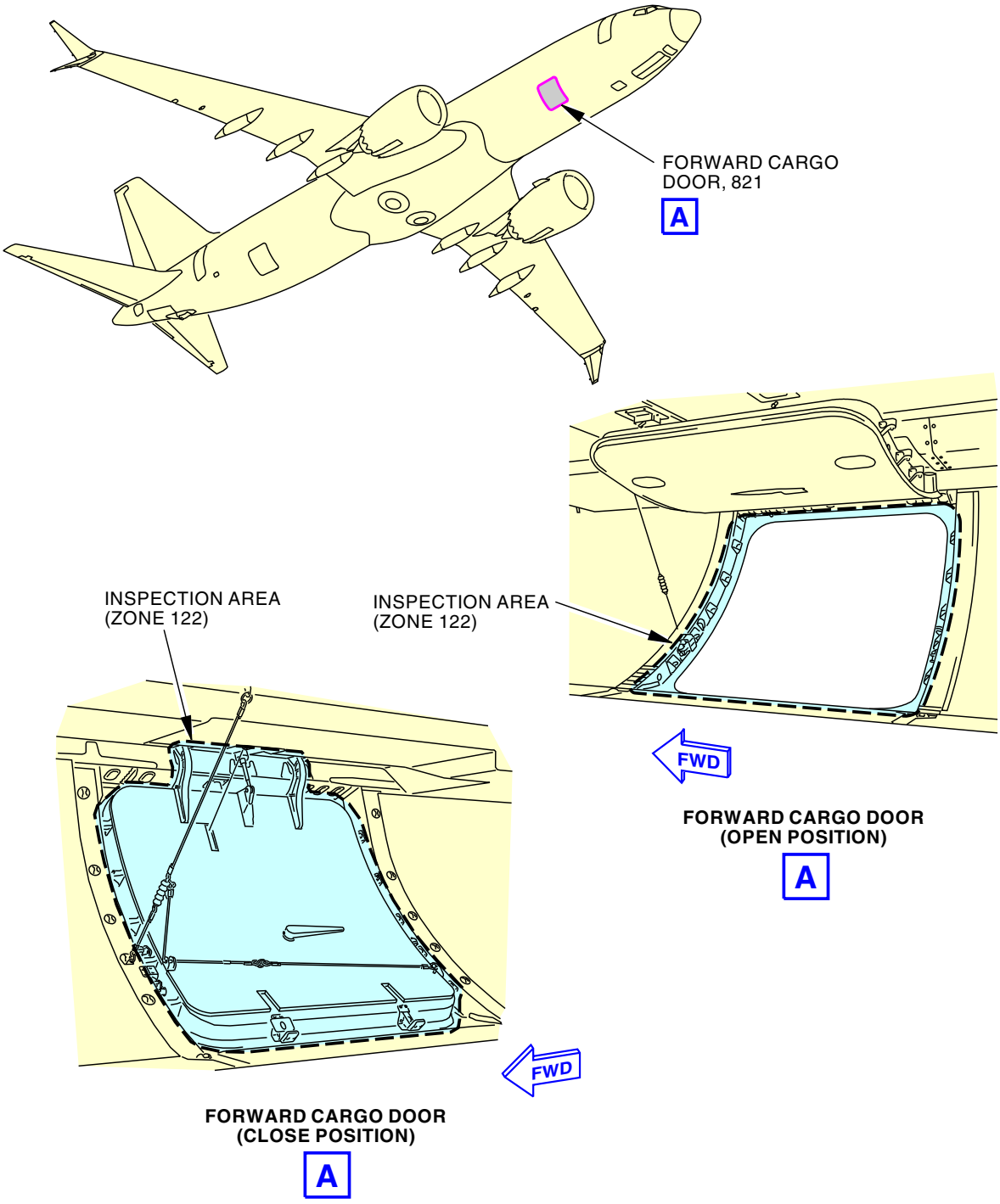
SUBTASK 05-41-01-410-009

(3) Close this access panel:

Number	Name/Location
821	Forward Cargo Door

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



2410091 S00061524900_V1

Fittings and Stops - Forward Cargo Door Surround Structure General Visual (External)
Figure 216/05-41-01-990-810

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-01-210-838

18. EXTERNAL - ZONAL (GVI): Area Below Forward Cargo Compartment

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
123	Forward Cargo Compartment - Left
124	Forward Cargo Compartment - Right

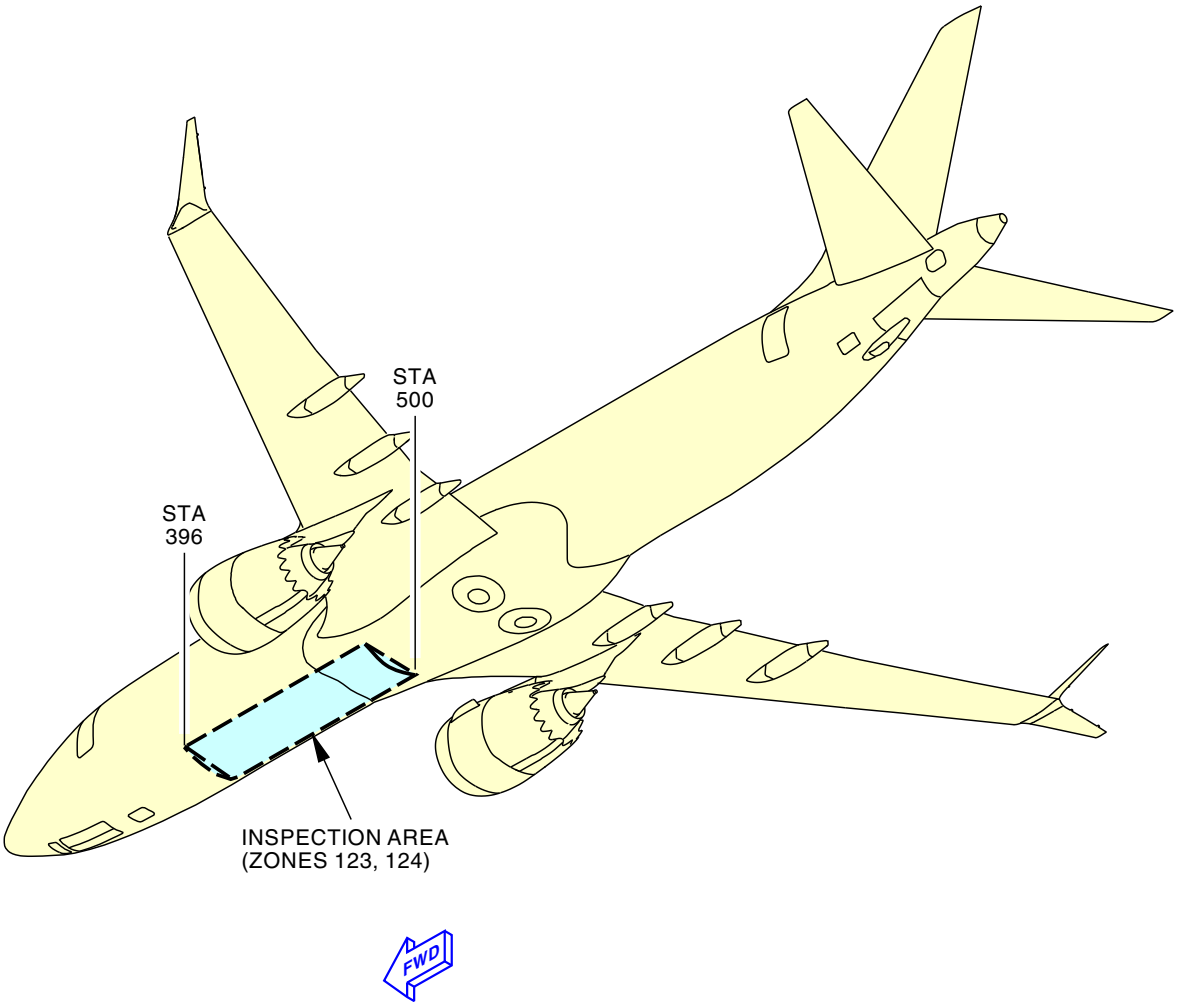
B. Zonal Inspection

SUBTASK 05-41-01-210-038

(1) Do a General Visual Inspection of the area below the forward cargo compartment.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



2545584 S0000601094_V2

Area Below Forward Cargo Compartment General Visual (External)
Figure 217/05-41-01-990-836

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-41-01-210-811

19. INTERNAL - ZONAL (GV): Area Below Forward Cargo Compartment

(Figure 218)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This Zonal inspection procedure satisfies the required EZAP-derived Zonal inspection requirement for this zone.

B. References

Reference	Title
05-00-00-910-802	Enhanced Zonal Inspection Program (EZAP) Precautions (P/B 201)
20-60-07-910-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
123	Forward Cargo Compartment - Left
124	Forward Cargo Compartment - Right

D. Access Panels

Number	Name/Location
821	Forward Cargo Door

E. Zonal Inspection

SUBTASK 05-41-01-010-010

(1) Open this access panel:

Number	Name/Location
821	Forward Cargo Door

NOTE: Center floor panels removal required. Cargo loading system removed/displaced as required.

SUBTASK 05-41-01-210-011

(2) Do the zonal inspection following the procedures in Enhanced Zonal Inspection Program (EZAP) Precautions, TASK 05-00-00-910-802.

(3) Perform an internal zonal inspection (GV) of the area below the forward cargo compartment - Section 43, Sta 396 to forward cargo compartment aft bulkhead. (EZAP)

SUBTASK 05-41-01-910-005

(4) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-910-801 for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

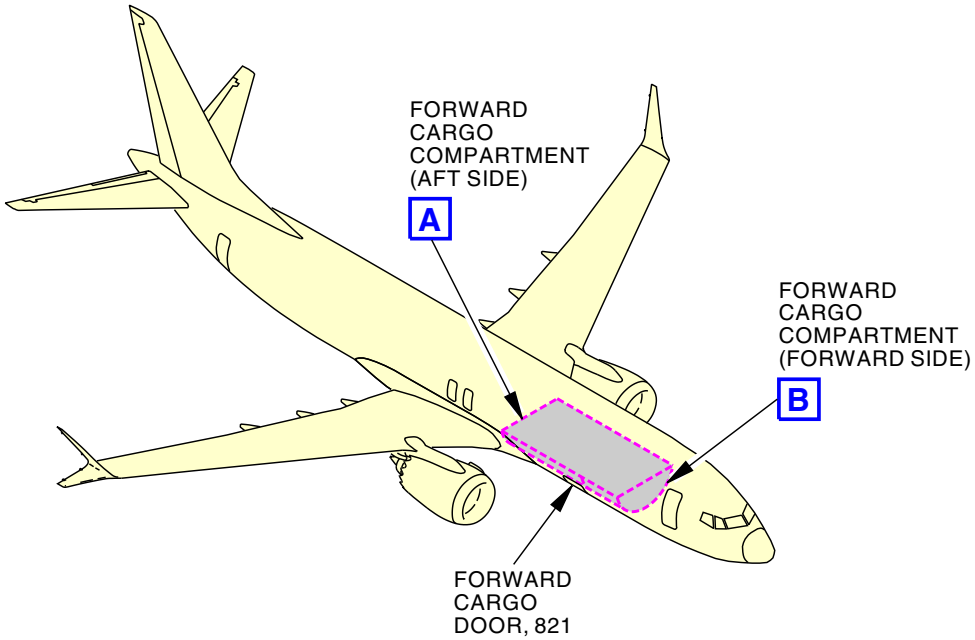
SUBTASK 05-41-01-410-010

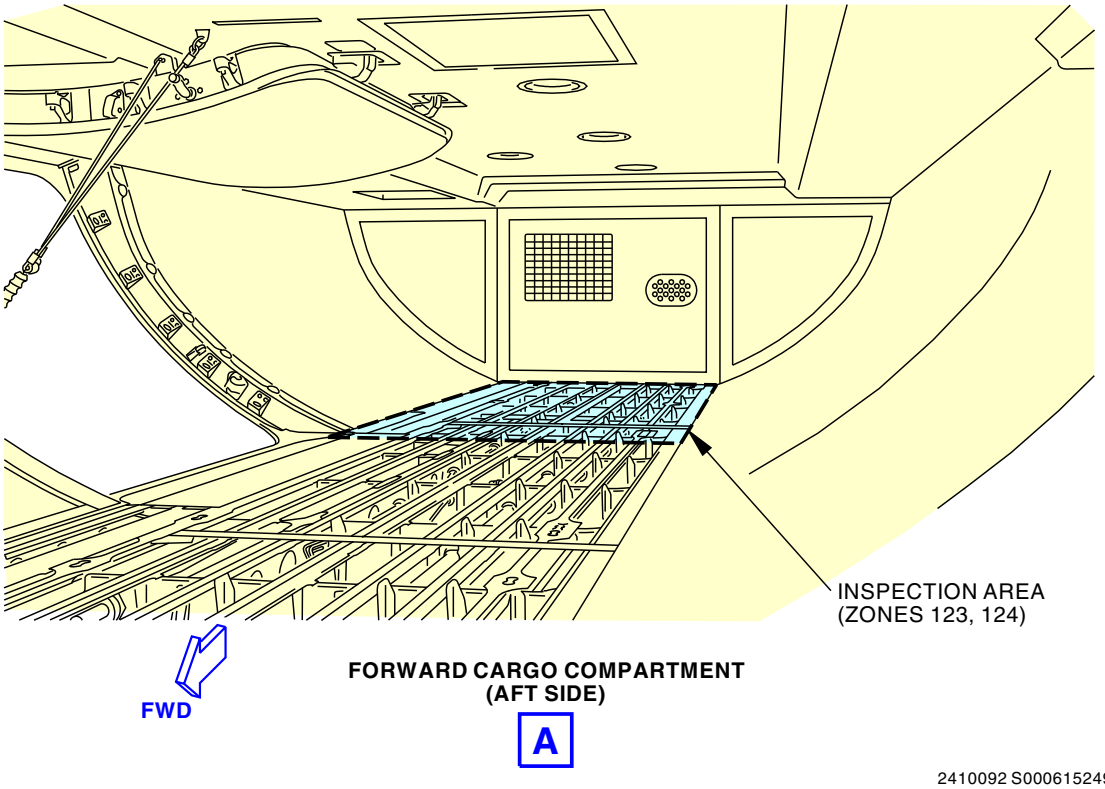
(5) Close this access panel:

Number	Name/Location
821	Forward Cargo Door

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

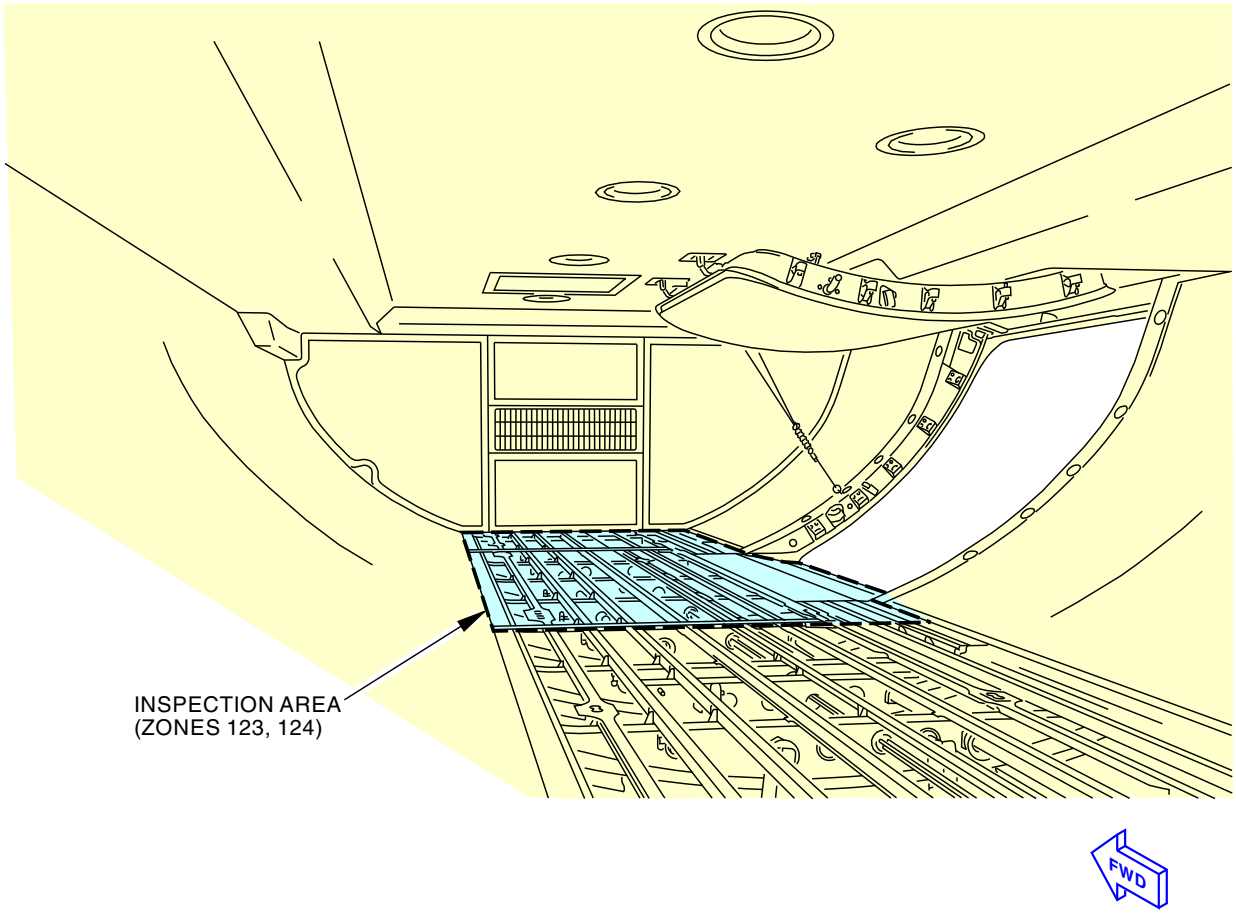




2410092 S00061524902_V1

Below the Forward Cargo Compartment General Visual (Internal) (Floor Panels Removed)
Figure 218/05-41-01-990-811 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



**FORWARD CARGO COMPARTMENT
(FORWARD SIDE)**

B

2410093 S00061524903_V1

**Below the Forward Cargo Compartment General Visual (Internal) (Floor Panels Removed)
Figure 218/05-41-01-990-811 (Sheet 2 of 2)**

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-01-210-839

20. EXTERNAL - ZONAL (GVI): Air Conditioning Distribution Bay

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
125	Air Conditioning Distribution Bay - Left
126	Air Conditioning Distribution Bay - Right

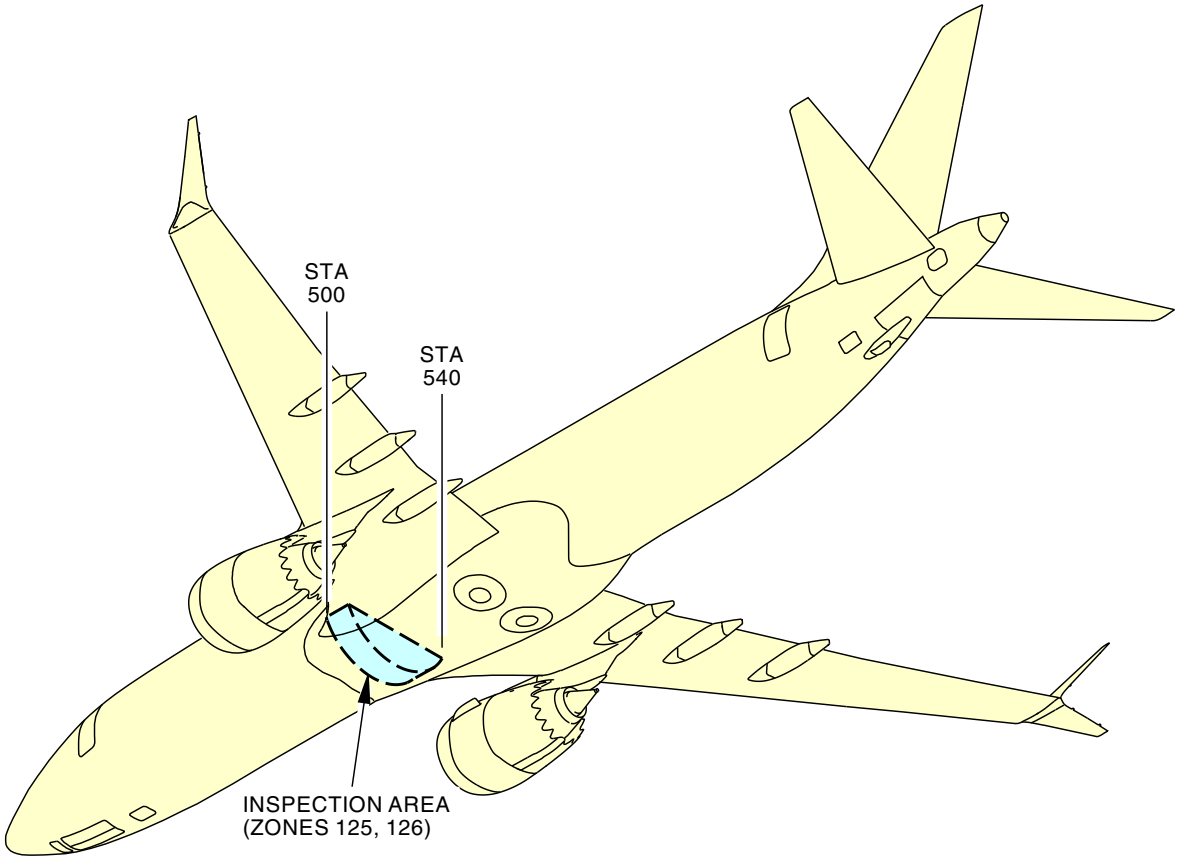
B. Zonal Inspection

SUBTASK 05-41-01-210-039

(1) Do a General Visual Inspection of the air conditioning distribution bay.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



2545611 S0000601095_V2

Air Conditioning Distribution Bay General Visual (External)
Figure 219/05-41-01-990-837

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-41-01-210-812

21. INTERNAL - ZONAL (GV): Air Conditioning Distribution Bay

(Figure 220)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This Zonal inspection procedure satisfies the required EZAP-derived Zonal inspection requirement for this zone.

B. References

Reference	Title
05-00-00-910-802	Enhanced Zonal Inspection Program (EZAP) Precautions (P/B 201)
20-60-07-910-801	Protection of the EWIS During Maintenance (P/B 201)
50-11-02-000-801	Forward Cargo Compartment Aft Bulkhead Liner Removal (P/B 401)
50-11-02-400-801	Forward Cargo Compartment Aft Bulkhead Liner Installation (P/B 401)

C. Location Zones

Zone	Area
125	Air Conditioning Distribution Bay - Left
126	Air Conditioning Distribution Bay - Right

D. Access Panels

Number	Name/Location
821	Forward Cargo Door

E. Zonal Inspection

SUBTASK 05-41-01-010-011

(1) Open this access panel:

Number	Name/Location
821	Forward Cargo Door

SUBTASK 05-41-01-010-027

(2) Remove Forward cargo compartment aft bulkhead center panel: TASK 50-11-02-000-801.

SUBTASK 05-41-01-210-012

(3) Do the zonal inspection following the procedures in Enhanced Zonal Inspection Program (EZAP) Precautions, TASK 05-00-00-910-802.

(4) Perform an internal zonal inspection (GV) of the air conditioning distribution bay - Section 43, forward cargo compartment bulkhead to Sta 540. (EZAP)

SUBTASK 05-41-01-910-006

(5) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-910-801 for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

SUBTASK 05-41-01-410-027

(6) Install the Forward cargo compartment aft bulkhead center panel: TASK 50-11-02-400-801.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

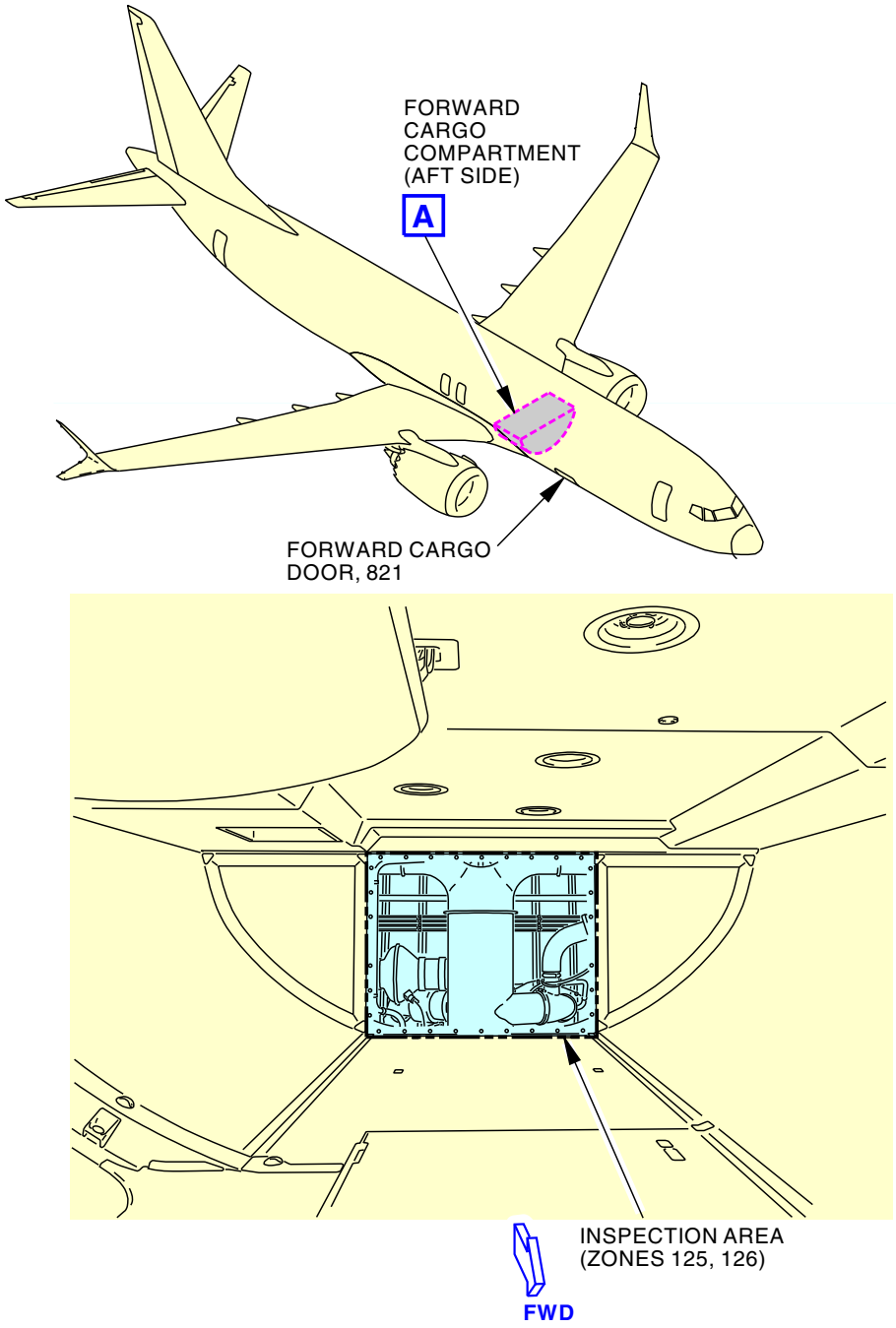
SUBTASK 05-41-01-410-011

(7) Close this access panel:

Number	Name/Location
821	Forward Cargo Door

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Aft of Forward Cargo Compartment General Visual (Internal) (Aft Bulkhead Center Panel Removed)
Figure 220/05-41-01-990-812

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-01-210-840

22. INTERNAL - ZONAL (GVI): Keel Beam - Section 43

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
129	Keel Beam (Part) - Section 43

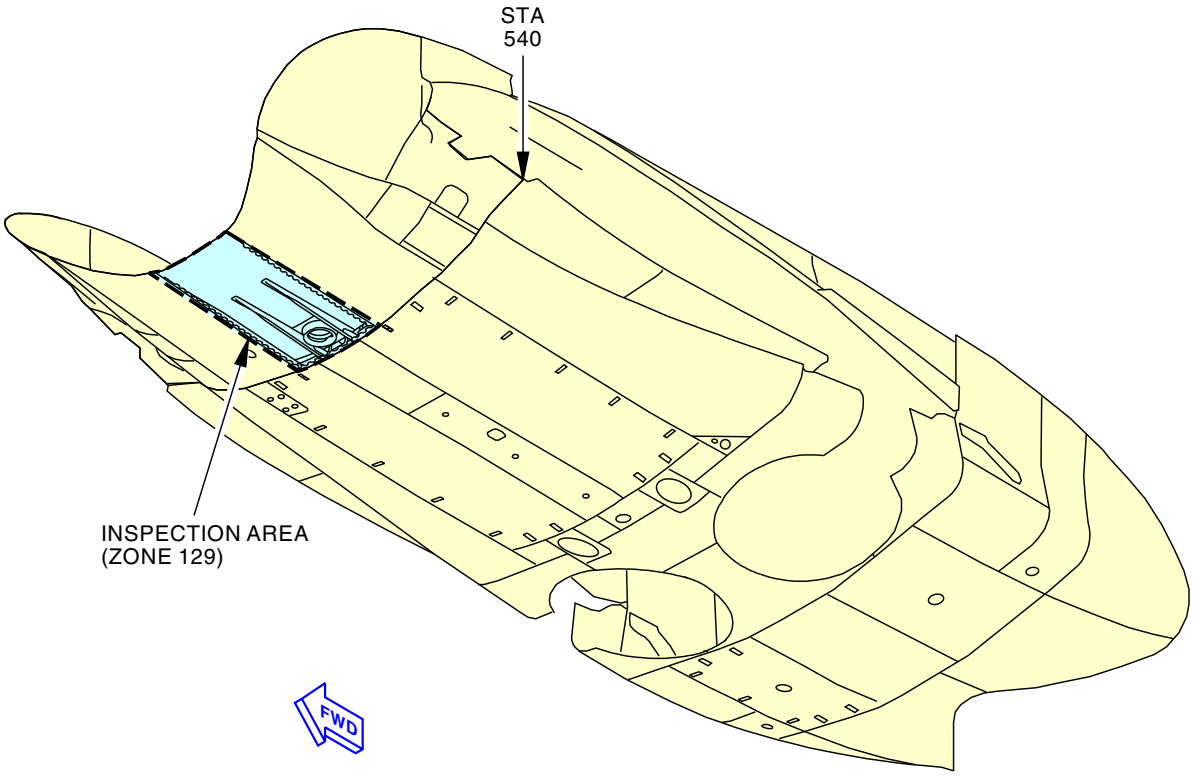
B. Zonal Inspection

SUBTASK 05-41-01-210-040

(1) Do a General Visual Inspection of the Keel Beam - Section 43.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



2545625 S0000601096_V2

Keel Beam - Section 43 General Visual (Internal)
Figure 221/05-41-01-990-838

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-01-210-841

23. EXTERNAL - ZONAL (GVI): Keel Beam - Section 43

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
129	Keel Beam (Part) - Section 43

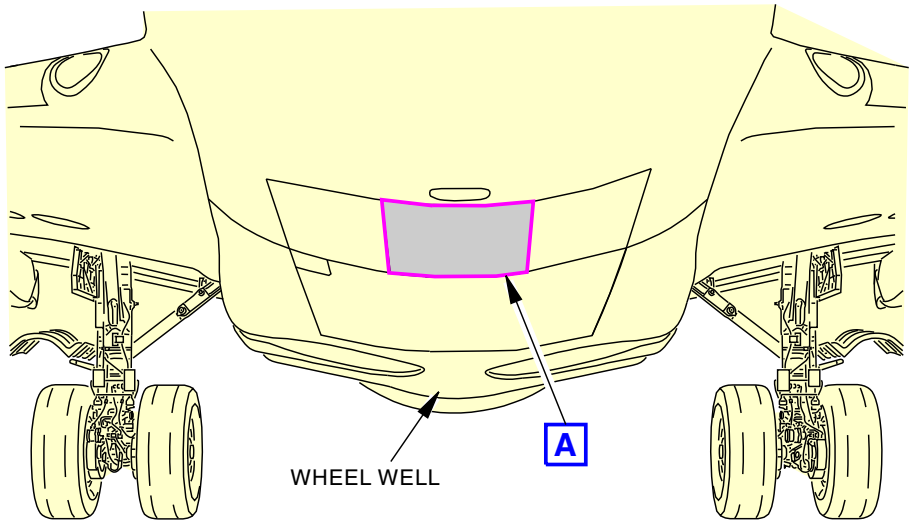
B. Zonal Inspection

SUBTASK 05-41-01-210-041

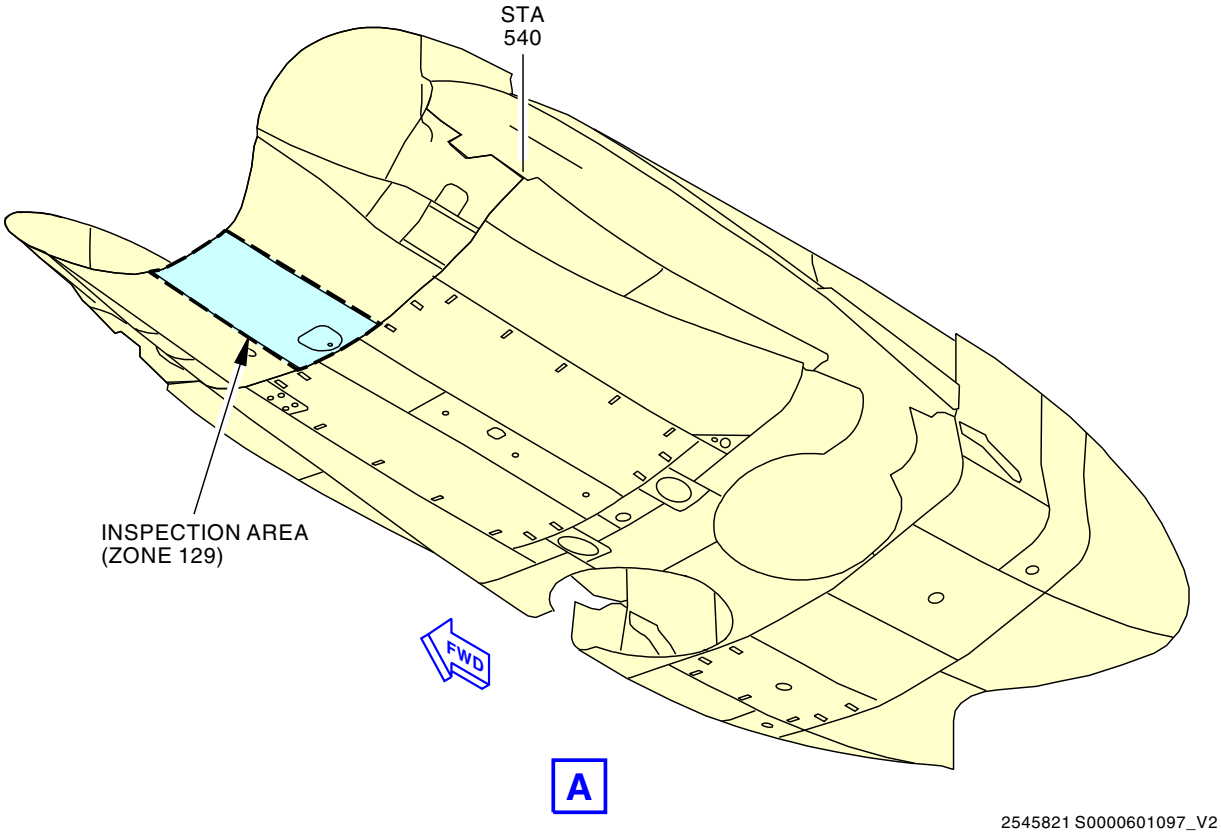
(1) Do a General Visual Inspection of the keel beam Section 43: 737-8/-8200 STA 500H + 5.0 to STA 540; 737-7 STA 500D + 5.0 to STA 540; 737-9 STA 500K + 5.0 to STA 540; 737-10 STA 500L + 5.0 to STA 540.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



(VIEW IN THE AFT DIRECTION)



2545821 S0000601097_V2

Keel Beam - Section 43 General Visual (External)
Figure 222/05-41-01-990-839

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-41-01-210-813

24. INTERNAL - ZONAL (GV): Area Above Center Section Wing Box

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
135	Area Above Wing Center Section, Body Station 540 to Body Station 663.75 - Left
136	Area Above Wing Center Section, Body Station 540 to Body Station 663.75 - Right

B. Zonal Inspection

NOTE: Floor panels removal required. Insulation as required.

SUBTASK 05-41-01-210-013

(1) Do a General Visual inspection of the area above the center section wing box - Section 44, Sta 540 to Sta 663.75.

END OF TASK

EWIS

TASK 05-41-01-210-832

25. INTERNAL - ZONAL (GVI): Main Landing Gear Wheel Well

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This Zonal inspection procedure satisfies the required EZAP-derived Zonal inspection requirement for this zone.

B. References

Reference	Title
05-00-00-910-802	Enhanced Zonal Inspection Program (EZAP) Precautions (P/B 201)
20-60-07-910-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
133	Main Landing Gear Wheel Well, Body Station 663.75 to Body Station 727.00 - Left
134	Main Landing Gear Wheel Well, Body Station 663.75 to Body Station 727.00 - Right

D. Zonal Inspection

SUBTASK 05-41-01-210-033

(1) Do the zonal inspection following the procedures in Enhanced Zonal Inspection Program (EZAP) Precautions, TASK 05-00-00-910-802

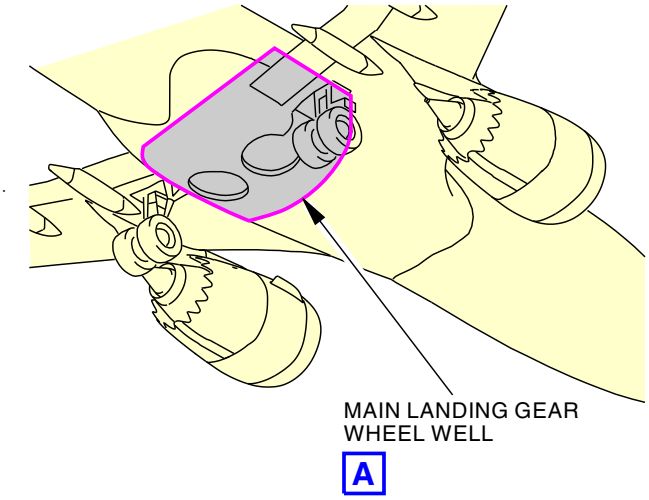
(2) Perform an internal zonal inspection (GVI) of the main landing gear wheel well. (EZAP)

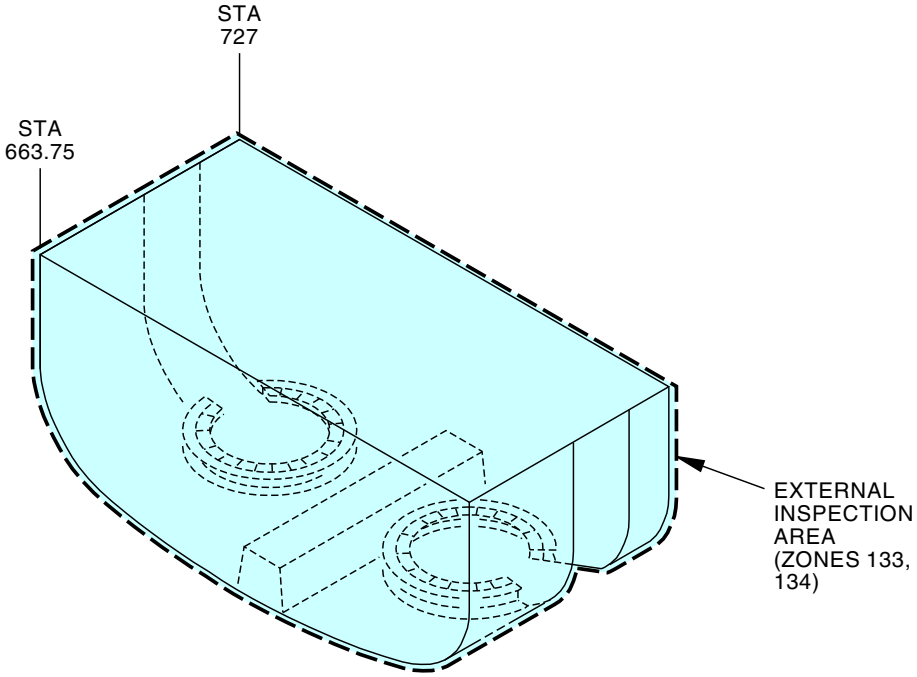
SUBTASK 05-41-01-910-015

(3) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-910-801 for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details





MAIN LANDING GEAR WHEEL WELL

A

2545575 S0000601098_V1

Main Landing Gear Wheel Well General Visual (Internal)
Figure 223/05-41-01-990-840

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-41-01-210-814

26. INTERNAL - ZONAL (GV): Pressure Deck Above Main Landing Gear Wheel Well

(Figure 224)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This Zonal inspection procedure satisfies the required EZAP-derived Zonal inspection requirement for this zone.

B. References

Reference	Title
05-00-00-910-802	Enhanced Zonal Inspection Program (EZAP) Precautions (P/B 201)
20-60-07-910-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
137	Area Above M.L.G. Wheel Well, Body Station 663.75 to Body Station 727 - Left
138	Area Above M.L.G. Wheel Well, Body Station 663.75 Body Station 727 - Right

D. Zonal Inspection

NOTE: Floor panels removal required.

SUBTASK 05-41-01-210-014

(1) Do the zonal inspection following the procedures in Enhanced Zonal Inspection Program (EZAP) Precautions, TASK 05-00-00-910-802.

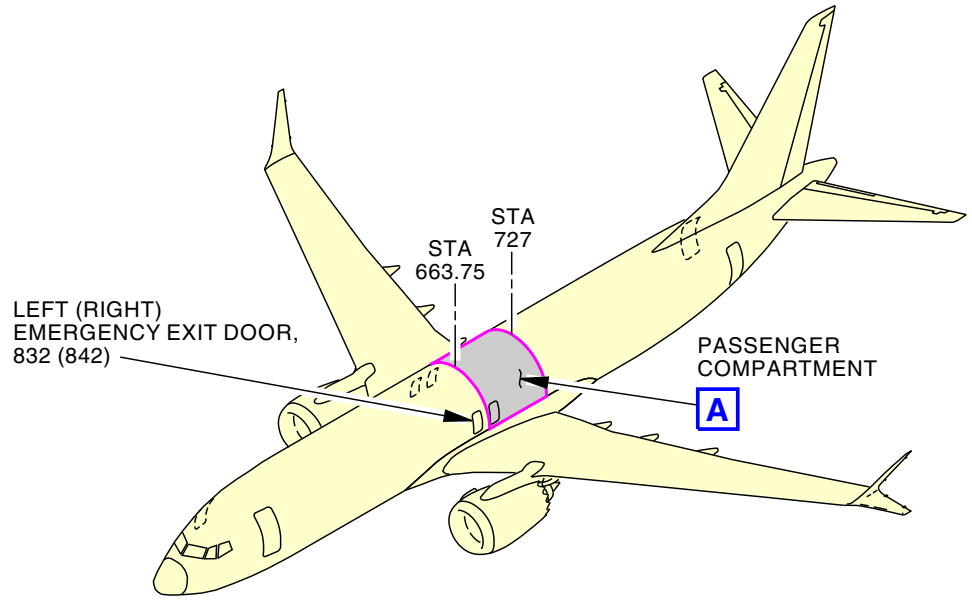
(2) Perform an internal zonal inspection (GV) of the pressure deck above the main landing gear wheel well - Section 44, Sta 663.75 to Sta 727. (EZAP)

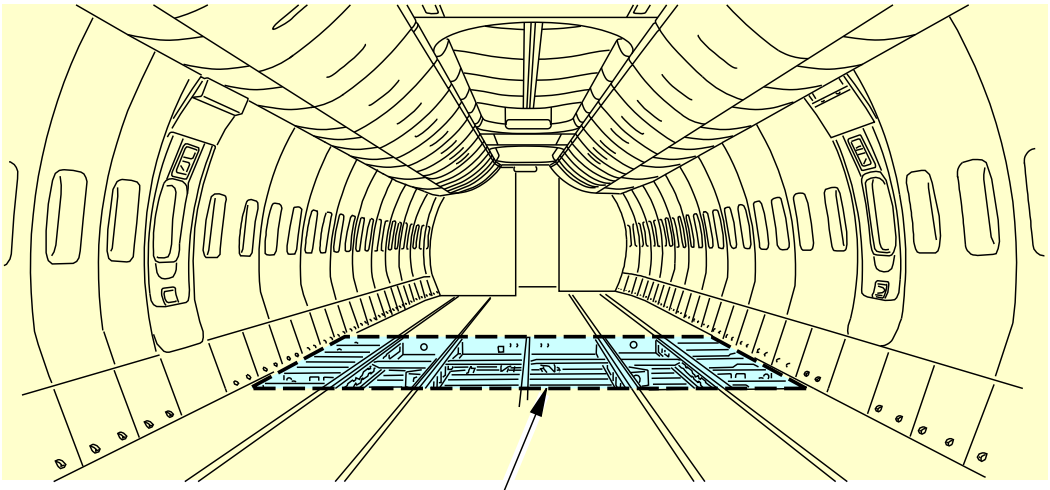
SUBTASK 05-41-01-910-007

(3) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-910-801 for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details





2410095 S00061524908_V2

Passenger Compartment (Sta 663.75-727) General Visual (Internal) (Floor Panels and Insulation Removed)
Figure 224/05-41-01-990-813

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-01-210-842

27. EXTERNAL - ZONAL (GVI): Keel Beam Sta 540 to 727

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
139	Keel Beam, (Part) Body Station 540.00 to Body Station 727.00

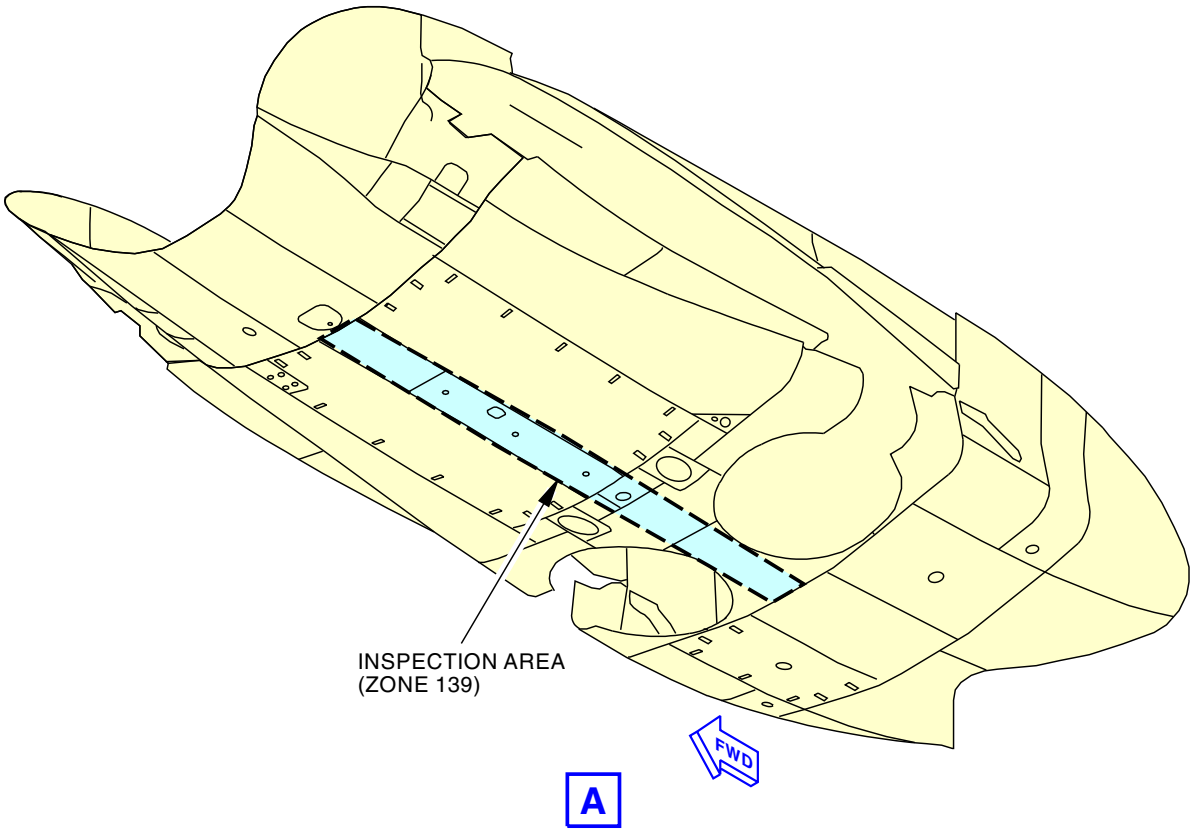
B. Zonal Inspection

SUBTASK 05-41-01-210-042

(1) Do a General Visual Inspection of the Keel Beam Sta 540 to Sta 727.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



2545739 S0000601099_V2

Keel Beam General Visual (External)
Figure 225/05-41-01-990-841

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-41-01-210-815

28. INTERNAL - ZONAL (GV): Keel Beam (Part) Sta 540 to 727

(Figure 226)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This Zonal inspection procedure satisfies the required EZAP-derived Zonal inspection requirement for this zone.

B. References

Reference	Title
05-00-00-910-802	Enhanced Zonal Inspection Program (EZAP) Precautions (P/B 201)
20-60-07-910-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
139	Keel Beam, (Part) Body Station 540.00 to Body Station 727.00

D. Access Panels

Number	Name/Location
192CL	ECS Access Door
192CR	ECS Access Door

E. Zonal Inspection

SUBTASK 05-41-01-010-012

(1) Open these access panels:

Number	Name/Location
192CL	ECS Access Door
192CR	ECS Access Door

SUBTASK 05-41-01-210-015

(2) Do the zonal inspection following the procedures in Enhanced Zonal Inspection Program (EZAP) Precautions, TASK 05-00-00-910-802.

(3) Perform an internal zonal inspection (GV) of the keel beam (part) Sta 540 to 727 - Section 44. (EZAP)

SUBTASK 05-41-01-910-008

(4) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-910-801 for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

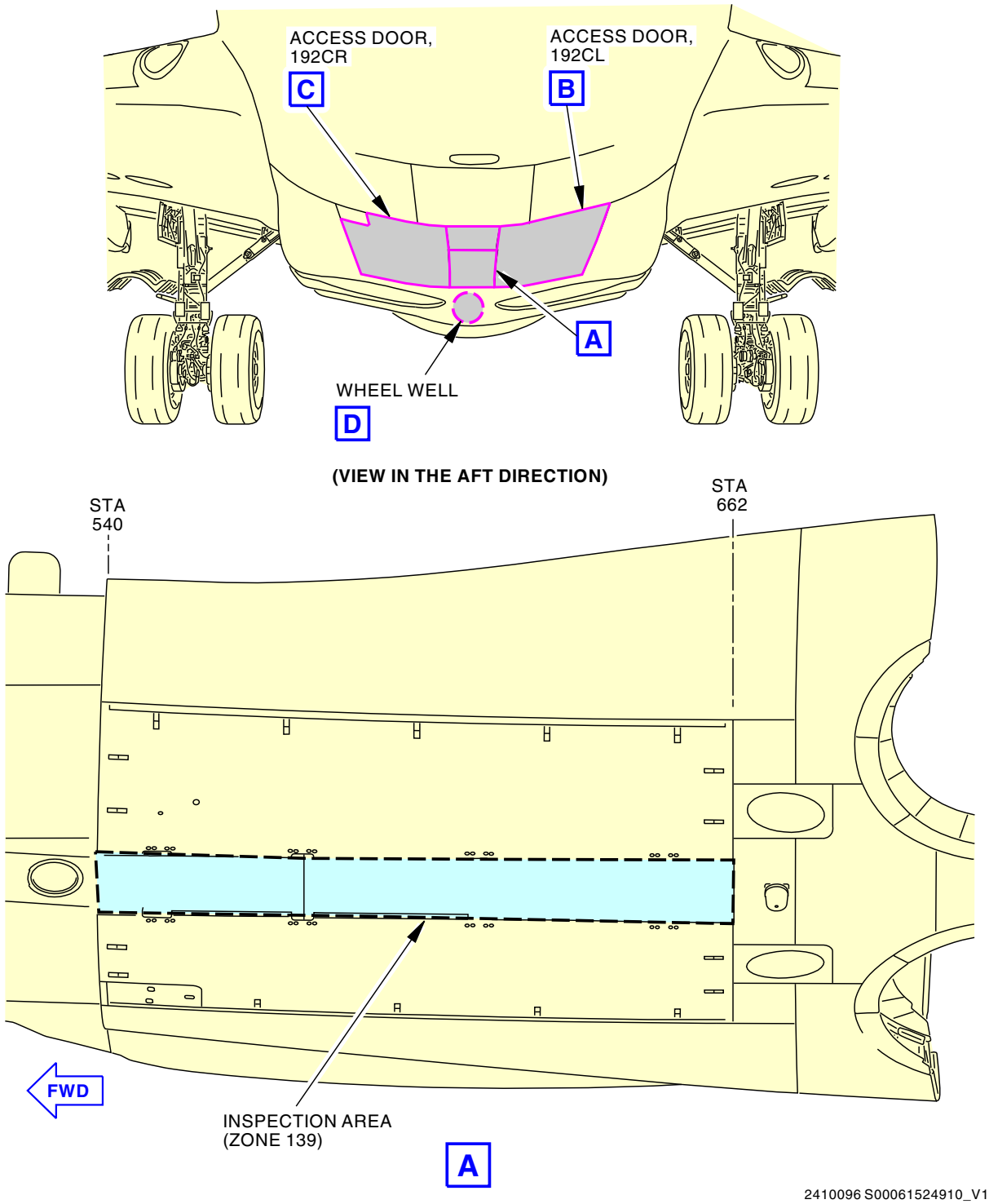
SUBTASK 05-41-01-410-012

(5) Close these access panels:

Number	Name/Location
192CL	ECS Access Door
192CR	ECS Access Door

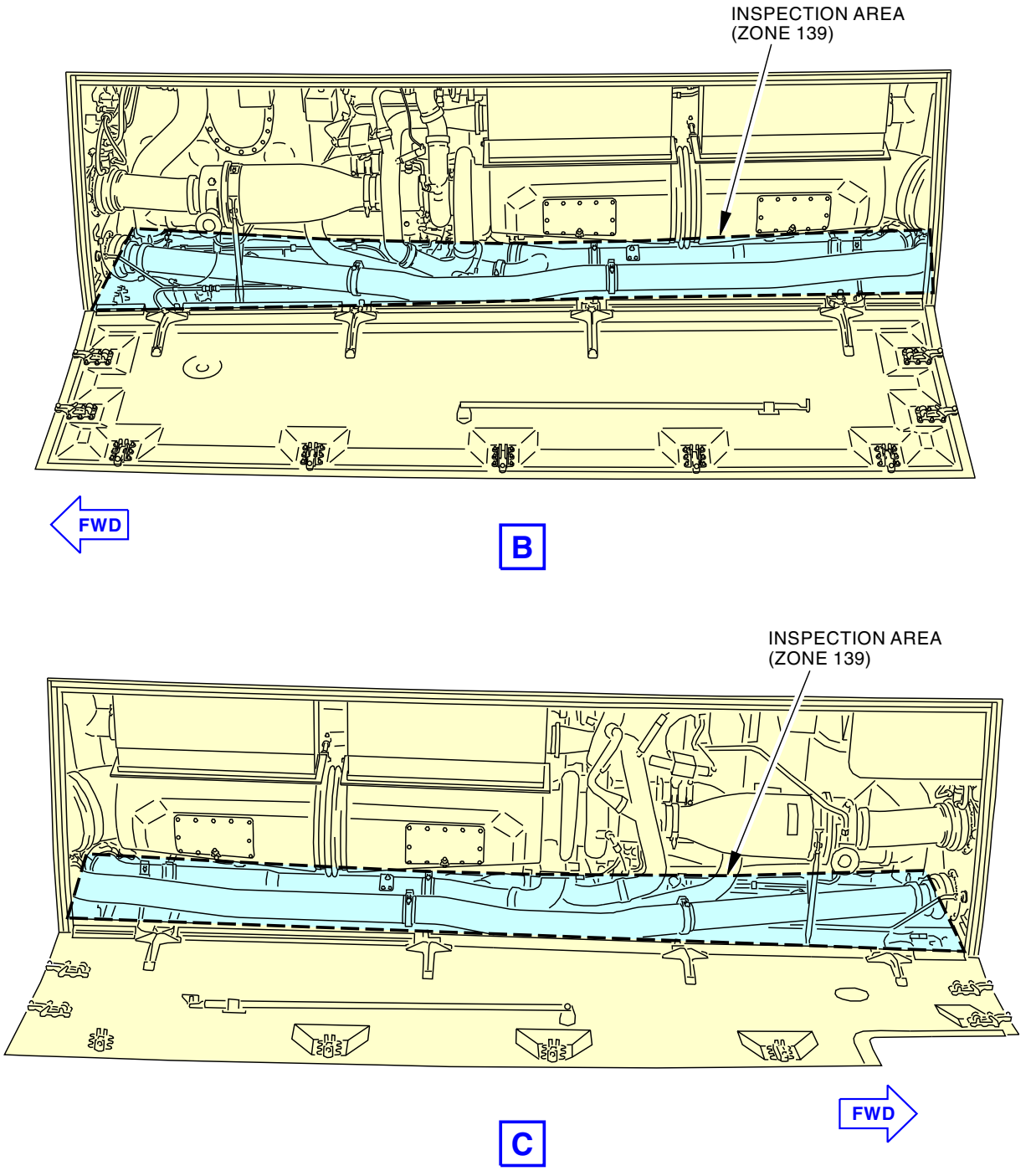
END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details



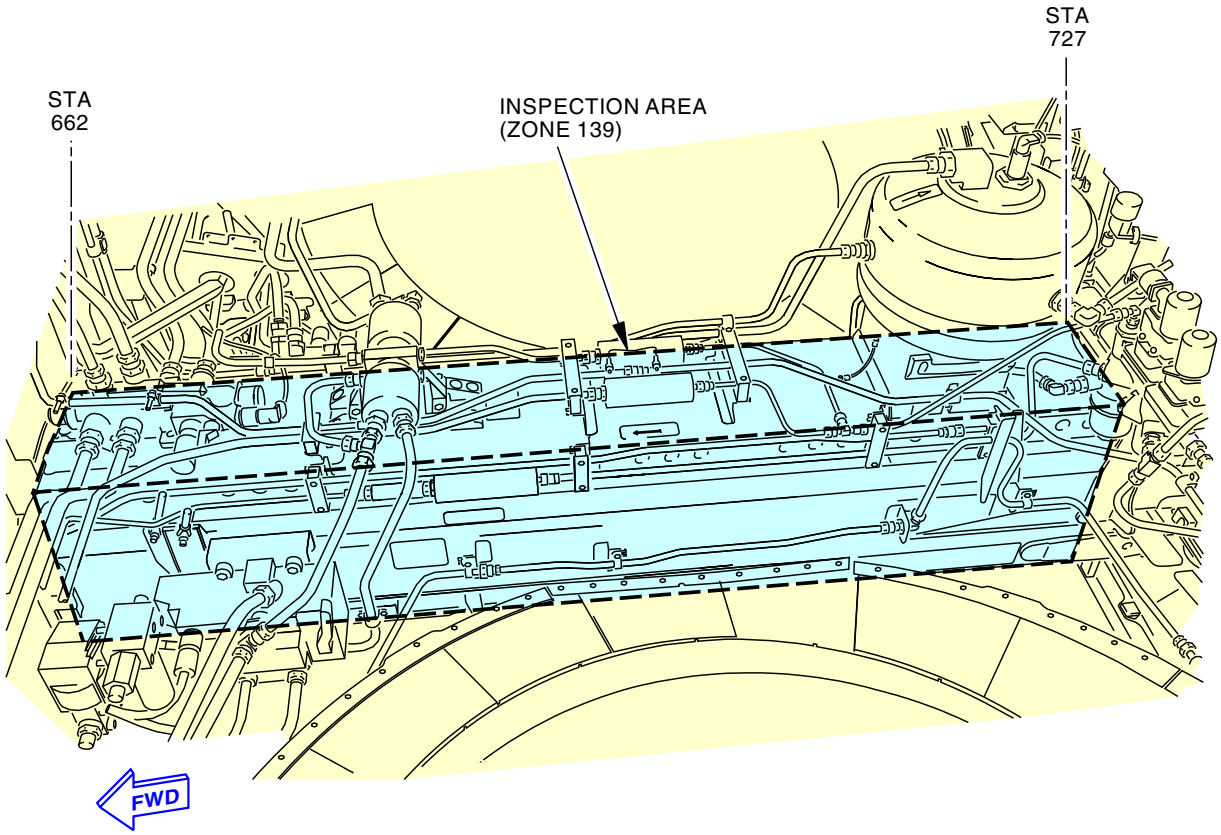
Keel Beam (Sta 540-727) General Visual (Internal)
Figure 226/05-41-01-990-814 (Sheet 1 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Keel Beam (Sta 540-727) General Visual (Internal)
Figure 226/05-41-01-990-814 (Sheet 2 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



2410098 S00061524912_V1

Keel Beam (Sta 540-727) General Visual (Internal)
Figure 226/05-41-01-990-814 (Sheet 3 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-01-210-816

29. INTERNAL - ZONAL (GV): Center Section Wing Box

(Figure 227)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
131	Center Section Wing Box, Body Station 540.00 to Body Station 663.75 - Left
132	Center Section Wing Box, Body Station 540.00 to Body Station 663.75 - Right

B. Access Panels

Number	Name/Location
131AB	Center Tank Access
192CL	ECS Access Door

C. Zonal Inspection

SUBTASK 05-41-01-010-013

(1) Open these access panels:

Number	Name/Location
131AB	Center Tank Access
192CL	ECS Access Door

SUBTASK 05-41-01-210-016

(2) Do a General Visual inspection of the center section wing box - Section 44, Sta 540 to Sta 663.75.

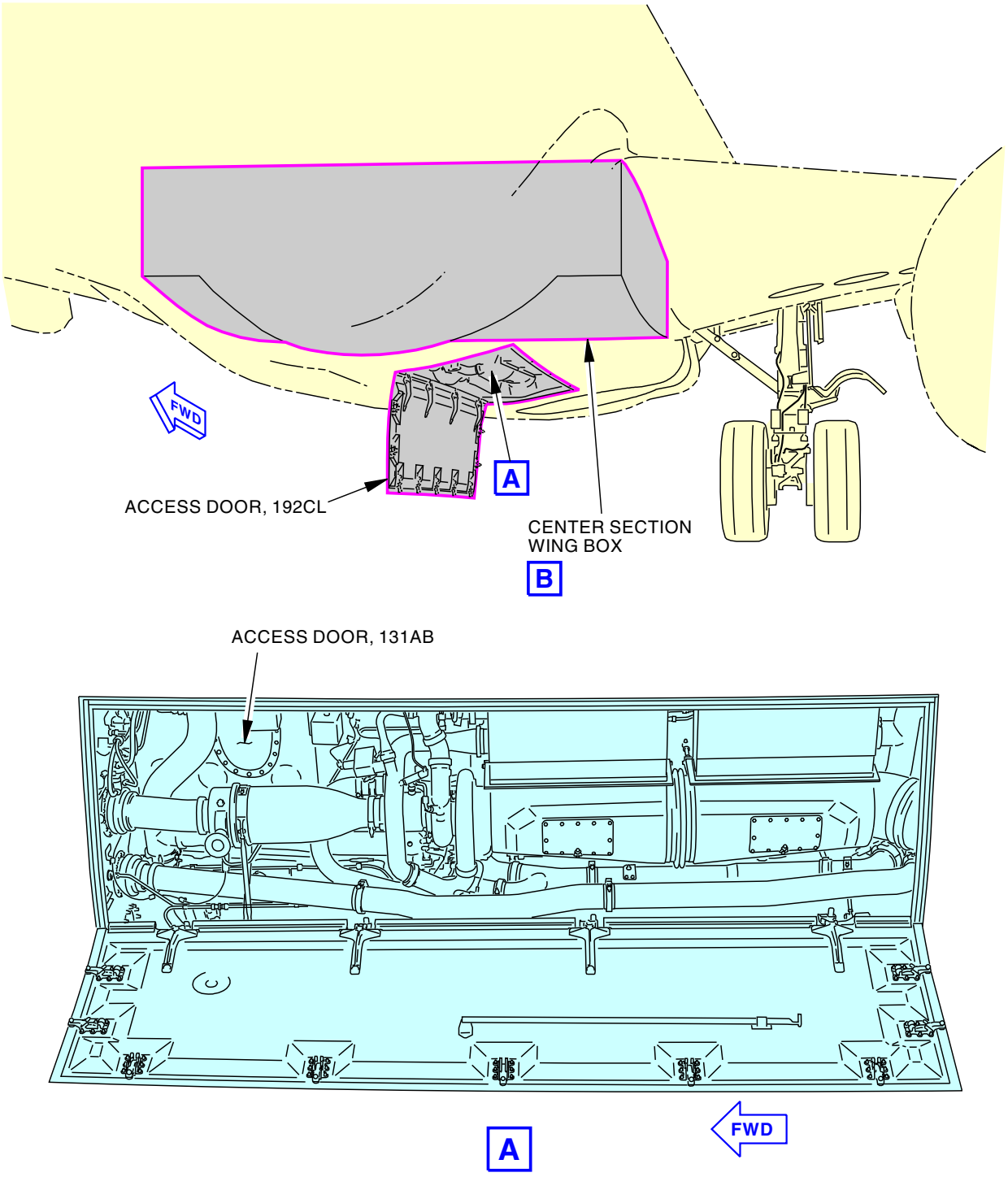
SUBTASK 05-41-01-410-013

(3) Close these access panels:

Number	Name/Location
131AB	Center Tank Access
192CL	ECS Access Door

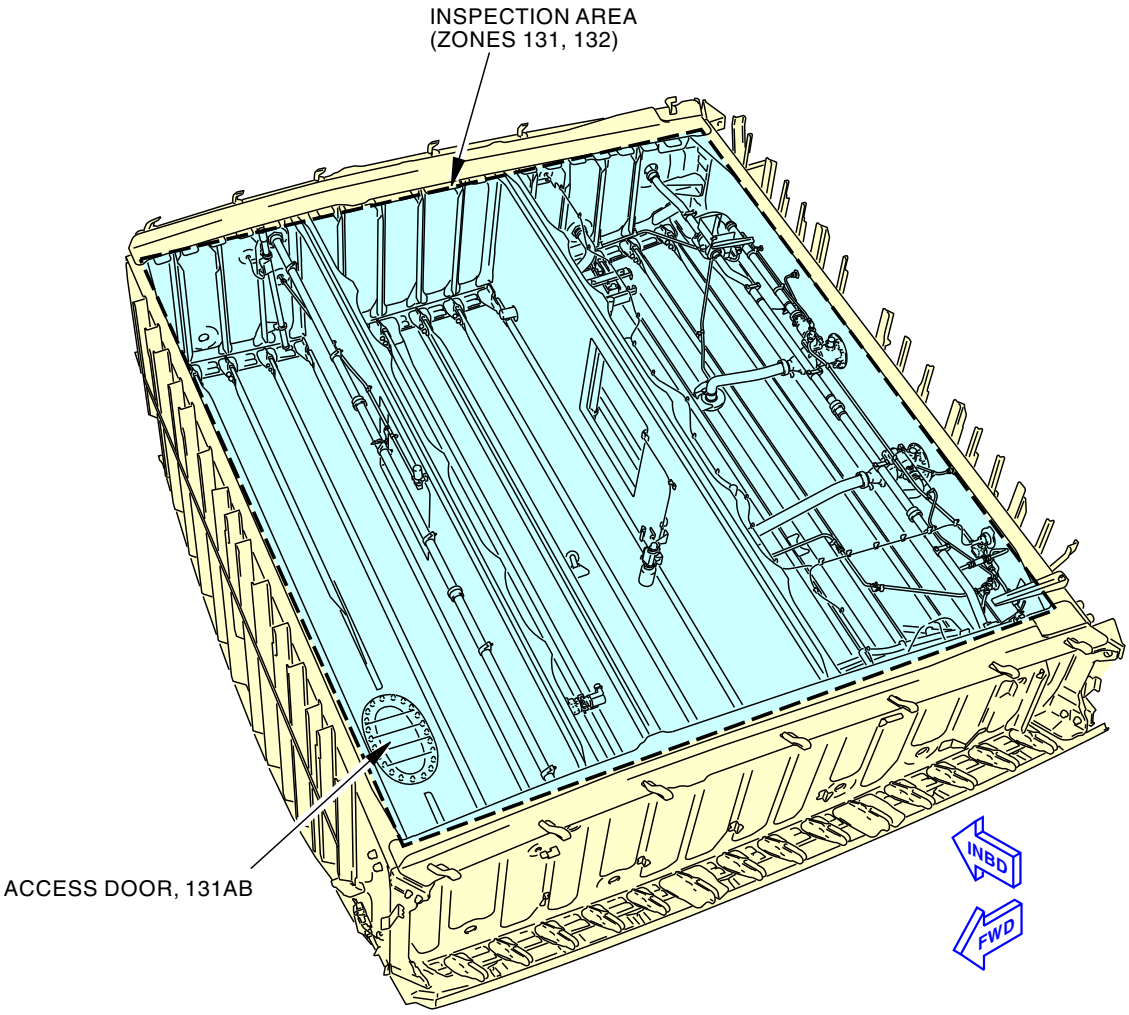
——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Center Section Wing Box General Visual (Internal)
Figure 227/05-41-01-990-815 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



CENTER SECTION WING BOX

B

2410100 S00061524915_V1

Center Section Wing Box General Visual (Internal)
Figure 227/05-41-01-990-815 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-01-210-843

30. EXTERNAL - ZONAL (GVI): Aft Cargo Compartment

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
141	Aft Cargo Compartment - Left
142	Aft Cargo Compartment - Right

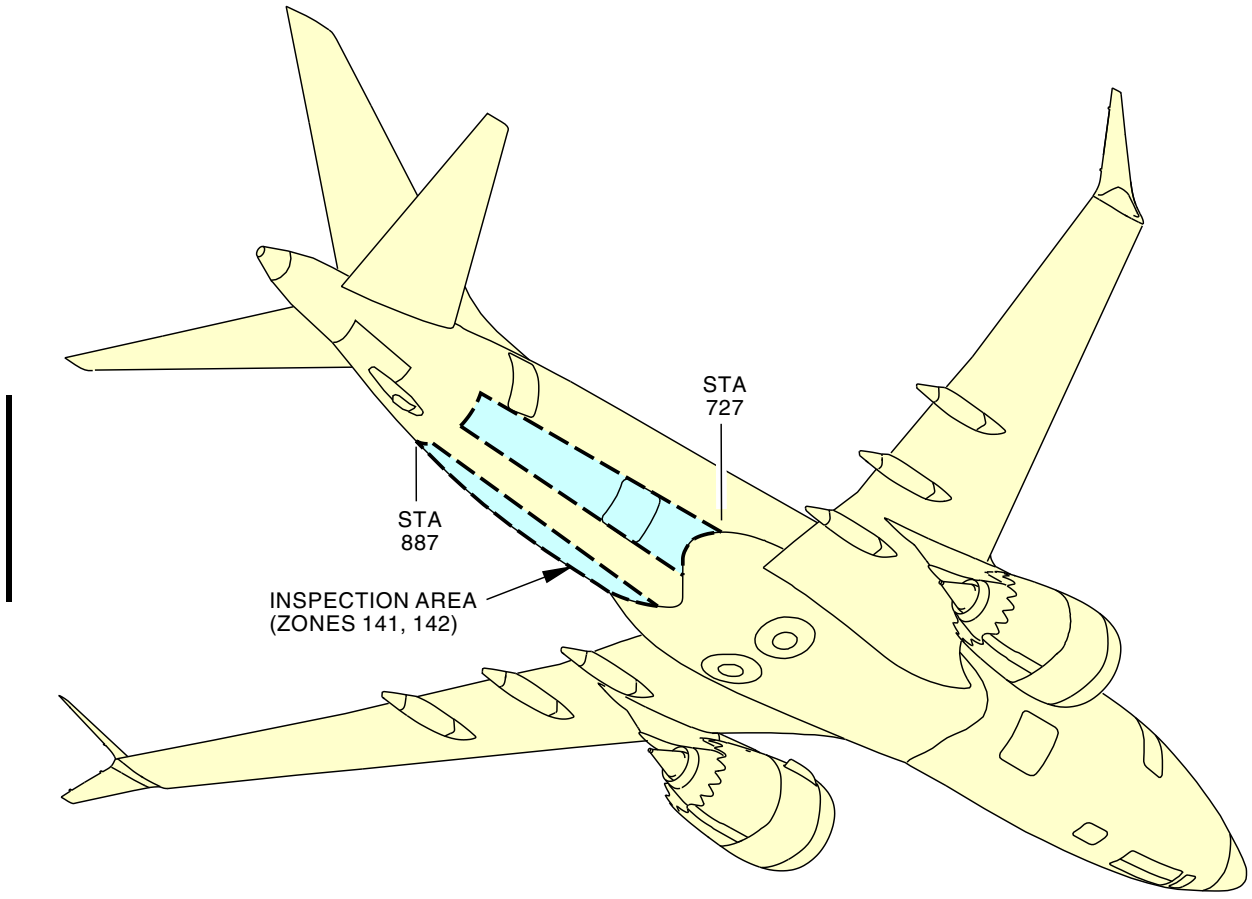
B. Zonal Inspection

SUBTASK 05-41-01-210-043

(1) Do a General Visual Inspection of the aft cargo compartment.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



2545754 S0000601102_V2

Aft Cargo Compartment General Visual (External)
Figure 228/05-41-01-990-842

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-01-210-817

31. INTERNAL - ZONAL (GV): Aft Cargo Compartment

(Figure 229)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
141	Aft Cargo Compartment - Left
142	Aft Cargo Compartment - Right

B. Access Panels

Number	Name/Location
822	Aft Cargo Door

C. Zonal Inspection

SUBTASK 05-41-01-010-014

(1) Open this access panel:

Number	Name/Location
822	Aft Cargo Door

NOTE: No cargo liners removed.

SUBTASK 05-41-01-210-017

(2) Do a General Visual inspection of the aft cargo compartment - Section 46 and 47 (part), Sta 727 to Sta 947.5.

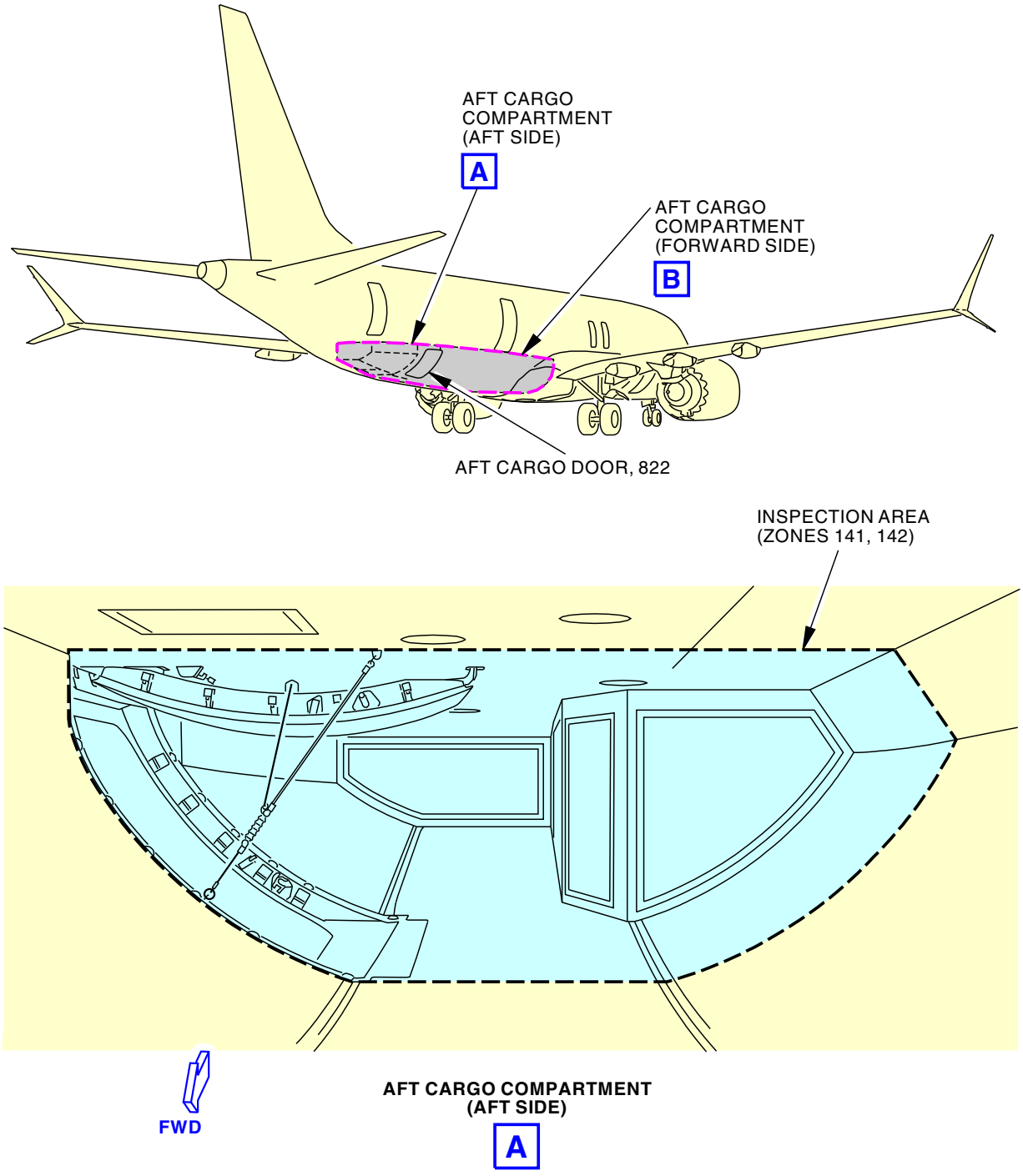
SUBTASK 05-41-01-410-014

(3) Close this access panel:

Number	Name/Location
822	Aft Cargo Door

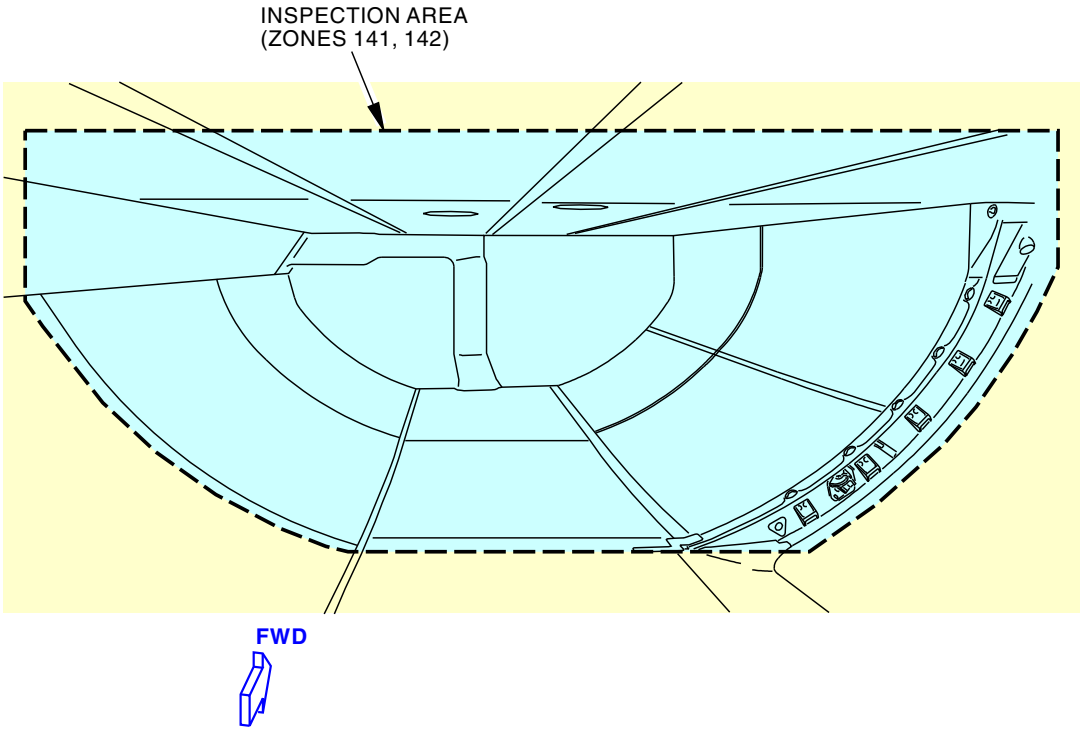
END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Aft Cargo Compartment General Visual (Internal)
Figure 229/05-41-01-990-816 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



2410102 S00061524918_V1

Aft Cargo Compartment General Visual (Internal)
Figure 229/05-41-01-990-816 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-41-01-210-818

32. INTERNAL - ZONAL (GV): Aft Cargo Compartment - Upper Angled Sidewall and Ceiling Panels Removed

(Figure 230)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
141	Aft Cargo Compartment - Left
142	Aft Cargo Compartment - Right

B. Access Panels

Number	Name/Location
822	Aft Cargo Door

C. Zonal Inspection

SUBTASK 05-41-01-010-015

(1) Open this access panel:

Number	Name/Location
822	Aft Cargo Door

NOTE: Upper angled sidewall and ceiling panels removal required.

SUBTASK 05-41-01-210-018

(2) Do a General Visual inspection of the aft cargo compartment - Section 46 and 47 (part), Sta 727 to Sta 947.5.

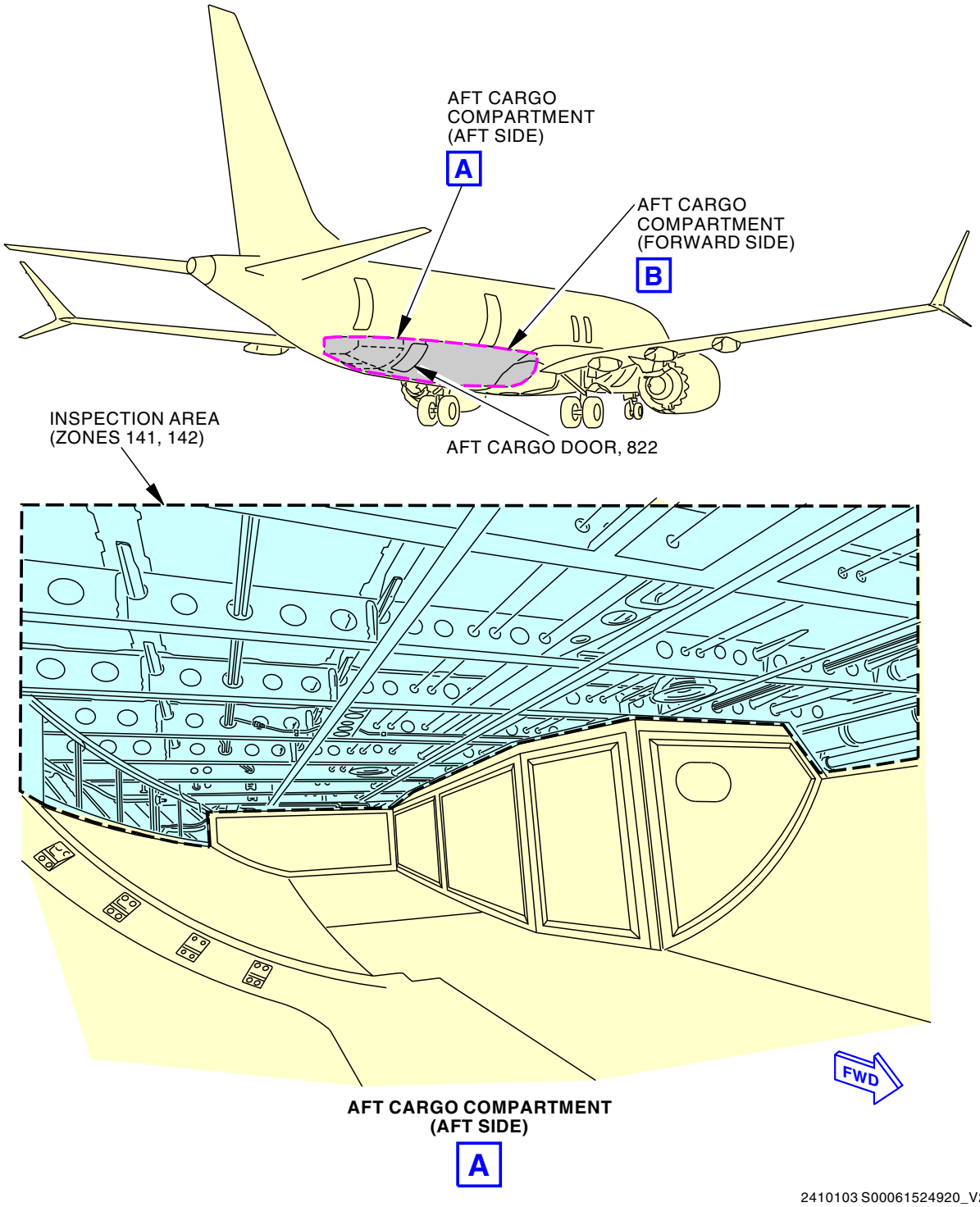
SUBTASK 05-41-01-410-015

(3) Close this access panel:

Number	Name/Location
822	Aft Cargo Door

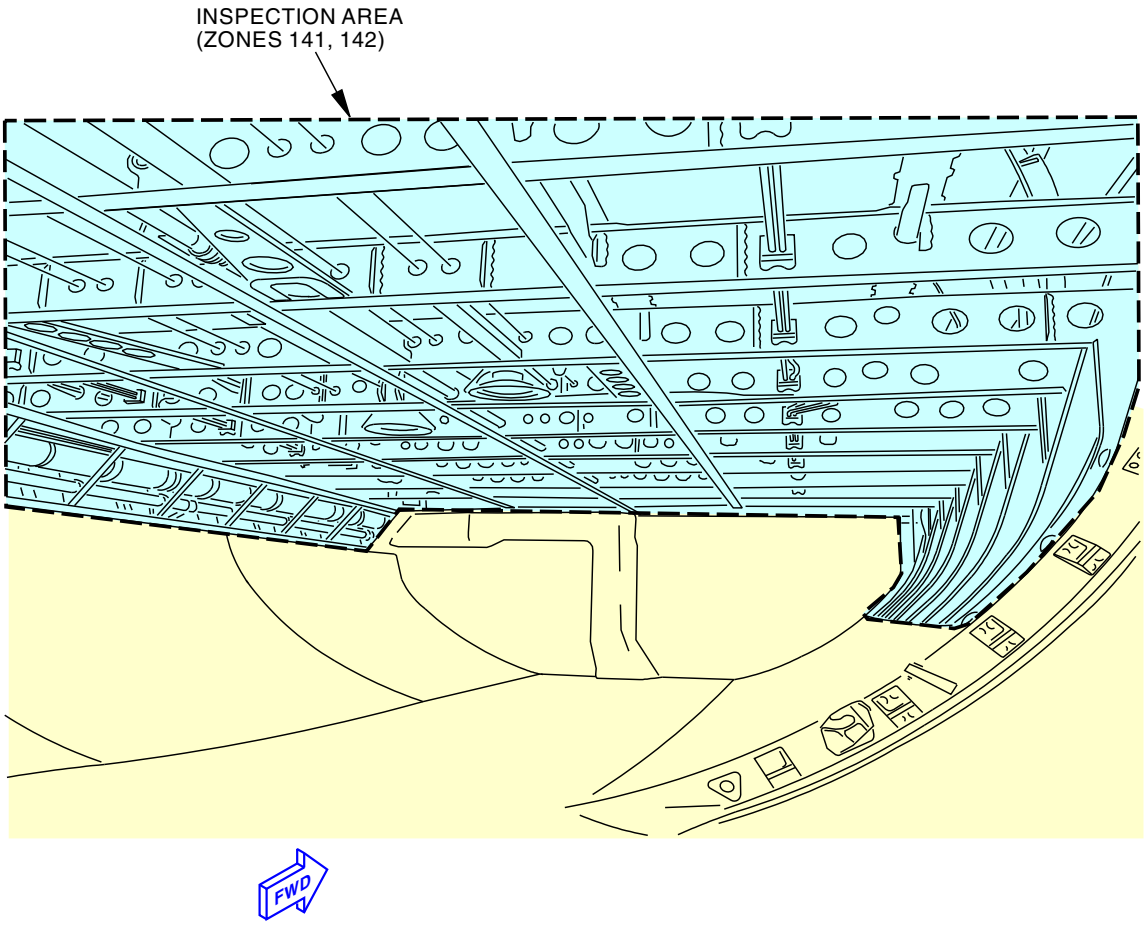
END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Aft Cargo Compartment General Visual (Internal) (Upper Angled Sidewall and Ceiling Panels Removed)
Figure 230/05-41-01-990-817 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



**AFT CARGO COMPARTMENT
(FORWARD SIDE)**

B

2410104 S00061524921_V1

**Aft Cargo Compartment General Visual (Internal) (Upper Angled Sidewall and Ceiling Panels Removed)
Figure 230/05-41-01-990-817 (Sheet 2 of 2)**

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-01-210-819

33. INTERNAL - ZONAL (GV): Aft Cargo Compartment - Sidewall Liners Removed

(Figure 231)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
141	Aft Cargo Compartment - Left
142	Aft Cargo Compartment - Right

B. Access Panels

Number	Name/Location
822	Aft Cargo Door

C. Zonal Inspection

SUBTASK 05-41-01-010-016

(1) Open this access panel:

Number	Name/Location
822	Aft Cargo Door

NOTE: Sidewall panels removal required.

SUBTASK 05-41-01-210-019

(2) Do a General Visual inspection of the aft cargo compartment - Section 46 and 47 (part), Sta 727 to Sta 947.5.

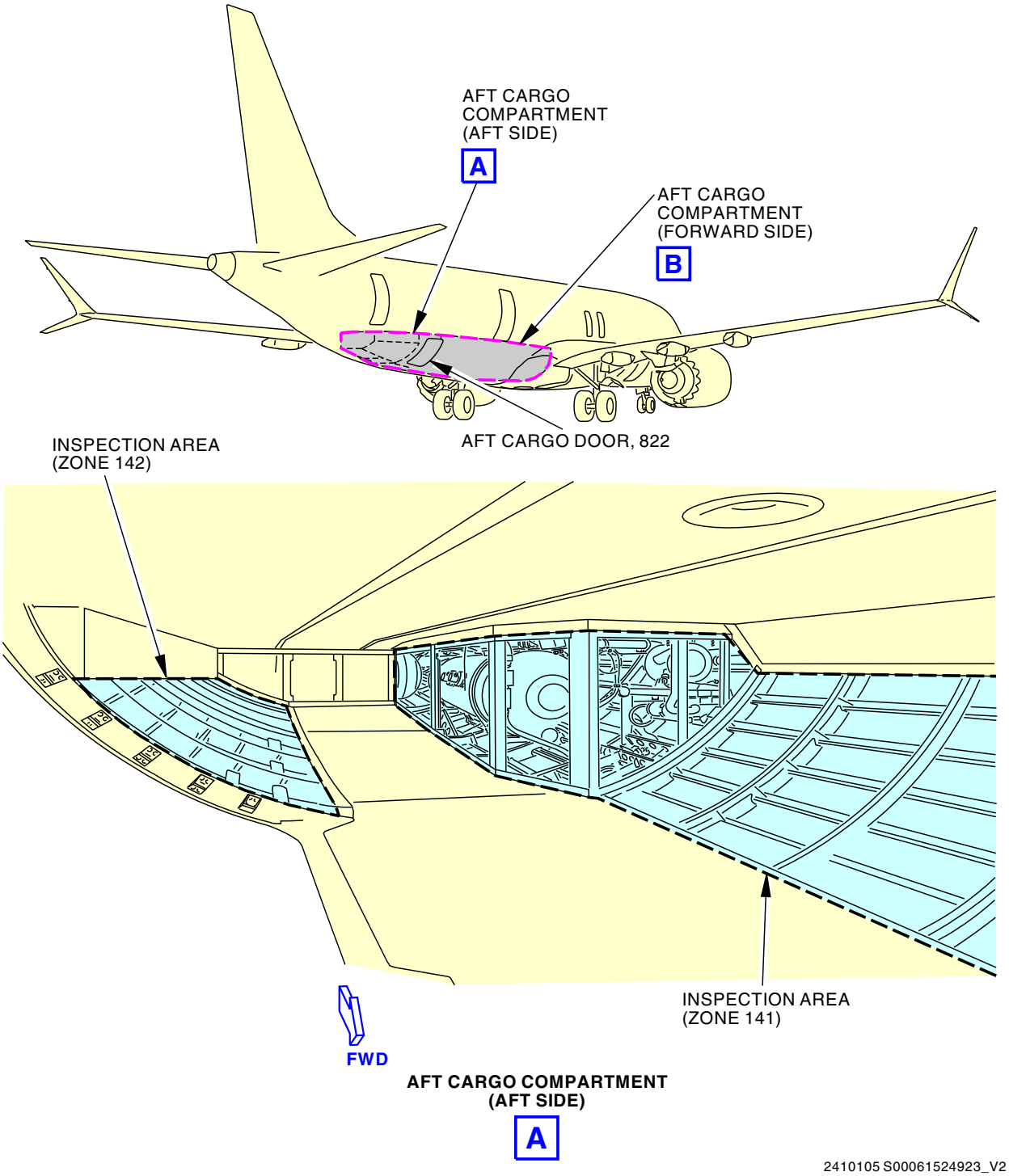
SUBTASK 05-41-01-410-016

(3) Close this access panel:

Number	Name/Location
822	Aft Cargo Door

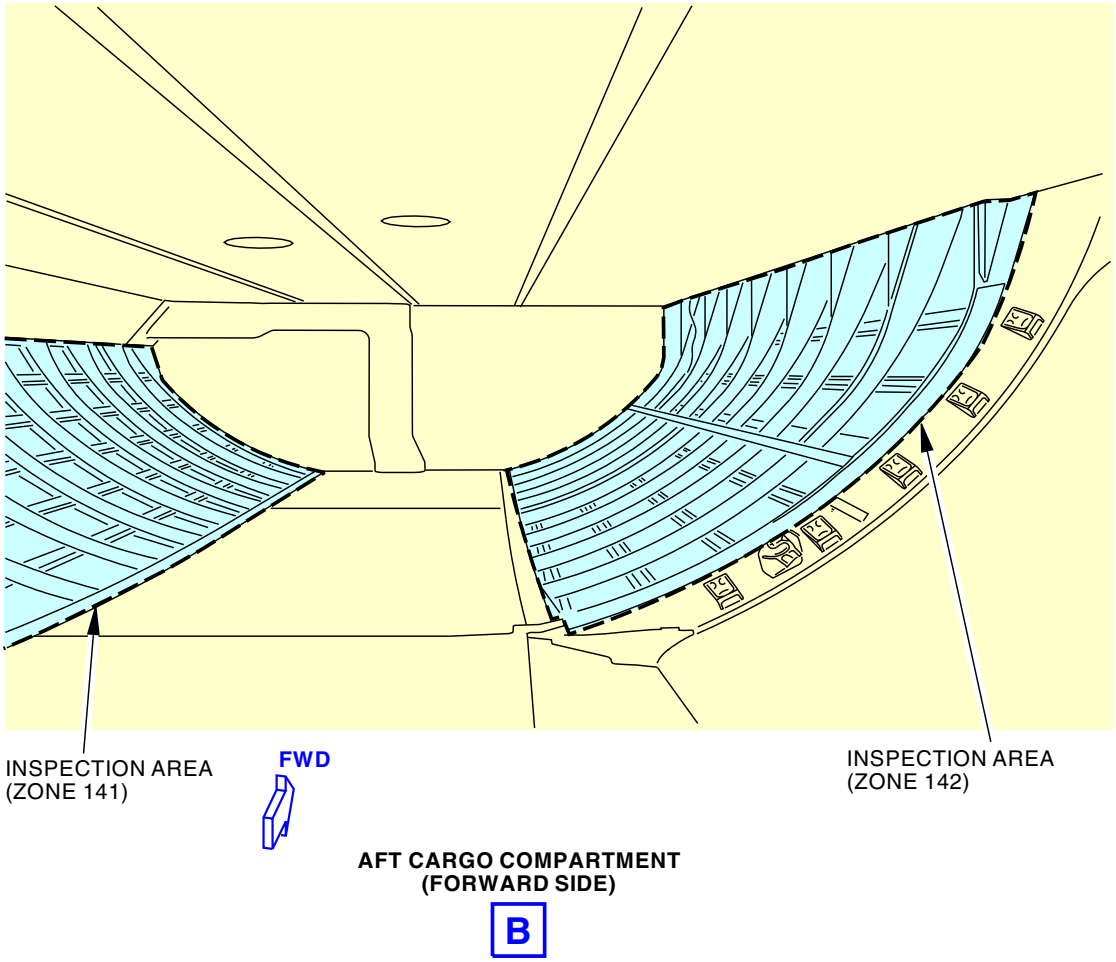
END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Aft Cargo Compartment General Visual (Internal) (Sidewall Liners Removed)
Figure 231/05-41-01-990-818 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



2410106 S00061524924_V1

Aft Cargo Compartment General Visual (Internal) (Sidewall Liners Removed)
Figure 231/05-41-01-990-818 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-01-210-820

34. EXTERNAL - ZONAL (GV): Aft Cargo Door Surround Structure Fittings and Stops

(Figure 232)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
142	Aft Cargo Compartment - Right

B. Access Panels

Number	Name/Location
822	Aft Cargo Door

C. Zonal Inspection

SUBTASK 05-41-01-010-017

(1) Open this access panel:

Number	Name/Location
822	Aft Cargo Door

SUBTASK 05-41-01-210-020

(2) Do a General Visual inspection of the aft cargo door surround structure fittings and stops - Section 46, Sta 827.

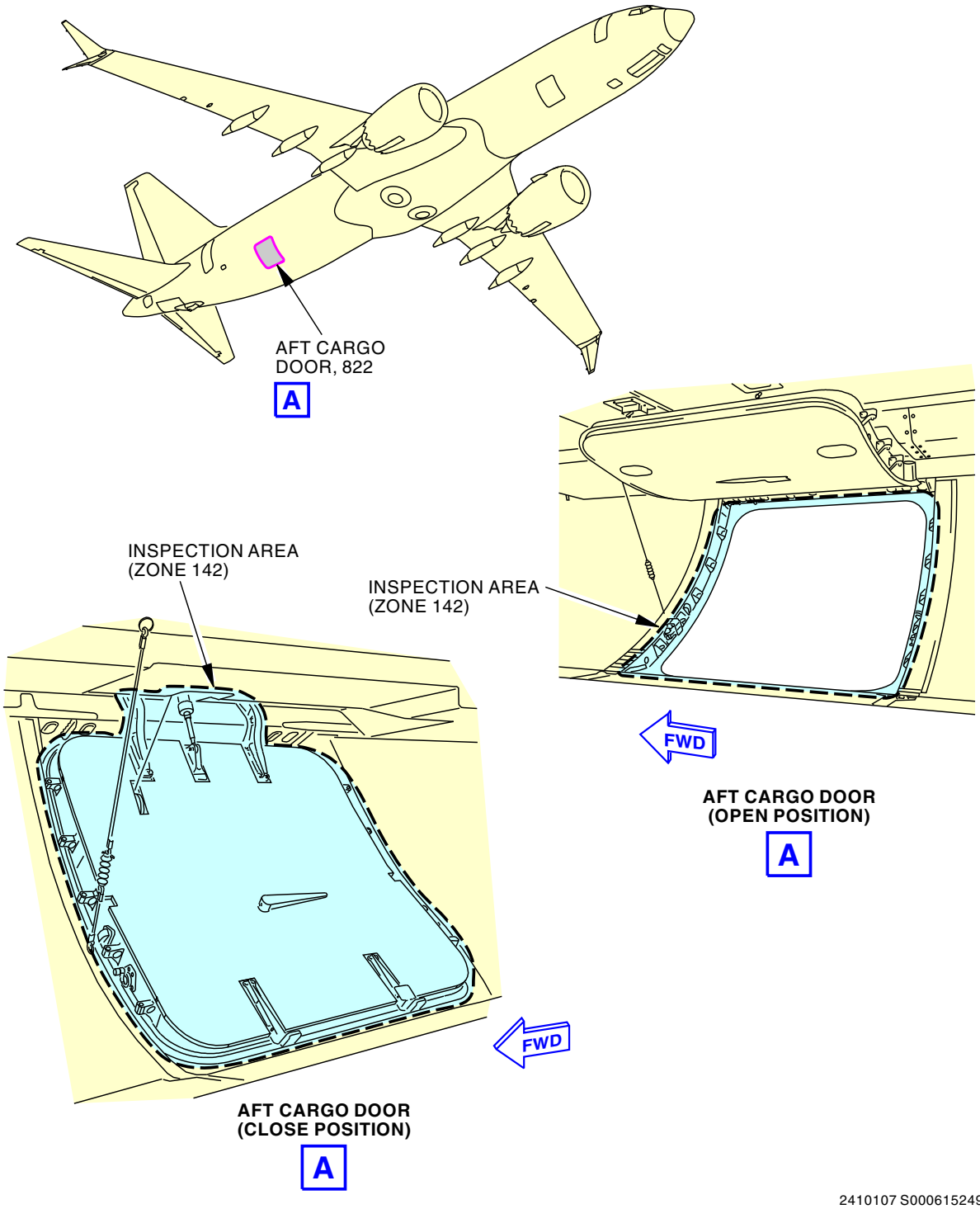
SUBTASK 05-41-01-410-017

(3) Close this access panel:

Number	Name/Location
822	Aft Cargo Door

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



2410107 S00061524926_V1

Fittings and Stops - Aft Cargo Door Surround Structure General Visual (External)
Figure 232/05-41-01-990-819

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-01-210-821

35. INTERNAL - ZONAL (GV): Aft Cargo Compartment Vacuum Waste Compartment

(Figure 233)

NOTE: This procedure is a scheduled maintenance task.

A. References

Reference	Title
50-12-03-000-801	Waste Tank Enclosure Panel Removal (P/B 401)
50-12-03-400-801	Waste Tank Enclosure Panel Installation (P/B 401)

B. Location Zones

Zone	Area
141	Aft Cargo Compartment - Left

C. Access Panels

Number	Name/Location
141MW	Panel Assy - Aft Cargo Compartment Bulkhead Vacuum Blower Access
141PW	Aft Cargo Compartment Bulkhead Logic Mod/Waste Tank Access
141QW	Aft Cargo Compartment Bulkhead
141RW	Aft Cargo Compartment Bulkhead Waste Tank Level Sensor Access
141SW	Aft Cargo Compartment Bulkhead
822	Aft Cargo Door

D. Zonal Inspection

SUBTASK 05-41-01-010-018

(1) Open these access panels:

Number	Name/Location
141MW	Panel Assy - Aft Cargo Compartment Bulkhead Vacuum Blower Access
141PW	Aft Cargo Compartment Bulkhead Logic Mod/Waste Tank Access
141QW	Aft Cargo Compartment Bulkhead
141RW	Aft Cargo Compartment Bulkhead Waste Tank Level Sensor Access
141SW	Aft Cargo Compartment Bulkhead
822	Aft Cargo Door

SUBTASK 05-41-01-010-028

(2) Remove vacuum waste compartment panels: Waste Tank Enclosure Panel Removal, TASK 50-12-03-000-801.

SUBTASK 05-41-01-210-021

(3) Do a General Visual inspection of the aft cargo compartment vacuum waste compartment.

SUBTASK 05-41-01-410-028

(4) Install Vacuum waste compartment panels: Waste Tank Enclosure Panel Installation, TASK 50-12-03-400-801.

SUBTASK 05-41-01-410-018

(5) Close these access panels:

Number	Name/Location
141MW	Panel Assy - Aft Cargo Compartment Bulkhead Vacuum Blower Access

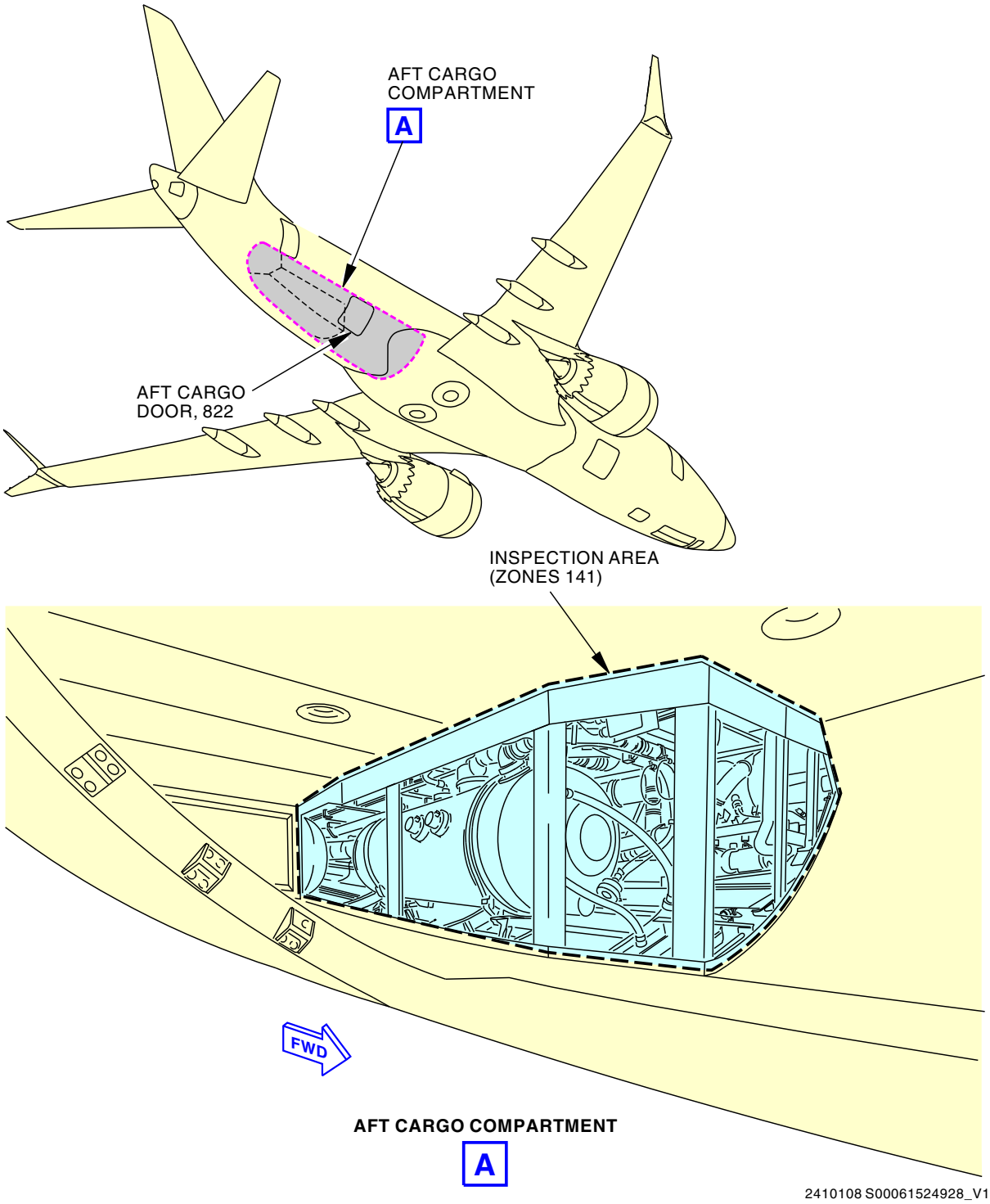
ECCN 9E991 BOEING PROPRIETARY - See title page for details

(Continued)

Number	Name/Location
141PW	Aft Cargo Compartment Bulkhead Logic Mod/Waste Tank Access
141QW	Aft Cargo Compartment Bulkhead
141RW	Aft Cargo Compartment Bulkhead Waste Tank Level Sensor Access
141SW	Aft Cargo Compartment Bulkhead
822	Aft Cargo Door

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Aft Cargo Compartment - Vacuum Waste Compartment General Visual (Internal)
Figure 233/05-41-01-990-820

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-01-210-844

36. EXTERNAL - ZONAL (GVI): Area Below Aft Cargo Compartment

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
143	Area Below Aft Cargo Compartment - Left
144	Area Below Aft Cargo Compartment - Right

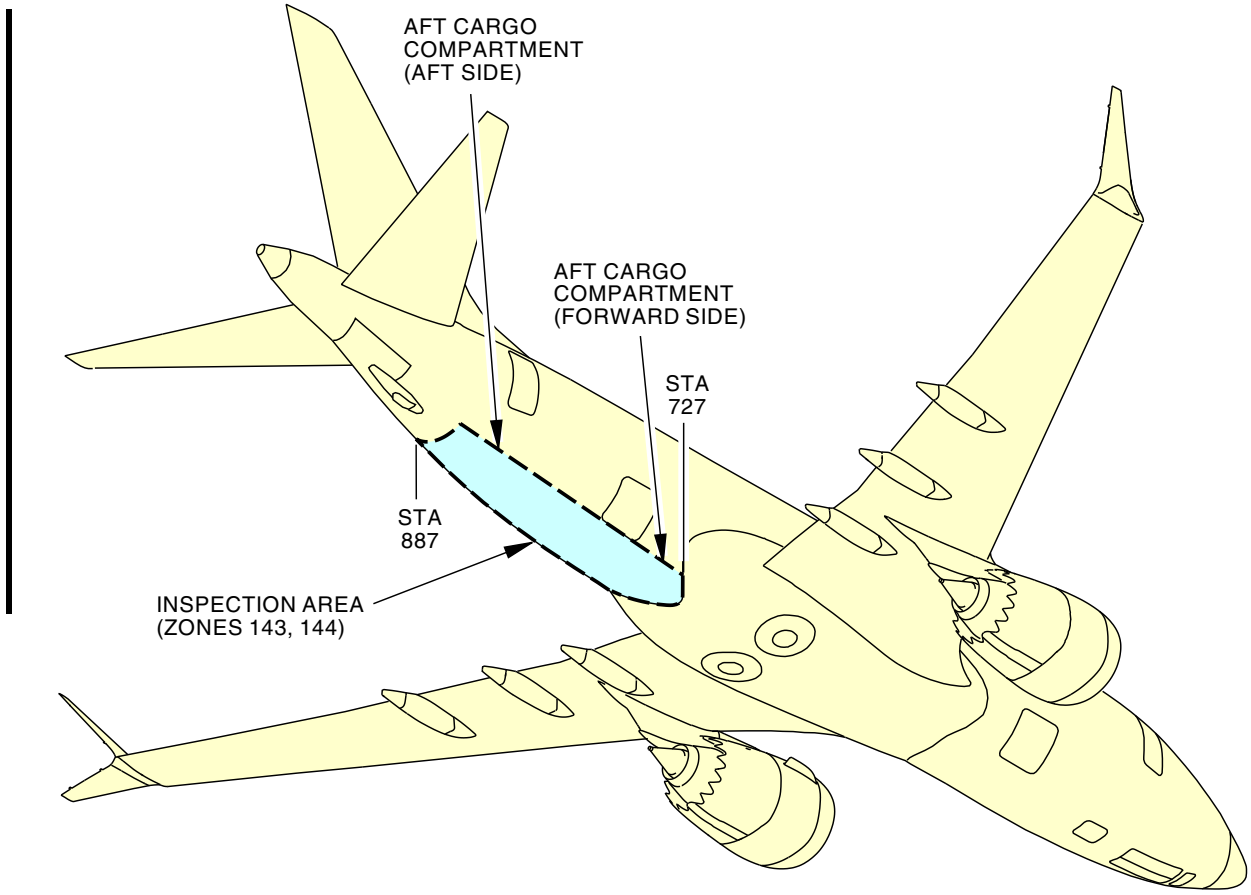
B. Zonal Inspection

SUBTASK 05-41-01-210-044

(1) Do a General Visual Inspection of the area below the aft cargo compartment.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



2545760 S0000601104_V2

Area Below Aft Cargo Compartment General Visual (External)
Figure 234/05-41-01-990-843

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-41-01-210-822

37. INTERNAL - ZONAL (GV): Area Below Aft Cargo Compartment

(Figure 235)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This Zonal inspection procedure satisfies the required EZAP-derived Zonal inspection requirement for this zone.

B. References

Reference	Title
05-00-00-910-802	Enhanced Zonal Inspection Program (EZAP) Precautions (P/B 201)
20-60-07-910-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
143	Area Below Aft Cargo Compartment - Left
144	Area Below Aft Cargo Compartment - Right

D. Access Panels

Number	Name/Location
822	Aft Cargo Door

E. Zonal Inspection

SUBTASK 05-41-01-010-019

(1) Open this access panel:

Number	Name/Location
822	Aft Cargo Door

NOTE: Center floor panels removal required. Cargo loading system removed/displaced as required.

SUBTASK 05-41-01-210-022

(2) Do the zonal inspection following the procedures in Enhanced Zonal Inspection Program (EZAP) Precautions, TASK 05-00-00-910-802.

(3) Perform an internal zonal inspection (GV) of the area below the aft cargo compartment - Section 46 and 47 (part), Sta 727 to Sta 947.5. (EZAP)

SUBTASK 05-41-01-910-009

(4) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-910-801 for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

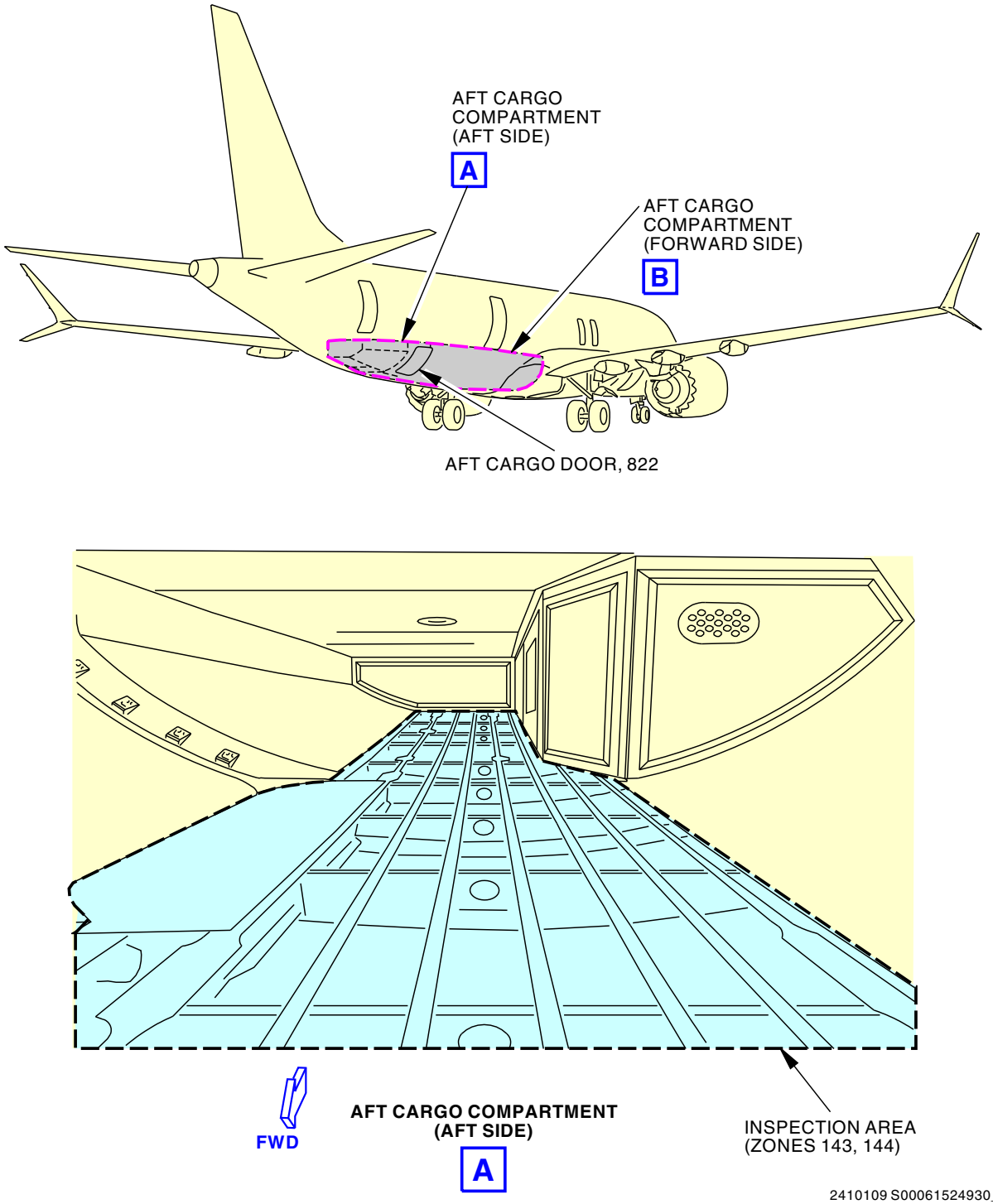
SUBTASK 05-41-01-410-019

(5) Close this access panel:

Number	Name/Location
822	Aft Cargo Door

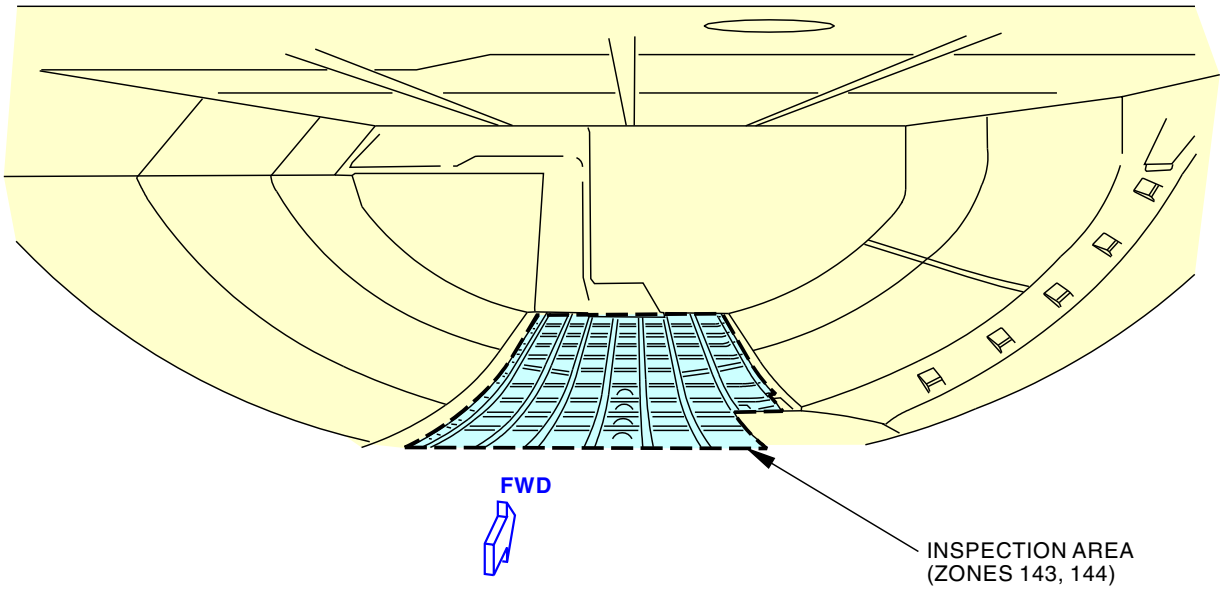
END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Below the Aft Cargo Compartment General Visual (Internal) (Floor Panels Removed)
Figure 235/05-41-01-990-821 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



**AFT CARGO COMPARTMENT
(FORWARD SIDE)**

B

2410110 S00061524931_V1

**Below the Aft Cargo Compartment General Visual (Internal) (Floor Panels Removed)
Figure 235/05-41-01-990-821 (Sheet 2 of 2)**

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-01-210-845

38. EXTERNAL - ZONAL (GVI): Aft Cargo Compartment Equipment Bay

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
145	Aft Cargo Compartment Equipment Bay - Left
146	Aft Cargo Compartment Equipment Bay - Right

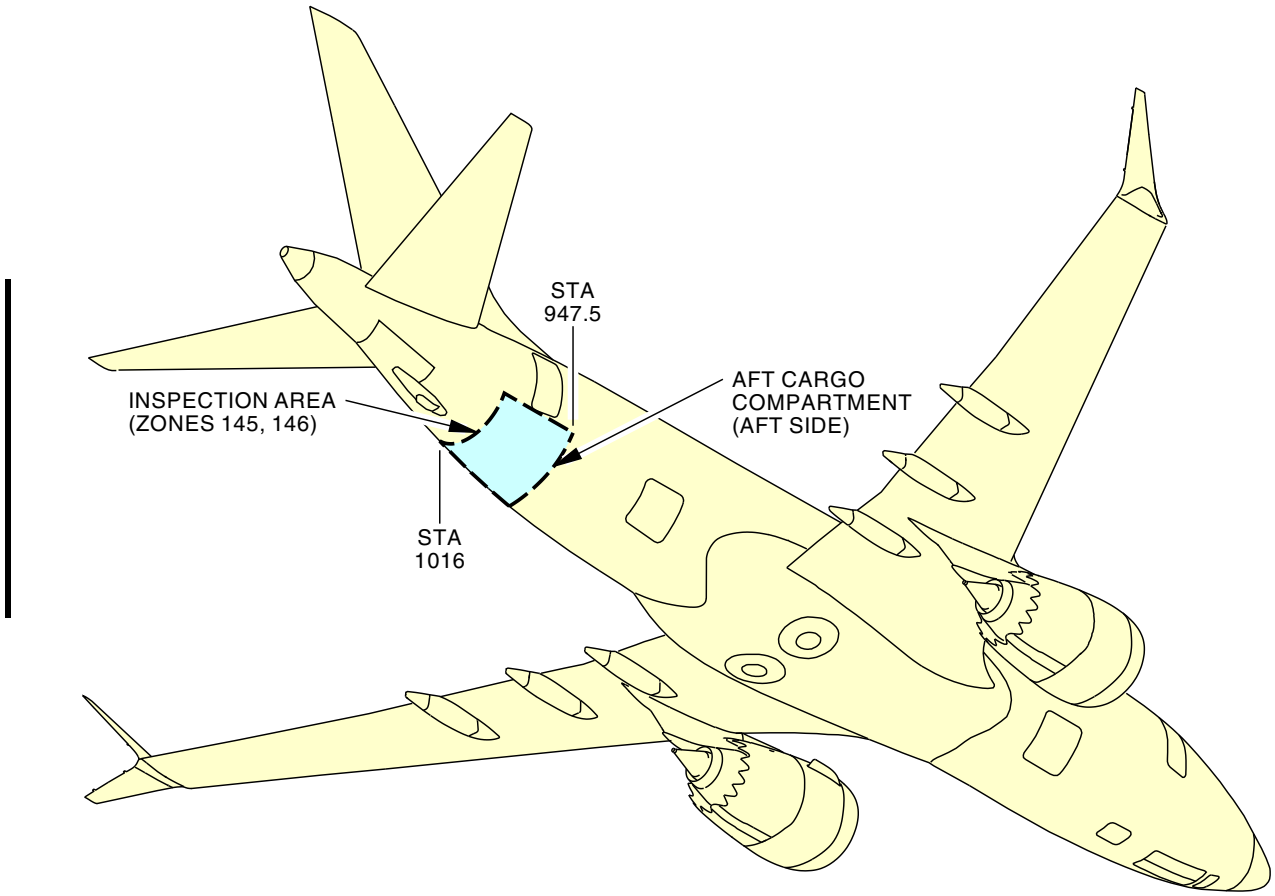
B. Zonal Inspection

SUBTASK 05-41-01-210-045

(1) Do a General Visual Inspection of the aft cargo compartment equipment bay.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



2545765 S0000601106_V2

Aft Cargo Compartment Equipment Bay General Visual (External)
Figure 236/05-41-01-990-844

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-41-01-210-823

39. INTERNAL - ZONAL (GV): Aft Cargo Compartment Equipment Bay

(Figure 237)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This Zonal inspection procedure satisfies the required EZAP-derived Zonal inspection requirement for this zone.

B. References

Reference	Title
05-00-00-910-802	Enhanced Zonal Inspection Program (EZAP) Precautions (P/B 201)
20-60-07-910-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
145	Aft Cargo Compartment Equipment Bay - Left
146	Aft Cargo Compartment Equipment Bay - Right

D. Access Panels

Number	Name/Location
822	Aft Cargo Door

E. Zonal Inspection

SUBTASK 05-41-01-010-020

(1) Open this access panel:

Number	Name/Location
822	Aft Cargo Door

NOTE: Aft cargo panels at Sta 947 bulkhead removal required.

SUBTASK 05-41-01-210-023

(2) Do the zonal inspection following the procedures in Enhanced Zonal Inspection Program (EZAP) Precautions, TASK 05-00-00-910-802.

(3) Perform an internal zonal inspection (GV) of the aft cargo compartment equipment bay - Section 47, Sta 947.5. to aft pressure bulkhead. (EZAP)

SUBTASK 05-41-01-910-010

(4) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-910-801 for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

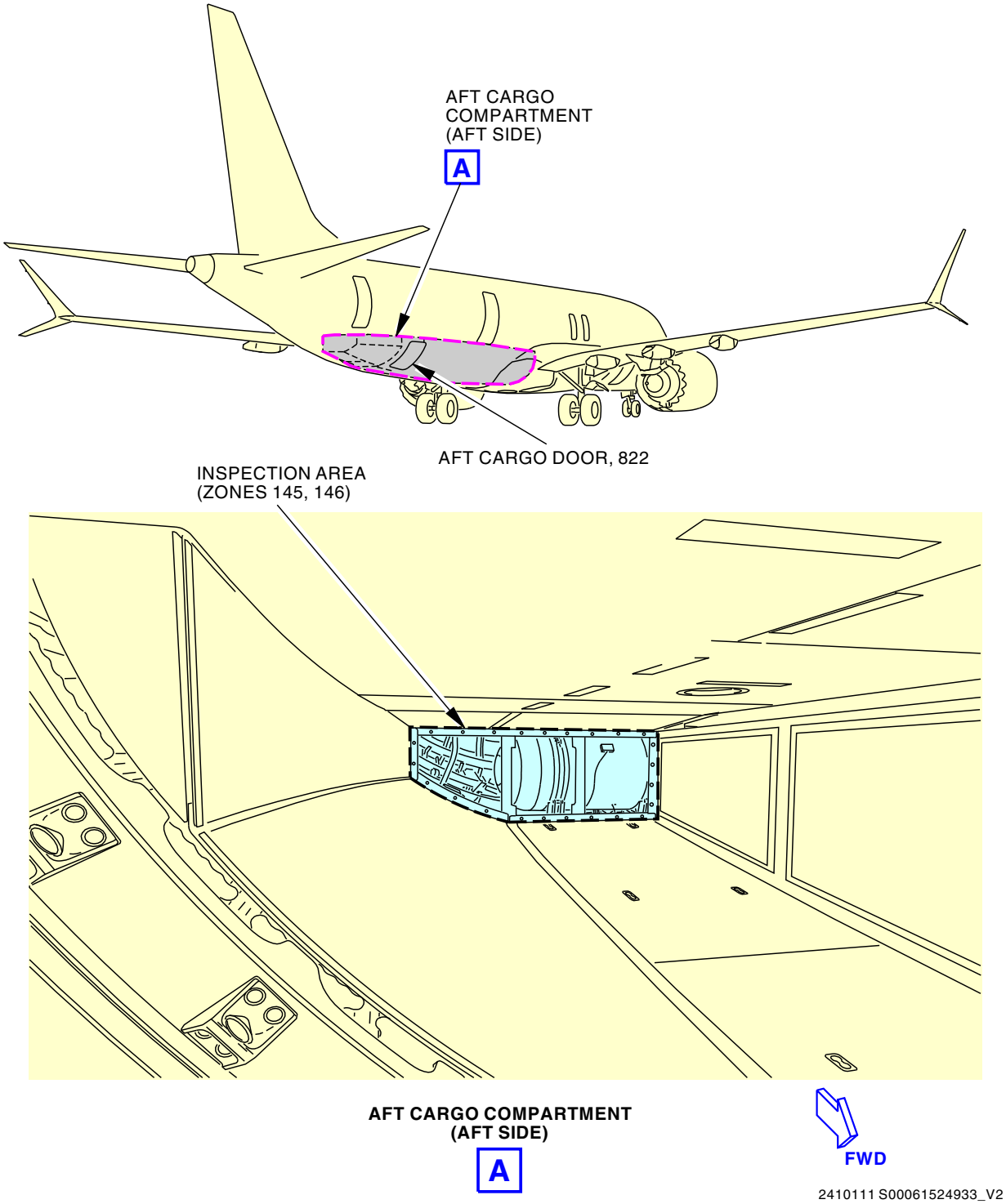
SUBTASK 05-41-01-410-020

(5) Close this access panel:

Number	Name/Location
822	Aft Cargo Door

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Aft Cargo Compartment - Equipment Bay General Visual (Internal) (Endwall Liners Removed)
Figure 237/05-41-01-990-822

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-01-210-846

40. EXTERNAL - ZONAL (GVI): Keel Beam Sta 727 to Sta 743.95

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
149	Keel Beam (Part) Body Station 727.00 to Body Station 743.95

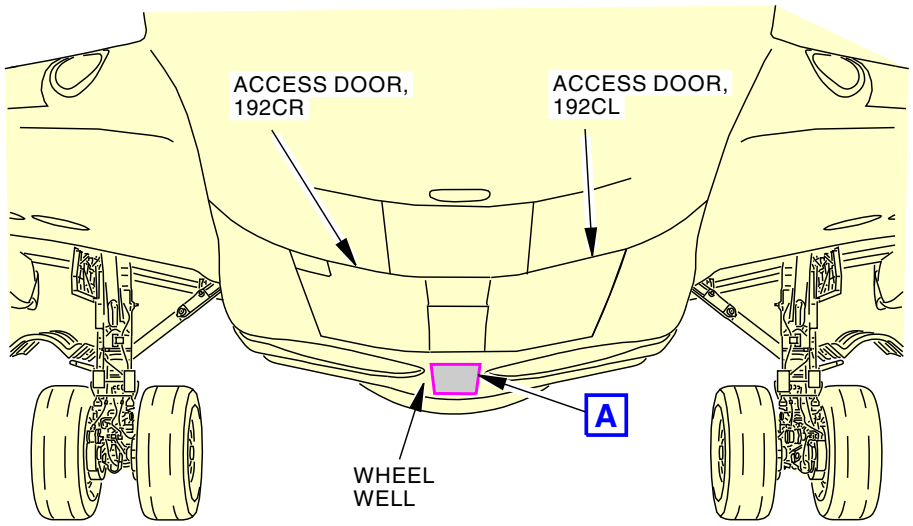
B. Zonal Inspection

SUBTASK 05-41-01-210-046

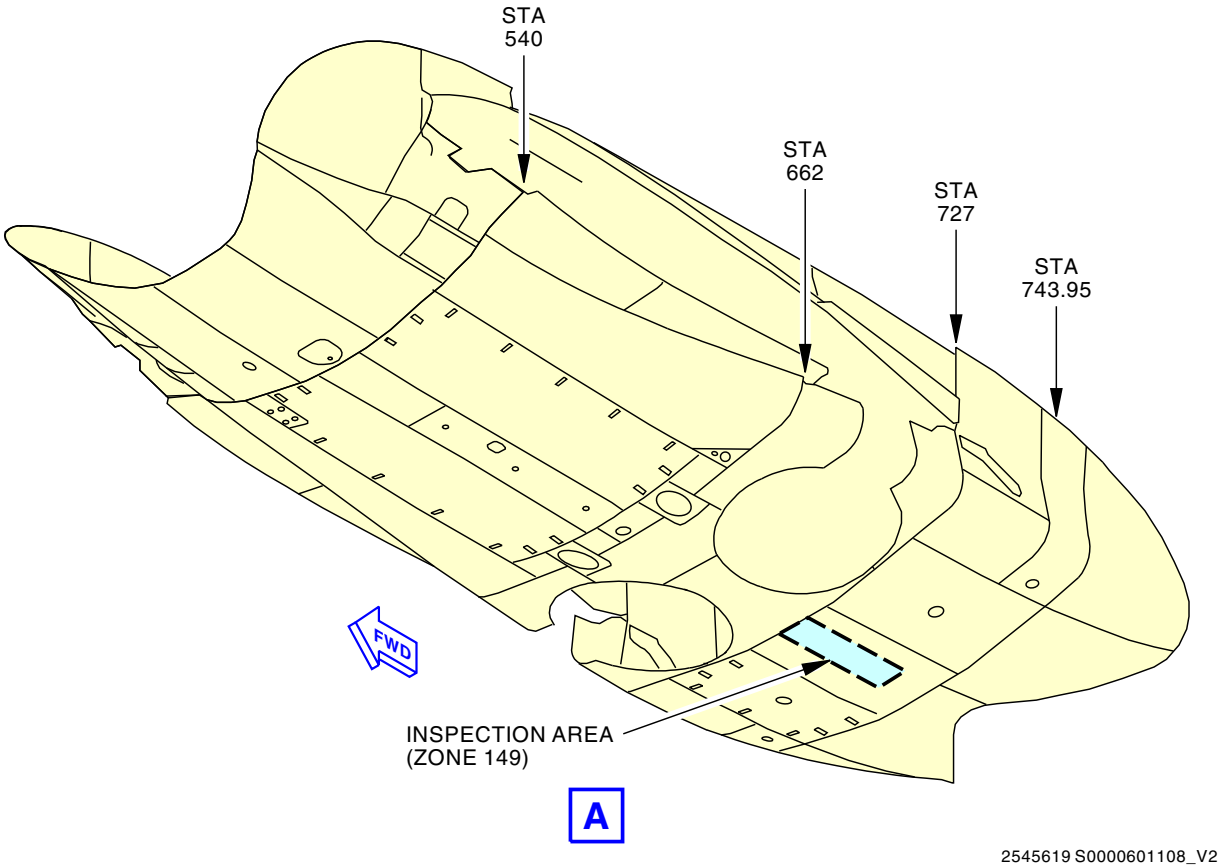
(1) Do a General Visual Inspection of the keel beam Sta 727 to 743.95.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



(VIEW IN THE AFT DIRECTION)



Keel Beam Sta 727 to Sta 743.95 General Visual (External)
Figure 238/05-41-01-990-845

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-01-210-847

41. INTERNAL - ZONAL (GVI): Keel Beam Sta 727 to sta 743.95

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
149	Keel Beam (Part) Body Station 727.00 to Body Station 743.95

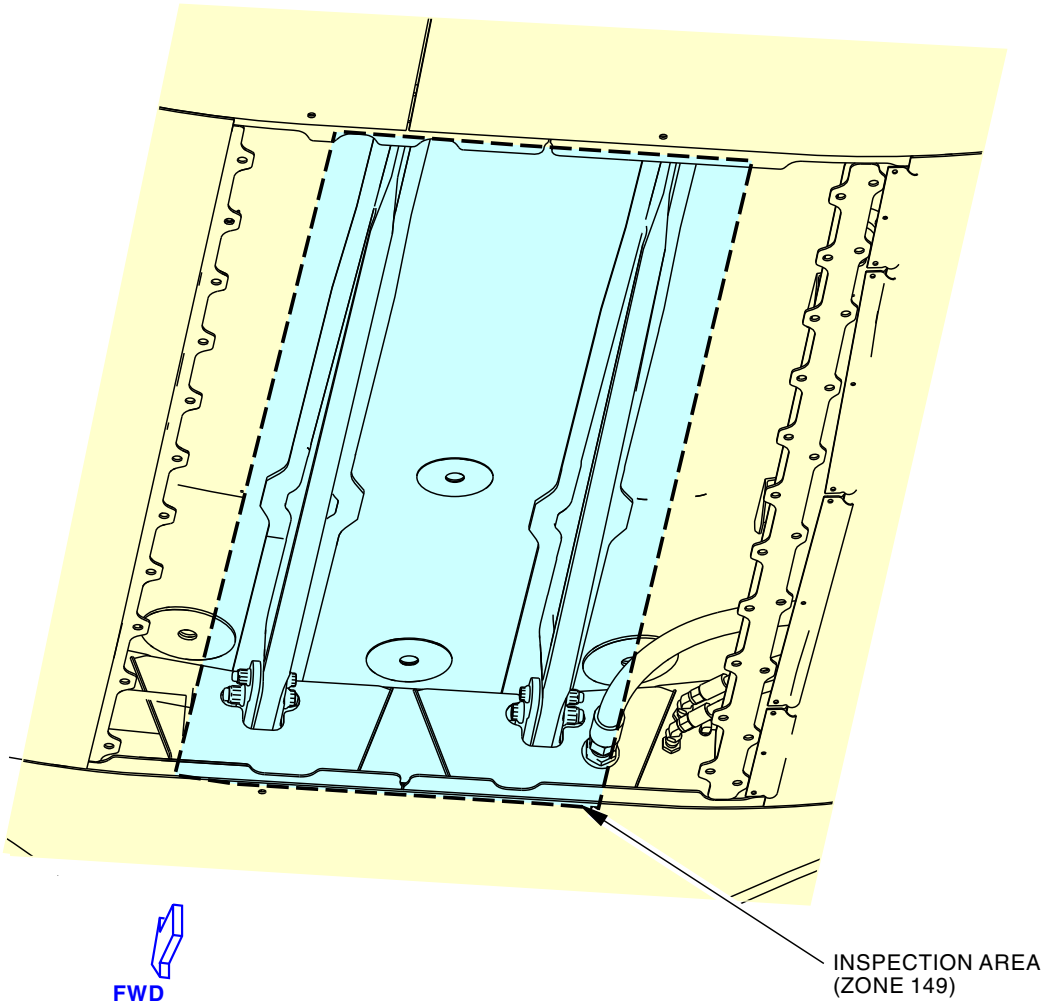
B. Zonal Inspection

SUBTASK 05-41-01-210-047

(1) Do a General Visual Inspection of the keel beam Sta 727 to Sta 743.95.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



2545825 S0000601109_V2

Keel Beam Sta 727 to Sta 743.95 General Visual (Internal)
Figure 239/05-41-01-990-846

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-01-210-824

42. EXTERNAL - ZONAL (GV): Wing to Body Fairing

(Figure 240)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
190	Subzone - Wing-to-Body Fairing

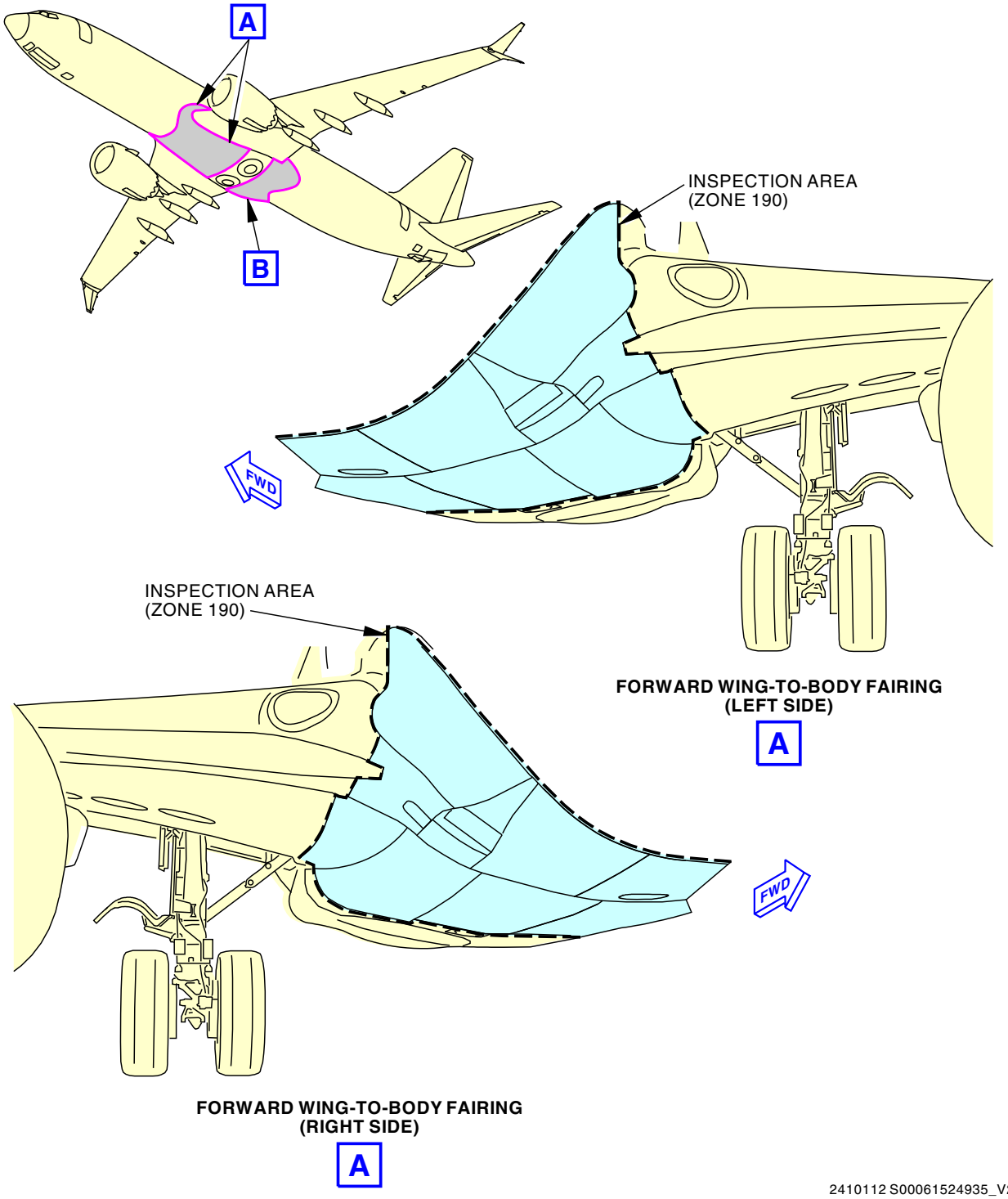
B. Zonal Inspection

SUBTASK 05-41-01-210-024

(1) Do a General Visual inspection of the wing to body fairing. Inspection is accomplished from the ground, without the use of stands or ladders. No additional access panels required.

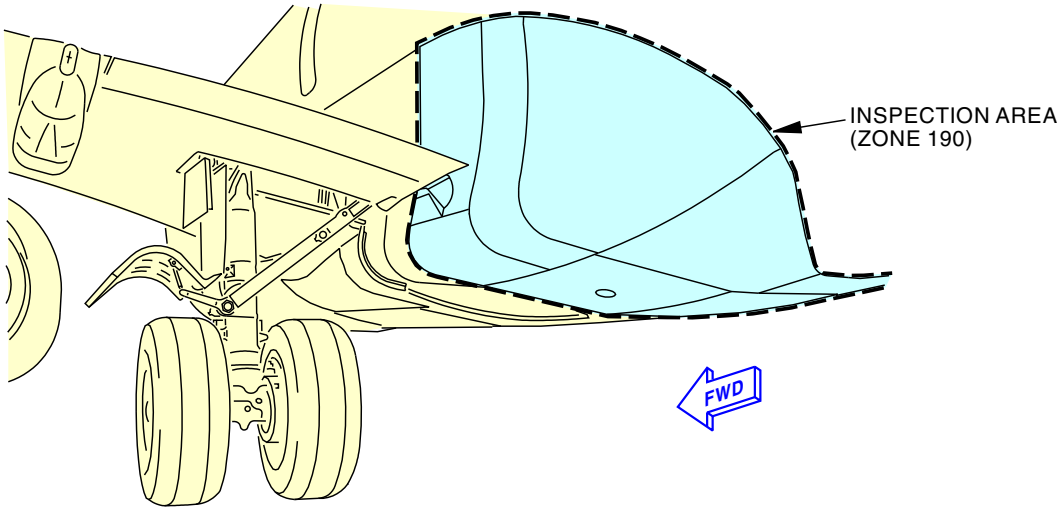
——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



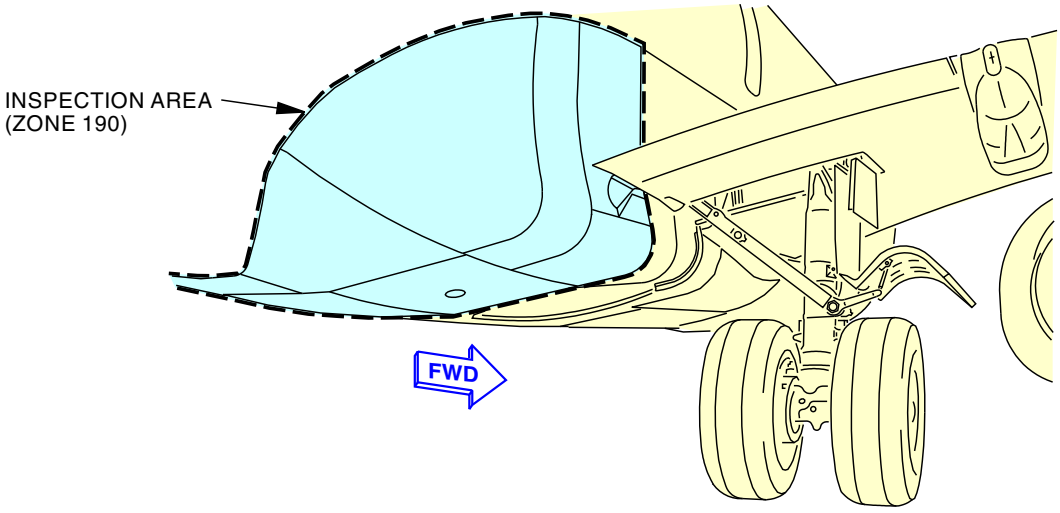
Wing-to-Body Fairing General Visual (External)
Figure 240/05-41-01-990-823 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



**AFT WING-TO-BODY FAIRING
(LEFT SIDE)**

B



**AFT WING-TO-BODY FAIRING
(RIGHT SIDE)**

B

2410113 S00061524936_V1

**Wing-to-Body Fairing General Visual (External)
Figure 240/05-41-01-990-823 (Sheet 2 of 2)**

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-01-210-848

43. EXTERNAL - ZONAL (GVI): Lower Wing to Body Fairing - Forward of Wing Box

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
191	Lower Wing-To-Body Fairing - Forward of Wing Box

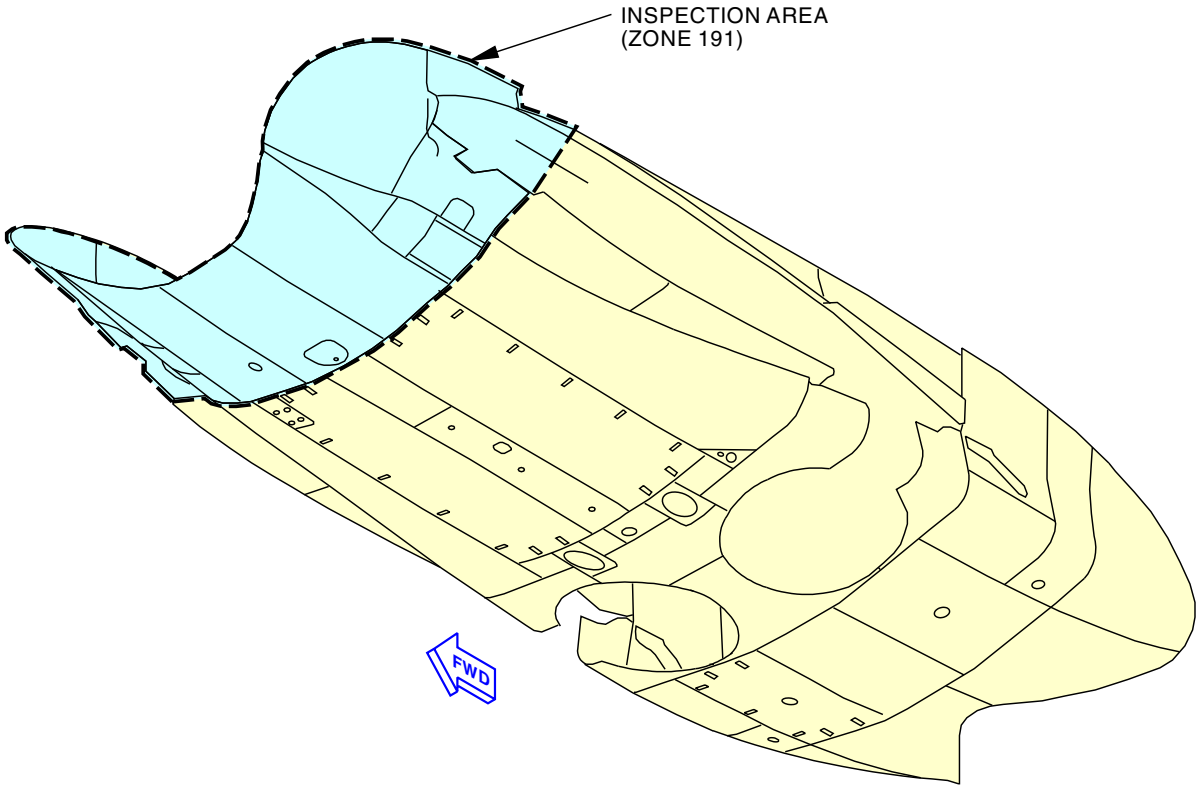
B. Zonal Inspection

SUBTASK 05-41-01-210-048

(1) Do a General Visual Inspection of the lower wing-to-body fairing - forward of wing box.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



2545747 S0000601111_V1

Lower Wing-to-Body Fairing - Forward of Wing Box General Visual (External)
Figure 241/05-41-01-990-847

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-41-01-210-825

44. INTERNAL - ZONAL (GV): Lower Wing to Body Fairing - Forward of Wing Box

(Figure 242)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This Zonal inspection procedure satisfies the required EZAP-derived Zonal inspection requirement for this zone.

B. References

Reference	Title
05-00-00-910-802	Enhanced Zonal Inspection Program (EZAP) Precautions (P/B 201)
20-60-07-910-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
191	Lower Wing-To-Body Fairing - Forward of Wing Box

D. Access Panels

Number	Name/Location
191GL	Ram Air Actuator Panel - Forward
191GR	Ram Air Actuator Panel - Forward
192CL	ECS Access Door
192CR	ECS Access Door

E. Zonal Inspection

SUBTASK 05-41-01-010-021

(1) Open these access panels:

Number	Name/Location
191GL	Ram Air Actuator Panel - Forward
191GR	Ram Air Actuator Panel - Forward
192CL	ECS Access Door
192CR	ECS Access Door

NOTE: Through access provided.

SUBTASK 05-41-01-210-025

(2) Do the zonal inspection following the procedures in Enhanced Zonal Inspection Program (EZAP) Precautions, TASK 05-00-00-910-802.

(3) Perform an internal zonal inspection (GV) of the lower wing to body fairing - forward of wing box. (EZAP)

SUBTASK 05-41-01-910-011

(4) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-910-801 for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

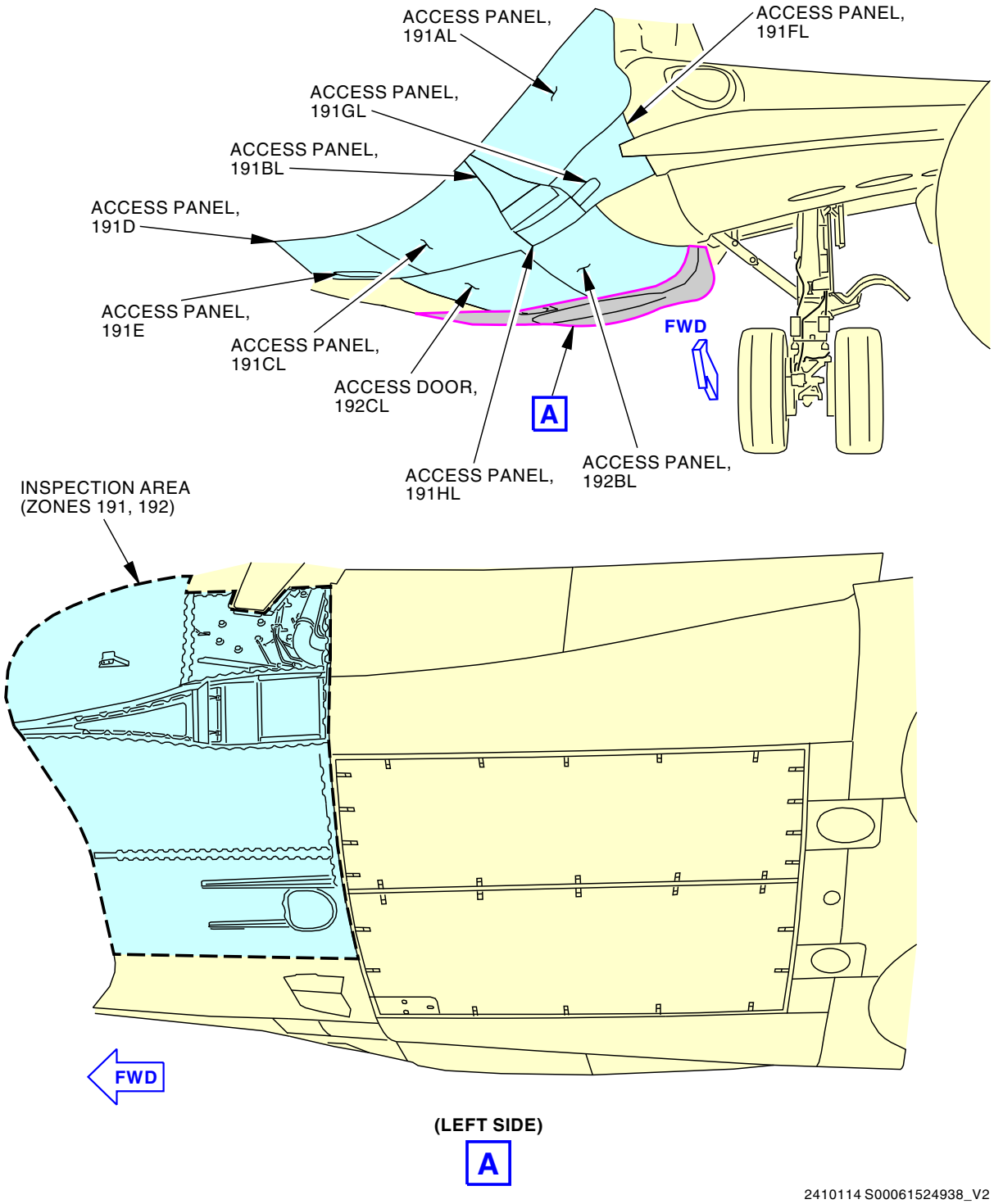
SUBTASK 05-41-01-410-021

(5) Close these access panels:

Number	Name/Location
191GL	Ram Air Actuator Panel - Forward
191GR	Ram Air Actuator Panel - Forward
192CL	ECS Access Door
192CR	ECS Access Door

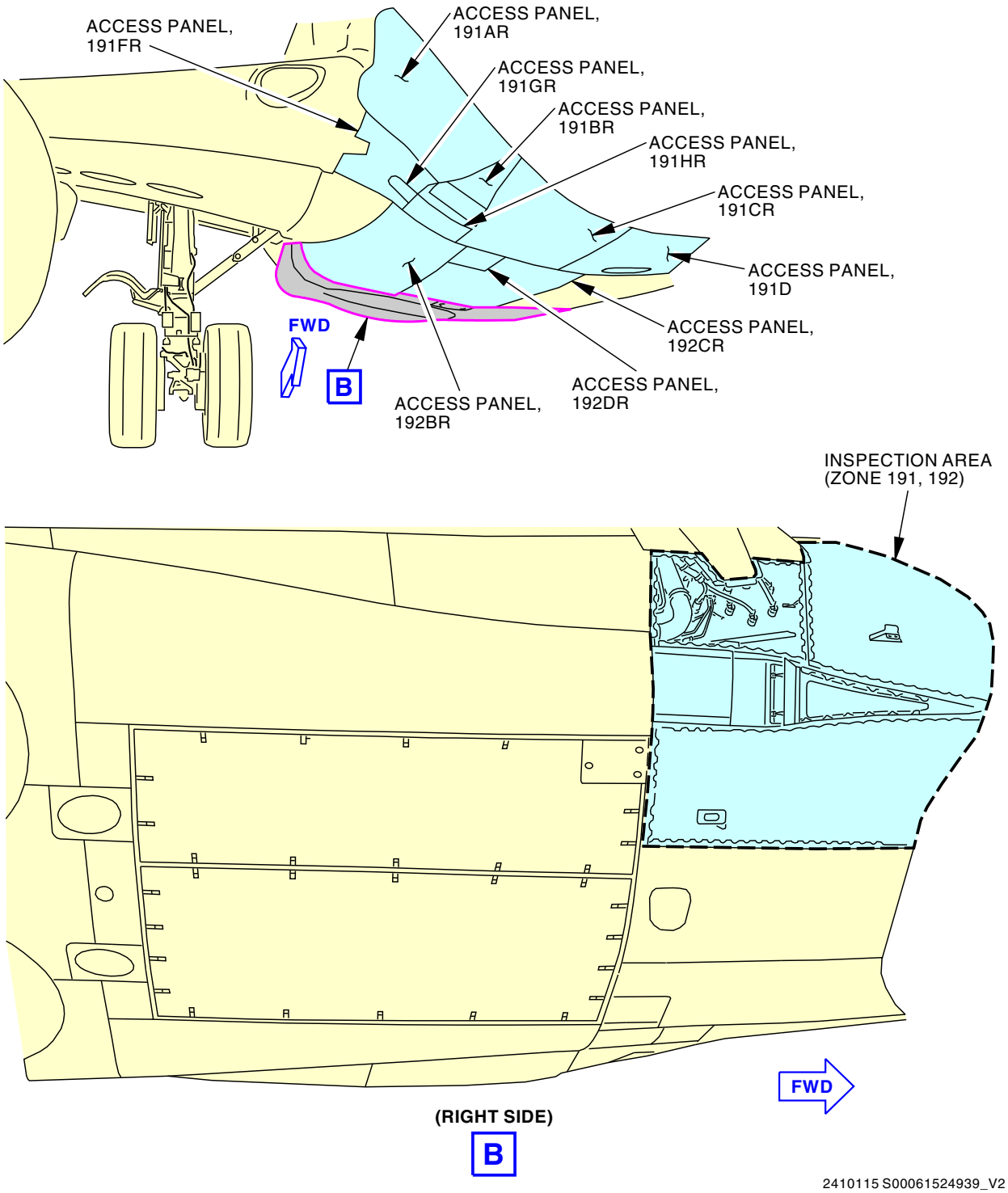
END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Forward Wing-to-Body Fairing General Visual (Internal)
Figure 242/05-41-01-990-824 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Forward Wing-to-Body Fairing General Visual (Internal)
Figure 242/05-41-01-990-824 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-01-210-849

45. EXTERNAL - ZONAL (GVI): Lower Wing to Body Fairing - Under Wing Box

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
192	Lower Wing-To-Body Fairing - Under Wing Box

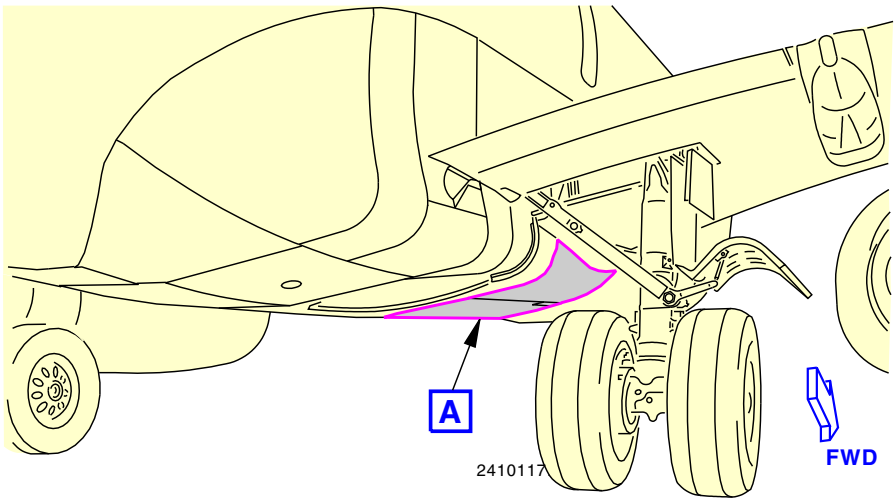
B. Zonal Inspection

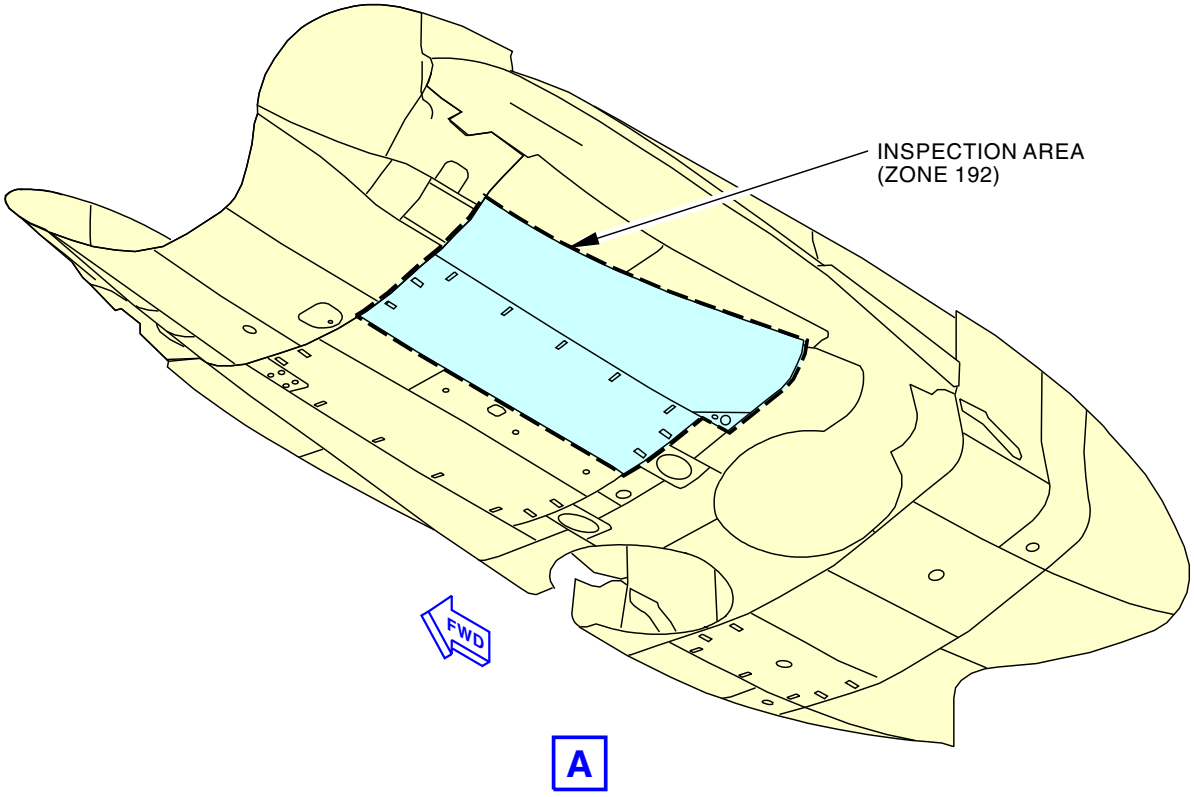
SUBTASK 05-41-01-210-049

(1) Do a General Visual Inspection of the lower wing-to-body fairing - under the wing box.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details





Lower Wing-to-Body Fairing - Under Wing Box General Visual (External)
Figure 243/05-41-01-990-848

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-41-01-210-826

46. INTERNAL - ZONAL (GV): Lower Wing to Body Fairing - Under Wing Box

(Figure 244)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This Zonal inspection procedure satisfies the required EZAP-derived Zonal inspection requirement for this zone.

B. References

Reference	Title
05-00-00-910-802	Enhanced Zonal Inspection Program (EZAP) Precautions (P/B 201)
20-60-07-910-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
192	Lower Wing-To-Body Fairing - Under Wing Box

D. Access Panels

Number	Name/Location
192BL	ECS Ram Air Inlet Mixing Duct Panel - Forward
192BR	ECS Ram Air Inlet Mixing Duct Panel - Forward
192CL	ECS Access Door
192CR	ECS Access Door
192DR	ECS High Pressure Access Door

E. Zonal Inspection

SUBTASK 05-41-01-010-022

(1) Open these access panels:

Number	Name/Location
192BL	ECS Ram Air Inlet Mixing Duct Panel - Forward
192BR	ECS Ram Air Inlet Mixing Duct Panel - Forward
192CL	ECS Access Door
192CR	ECS Access Door
192DR	ECS High Pressure Access Door

NOTE: Through access provided.

SUBTASK 05-41-01-210-026

(2) Do the zonal inspection following the procedures in Enhanced Zonal Inspection Program (EZAP) Precautions, TASK 05-00-00-910-802.

(3) Perform an internal zonal inspection (GV) of the lower wing to body fairing - under the wing box. (EZAP)

SUBTASK 05-41-01-910-012

(4) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-910-801 for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

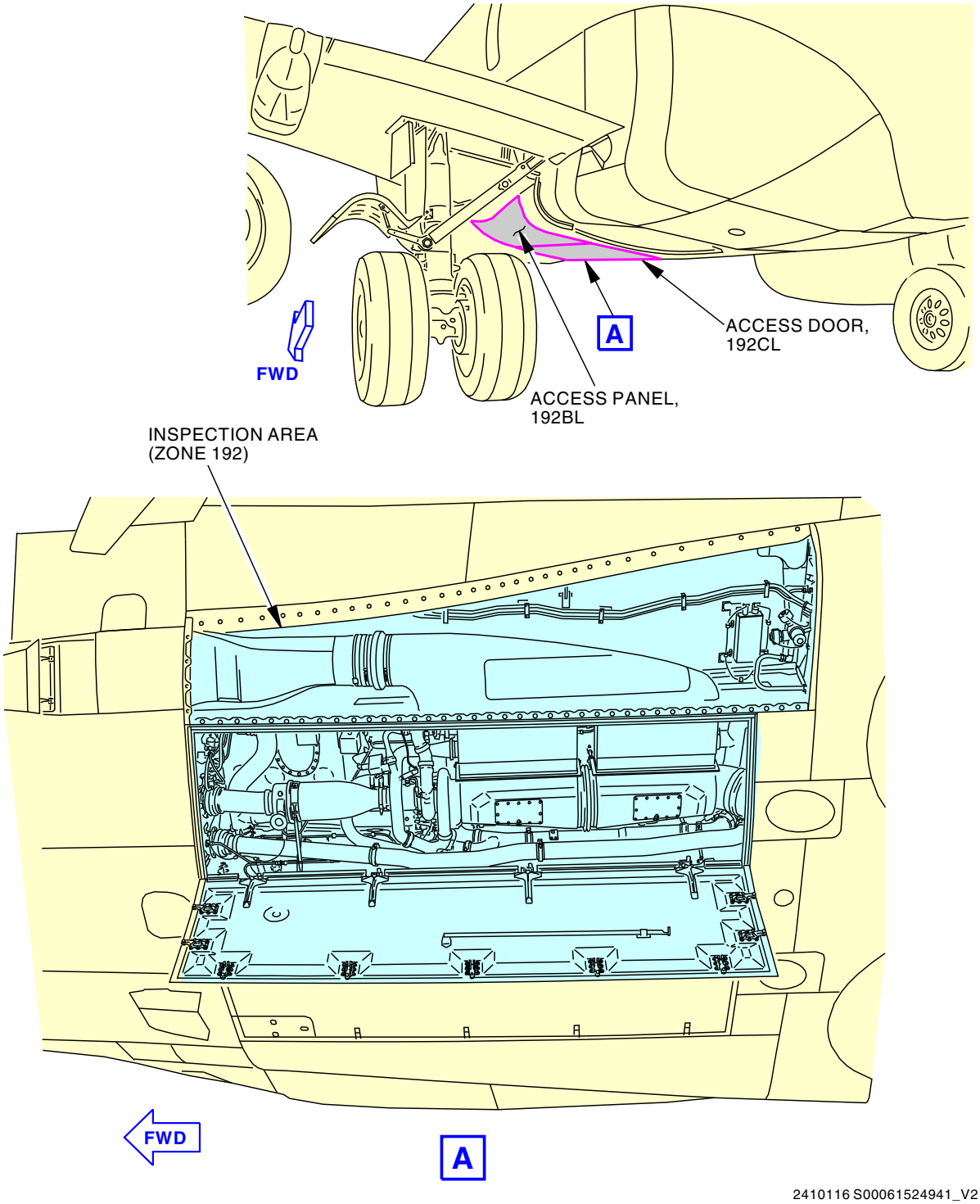
SUBTASK 05-41-01-410-022

(5) Close these access panels:

Number	Name/Location
192BL	ECS Ram Air Inlet Mixing Duct Panel - Forward
192BR	ECS Ram Air Inlet Mixing Duct Panel - Forward
192CL	ECS Access Door
192CR	ECS Access Door
192DR	ECS High Pressure Access Door

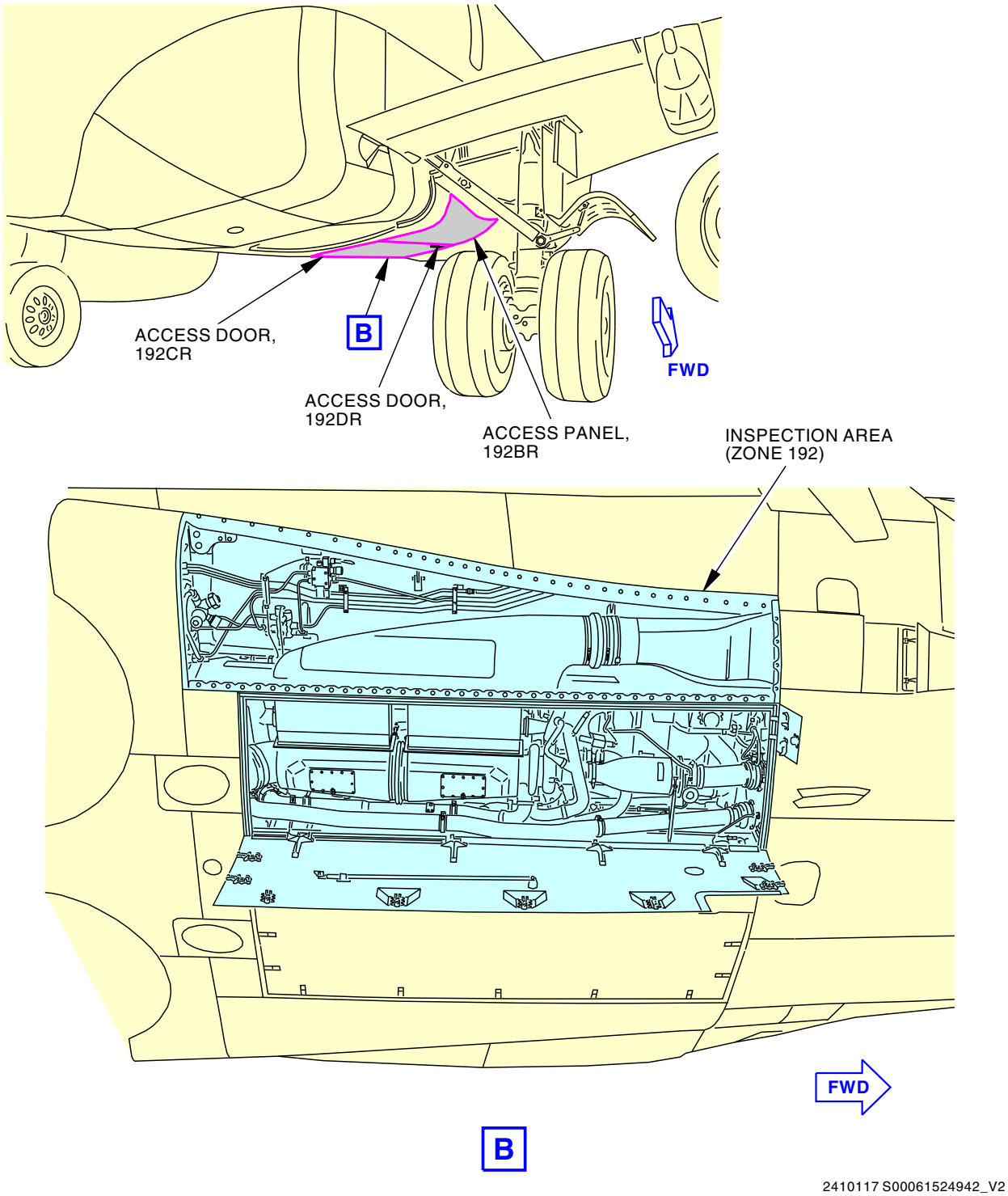
——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Underwing - Wing-to-Body Fairing General Visual (Internal)
Figure 244/05-41-01-990-825 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Underwing - Wing-to-Body Fairing General Visual (Internal)
Figure 244/05-41-01-990-825 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-01-210-850

47. EXTERNAL - ZONAL (GVI): Lower Wing to Body Fairing - Wheel Well

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
193	Lower Wing-To-Body Fairing - Wheel Well

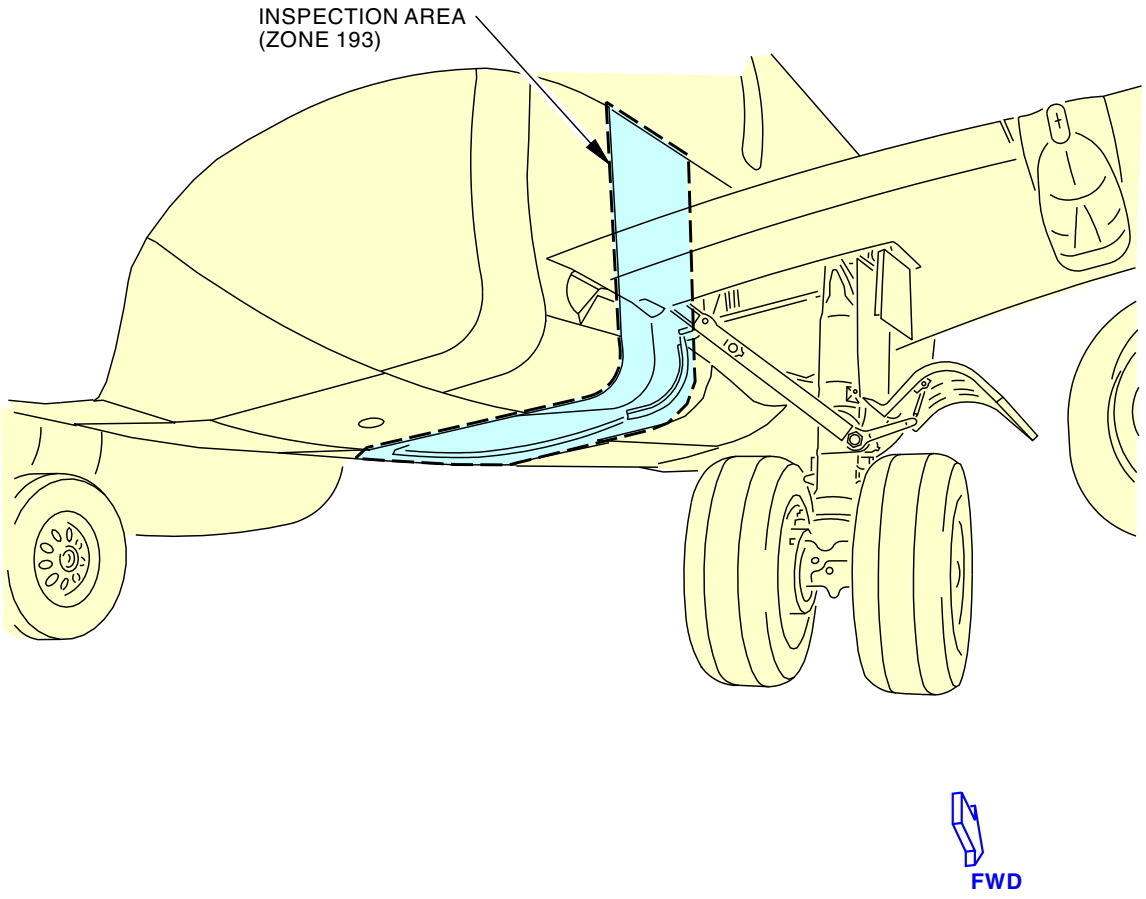
B. Zonal Inspection

SUBTASK 05-41-01-210-050

(1) Do a General Visual Inspection of the lower wing-to-body fairing - wheel well.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



2545785 S0000601113_V1

Lower Wing-to-Body Fairing - Wheel Well General Visual (External)
Figure 245/05-41-01-990-849

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-01-210-851

48. EXTERNAL - ZONAL (GVI): Lower Wing to Body Fairing - Aft of Wheel Well

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
194	Lower Wing-To-Body Fairing - Aft of Wheel Well

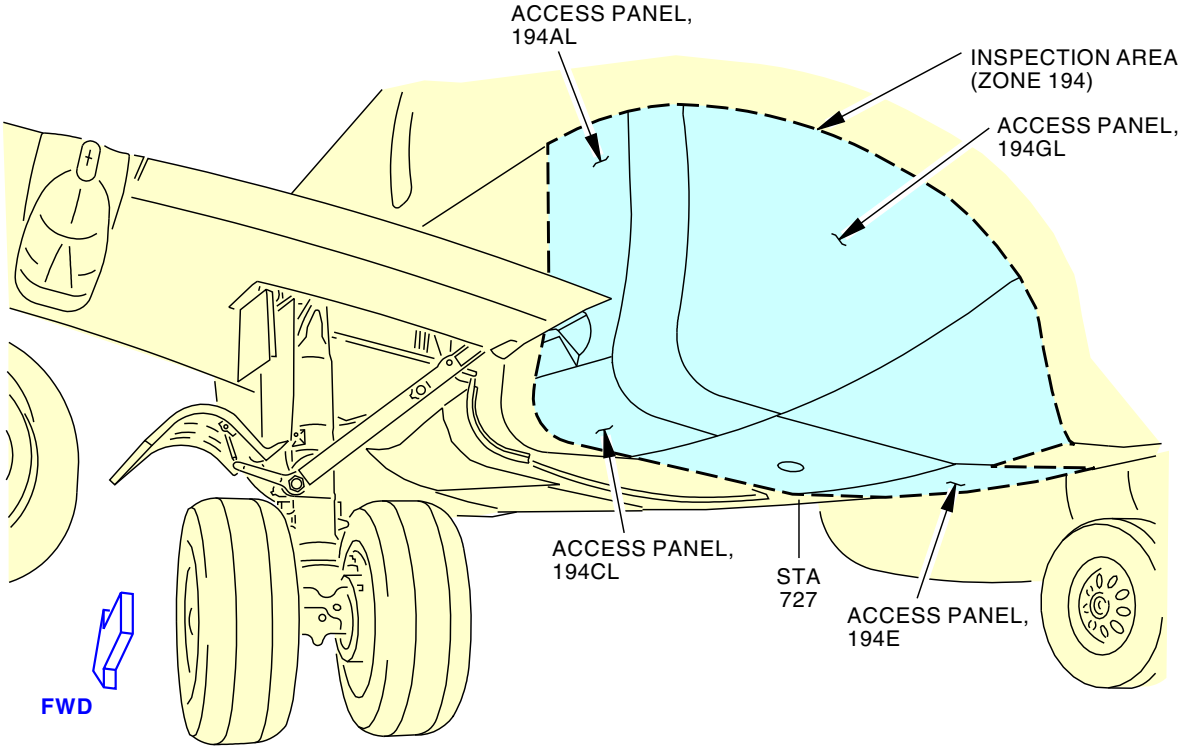
B. Zonal Inspection

SUBTASK 05-41-01-210-051

(1) Do a General Visual Inspection of the lower wing-to-body fairing - aft of wheel well.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



2545781 S0000601114_V1

Lower Wing-to-Body Fairing - Aft of Wheel Well General Visual (External)
Figure 246/05-41-01-990-850

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-41-01-210-827

49. INTERNAL - ZONAL (GV): Lower Wing to Body Fairing - Aft of Wheel Well

(Figure 247)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This Zonal inspection procedure satisfies the required EZAP-derived Zonal inspection requirement for this zone.

B. References

Reference	Title
05-00-00-910-802	Enhanced Zonal Inspection Program (EZAP) Precautions (P/B 201)
20-60-07-910-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
194	Lower Wing-To-Body Fairing - Aft of Wheel Well

D. Access Panels

Number	Name/Location
194AL	Aft Wing To Body Fairing Panel
194AR	Aft Wing To Body Fairing Panel
194BL	Flap Track Lubrication Panel - Aft
194BR	Flap Track Lubrication Panel - Aft
194CL	Aft Wing To Body Fairing Panel
194CR	Aft Wing To Body Fairing Panel
194DL	Aft Wing To Body Fairing Panel
194DR	Aft Wing To Body Fairing Panel
194E	Aft Wing To Body Fairing Panel
194FL	Aft Wing To Body Fairing Panel
194FR	Aft Wing To Body Fairing Panel
194GL	Aft Wing To Body Fairing Panel
194GR	Aft Wing To Body Fairing Panel
194HL	Aft Wing To Body Fairing Panel
194HR	Aft Wing To Body Fairing Panel

E. Zonal Inspection

SUBTASK 05-41-01-010-023

(1) Open these access panels:

Number	Name/Location
194AL	Aft Wing To Body Fairing Panel
194AR	Aft Wing To Body Fairing Panel
194BL	Flap Track Lubrication Panel - Aft
194BR	Flap Track Lubrication Panel - Aft
194CL	Aft Wing To Body Fairing Panel
194CR	Aft Wing To Body Fairing Panel

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(Continued)

Number	Name/Location
194DL	Aft Wing To Body Fairing Panel
194DR	Aft Wing To Body Fairing Panel
194E	Aft Wing To Body Fairing Panel
194FL	Aft Wing To Body Fairing Panel
194FR	Aft Wing To Body Fairing Panel
194GL	Aft Wing To Body Fairing Panel
194GR	Aft Wing To Body Fairing Panel
194HL	Aft Wing To Body Fairing Panel
194HR	Aft Wing To Body Fairing Panel

SUBTASK 05-41-01-210-027

(2) Do the zonal inspection following the procedures in Enhanced Zonal Inspection Program (EZAP) Precautions, TASK 05-00-00-910-802.

(3) Perform an internal zonal inspection (GV) of the lower wing to body fairing - aft of wheel well. (EZAP)

SUBTASK 05-41-01-910-013

(4) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-910-801 for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

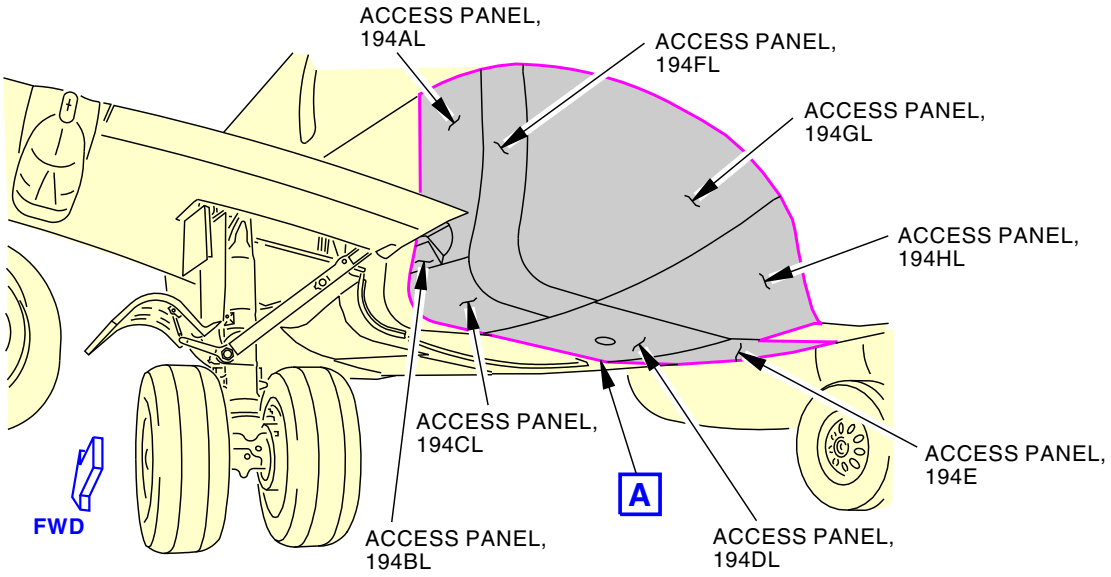
SUBTASK 05-41-01-410-023

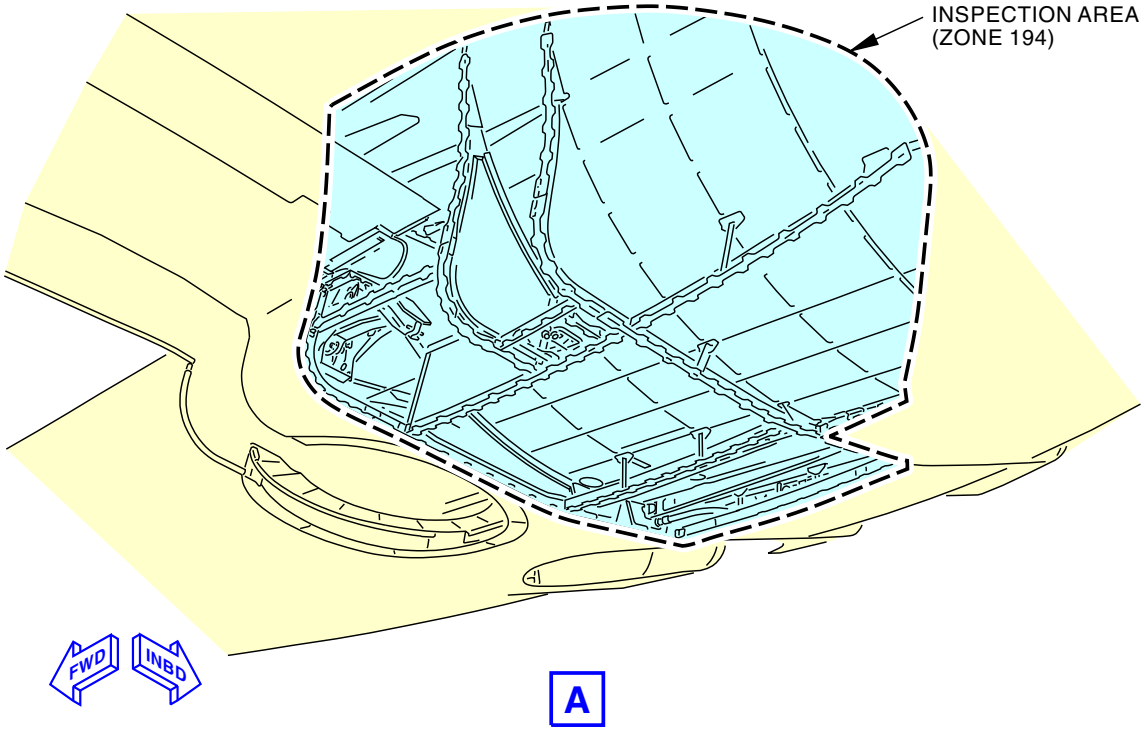
(5) Close these access panels:

Number	Name/Location
194AL	Aft Wing To Body Fairing Panel
194AR	Aft Wing To Body Fairing Panel
194BL	Flap Track Lubrication Panel - Aft
194BR	Flap Track Lubrication Panel - Aft
194CL	Aft Wing To Body Fairing Panel
194CR	Aft Wing To Body Fairing Panel
194DL	Aft Wing To Body Fairing Panel
194DR	Aft Wing To Body Fairing Panel
194E	Aft Wing To Body Fairing Panel
194FL	Aft Wing To Body Fairing Panel
194FR	Aft Wing To Body Fairing Panel
194GL	Aft Wing To Body Fairing Panel
194GR	Aft Wing To Body Fairing Panel
194HL	Aft Wing To Body Fairing Panel
194HR	Aft Wing To Body Fairing Panel

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

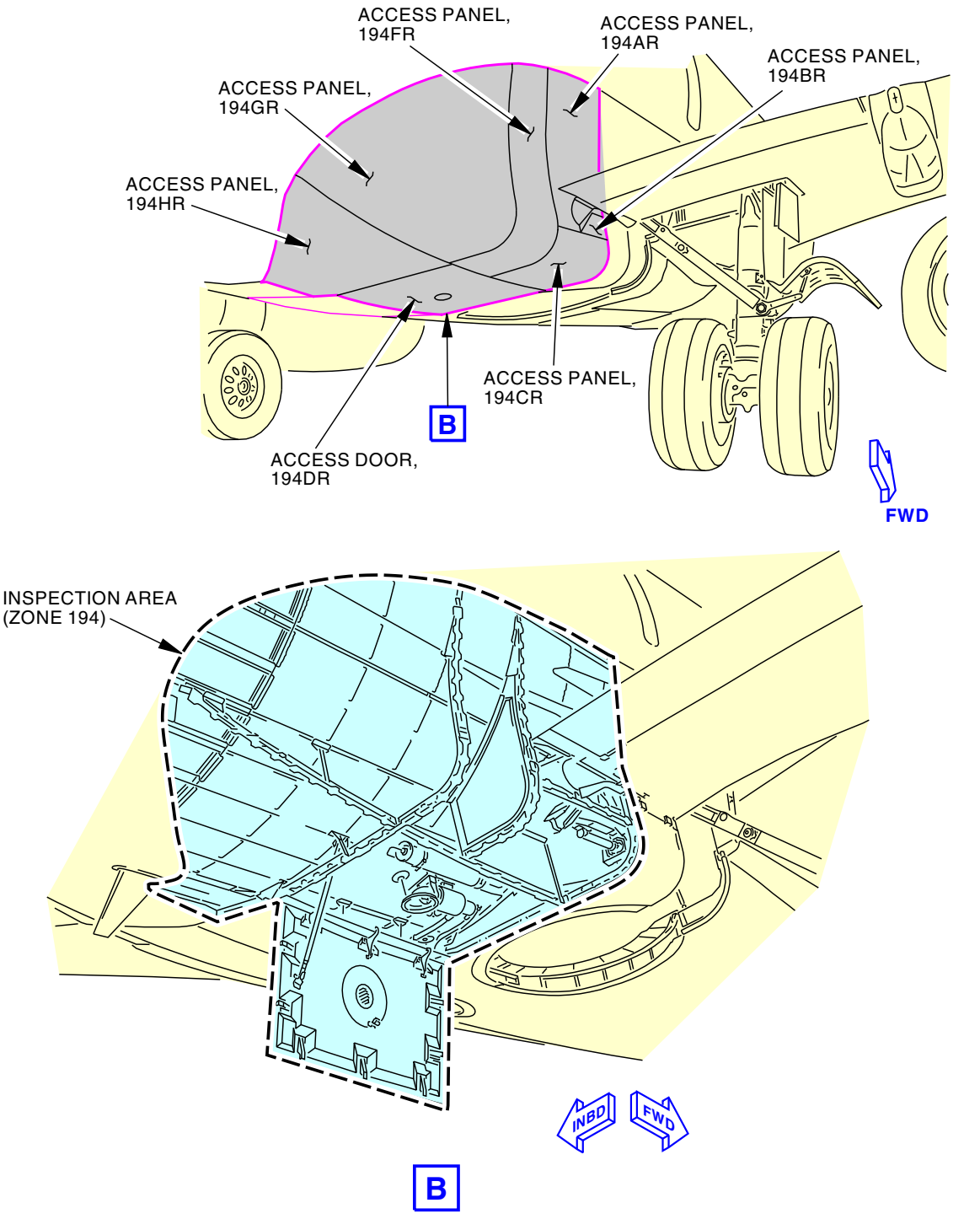




2410118 S00061524944_V1

Aft of Wheel Well - Wing-to-Body Fairing General Visual (Internal)
Figure 247/05-41-01-990-826 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



2410119 S00061524945_V1

Aft of Wheel Well - Wing-to-Body Fairing General Visual (Internal)
Figure 247/05-41-01-990-826 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-01-210-828

50. INTERNAL - ZONAL (GV): Lower Wing to Body Fairing - Aft of Wheel Well

(Figure 248)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
194	Lower Wing-To-Body Fairing - Aft of Wheel Well

B. Access Panels

Number	Name/Location
194DR	Aft Wing To Body Fairing Panel

C. Zonal Inspection

SUBTASK 05-41-01-010-024

(1) Open this access panel:

Number	Name/Location
194DR	Aft Wing To Body Fairing Panel

NOTE: Through access provided.

SUBTASK 05-41-01-210-028

(2) Do a General Visual inspection of the lower wing to body fairing - aft of wheel well.

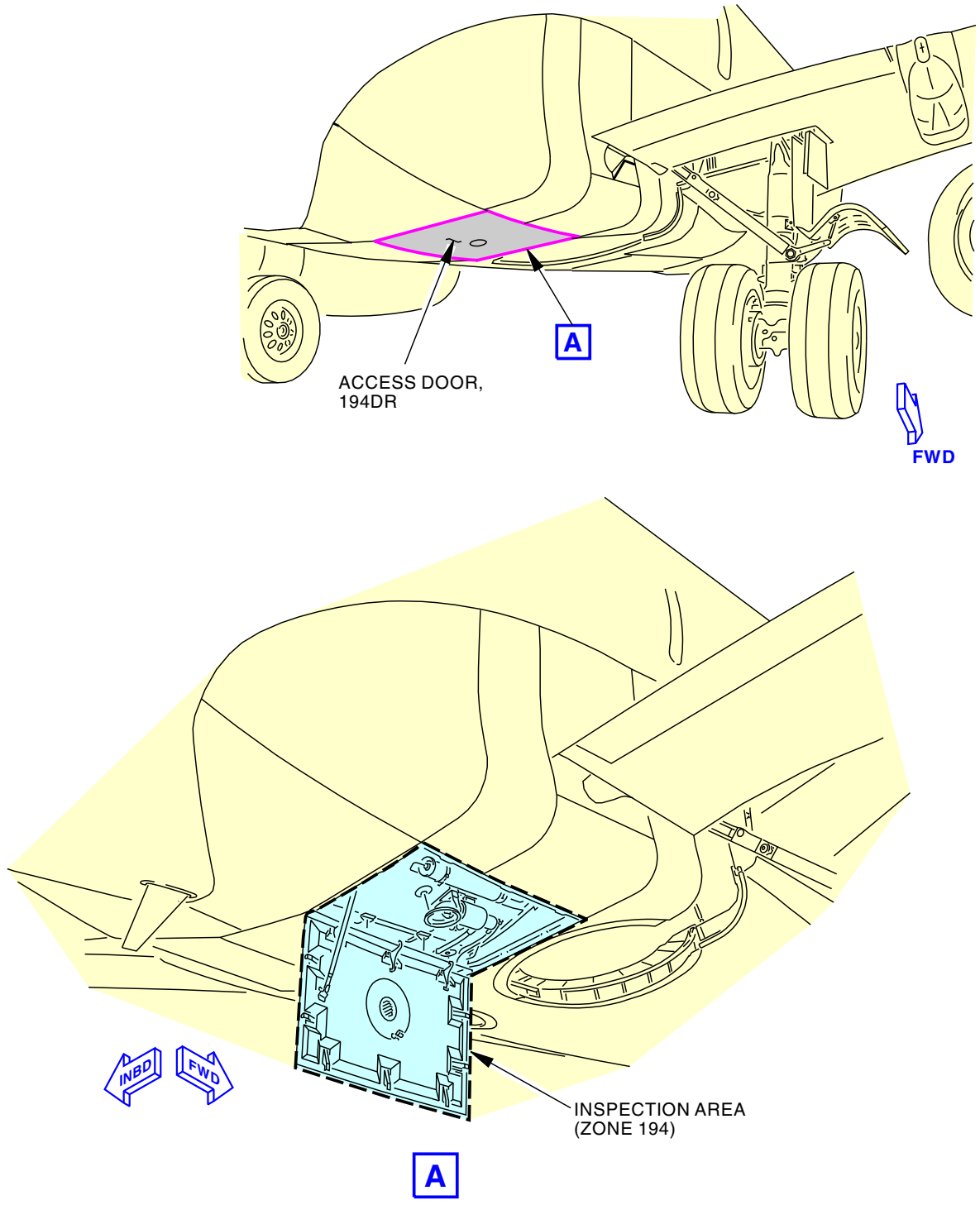
SUBTASK 05-41-01-410-024

(3) Close this access panel:

Number	Name/Location
194DR	Aft Wing To Body Fairing Panel

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Right Aft of Wheel Well - Wing-to-Body Fairing General Visual (Internal)
Figure 248/05-41-01-990-827

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-01-210-852

51. EXTERNAL - ZONAL (GVI): Above Wing, Wing to Body Fairing - Right

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
196	Above Wing, Wing-To-Body Fairing - Right

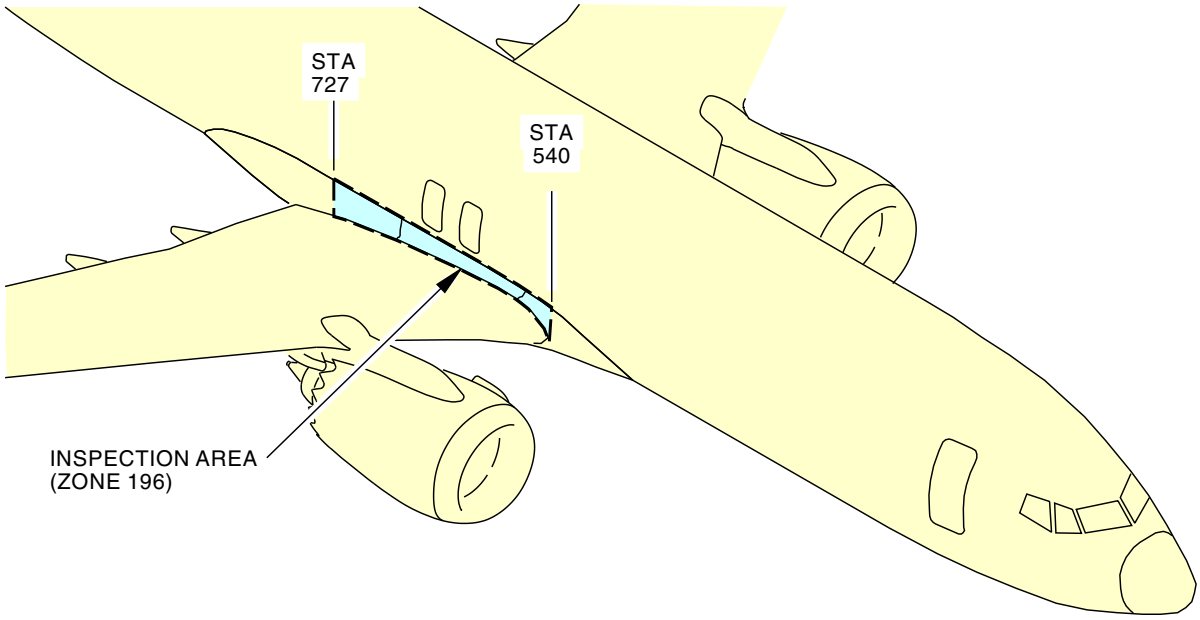
B. Zonal Inspection

SUBTASK 05-41-01-210-052

(1) Do a General Visual Inspection above the wing, wing-to-body fairing - right side.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



2545840 S0000601115_V1

Above Wing, Wing-to-Body Fairing - Right General Visual (External)
Figure 249/05-41-01-990-851

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-01-210-829

52. INTERNAL - ZONAL (GV): Above Wing, Wing to Body Fairing - Right

(Figure 250)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
196	Above Wing, Wing-To-Body Fairing - Right

B. Access Panels

Number	Name/Location
195AR	Wing-To-Body Fairing - Right Side
195BR	Wing-To-Body Fairing - Right Side
195CR	Wing-To-Body Fairing - Right Side

C. Zonal Inspection

SUBTASK 05-41-01-010-025

(1) Open these access panels:

Number	Name/Location
195AR	Wing-To-Body Fairing - Right Side
195BR	Wing-To-Body Fairing - Right Side
195CR	Wing-To-Body Fairing - Right Side

SUBTASK 05-41-01-210-030

(2) Do a General Visual inspection of the above wing, wing to body fairing - right side.

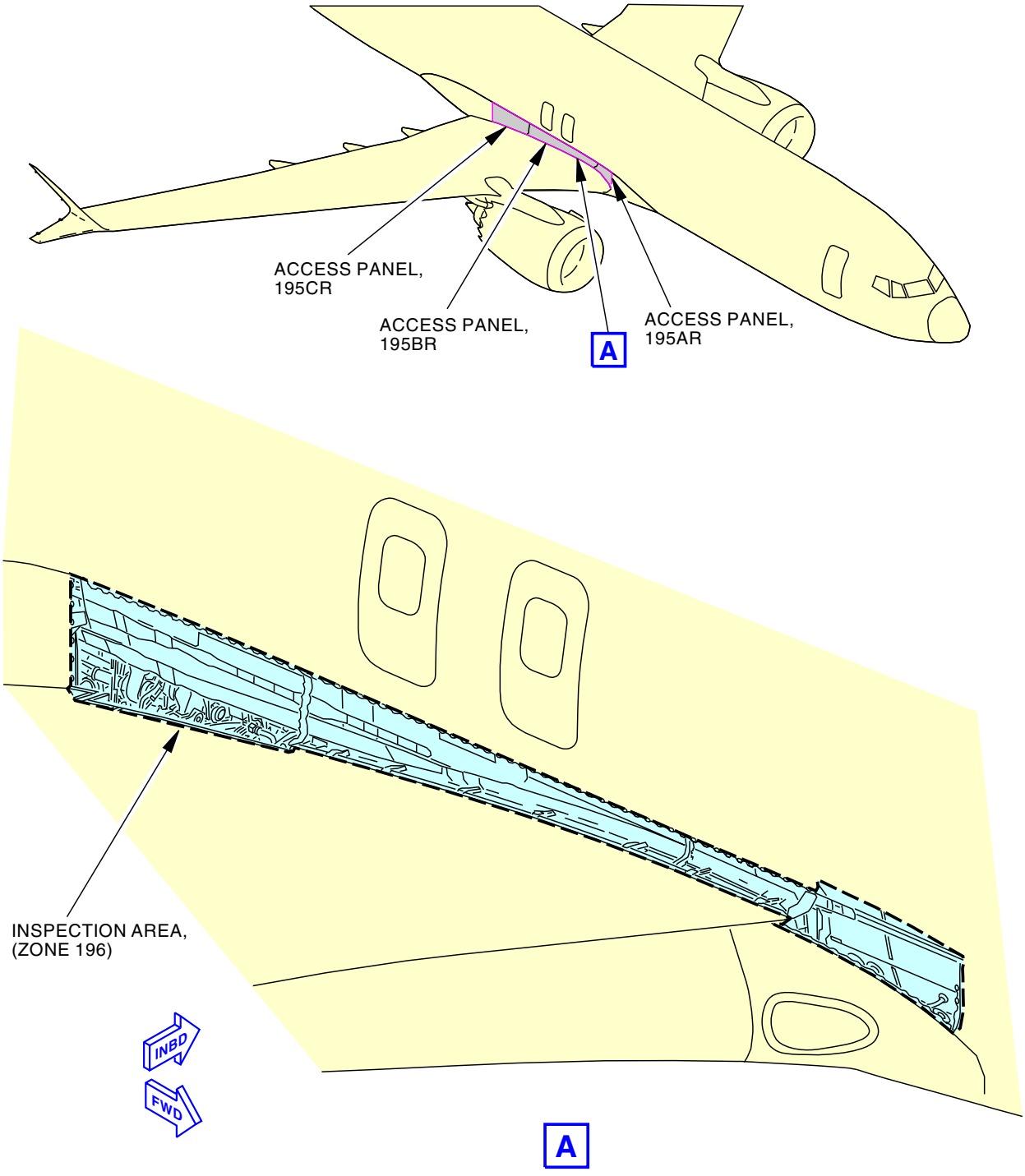
SUBTASK 05-41-01-410-025

(3) Close these access panels:

Number	Name/Location
195AR	Wing-To-Body Fairing - Right Side
195BR	Wing-To-Body Fairing - Right Side
195CR	Wing-To-Body Fairing - Right Side

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Above the Right Wing - Wing-to-Body Fairing General Visual (Internal)
Figure 250/05-41-01-990-828

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-01-210-830

53. INTERNAL - ZONAL (GV): Above Wing, Wing to Body Fairing - Left

(Figure 251)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
195	Above Wing, Wing-To-Body Fairing - Left

B. Access Panels

Number	Name/Location
195AL	Wing-To-Body Fairing - Left Side
195BL	Wing-To-Body Fairing - Left Side
195CL	Wing-To-Body Fairing - Left Side

C. Zonal Inspection

SUBTASK 05-41-01-010-026

(1) Open these access panels:

Number	Name/Location
195AL	Wing-To-Body Fairing - Left Side
195BL	Wing-To-Body Fairing - Left Side
195CL	Wing-To-Body Fairing - Left Side

SUBTASK 05-41-01-210-031

(2) Do a General Visual inspection of the above wing, wing to body fairing - left side.

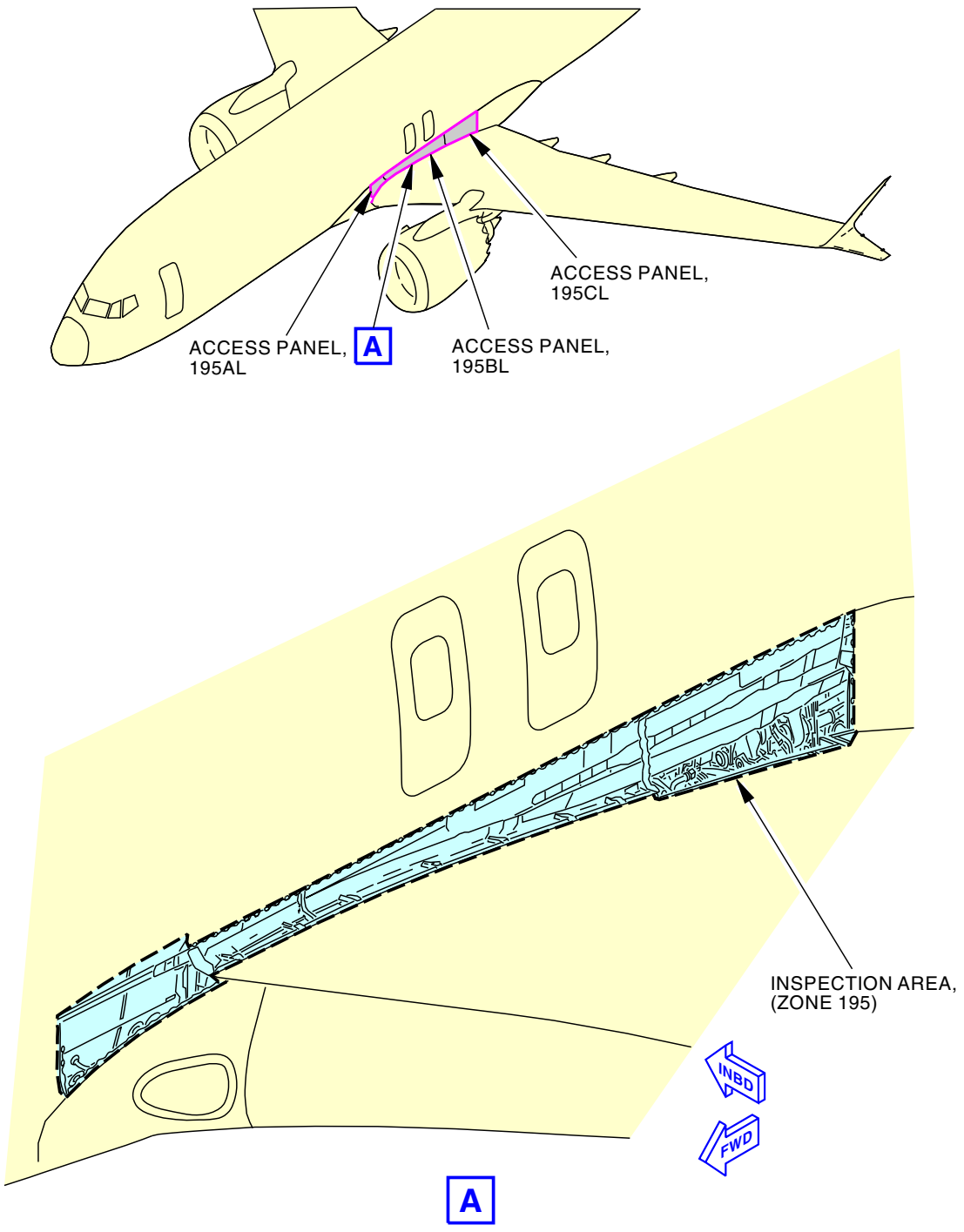
SUBTASK 05-41-01-410-026

(3) Close these access panels:

Number	Name/Location
195AL	Wing-To-Body Fairing - Left Side
195BL	Wing-To-Body Fairing - Left Side
195CL	Wing-To-Body Fairing - Left Side

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Above the Left Wing - Wing-to-Body Fairing General Visual (Internal)
Figure 251/05-41-01-990-829

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-01-210-853

54. EXTERNAL - ZONAL (GVI): Above Wing, Wing to Body Fairing - Left

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
195	Above Wing, Wing-To-Body Fairing - Left

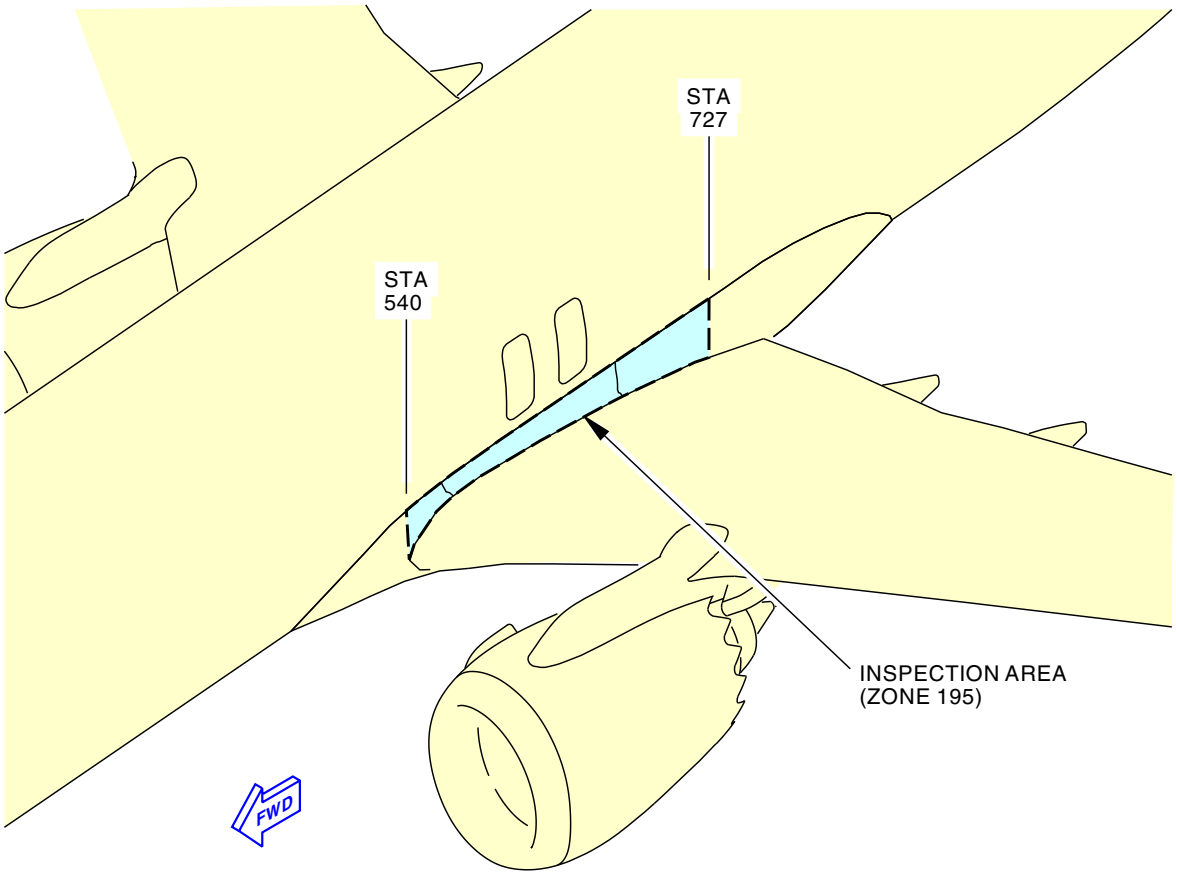
B. Zonal Inspection

SUBTASK 05-41-01-210-053

(1) Do a General Visual Inspection above the wing, wing-to-body fairing - left side.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



2545812 S0000601116_V1

Above Wing, Wing-to-Body Fairing - Left General Visual (External)
Figure 252/05-41-01-990-852

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-01-211-801

55. INTERNAL - DETAILED: Center Wing Rear Spar Vapor Web

(Figure 253)

A. General

(1) This task is the manufacturer's procedure for compliance with Certification Maintenance Requirement (CMR), 26–CMR-02.

B. Location Zones

Zone	Area
133	Main Landing Gear Wheel Well, Body Station 663.75 to Body Station 727.00 - Left
134	Main Landing Gear Wheel Well, Body Station 663.75 to Body Station 727.00 - Right

C. Detailed Inspection

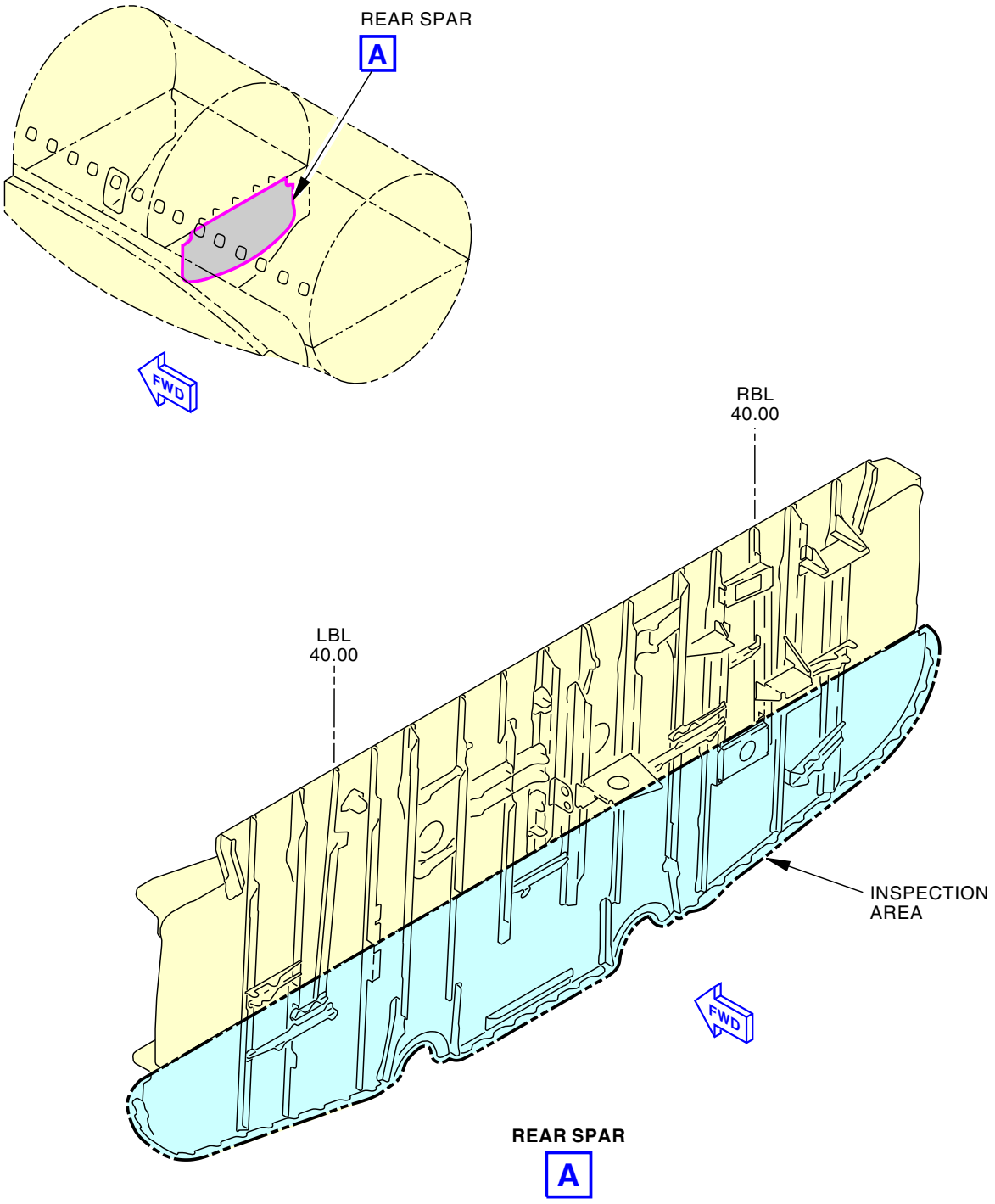
SUBTASK 05-41-01-211-001

(1) Perform a detailed inspection of the Center Wing Rear Spar Vapor Web for cracking in the fiberglass panel between the vertical structural members as follows:

(a) Do the inspection from inside the main gear wheel well.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Center Wing Rear Spar Vapor Web
Figure 253/05-41-01-990-830

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-02-210-819

1. EXTERNAL - ZONAL (GVI): Upper Fuselage

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
200	Upper Half of Fuselage

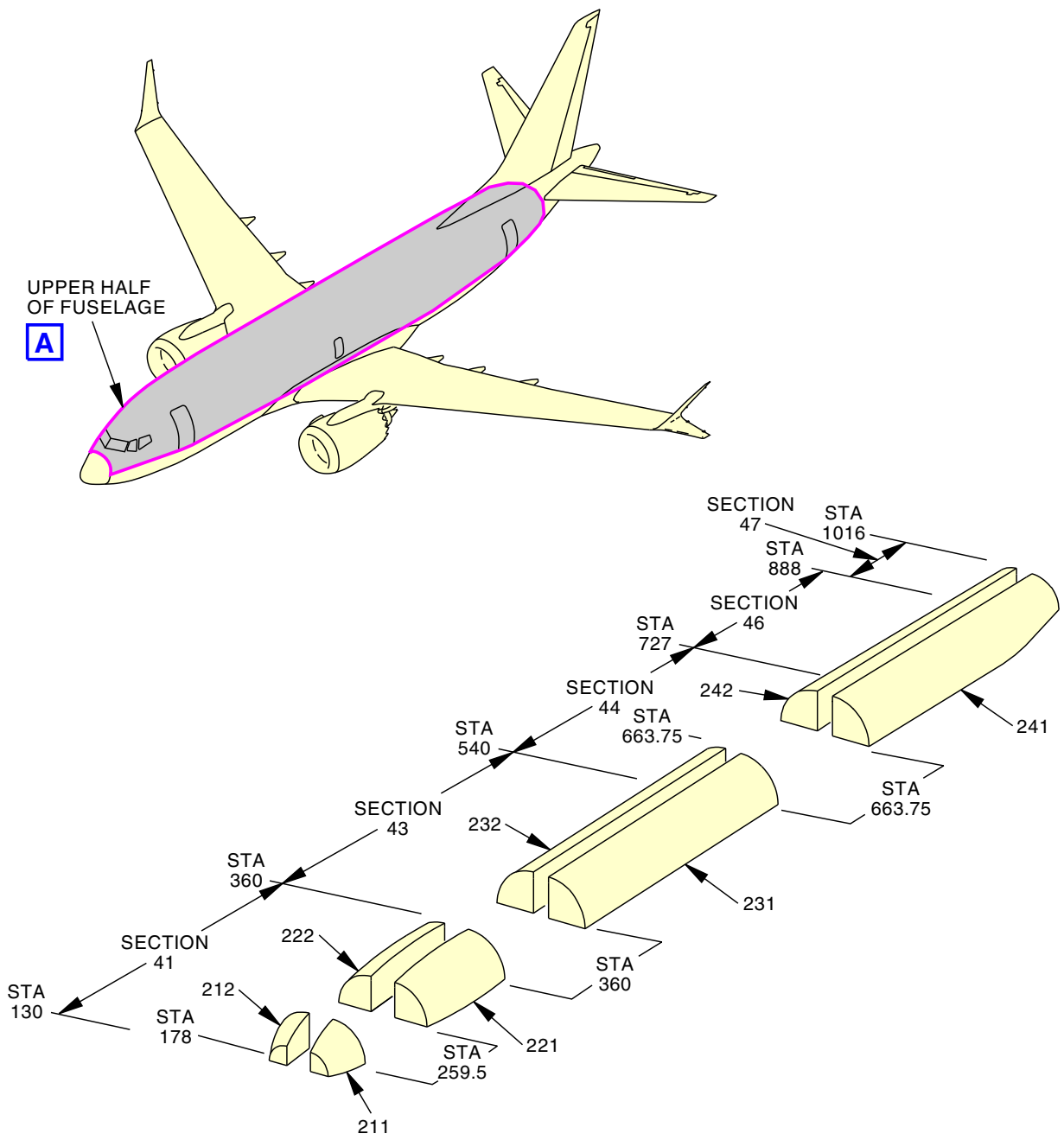
B. Zonal Inspection

SUBTASK 05-41-02-210-019

(1) Do a General Visual Inspection of the upper half of the fuselage. Inspection is accomplished from the ground, without the use of stands or ladders, no additional access panels required.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



2546215 S0000601239_V1

Upper Fuselage Genearal Visual Inspection (External)
Figure 201/05-41-02-990-819

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-02-210-801

2. EXTERNAL - ZONAL (GV): Flight Control Compartment

(Figure 202)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
211	Flight Compartment - Left
212	Flight Compartment - Right

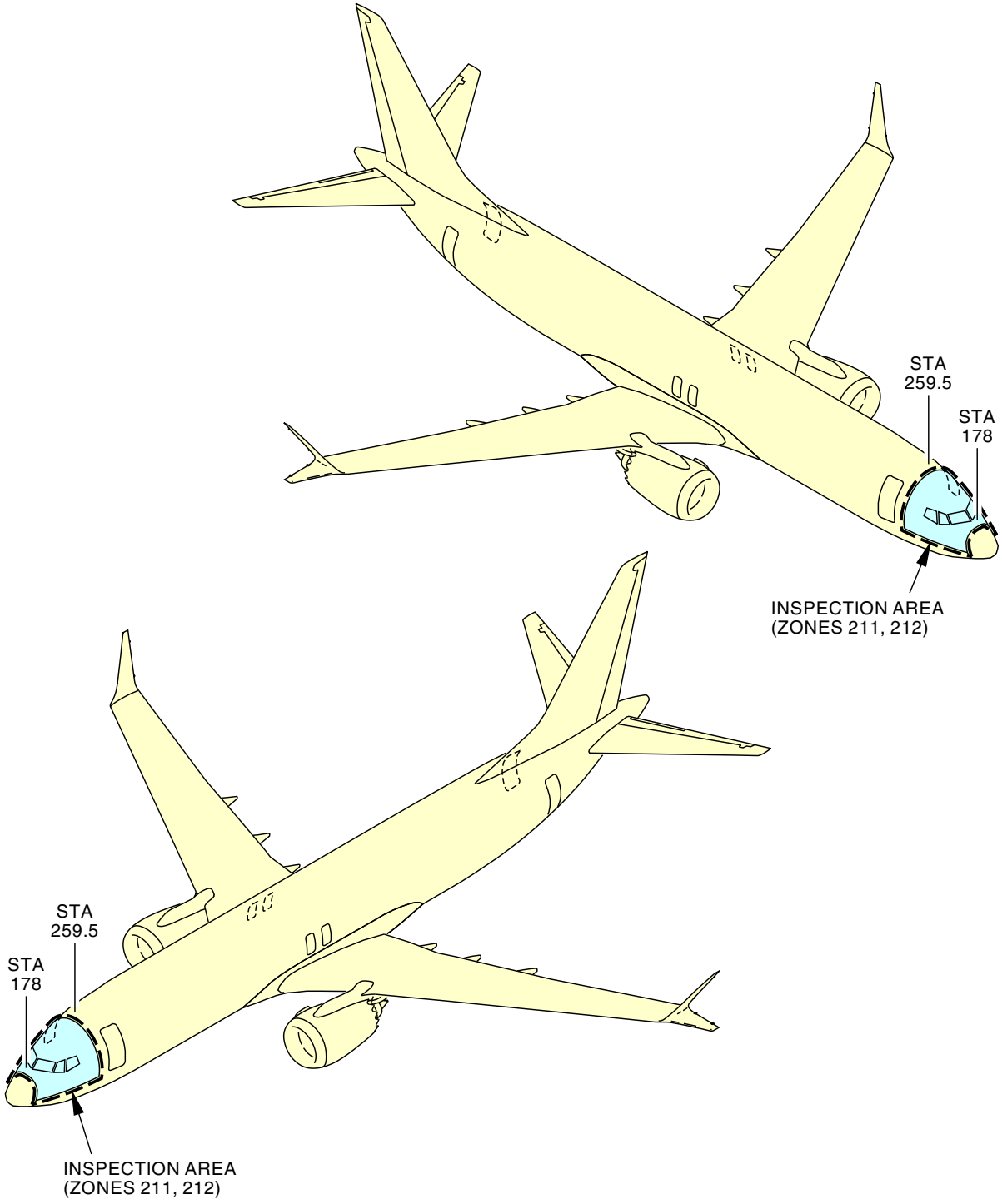
B. Zonal Inspection

SUBTASK 05-41-02-210-001

(1) Do a General Visual inspection of the flight control compartment - Section 41, Sta 178 to Sta 259.5.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



2410124 S00061524957_V2

Flight Compartment (Sta 178-259.5) General Visual (External)
Figure 202/05-41-02-990-801

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-02-210-802

3. INTERNAL - ZONAL (GV): Flight Control Compartment - Control Stand

(Figure 203)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
211	Flight Compartment - Left
212	Flight Compartment - Right

B. Zonal Inspection

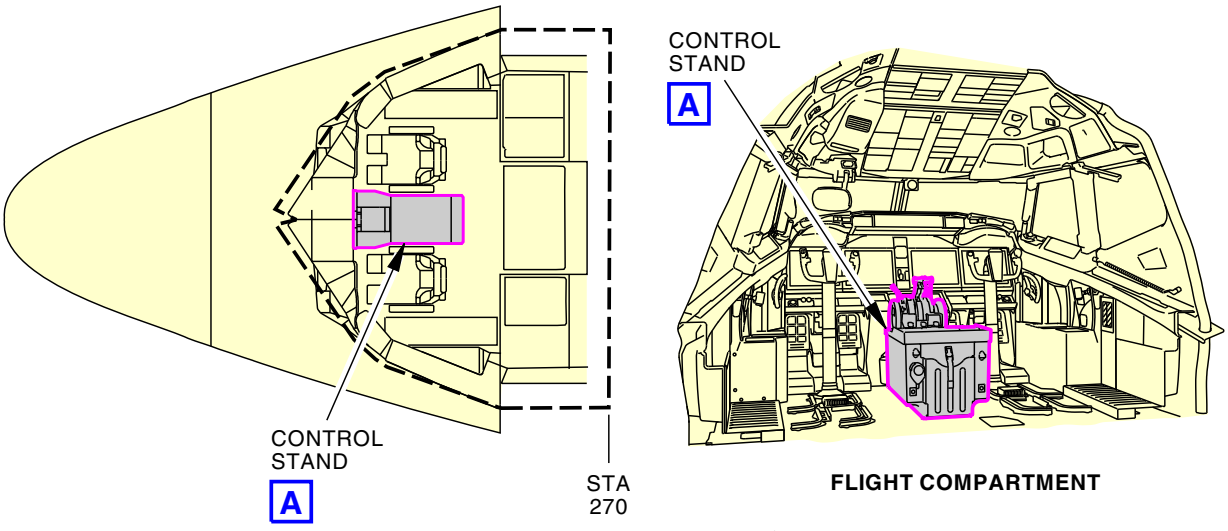
NOTE: Control stand access panels 211A and 212A removal required.

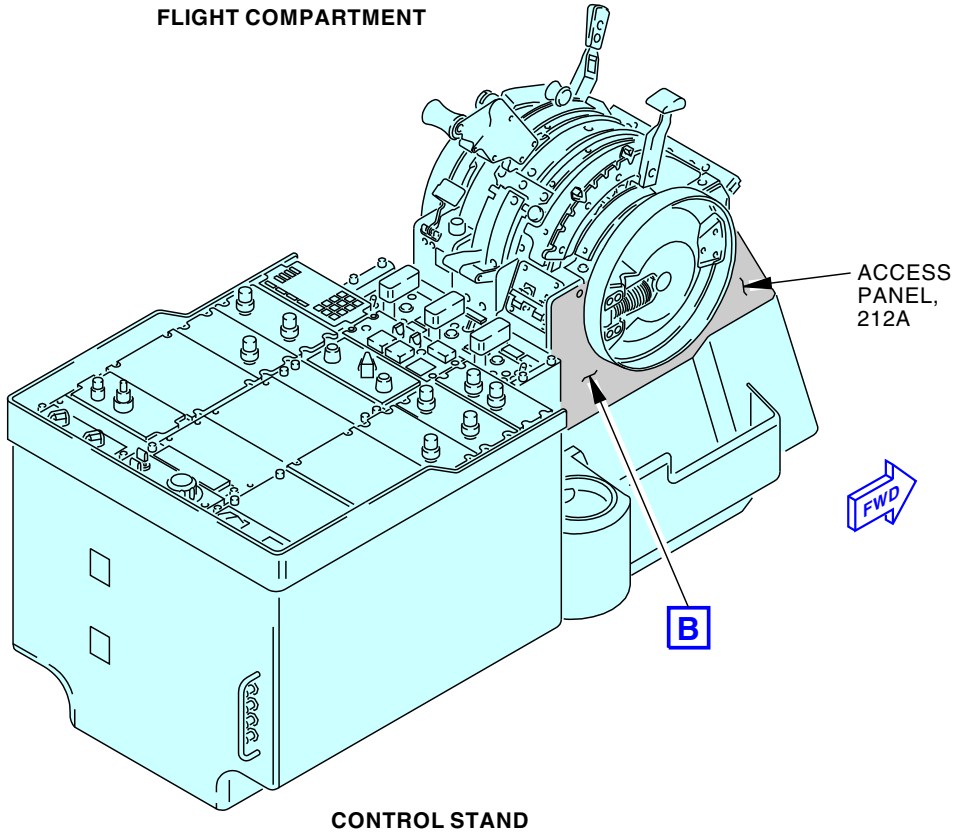
SUBTASK 05-41-02-210-002

(1) Do a General Visual inspection of the flight control compartment - Section 41, Sta 178 to Sta 270.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details





CONTROL STAND
(RIGHT SIDE)

A

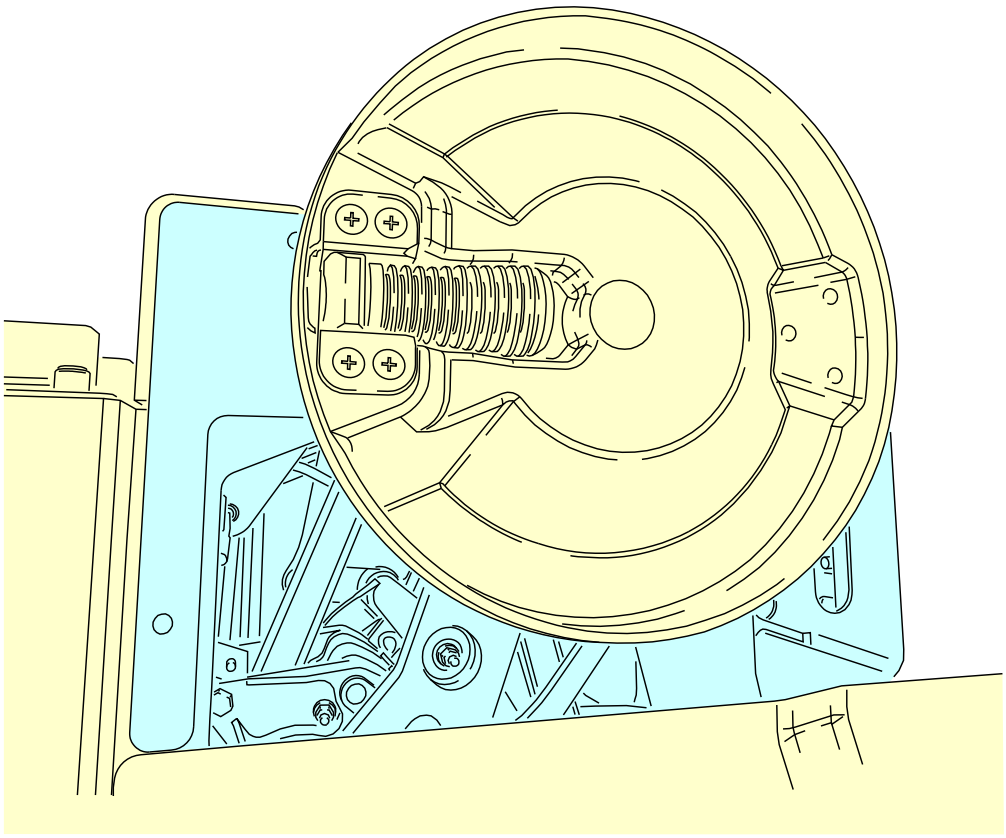
NOTE:

DO NOT NEED TO REMOVE TRIM WHEEL TO DO THIS INSPECTION.

2410125 S00061524959_V1

Control Stand - Flight Compartment General Visual (Internal)
Figure 203/05-41-02-990-802 (Sheet 1 of 3)

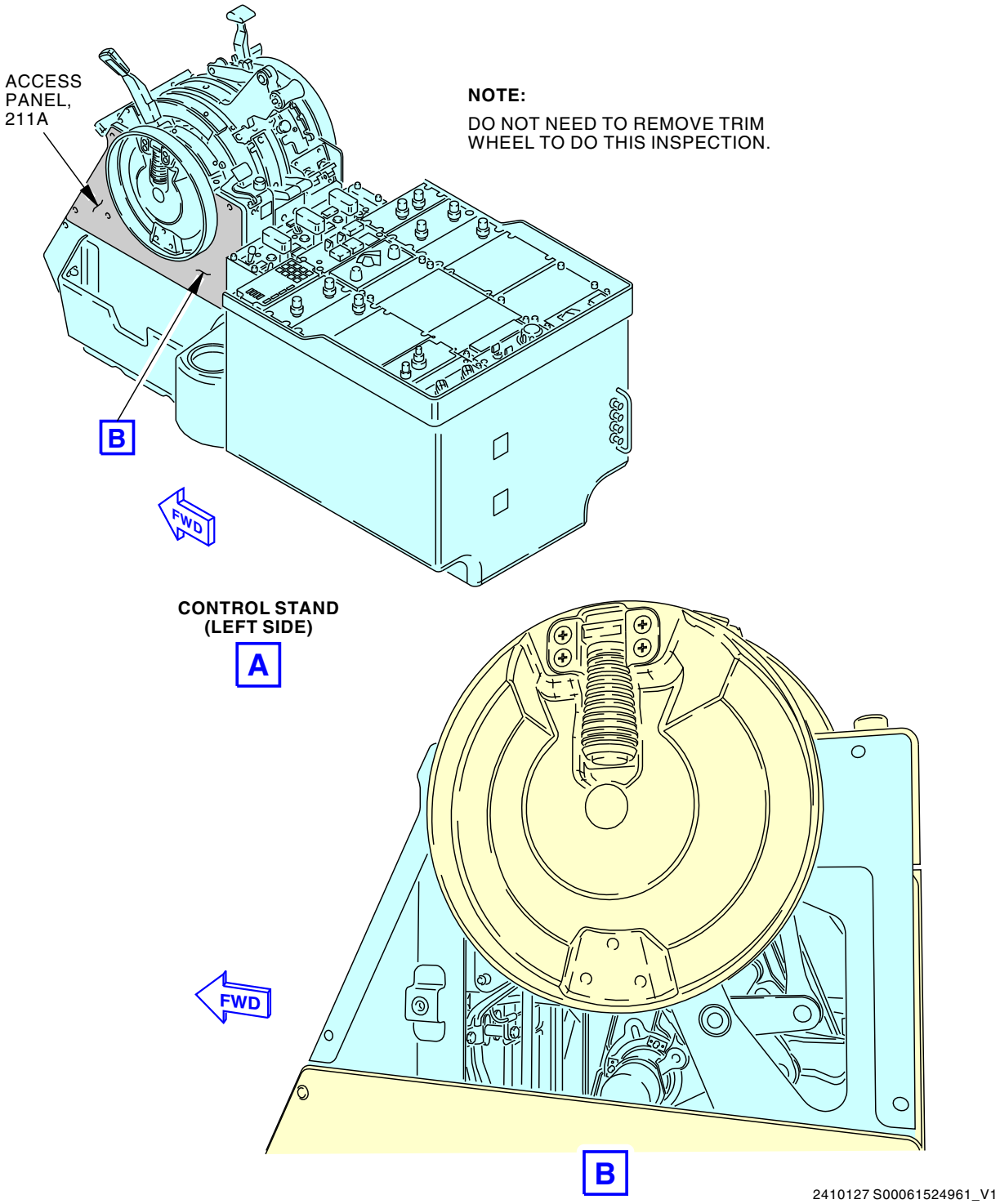
ECCN 9E991 BOEING PROPRIETARY - See title page for details



2410126 S00061524960_V1

Control Stand - Flight Compartment General Visual (Internal)
Figure 203/05-41-02-990-802 (Sheet 2 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Control Stand - Flight Compartment General Visual (Internal)
Figure 203/05-41-02-990-802 (Sheet 3 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-41-02-210-803

4. INTERNAL - ZONAL (GV): Flight Control Compartment - Ceiling Panels and Sidewall Console

(Figure 204)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This Zonal inspection procedure satisfies the required EZAP-derived Zonal inspection requirement for this zone.

B. References

Reference	Title
05-00-00-910-802	Enhanced Zonal Inspection Program (EZAP) Precautions (P/B 201)
20-60-07-910-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
211	Flight Compartment - Left
212	Flight Compartment - Right

D. Access Panels

Number	Name/Location
211AF	Panel Assy - Flight Compartment Floor

E. Zonal Inspection

SUBTASK 05-41-02-010-001

(1) Open this access panel:

Number	Name/Location
211AF	Panel Assy - Flight Compartment Floor

NOTE: With access provided. Seats removed. Control stand access panels, overhead and sidewall panels, and floor panel.

SUBTASK 05-41-02-210-003

(2) Do the zonal inspection following the procedures in Enhanced Zonal Inspection Program (EZAP) Precautions, TASK 05-00-00-910-802.

(3) Perform an internal zonal inspection (GV) of the flight control compartment - section 41, Sta 178 to Sta 270. (EZAP)

SUBTASK 05-41-02-910-001

(4) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-910-801 for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

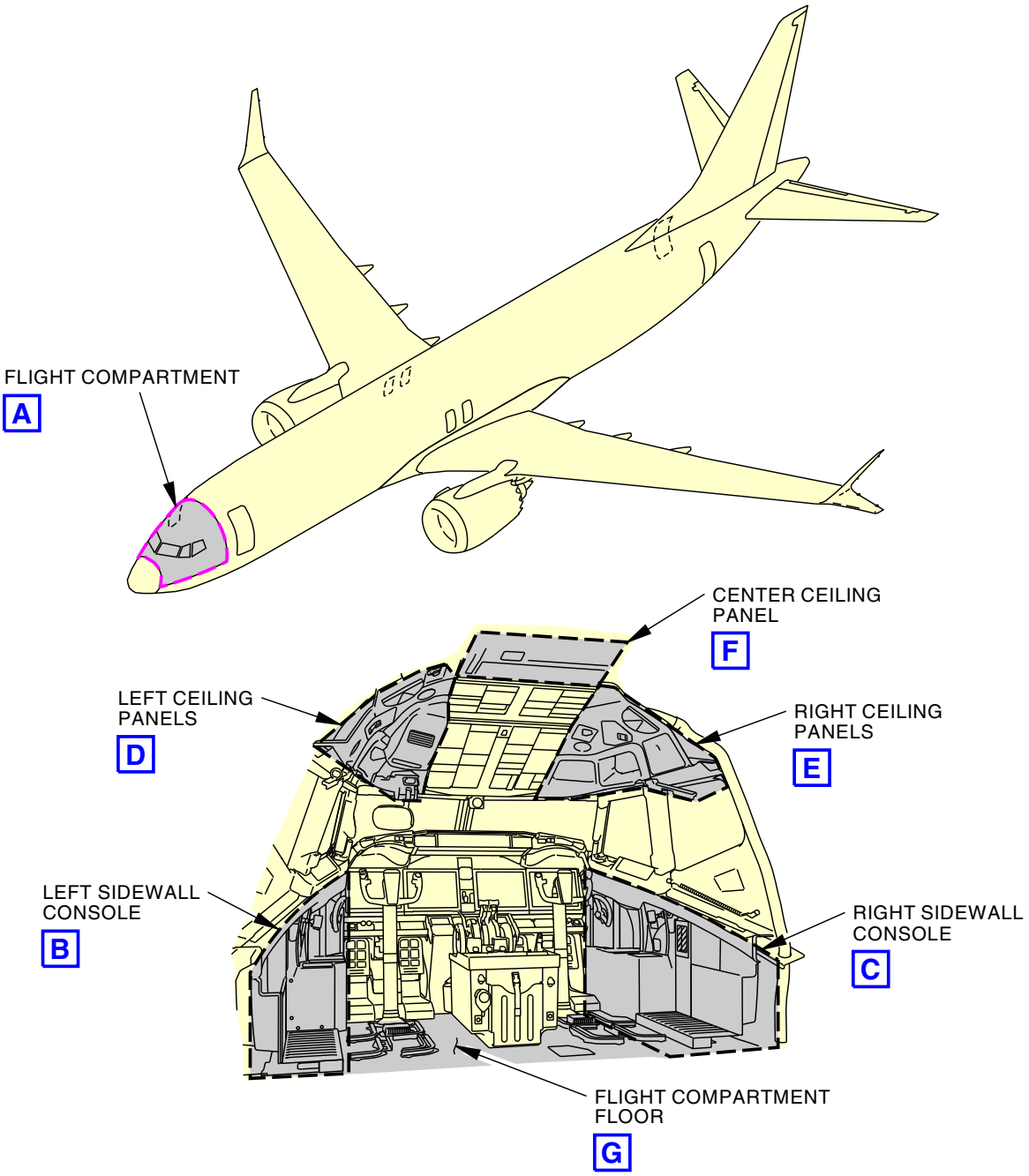
SUBTASK 05-41-02-410-001

(5) Close this access panel:

Number	Name/Location
211AF	Panel Assy - Flight Compartment Floor

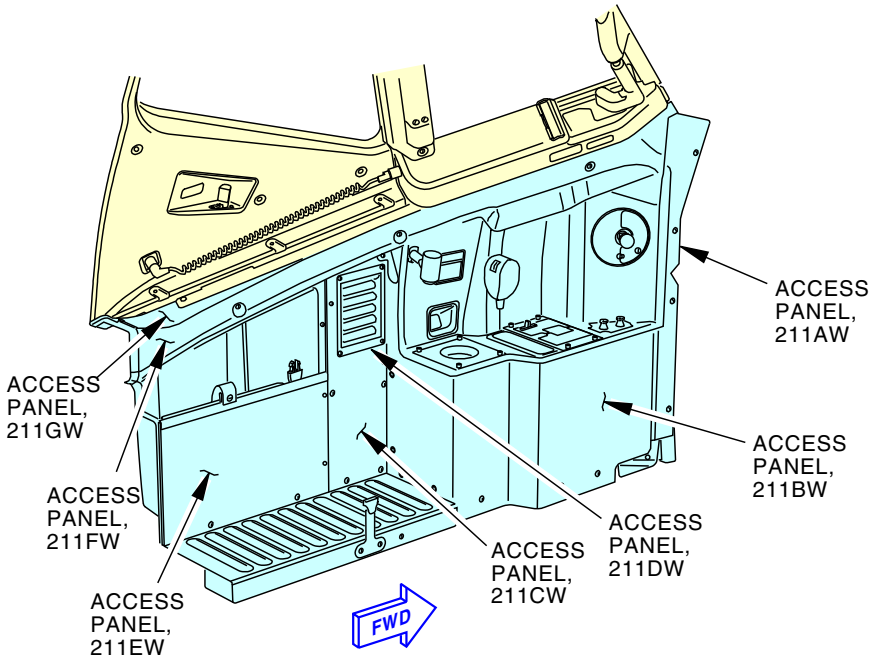
END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details



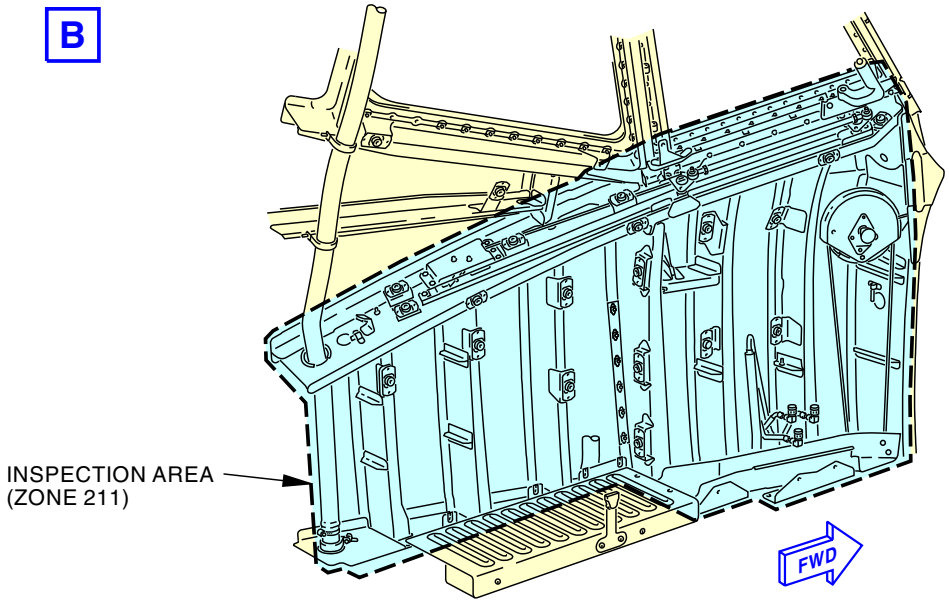
Ceiling Panels and Sidewall Console - Flight Compartment General Visual (Internal)
Figure 204/05-41-02-990-803 (Sheet 1 of 7)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



LEFT SIDEWALL CONSOLE

B



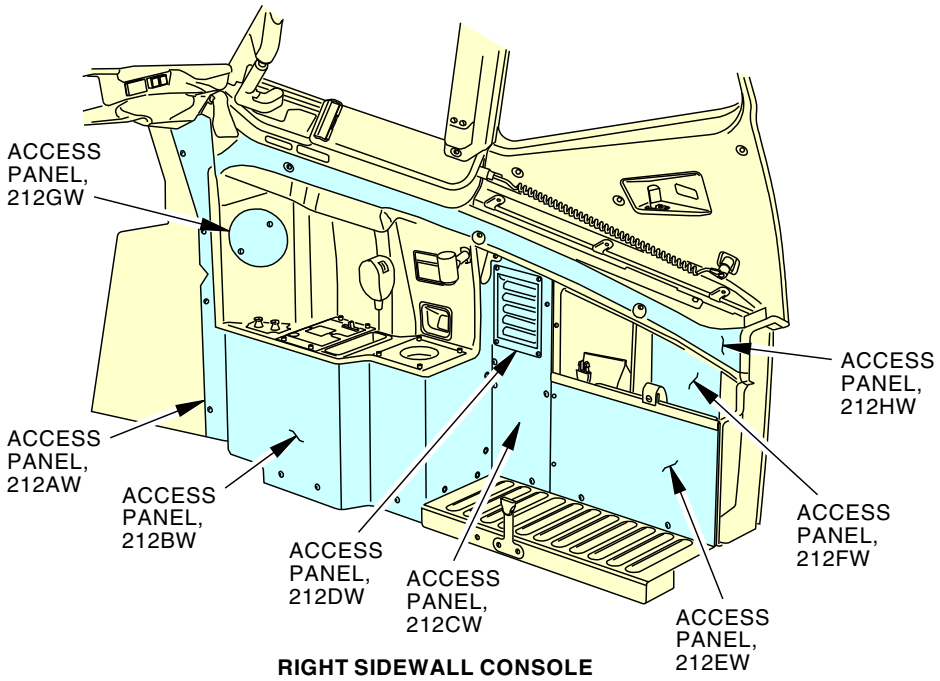
LEFT SIDEWALL CONSOLE (PANELS REMOVED)

B

2410129 S00061524964_V1

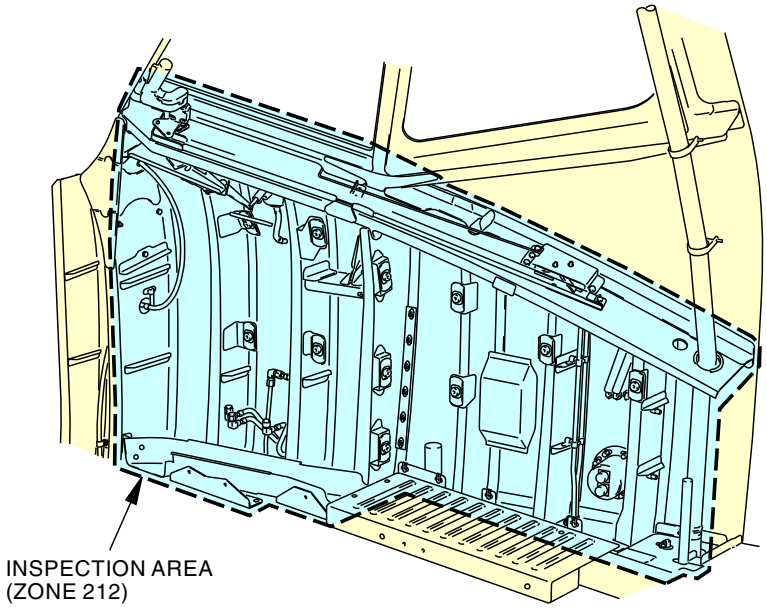
Ceiling Panels and Sidewall Console - Flight Compartment General Visual (Internal)
Figure 204/05-41-02-990-803 (Sheet 2 of 7)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



RIGHT SIDEWALL CONSOLE

C



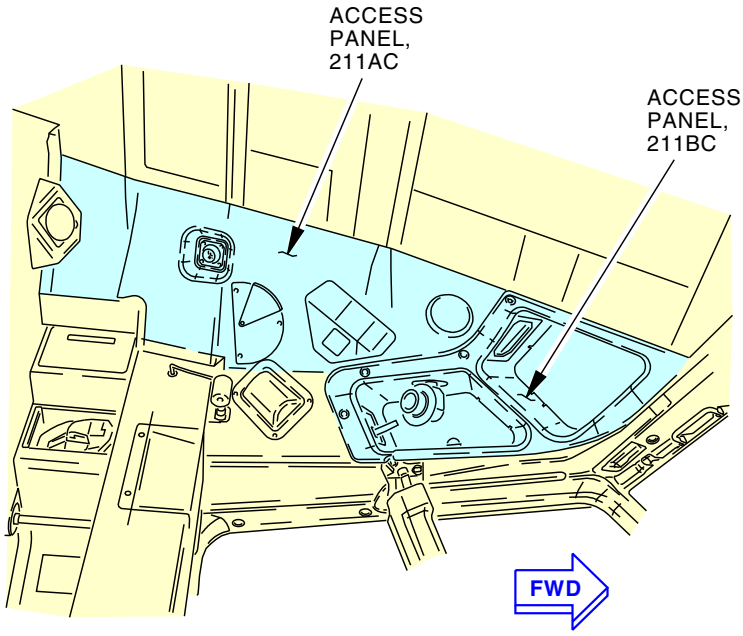
RIGHT SIDEWALL CONSOLE (PANELS REMOVED)

C

2410130 S00061524965_V1

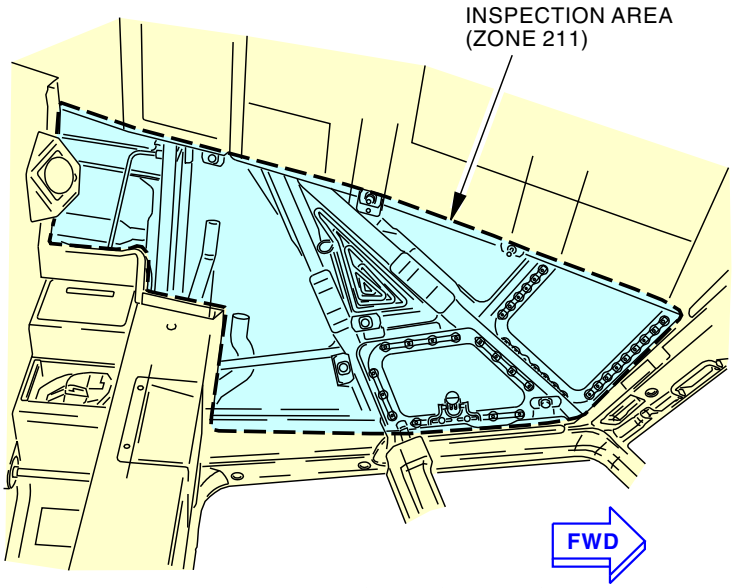
Ceiling Panels and Sidewall Console - Flight Compartment General Visual (Internal)
Figure 204/05-41-02-990-803 (Sheet 3 of 7)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



LEFT CEILING PANELS

D



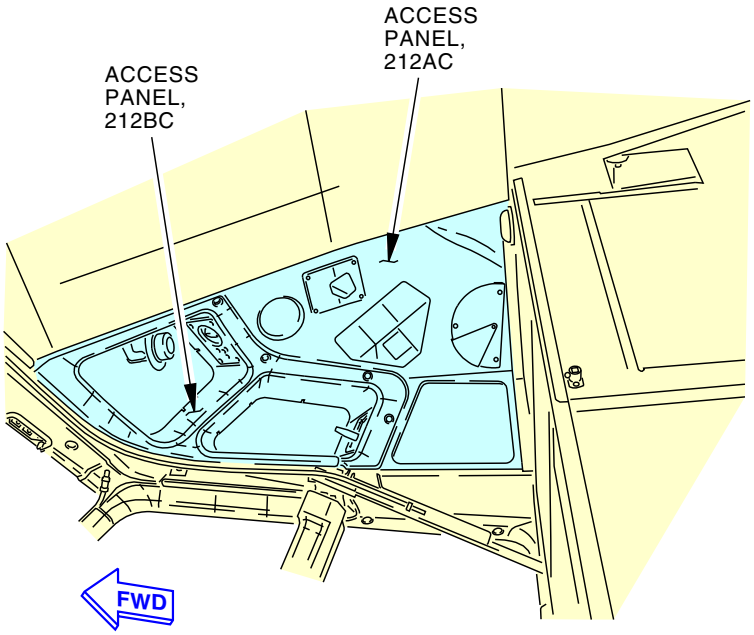
**LEFT CEILING PANELS
(PANELS REMOVED)**

D

2410131 S00061524966_V1

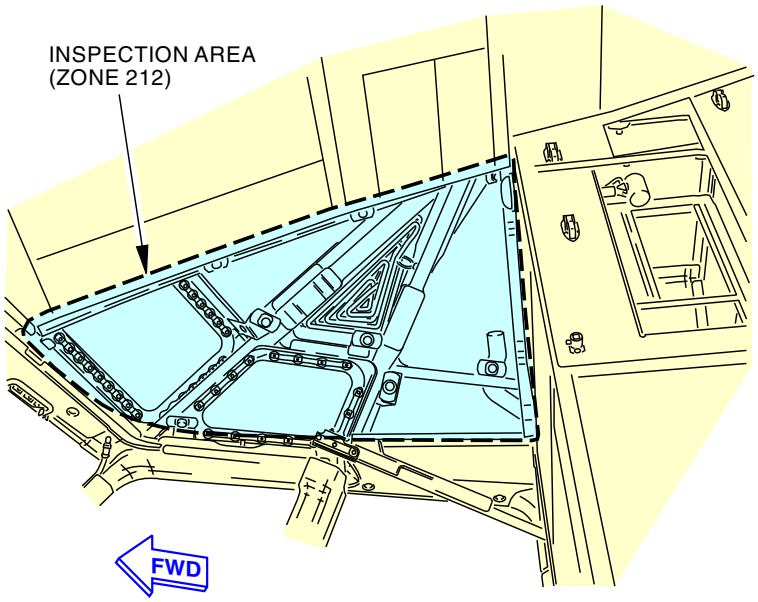
**Ceiling Panels and Sidewall Console - Flight Compartment General Visual (Internal)
Figure 204/05-41-02-990-803 (Sheet 4 of 7)**

ECCN 9E991 BOEING PROPRIETARY - See title page for details



RIGHT CEILING PANELS

E



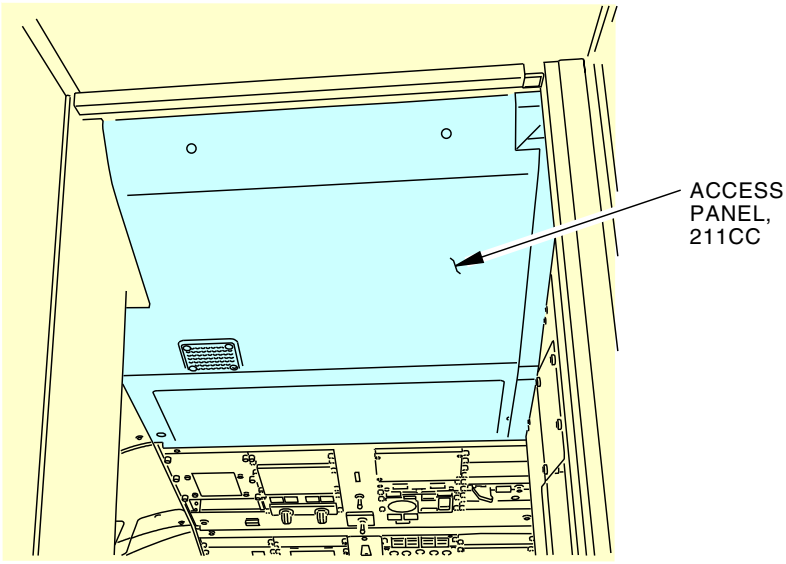
RIGHT CEILING PANELS (PANELS REMOVED)

E

2410132 S00061524967_V1

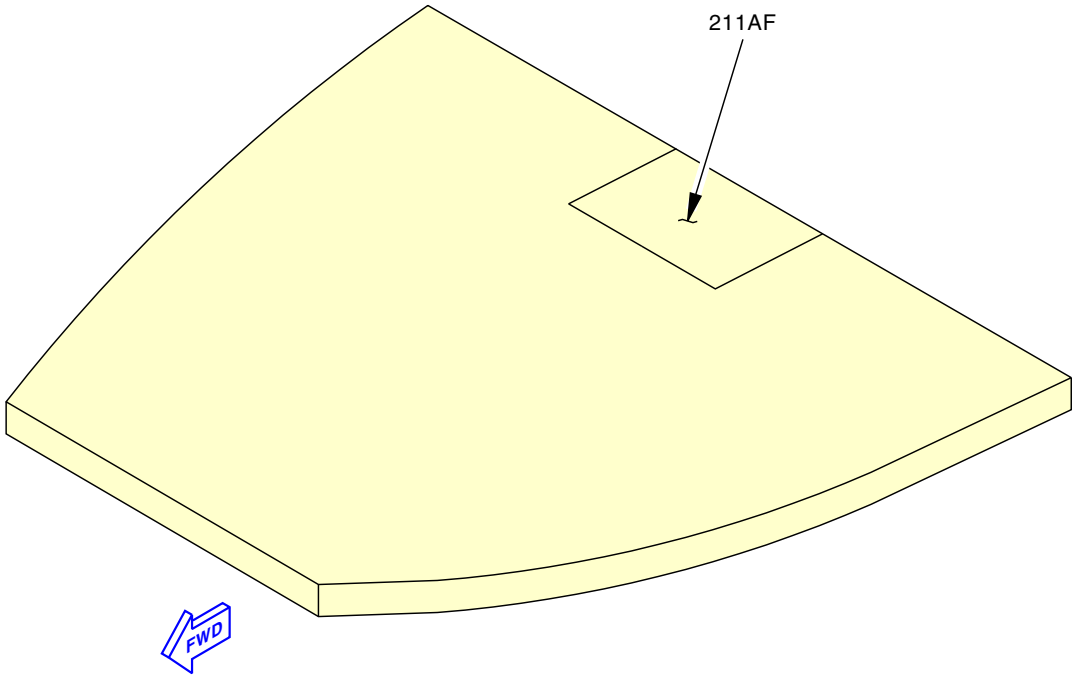
Ceiling Panels and Sidewall Console - Flight Compartment General Visual (Internal)
Figure 204/05-41-02-990-803 (Sheet 5 of 7)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Ceiling Panels and Sidewall Console - Flight Compartment General Visual (Internal)
Figure 204/05-41-02-990-803 (Sheet 6 of 7)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



FLIGHT COMPARTMENT FLOOR

G

2809952 S0000646074_V1

Ceiling Panels and Sidewall Console - Flight Compartment General Visual (Internal)
Figure 204/05-41-02-990-803 (Sheet 7 of 7)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-02-210-804

5. EXTERNAL - ZONAL (GV): Passenger Compartment - Aft of Control Compartment to Forward Entry Door

(Figure 205)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
221	Passenger Compartment - Aft of Control Compartment to Forward Entry Door - Left
222	Passenger Compartment - Aft of Control Compartment to Forward Entry Door - Right

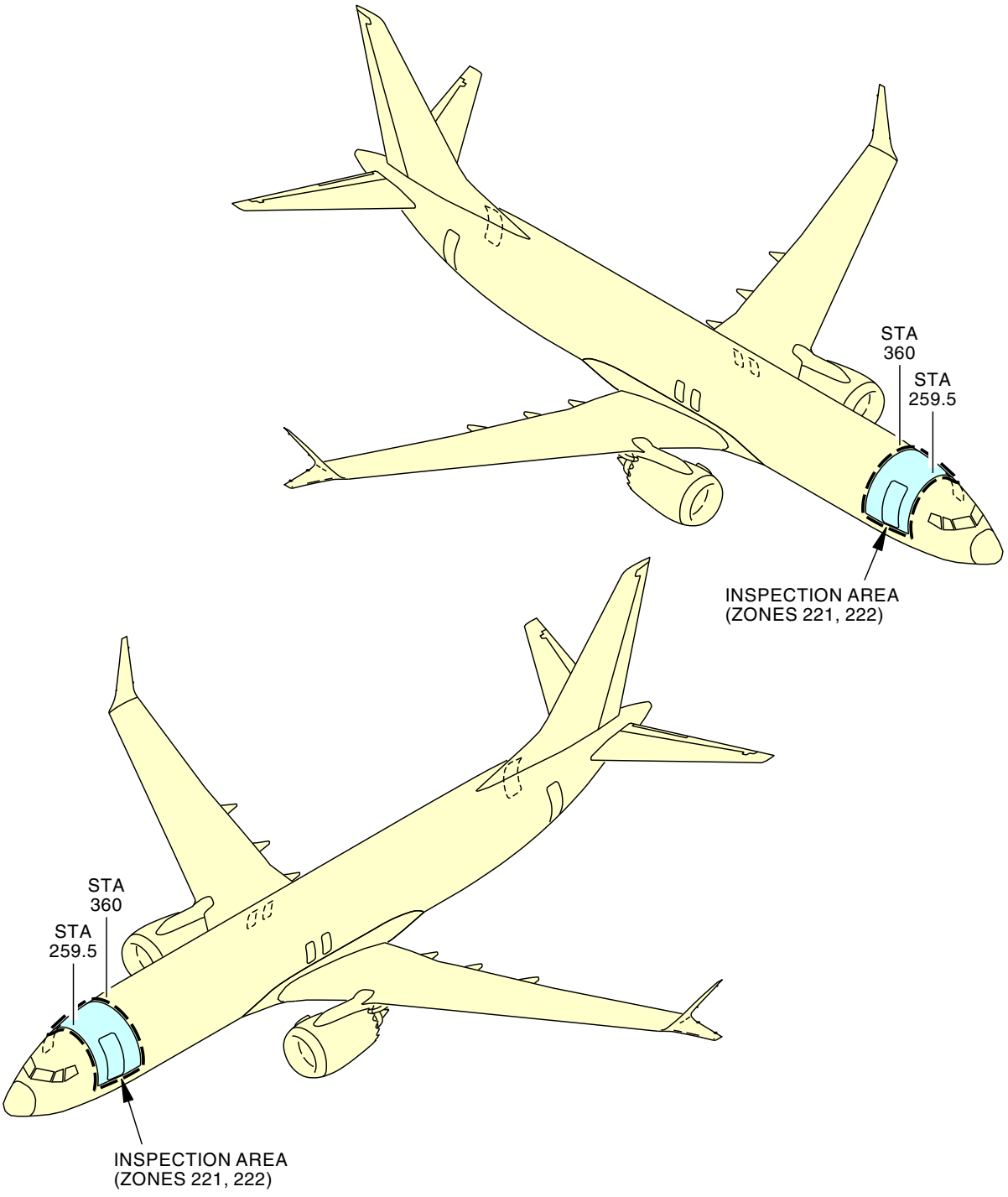
B. Zonal Inspection

SUBTASK 05-41-02-210-004

(1) Do a General Visual inspection of the passenger compartment - aft of the control compartment to forward entry door - left and right - section 41, Sta 259.5 to Sta 360.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



2410134 S00061524970_V2

Passenger Compartment (Sta 259.5-360) General Visual (External)
Figure 205/05-41-02-990-804

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-02-210-805

6. INTERNAL - ZONAL (GV): Passenger Compartment - Section 41, Sta 270 to Sta 360

(Figure 206)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
221	Passenger Compartment - Aft of Control Compartment to Forward Entry Door - Left
222	Passenger Compartment - Aft of Control Compartment to Forward Entry Door - Right

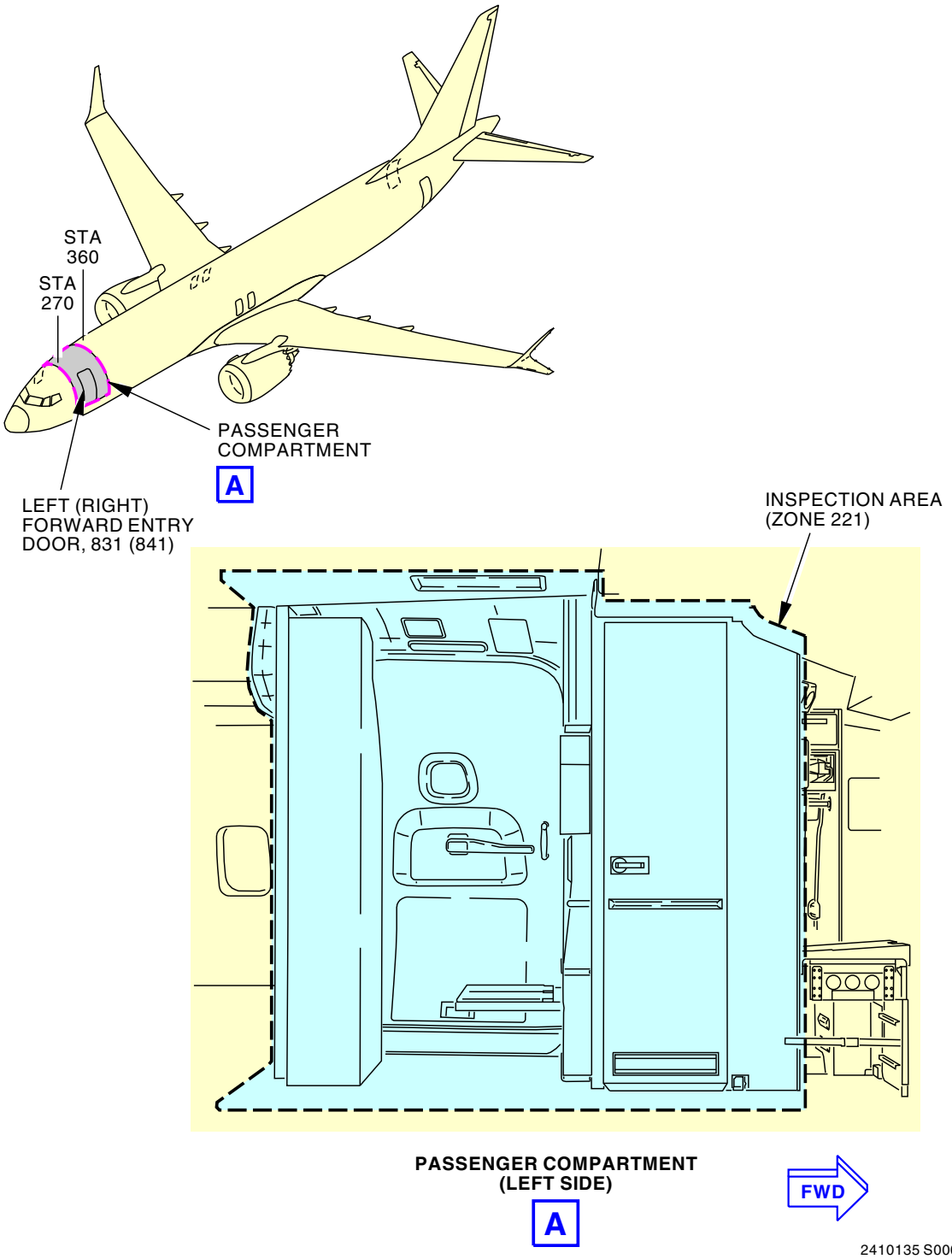
B. Zonal Inspection

SUBTASK 05-41-02-210-005

(1) Do a General Visual inspection of the passenger compartment - left and right - Section 41, Sta 270 to Sta 360.

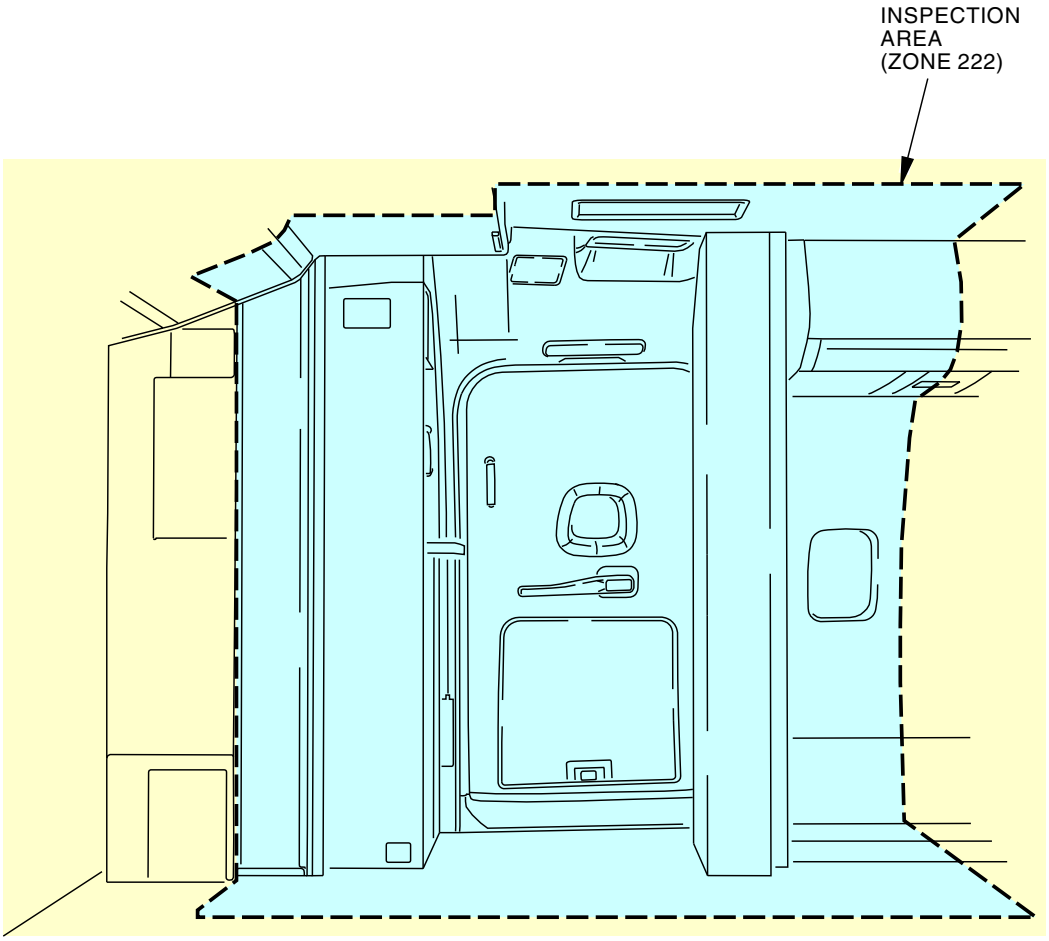
——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Passenger Compartment (Sta 270-360) General Visual (Internal)
Figure 206/05-41-02-990-805 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



**PASSENGER COMPARTMENT
(RIGHT SIDE)**

A

2410136 S00061524973_V1

**Passenger Compartment (Sta 270-360) General Visual (Internal)
Figure 206/05-41-02-990-805 (Sheet 2 of 2)**

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-41-02-210-806

7. INTERNAL - ZONAL (GV): Passenger Compartment - Aft of Control Compartment to Forward Entry Door

(Figure 207)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This Zonal inspection procedure satisfies the required EZAP-derived Zonal inspection requirement for this zone.

B. References

Reference	Title
05-00-00-910-802	Enhanced Zonal Inspection Program (EZAP) Precautions (P/B 201)
20-60-07-910-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
221	Passenger Compartment - Aft of Control Compartment to Forward Entry Door - Left
222	Passenger Compartment - Aft of Control Compartment to Forward Entry Door - Right

D. Zonal Inspection

NOTE: With access provided. Galleys and lavs removed. Floor panels, sidewall panels, and ceiling panels removal required.

SUBTASK 05-41-02-210-006

(1) Do the zonal inspection following the procedures in Enhanced Zonal Inspection Program (EZAP) Precautions, TASK 05-00-00-910-802.

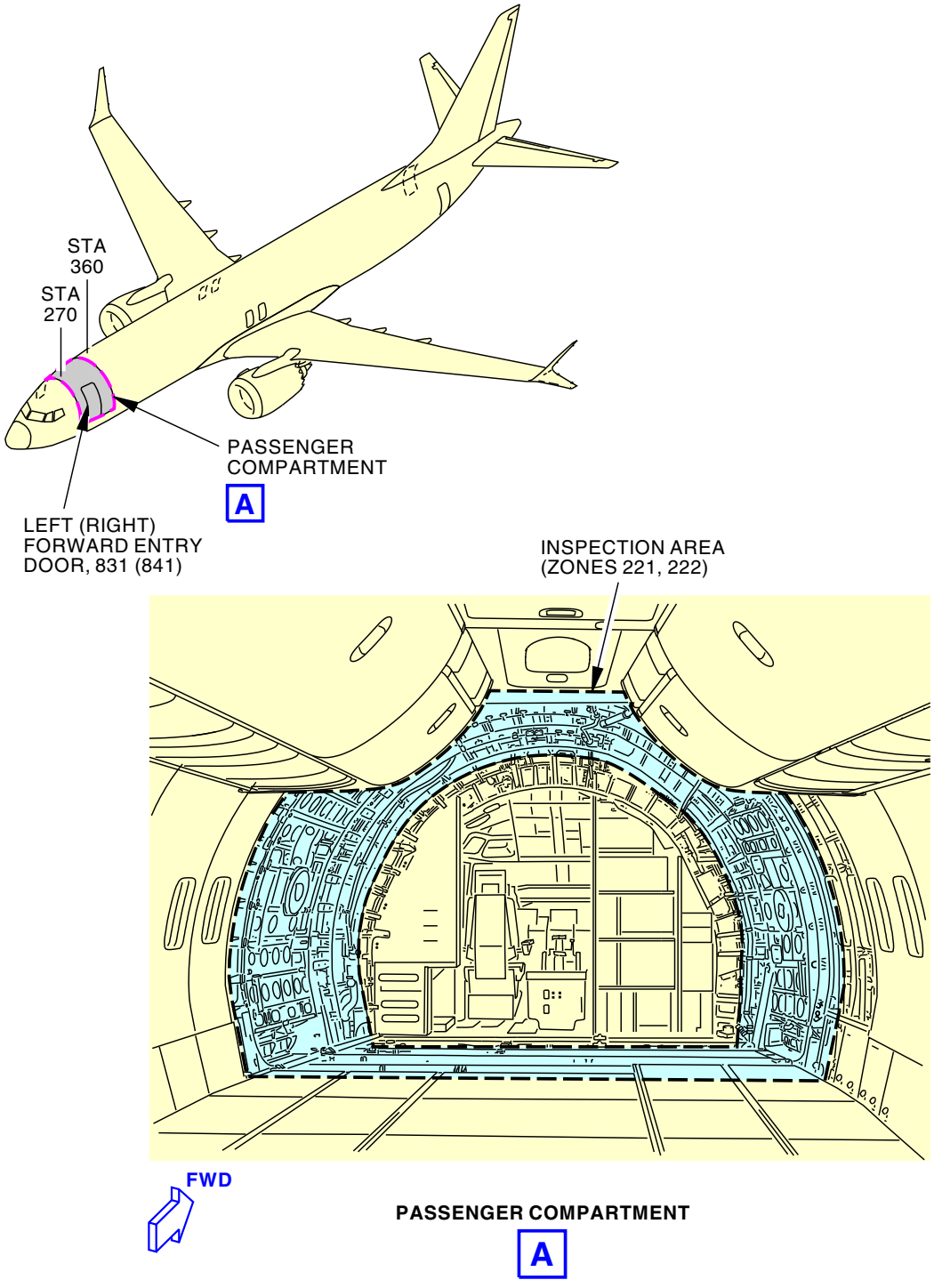
(2) Perform an internal zonal inspection (GV) of the passenger compartment - aft of the control compartment to forward entry door - left and right - Section 41, Sta 270 to Sta 360. (EZAP)

SUBTASK 05-41-02-910-002

(3) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-910-801 for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



2410137 S00061524975_V2

Passenger Compartment (Sta 270-360) General Visual (Internal) (Panels Removed)
Figure 207/05-41-02-990-806

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-02-210-807

8. EXTERNAL - ZONAL (GV): Forward Passenger Entry Door Stops, Latches, and Hinges

(Figure 208)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
221	Passenger Compartment - Aft of Control Compartment to Forward Entry Door - Left

B. Access Panels

Number	Name/Location
831	Forward Entry Door

C. Zonal Inspection

SUBTASK 05-41-02-010-002

(1) Open this access panel:

Number	Name/Location
831	Forward Entry Door

SUBTASK 05-41-02-210-007

(2) Do a General Visual inspection of the forward passenger entry door stops, latches and hinges - Section 41, Sta 345.

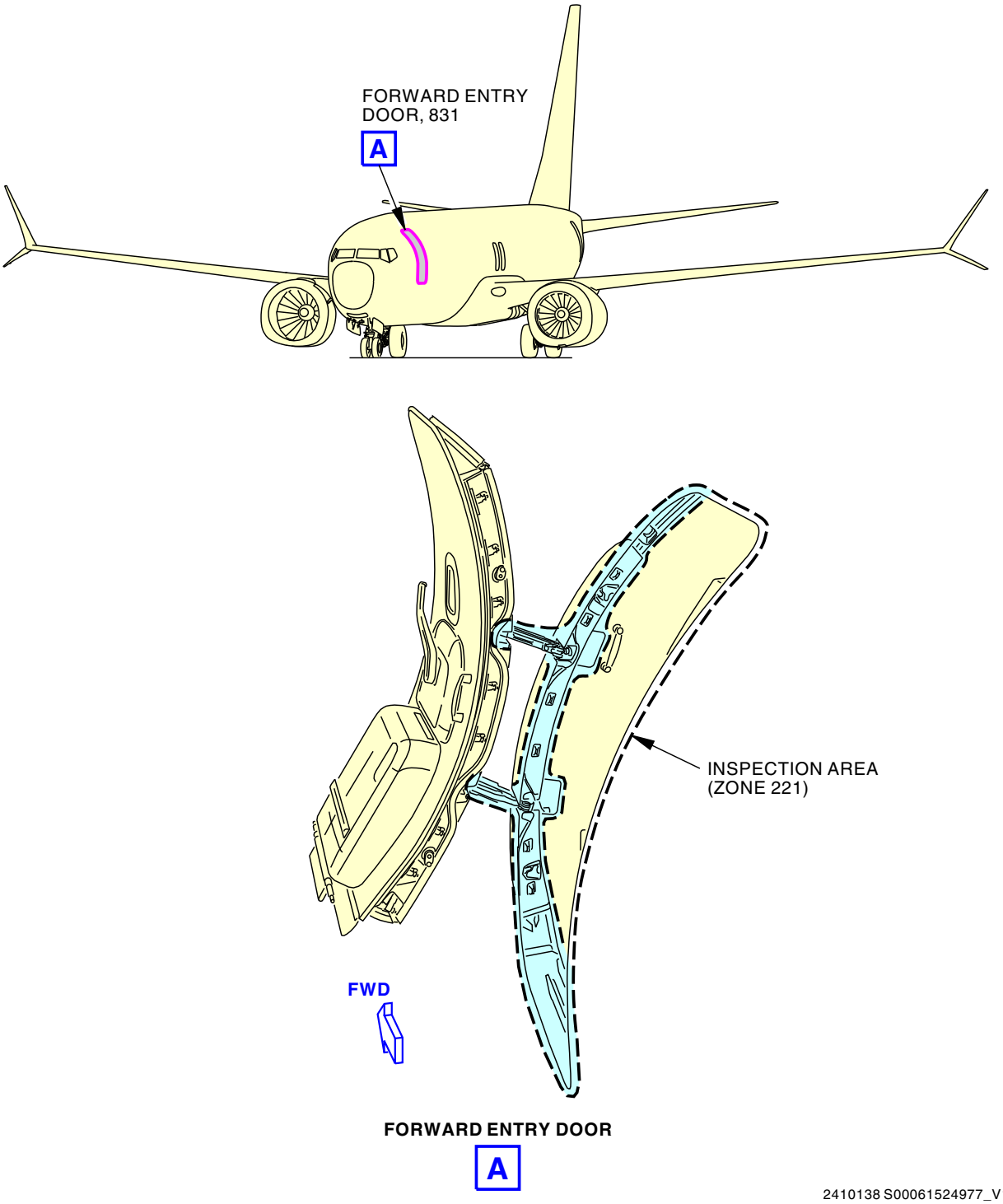
SUBTASK 05-41-02-410-002

(3) Close this access panel:

Number	Name/Location
831	Forward Entry Door

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Door Stops, Latches and Hinges - Forward Entry Door General Visual (External)
Figure 208/05-41-02-990-807

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-02-210-808

9. EXTERNAL - ZONAL (GV): Forward Galley Service Door Stops, Latches, and Hinges

(Figure 209)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
222	Passenger Compartment - Aft of Control Compartment to Forward Entry Door - Right

B. Access Panels

Number	Name/Location
841	Forward Galley Service Door

C. Zonal Inspection

SUBTASK 05-41-02-010-003

(1) Open this access panel:

Number	Name/Location
841	Forward Galley Service Door

SUBTASK 05-41-02-210-008

(2) Do a General Visual inspection of the forward galley service door stops, latches, and hinges - Section 41, Sta 340.

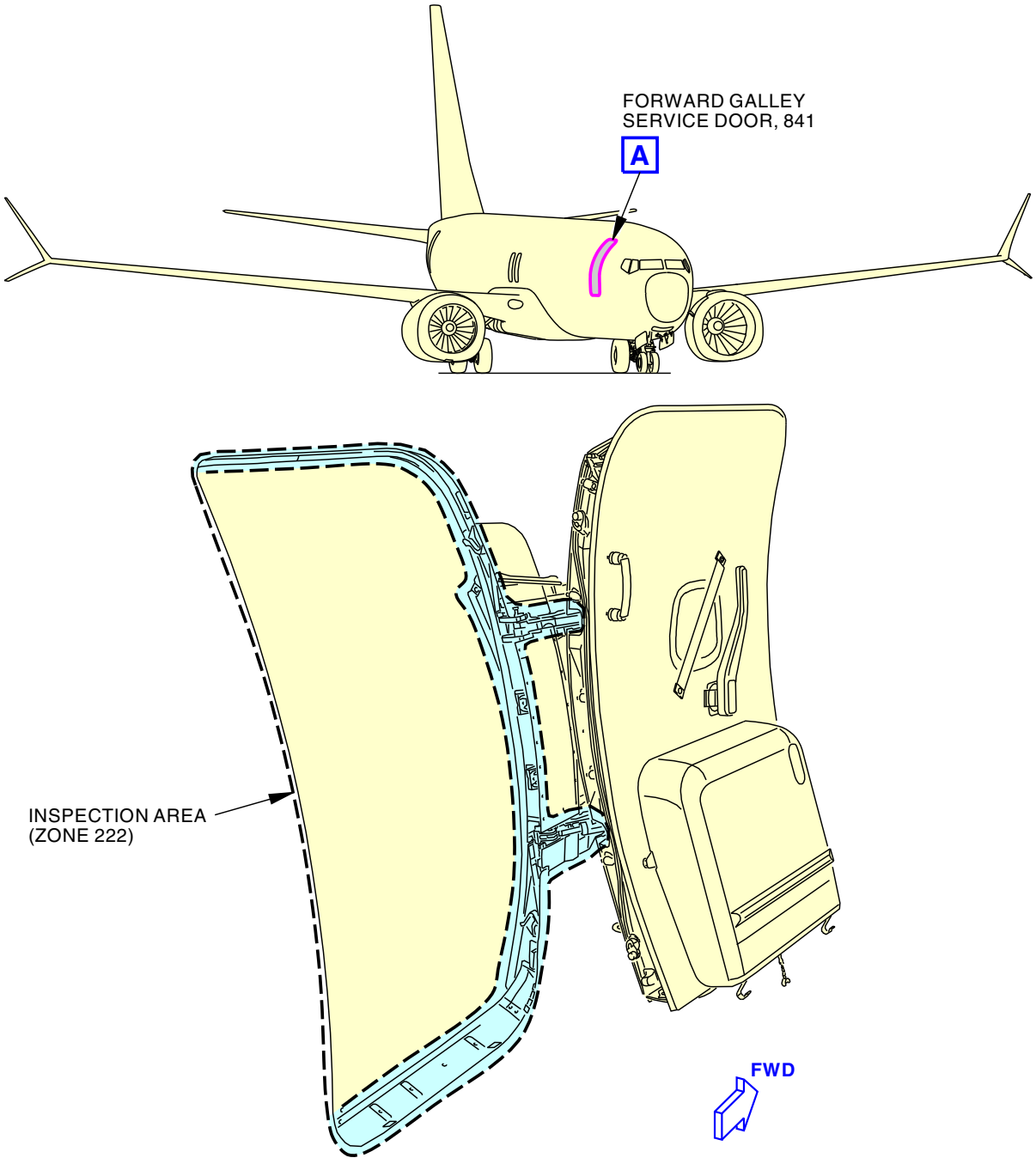
SUBTASK 05-41-02-410-003

(3) Close this access panel:

Number	Name/Location
841	Forward Galley Service Door

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



FORWARD GALLEY SERVICE DOOR

A

2410139 S00061524979_V1

Door Stops, Latches and Hinges - Forward Galley Service Door General Visual (External)
Figure 209/05-41-02-990-808

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-02-210-809

10. EXTERNAL - ZONAL (GV): Forward Passenger Compartment - Sta 360 to Sta 663.75

(Figure 210)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
231	Forward Passenger Compartment - Forward Entry Door to STA 663.75 - Left
232	Forward Passenger Compartment - Forward Entry Door to STA 663.75 - Right

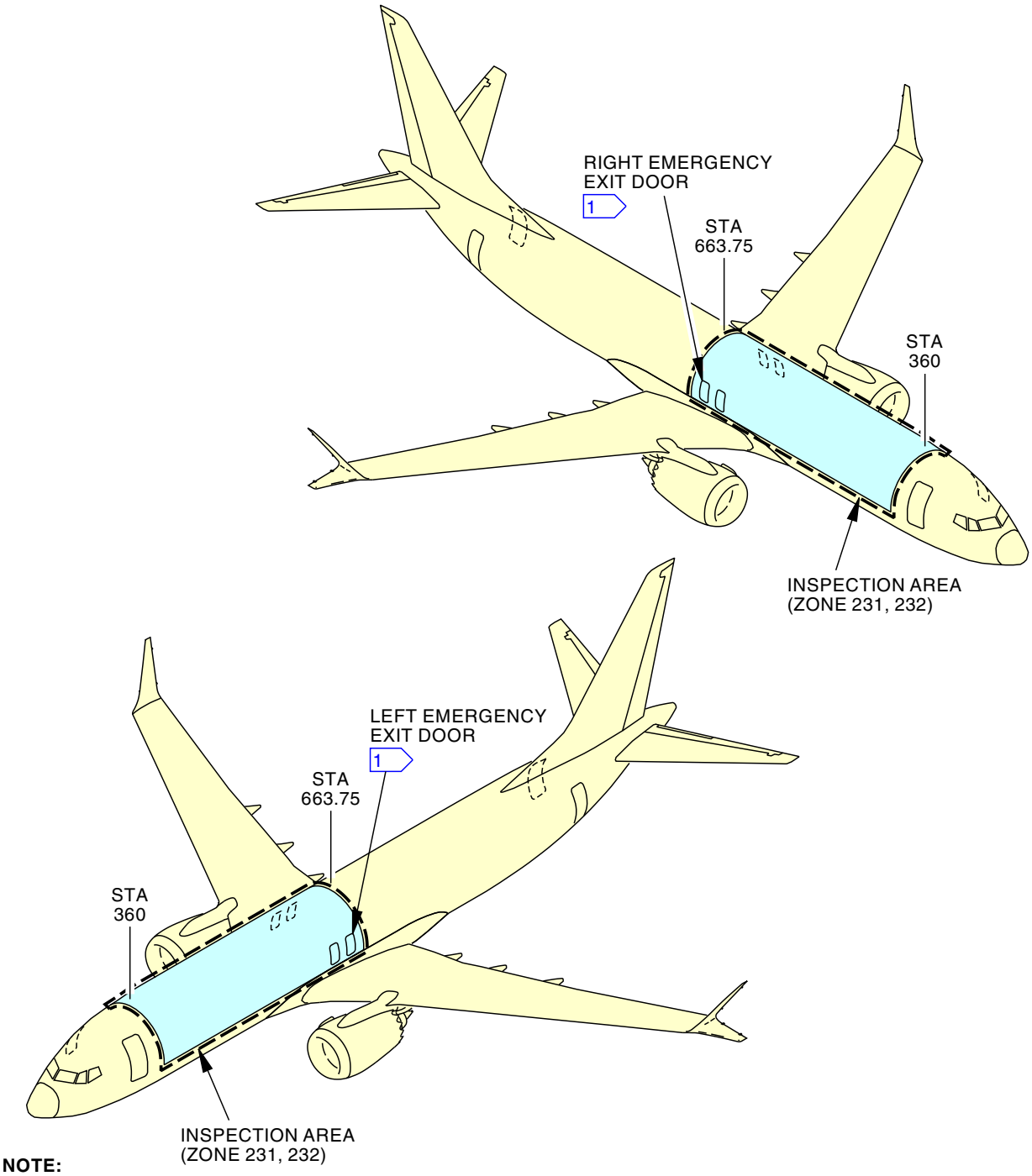
B. Zonal Inspection

SUBTASK 05-41-02-210-009

(1) Do a General Visual inspection of the forward passenger compartment - Sta 360 to Sta 663.75 - left and right - Section 43 and 44 (part).

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



NOTE:

1 TWO EMERGENCY EXIT DOORS ON 8 AND 9 ONLY

2410140 S00061524981_V2

Passenger Compartment (Sta 360-663.75) General Visual (External)
Figure 210/05-41-02-990-809

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-02-210-810

11. INTERNAL - ZONAL (GV): Forward Passenger Compartment - Sta 360 to Sta 663.75

(Figure 211)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
231	Forward Passenger Compartment - Forward Entry Door to STA 663.75 - Left
232	Forward Passenger Compartment - Forward Entry Door to STA 663.75 - Right

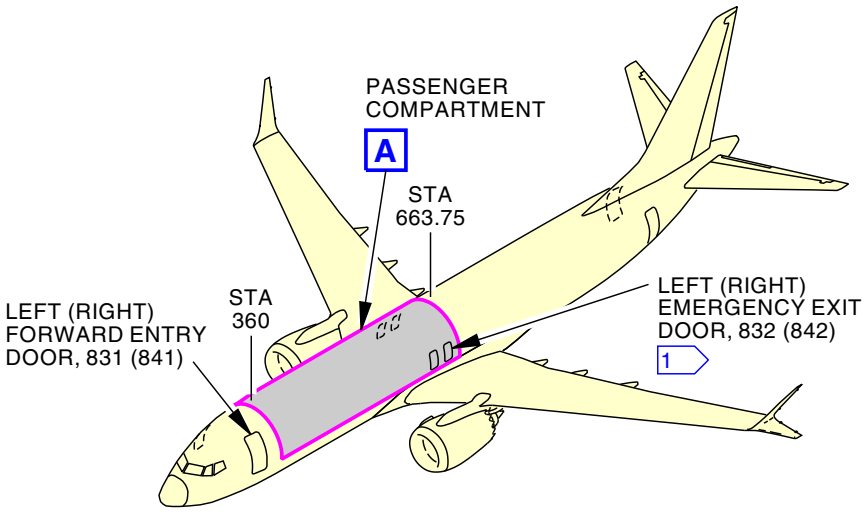
B. Zonal Inspection

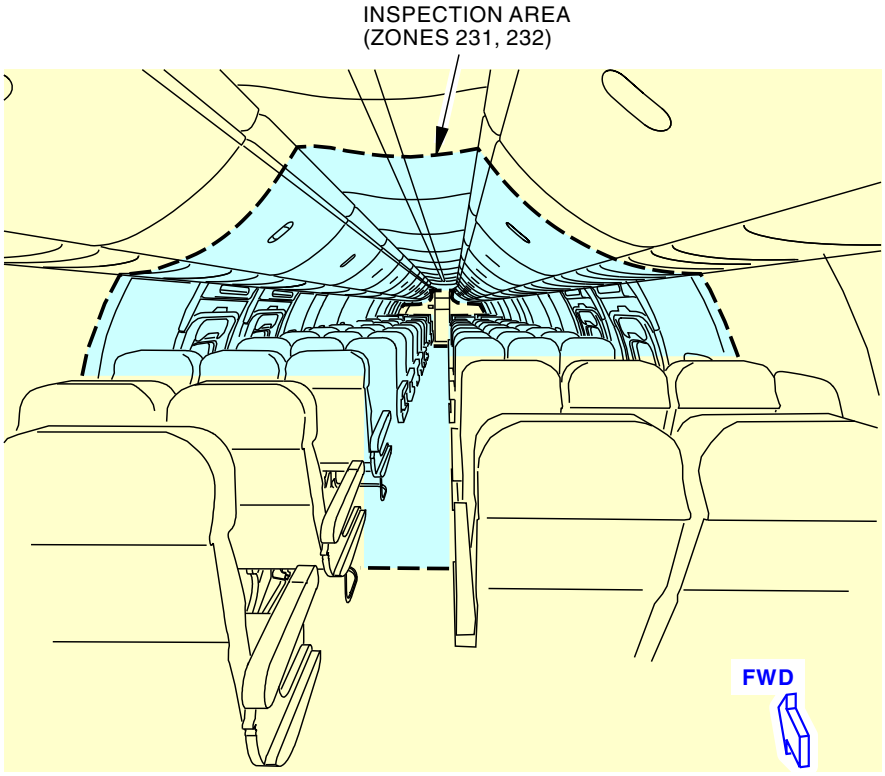
SUBTASK 05-41-02-210-010

(1) Do a General Visual inspection of the forward passenger compartment - Sta 360 to Sta 663.75 - left and right - Section 43 and 44 (part).

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details





PASSENGER COMPARTMENT

A

NOTE:

1 TWO EMERGENCY EXIT DOORS ON 8 AND 9 ONLY.

2410141 S00061524983_V3

Passenger Compartment (Sta 360-663.75) General Visual (Internal)
Figure 211/05-41-02-990-810

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-41-02-210-811

12. INTERNAL - ZONAL (GV): Forward Passenger Compartment - Sta 360 to Sta 663.75 Wet Areas

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This Zonal inspection procedure satisfies the required EZAP-derived Zonal inspection requirement for this zone.

B. References

Reference	Title
05-00-00-910-802	Enhanced Zonal Inspection Program (EZAP) Precautions (P/B 201)
20-60-07-910-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
231	Forward Passenger Compartment - Forward Entry Door to STA 663.75 - Left
232	Forward Passenger Compartment - Forward Entry Door to STA 663.75 - Right

D. Zonal Inspection

NOTE: Galleys and lavs removed. Floor panels, sidewall panels, and ceiling panels removal required in areas where galleys and lavs are located.

SUBTASK 05-41-02-210-011

(1) Do the zonal inspection following the procedures in Enhanced Zonal Inspection Program (EZAP) Precautions, TASK 05-00-00-910-802.

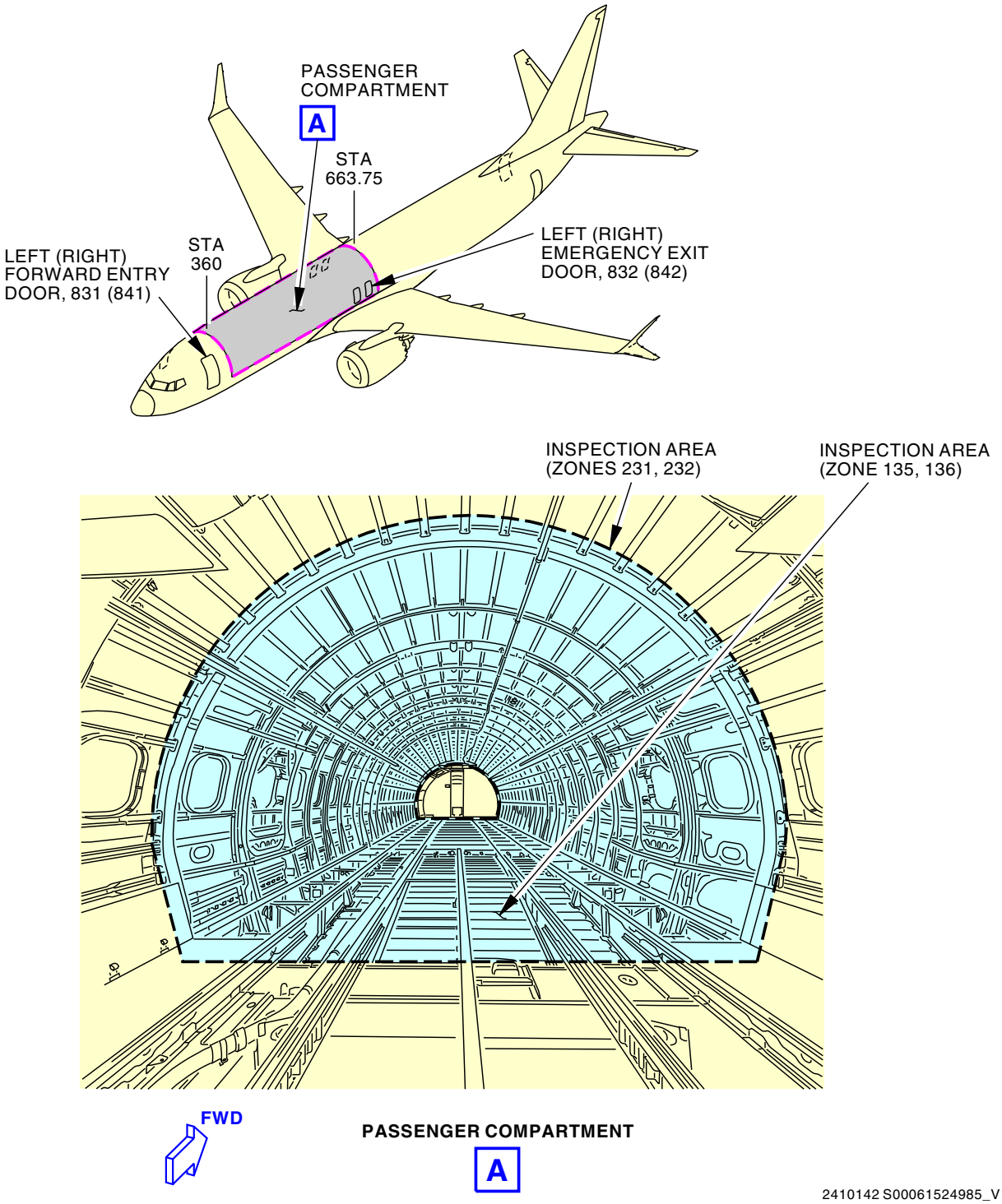
(2) Perform an internal zonal inspection (GV) of the forward passenger compartment - Sta 360 to Sta 663.75 wet areas (within approximately 20 inches from galley or lav) - left and right - Section 43 and 44 (part). (EZAP)

SUBTASK 05-41-02-910-003

(3) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-910-801 for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Passenger Compartment (Sta 360-663.75) General Visual (Internal) (Panels Removed)
Figure 212/05-41-02-990-811

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-41-02-210-812

13. INTERNAL - ZONAL (GV): Forward Passenger Compartment - Sta 360 to Sta 663.75 Dry Areas

(Figure 213)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This Zonal inspection procedure satisfies the required EZAP-derived Zonal inspection requirement for this zone.

B. References

Reference	Title
05-00-00-910-802	Enhanced Zonal Inspection Program (EZAP) Precautions (P/B 201)
20-60-07-910-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
231	Forward Passenger Compartment - Forward Entry Door to STA 663.75 - Left
232	Forward Passenger Compartment - Forward Entry Door to STA 663.75 - Right

D. Zonal Inspection

NOTE: Floor panels, sidewall panels, and ceiling panels removal required.

SUBTASK 05-41-02-210-012

(1) Do the zonal inspection following the procedures in Enhanced Zonal Inspection Program (EZAP) Precautions, TASK 05-00-00-910-802.

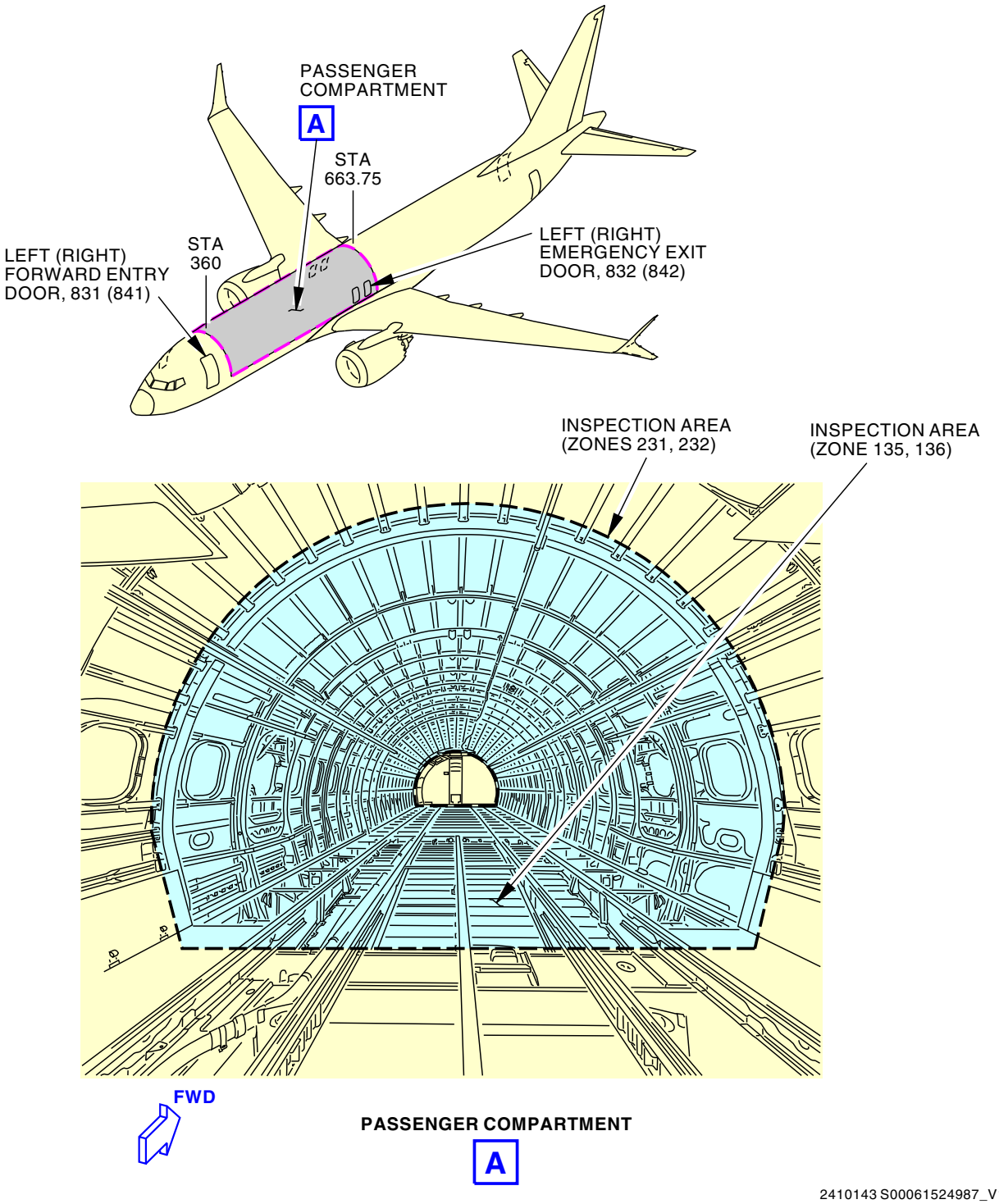
(2) Perform an internal zonal inspection (GV) of the forward passenger compartment - Sta 360 to Sta 663.75 dry area (away from doors, galleys, and lavs) - left and right - Section 43 and 44 (part). (EZAP)

SUBTASK 05-41-02-910-004

(3) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-910-801 for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Passenger Compartment (Sta 360-663.75) General Visual (Internal) (Panels Removed)
Figure 213/05-41-02-990-812

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-02-210-813

14. EXTERNAL - ZONAL (GV): Aft Passenger Compartment - Sta 663.75 to Aft Pressure Bulkhead

(Figure 214)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
241	Aft Passenger Compartment - Station 663.75 to Aft Pressure Bulkhead - Left
242	Aft Passenger Compartment - Station 663.75 to Aft Pressure Bulkhead - Right

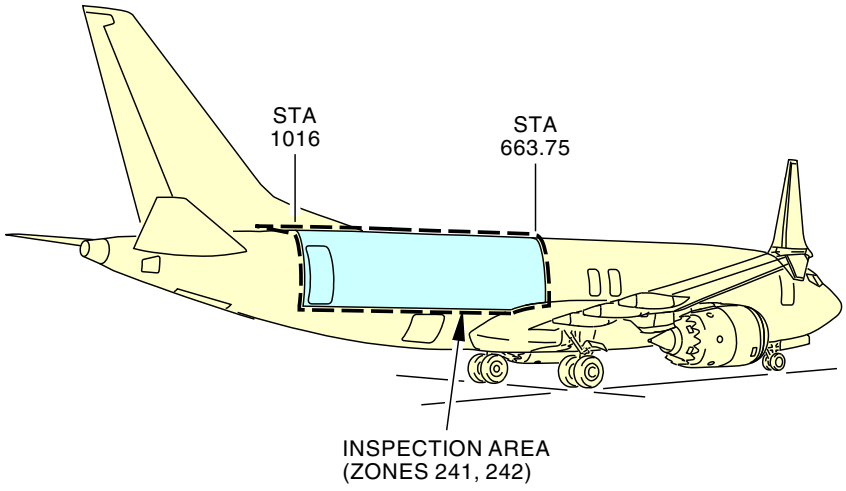
B. Zonal Inspection

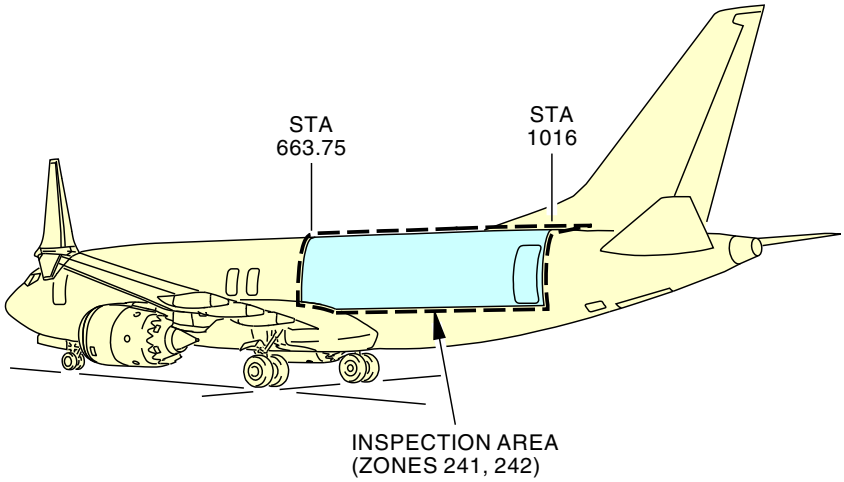
SUBTASK 05-41-02-210-013

(1) Do a General Visual inspection of the aft passenger compartment - Sta 663.75 to the aft pressure bulkhead - left and right - Section 44 (part), 46, and 47, Sta 663.75 to the aft pressure bulkhead.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details





2410144 S00061524989_V2

Passenger Compartment (Sta 663.75-1042) General Visual (External)
Figure 214/05-41-02-990-813

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-02-210-814

15. INTERNAL - ZONAL (GV): Aft Passenger Compartment - Sta 663.75 to Aft Pressure Bulkhead

(Figure 215)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
241	Aft Passenger Compartment - Station 663.75 to Aft Pressure Bulkhead - Left
242	Aft Passenger Compartment - Station 663.75 to Aft Pressure Bulkhead - Right

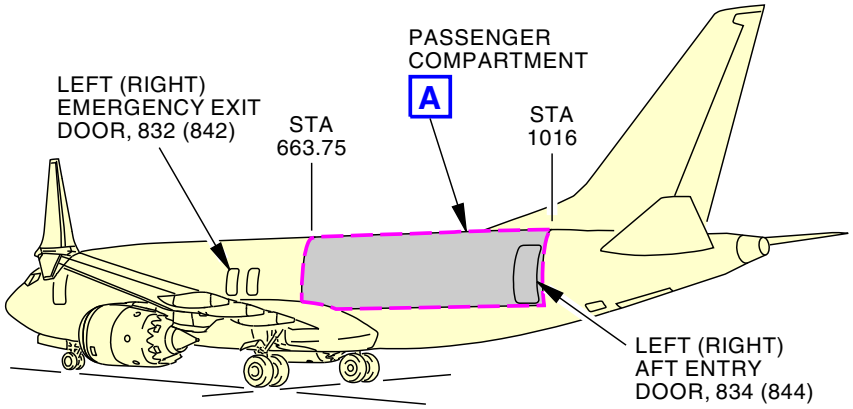
B. Zonal Inspection

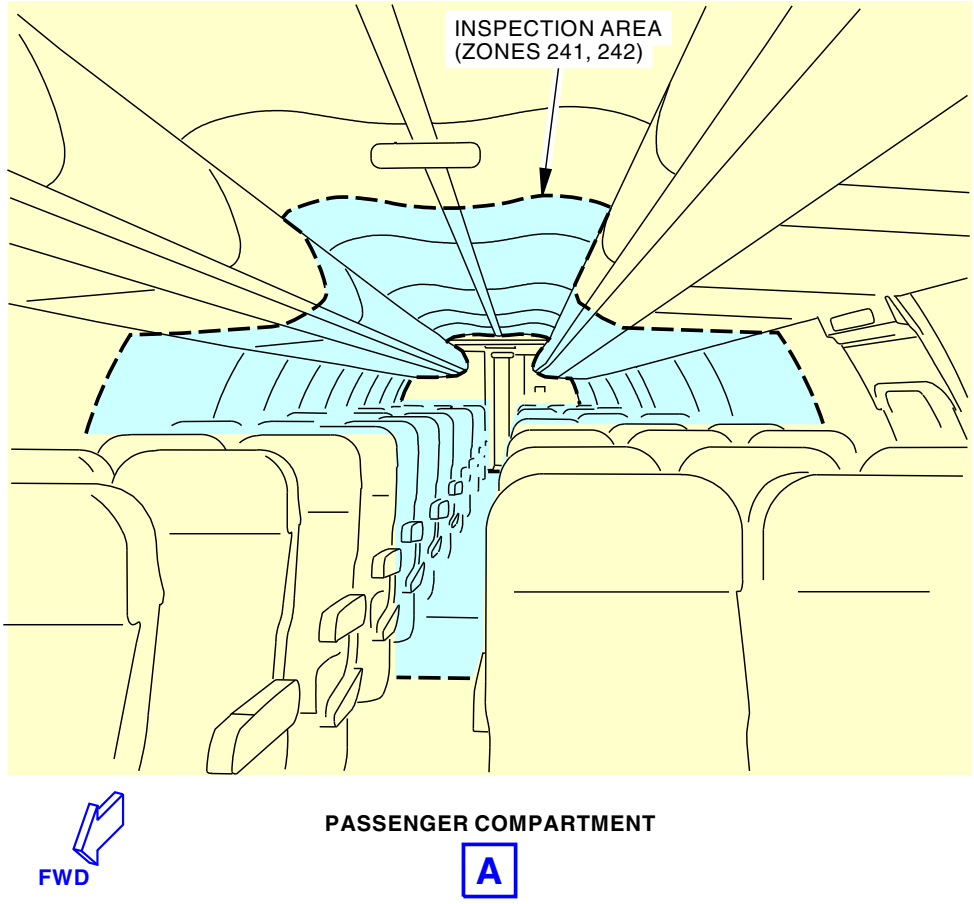
SUBTASK 05-41-02-210-014

(1) Do a General Visual inspection of the aft passenger compartment - Sta 663.75 to the aft pressure bulkhead - left and right- Section 44 (part), 46 and 47, Sta 663.75 to aft pressure bulkhead.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details





2410145 S00061524991_V2

Passenger Compartment (Sta 663.75-1016) General Visual (Internal)
Figure 215/05-41-02-990-814

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-41-02-210-815

16. INTERNAL - ZONAL (GV): Aft Passenger Compartment - Sta 663.75 to Aft Pressure Bulkhead Wet Area

(Figure 216)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This Zonal inspection procedure satisfies the required EZAP-derived Zonal inspection requirement for this zone.

B. References

Reference	Title
05-00-00-910-802	Enhanced Zonal Inspection Program (EZAP) Precautions (P/B 201)
20-60-07-910-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
241	Aft Passenger Compartment - Station 663.75 to Aft Pressure Bulkhead - Left
242	Aft Passenger Compartment - Station 663.75 to Aft Pressure Bulkhead - Right

D. Zonal Inspection

NOTE: Galleys and lavs removed. Floor panels, sidewall panels, and ceiling panels removal required in areas where galleys and lavs are located.

SUBTASK 05-41-02-210-015

(1) Do the zonal inspection following the procedures in Enhanced Zonal Inspection Program (EZAP) Precautions, TASK 05-00-00-910-802.

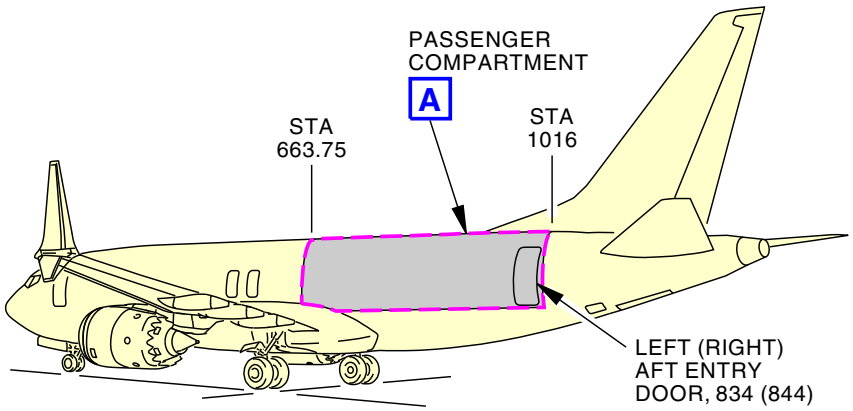
(2) Perform an internal zonal inspection (GV) of the aft passenger compartment - Sta 663.75 to the aft pressure bulkhead wet area (within approximately 20 in. (51 cm) from galley service door, passenger door, galley or lav) - left and right - Section 44 (part), 46, and 47, Sta 663.75 to aft pressure bulkhead. (EZAP)

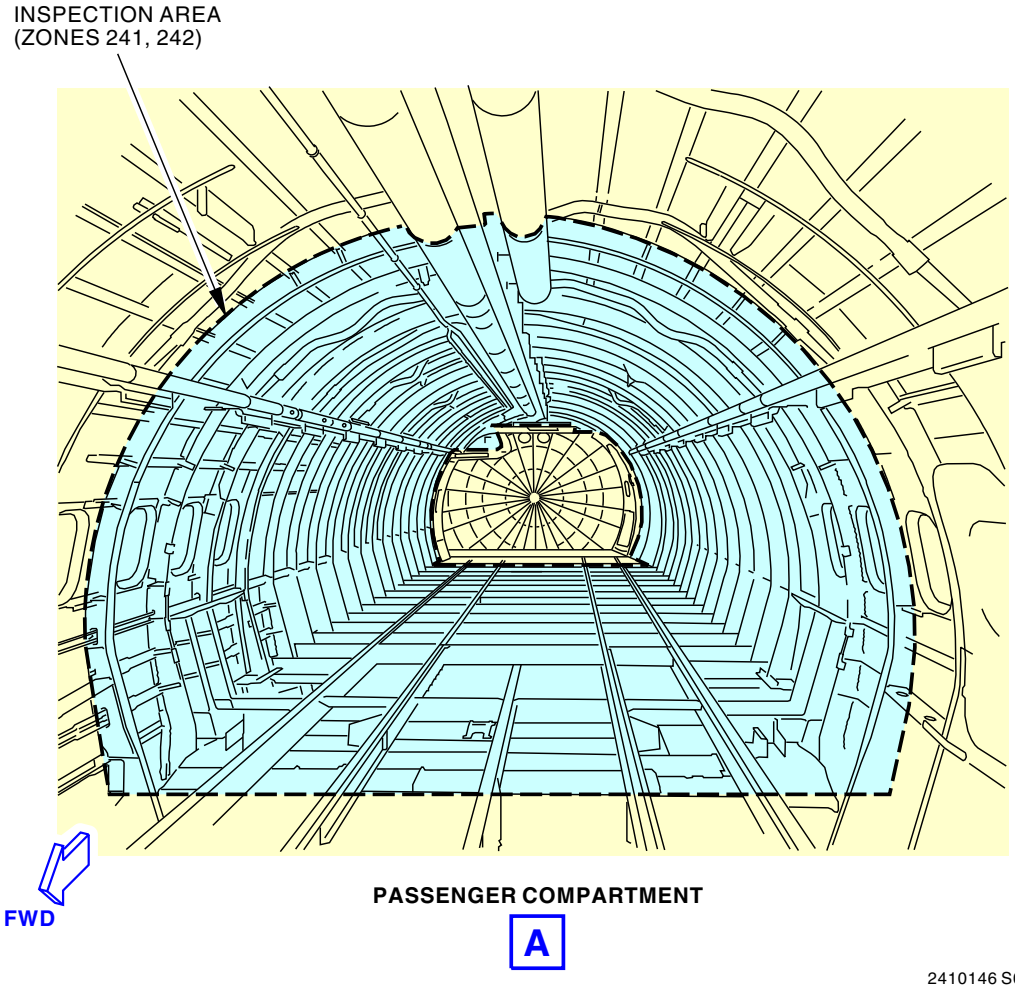
SUBTASK 05-41-02-910-005

(3) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-910-801 for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance".

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details





2410146 S00061524993_V2

Passenger Compartment (Sta 663.75-1016) General Visual (Internal) (Galley, Lavatory and Panels Removed)
Figure 216/05-41-02-990-815

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-41-02-210-816

17. INTERNAL - ZONAL (GV): Passenger Compartment - Sta 663.75 to Aft Pressure Bulkhead Dry Area

(Figure 217)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This Zonal inspection procedure satisfies the required EZAP-derived Zonal inspection requirement for this zone.

B. References

Reference	Title
05-00-00-910-802	Enhanced Zonal Inspection Program (EZAP) Precautions (P/B 201)
20-60-07-910-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
241	Aft Passenger Compartment - Station 663.75 to Aft Pressure Bulkhead - Left
242	Aft Passenger Compartment - Station 663.75 to Aft Pressure Bulkhead - Right

D. Zonal Inspection

NOTE: Floor panels, sidewall panels, and ceiling panels removal required.

SUBTASK 05-41-02-210-016

(1) Do the zonal inspection following the procedures in Enhanced Zonal Inspection Program (EZAP) Precautions, TASK 05-00-00-910-802.

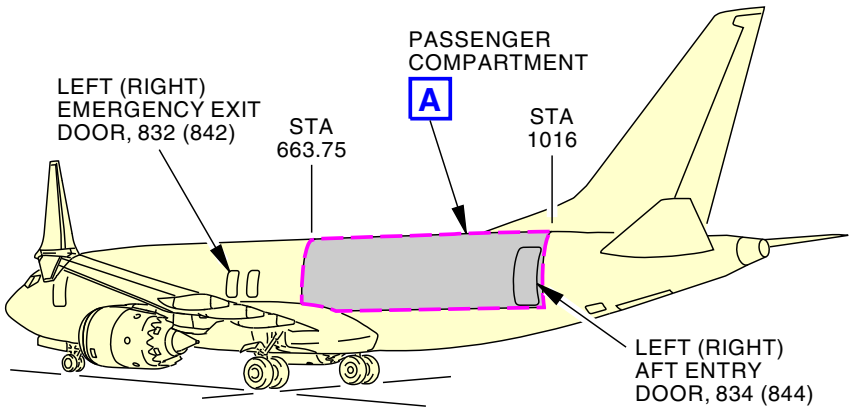
(2) Perform an internal zonal inspection (GV) of the aft passenger compartment - Sta 663.75 to the aft pressure bulkhead dry area (away from doors, galleys and lavs) - left and right - Section 44 (part), 46, and 47, Sta 663.75 to aft pressure bulkhead. (EZAP)

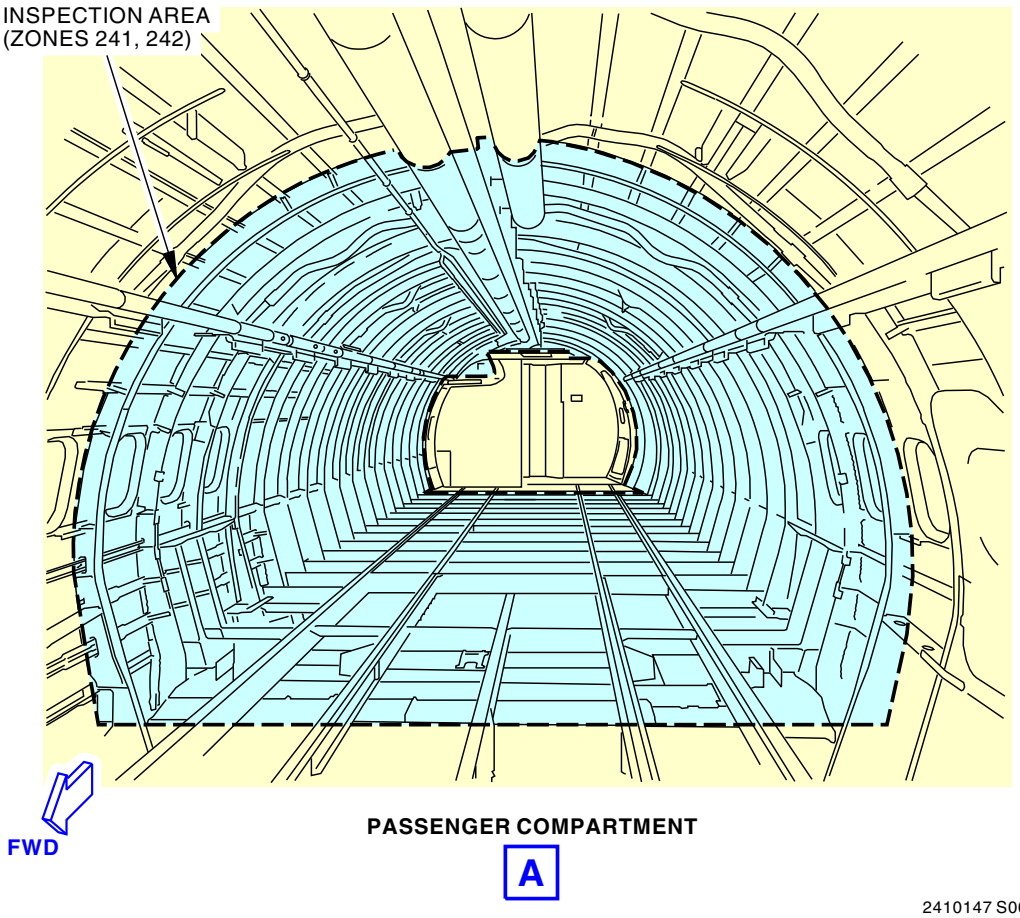
SUBTASK 05-41-02-910-006

(3) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-910-801 for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details





2410147 S00061524995_V2

Passenger Compartment (Sta 663.75-1016) General Visual (Internal) (Panels Removed)
Figure 217/05-41-02-990-816

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-02-210-817

18. EXTERNAL - ZONAL (GV): Aft Passenger Entry Door Stops, Latches, and Hinges

(Figure 218)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
241	Aft Passenger Compartment - Station 663.75 to Aft Pressure Bulkhead - Left

B. Access Panels

Number	Name/Location
834	Aft Entry Door

C. Zonal Inspection

SUBTASK 05-41-02-010-004

(1) Open this access panel:

Number	Name/Location
834	Aft Entry Door

SUBTASK 05-41-02-210-017

(2) Do a General Visual inspection of the aft passenger entry door stops, latches, and hinges - Section 47, Sta 980.

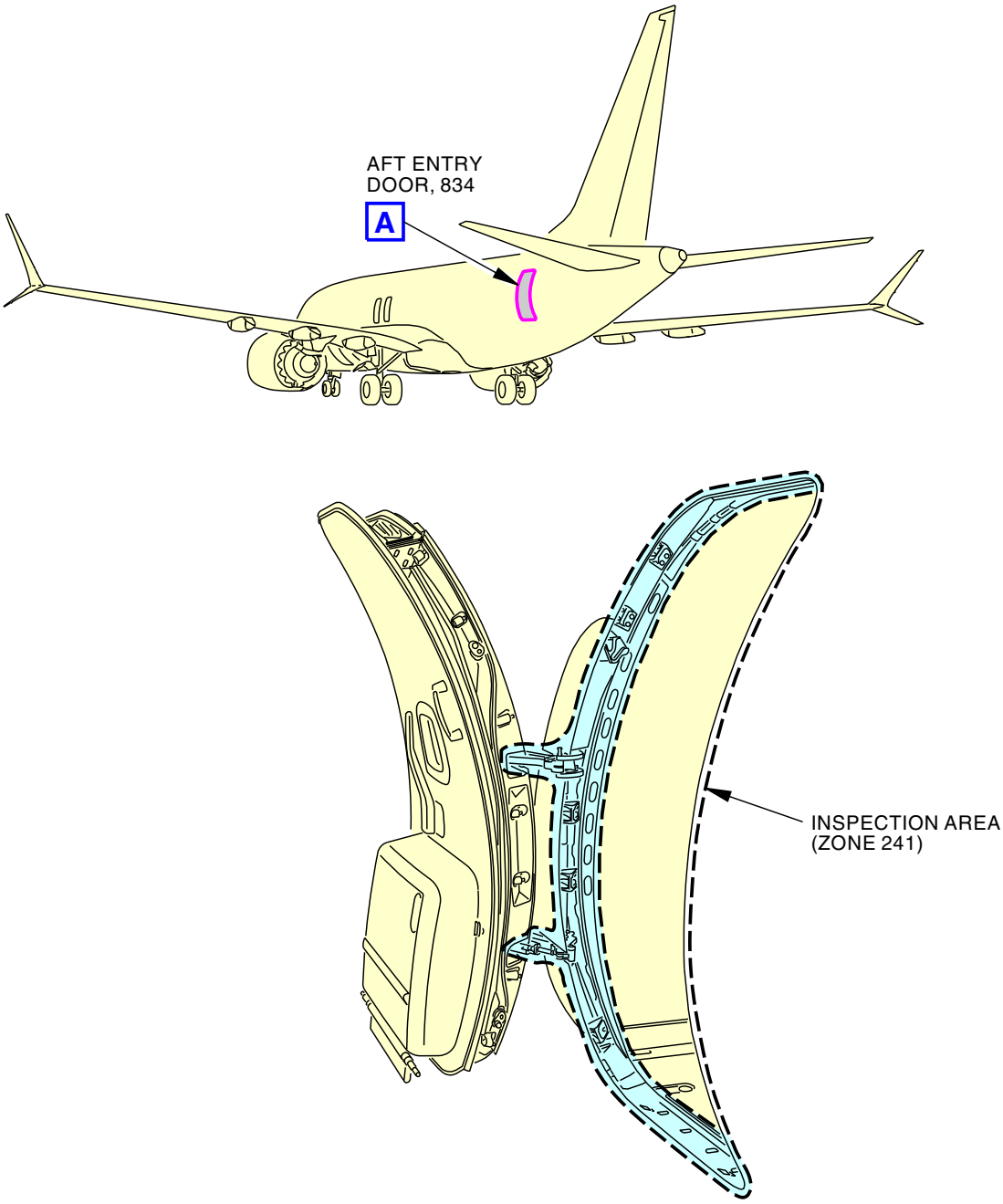
SUBTASK 05-41-02-410-004

(3) Close this access panel:

Number	Name/Location
834	Aft Entry Door

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Door Stops, Latches and Hinges - Aft Entry Door General Visual (External)
Figure 218/05-41-02-990-817

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-02-210-818

19. EXTERNAL - ZONAL (GV): Aft Galley Service Door Stops, Latches, and Hinges

(Figure 219)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
242	Aft Passenger Compartment - Station 663.75 to Aft Pressure Bulkhead - Right

B. Access Panels

Number	Name/Location
844	Aft Galley Service Door

C. Zonal Inspection

SUBTASK 05-41-02-010-005

(1) Open this access panel:

Number	Name/Location
844	Aft Galley Service Door

SUBTASK 05-41-02-210-018

(2) Do a General Visual inspection of the aft galley service door stops, latches, and hinges - Section 47, Sta 980.

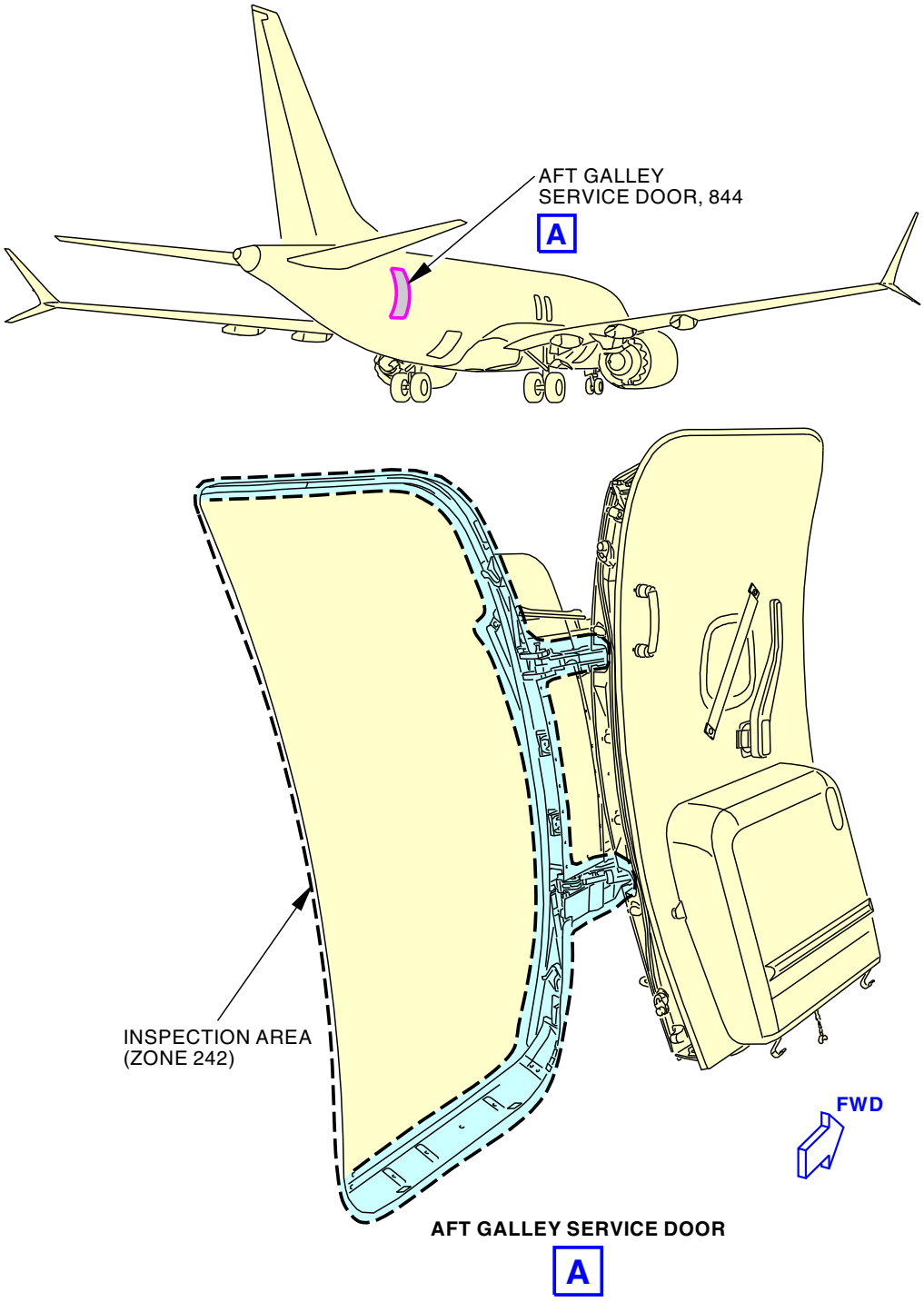
SUBTASK 05-41-02-410-005

(3) Close this access panel:

Number	Name/Location
844	Aft Galley Service Door

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Door Stops, Latches and Hinges - Aft Galley Service Door General Visual (External)
Figure 219/05-41-02-990-818

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-03-210-801

1. EXTERNAL - ZONAL (GV): AREA AFT OF THE PRESSURE BULKHEAD

(Figure 201)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
310	Fuselage - Body Station 1016.00 to Body Station 1260.00

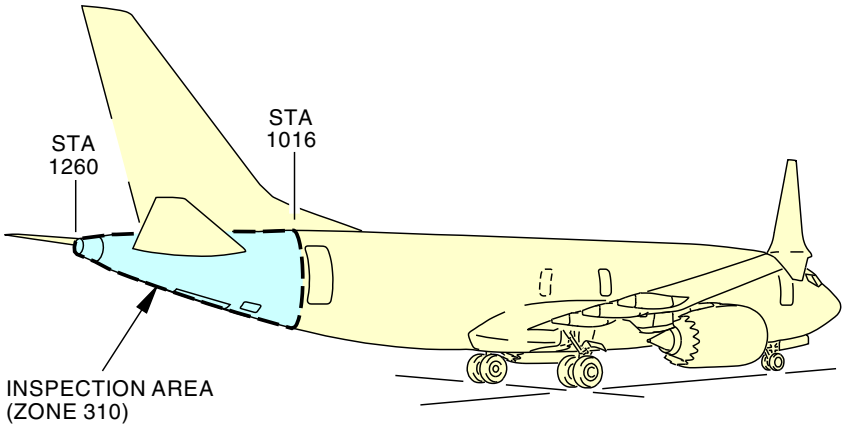
B. Zonal Inspection

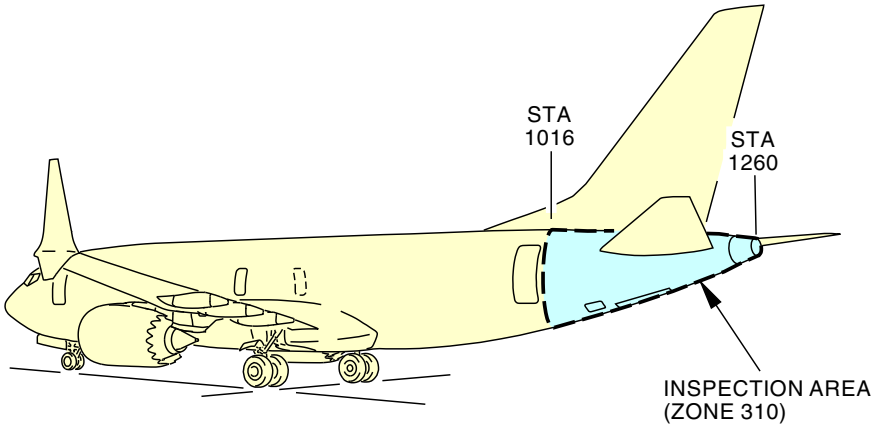
SUBTASK 05-41-03-210-001

(1) Do a General Visual inspection of the area aft of the pressure bulkhead. Inspection is accomplished from the ground, without the use of stands or ladders. No additional access panels required.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details





2410150 S00061525003_V2

Area Aft of Pressure Bulkhead General Visual (External)
Figure 201/05-41-03-990-801

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-41-03-210-802

2. INTERNAL - ZONAL (GV): Area Aft of Pressure Bulkhead

(Figure 202)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This Zonal inspection procedure satisfies the required EZAP-derived Zonal inspection requirement for this zone.

B. References

Reference	Title
05-00-00-910-802	Enhanced Zonal Inspection Program (EZAP) Precautions (P/B 201)
20-60-07-910-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
311	Area Aft of Pressure Bulkhead - Left
312	Area Aft of Pressure Bulkhead - Right

D. Access Panels

Number	Name/Location
311BL	Stabilizer Trim Access Door

E. Zonal Inspection

SUBTASK 05-41-03-010-001

(1) Open this access panel:

Number	Name/Location
311BL	Stabilizer Trim Access Door

SUBTASK 05-41-03-210-002

(2) Do the zonal inspection following the procedures in Enhanced Zonal Inspection Program (EZAP) Precautions, TASK 05-00-00-910-802.

(3) Perform an internal zonal inspection (GV) of the area aft of pressure bulkhead - Section 48, aft of aft pressure bulkhead to Sta 1088. (EZAP)

SUBTASK 05-41-03-910-001

(4) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-910-801 for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

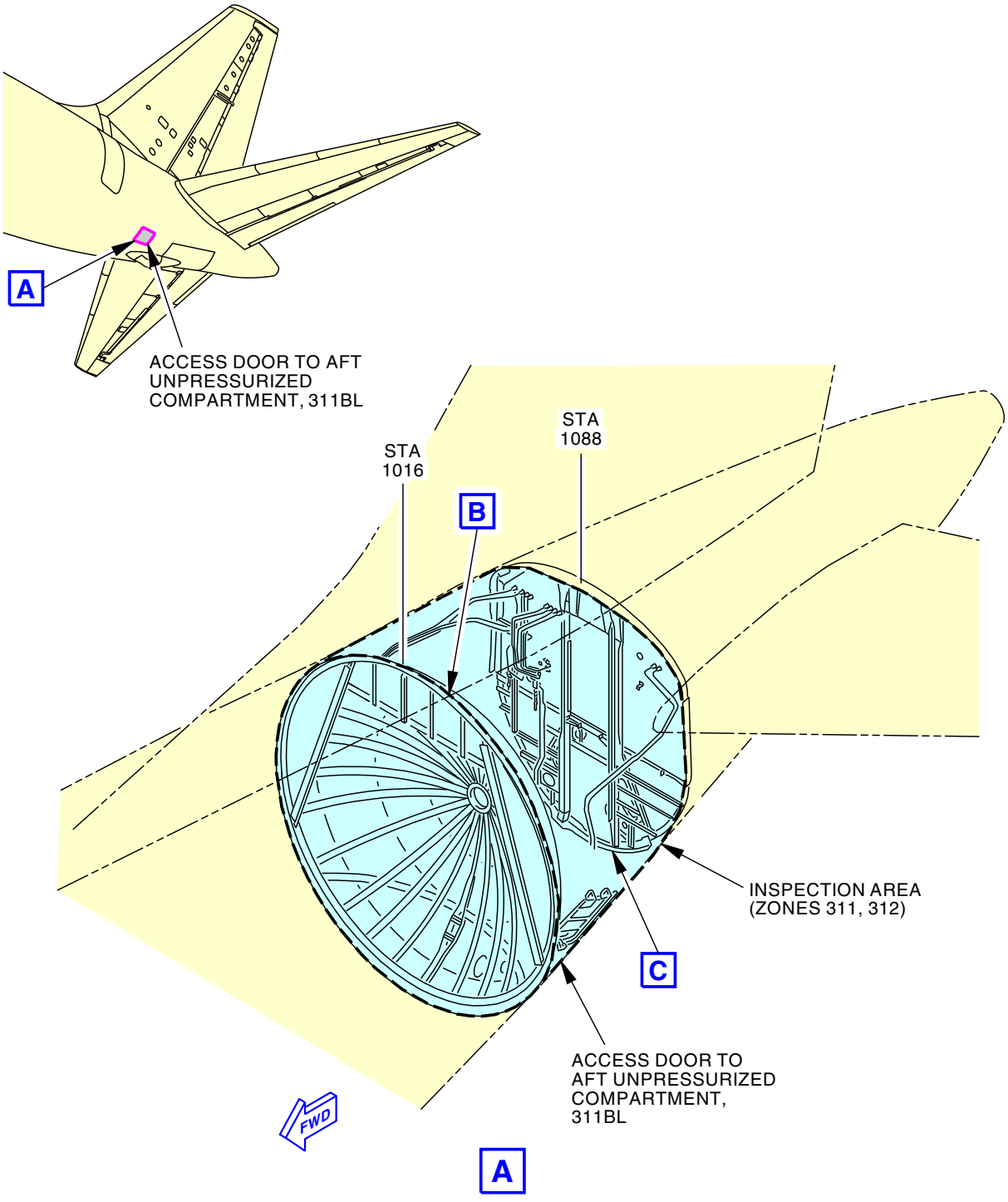
SUBTASK 05-41-03-410-001

(5) Close this access panel:

Number	Name/Location
311BL	Stabilizer Trim Access Door

END OF TASK

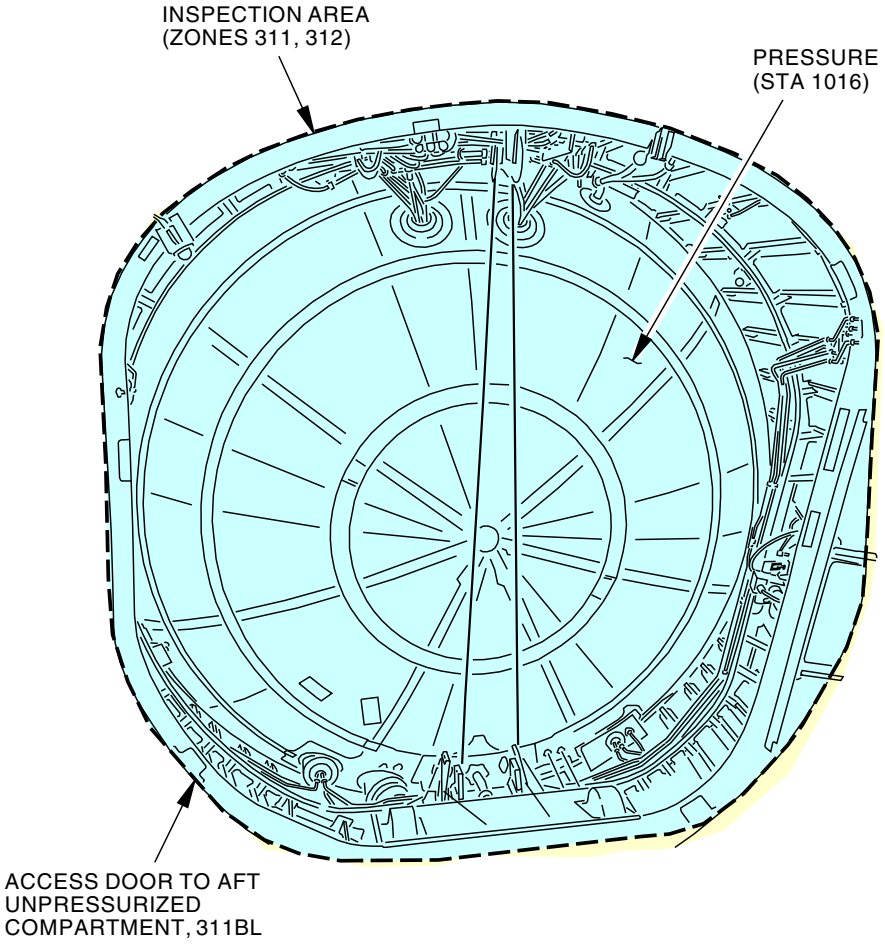
ECCN 9E991 BOEING PROPRIETARY - See title page for details



2410151 S00061525005_V1

Aft Pressure Bulkhead General Visual (Internal)
Figure 202/05-41-03-990-802 (Sheet 1 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



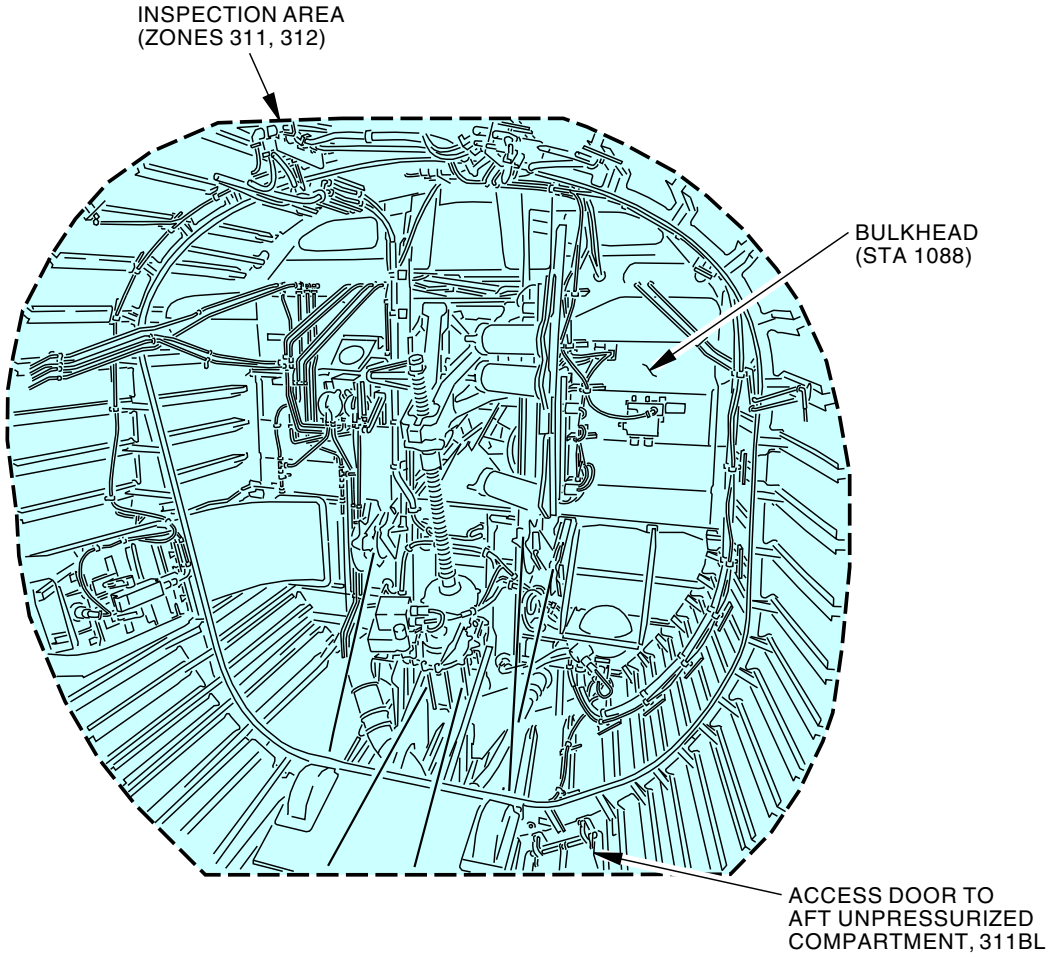
AFT PRESSURE BULKHEAD
(VIEW IN THE FORWARD DIRECTION)

B

2410152 S00061525006_V1

Aft Pressure Bulkhead General Visual (Internal)
Figure 202/05-41-03-990-802 (Sheet 2 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



AFT PRESSURE BULKHEAD
(VIEW IN THE AFT DIRECTION)

C

2410153 S00061525007_V1

Aft Pressure Bulkhead General Visual (Internal)
Figure 202/05-41-03-990-802 (Sheet 3 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-03-210-830

3. EXTERNAL - ZONAL (GVI): Area Aft of Pressure Bulkhead

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
311	Area Aft of Pressure Bulkhead - Left
312	Area Aft of Pressure Bulkhead - Right

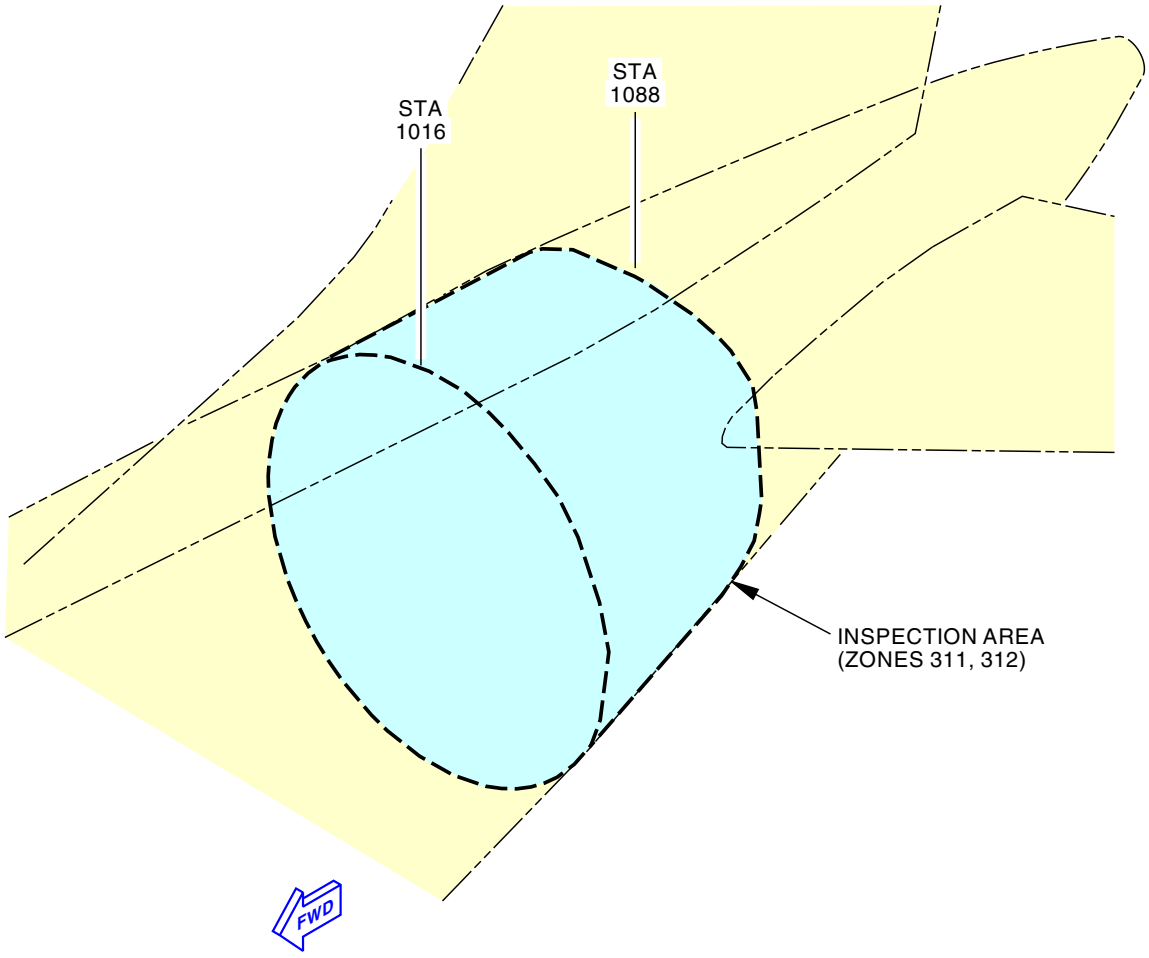
B. Zonal Inspection

SUBTASK 05-41-03-210-030

(1) Do an General Visual Inspection of the area aft of the pressure bulkhead.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



2545857 S0000601535_V1

Area Aft of Pressure Bulkhead General Visual (External)
Figure 203/05-41-03-990-830

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-41-03-210-803

4. INTERNAL - ZONAL (GV): Stabilizer Torsion Box Compartment

(Figure 204)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This Zonal inspection procedure satisfies the required EZAP-derived Zonal inspection requirement for this zone.

B. References

Reference	Title
05-00-00-910-802	Enhanced Zonal Inspection Program (EZAP) Precautions (P/B 201)
20-60-07-910-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
313	Stabilizer Torsion Box Compartment - Left
314	Stabilizer Torsion Box Compartment - Right

D. Access Panels

Number	Name/Location
311BL	Stabilizer Trim Access Door

E. Zonal Inspection

SUBTASK 05-41-03-010-002

(1) Open this access panel:

Number	Name/Location
311BL	Stabilizer Trim Access Door

SUBTASK 05-41-03-210-003

(2) Do the zonal inspection following the procedures in Enhanced Zonal Inspection Program (EZAP) Precautions, TASK 05-00-00-910-802.

(3) Perform an internal zonal inspection (GV) of the stabilizer torsion box compartment - Section 48, Sta 1088 to Sta 1156. (EZAP)

SUBTASK 05-41-03-910-002

(4) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-910-801 for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

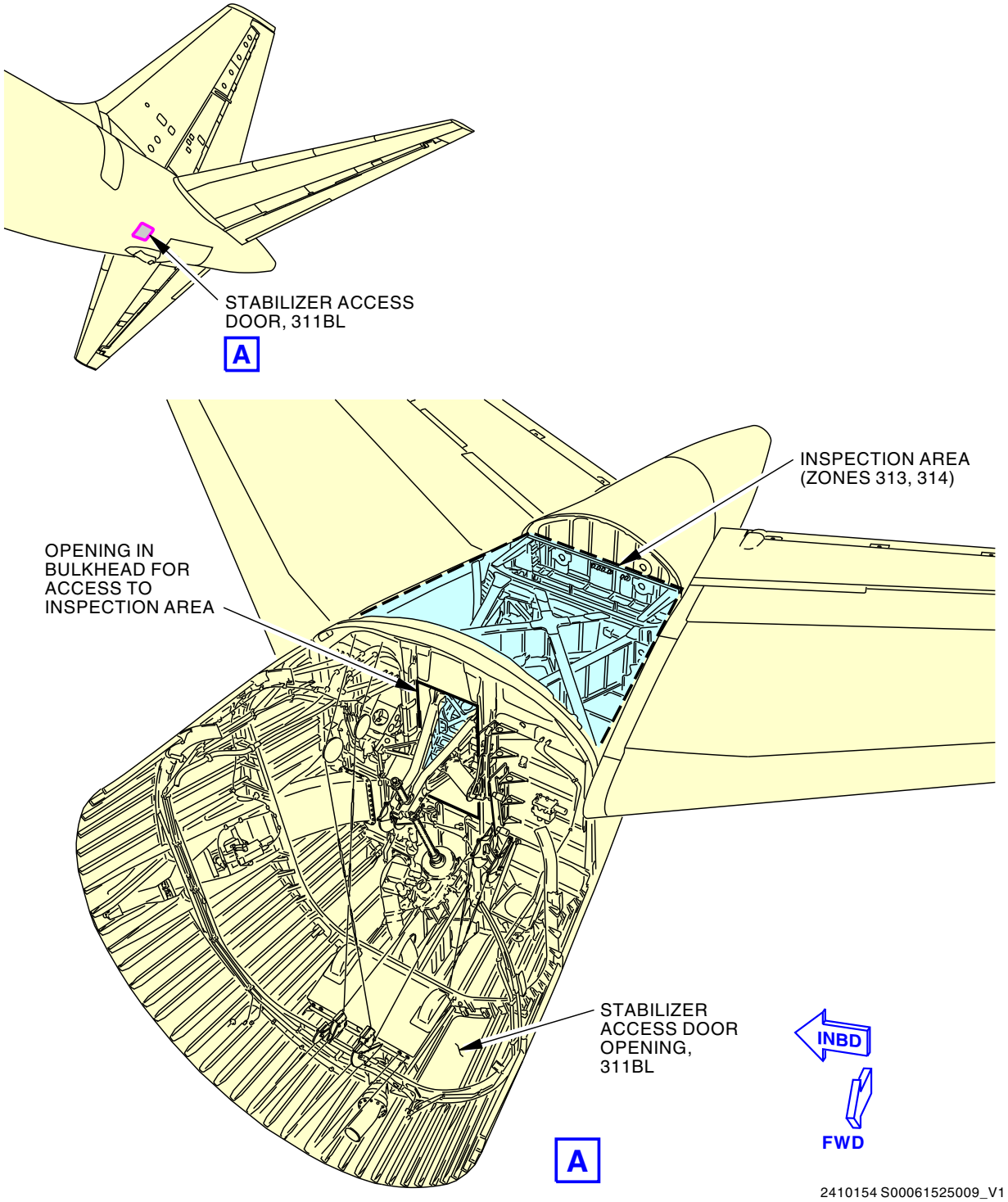
SUBTASK 05-41-03-410-002

(5) Close this access panel:

Number	Name/Location
311BL	Stabilizer Trim Access Door

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Stabilizer Torsion Box Compartment General Visual (Internal)
Figure 204/05-41-03-990-803

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-03-210-831

5. EXTERNAL - ZONAL (GVI): Stabilizer Torsion Box Compartment

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
313	Stabilizer Torsion Box Compartment - Left
314	Stabilizer Torsion Box Compartment - Right

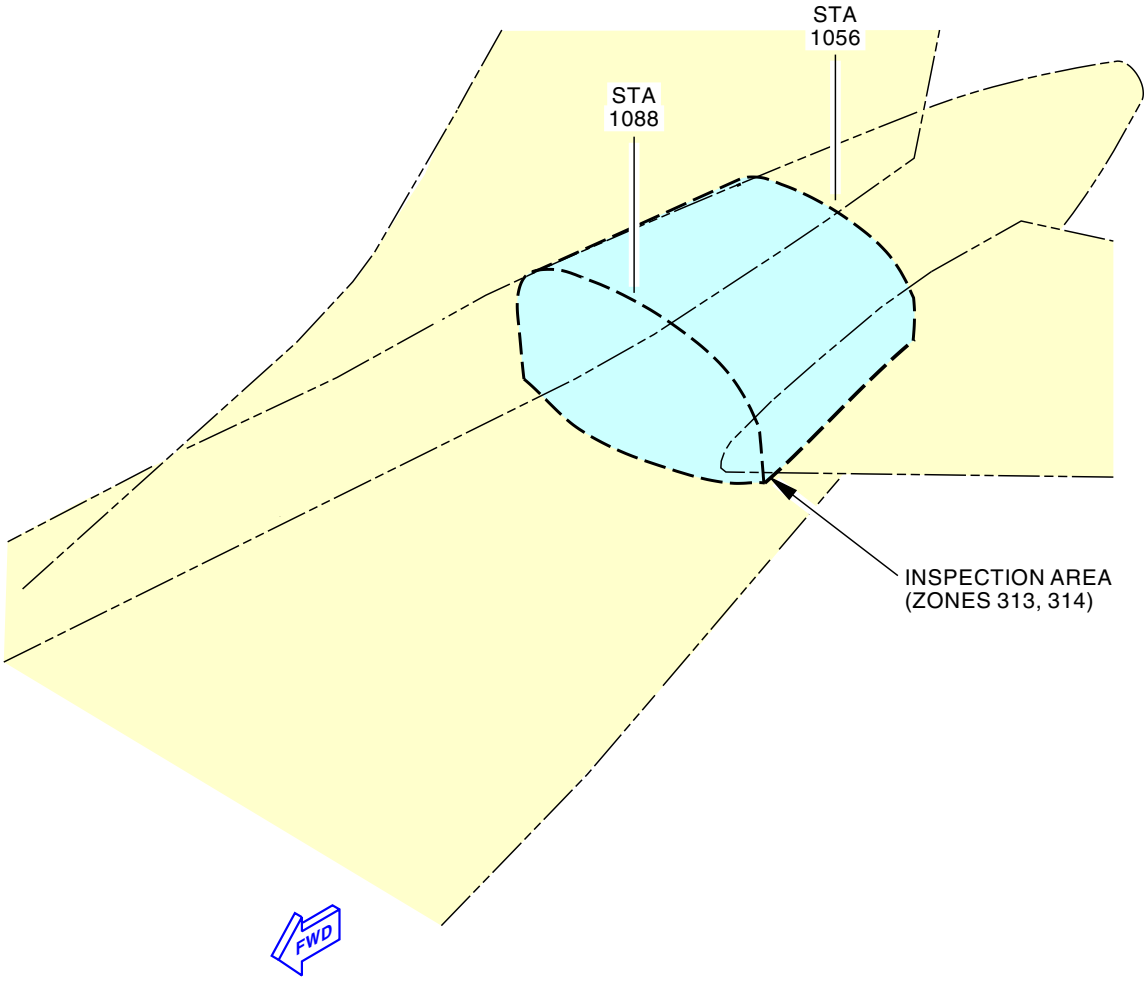
B. Zonal Inspection

SUBTASK 05-41-03-210-031

(1) Do a General Visual Inspection of the stabilizer torsion box compartment.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



2545860 S0000601536_V2

Stabilizer Torsion Box Compartment General Visual (External)
Figure 205/05-41-03-990-831

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-41-03-210-804

6. INTERNAL - ZONAL (GV): APU Compartment

(Figure 206)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This Zonal inspection procedure satisfies the required EZAP-derived Zonal inspection requirement for this zone.

B. References

Reference	Title
05-00-00-910-802	Enhanced Zonal Inspection Program (EZAP) Precautions (P/B 201)
20-60-07-910-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
315	APU Compartment - Left
316	APU Compartment - Right

D. Access Panels

Number	Name/Location
315A	APU Cowl Door

E. Zonal Inspection

SUBTASK 05-41-03-010-003

(1) Open this access panel:

Number	Name/Location
315A	APU Cowl Door

SUBTASK 05-41-03-210-004

(2) Do the zonal inspection following the procedures in Enhanced Zonal Inspection Program (EZAP) Precautions, TASK 05-00-00-910-802.

(3) Perform an internal zonal inspection (GV) of the APU compartment - Section 48, Sta 1088 to Sta 1156. (EZAP)

SUBTASK 05-41-03-910-003

(4) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-910-801 for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

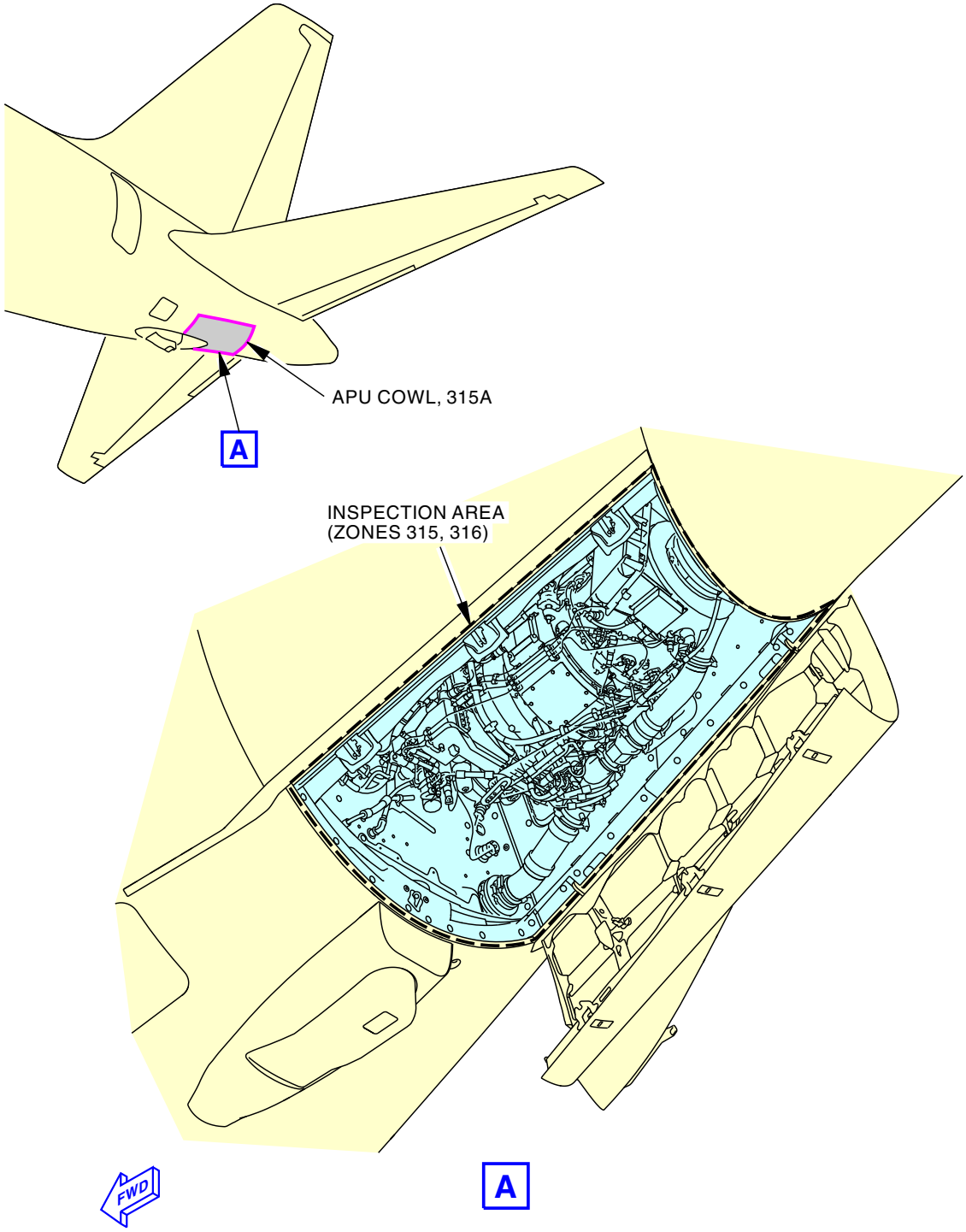
SUBTASK 05-41-03-410-003

(5) Close this access panel:

Number	Name/Location
315A	APU Cowl Door

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details



APU Compartment - General Visual (Internal)
Figure 206/05-41-03-990-804

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-03-210-832

7. EXTERNAL - ZONAL (GVI): APU Compartment

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
315	APU Compartment - Left
316	APU Compartment - Right

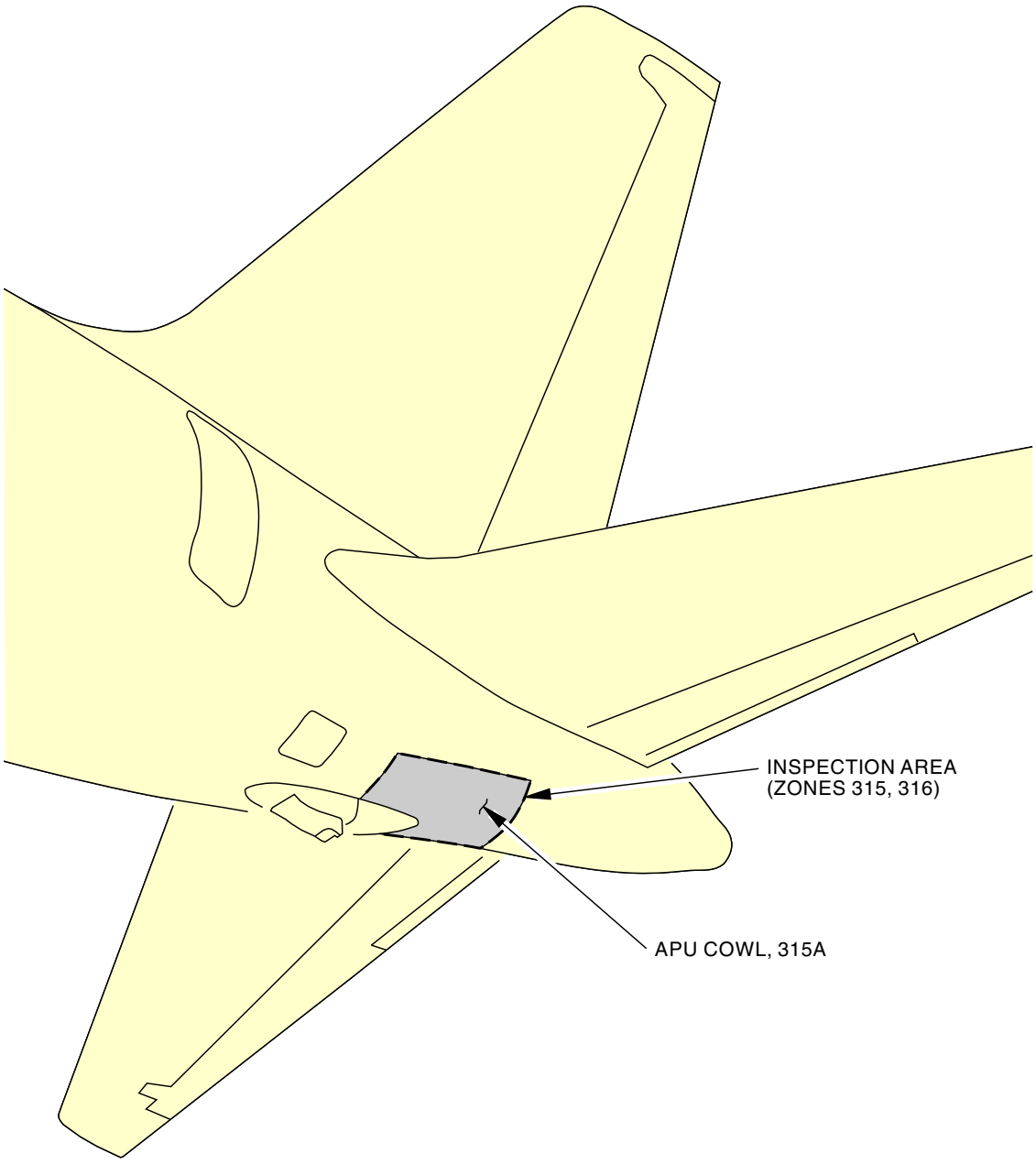
B. Zonal Inspection

SUBTASK 05-41-03-210-032

(1) Do a General Visual Inspection of the APU Compartment.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



2545969 S0000601537_V1

APU Compartment General Visual (External)
Figure 207/05-41-03-990-832

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-41-03-210-805

8. INTERNAL - ZONAL (GV): Tail Cone

(Figure 208)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This Zonal inspection procedure satisfies the required EZAP-derived Zonal inspection requirement for this zone.

B. References

Reference	Title
05-00-00-910-802	Enhanced Zonal Inspection Program (EZAP) Precautions (P/B 201)
20-60-07-910-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
317	Tail Cone Compartment - Left
318	Tail Cone Compartment - Right

D. Access Panels

Number	Name/Location
318BR	Tailcone Access Door

E. Zonal Inspection

SUBTASK 05-41-03-010-004

(1) Open this access panel:

Number	Name/Location
318BR	Tailcone Access Door

SUBTASK 05-41-03-210-005

(2) Do the zonal inspection following the procedures in Enhanced Zonal Inspection Program (EZAP) Precautions, TASK 05-00-00-910-802.

(3) Perform an internal zonal inspection (GV) of the tail cone - Section 48, Sta 1156 to Sta 1217. (EZAP)

SUBTASK 05-41-03-910-004

(4) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-910-801 for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

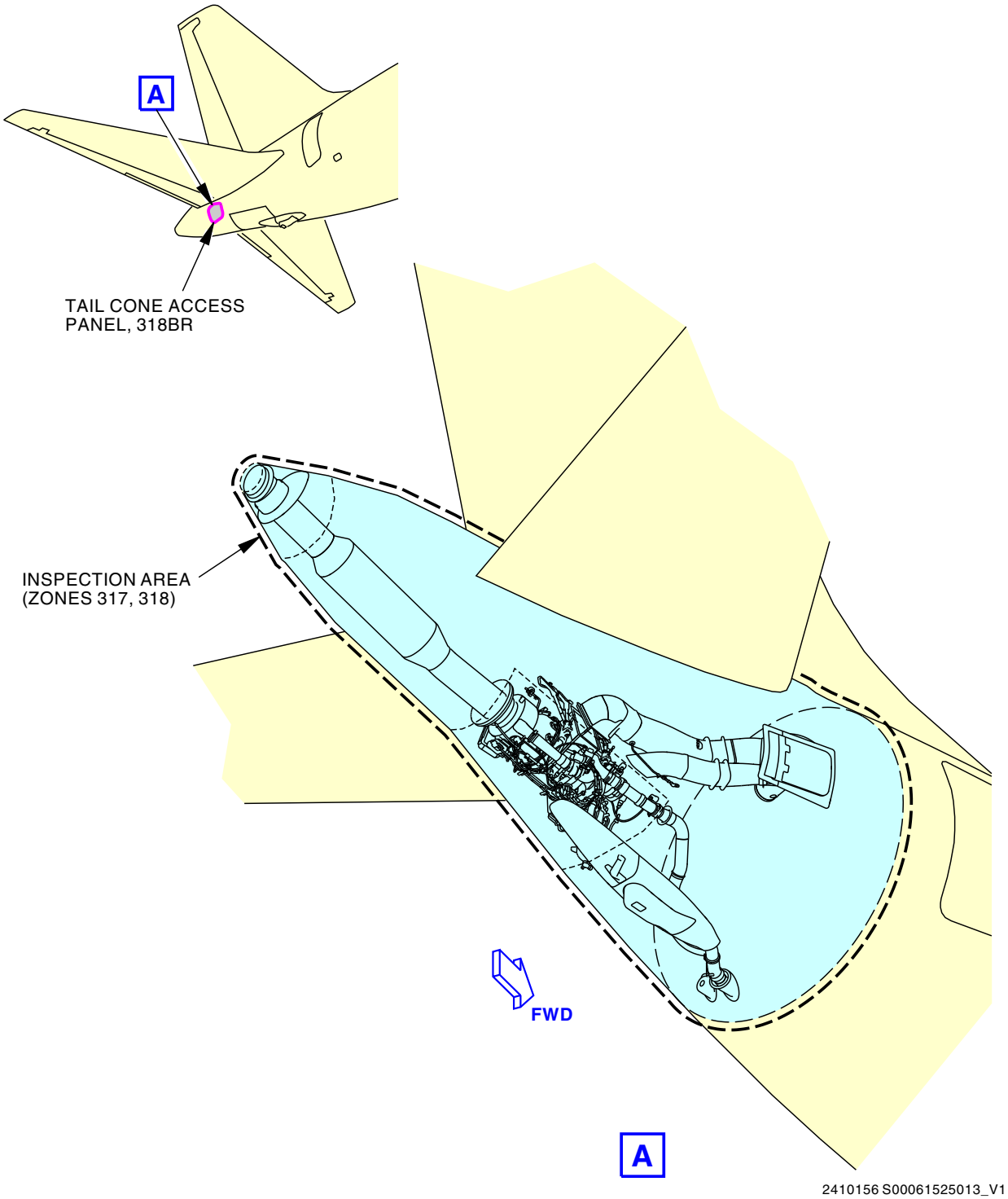
SUBTASK 05-41-03-410-004

(5) Close this access panel:

Number	Name/Location
318BR	Tailcone Access Door

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Tail Cone - General Visual (Internal)
Figure 208/05-41-03-990-805

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-03-210-833

9. EXTERNAL - ZONAL (GVI): Tail Cone

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
317	Tail Cone Compartment - Left
318	Tail Cone Compartment - Right

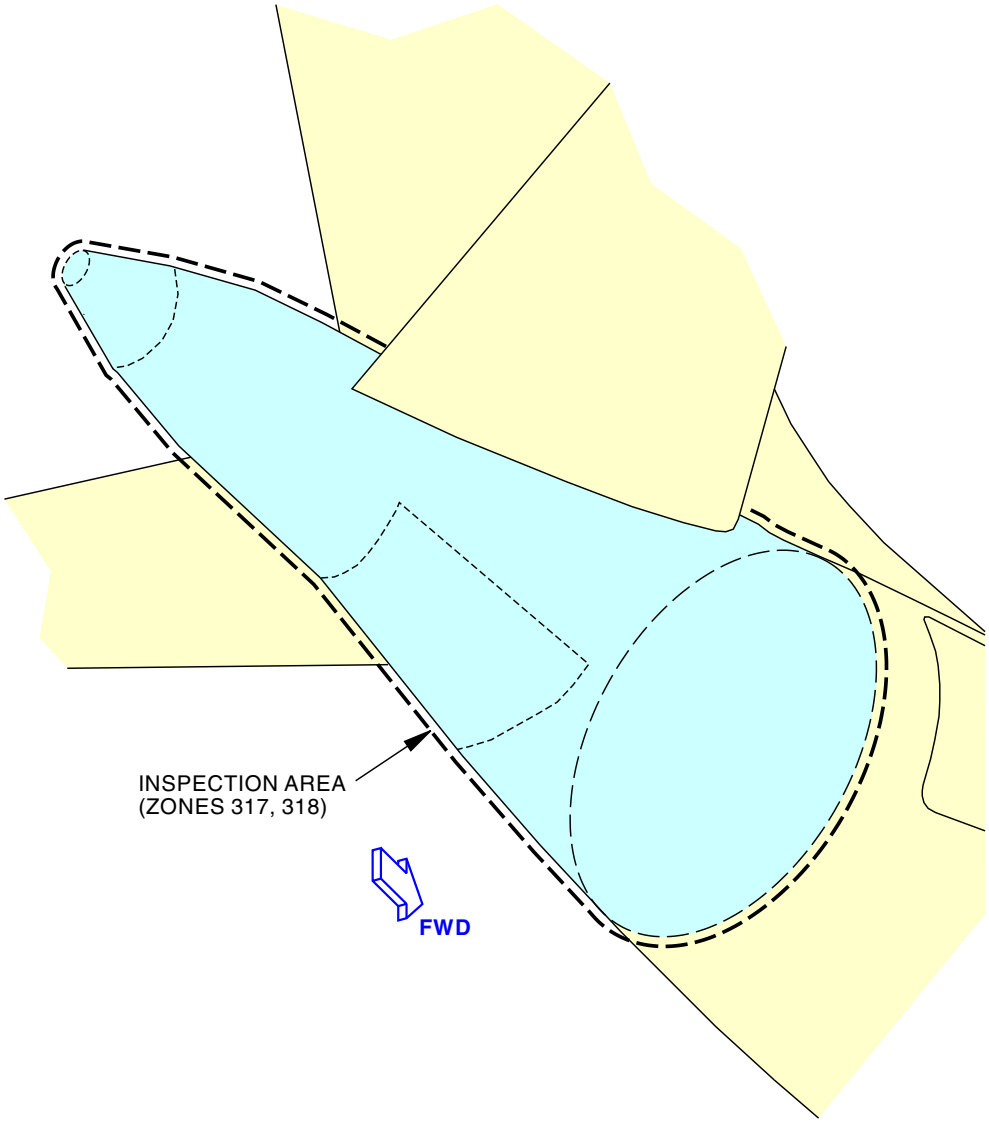
B. Zonal Inspection

SUBTASK 05-41-03-210-033

(1) Do a General Visual Inspection of the tail cone.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



2545977 S0000601538_V1

Tail Cone - General Visual (External)
Figure 209/05-41-03-990-833

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-03-210-806

10. EXTERNAL - ZONAL (GV): VERTICAL FIN AND HORIZONTAL STABILIZER

(Figure 210)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
320	Subzone - Vertical Fin and Rudder
330	Subzone - Left Horizontal Stabilizer and Elevator
340	Subzone - Right Horizontal Stabilizer and Elevator

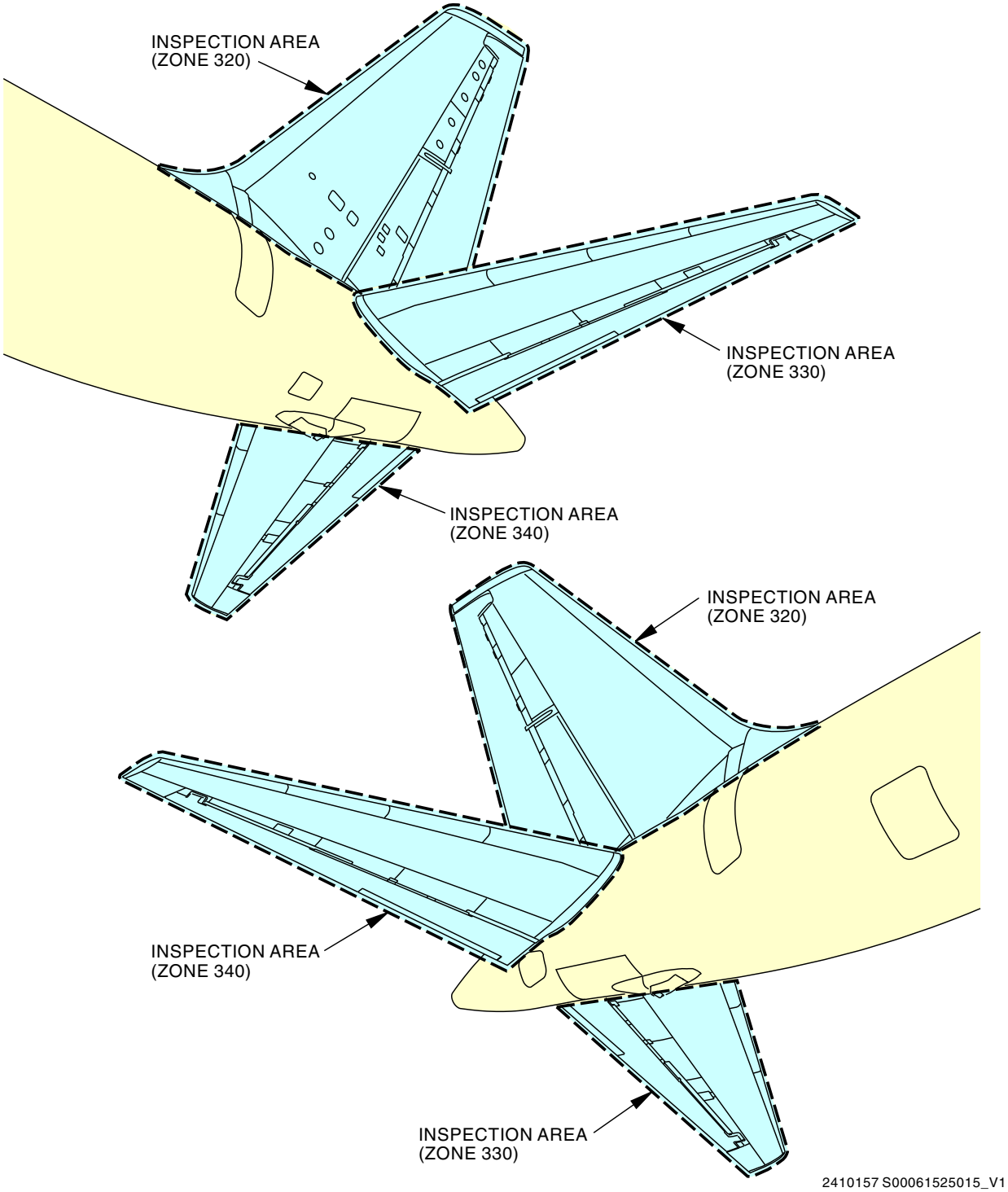
B. Zonal Inspection

SUBTASK 05-41-03-210-006

(1) Do a General Visual inspection of the vertical fin and horizontal stabilizer. Inspection is accomplished from the ground, without the use of stands or ladders. No additional access panel required.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Vertical Fin and Horizontal Stabilizer General Visual (External)
Figure 210/05-41-03-990-806

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-03-210-807

11. EXTERNAL - ZONAL (GV): VERTICAL FIN - DORSAL FIN

(Figure 211)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
321	Vertical Fin - Dorsal Fin

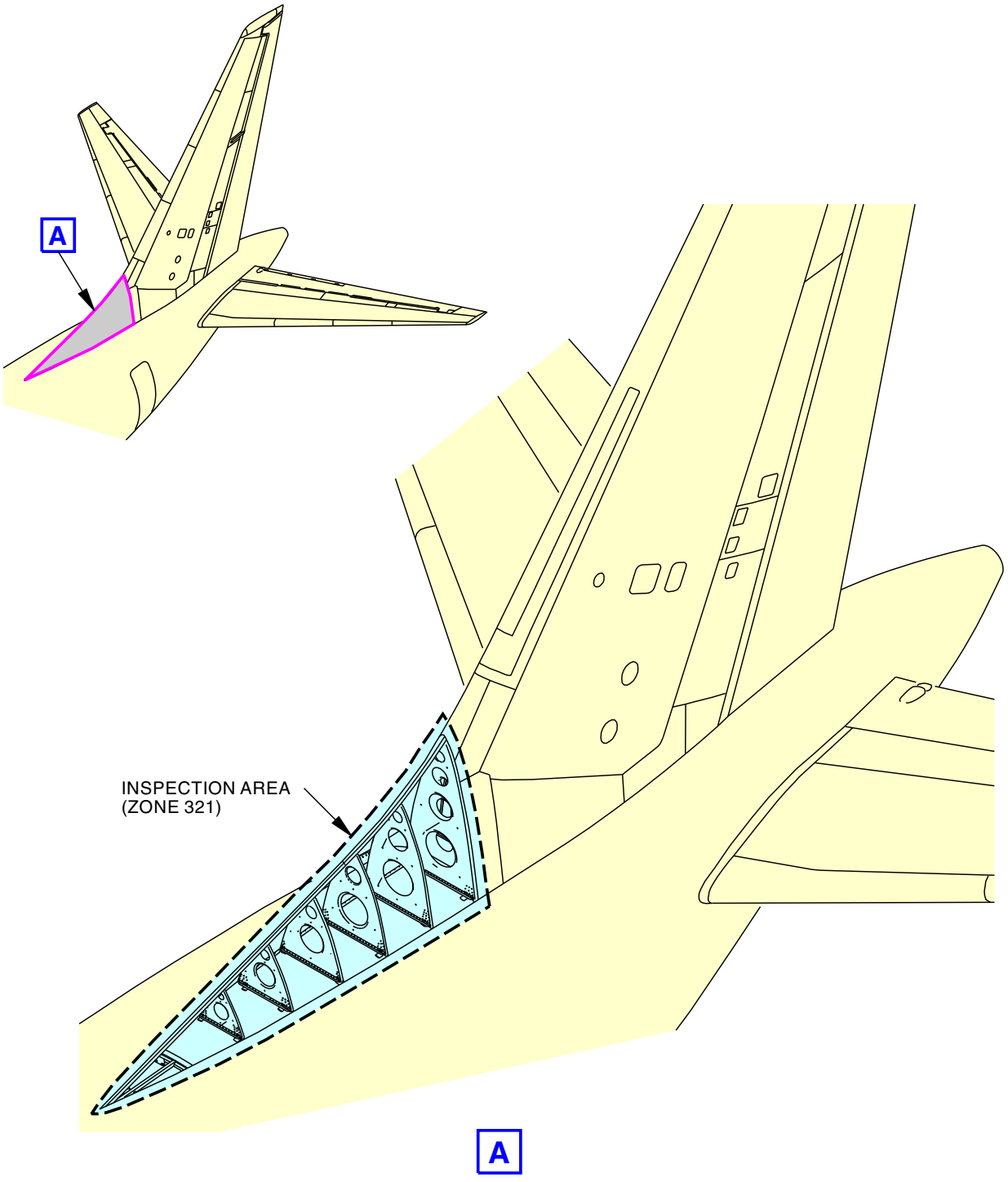
B. Zonal Inspection

SUBTASK 05-41-03-210-007

(1) Do a General Visual inspection of the vertical fin - dorsal fin.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Dorsal Fin - Vertical Fin General Visual (External)
Figure 211/05-41-03-990-807

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-03-210-834

12. INTERNAL - ZONAL (GVI): Vertical Fin - Dorsal Fin

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
321	Vertical Fin - Dorsal Fin

B. Access Panels

Number	Name/Location
321A	Vertical Fin, Dorsal Fin

C. Zonal Inspection

SUBTASK 05-41-03-010-013

(1) Open this access panel:

Number	Name/Location
321A	Vertical Fin, Dorsal Fin

SUBTASK 05-41-03-210-034

(2) Do a General Visual Inspection of the Vertical Fin - Dorsal Fin.

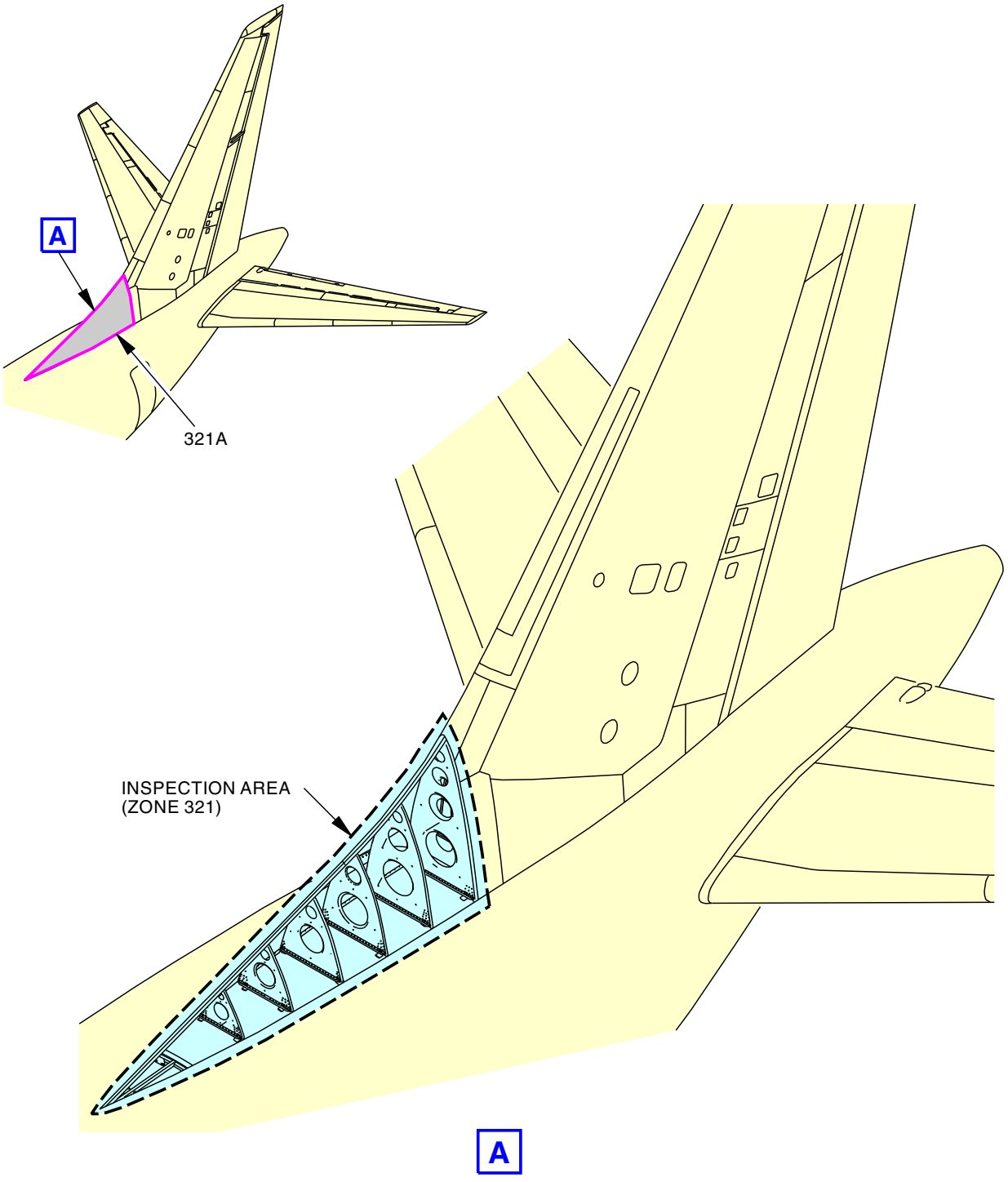
SUBTASK 05-41-03-410-013

(3) Close this access panel:

Number	Name/Location
321A	Vertical Fin, Dorsal Fin

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Dorsal Fin - Vertical Fin General Visual (Internal)
Figure 212/05-41-03-990-834

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-03-210-808

13. EXTERNAL - ZONAL (GV): VERTICAL FIN - LEADING EDGE

(Figure 213)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
322	Vertical Fin - Removable Fin Leading Edge

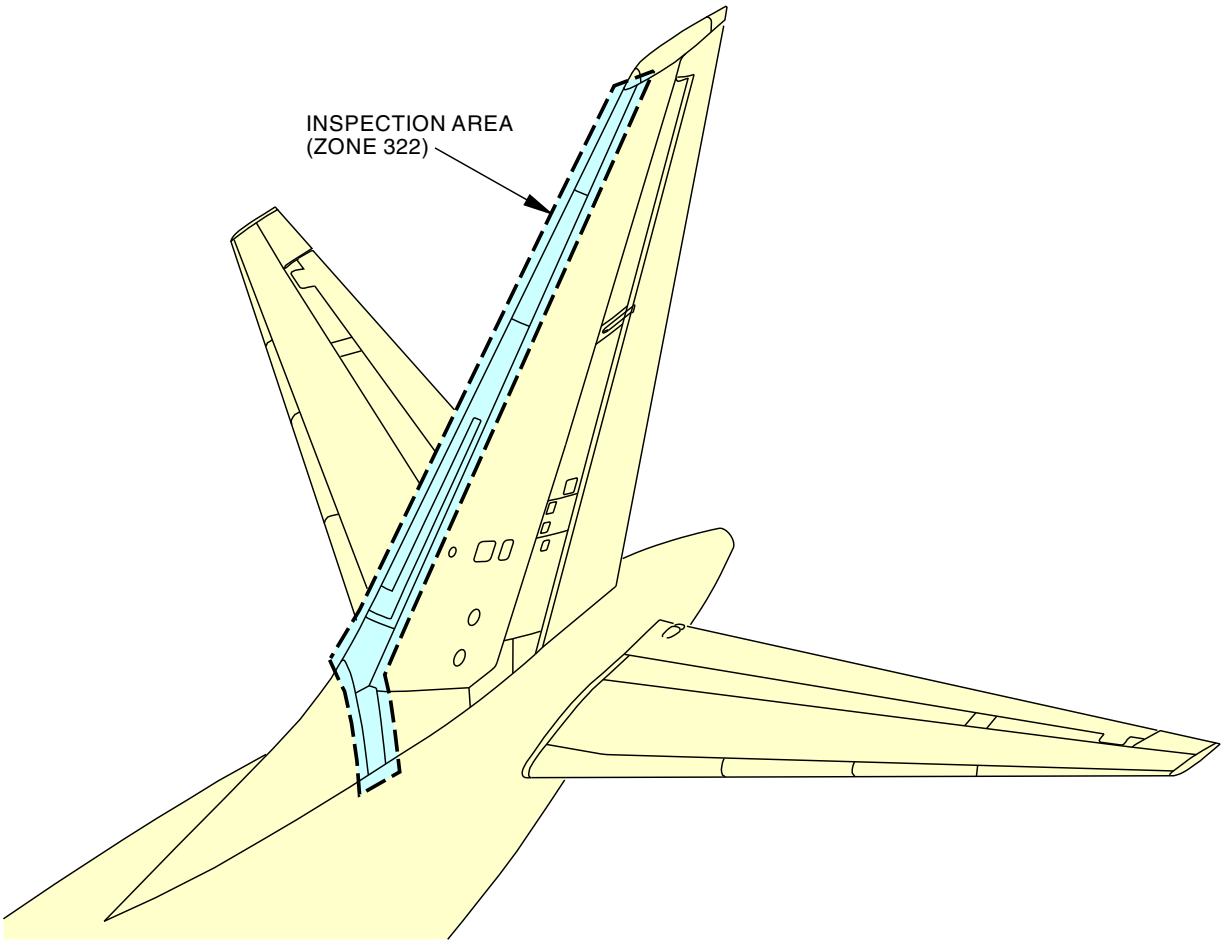
B. Zonal Inspection

SUBTASK 05-41-03-210-008

(1) Do a General Visual inspection of the vertical fin - leading edge.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



2410159 S00061525019_V1

Leading Edge - Vertical Fin General Visual (External)
Figure 213/05-41-03-990-808

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-03-210-809

14. INTERNAL - ZONAL (GV): VERTICAL FIN - LEADING EDGE

(Figure 214)

NOTE: This procedure is a scheduled maintenance task.

A. References

Reference	Title
51-22-00-390-809	Aerodynamic Smoother Application (P/B 201)
737-678 SRM 51-10-01	Structural Repair Manual

B. Consumable Materials

Reference	Description	Specification
A02315	Sealant - Low Density, Synthetic Rubber. 2 Part	BMS5-142 Type II

C. Location Zones

Zone	Area
322	Vertical Fin - Removable Fin Leading Edge

D. Access Panels

Number	Name/Location
322AT	Vertical Fin, Removable Leading Edge
322BT	Vertical Fin, Removable Leading Edge
322CT	Vertical Fin, Removable Leading Edge

E. Zonal Inspection

SUBTASK 05-41-03-010-005

(1) Open these access panels:

Number	Name/Location
322AT	Vertical Fin, Removable Leading Edge
322BT	Vertical Fin, Removable Leading Edge
322CT	Vertical Fin, Removable Leading Edge

SUBTASK 05-41-03-210-009

(2) Do a General Visual inspection of the vertical fin - leading edge.

SUBTASK 05-41-03-410-005

(3) Close these access panels:

Number	Name/Location
322AT	Vertical Fin, Removable Leading Edge
322BT	Vertical Fin, Removable Leading Edge
322CT	Vertical Fin, Removable Leading Edge

SUBTASK 05-41-03-390-001

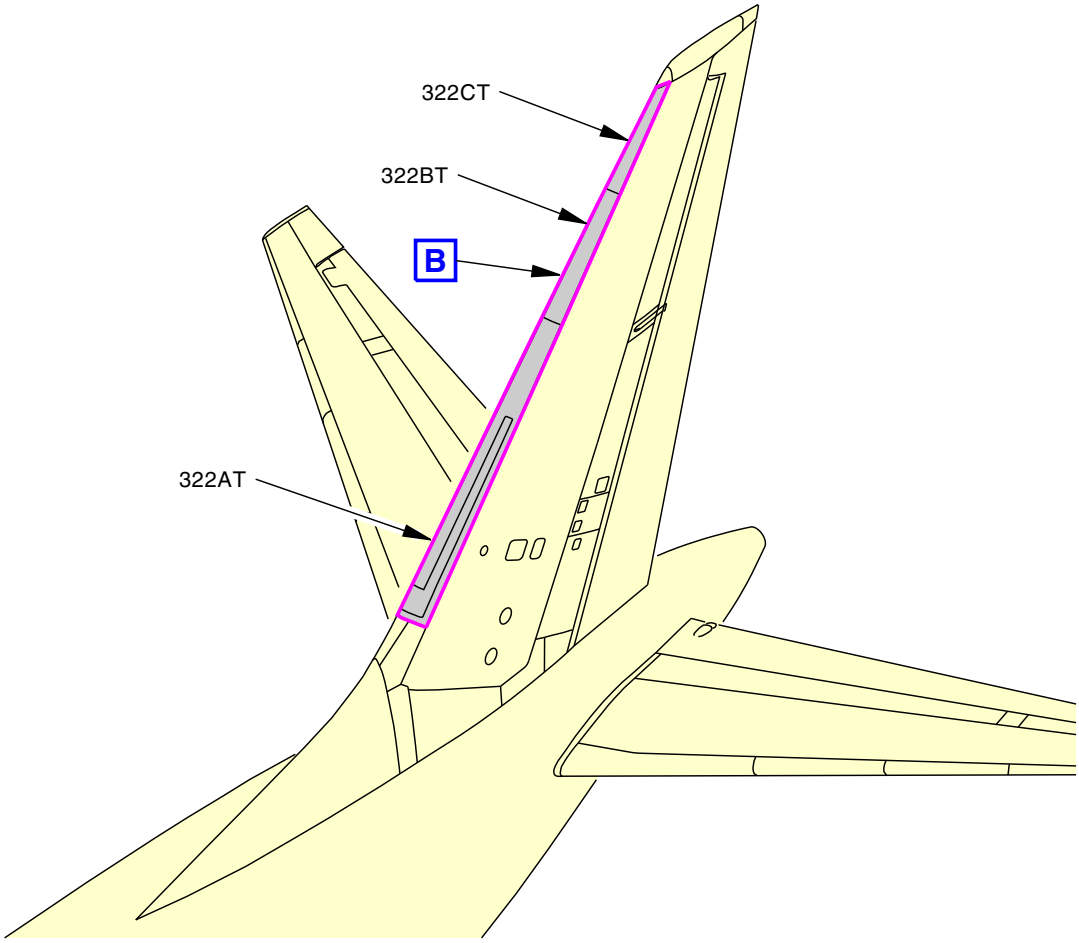
(4) Apply an aerodynamic smoother sealant, A02315, to all non-bonded structural components contacting exterior skins.

NOTE: Sealant does not need to be applied to gaps between panels that are used for regular access as long as they are less than limits given in the Structural Repair Manual (737-678 SRM 51-10-01).

(a) Do this task: Aerodynamic Smoother Application, TASK 51-22-00-390-809.

END OF TASK

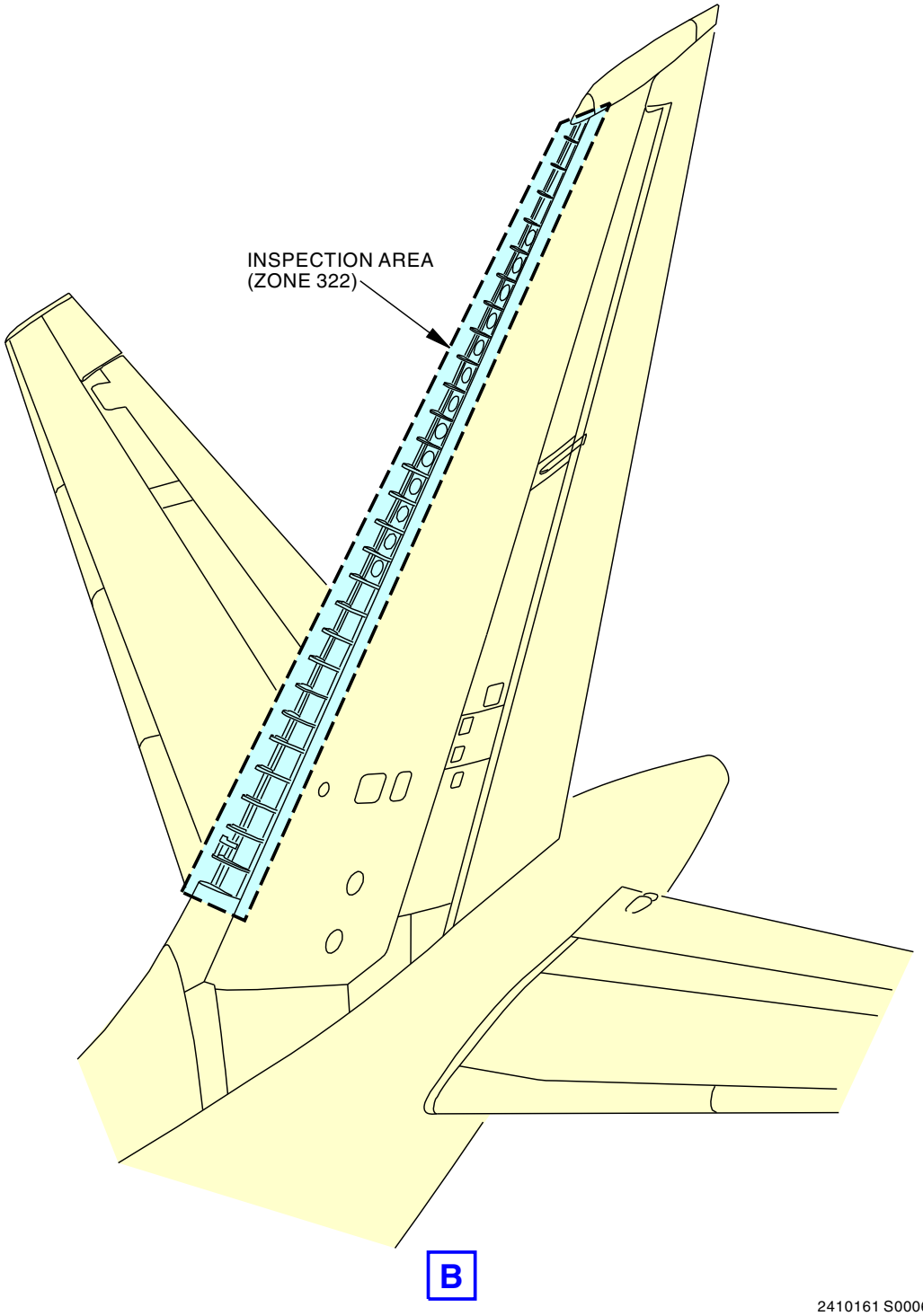
ECCN 9E991 BOEING PROPRIETARY - See title page for details



2410160 S00061525021_V3

Leading Edge - Vertical Fin General Visual (Internal)
Figure 214/05-41-03-990-809 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



2410161 S00061525022_V2

Leading Edge - Vertical Fin General Visual (Internal)
Figure 214/05-41-03-990-809 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-03-210-840

15. INTERNAL - ZONAL (GV): VERTICAL FIN - LEADING EDGE - HF ANTENNA AREA

(Figure 215)

NOTE: This procedure is a scheduled maintenance task.

A. References

Reference	Title
51-22-00-390-809	Aerodynamic Smoother Application (P/B 201)
737-678 SRM 51-10-01	Structural Repair Manual

B. Consumable Materials

Reference	Description	Specification
A02315	Sealant - Low Density, Synthetic Rubber. 2 Part	BMS5-142 Type II

C. Location Zones

Zone	Area
322	Vertical Fin - Removable Fin Leading Edge

D. Access Panels

Number	Name/Location
322AL	Vertical Fin, Fixed Leading Edge

E. Zonal Inspection

SUBTASK 05-41-03-040-001

WARNING REMOVE THE ELECTRICAL POWER FROM EACH HF COMMUNICATION SYSTEM BEFORE YOU REMOVE THE LEADING EDGE SECTIONS. HF SIGNALS CAN CAUSE ELECTRICAL SHOCKS AND INJURY TO PERSONS.

(1) Open these circuit breakers and install safety tags:

CAPT Electrical System Panel, P18-2

Row	Col	Number	Name
E	11	C00839	COMMUNICATIONS HF 1

F/O Electrical System Panel, P6-1

Row	Col	Number	Name
D	2	C00857	COMMUNICATIONS HF 2

SUBTASK 05-41-03-010-012

(2) Open this access panel:

Number	Name/Location
322AL	Vertical Fin, Fixed Leading Edge

SUBTASK 05-41-03-210-040

(3) Do a General Visual inspection of the vertical fin - leading edge, high frequency antenna area.

SUBTASK 05-41-03-410-012

(4) Close this access panel:

Number	Name/Location
322AL	Vertical Fin, Fixed Leading Edge

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 05-41-03-390-002

(5) Apply an aerodynamic smoother sealant, A02315, to all non-bonded structural components contacting exterior skins.

NOTE: Sealant does not need to be applied to gaps between panels that are used for regular access as long as they are less than limits given in the Structural Repair Manual (737-678 SRM 51-10-01).

(a) Do this task: Aerodynamic Smoother Application, TASK 51-22-00-390-809.

SUBTASK 05-41-03-860-001

(6) Remove the safety tags and close these circuit breakers:

CAPT Electrical System Panel, P18-2

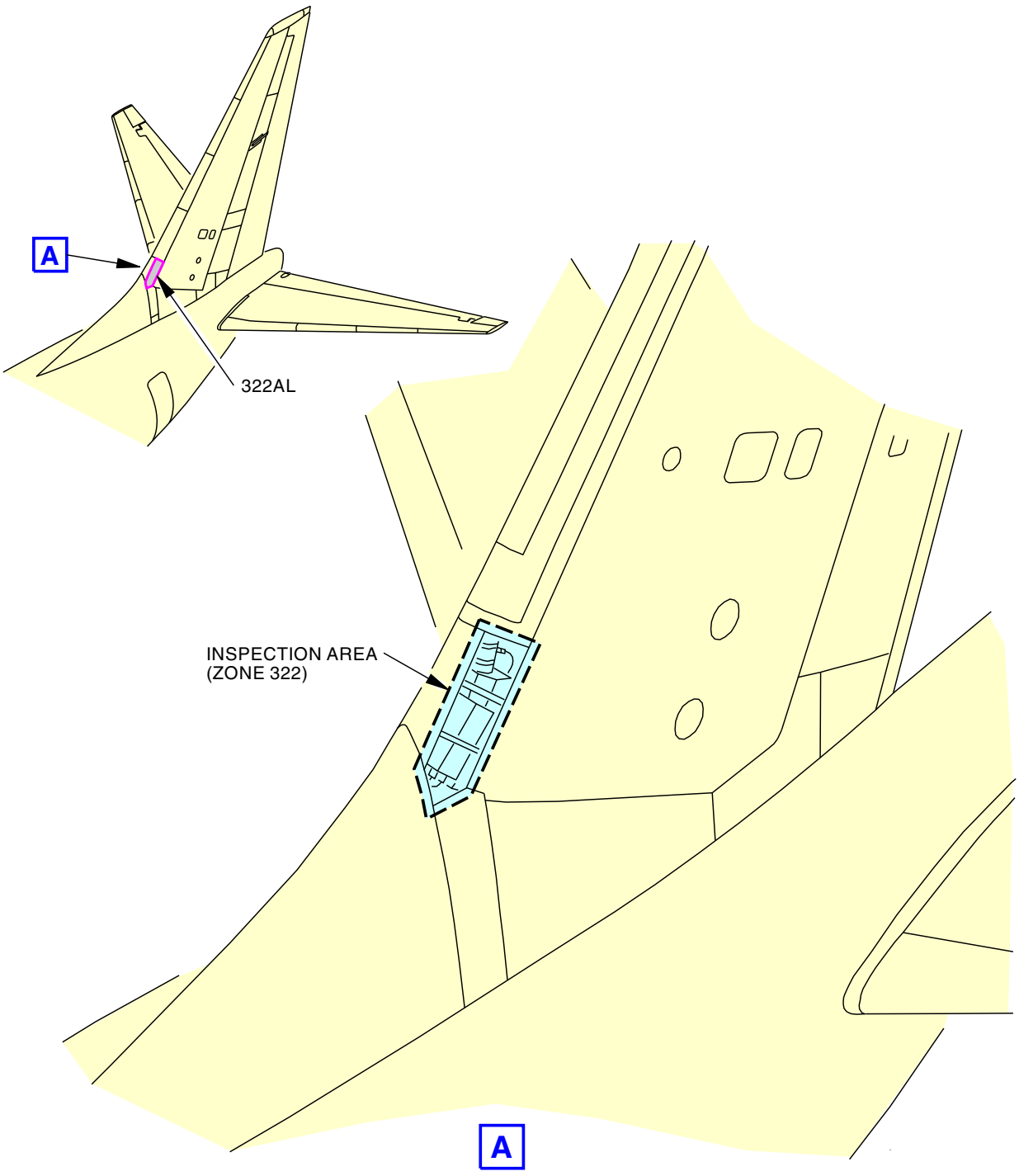
Row	Col	Number	Name
E	11	C00839	COMMUNICATIONS HF 1

F/O Electrical System Panel, P6-1

Row	Col	Number	Name
D	2	C00857	COMMUNICATIONS HF 2

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Leading Edge HF Antenna Area - Vertical Fin General Visual (Internal)
Figure 215/05-41-03-990-840

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-41-03-210-810

16. INTERNAL - ZONAL (GV): Vertical Fin - Front Spar to Rear Spar

(Figure 216)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This Zonal inspection procedure satisfies the required EZAP-derived Zonal inspection requirement for this zone.

B. References

Reference	Title
05-00-00-910-802	Enhanced Zonal Inspection Program (EZAP) Precautions (P/B 201)
20-60-07-910-801	Protection of the EWIS During Maintenance (P/B 201)
51-22-00-390-809	Aerodynamic Smoother Application (P/B 201)
737-678 SRM 51-10-01	Structural Repair Manual

C. Consumable Materials

Reference	Description	Specification
A02315	Sealant - Low Density, Synthetic Rubber. 2 Part	BMS5-142 Type II

D. Location Zones

Zone	Area
323	Vertical Fin - Front Spar To Rear Spar

E. Access Panels

Number	Name/Location
323AL	Vertical Fin, Front Spar Access Door
323BL	Vertical Fin, Forward Fin Access Door
323CL	Vertical Fin, Rear Spar Access Door
323DL	Vertical Fin, Access
323EL	Vertical Fin, Access
323FL	Vertical Fin, Access
323GL	Vertical Fin, Access

F. Zonal Inspection

SUBTASK 05-41-03-010-006

(1) Open these access panels:

Number	Name/Location
323AL	Vertical Fin, Front Spar Access Door
323BL	Vertical Fin, Forward Fin Access Door
323CL	Vertical Fin, Rear Spar Access Door
323DL	Vertical Fin, Access
323EL	Vertical Fin, Access
323FL	Vertical Fin, Access
323GL	Vertical Fin, Access

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 05-41-03-210-010

(2) Do the zonal inspection following the procedures in Enhanced Zonal Inspection Program (EZAP) Precautions, TASK 05-00-00-910-802.

(3) Perform an internal zonal inspection (GV) of the vertical fin - front spar to rear spar. (EZAP)

SUBTASK 05-41-03-910-005

(4) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-910-801 for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

SUBTASK 05-41-03-410-006

(5) Close these access panels:

Number	Name/Location
323AL	Vertical Fin, Front Spar Access Door
323BL	Vertical Fin, Forward Fin Access Door
323CL	Vertical Fin, Rear Spar Access Door
323DL	Vertical Fin, Access
323EL	Vertical Fin, Access
323FL	Vertical Fin, Access
323GL	Vertical Fin, Access

SUBTASK 05-41-03-390-003

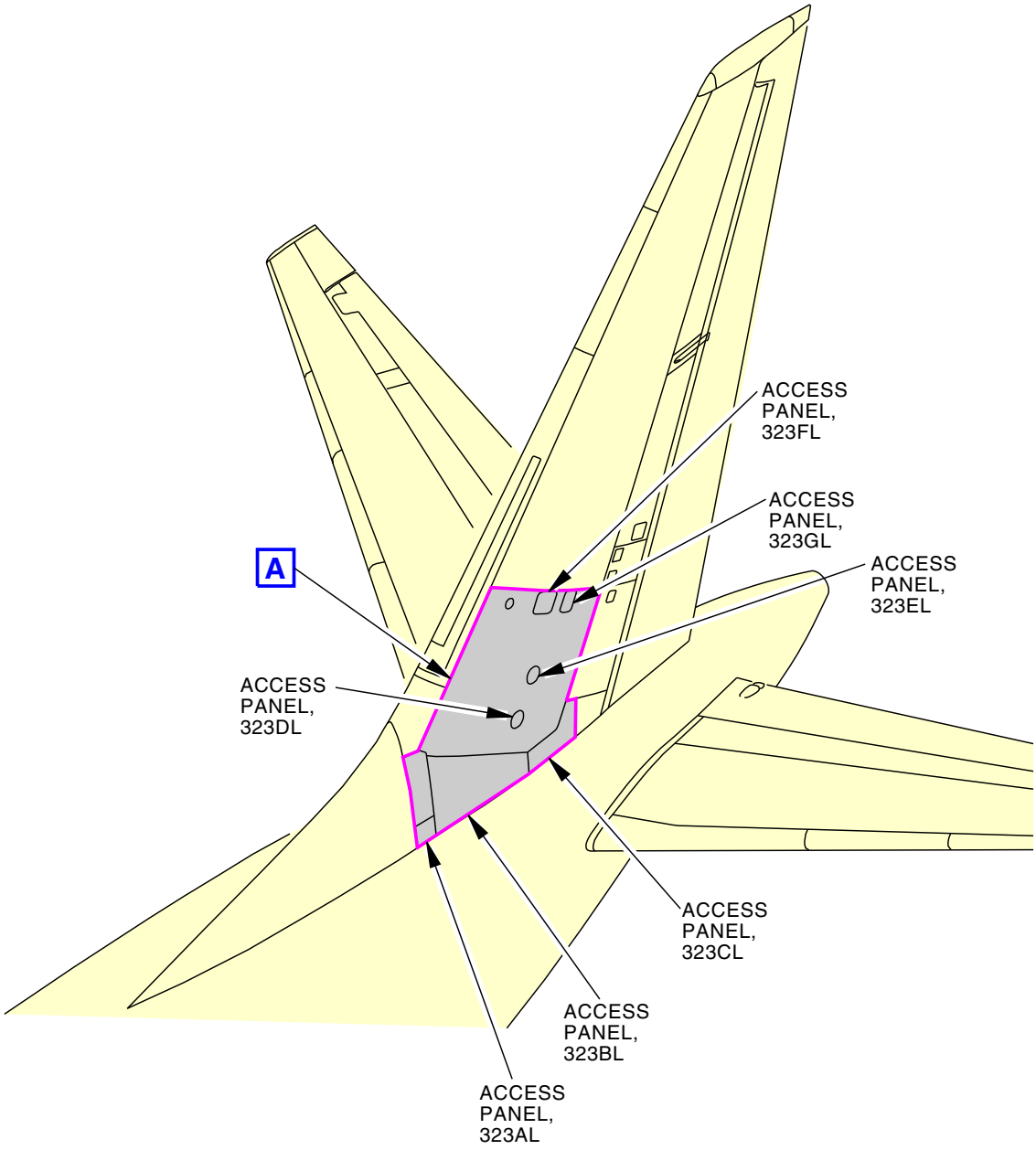
(6) Apply an aerodynamic smoother sealant, A02315, to all non-bonded structural components contacting exterior skins.

NOTE: Sealant does not need to be applied to gaps between panels that are used for regular access as long as they are less than limits given in the Structural Repair Manual (737-678 SRM 51-10-01).

(a) Do this task: Aerodynamic Smoother Application, TASK 51-22-00-390-809.

——— END OF TASK ———

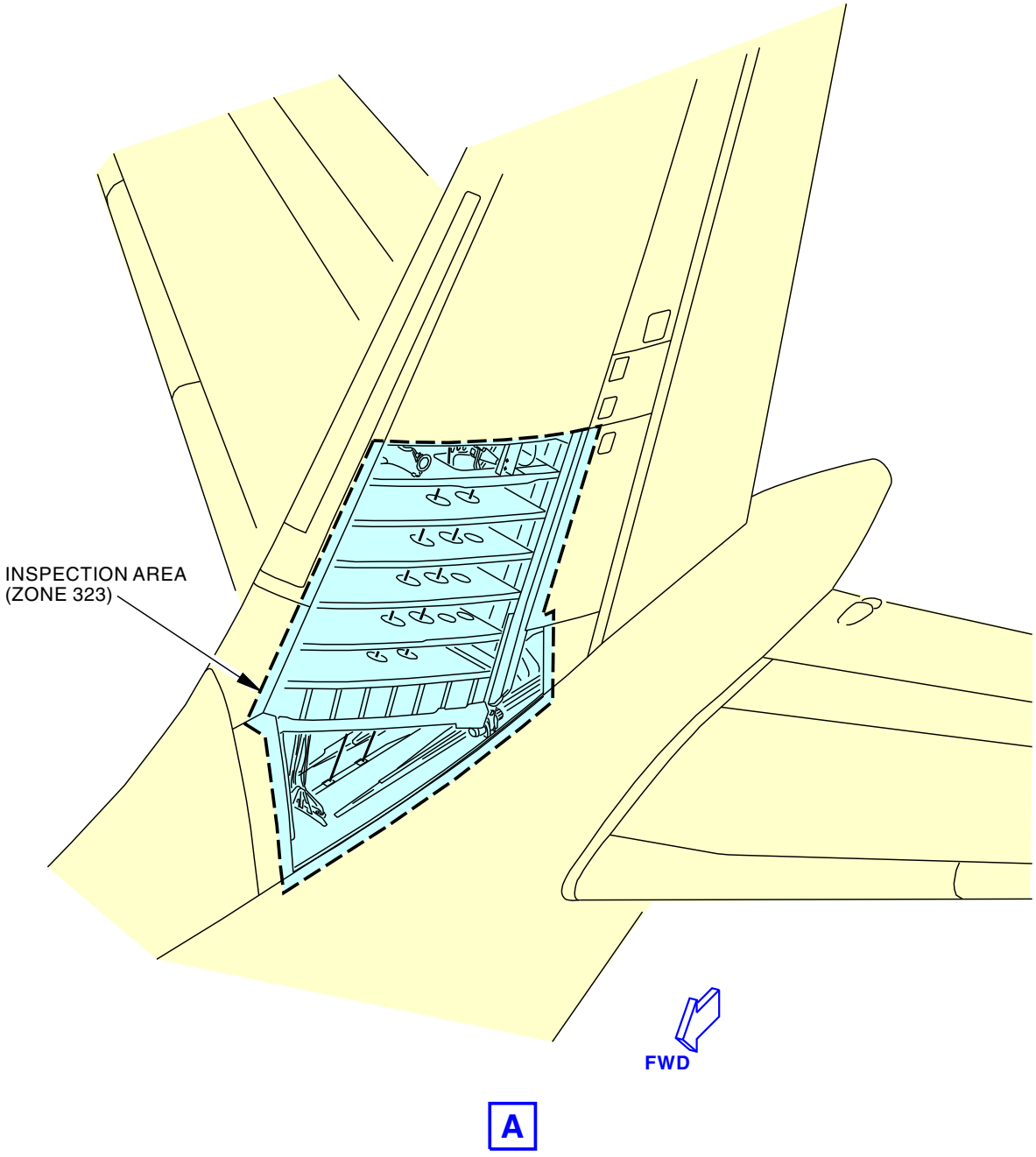
ECCN 9E991 BOEING PROPRIETARY - See title page for details



2410162 S00061525024_V1

Front Spar to Rear Spar - Vertical Fin General Visual (Internal)
Figure 216/05-41-03-990-810 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



2410163 S00061525025_V1

Front Spar to Rear Spar - Vertical Fin General Visual (Internal)
Figure 216/05-41-03-990-810 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-03-210-811

17. EXTERNAL - ZONAL (GV): VERTICAL FIN - FRONT SPAR TO REAR SPAR

(Figure 217)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
323	Vertical Fin - Front Spar To Rear Spar

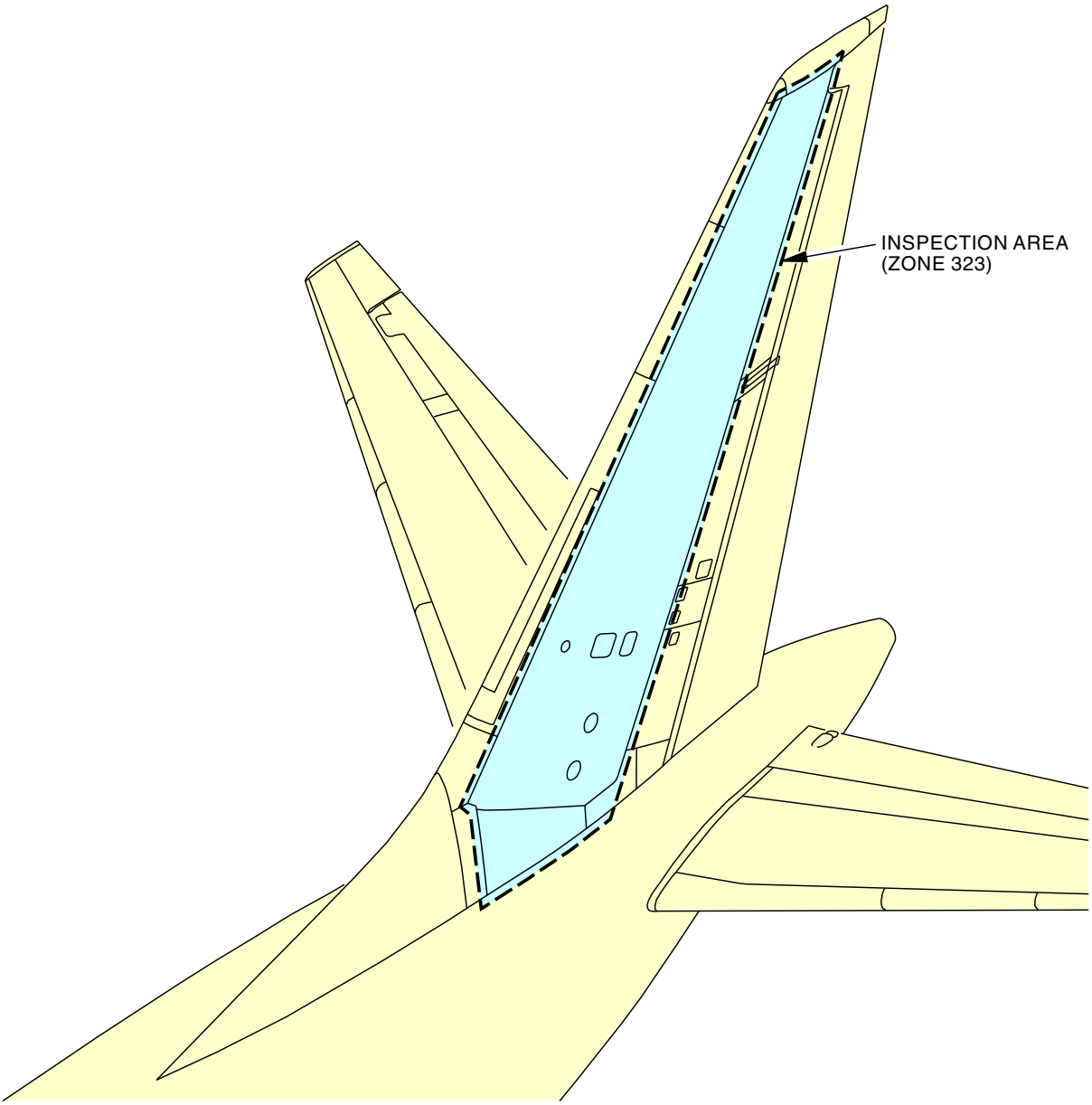
B. Zonal Inspection

SUBTASK 05-41-03-210-011

(1) Do a General Visual inspection of the vertical fin - front spar to rear spar.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



2410164 S00061525027_V1

Front Spar to Rear Spar - Vertical Fin General Visual (External)
Figure 217/05-41-03-990-811

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-41-03-210-812

18. INTERNAL - ZONAL (GV): Vertical Fin - Rear Spar to Trailing Edge

(Figure 218)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This Zonal inspection procedure satisfies the required EZAP-derived Zonal inspection requirement for this zone.

B. References

Reference	Title
05-00-00-910-802	Enhanced Zonal Inspection Program (EZAP) Precautions (P/B 201)
20-60-07-910-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
324	Vertical Fin - Rear Spar To Trailing Edge

D. Access Panels

Number	Name/Location
324AL	Vertical Fin, Aft Fin Access Door
324BL	Vertical Fin, Trailing Edge Access
324DL	Trailing Edge Access
324HL	Vertical Fin, Access

E. Zonal Inspection

SUBTASK 05-41-03-010-007

(1) Open these access panels:

Number	Name/Location
324AL	Vertical Fin, Aft Fin Access Door
324BL	Vertical Fin, Trailing Edge Access
324DL	Trailing Edge Access
324HL	Vertical Fin, Access

SUBTASK 05-41-03-210-012

(2) Do the zonal inspection following the procedures in Enhanced Zonal Inspection Program (EZAP) Precautions, TASK 05-00-00-910-802.

(3) Perform an internal zonal inspection (GV) of the vertical fin - rear spar to trailing edge. (EZAP)

SUBTASK 05-41-03-910-006

(4) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-910-801 for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

SUBTASK 05-41-03-410-007

(5) Close these access panels:

Number	Name/Location
324AL	Vertical Fin, Aft Fin Access Door

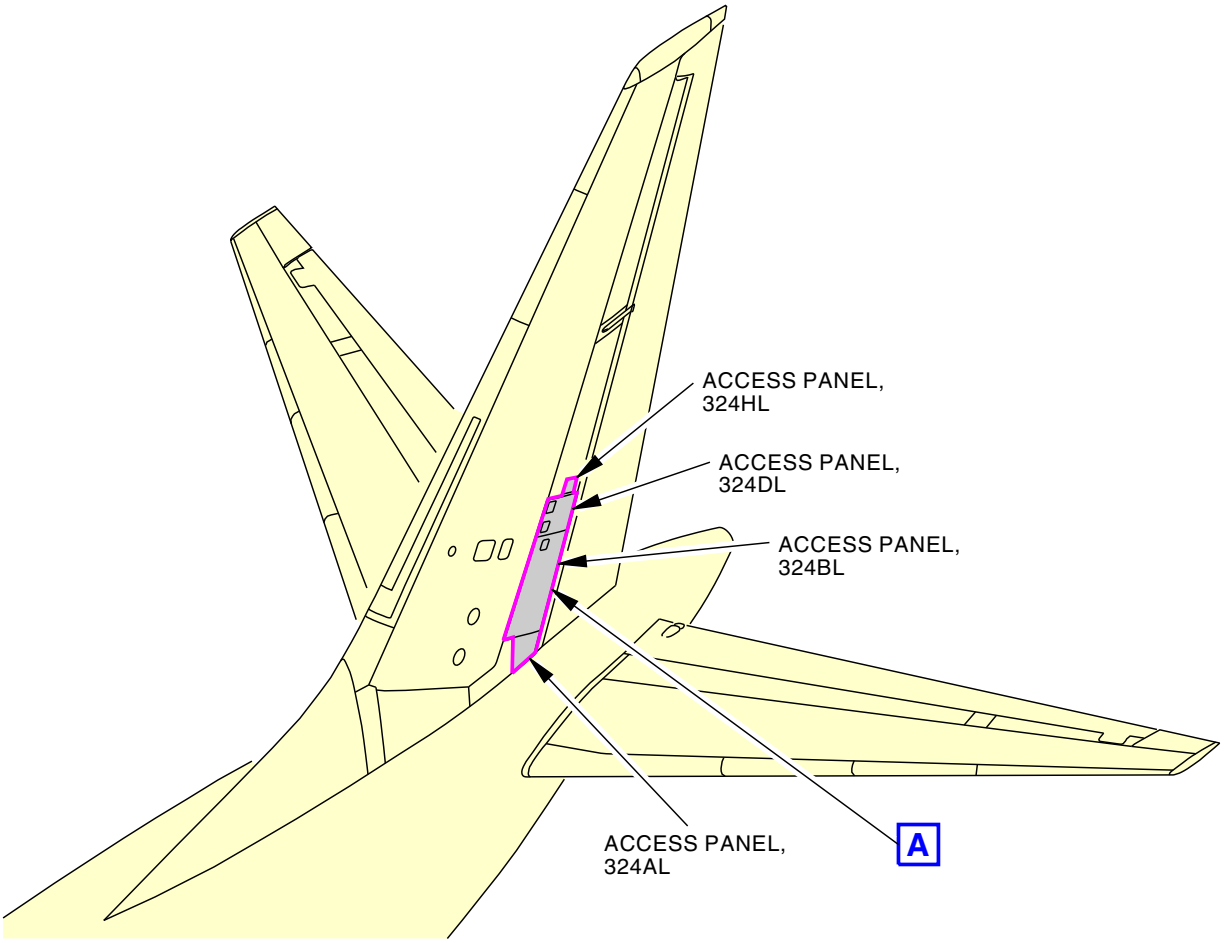
ECCN 9E991 BOEING PROPRIETARY - See title page for details

(Continued)

Number	Name/Location
324BL	Vertical Fin, Trailing Edge Access
324DL	Trailing Edge Access
324HL	Vertical Fin, Access

END OF TASK

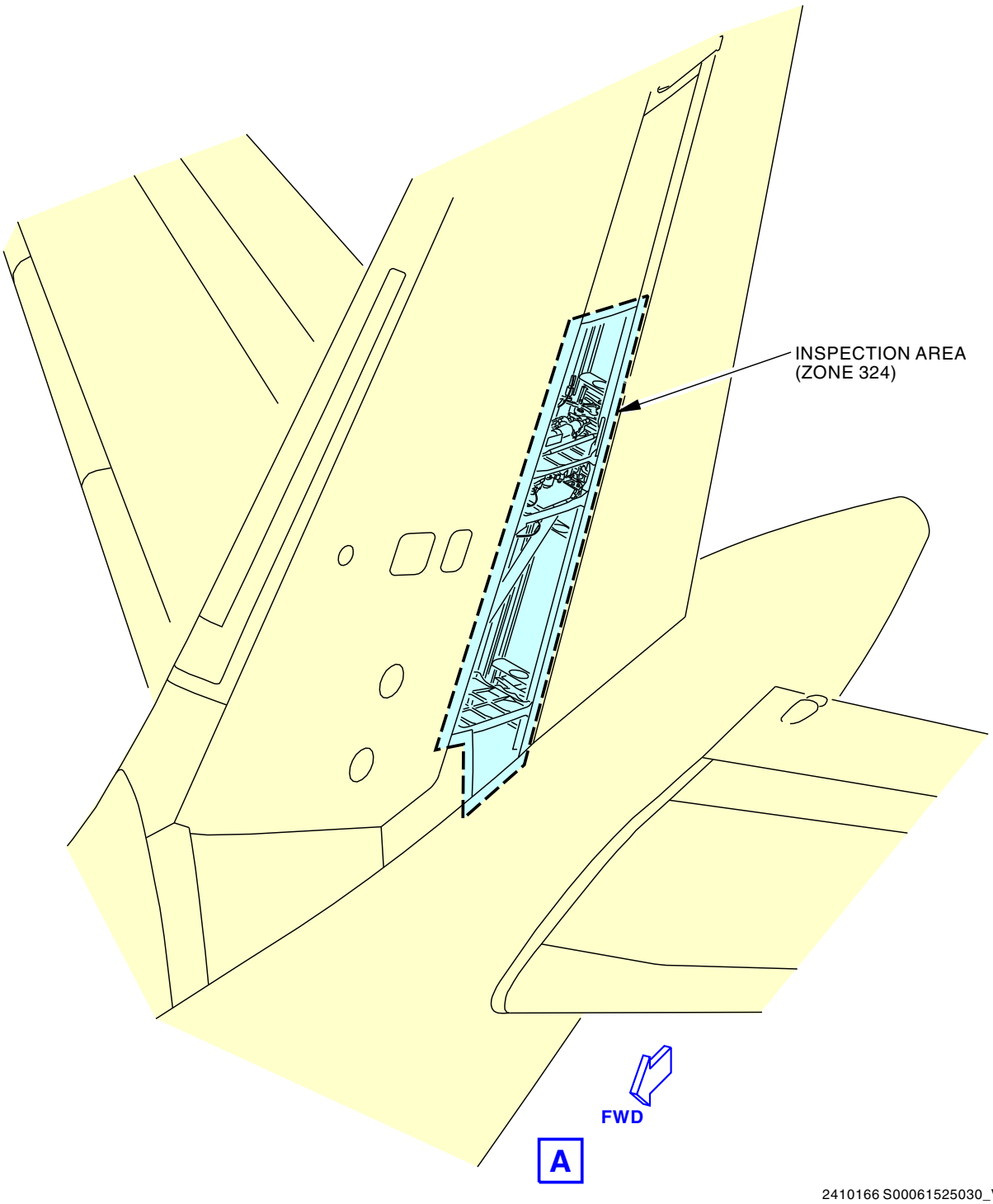
ECCN 9E991 BOEING PROPRIETARY - See title page for details



2410165 S00061525029_V1

Rear Spar to Trailing Edge - Vertical Fin General Visual (Internal)
Figure 218/05-41-03-990-812 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Rear Spar to Trailing Edge - Vertical Fin General Visual (Internal)
Figure 218/05-41-03-990-812 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-03-210-813

19. EXTERNAL - ZONAL (GV): VERTICAL FIN - REAR SPAR TO TRAILING EDGE

(Figure 219)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
324	Vertical Fin - Rear Spar To Trailing Edge

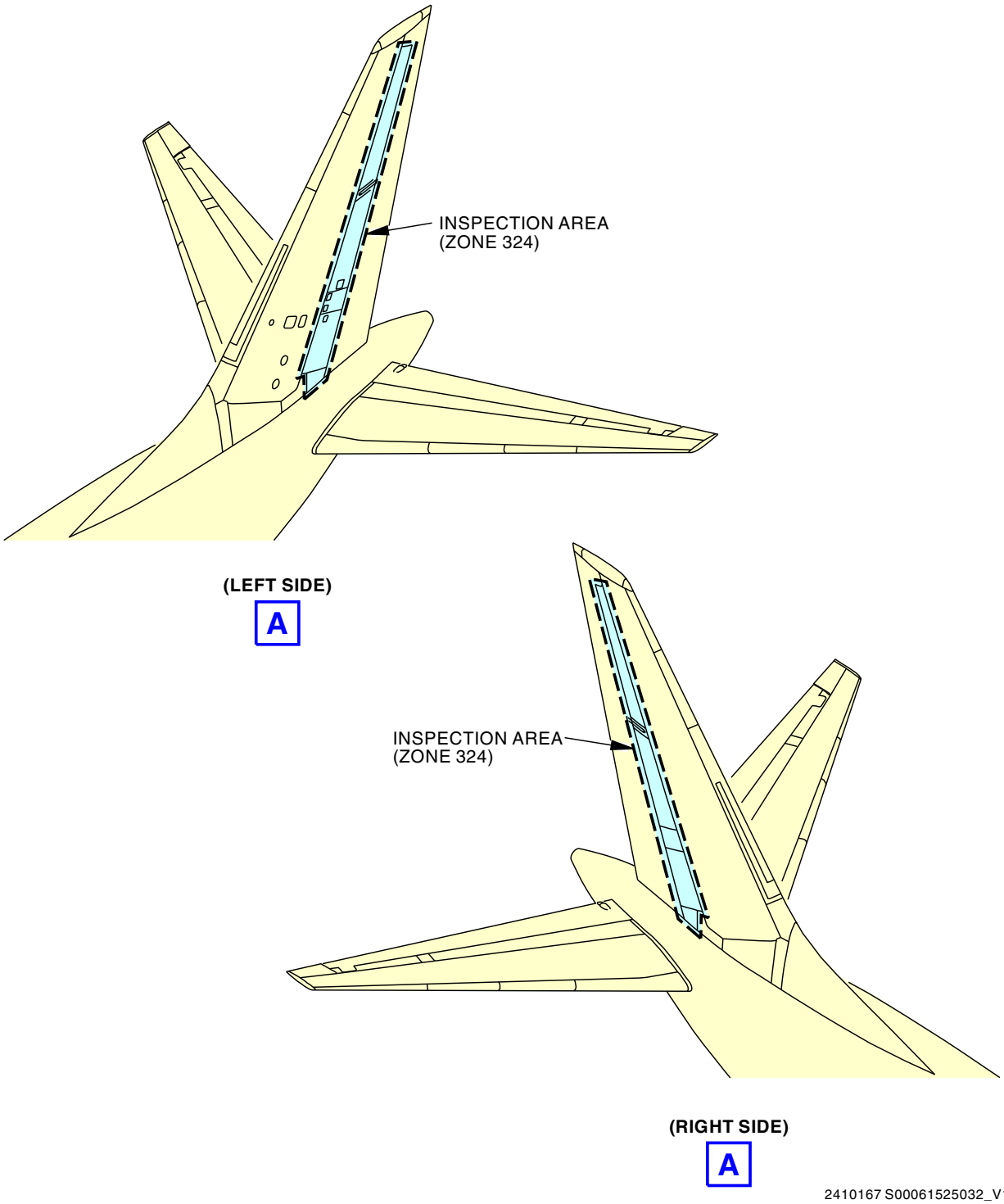
B. Zonal Inspection

SUBTASK 05-41-03-210-013

(1) Do a General Visual inspection of the vertical fin - rear spar to trailing edge.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Rear Spar to Trailing Edge - Vertical Fin General Visual (External)
Figure 219/05-41-03-990-813

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-03-210-814

20. EXTERNAL - ZONAL (GV): RUDDER

(Figure 220)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
325	Vertical Fin - Rudder

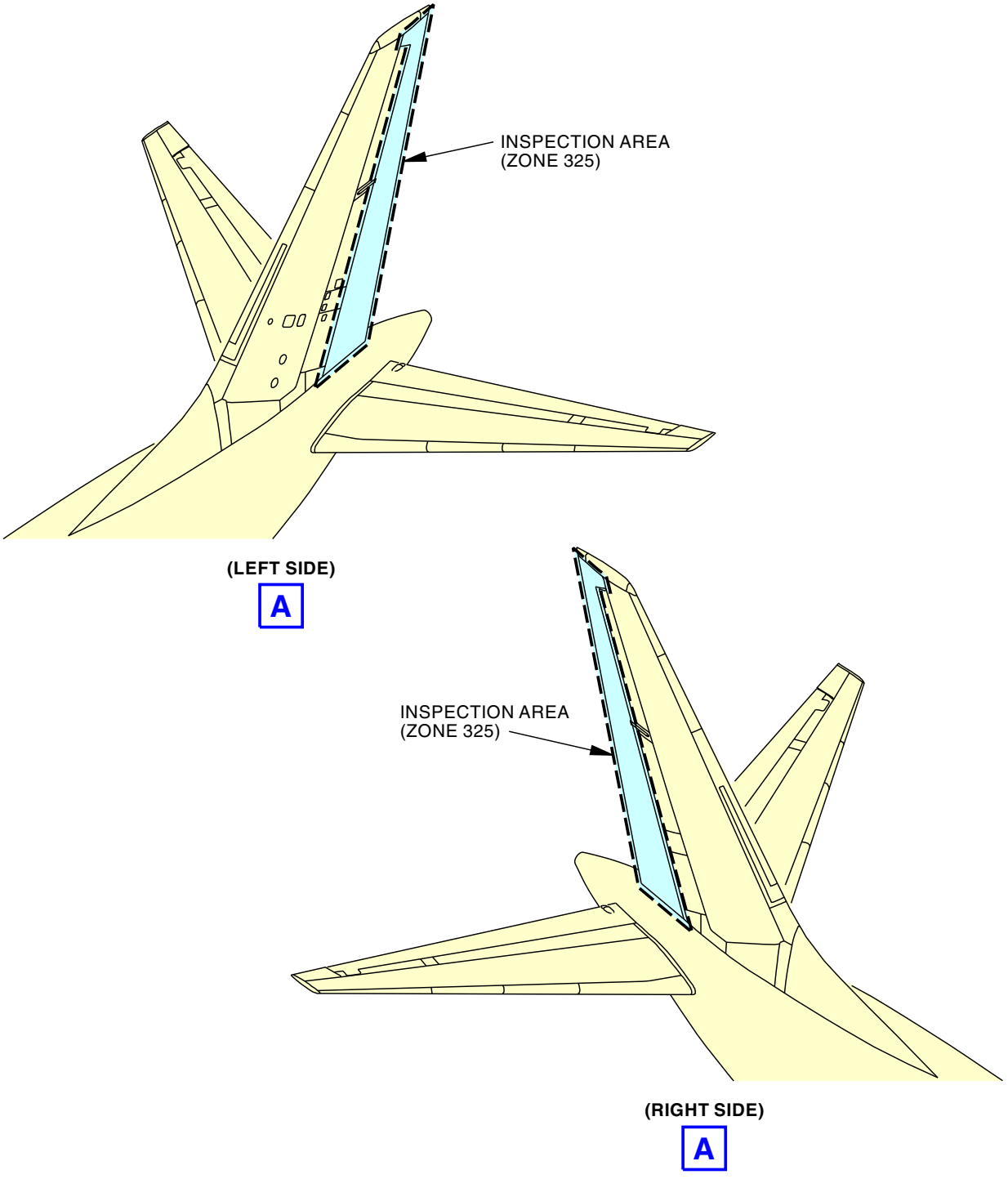
B. Zonal Inspection

SUBTASK 05-41-03-210-014

(1) Do a General Visual inspection of the rudder.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Rudder General Visual (External)
Figure 220/05-41-03-990-814

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-03-210-815

21. EXTERNAL - ZONAL (GV): VERTICAL FIN TIP

(Figure 221)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
326	Vertical Fin - Fin Tip

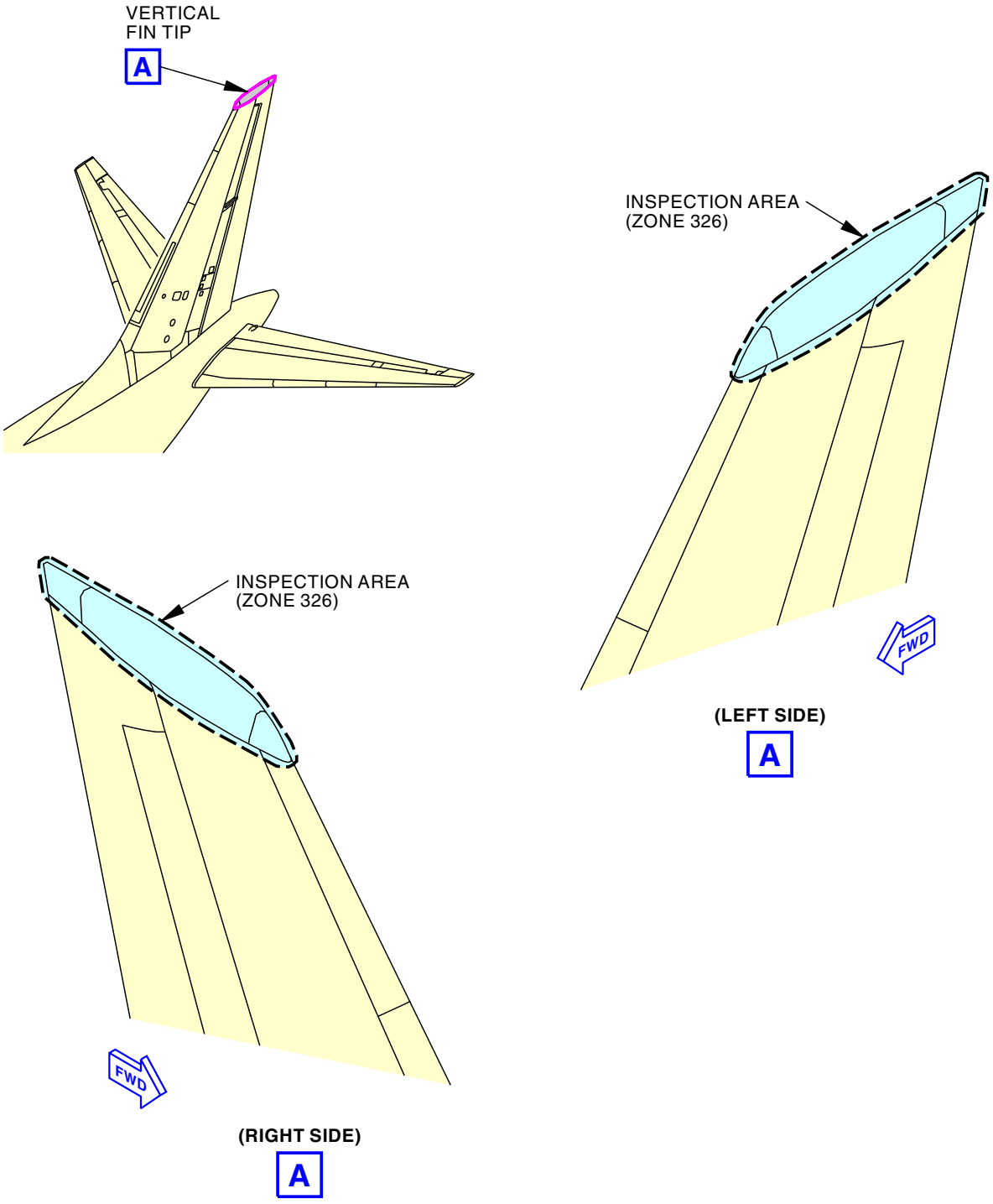
B. Zonal Inspection

SUBTASK 05-41-03-210-015

(1) Do a General Visual inspection of the vertical fin tip.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



2410169 S00061525036_V1

Vertical Fin Tip General Visual (External)
Figure 221/05-41-03-990-815

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-03-210-835

22. INTERNAL - ZONAL (GVI): Vertical Fin - Fin Tip

(Figure 222)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
326	Vertical Fin - Fin Tip

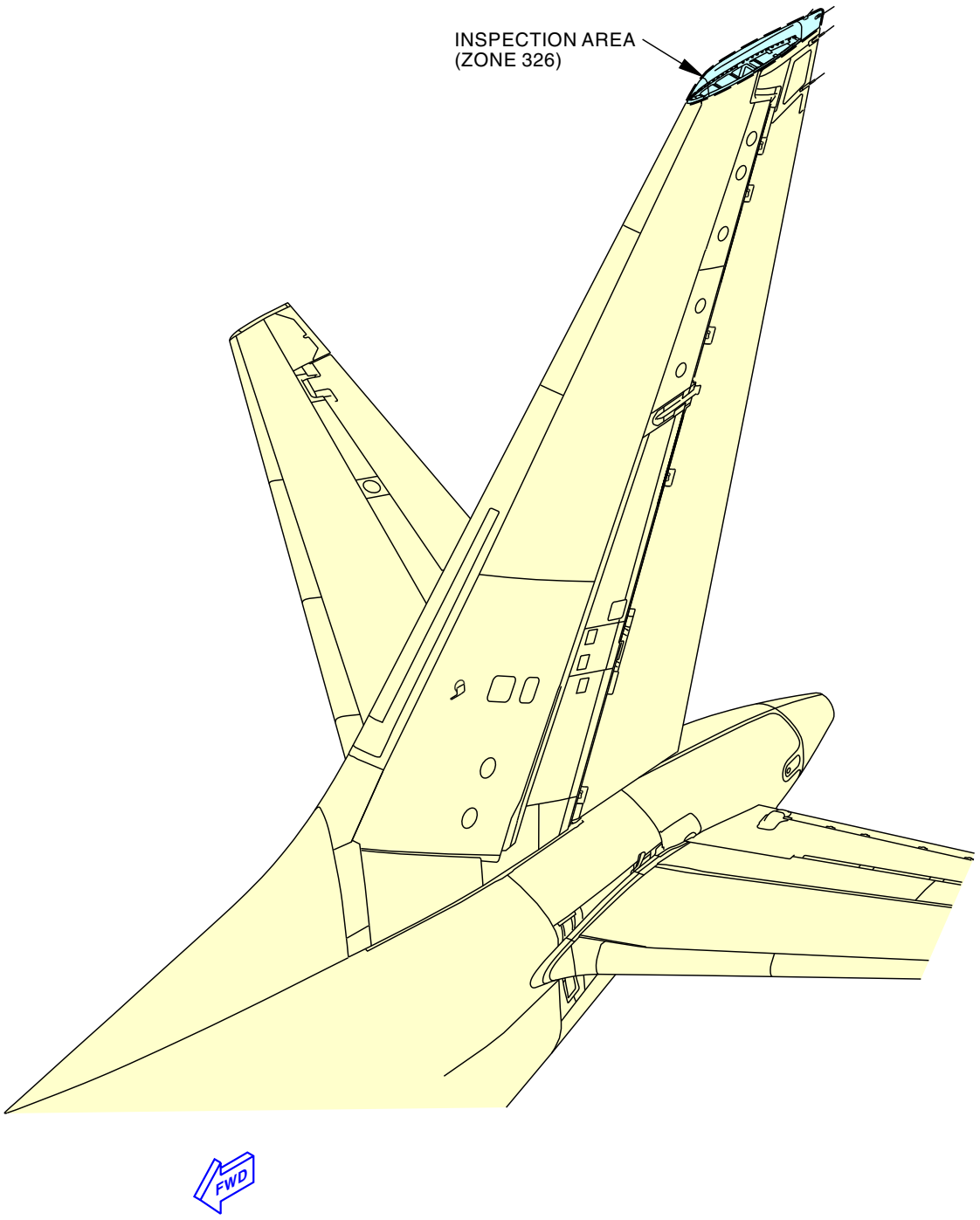
B. Zonal Inspection

SUBTASK 05-41-03-210-035

(1) Do a General Visual Inspection of the Vertical Fin - Fin Tip.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



2546049 S0000601542_V1

Vertical Fin Tip General Visual (Internal)
Figure 222/05-41-03-990-835

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-03-210-816

23. EXTERNAL - ZONAL (GV): HORIZONTAL STABILIZER - LEADING EDGE - LEFT

(Figure 223)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
331	Left Horizontal Stabilizer - Removable Leading Edge

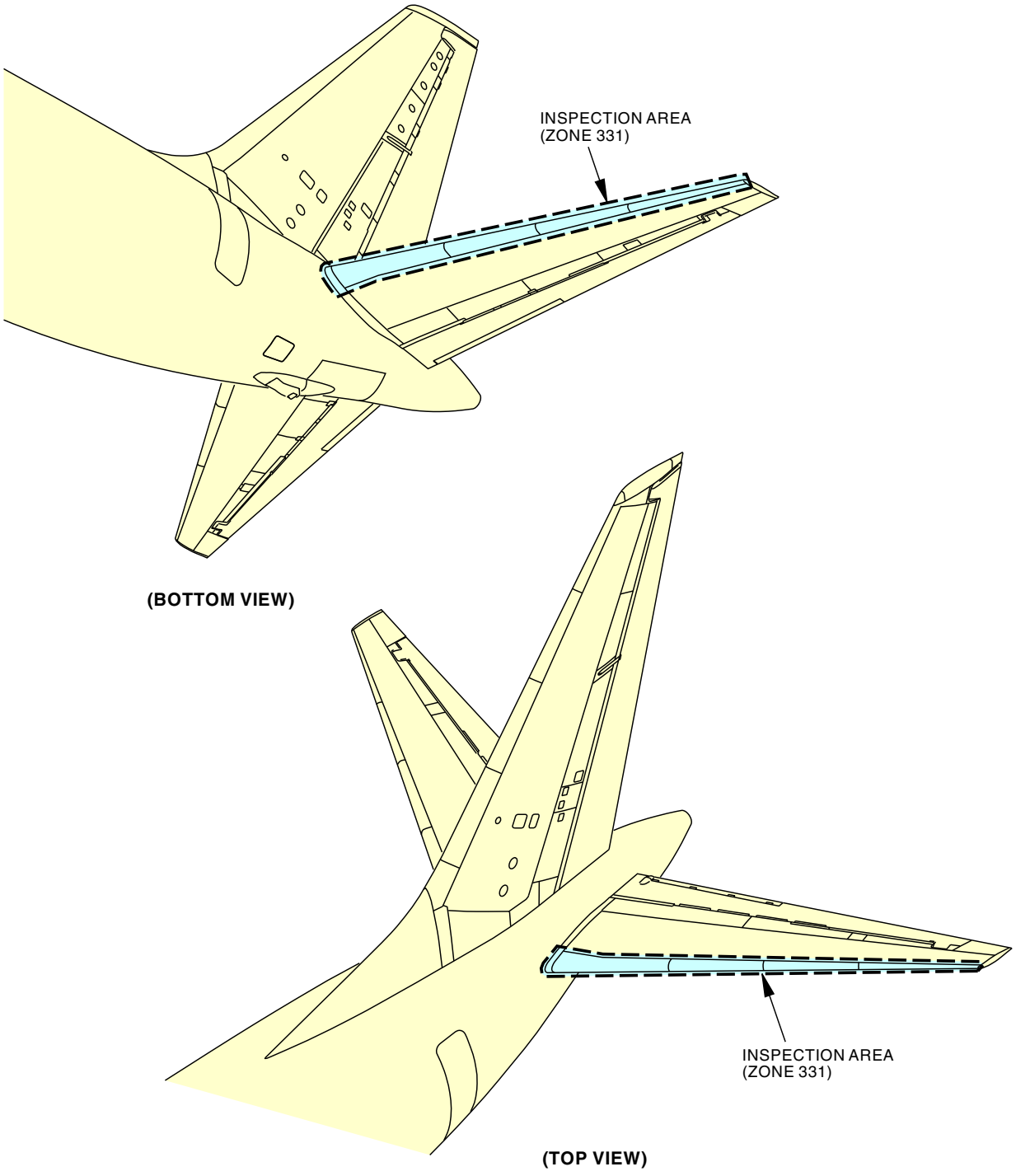
B. Zonal Inspection

SUBTASK 05-41-03-210-016

(1) Do a General Visual inspection of the horizontal stabilizer - leading edge - left.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Leading Edge - Left Horizontal Stabilizer General Visual (External)
Figure 223/05-41-03-990-816

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-03-210-836

24. INTERNAL - ZONAL (GVI): Horizontal Stabilizer - Leading Edge - Left

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
331	Left Horizontal Stabilizer - Removable Leading Edge

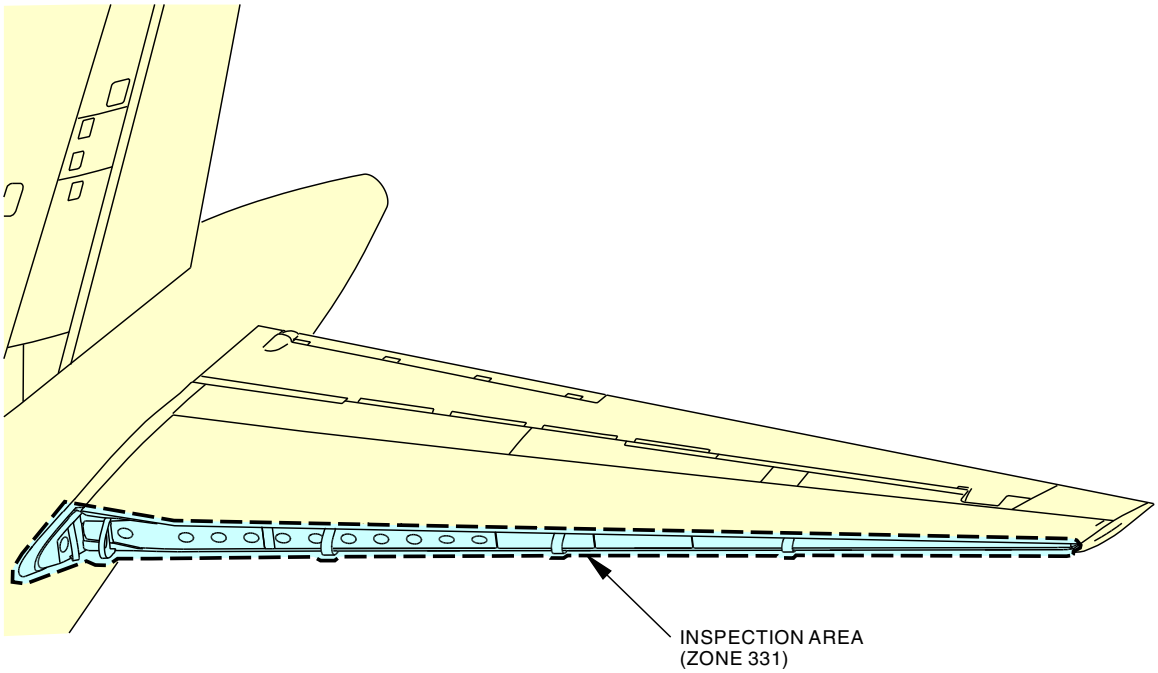
B. Zonal Inspection

SUBTASK 05-41-03-210-036

(1) Do a General Visual Inspection of the horizontal stabilizer - leading edge - left.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



2546005 S0000601546_V1

Left Horizontal Stabilizer Leading Edge General Visual (External)
Figure 224/05-41-03-990-836

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-03-210-817

25. EXTERNAL - ZONAL (GV): HORIZONTAL STABILIZER - FRONT SPAR TO REAR SPAR - LEFT

(Figure 225)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
332	Left Horizontal Stab - Front Spar to Rear Spar, Stab Sta 57.93 to Stab BL 249.81

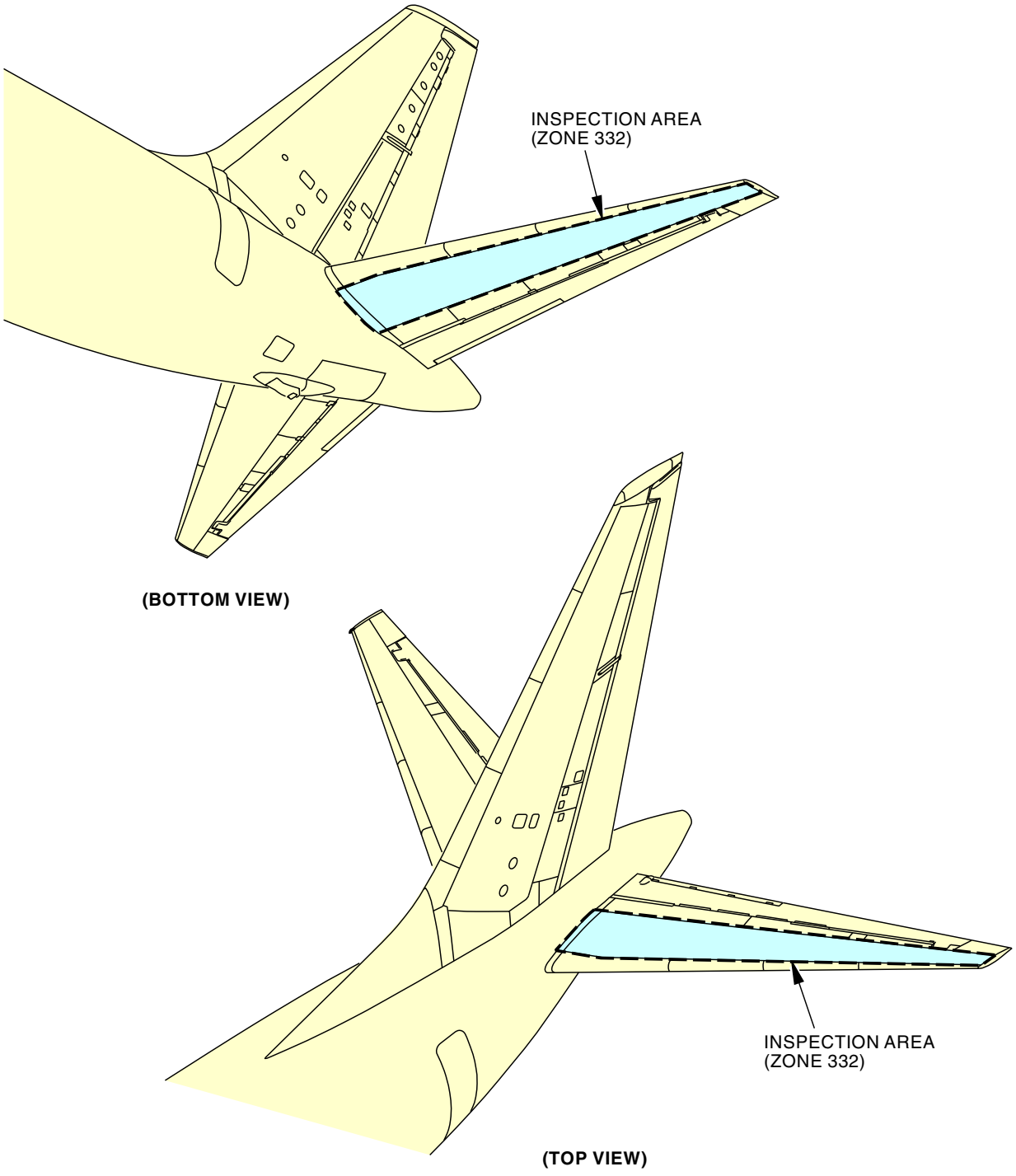
B. Zonal Inspection

SUBTASK 05-41-03-210-017

(1) Do a General Visual inspection of the horizontal stabilizer - front spar to rear spar - left.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Front Spar to Rear Spar - Left Horizontal Stabilizer General Visual (External)
Figure 225/05-41-03-990-817

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-03-210-818

26. INTERNAL - ZONAL (GV): HORIZONTAL STABILIZER - FRONT SPAR TO REAR SPAR - LEFT

(Figure 226)

NOTE: This procedure is a scheduled maintenance task.

A. References

Reference	Title
51-22-00-390-809	Aerodynamic Smoother Application (P/B 201)
737-678 SRM 51-10-01	Structural Repair Manual

B. Consumable Materials

Reference	Description	Specification
A02315	Sealant - Low Density, Synthetic Rubber. 2 Part	BMS5-142 Type II

C. Location Zones

Zone	Area
332	Left Horizontal Stab - Front Spar to Rear Spar, Stab Sta 57.93 to Stab BL 249.81

D. Access Panels

Number	Name/Location
332AT	Horizontal Stabilizer, Gap Cover, Horizontal Stabilizer to Body

E. Zonal Inspection

SUBTASK 05-41-03-010-008

(1) Open this access panel:

Number	Name/Location
332AT	Horizontal Stabilizer, Gap Cover, Horizontal Stabilizer to Body

NOTE: As an alternate to the access provided, access panel 332AB can be removed for inspection from lower side of stabilizer.

SUBTASK 05-41-03-210-018

(2) Do a General Visual inspection of the inboard horizontal stabilizer - front spar to rear spar - left.

SUBTASK 05-41-03-410-008

(3) Close this access panel:

Number	Name/Location
332AT	Horizontal Stabilizer, Gap Cover, Horizontal Stabilizer to Body

SUBTASK 05-41-03-390-004

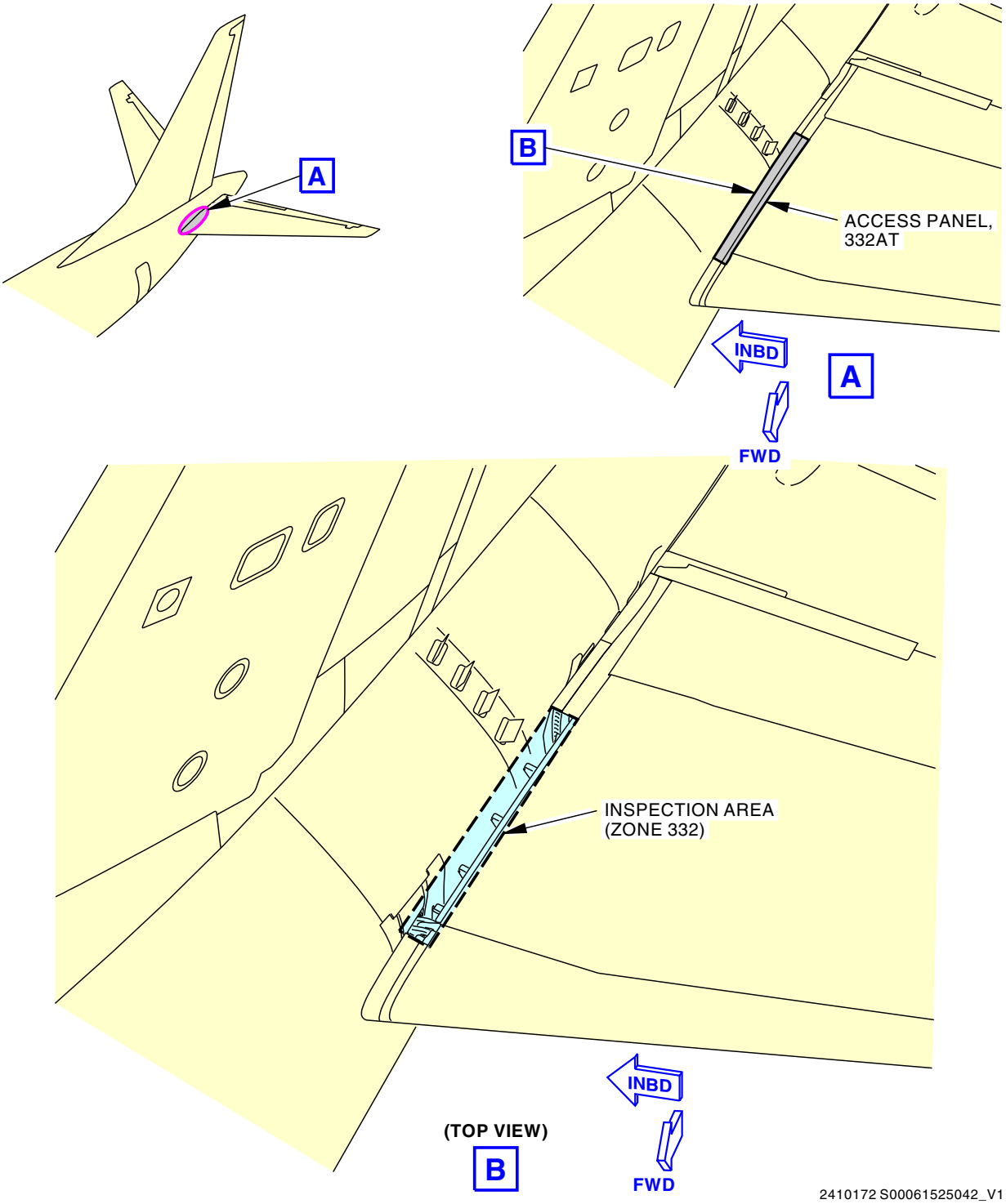
(4) Apply an aerodynamic smoother sealant, A02315, to all non-bonded structural components contacting exterior skins.

NOTE: Sealant does not need to be applied to gaps between panels that are used for regular access as long as they are less than limits given in the Structural Repair Manual (737-678 SRM 51-10-01).

(a) Do this task: Aerodynamic Smoother Application, TASK 51-22-00-390-809.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Front Spar to Rear Spar - Left Horizontal Stabilizer General Visual (Internal)
Figure 226/05-41-03-990-818

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-41-03-210-819

27. INTERNAL - ZONAL (GV): Horizontal Stabilizer - Rear Spar to Trailing Edge - Left

(Figure 227)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This Zonal inspection procedure satisfies the required EZAP-derived Zonal inspection requirement for this zone.

B. References

Reference	Title
05-00-00-910-802	Enhanced Zonal Inspection Program (EZAP) Precautions (P/B 201)
20-60-07-910-801	Protection of the EWIS During Maintenance (P/B 201)
51-22-00-390-809	Aerodynamic Smoother Application (P/B 201)
737-678 SRM 51-10-01	Structural Repair Manual

C. Consumable Materials

Reference	Description	Specification
A02315	Sealant - Low Density, Synthetic Rubber. 2 Part	BMS5-142 Type II

D. Location Zones

Zone	Area
333	Left Horizontal Stabilizer - Rear Spar to Trailing Edge

E. Access Panels

Number	Name/Location
333AB	Horizontal Stabilizer, Gap Cover, Horizontal Stabilizer to Body
333AT	Horizontal Stabilizer, Gap Cover, Horizontal Stabilizer to Body
333BB	Horizontal Stabilizer, Access Panel, Trailing Edge
333CB	Horizontal Stabilizer, Access Panel, Trailing Edge
333DB	Horizontal Stabilizer, Access Panel, Trailing Edge
333EB	Horizontal Stabilizer, Access Panel, Trailing Edge
333FB	Horizontal Stabilizer, Access Panel, Trailing Edge

F. Zonal Inspection

SUBTASK 05-41-03-010-009

(1) Open these access panels:

Number	Name/Location
333AB	Horizontal Stabilizer, Gap Cover, Horizontal Stabilizer to Body
333AT	Horizontal Stabilizer, Gap Cover, Horizontal Stabilizer to Body
333BB	Horizontal Stabilizer, Access Panel, Trailing Edge
333CB	Horizontal Stabilizer, Access Panel, Trailing Edge
333DB	Horizontal Stabilizer, Access Panel, Trailing Edge
333EB	Horizontal Stabilizer, Access Panel, Trailing Edge
333FB	Horizontal Stabilizer, Access Panel, Trailing Edge

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 05-41-03-210-019

(2) Do the zonal inspection following the procedures in Enhanced Zonal Inspection Program (EZAP) Precautions, TASK 05-00-00-910-802.

(3) Perform an internal zonal inspection (GV) of the horizontal stabilizer - rear spar to trailing edge - left. (EZAP)

SUBTASK 05-41-03-910-007

(4) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-910-801 for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

SUBTASK 05-41-03-410-009

(5) Close these access panels:

Number	Name/Location
333AB	Horizontal Stabilizer, Gap Cover, Horizontal Stabilizer to Body
333AT	Horizontal Stabilizer, Gap Cover, Horizontal Stabilizer to Body
333BB	Horizontal Stabilizer, Access Panel, Trailing Edge
333CB	Horizontal Stabilizer, Access Panel, Trailing Edge
333DB	Horizontal Stabilizer, Access Panel, Trailing Edge
333EB	Horizontal Stabilizer, Access Panel, Trailing Edge
333FB	Horizontal Stabilizer, Access Panel, Trailing Edge

SUBTASK 05-41-03-390-005

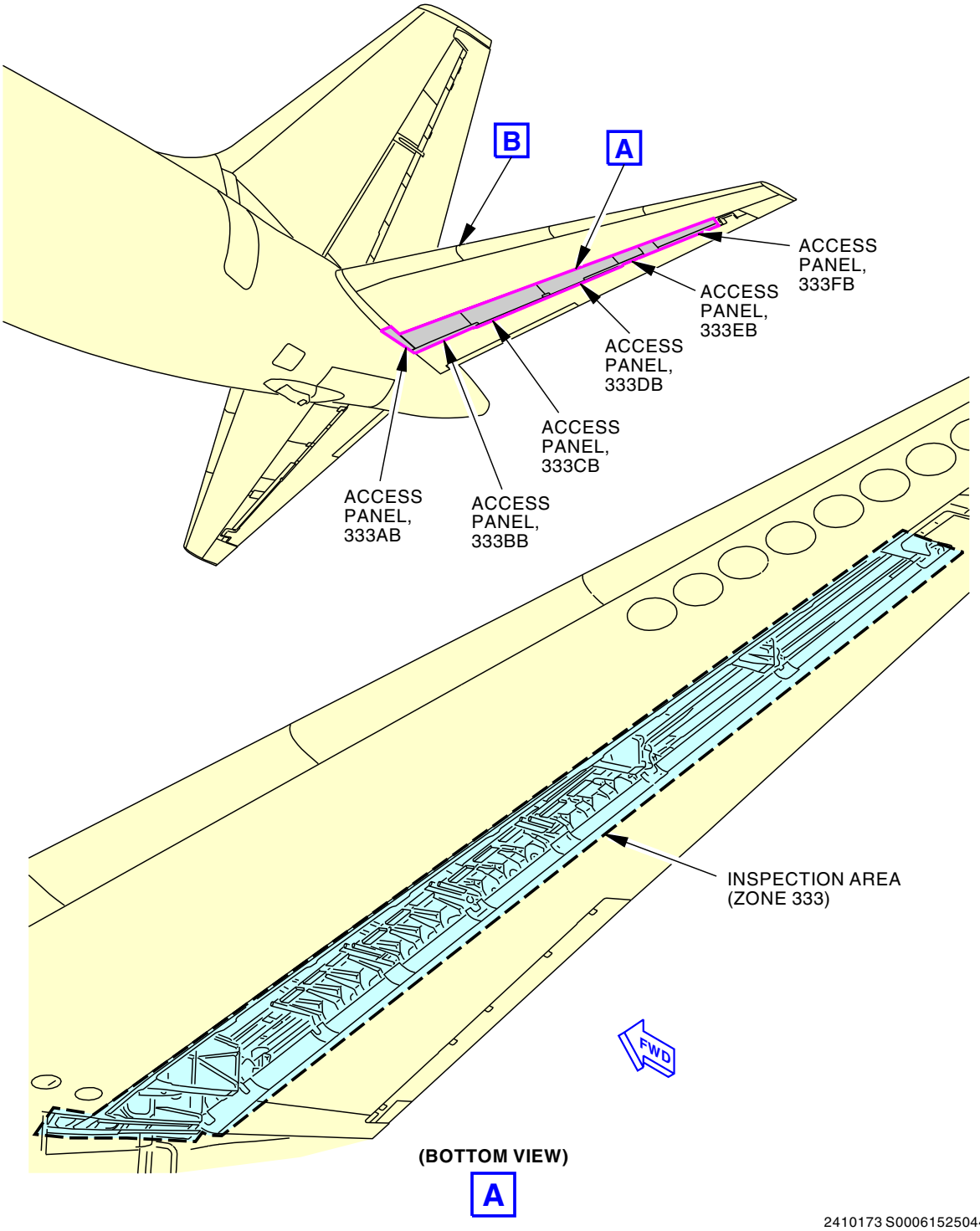
(6) Apply an aerodynamic smoother sealant, A02315, to all non-bonded structural components contacting exterior skins.

NOTE: Sealant does not need to be applied to gaps between panels that are used for regular access as long as they are less than limits given in the Structural Repair Manual (737-678 SRM 51-10-01).

(a) Do this task: Aerodynamic Smoother Application, TASK 51-22-00-390-809.

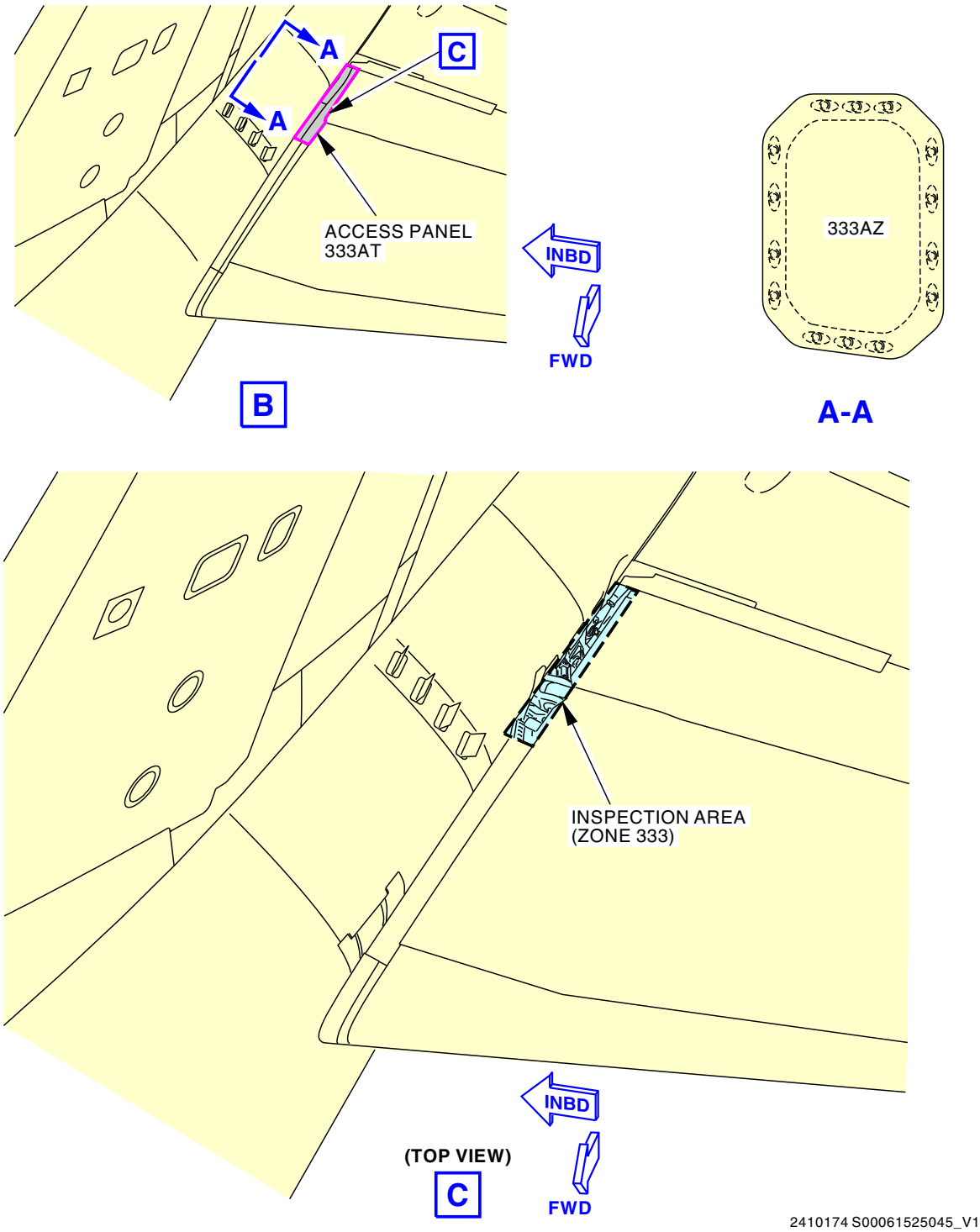
——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Rear Spar to Trailing Edge - Left Horizontal Stabilizer General Visual (Internal)
Figure 227/05-41-03-990-819 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Rear Spar to Trailing Edge - Left Horizontal Stabilizer General Visual (Internal)
Figure 227/05-41-03-990-819 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-03-210-820

28. EXTERNAL - ZONAL (GV): HORIZONTAL STABILIZER - REAR SPAR TO TRAILING EDGE - LEFT

(Figure 228)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
333	Left Horizontal Stabilizer - Rear Spar to Trailing Edge

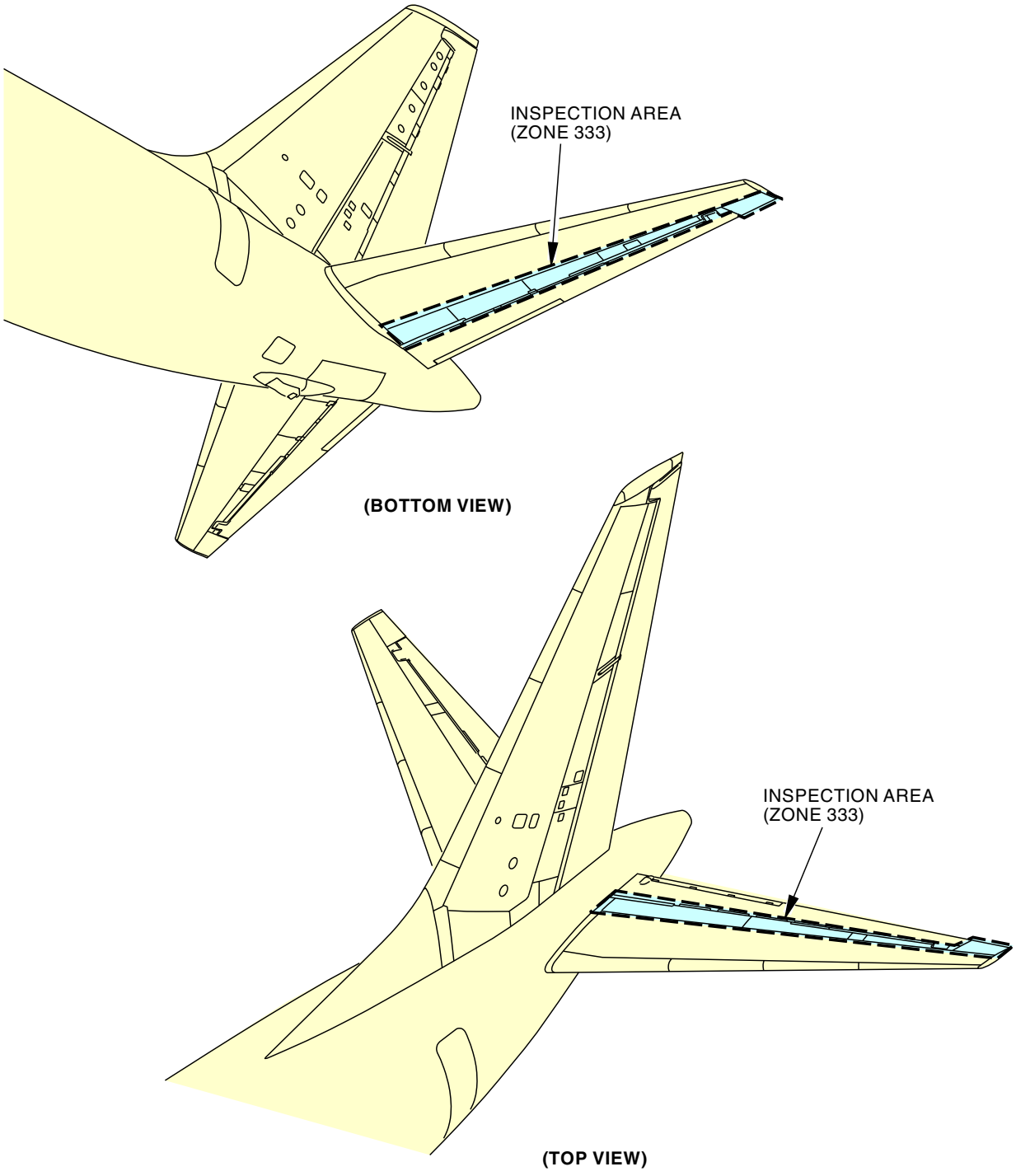
B. Zonal Inspection

SUBTASK 05-41-03-210-020

(1) Do a General Visual inspection of the horizontal stabilizer - rear spar to trailing edge - left.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Rear Spar to Trailing Edge - Left Horizontal Stabilizer General Visual (External)
Figure 228/05-41-03-990-820

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-03-210-821

29. EXTERNAL - ZONAL (GV): HORIZONTAL STABILIZER - ELEVATOR - LEFT

(Figure 229)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
334	Left Horizontal Stabilizer - Elevator

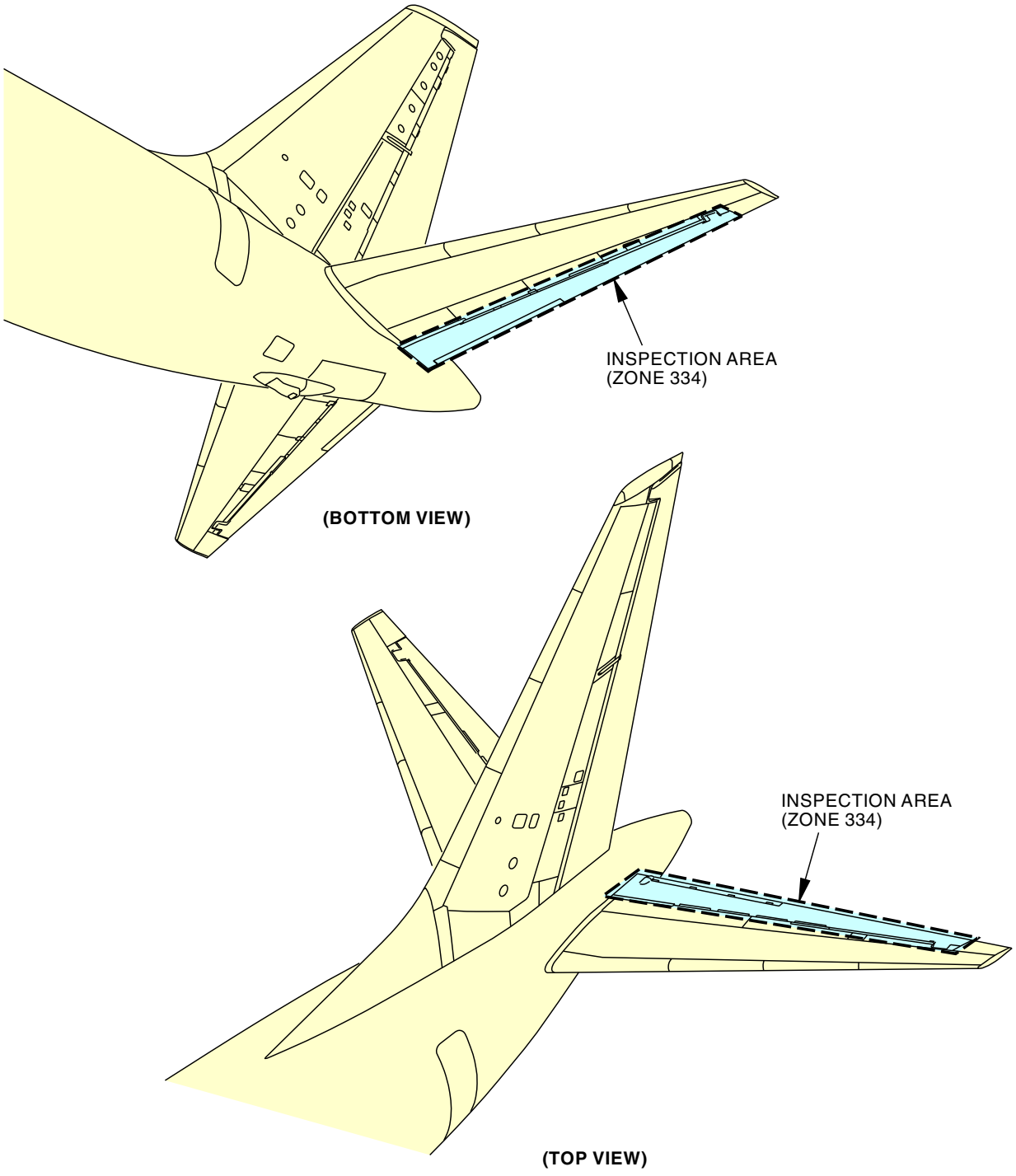
B. Zonal Inspection

SUBTASK 05-41-03-210-021

(1) Do a General Visual inspection of the horizontal stabilizer - elevator - left.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Elevator - Left Horizontal Stabilizer General Visual (External)
Figure 229/05-41-03-990-821

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-03-210-822

30. EXTERNAL - ZONAL (GV): HORIZONTAL STABILIZER - STABILIZER TIP - LEFT

(Figure 230)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
335	Left Horizontal Stabilizer - Tip

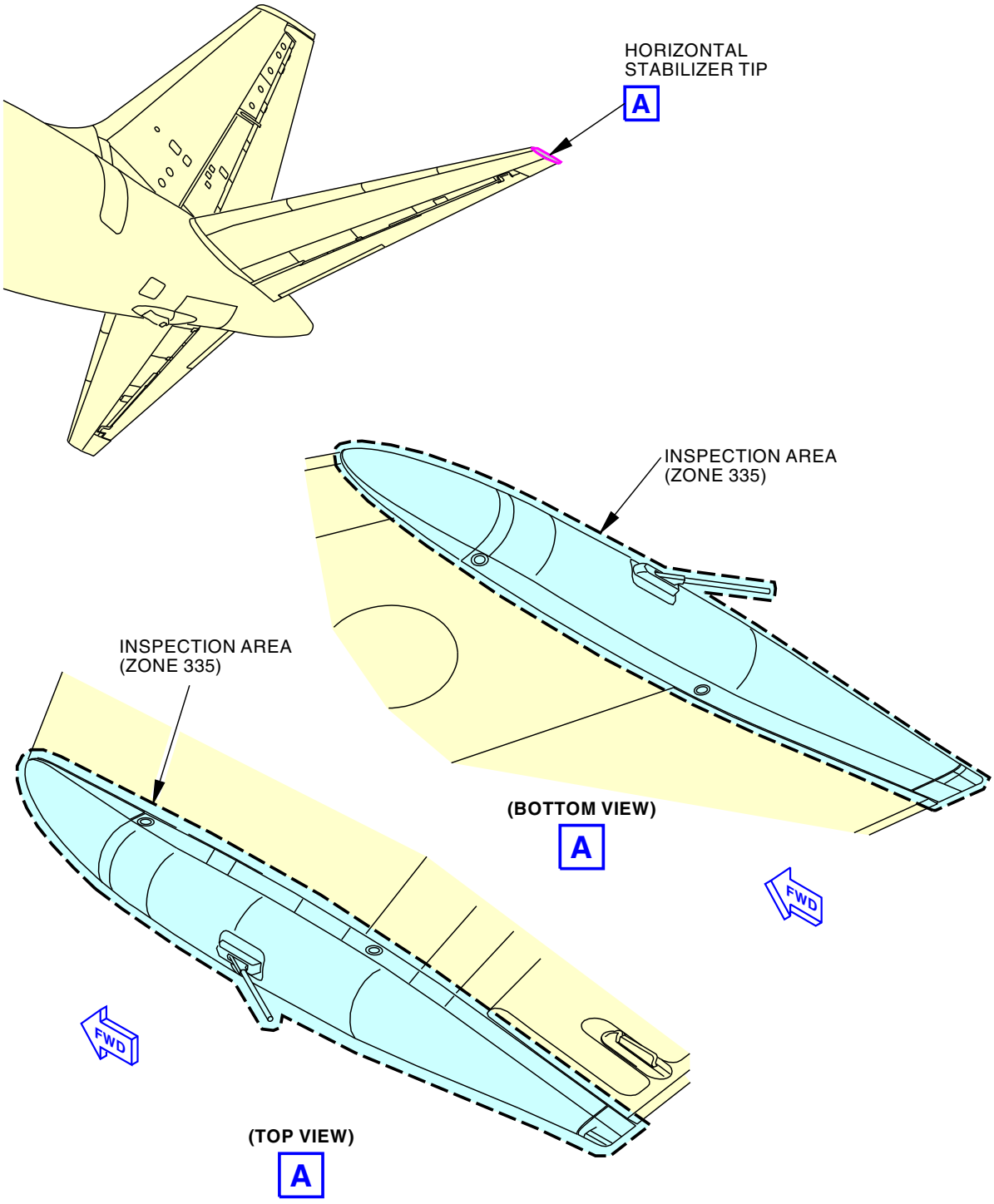
B. Zonal Inspection

SUBTASK 05-41-03-210-022

(1) Do a General Visual inspection of the horizontal stabilizer - stabilizer tip -left.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Stabilizer Tip - Left Horizontal Stabilizer General Visual (External)
Figure 230/05-41-03-990-822

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-03-210-837

31. INTERNAL - ZONAL (GVI): Horizontal Stabilizer - Stabilizer Tip - Left

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
335	Left Horizontal Stabilizer - Tip

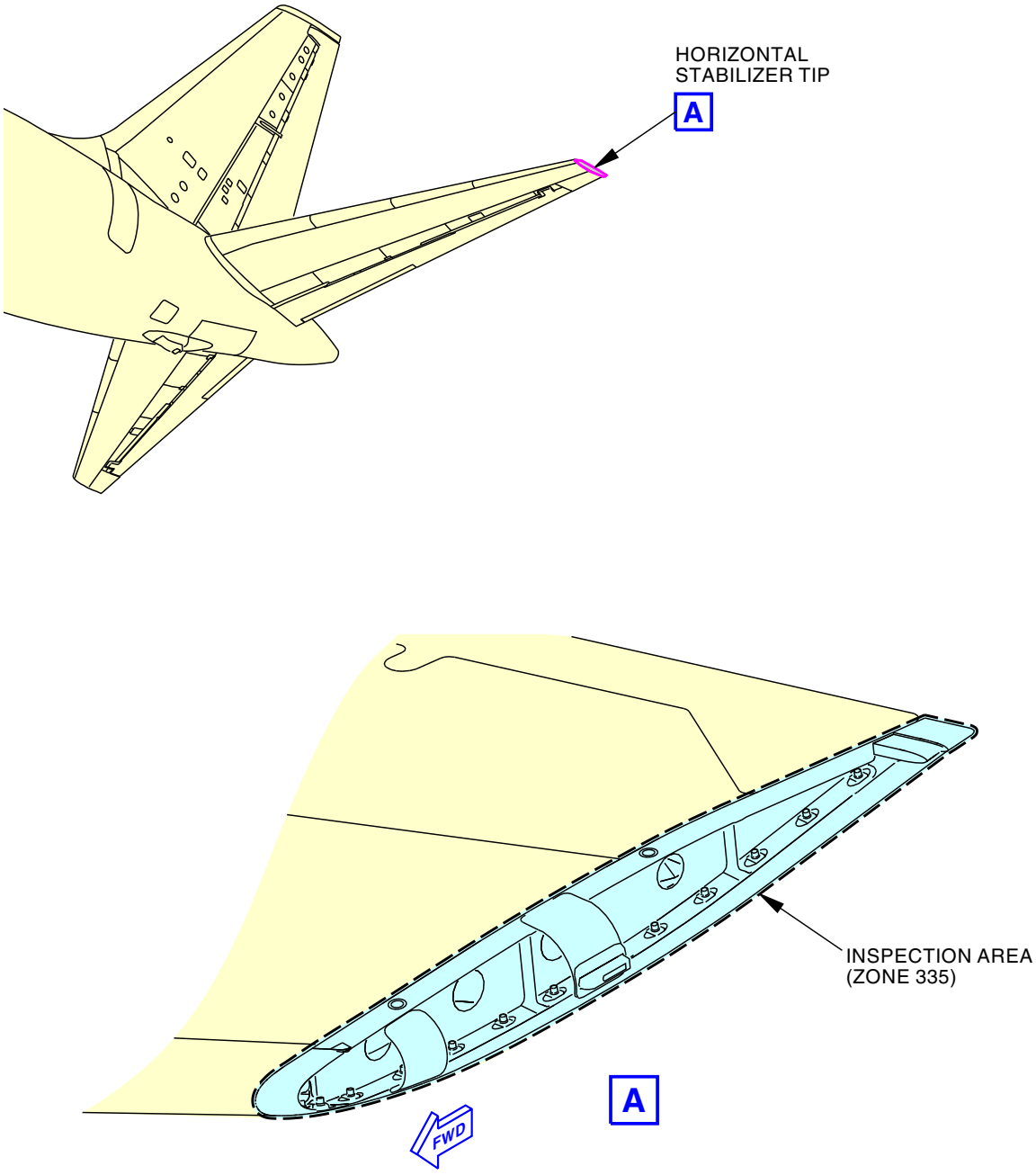
B. Zonal Inspection

SUBTASK 05-41-03-210-037

(1) Do a General Visual Inspection horizontal stabilizer - stabilizer tip - left.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Stabilizer Tip - Left Horizontal Stabilizer General Visual (Internal)
Figure 231/05-41-03-990-837

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-03-210-823

32. EXTERNAL - ZONAL (GV): HORIZONTAL STABILIZER - LEADING EDGE - RIGHT

(Figure 232)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
341	Right Horizontal Stabilizer - Removable Leading Edge

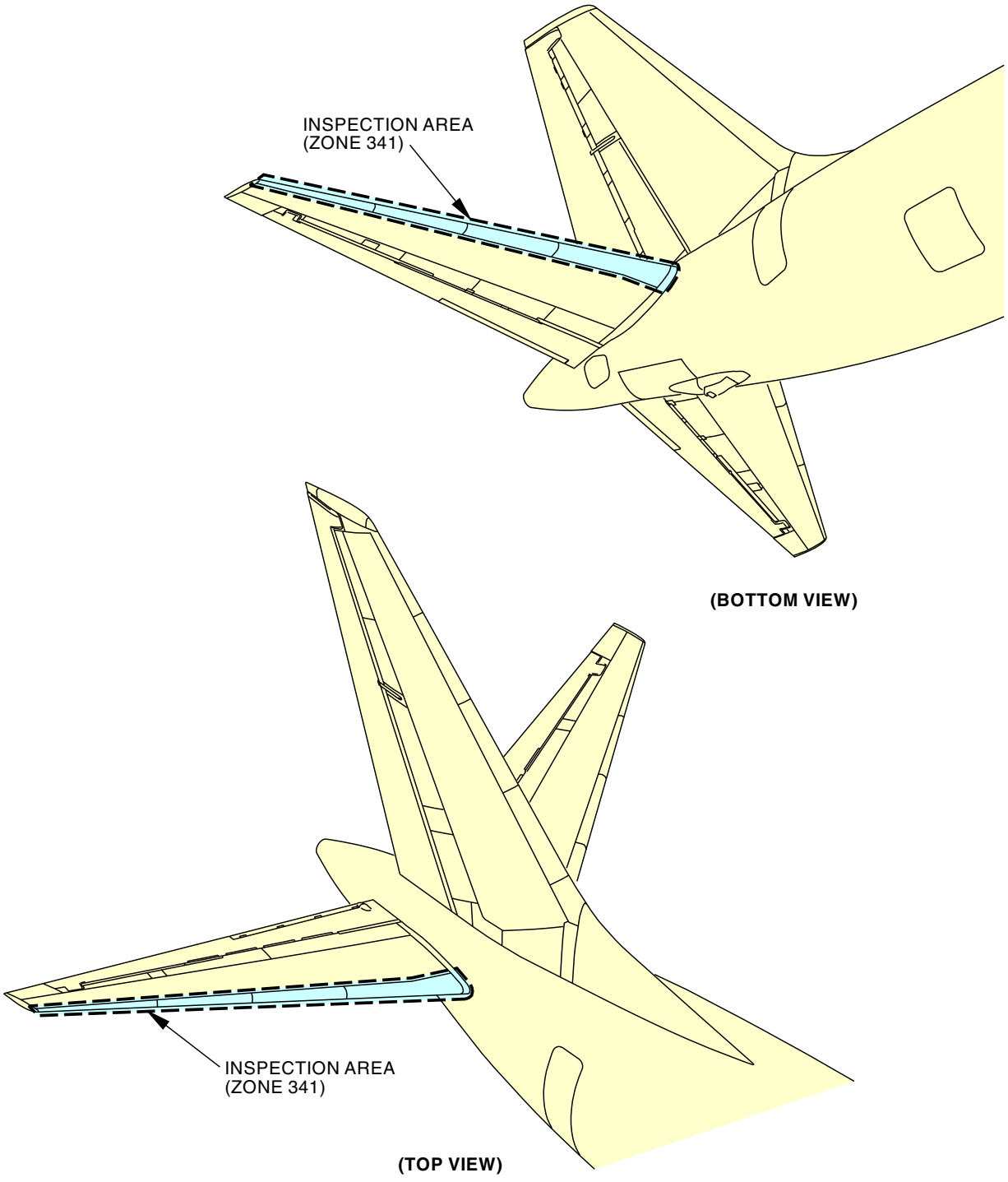
B. Zonal Inspection

SUBTASK 05-41-03-210-023

(1) Do a General Visual inspection of the horizontal stabilizer - leading edge - right.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Leading Edge - Right Horizontal Stabilizer General Visual (External)
Figure 232/05-41-03-990-823

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-03-210-838

33. INTERNAL - ZONAL (GVI): Horizontal Stabilizer - Leading Edge - Right

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
341	Right Horizontal Stabilizer - Removable Leading Edge

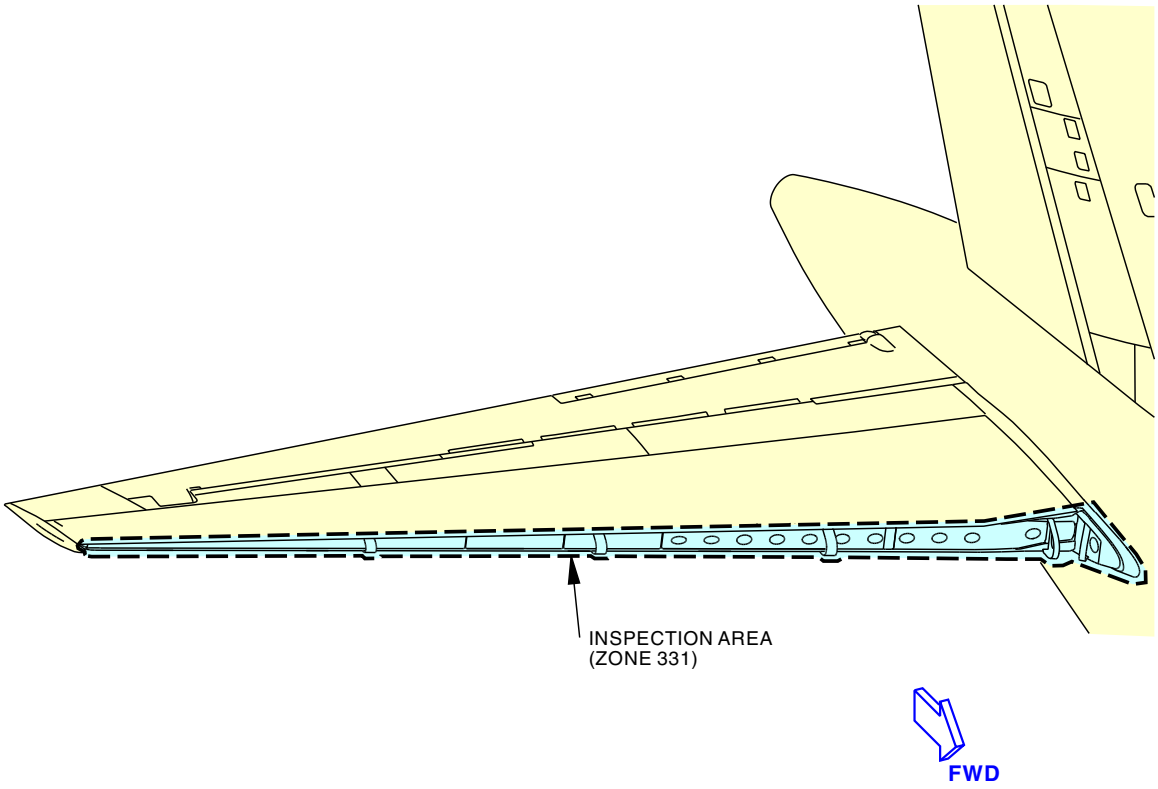
B. Zonal Inspection

SUBTASK 05-41-03-210-038

(1) Do a General Visual Inspection of the horizontal stabilizer - leading edge - right.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



2546208 S0000601548_V1

Right Horizontal Stabilizer - Leading Edge General Visual (Internal Zonal)
Figure 233/05-41-03-990-838

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-03-210-824

34. EXTERNAL - ZONAL (GV): HORIZONTAL STABILIZER - FRONT SPAR TO REAR SPAR - RIGHT

(Figure 234)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
342	Right Horizontal Stab - Front Spar to Rear Spar, Stab Sta 57.93 to Stab BL 249.81

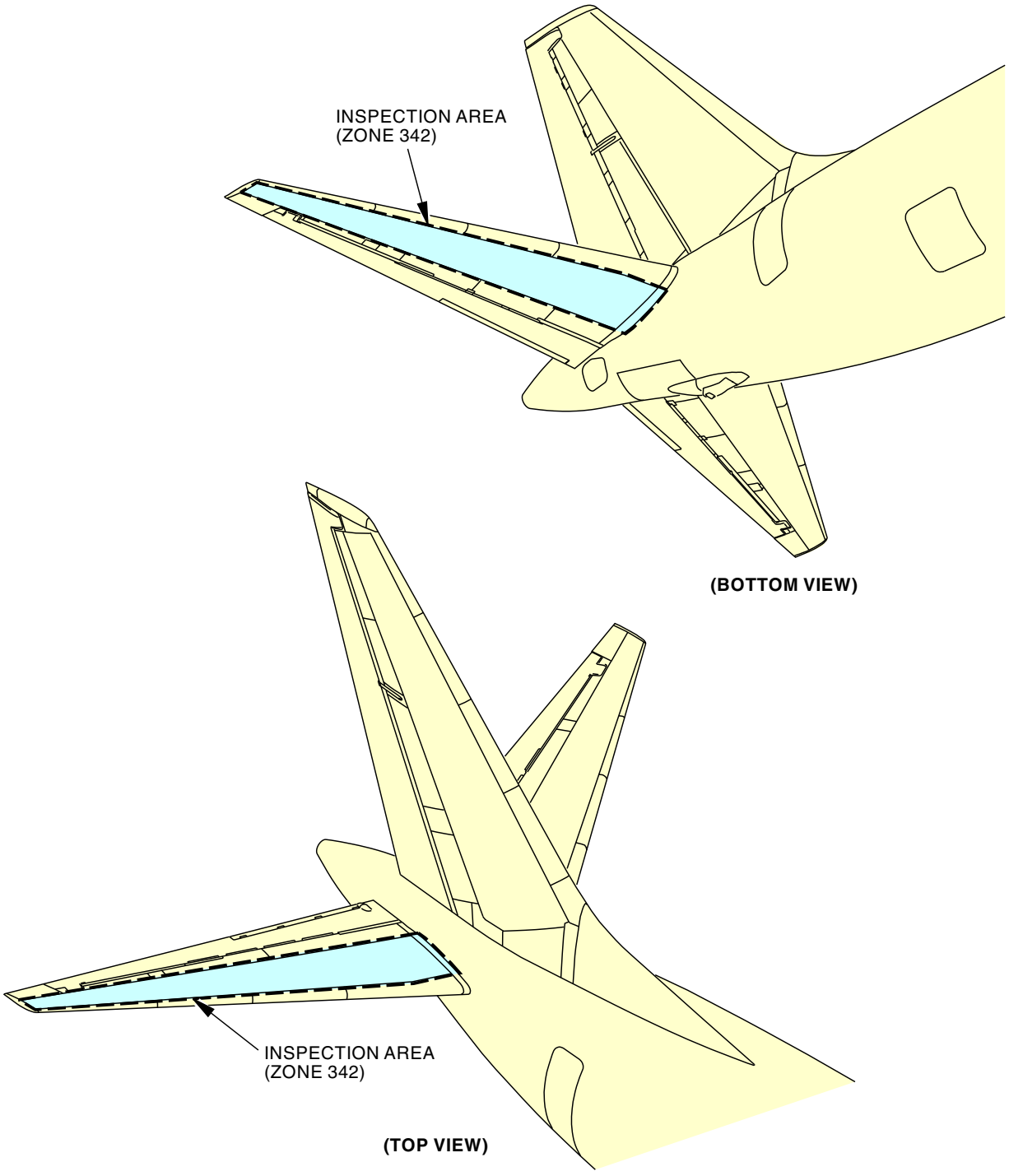
B. Zonal Inspection

SUBTASK 05-41-03-210-024

(1) Do a General Visual inspection of the horizontal stabilizer - front spar to rear spar - right.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Front Spar to Rear Spar - Right Horizontal Stabilizer General Visual (External)
Figure 234/05-41-03-990-824

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-03-210-825

35. INTERNAL - ZONAL (GV): HORIZONTAL STABILIZER - FRONT SPAR TO REAR SPAR - RIGHT

(Figure 235)

NOTE: This procedure is a scheduled maintenance task.

A. References

Reference	Title
51-22-00-390-809	Aerodynamic Smoother Application (P/B 201)
737-678 SRM 51-10-01	Structural Repair Manual

B. Consumable Materials

Reference	Description	Specification
A02315	Sealant - Low Density, Synthetic Rubber. 2 Part	BMS5-142 Type II

C. Location Zones

Zone	Area
342	Right Horizontal Stab - Front Spar to Rear Spar, Stab Sta 57.93 to Stab BL 249.81

D. Access Panels

Number	Name/Location
342AT	Gap Cover, Horizontal Stabilizer

E. Zonal Inspection

SUBTASK 05-41-03-010-010

(1) Open this access panel:

Number	Name/Location
342AT	Gap Cover, Horizontal Stabilizer

NOTE: With access provided. Access panel 342AB can be used as an alternate to inspect from the lower side of the stabilizer.

SUBTASK 05-41-03-210-025

(2) Do a General Visual inspection of the inboard horizontal stabilizer - front spar to rear spar - right.

SUBTASK 05-41-03-410-010

(3) Close this access panel:

Number	Name/Location
342AT	Gap Cover, Horizontal Stabilizer

SUBTASK 05-41-03-390-006

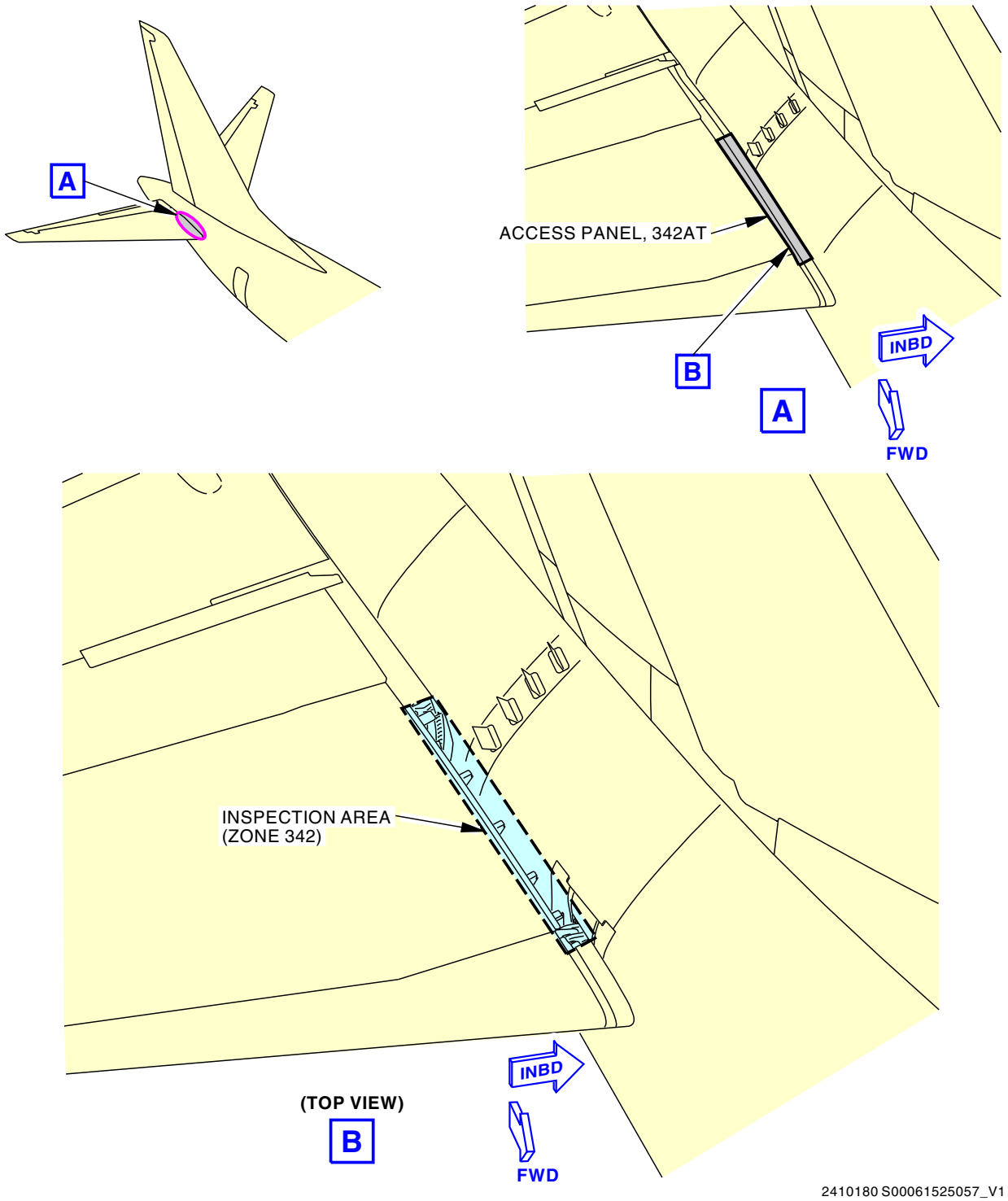
(4) Apply an aerodynamic smoother sealant, A02315, to all non-bonded structural components contacting exterior skins.

NOTE: Sealant does not need to be applied to gaps between panels that are used for regular access as long as they are less than limits given in the Structural Repair Manual (737-678 SRM 51-10-01).

(a) Do this task: Aerodynamic Smoother Application, TASK 51-22-00-390-809.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Front Spar to Rear Spar - Right Horizontal Stabilizer General Visual (Internal)
Figure 235/05-41-03-990-825

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-41-03-210-826

36. INTERNAL - ZONAL (GV): Horizontal Stabilizer - Rear Spar to Trailing Edge - Right

(Figure 236)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This Zonal inspection procedure satisfies the required EZAP-derived Zonal inspection requirement for this zone.

B. References

Reference	Title
05-00-00-910-802	Enhanced Zonal Inspection Program (EZAP) Precautions (P/B 201)
20-60-07-910-801	Protection of the EWIS During Maintenance (P/B 201)
51-22-00-390-809	Aerodynamic Smoother Application (P/B 201)
737-678 SRM 51-10-01	Structural Repair Manual

C. Consumable Materials

Reference	Description	Specification
A02315	Sealant - Low Density, Synthetic Rubber. 2 Part	BMS5-142 Type II

D. Location Zones

Zone	Area
343	Right Horizontal Stabilizer - Rear Spar to Trailing Edge

E. Access Panels

Number	Name/Location
343AB	Horizontal Stabilizer, Gap Cover - H. Stab. to Body
343AT	Horizontal Stabilizer, Gap Cover - H. Stab. to Body
343BB	Horizontal Stabilizer, Access Panel - T.E. Area
343CB	Horizontal Stabilizer, Access Panel - T.E. Area
343DB	Horizontal Stabilizer, Access Panel - T.E. Area
343EB	Horizontal Stabilizer, Access Panel - T.E. Area
343FB	Horizontal Stabilizer, Access Panel - T.E. Area

F. Zonal Inspection

SUBTASK 05-41-03-010-011

(1) Open these access panels:

Number	Name/Location
343AB	Horizontal Stabilizer, Gap Cover - H. Stab. to Body
343AT	Horizontal Stabilizer, Gap Cover - H. Stab. to Body
343BB	Horizontal Stabilizer, Access Panel - T.E. Area
343CB	Horizontal Stabilizer, Access Panel - T.E. Area
343DB	Horizontal Stabilizer, Access Panel - T.E. Area
343EB	Horizontal Stabilizer, Access Panel - T.E. Area
343FB	Horizontal Stabilizer, Access Panel - T.E. Area

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 05-41-03-210-026

(2) Do the zonal inspection following the procedures in Enhanced Zonal Inspection Program (EZAP) Precautions, TASK 05-00-00-910-802.

(3) Perform an internal zonal inspection (GV) of the horizontal stabilizer - rear spar to trailing edge - right. (EZAP)

SUBTASK 05-41-03-910-008

(4) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-910-801 for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

SUBTASK 05-41-03-410-011

(5) Close these access panels:

Number	Name/Location
343AB	Horizontal Stabilizer, Gap Cover - H. Stab. to Body
343AT	Horizontal Stabilizer, Gap Cover - H. Stab. to Body
343BB	Horizontal Stabilizer, Access Panel - T.E. Area
343CB	Horizontal Stabilizer, Access Panel - T.E. Area
343DB	Horizontal Stabilizer, Access Panel - T.E. Area
343EB	Horizontal Stabilizer, Access Panel - T.E. Area
343FB	Horizontal Stabilizer, Access Panel - T.E. Area

SUBTASK 05-41-03-390-007

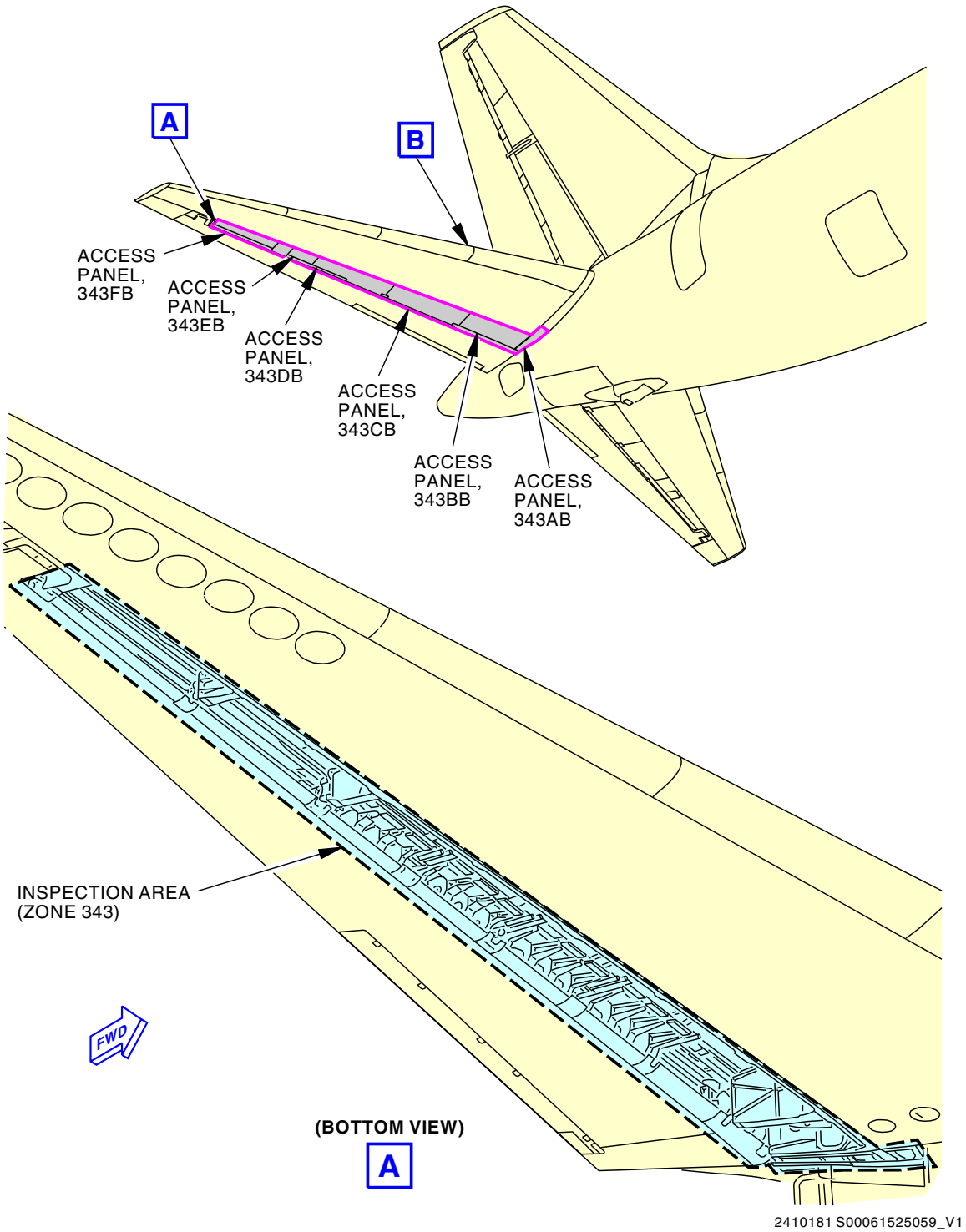
(6) Apply an aerodynamic smoother sealant, A02315, to all non-bonded structural components contacting exterior skins.

NOTE: Sealant does not need to be applied to gaps between panels that are used for regular access as long as they are less than limits given in the Structural Repair Manual (737-678 SRM 51-10-01).

(a) Do this task: Aerodynamic Smoother Application, TASK 51-22-00-390-809.

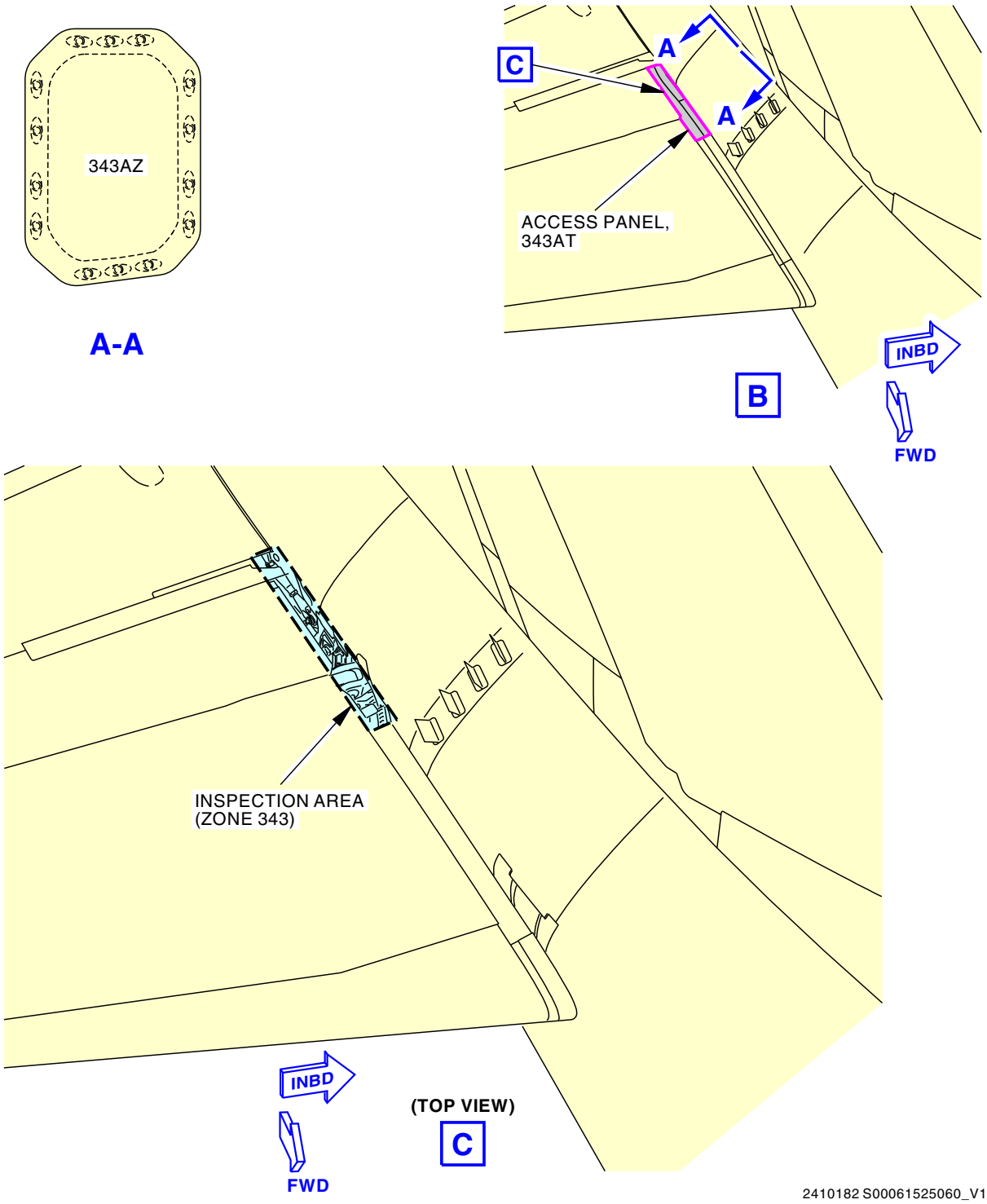
——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Rear Spar to Trailing Edge - Right Horizontal Stabilizer General Visual (Internal)
Figure 236/05-41-03-990-826 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Rear Spar to Trailing Edge - Right Horizontal Stabilizer General Visual (Internal)
Figure 236/05-41-03-990-826 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-03-210-827

37. EXTERNAL - ZONAL (GV): HORIZONTAL STABILIZER - REAR SPAR TO TRAILING EDGE - RIGHT

(Figure 237)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
343	Right Horizontal Stabilizer - Rear Spar to Trailing Edge

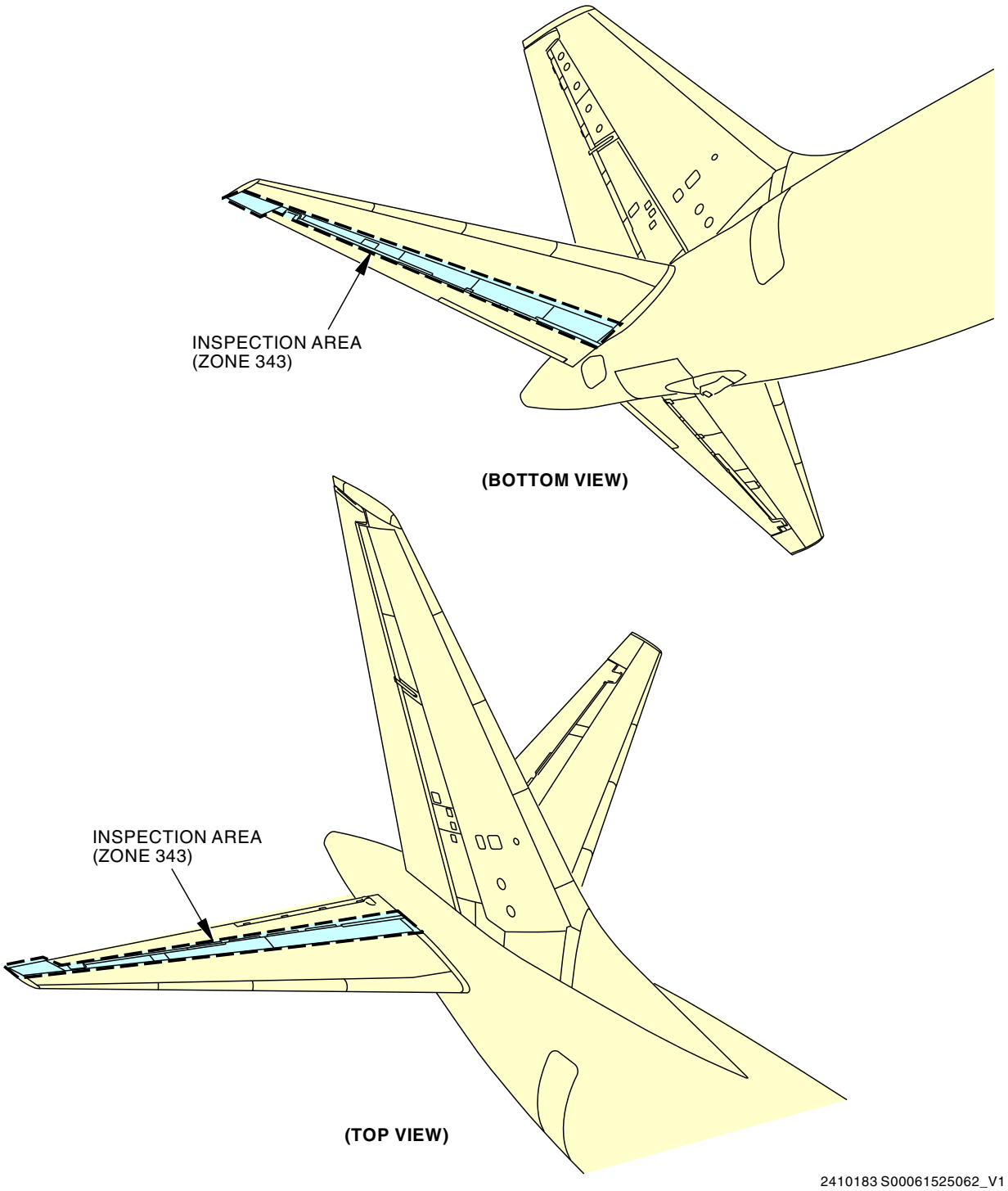
B. Zonal Inspection

SUBTASK 05-41-03-210-027

(1) Do a General Visual inspection of the horizontal stabilizer - rear spar to trailing edge - right.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Rear Spar to Trailing Edge - Right Horizontal Stabilizer General Visual (External)
Figure 237/05-41-03-990-827

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-03-210-828

38. EXTERNAL - ZONAL (GV): HORIZONTAL STABILIZER - ELEVATOR - RIGHT

(Figure 238)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
344	Right Horizontal Stabilizer - Elevator

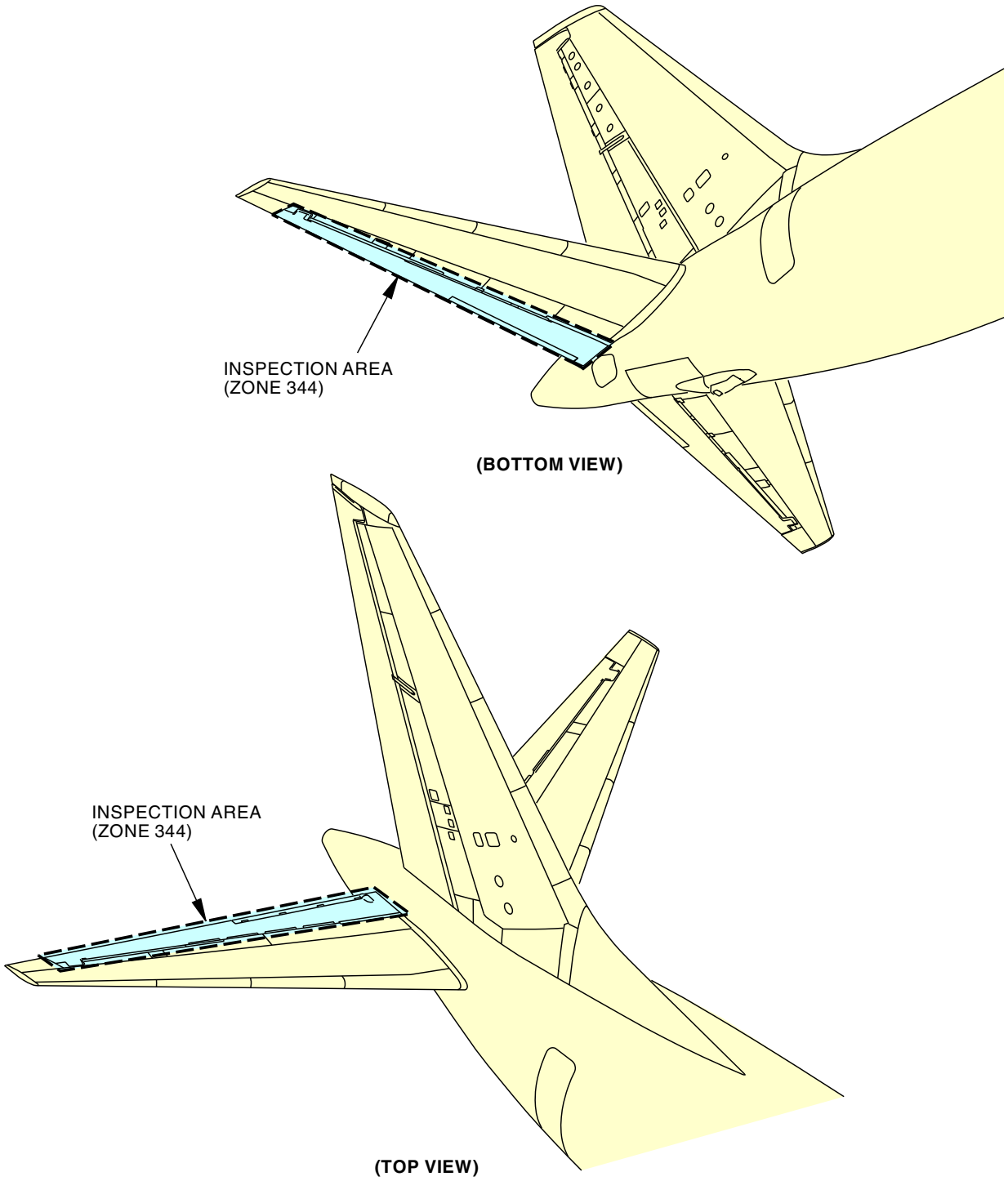
B. Zonal Inspection

SUBTASK 05-41-03-210-028

(1) Do a General Visual inspection of the horizontal stabilizer - elevator - right.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Elevator - Right Horizontal Stabilizer General Visual (External)
Figure 238/05-41-03-990-828

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-03-210-829

39. EXTERNAL - ZONAL (GV): HORIZONTAL STABILIZER - STABILIZER TIP - RIGHT

(Figure 239)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
345	Right Horizontal Stabilizer - Tip

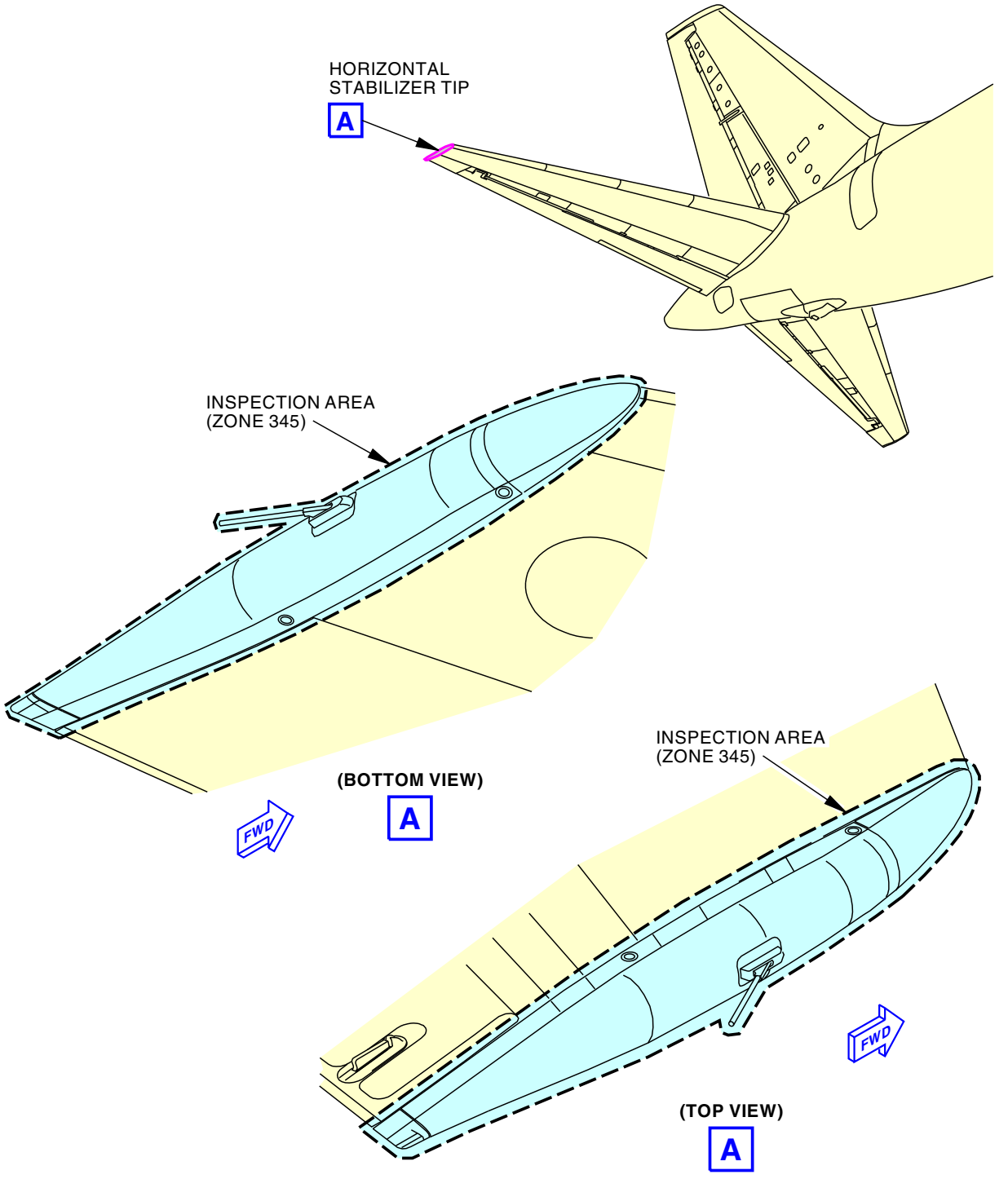
B. Zonal Inspection

SUBTASK 05-41-03-210-029

(1) Do a General Visual inspection of the horizontal stabilizer - stabilizer tip - right.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Stabilizer Tip - Right Horizontal Stabilizer General Visual (External)
Figure 239/05-41-03-990-829

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-03-210-839

40. INTERNAL - ZONAL (GVI): Horizontal Stabilizer - Stabilizer Tip - Right

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
345	Right Horizontal Stabilizer - Tip

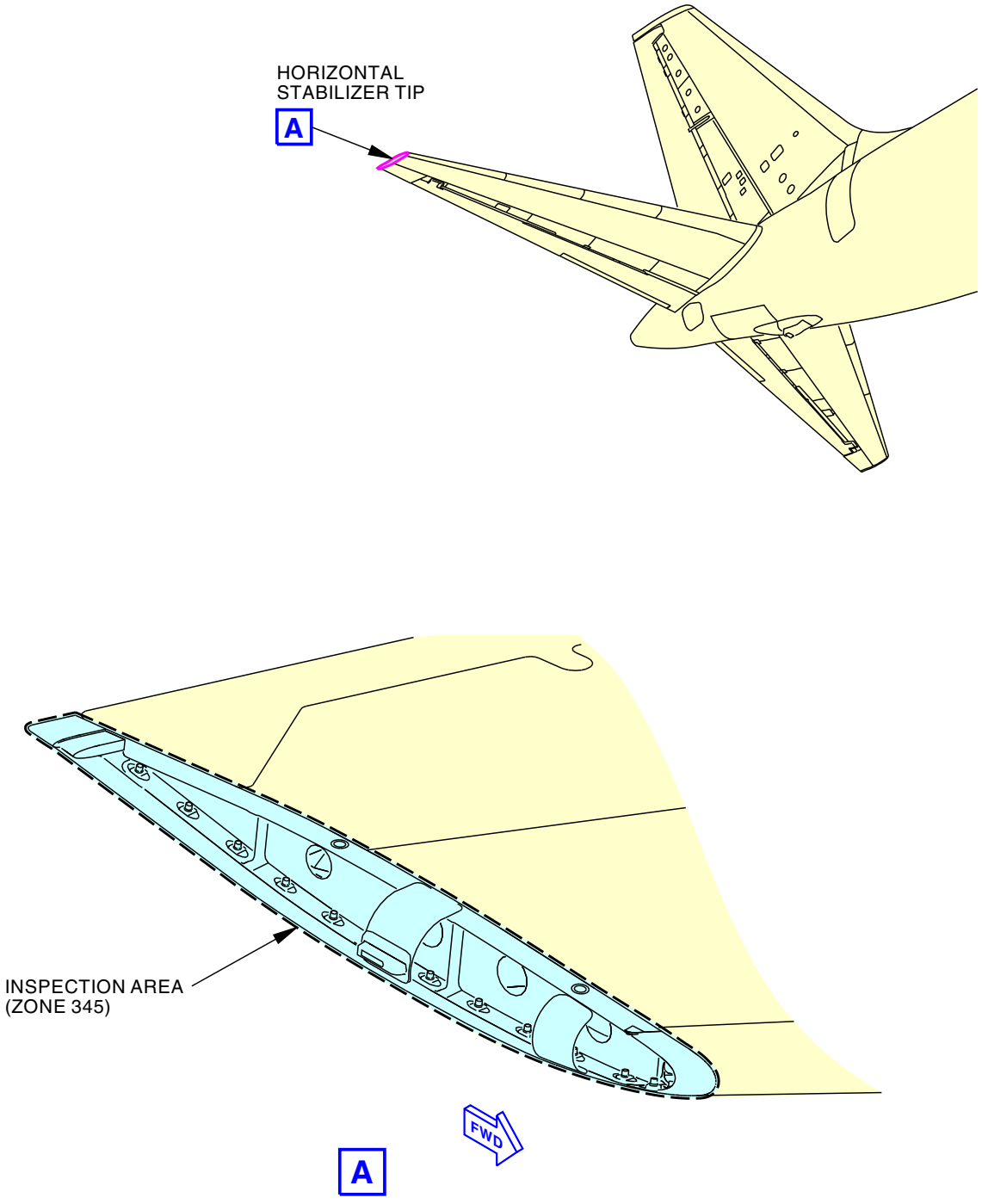
B. Zonal Inspection

SUBTASK 05-41-03-210-039

(1) Do a General Visual Inspection of the horizontal stabilizer - stabilizer tip - right.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



2546212 S0000601550_V1

Stabilizer Tip - Right Horizontal Stabilizer General Visual (Internal)
Figure 240/05-41-03-990-839

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-04-210-801

1. EXTERNAL - ZONAL (GV): POWERPLANT NO. 1

(Figure 201)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
410	Subzone - Engine 1
430	Subzone - Engine 1, Nacelle Strut

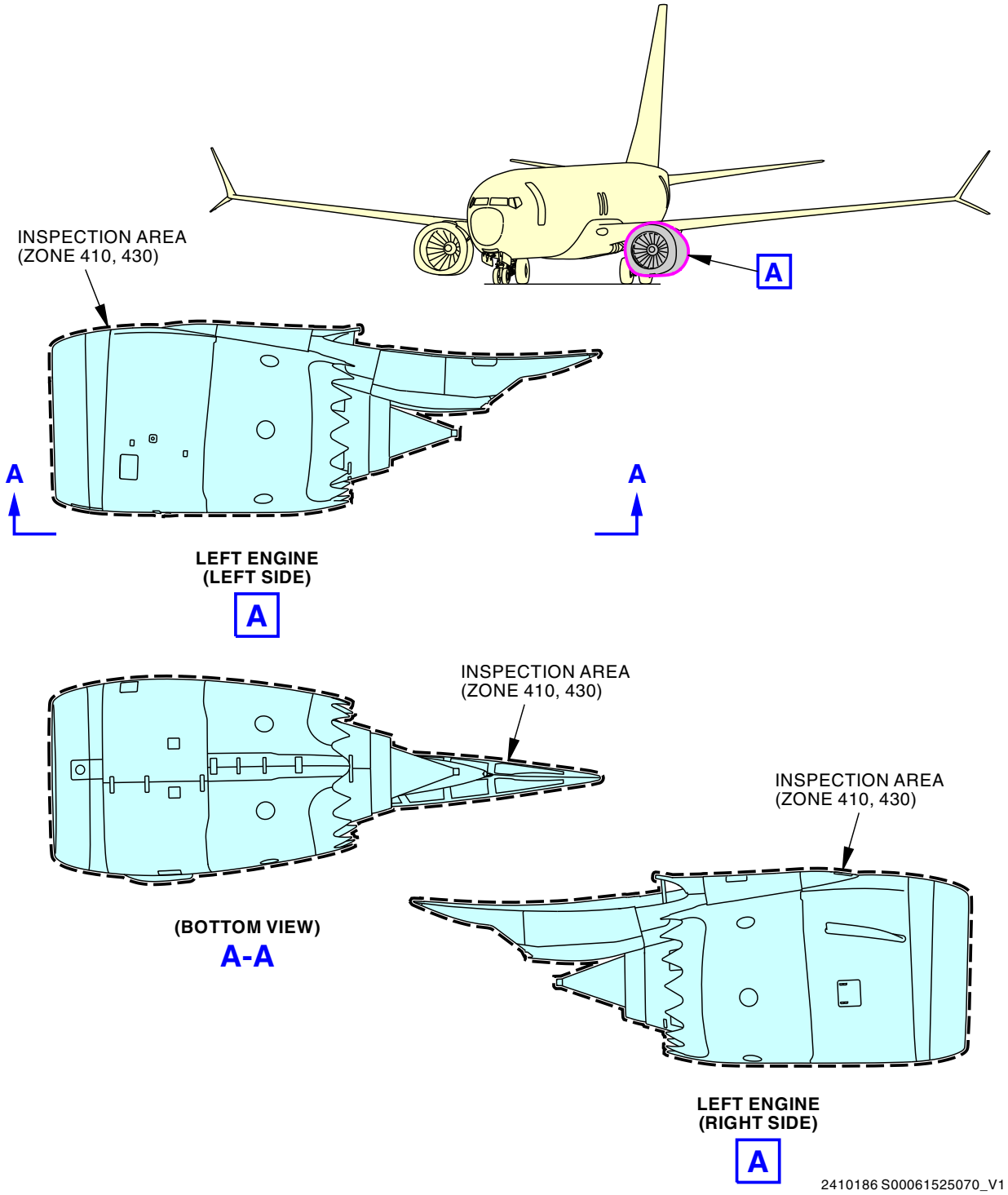
B. Zonal Inspection

SUBTASK 05-41-04-210-001

(1) Do a General Visual inspection of engine no. 1 and engine no. 1 strut fairings. Inspection is accomplished from the ground, without the use of stands or ladders. No additional access panels required.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Left Engine (Outer Exterior Surfaces) General Visual (External)
Figure 201/05-41-04-990-801

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-41-04-210-802

2. EXTERNAL - ZONAL (GV): Engine No. 1

(Figure 202)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This Zonal inspection procedure satisfies the required EZAP-derived Zonal inspection requirement for this zone.

B. References

Reference	Title
05-00-00-910-802	Enhanced Zonal Inspection Program (EZAP) Precautions (P/B 201)
20-60-07-910-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
411	Engine 1 - Engine

D. Access Panels

Number	Name/Location
413	Left Fan Cowl, Engine 1
414	Right Fan Cowl, Engine 1
415	Left Thrust Reverser, Engine 1
416	Right Thrust Reverser, Engine 1

E. Zonal Inspection

SUBTASK 05-41-04-010-001

(1) Open these access panels:

Number	Name/Location
413	Left Fan Cowl, Engine 1
414	Right Fan Cowl, Engine 1
415	Left Thrust Reverser, Engine 1
416	Right Thrust Reverser, Engine 1

SUBTASK 05-41-04-210-002

(2) Do the zonal inspection following the procedures in Enhanced Zonal Inspection Program (EZAP) Precautions, TASK 05-00-00-910-802.

(3) Perform an external zonal inspection (GV) of the engine no. 1. (EZAP)

SUBTASK 05-41-04-910-001

(4) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-910-801 for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

SUBTASK 05-41-04-410-001

(5) Close these access panels:

Number	Name/Location
413	Left Fan Cowl, Engine 1

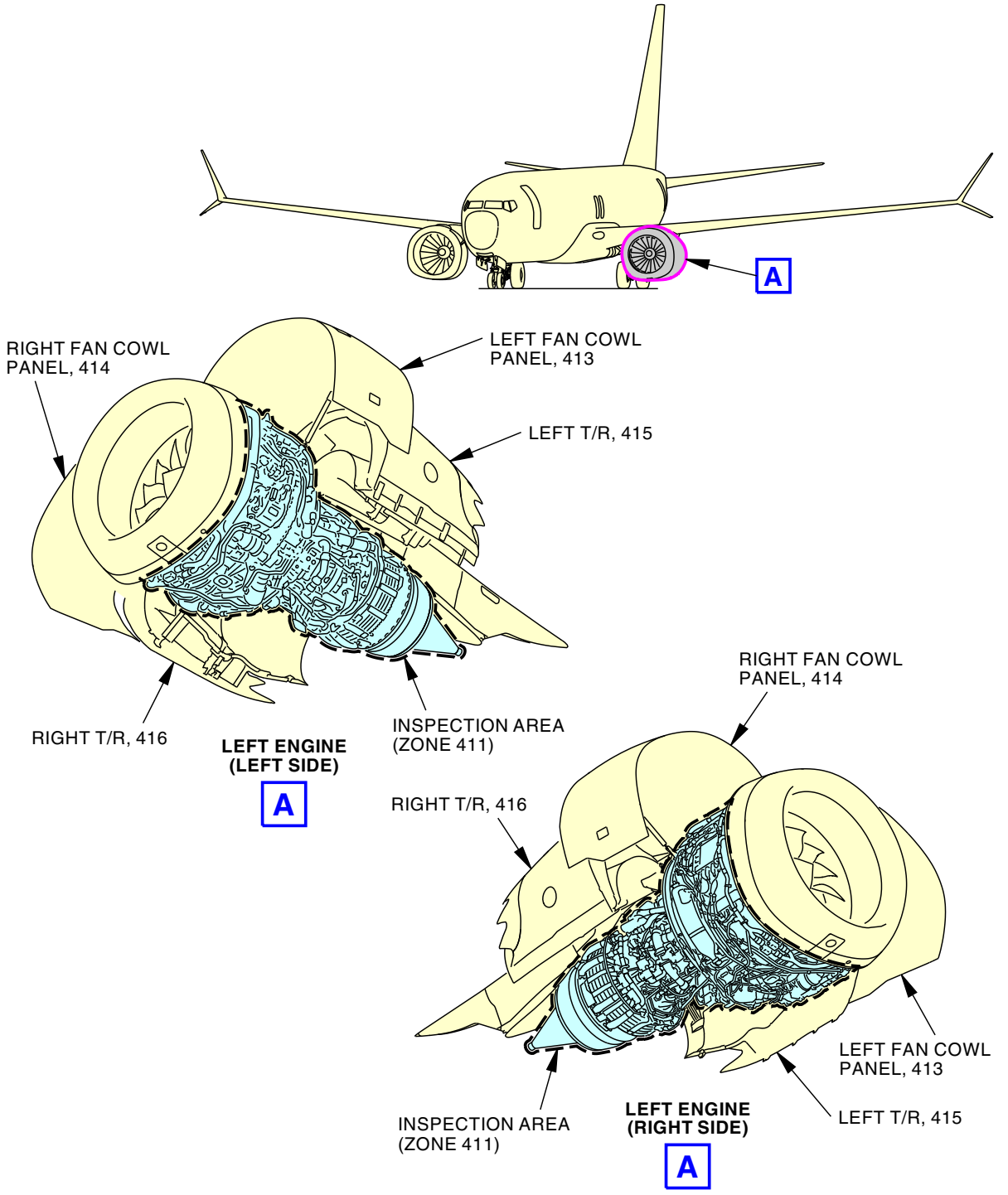
ECCN 9E991 BOEING PROPRIETARY - See title page for details

(Continued)

Number	Name/Location
414	Right Fan Cowl, Engine 1
415	Left Thrust Reverser, Engine 1
416	Right Thrust Reverser, Engine 1

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Left Engine (Inner Exterior Surfaces) General Visual (External)
Figure 202/05-41-04-990-802

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-04-210-803

3. EXTERNAL - ZONAL (GV): FAN COWL - ENGINE NO. 1

(Figure 203)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
413	Engine 1 - Fan Cowl, Left
414	Engine 1 - Fan Cowl, Right

B. Access Panels

Number	Name/Location
413	Left Fan Cowl, Engine 1
414	Right Fan Cowl, Engine 1

C. Zonal Inspection

SUBTASK 05-41-04-010-002

(1) Open these access panels:

Number	Name/Location
413	Left Fan Cowl, Engine 1
414	Right Fan Cowl, Engine 1

SUBTASK 05-41-04-210-003

(2) Do a General Visual Inspection of the fan cowl - engine no. 1 in the open position.

NOTE: Inner and outer exterior surface.

SUBTASK 05-41-04-210-023

(3) Do a General Visual Inspection of the fan cowl - engine no. 1 in the closed position.

NOTE: Inner and outer exterior surface.

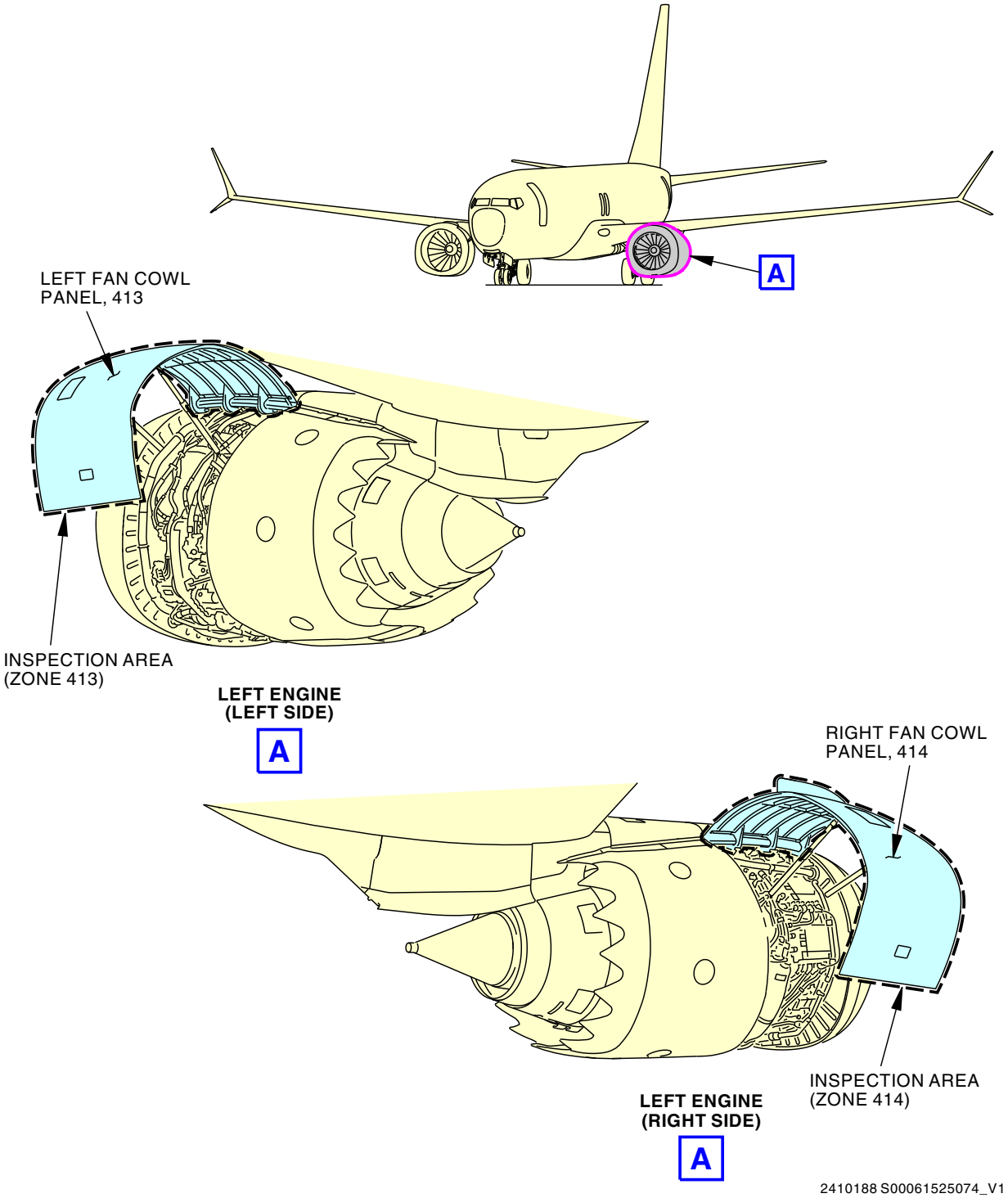
SUBTASK 05-41-04-410-002

(4) Close these access panels:

Number	Name/Location
413	Left Fan Cowl, Engine 1
414	Right Fan Cowl, Engine 1

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Fan Cowl - Left Engine General Visual (External)
Figure 203/05-41-04-990-803

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-04-210-804

4. EXTERNAL - ZONAL (GV): THRUST REVERSER - ENGINE NO. 1

(Figure 204)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
415	Engine 1 - Thrust Reverser, Left
416	Engine 1 - Thrust Reverser, Right

B. Zonal Inspection

NOTE: Thrust reverser in stowed and deployed position.

SUBTASK 05-41-04-210-004

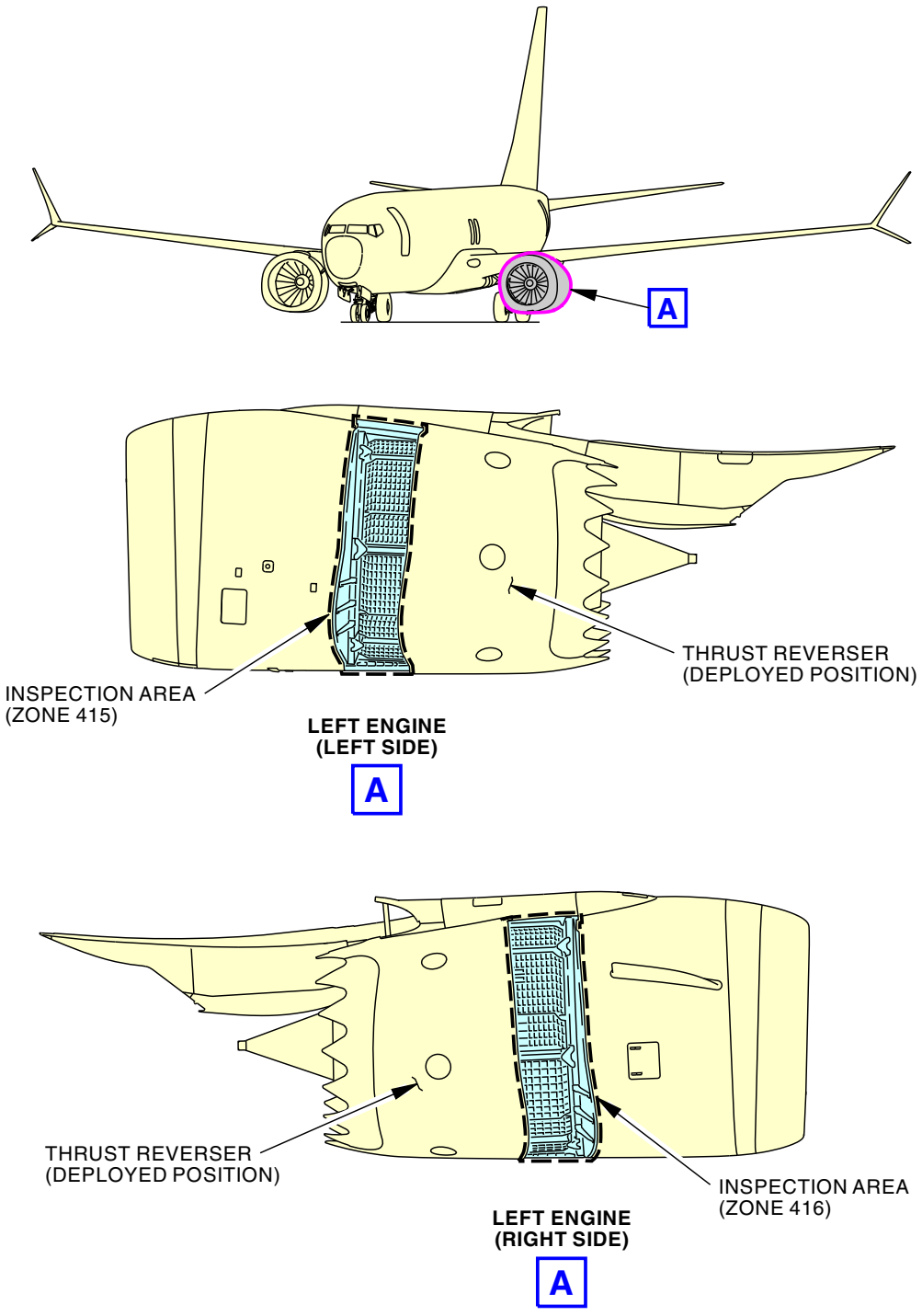
(1) Do a General Visual inspection of the thrust reverser in the deployed position - engine No. 1.

SUBTASK 05-41-04-210-019

(2) Do a General Visual inspection of the thrust reverser in the stowed position - engine No. 1.

——— END OF TASK ———

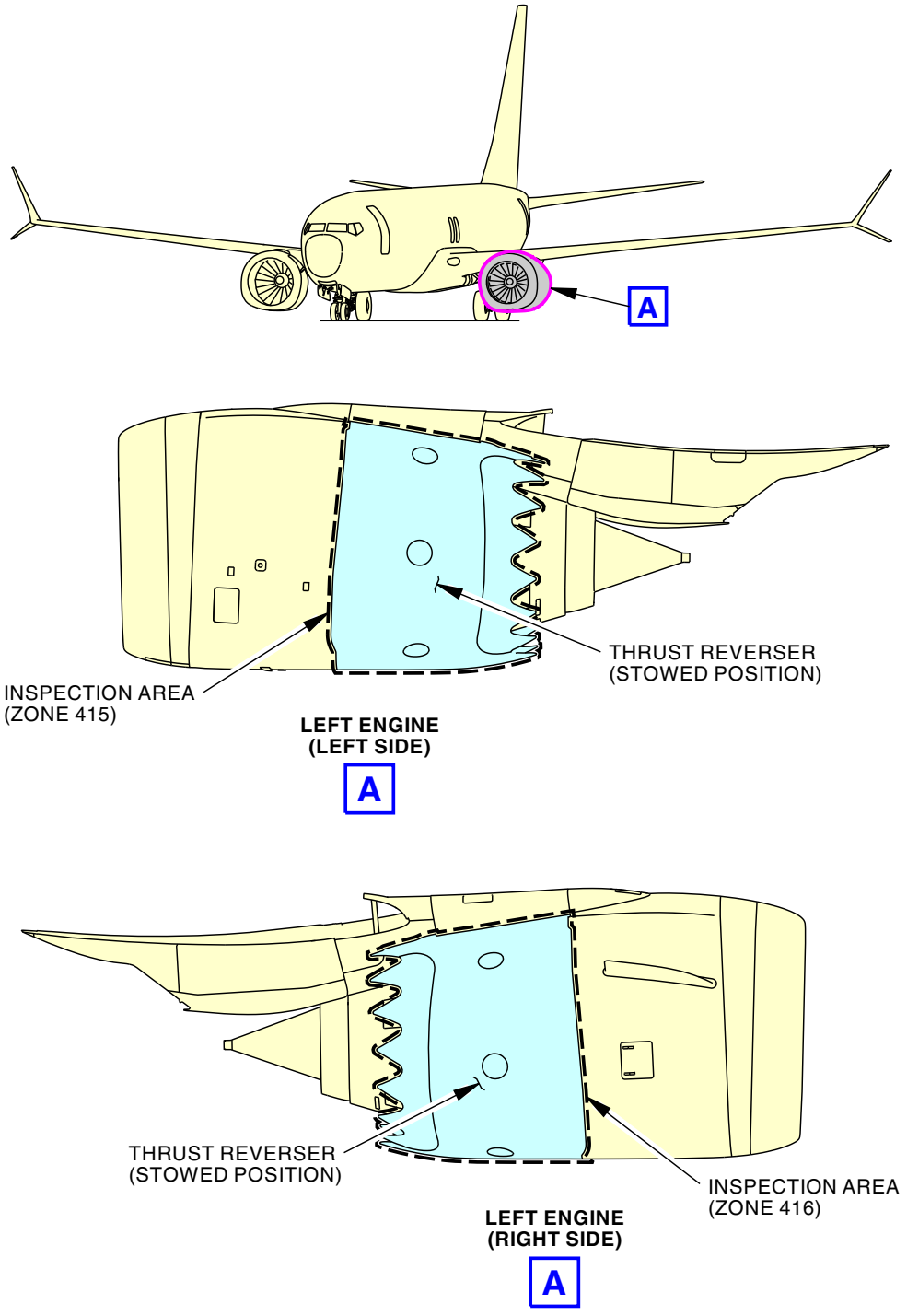
ECCN 9E991 BOEING PROPRIETARY - See title page for details



2410189 S00061525076_V1

Thrust Reverser (Stowed and Deployed Position) - Left Engine General Visual (External)
Figure 204/05-41-04-990-804 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



2410190 S00061525077_V1

Thrust Reverser (Stowed and Deployed Position) - Left Engine General Visual (External)
Figure 204/05-41-04-990-804 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-41-04-210-805

5. EXTERNAL - ZONAL (GV): Thrust Reverser - Engine No. 1

(Figure 205)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This Zonal inspection procedure satisfies the required EZAP-derived Zonal inspection requirement for this zone.

B. References

Reference	Title
05-00-00-910-802	Enhanced Zonal Inspection Program (EZAP) Precautions (P/B 201)
20-60-07-910-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
415	Engine 1 - Thrust Reverser, Left
416	Engine 1 - Thrust Reverser, Right

D. Access Panels

Number	Name/Location
415	Left Thrust Reverser, Engine 1
416	Right Thrust Reverser, Engine 1

E. Zonal Inspection

SUBTASK 05-41-04-010-003

(1) Open these access panels:

Number	Name/Location
415	Left Thrust Reverser, Engine 1
416	Right Thrust Reverser, Engine 1

SUBTASK 05-41-04-210-005

(2) Do the zonal inspection following the procedures in Enhanced Zonal Inspection Program (EZAP) Precautions, TASK 05-00-00-910-802.

SUBTASK 05-41-04-210-021

(3) Perform an external zonal inspection (GV) of the thrust reverser - engine no. 1. (EZAP)

NOTE: Inner and outer exterior surfaces.

SUBTASK 05-41-04-910-002

(4) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-910-801 for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

SUBTASK 05-41-04-410-003

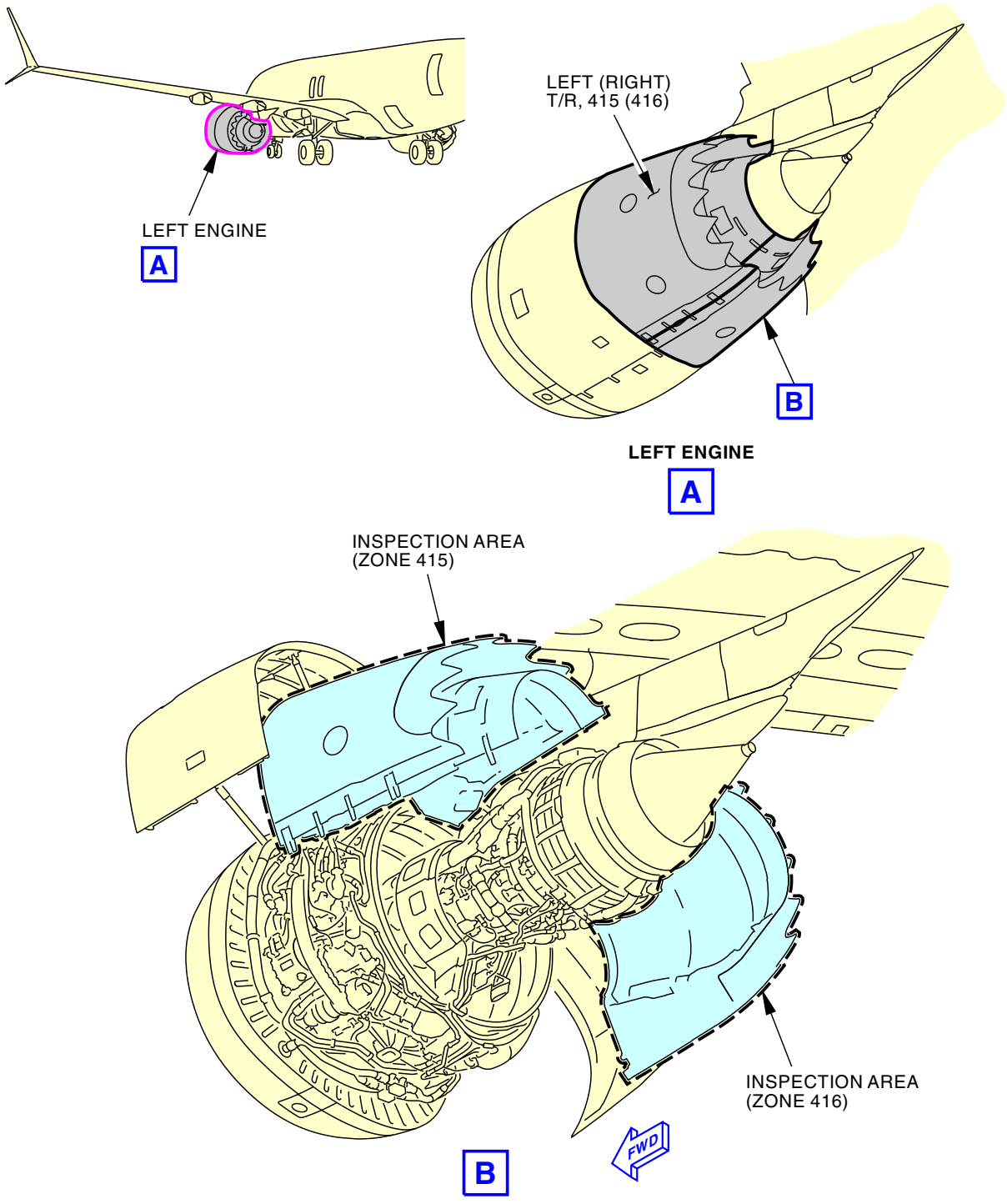
(5) Close these access panels:

Number	Name/Location
415	Left Thrust Reverser, Engine 1
416	Right Thrust Reverser, Engine 1

ECCN 9E991 BOEING PROPRIETARY - See title page for details

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Thrust Reverser (Inner and Outer Exterior Surfaces) Left Engine - General Visual (External)
Figure 205/05-41-04-990-805

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-04-210-806

6. EXTERNAL - ZONAL (GV): POWERPLANT NO. 2

(Figure 206)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
420	Subzone - Engine 2
440	Subzone - Engine 2, Nacelle Strut

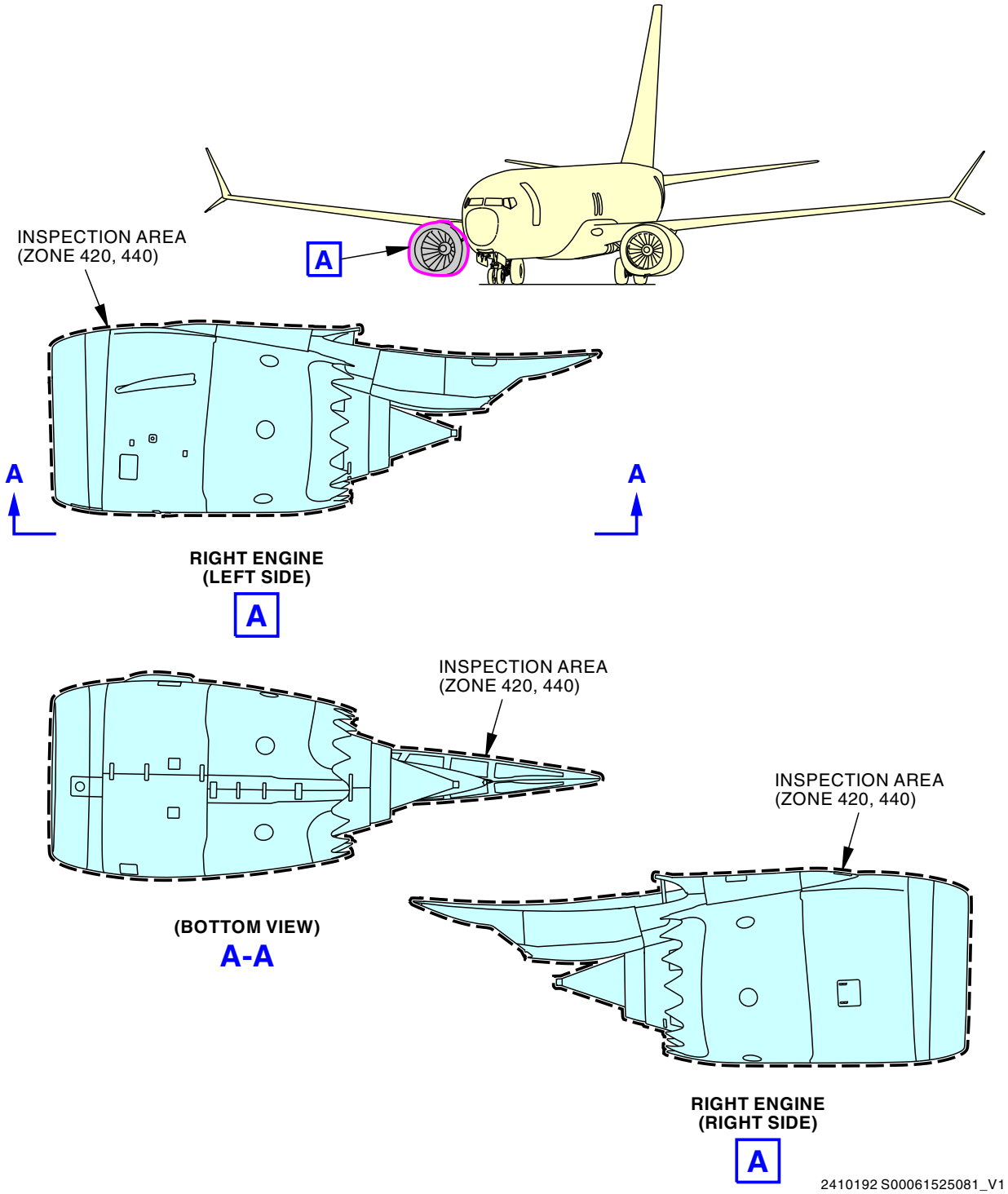
B. Zonal Inspection

SUBTASK 05-41-04-210-006

(1) Do a General Visual inspection of engine no. 2 and engine no. 2 strut fairings. Inspection is accomplished from the ground, without the use of stands or ladders. No additional access panels required.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Right Engine (Outer Exterior Surfaces) General Visual (External)
Figure 206/05-41-04-990-806

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-41-04-210-807

7. EXTERNAL - ZONAL (GV): Engine No. 2

(Figure 207)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This Zonal inspection procedure satisfies the required EZAP-derived Zonal inspection requirement for this zone.

B. References

Reference	Title
05-00-00-910-802	Enhanced Zonal Inspection Program (EZAP) Precautions (P/B 201)
20-60-07-910-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
421	Engine 2 - Engine

D. Access Panels

Number	Name/Location
423	Left Fan Cowl, Engine 2
424	Right Fan Cowl, Engine 2
425	Left Thrust Reverser, Engine 2
426	Right Thrust Reverser, Engine 2

E. Zonal Inspection

SUBTASK 05-41-04-010-004

(1) Open these access panels:

Number	Name/Location
423	Left Fan Cowl, Engine 2
424	Right Fan Cowl, Engine 2
425	Left Thrust Reverser, Engine 2
426	Right Thrust Reverser, Engine 2

SUBTASK 05-41-04-210-007

(2) Do the zonal inspection following the procedures in Enhanced Zonal Inspection Program (EZAP) Precautions, TASK 05-00-00-910-802.

(3) Perform an external zonal inspection (GV) of the engine no. 2. (EZAP)

SUBTASK 05-41-04-910-003

(4) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-910-801 for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

SUBTASK 05-41-04-410-004

(5) Close these access panels:

Number	Name/Location
423	Left Fan Cowl, Engine 2

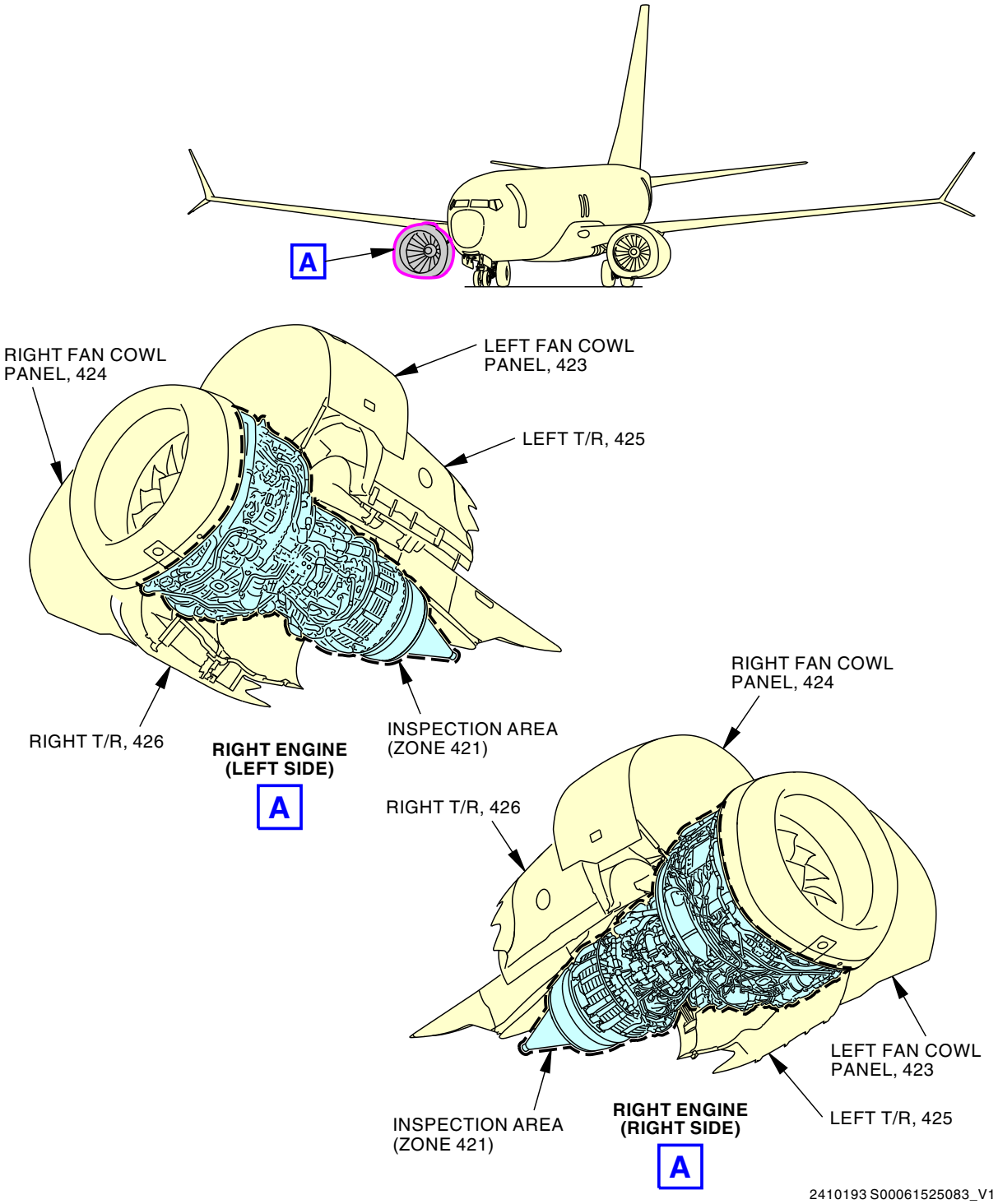
ECCN 9E991 BOEING PROPRIETARY - See title page for details

(Continued)

Number	Name/Location
424	Right Fan Cowl, Engine 2
425	Left Thrust Reverser, Engine 2
426	Right Thrust Reverser, Engine 2

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Right Engine (Inner Exterior Surfaces) General Visual (External)
Figure 207/05-41-04-990-807

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-04-210-808

8. EXTERNAL - ZONAL (GV): FAN COWL - ENGINE NO. 2

(Figure 208)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
423	Engine 2 - Fan Cowl, Left
424	Engine 2 - Fan Cowl, Right

B. Access Panels

Number	Name/Location
423	Left Fan Cowl, Engine 2
424	Right Fan Cowl, Engine 2

C. Zonal Inspection

SUBTASK 05-41-04-010-005

(1) Open these access panels:

Number	Name/Location
423	Left Fan Cowl, Engine 2
424	Right Fan Cowl, Engine 2

SUBTASK 05-41-04-210-008

(2) Do a General Visual Inspection of the fan cowl - engine no. 2 in the open position.

NOTE: Inner and outer exterior surface.

SUBTASK 05-41-04-210-024

(3) Do a General Visual Inspection of the fan cowl - engine no. 2 in the closed position.

NOTE: Inner and outer exterior surface.

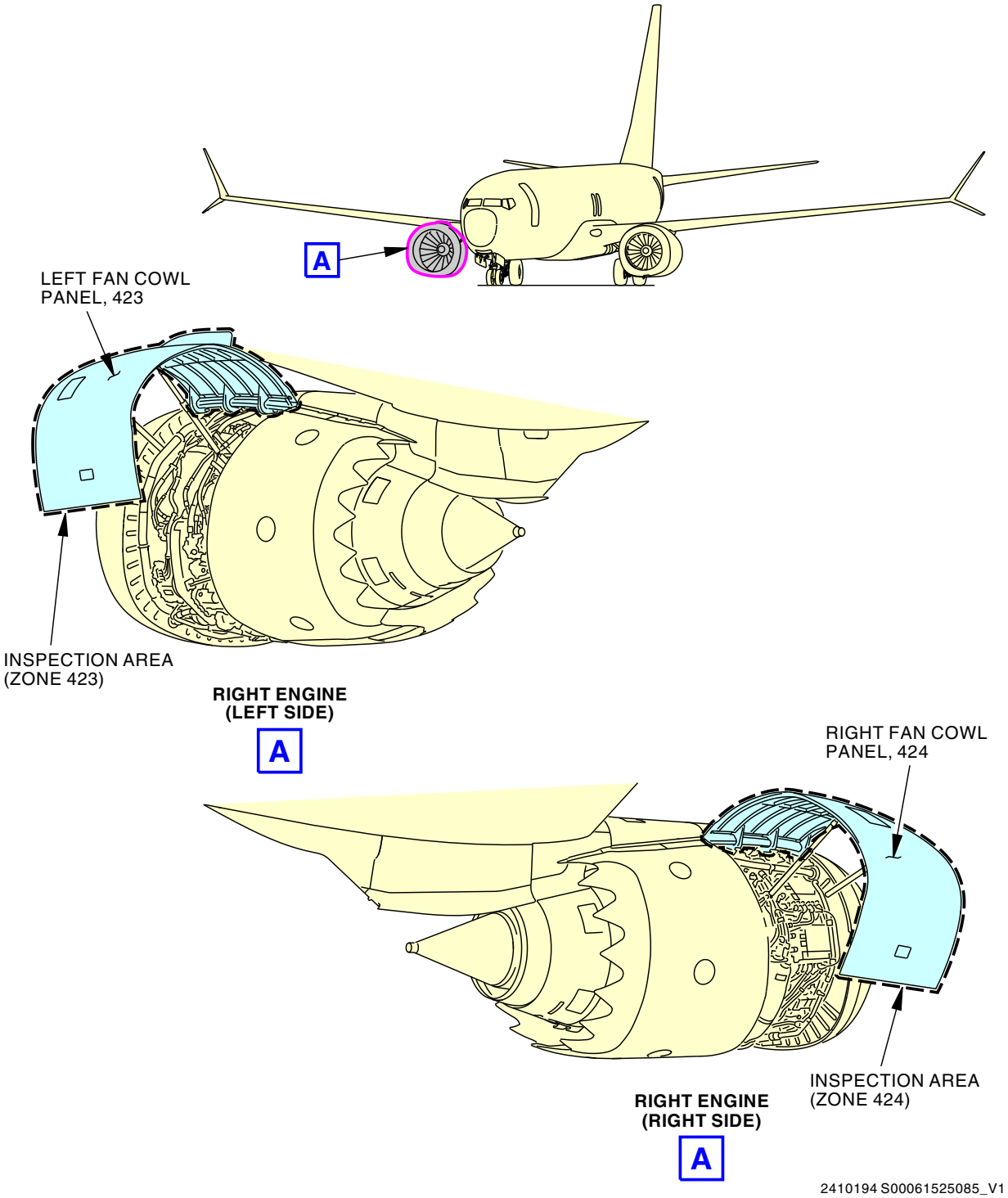
SUBTASK 05-41-04-410-005

(4) Close these access panels:

Number	Name/Location
423	Left Fan Cowl, Engine 2
424	Right Fan Cowl, Engine 2

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Fan Cowl - Right Engine General Visual (External)
Figure 208/05-41-04-990-808

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-04-210-809

9. EXTERNAL - ZONAL (GV): THRUST REVERSER - ENGINE NO. 2

(Figure 209)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
425	Engine 2 - Thrust Reverser, Left
426	Engine 2 - Thrust Reverser, Right

B. Zonal Inspection

NOTE: Thrust reverser in stowed and deployed position.

SUBTASK 05-41-04-210-009

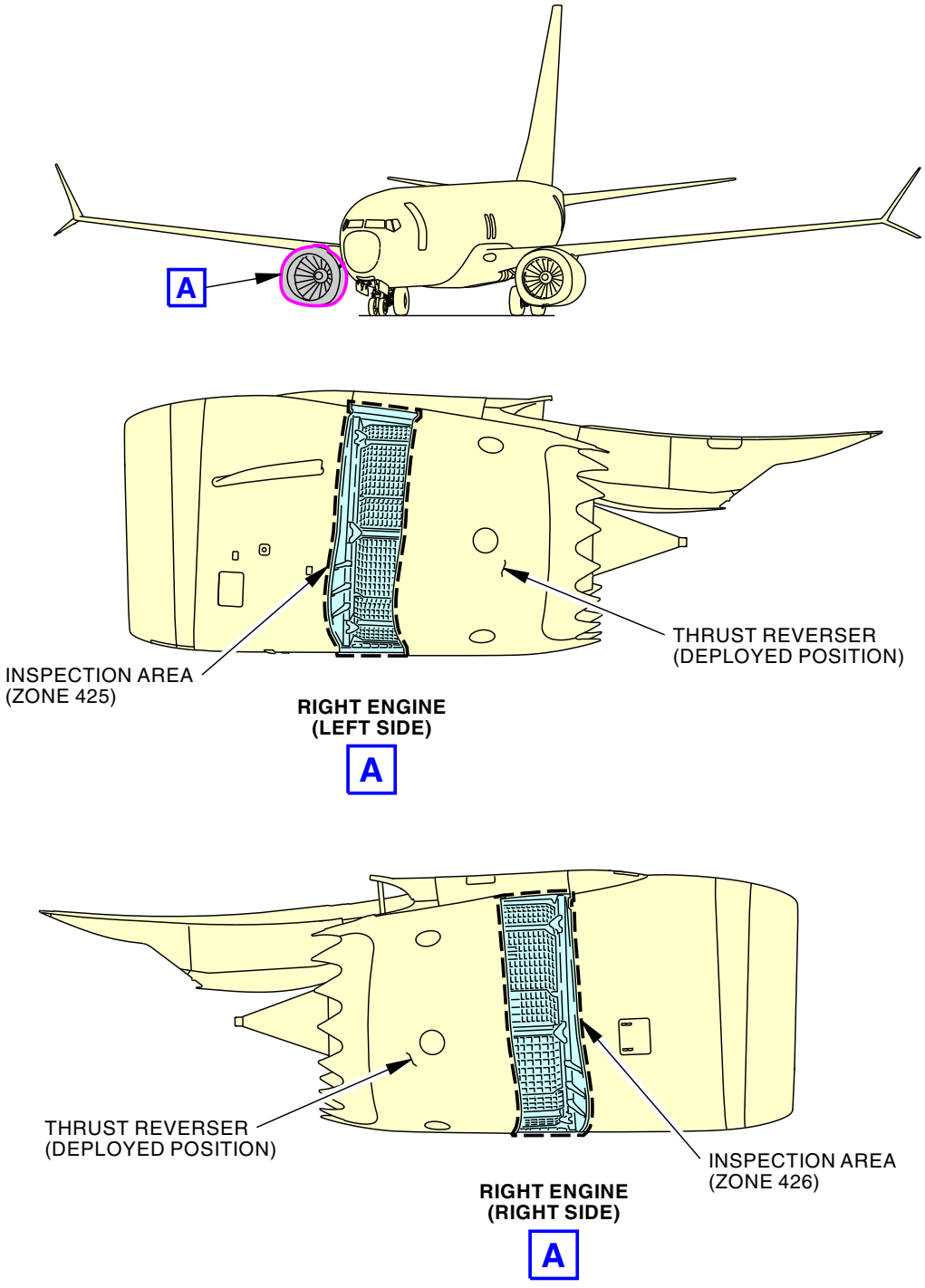
(1) Do a General Visual inspection of the thrust reverser in the deployed position - engine No. 2.

SUBTASK 05-41-04-210-020

(2) Do a General Visual inspection of the thrust reverser in the stowed position - engine No. 2.

——— END OF TASK ———

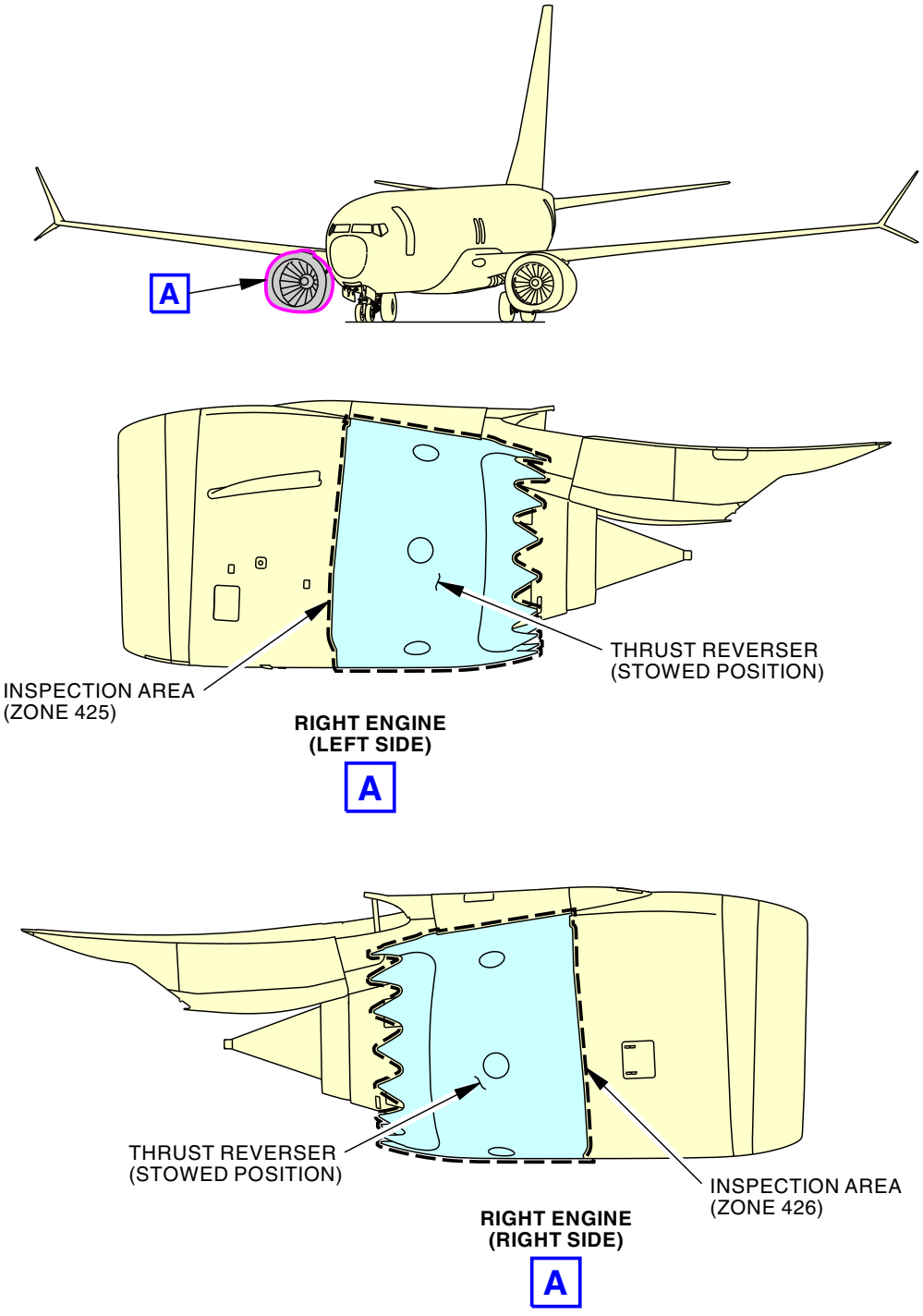
ECCN 9E991 BOEING PROPRIETARY - See title page for details



2410195 S00061525087_V1

Thrust Reverser (Stowed and Deployed Position) - Right Engine General Visual (External)
Figure 209/05-41-04-990-809 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



2410196 S00061525088_V1

Thrust Reverser (Stowed and Deployed Position) - Right Engine General Visual (External)
Figure 209/05-41-04-990-809 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-41-04-210-810

10. EXTERNAL - ZONAL (GV): Thrust Reverser - Engine No. 2

(Figure 210)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This Zonal inspection procedure satisfies the required EZAP-derived Zonal inspection requirement for this zone.

B. References

Reference	Title
05-00-00-910-802	Enhanced Zonal Inspection Program (EZAP) Precautions (P/B 201)
20-60-07-910-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
425	Engine 2 - Thrust Reverser, Left
426	Engine 2 - Thrust Reverser, Right

D. Access Panels

Number	Name/Location
425	Left Thrust Reverser, Engine 2
426	Right Thrust Reverser, Engine 2

E. Zonal Inspection

SUBTASK 05-41-04-010-006

(1) Open these access panels:

Number	Name/Location
425	Left Thrust Reverser, Engine 2
426	Right Thrust Reverser, Engine 2

SUBTASK 05-41-04-210-010

(2) Do the zonal inspection following the procedures in Enhanced Zonal Inspection Program (EZAP) Precautions, TASK 05-00-00-910-802.

SUBTASK 05-41-04-210-022

(3) Perform an external zonal inspection (GV) of the thrust reverser - engine no. 2. (EZAP)

NOTE: Inner and outer exterior surfaces.

SUBTASK 05-41-04-910-004

(4) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-910-801 for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

SUBTASK 05-41-04-410-006

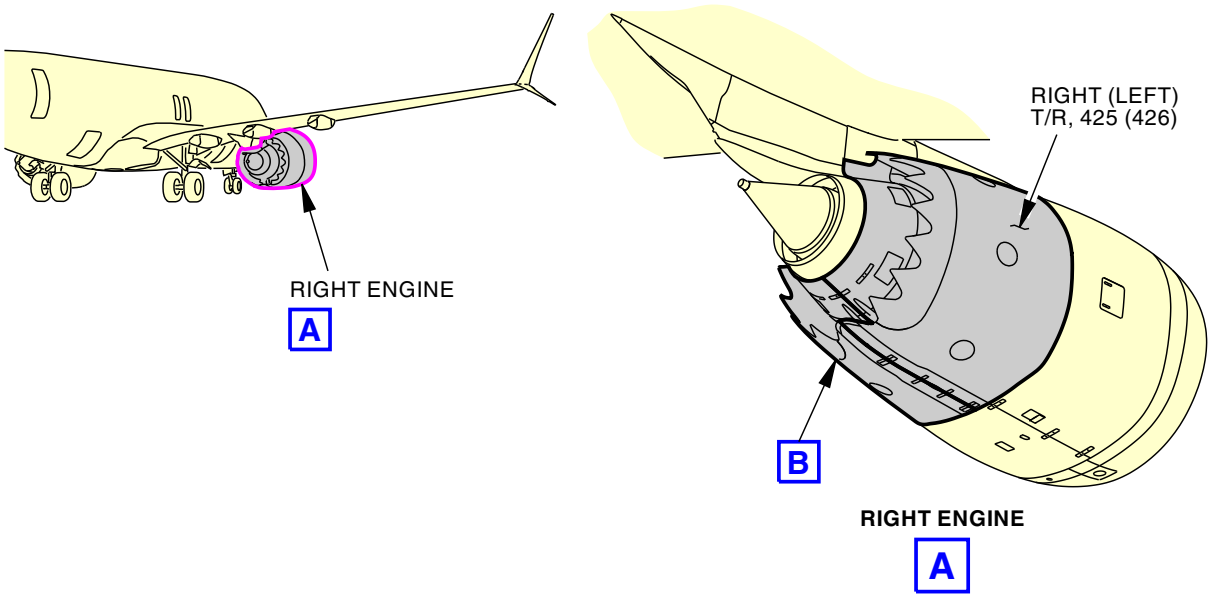
(5) Close these access panels:

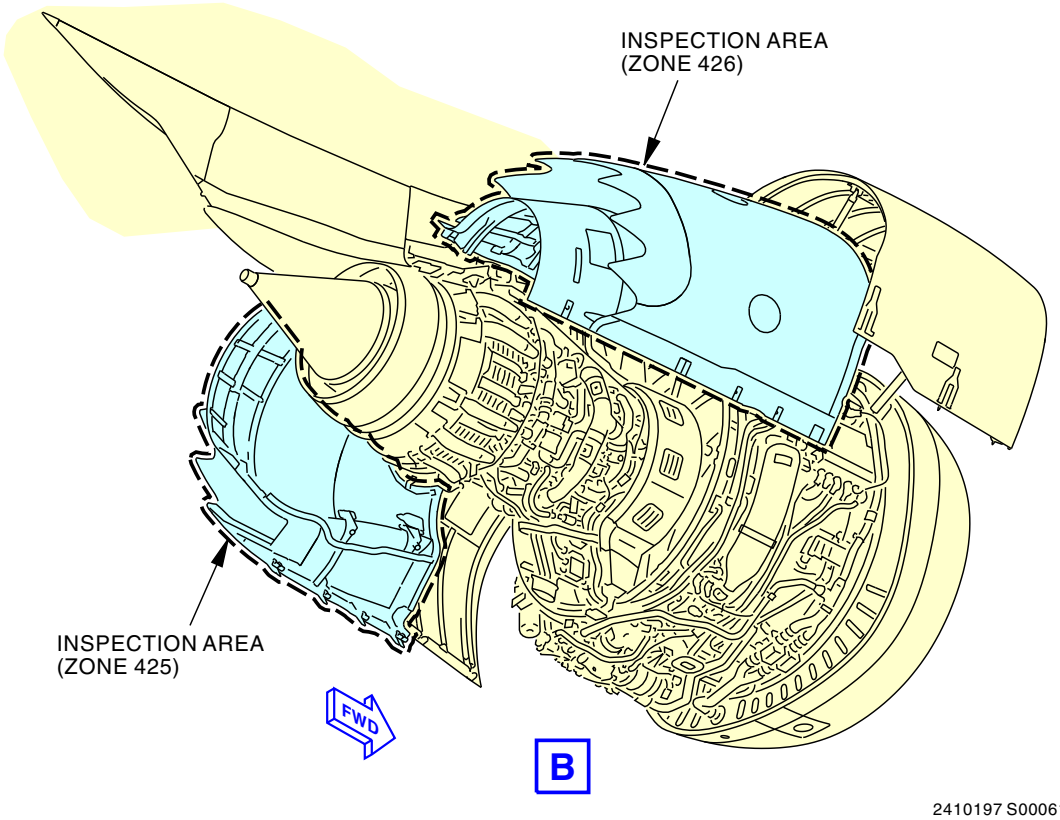
Number	Name/Location
425	Left Thrust Reverser, Engine 2
426	Right Thrust Reverser, Engine 2

ECCN 9E991 BOEING PROPRIETARY - See title page for details

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details





2410197 S00061525090_V1

Thrust Reverser (Inner and Outer Exterior Surfaces) Right Engine - General Visual (External)
Figure 210/05-41-04-990-810

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-04-210-811

11. EXTERNAL - ZONAL (GV): Forward Strut Fairing - Engine No. 1

(Figure 211)

NOTE: This procedure is a scheduled maintenance task.

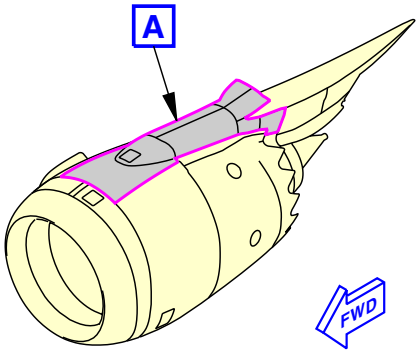
A. Zonal Inspection

SUBTASK 05-41-04-210-011

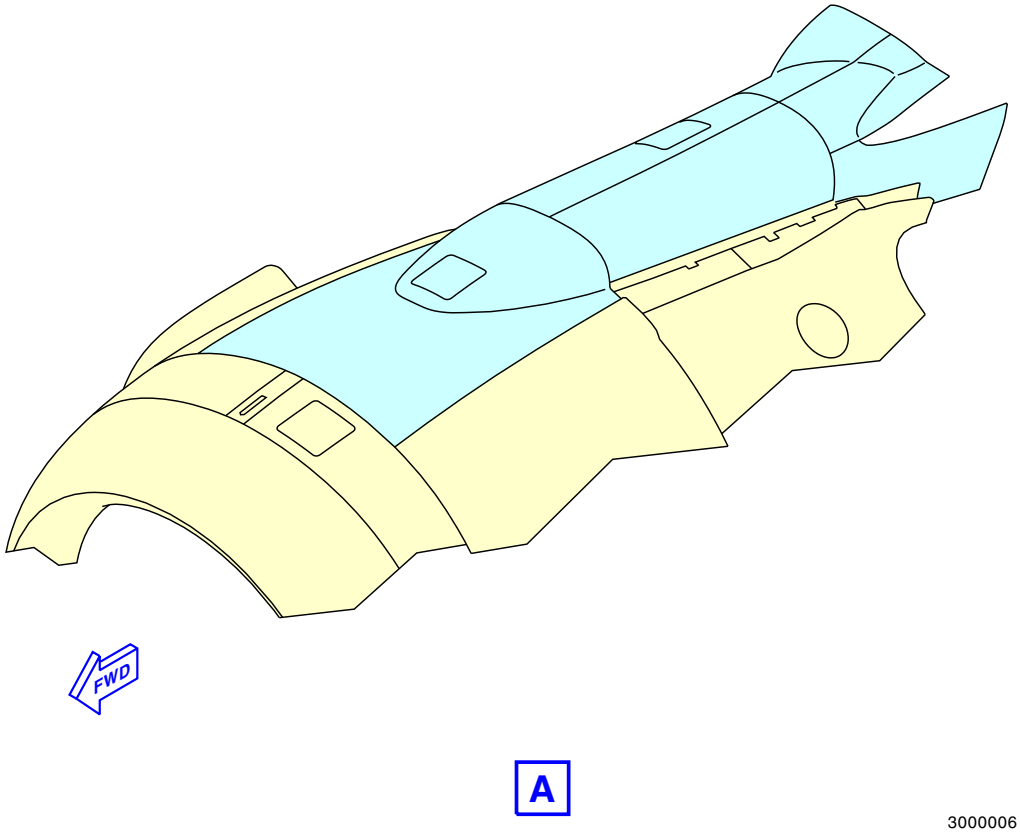
(1) Do an external zonal general visual inspection of the Forward Strut Fairing - Engine No. 1.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



(ENGINE POSITION 1 IS SHOWN, ENGINE POSITION 2 IS OPPOSITE)



3000006 S0000774924_V1

Forward Strut Fairing - Engine No. 1 General Visual (External)
Figure 211/05-41-04-990-819

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-41-04-210-812

12. INTERNAL - ZONAL (GV): Fan Cowl Support Beam - Engine No. 1

(Figure 212)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This Zonal inspection procedure satisfies the required EZAP-derived Zonal inspection requirement for this zone.

B. References

Reference	Title
05-00-00-910-802	Enhanced Zonal Inspection Program (EZAP) Precautions (P/B 201)
20-60-07-910-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
432	Engine 1 - Fan Cowl Support Beam

D. Access Panels

Number	Name/Location
431AT	Forward Strut Fairing, Thumbnail Fairing, Strut 1

E. Zonal Inspection

SUBTASK 05-41-04-010-008

(1) Open this access panel:

Number	Name/Location
431AT	Forward Strut Fairing, Thumbnail Fairing, Strut 1

SUBTASK 05-41-04-210-012

(2) Do the zonal inspection following the procedures in Enhanced Zonal Inspection Program (EZAP) Precautions, TASK 05-00-00-910-802.

(3) Perform an internal zonal inspection (GV) of the fan cowl support beam - engine no. 1. (EZAP)

SUBTASK 05-41-04-910-006

(4) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-910-801 for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

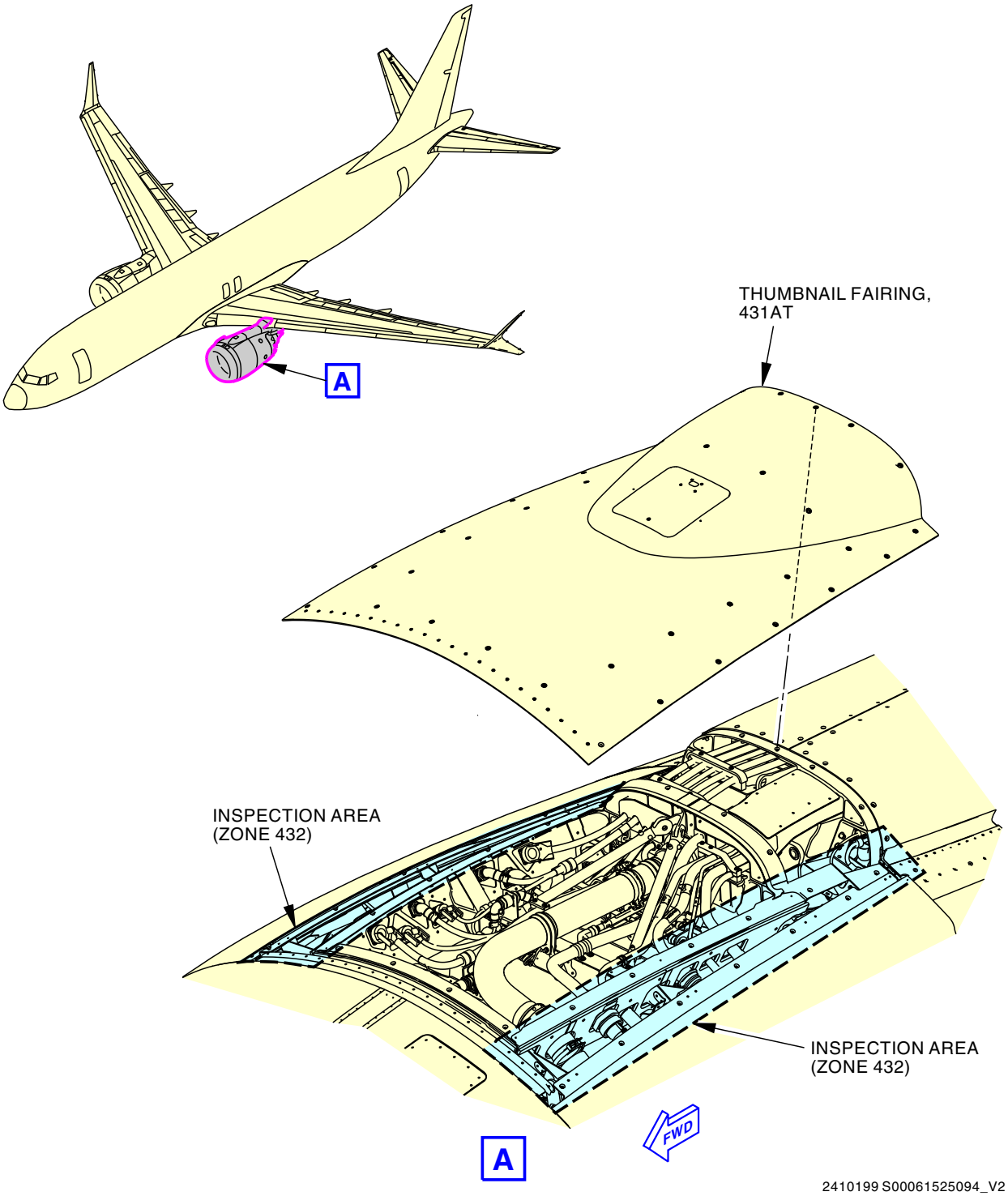
SUBTASK 05-41-04-410-008

(5) Close this access panel:

Number	Name/Location
431AT	Forward Strut Fairing, Thumbnail Fairing, Strut 1

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Fan Cowl Support Beam - Left Engine General Visual (Internal)
Figure 212/05-41-04-990-812

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-41-04-210-813

13. INTERNAL - ZONAL (GV): Strut Torque Box - Engine No. 1

(Figure 213)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This Zonal inspection procedure satisfies the required EZAP-derived Zonal inspection requirement for this zone.

B. References

Reference	Title
05-00-00-910-802	Enhanced Zonal Inspection Program (EZAP) Precautions (P/B 201)
05-51-22-210-801	Titanium Parts Contaminated With Fire-Resistant Hydraulic Fluid Inspection (P/B 201)
20-60-07-910-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
433	Engine 1 - Strut Torque Box

D. Access Panels

Number	Name/Location
431BL	Forward Strut Fairing, Left Mid Strut Fairing, Strut 1
431BR	Forward Strut Fairing, Right Mid Strut Fairing, Strut 1
431CL	Forward Strut Fairing, Left Overwing Fairing, Strut 1
431CR	Forward Strut Fairing, Right Overwing Fairing, Strut 1
431CT	Forward Strut Fairing, Right Mid-Strut Fairing Pressure Relief Door, Strut 1

E. Zonal Inspection

SUBTASK 05-41-04-010-009

(1) Open these access panels:

Number	Name/Location
431BL	Forward Strut Fairing, Left Mid Strut Fairing, Strut 1
431BR	Forward Strut Fairing, Right Mid Strut Fairing, Strut 1
431CL	Forward Strut Fairing, Left Overwing Fairing, Strut 1
431CR	Forward Strut Fairing, Right Overwing Fairing, Strut 1
431CT	Forward Strut Fairing, Right Mid-Strut Fairing Pressure Relief Door, Strut 1

SUBTASK 05-41-04-210-013

(2) Do the zonal inspection following the procedures in Enhanced Zonal Inspection Program (EZAP) Precautions, TASK 05-00-00-910-802.

(3) Perform an internal zonal inspection (GV) of the strut torque box - engine no. 1. (EZAP)

(4) If hydraulic fluid is found during the inspection, refer to Titanium Parts Contaminated With Fire-Resistant Hydraulic Fluid Inspection, TASK 05-51-22-210-801.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 05-41-04-910-007

(5) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-910-801, for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

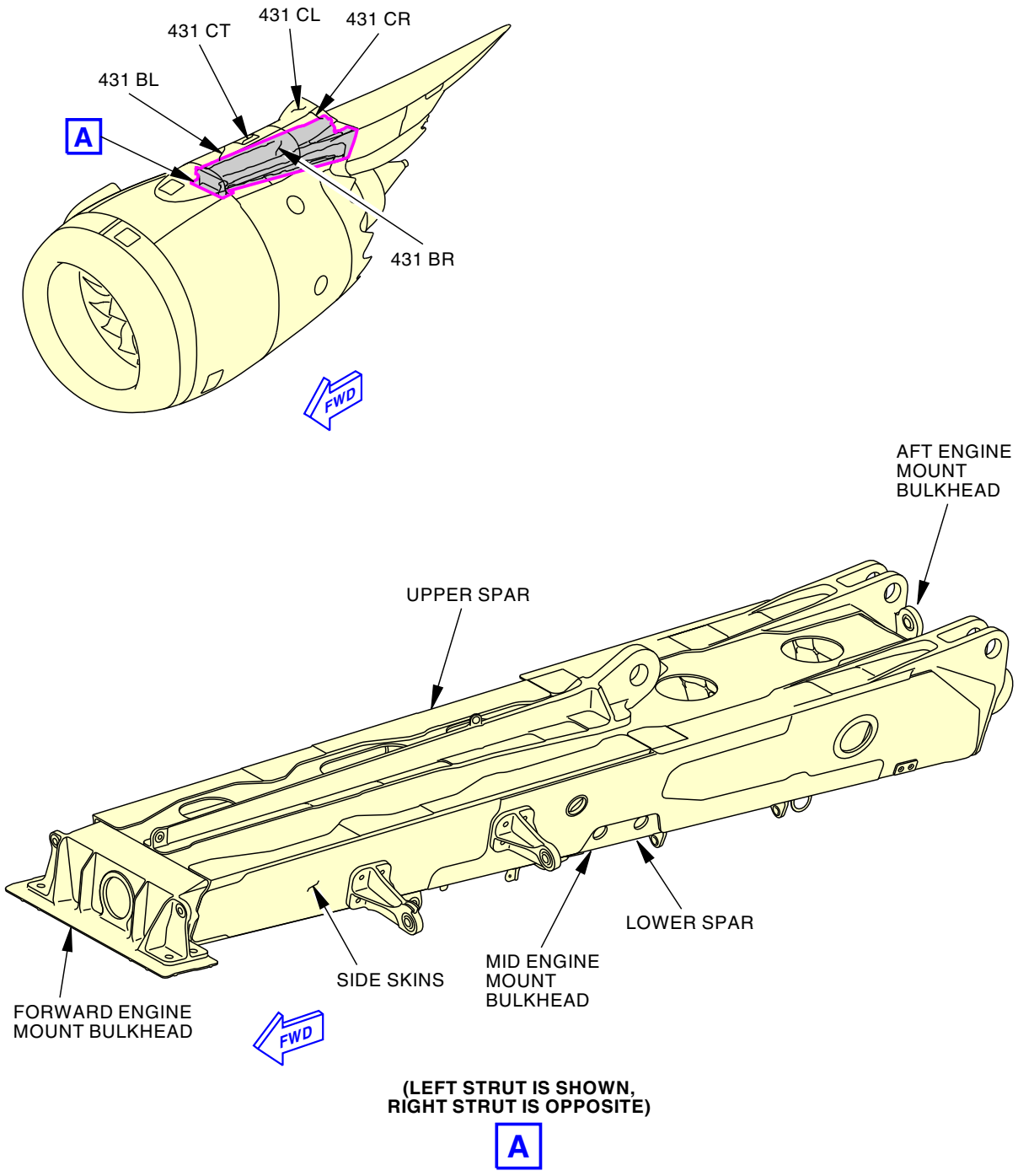
SUBTASK 05-41-04-410-009

(6) Close these access panels:

Number	Name/Location
431BL	Forward Strut Fairing, Left Mid Strut Fairing, Strut 1
431BR	Forward Strut Fairing, Right Mid Strut Fairing, Strut 1
431CL	Forward Strut Fairing, Left Overwing Fairing, Strut 1
431CR	Forward Strut Fairing, Right Overwing Fairing, Strut 1
431CT	Forward Strut Fairing, Right Mid-Strut Fairing Pressure Relief Door, Strut 1

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Strut Torque Box - Left Engine General Visual (Internal)
Figure 213/05-41-04-990-813

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-41-04-210-814

14. INTERNAL - ZONAL (GV): Aft Strut Fairing - Engine No. 1

(Figure 214)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This Zonal inspection procedure satisfies the required EZAP-derived Zonal inspection requirement for this zone.

B. References

Reference	Title
05-00-00-910-802	Enhanced Zonal Inspection Program (EZAP) Precautions (P/B 201)
20-60-07-910-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
434	Engine 1 - Aft Strut Fairing

D. Access Panels

Number	Name/Location
434AL	Aft Strut Fairing, Left Panel, Strut 1
434AR	Aft Strut Fairing, Right Panel, Strut 1
434CL	Aft Strut Fairing, Left Access To Fuel Door, Strut 1

E. Zonal Inspection

SUBTASK 05-41-04-010-010

(1) Open these access panels:

Number	Name/Location
434AL	Aft Strut Fairing, Left Panel, Strut 1
434AR	Aft Strut Fairing, Right Panel, Strut 1
434CL	Aft Strut Fairing, Left Access To Fuel Door, Strut 1

SUBTASK 05-41-04-210-014

(2) Do the zonal inspection following the procedures in Enhanced Zonal Inspection Program (EZAP) Precautions, TASK 05-00-00-910-802.

(3) Perform an internal zonal inspection (GV) of the aft strut fairing - engine no. 1 (EZAP).

SUBTASK 05-41-04-910-008

(4) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-910-801, for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

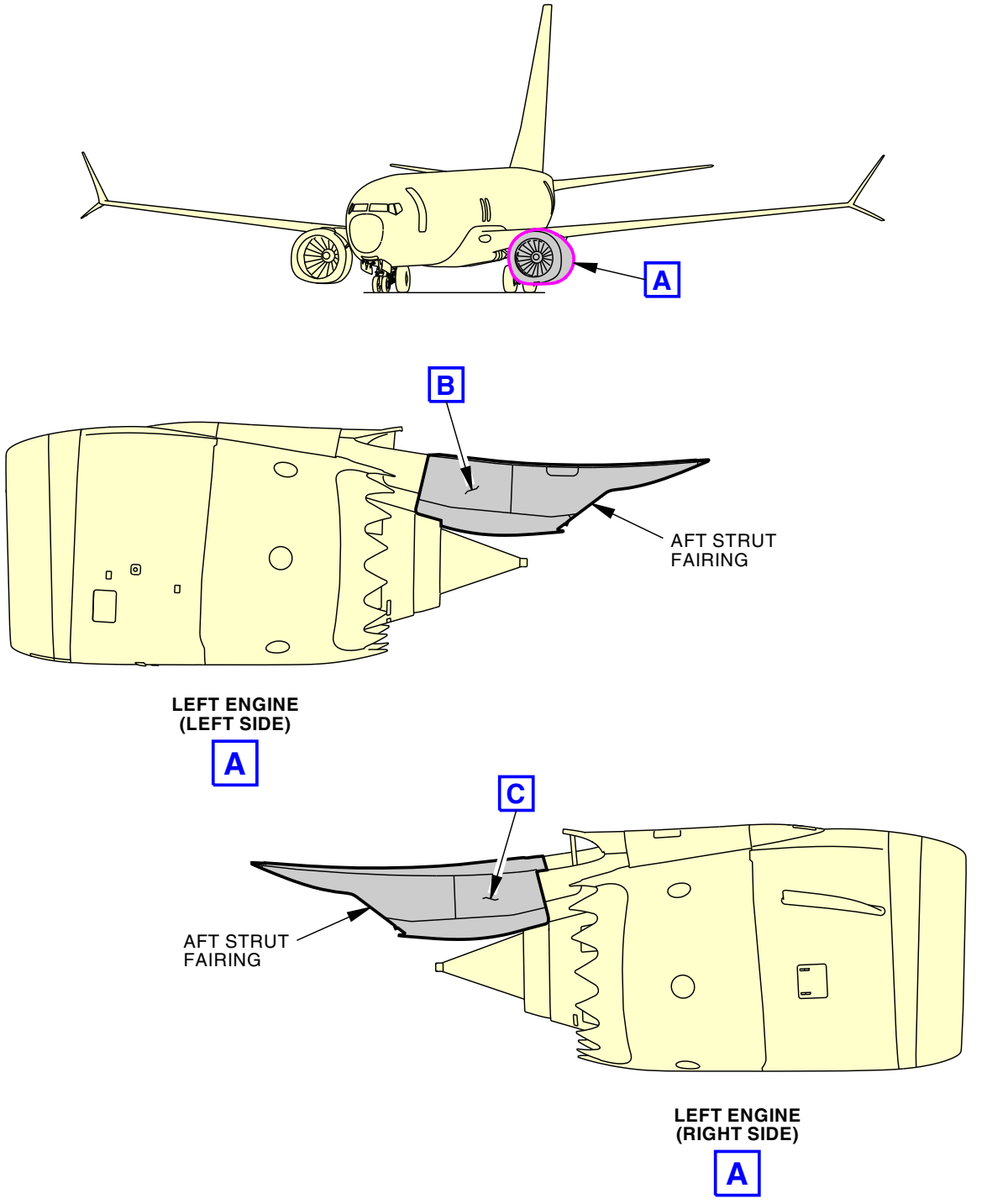
SUBTASK 05-41-04-410-010

(5) Close these access panels:

Number	Name/Location
434AL	Aft Strut Fairing, Left Panel, Strut 1
434AR	Aft Strut Fairing, Right Panel, Strut 1
434CL	Aft Strut Fairing, Left Access To Fuel Door, Strut 1

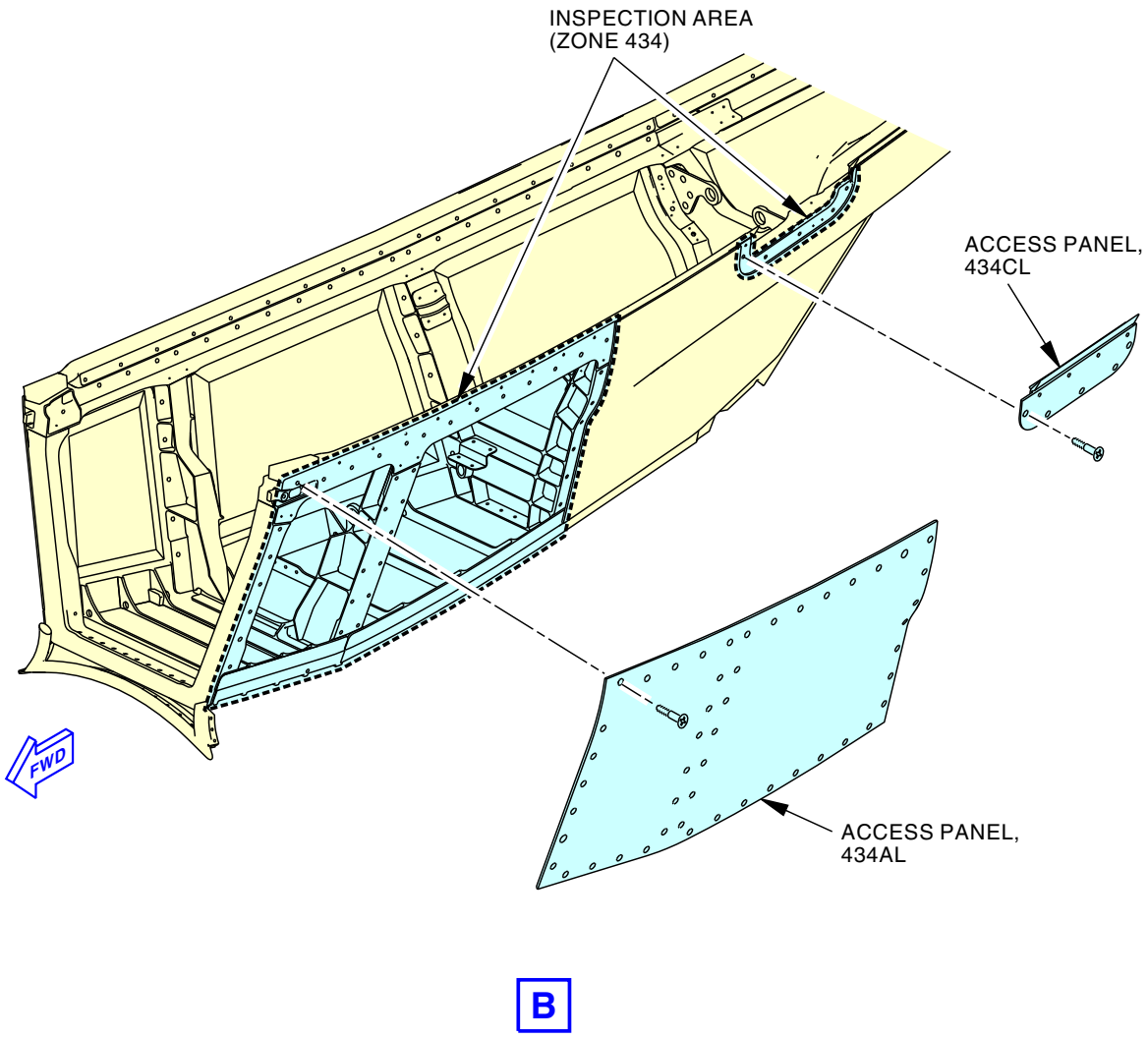
END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Aft Strut Fairing - Left Engine General Visual (Internal)
Figure 214/05-41-04-990-814 (Sheet 1 of 3)

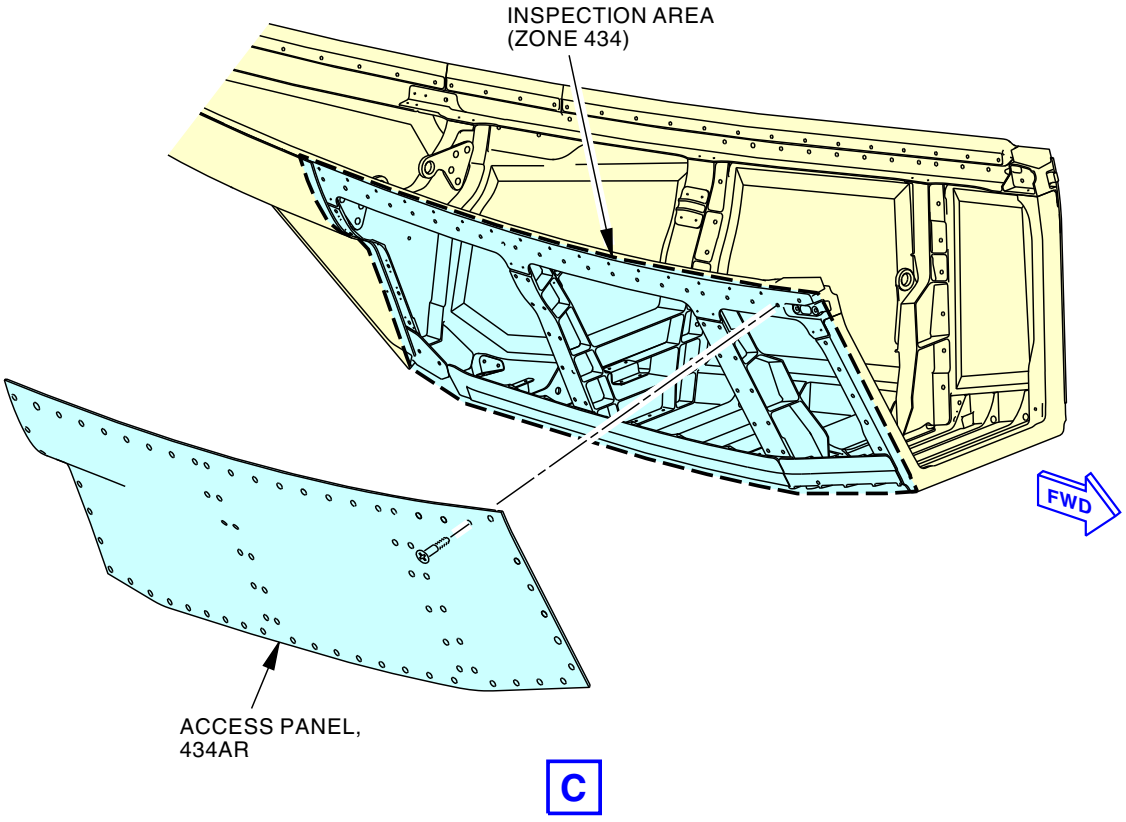
ECCN 9E991 BOEING PROPRIETARY - See title page for details



2410203 S00061525100_V2

Aft Strut Fairing - Left Engine General Visual (Internal)
Figure 214/05-41-04-990-814 (Sheet 2 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



2410204 S00061525101_V2

Aft Strut Fairing - Left Engine General Visual (Internal)
Figure 214/05-41-04-990-814 (Sheet 3 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-04-210-815

15. EXTERNAL - ZONAL (GV): Forward Strut Fairing - Engine No. 2

(Figure 215)

NOTE: This procedure is a scheduled maintenance task.

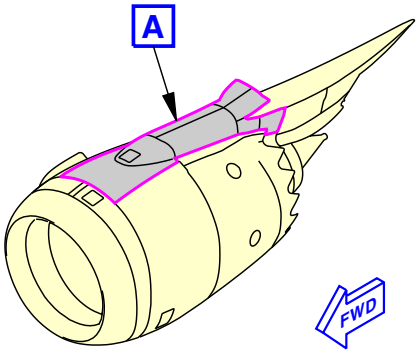
A. Zonal Inspection

SUBTASK 05-41-04-210-015

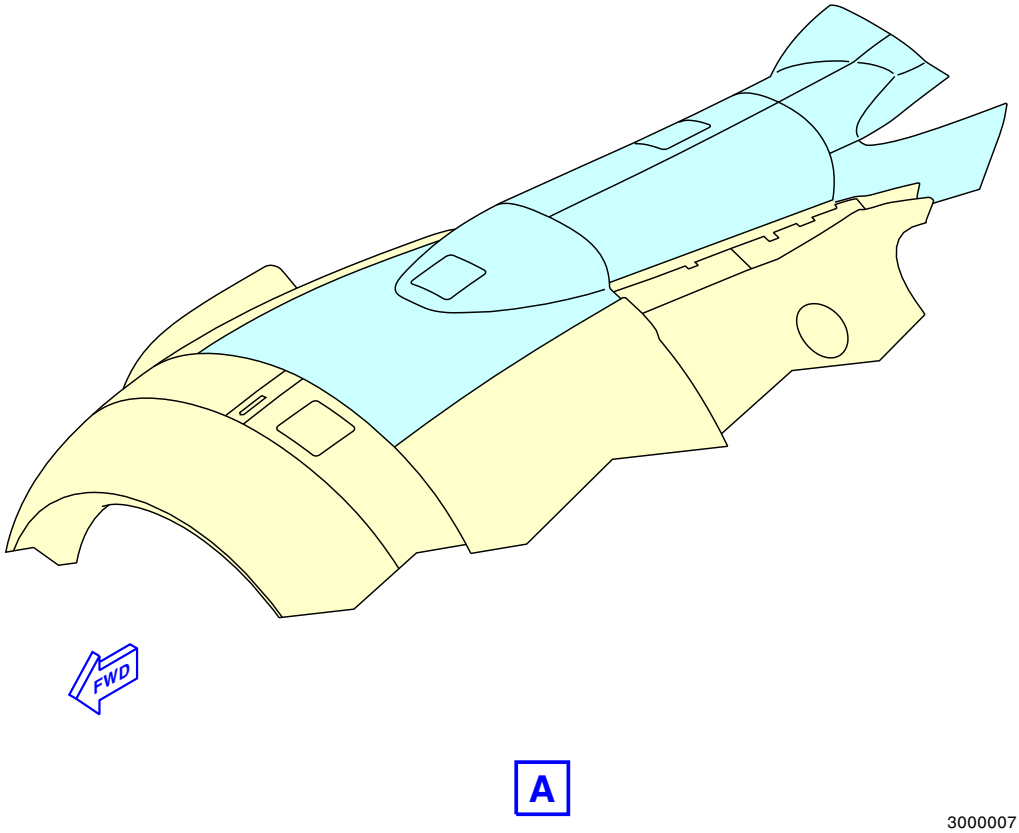
(1) Do an external zonal general visual inspection of the Forward Strut Fairing - Engine No. 2.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



**(ENGINE POSITION 1 IS SHOWN,
ENGINE POSITION 2 IS OPPOSITE)**



3000007 S0000774928_V1

**Forward Strut Fairing - Engine No. 2 General Visual (External)
Figure 215/05-41-04-990-820**

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-41-04-210-816

16. INTERNAL - ZONAL (GV): Fan Cowl Support Beam - Engine No. 2

(Figure 216)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This Zonal inspection procedure satisfies the required EZAP-derived Zonal inspection requirement for this zone.

B. References

Reference	Title
05-00-00-910-802	Enhanced Zonal Inspection Program (EZAP) Precautions (P/B 201)
20-60-07-910-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
442	Engine 2 - Fan Cowl Support Beam

D. Access Panels

Number	Name/Location
441AT	Forward Strut Fairing, Thumbnail Fairing, Strut 2

E. Zonal Inspection

SUBTASK 05-41-04-010-012

(1) Open this access panel:

Number	Name/Location
441AT	Forward Strut Fairing, Thumbnail Fairing, Strut 2

SUBTASK 05-41-04-210-016

(2) Do the zonal inspection following the procedures in Enhanced Zonal Inspection Program (EZAP) Precautions, TASK 05-00-00-910-802.

(3) Perform an internal zonal inspection (GV) of the fan cowl support beam - engine no. 2. (EZAP)

SUBTASK 05-41-04-910-010

(4) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-910-801 for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

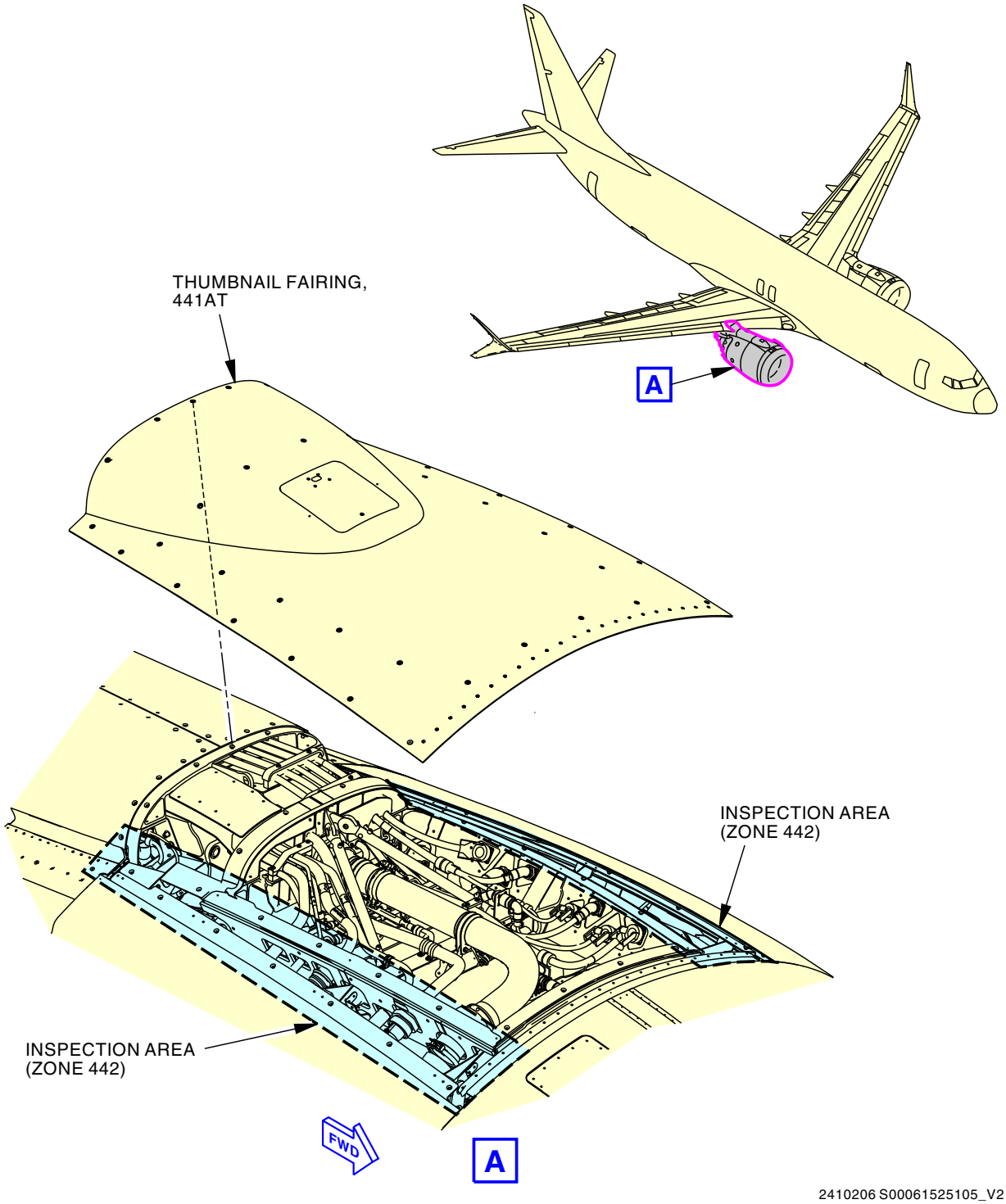
SUBTASK 05-41-04-410-012

(5) Close this access panel:

Number	Name/Location
441AT	Forward Strut Fairing, Thumbnail Fairing, Strut 2

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Fan Cowl Support Beam - Right Engine General Visual (Internal)
Figure 216/05-41-04-990-816

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-41-04-210-817

17. INTERNAL - ZONAL (GV): Strut Torque Box - Engine No. 2

(Figure 217)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This Zonal inspection procedure satisfies the required EZAP-derived Zonal inspection requirement for this zone.

B. References

Reference	Title
05-00-00-910-802	Enhanced Zonal Inspection Program (EZAP) Precautions (P/B 201)
05-51-22-210-801	Titanium Parts Contaminated With Fire-Resistant Hydraulic Fluid Inspection (P/B 201)
20-60-07-910-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
443	Engine 2 - Strut Torque Box

D. Access Panels

Number	Name/Location
441BL	Forward Strut Fairing, Left Mid Strut Fairing, Strut 2
441BR	Forward Strut Fairing, Right Mid Strut Fairing, Strut 2
441CL	Forward Strut Fairing, Left Overwing Fairing, Strut 2
441CR	Forward Strut Fairing, Right Overwing Fairing, Strut 2
441CT	Forward Strut Fairing, Forward Fuel/Hydraulic Tube Shroud Access, Strut 2

E. Zonal Inspection

SUBTASK 05-41-04-010-013

(1) Open these access panels:

Number	Name/Location
441BL	Forward Strut Fairing, Left Mid Strut Fairing, Strut 2
441BR	Forward Strut Fairing, Right Mid Strut Fairing, Strut 2
441CL	Forward Strut Fairing, Left Overwing Fairing, Strut 2
441CR	Forward Strut Fairing, Right Overwing Fairing, Strut 2
441CT	Forward Strut Fairing, Forward Fuel/Hydraulic Tube Shroud Access, Strut 2

SUBTASK 05-41-04-210-017

(2) Do the zonal inspection following the procedures in Enhanced Zonal Inspection Program (EZAP) Precautions, TASK 05-00-00-910-802.

(3) Perform an internal zonal inspection (GV) of the strut torque box - engine no. 2. (EZAP)

(4) If hydraulic fluid is found during the inspection, refer to Titanium Parts Contaminated With Fire-Resistant Hydraulic Fluid Inspection, TASK 05-51-22-210-801.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 05-41-04-910-011

(5) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-910-801 for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

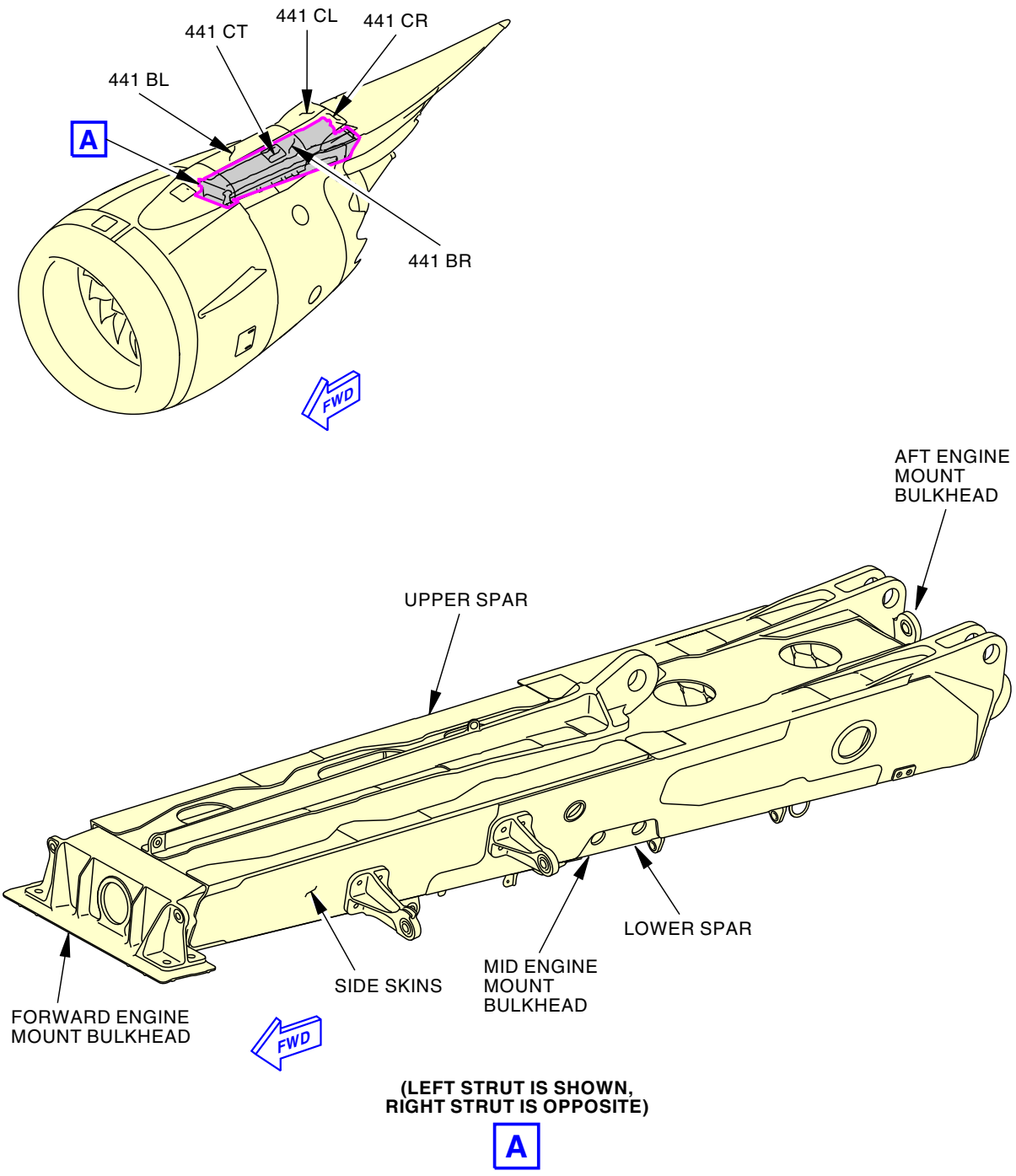
SUBTASK 05-41-04-410-013

(6) Close these access panels:

Number	Name/Location
441BL	Forward Strut Fairing, Left Mid Strut Fairing, Strut 2
441BR	Forward Strut Fairing, Right Mid Strut Fairing, Strut 2
441CL	Forward Strut Fairing, Left Overwing Fairing, Strut 2
441CR	Forward Strut Fairing, Right Overwing Fairing, Strut 2
441CT	Forward Strut Fairing, Forward Fuel/Hydraulic Tube Shroud Access, Strut 2

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Strut Torque Box - Right Engine General Visual (Internal)
Figure 217/05-41-04-990-817

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-41-04-210-818

18. INTERNAL - ZONAL (GV): Aft Strut Fairing - Engine No. 2

(Figure 218)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This Zonal inspection procedure satisfies the required EZAP-derived Zonal inspection requirement for this zone.

B. References

Reference	Title
05-00-00-910-802	Enhanced Zonal Inspection Program (EZAP) Precautions (P/B 201)
20-60-07-910-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
444	Engine 2 - Aft Strut Fairing

D. Access Panels

Number	Name/Location
444AL	Aft Strut Fairing, Left Panel, Strut 2
444AR	Aft Strut Fairing, Right Panel, Strut 2
444CR	Aft Strut Fairing, Right Access To Fuel Door, Strut 2

E. Zonal Inspection

SUBTASK 05-41-04-010-014

(1) Open these access panels:

Number	Name/Location
444AL	Aft Strut Fairing, Left Panel, Strut 2
444AR	Aft Strut Fairing, Right Panel, Strut 2
444CR	Aft Strut Fairing, Right Access To Fuel Door, Strut 2

SUBTASK 05-41-04-210-018

(2) Do the zonal inspection following the procedures in Enhanced Zonal Inspection Program (EZAP) Precautions, TASK 05-00-00-910-802.

(3) Perform an internal zonal inspection (GV) of the aft strut fairing - engine no. 2. (EZAP)

SUBTASK 05-41-04-910-012

(4) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-910-801 for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

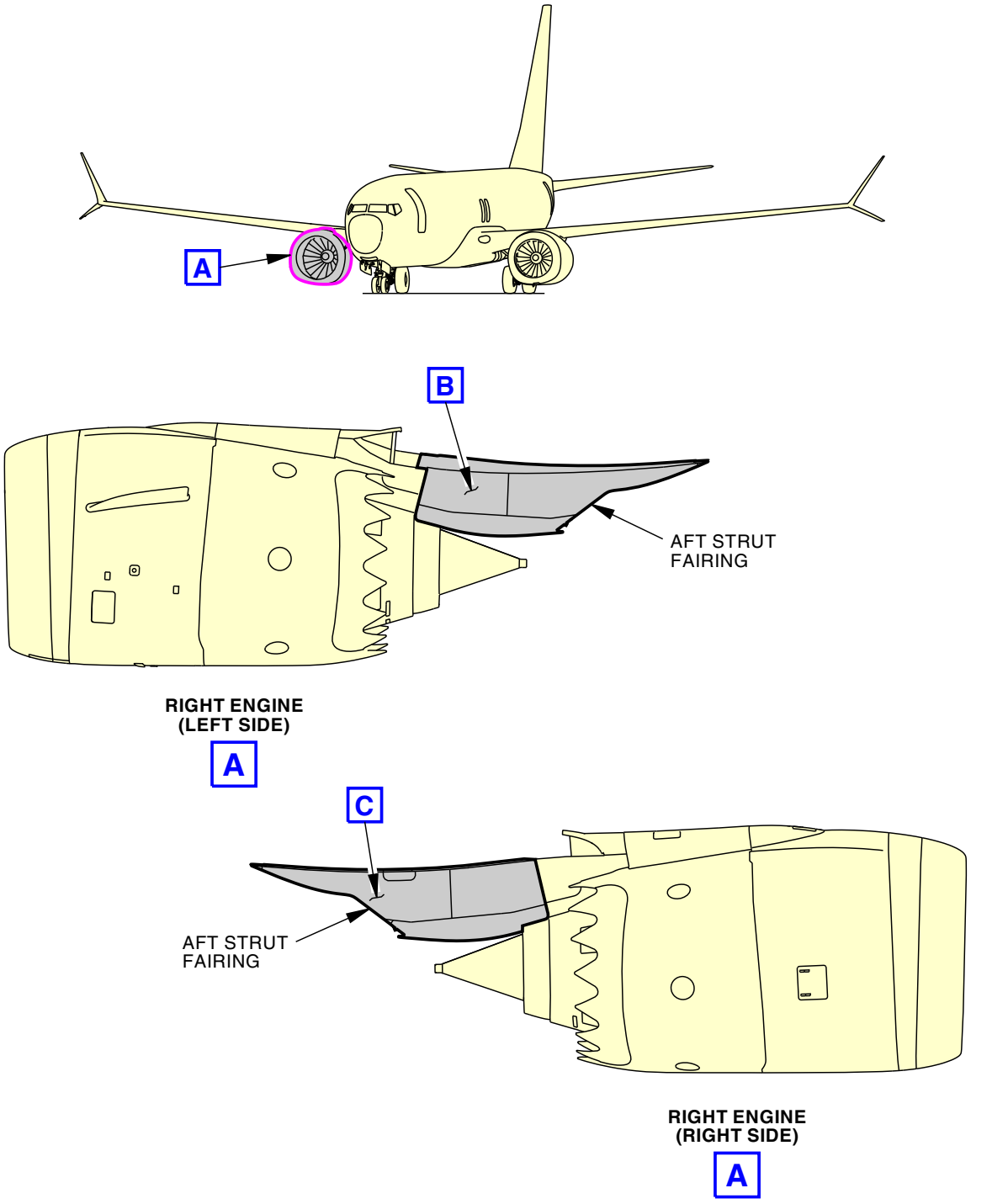
SUBTASK 05-41-04-410-014

(5) Close these access panels:

Number	Name/Location
444AL	Aft Strut Fairing, Left Panel, Strut 2
444AR	Aft Strut Fairing, Right Panel, Strut 2
444CR	Aft Strut Fairing, Right Access To Fuel Door, Strut 2

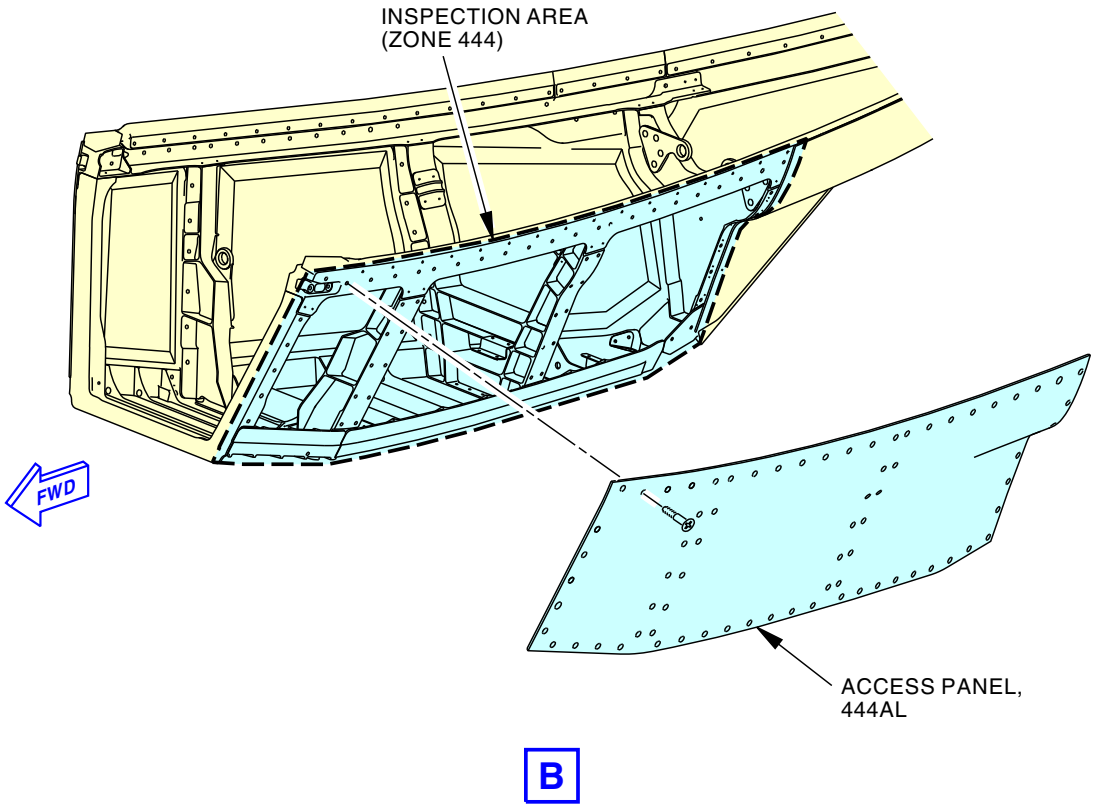
END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Aft Strut Fairing - Right Engine General Visual (Internal)
Figure 218/05-41-04-990-818 (Sheet 1 of 3)

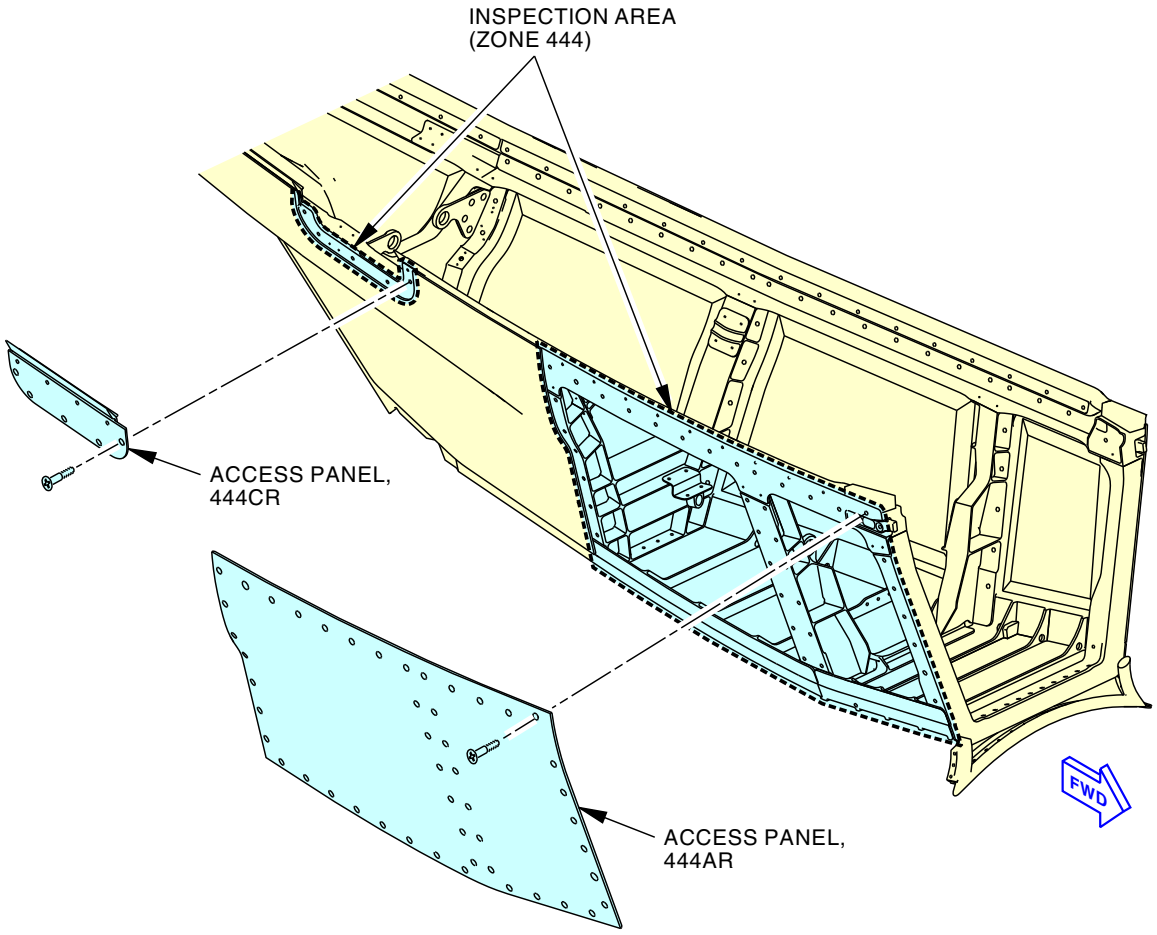
ECCN 9E991 BOEING PROPRIETARY - See title page for details



2410210 S00061525111_V2

Aft Strut Fairing - Right Engine General Visual (Internal)
Figure 218/05-41-04-990-818 (Sheet 2 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



C

2410211 S00061525112_V2

Aft Strut Fairing - Right Engine General Visual (Internal)
Figure 218/05-41-04-990-818 (Sheet 3 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-05-210-801

1. EXTERNAL - ZONAL (GV): LEFT WING

(Figure 201)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
510	Subzone - Left Wing: Leading Edge, Fwd of Front Spar, Inbd of Strut and Nacelle Gap Cover Area
520	Subzone - Left Wing: Leading Edge, Fwd of Front Spar, Outboard of Strut and Nacelle Gap Cover Area
530	Left Wing - Wing Inspar Area (Fuel Tanks), Inbd of Wing Rib 22, Wing Sta 643.50
540	Subzone - Left Wing, Wing Trailing Edge Flap Track Fairings
550	Subzone - Left Wing: Trailing Edge, Aft of Rear Spar, Inbd of Outboard Trailing Edge Flap
560	Subzone - Left Wing: Trailing Edge , Aft of Rear Spar, Outboard of Inbd Trailing Edge Flap, Inbd of Fixed Trailing Edge
570	Subzone - Left Wing: Fixed Trailing Edge, Outboard of Outboard Flap, Inboard of Wing Tip, Wing Buttock Line 658.17

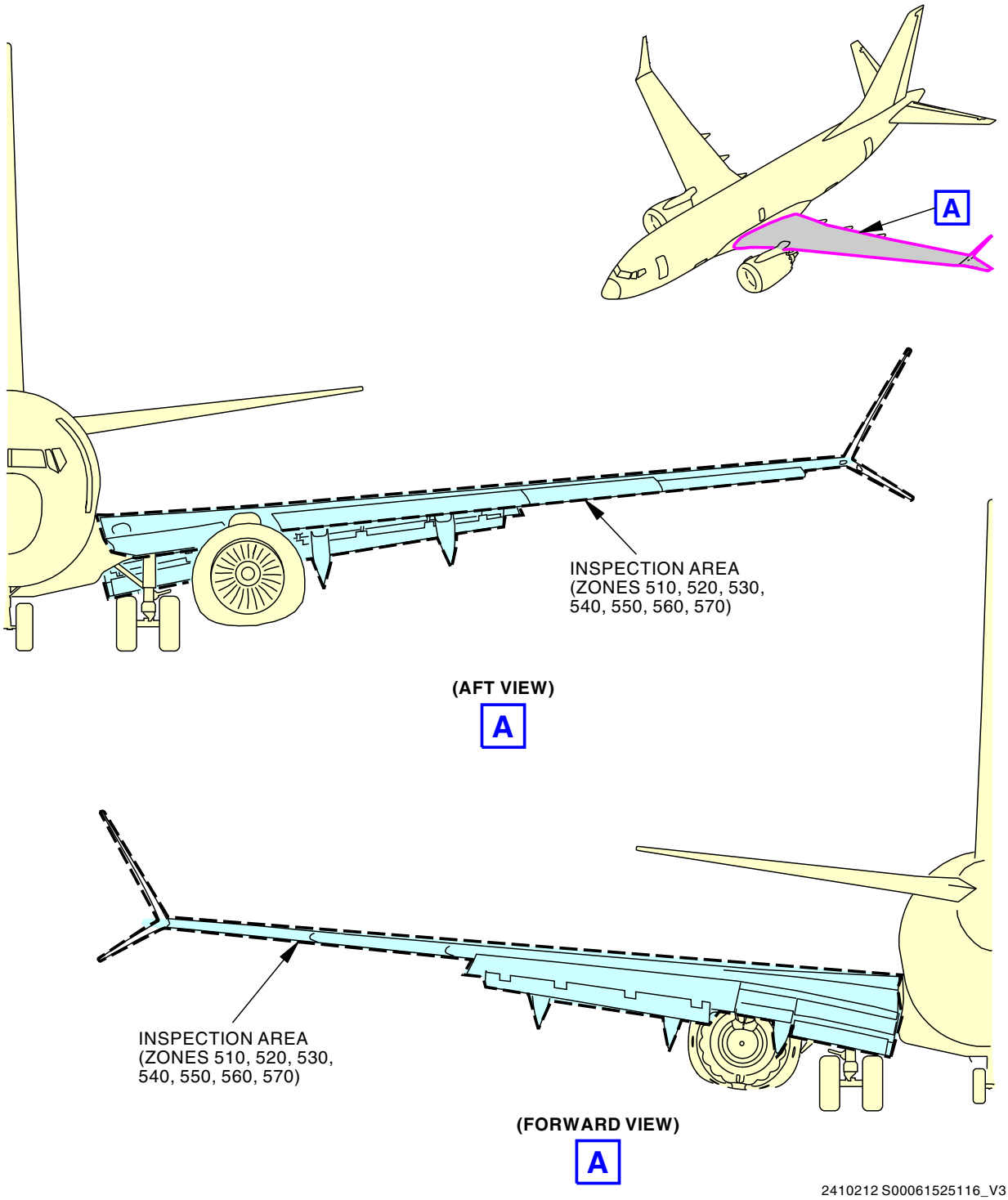
B. Zonal Inspection

SUBTASK 05-41-05-210-001

(1) Do a General Visual inspection of the left wing. Inspection is accomplished from the ground, without the use of stands or ladders. Control surfaces extended. No additional access panels required.

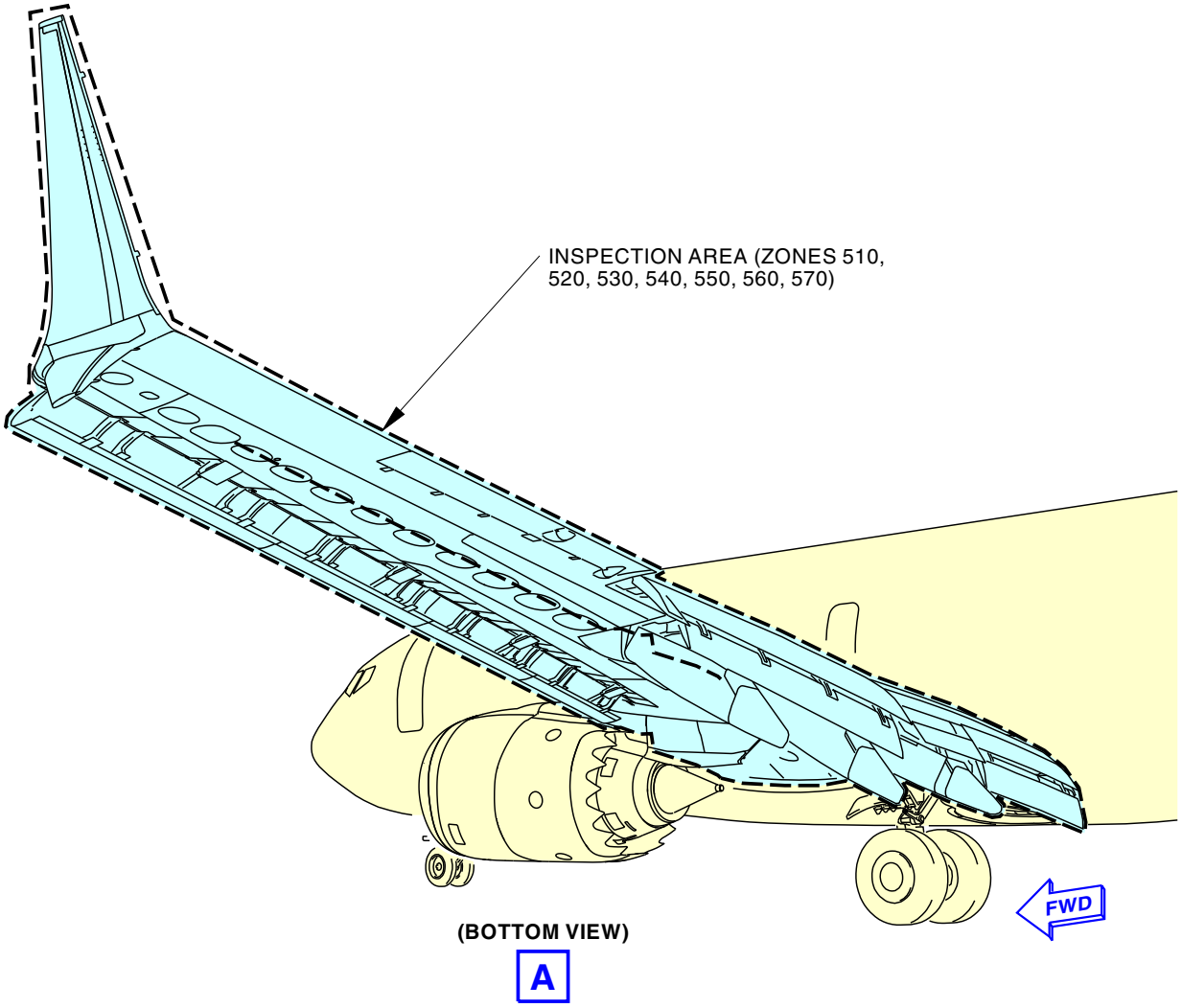
——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Left Wing - General Visual (External)
Figure 201/05-41-05-990-801 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



2410213 S00061525117_V1

Left Wing - General Visual (External)
Figure 201/05-41-05-990-801 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-05-210-802

2. EXTERNAL - ZONAL (GV): WINGLET - LEFT WING

(Figure 202)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
527	Left Winglet

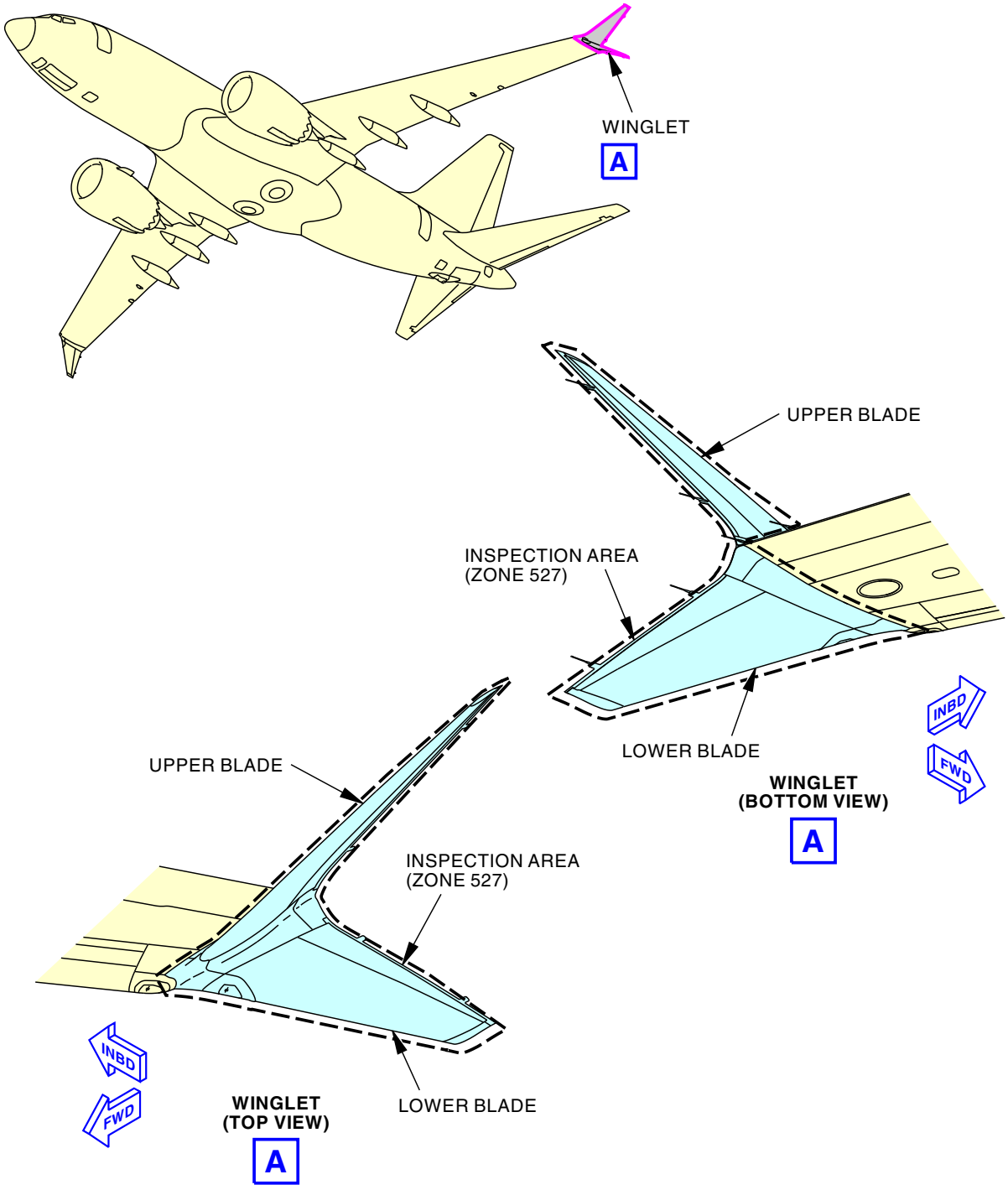
B. Zonal Inspection

SUBTASK 05-41-05-210-002

(1) Do a General Visual inspection of the upper and lower blades of the winglet - left wing.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Left Winglet - General Visual (External)
Figure 202/05-41-05-990-802

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-05-210-803

3. INTERNAL - ZONAL (GV): WINGLET - LEFT WING

(Figure 203)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
527	Left Winglet

B. Access Panels

Number	Name/Location
527BB	ACCESS PANEL - CENTER INBOARD LOWER PANEL, WINGLET
527BL	ACCESS PANEL - CENTER OUTBOARD PANEL, WINGLET
527BT	ACCESS PANEL - CENTER INBOARD UPPER PANEL, WINGLET

C. Zonal Inspection

SUBTASK 05-41-05-010-001

(1) Open these access panels:

Number	Name/Location
527BB	ACCESS PANEL - CENTER INBOARD LOWER PANEL, WINGLET
527BL	ACCESS PANEL - CENTER OUTBOARD PANEL, WINGLET
527BT	ACCESS PANEL - CENTER INBOARD UPPER PANEL, WINGLET

SUBTASK 05-41-05-210-003

(2) Do a General Visual inspection of the winglet - left wing.

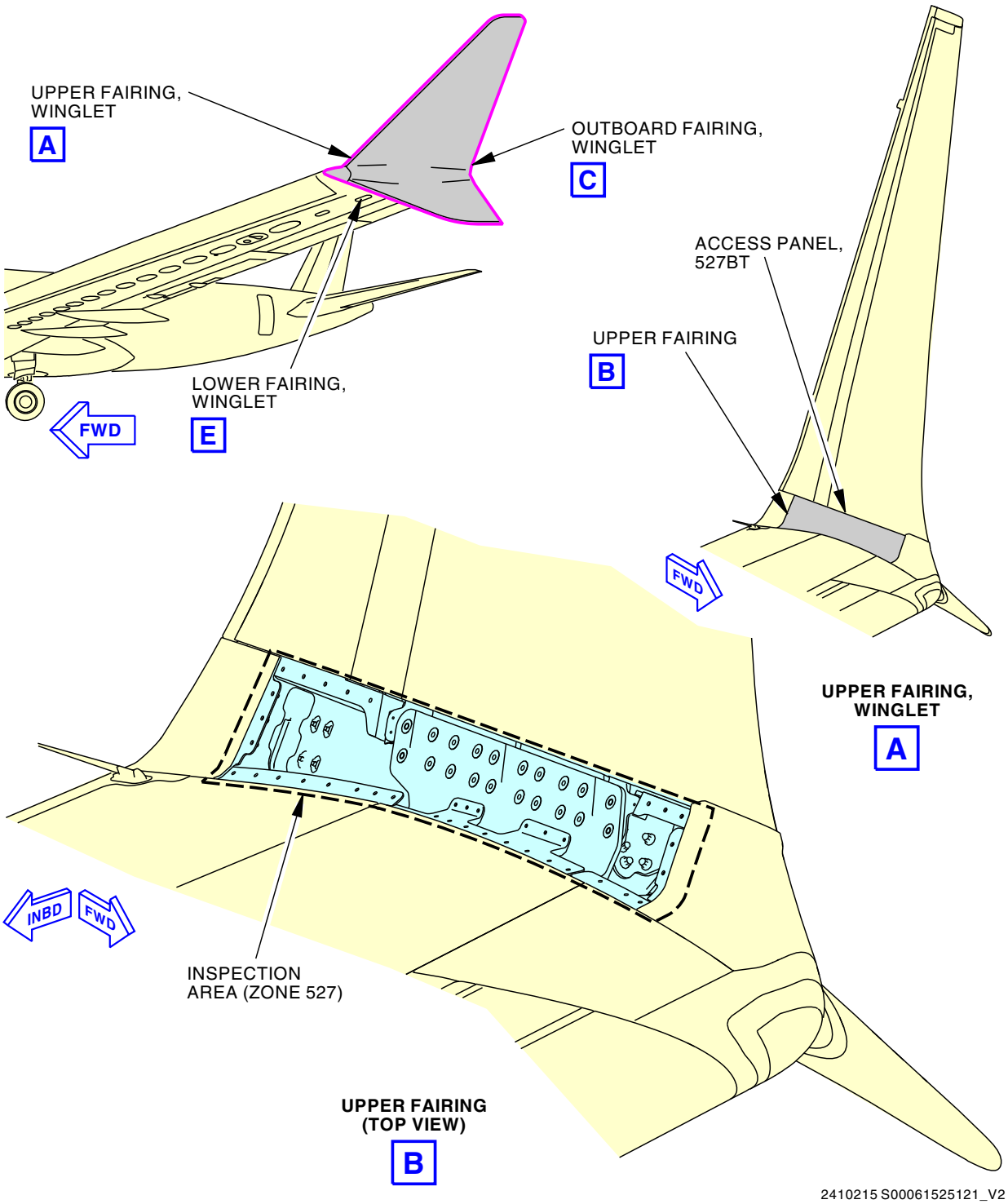
SUBTASK 05-41-05-410-001

(3) Close these access panels:

Number	Name/Location
527BB	ACCESS PANEL - CENTER INBOARD LOWER PANEL, WINGLET
527BL	ACCESS PANEL - CENTER OUTBOARD PANEL, WINGLET
527BT	ACCESS PANEL - CENTER INBOARD UPPER PANEL, WINGLET

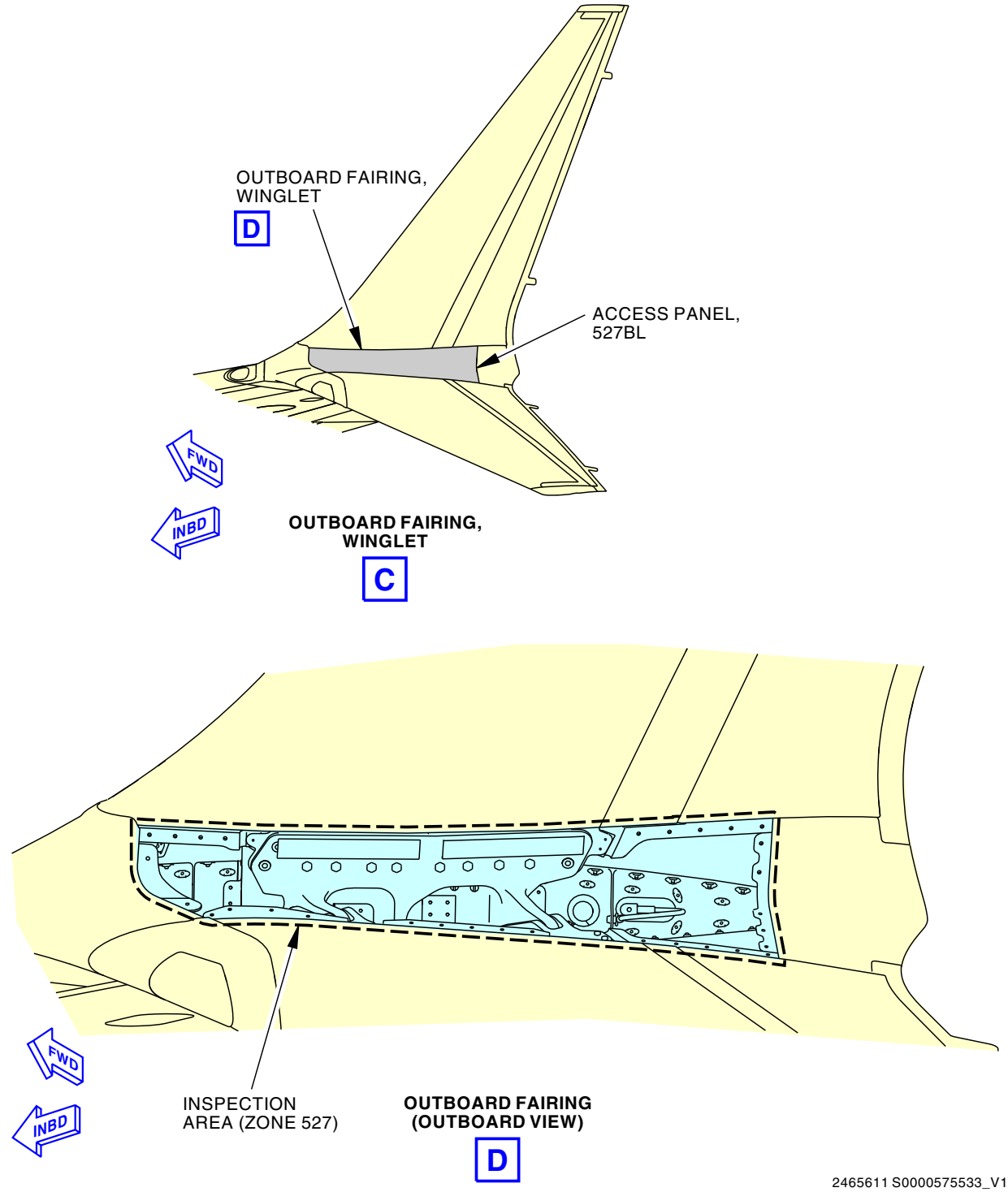
——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



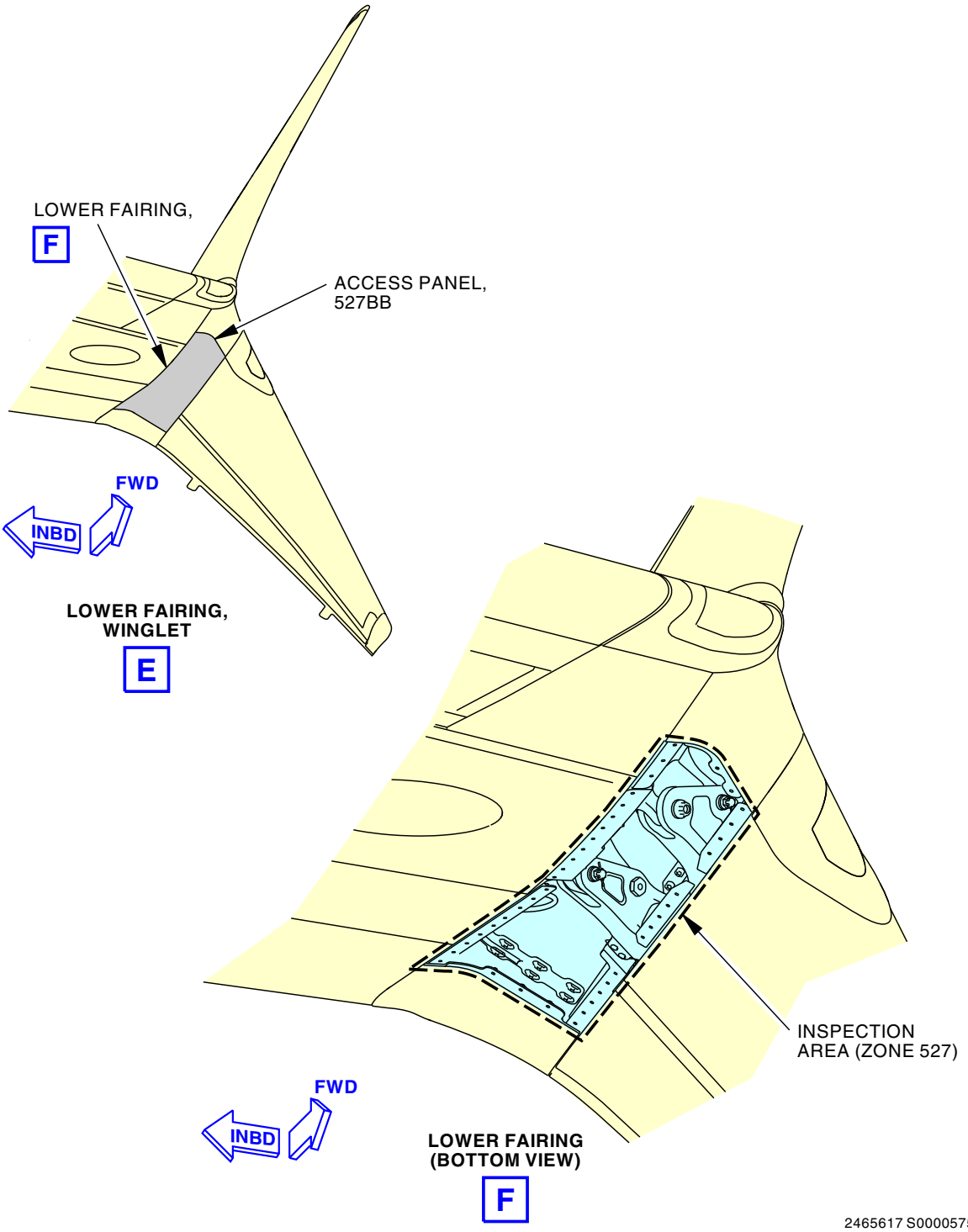
Left Winglet - General Visual (Internal)
Figure 203/05-41-05-990-803 (Sheet 1 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Left Winglet - General Visual (Internal)
Figure 203/05-41-05-990-803 (Sheet 2 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Left Winglet - General Visual (Internal)
Figure 203/05-41-05-990-803 (Sheet 3 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-05-210-804

4. EXTERNAL - ZONAL (GV): LEADING EDGE TO FRONT SPAR - INBD OF NACELLE STRUT - LEFT WING

(Figure 204)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
511	Left Wing - Leading Edge To Front Spar

B. Zonal Inspection

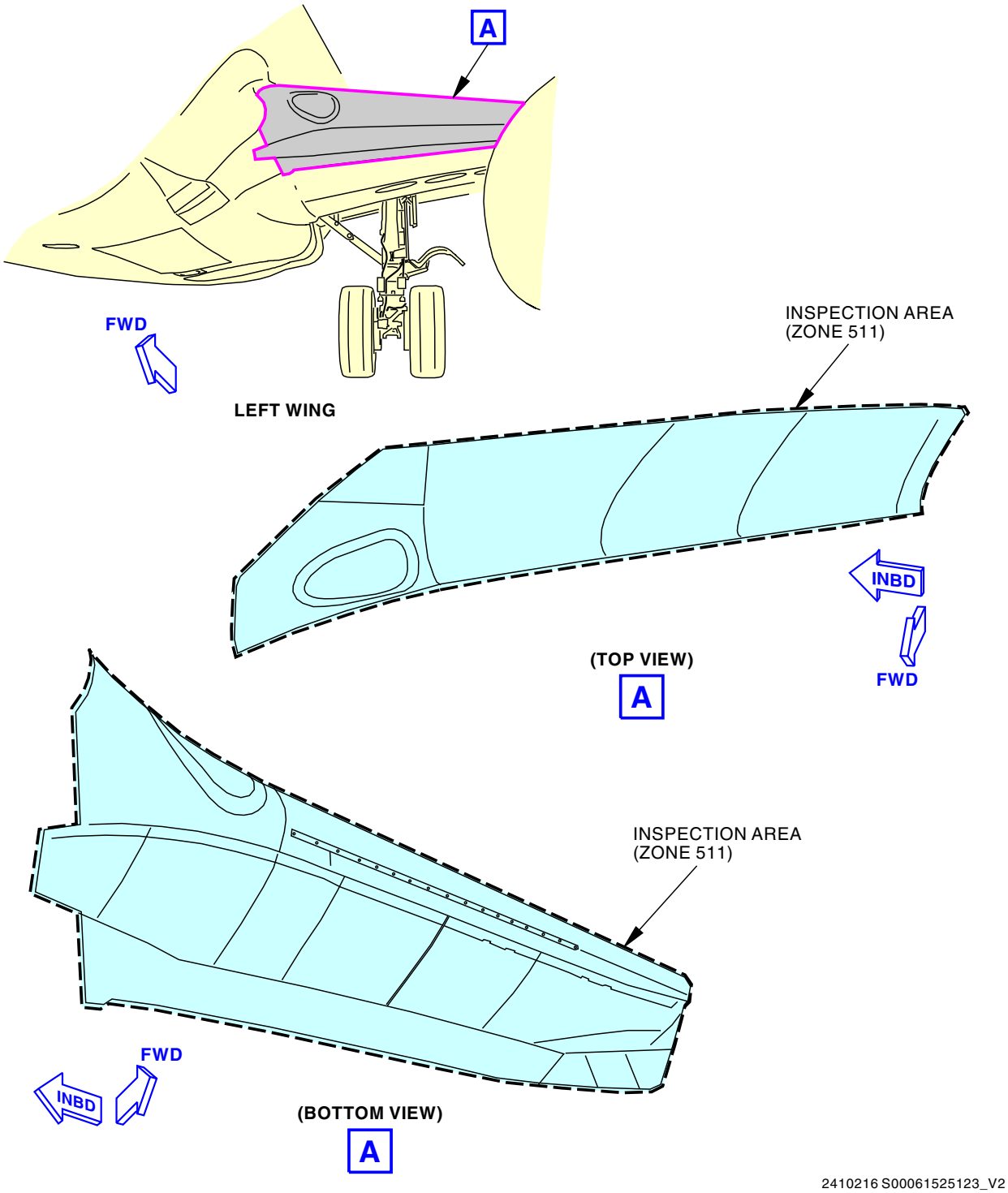
NOTE: Excluding surface under wing to body fairing.

SUBTASK 05-41-05-210-004

(1) Do a General Visual inspection of the leading edge to front spar - inboard of nacelle strut - left wing.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Leading Edge to Front Spar (Inboard of Nacelle Strut) Left Wing - General Visual (External)
Figure 204/05-41-05-990-804

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-41-05-210-805

5. INTERNAL - ZONAL (GV): Leading Edge to Front Spar - Inboard of Nacelle Strut - Left Wing

(Figure 205)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This Zonal inspection procedure satisfies the required EZAP-derived Zonal inspection requirement for this zone.

B. References

Reference	Title
05-00-00-910-802	Enhanced Zonal Inspection Program (EZAP) Precautions (P/B 201)
20-60-07-910-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
511	Left Wing - Leading Edge To Front Spar

D. Access Panels

Number	Name/Location
511AB	Inboard Leading Edge, Lower Removable Panel
511AT	Inboard Leading Edge, Strakelet Upper Panel
511BT	Fairing

E. Zonal Inspection

SUBTASK 05-41-05-010-002

(1) Open these access panels:

Number	Name/Location
511AB	Inboard Leading Edge, Lower Removable Panel
511AT	Inboard Leading Edge, Strakelet Upper Panel
511BT	Fairing

NOTE: Flaps deployed.

SUBTASK 05-41-05-210-005

(2) Do the zonal inspection following the procedures in Enhanced Zonal Inspection Program (EZAP) Precautions, TASK 05-00-00-910-802.

(3) Perform an internal zonal inspection (GV) of the leading edge to front spar - inboard of nacelle strut - left wing. (EZAP)

SUBTASK 05-41-05-910-001

(4) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-910-801 for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

SUBTASK 05-41-05-410-002

(5) Close these access panels:

Number	Name/Location
511AB	Inboard Leading Edge, Lower Removable Panel

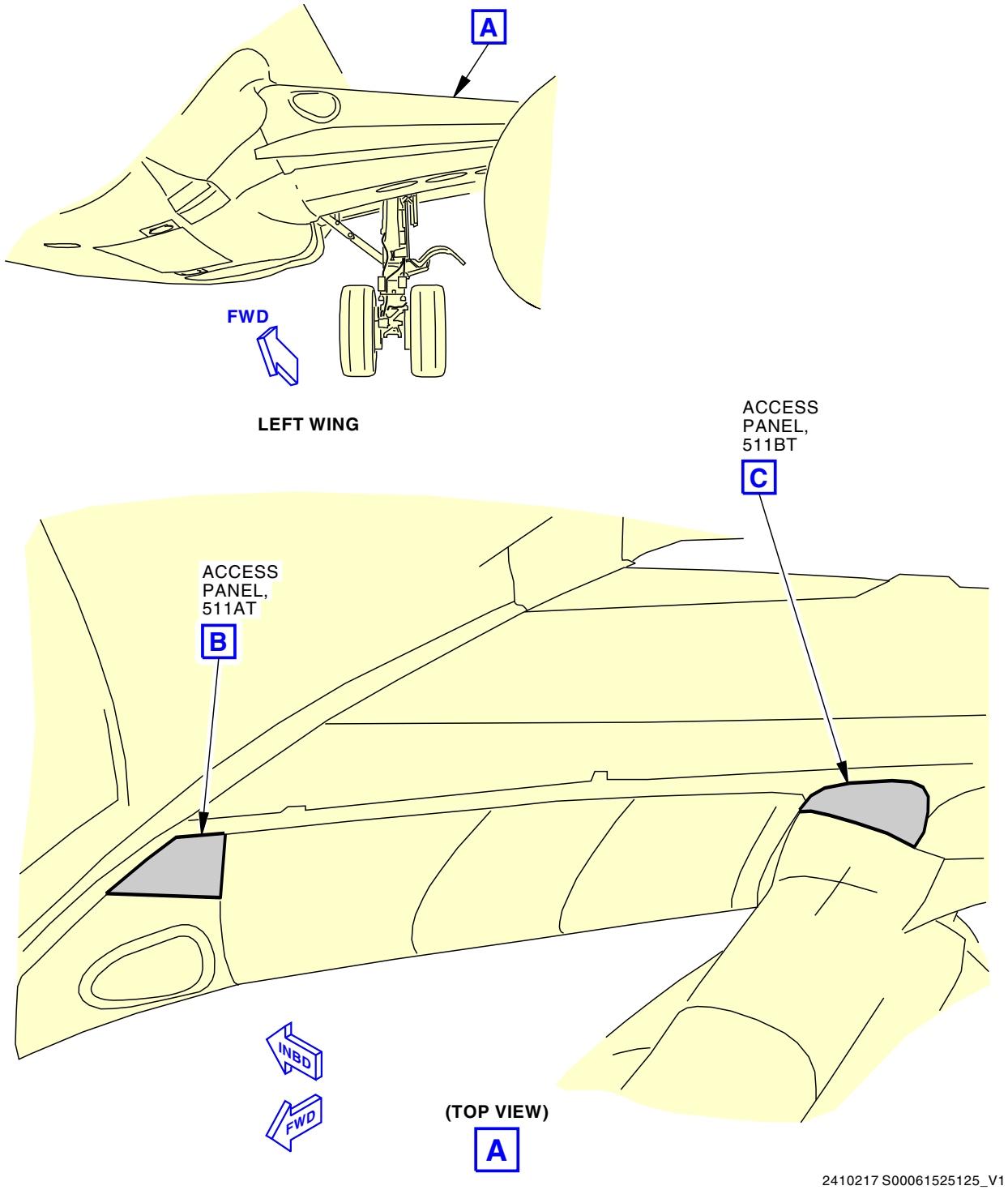
ECCN 9E991 BOEING PROPRIETARY - See title page for details

(Continued)

Number	Name/Location
511AT	Inboard Leading Edge, Strakelet Upper Panel
511BT	Fairing

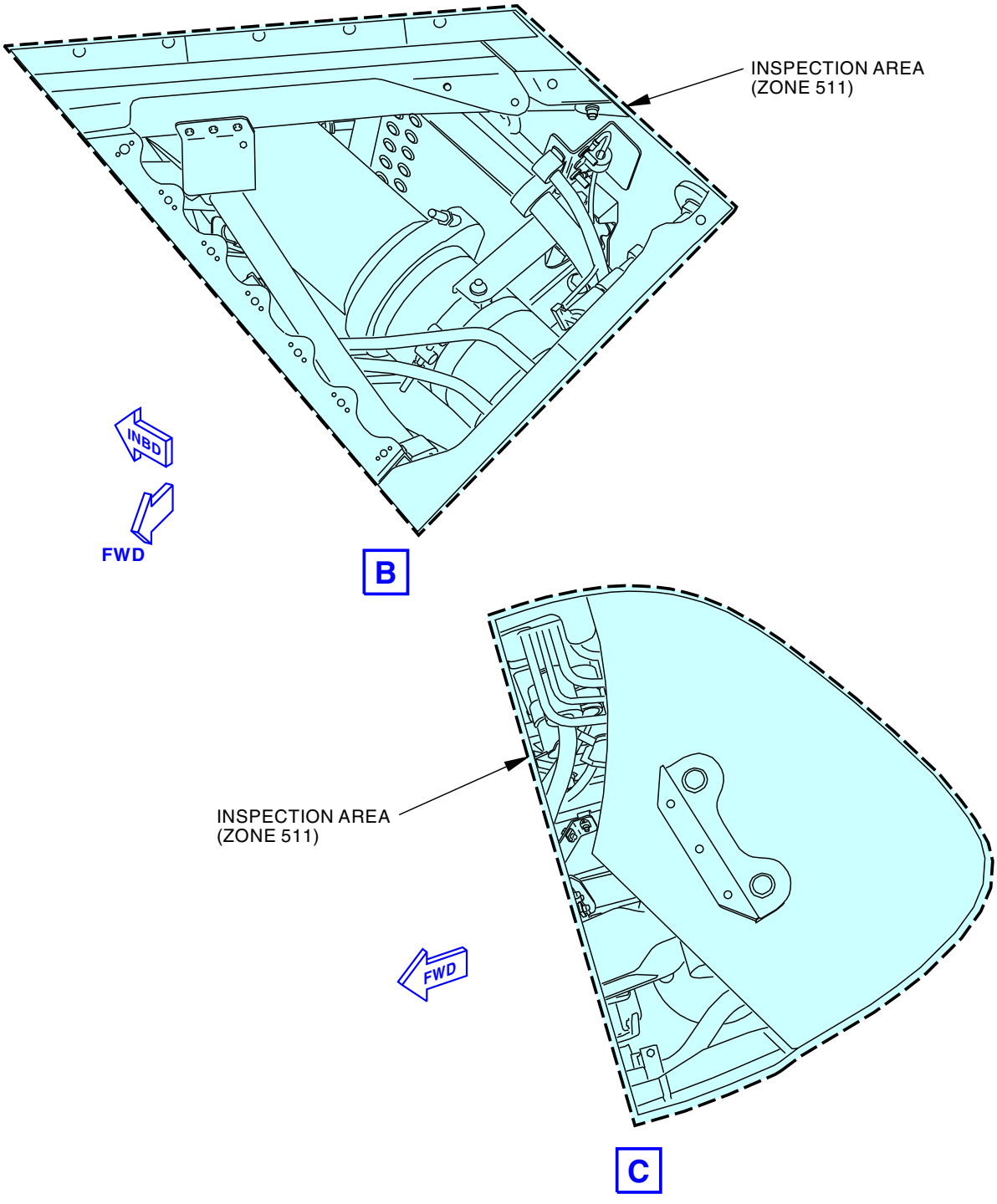
END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details



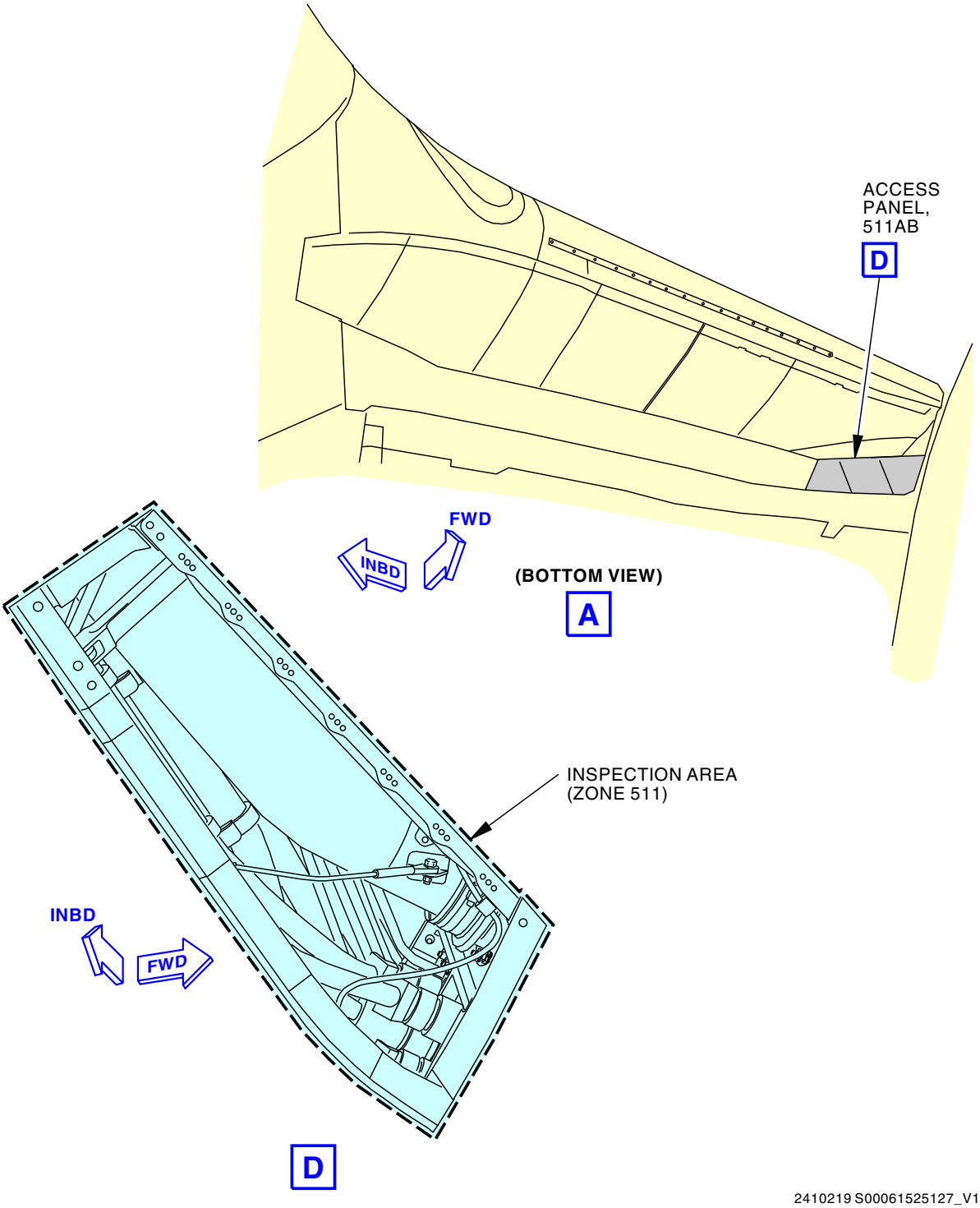
Leading Edge to Front Spar (Inboard of Nacelle Strut) Left Wing - General Visual (Internal)
Figure 205/05-41-05-990-805 (Sheet 1 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Leading Edge to Front Spar (Inboard of Nacelle Strut) Left Wing - General Visual (Internal)
Figure 205/05-41-05-990-805 (Sheet 2 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Leading Edge to Front Spar (Inboard of Nacelle Strut) Left Wing - General Visual (Internal)
Figure 205/05-41-05-990-805 (Sheet 3 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-05-210-806

6. EXTERNAL - ZONAL (GV): KRUEGER FLAPS NO. 1 AND 2 - LEFT WING

(Figure 206)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
512	Left Wing - Krueger Flap No. 2
513	Left Wing - Krueger Flap No. 1

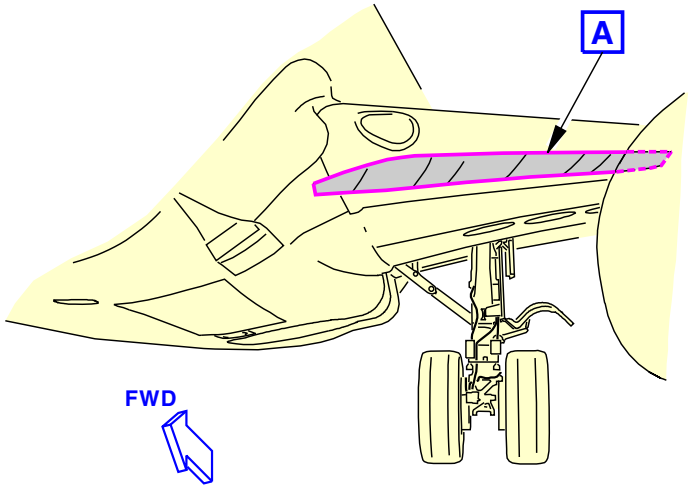
B. Zonal Inspection

SUBTASK 05-41-05-210-006

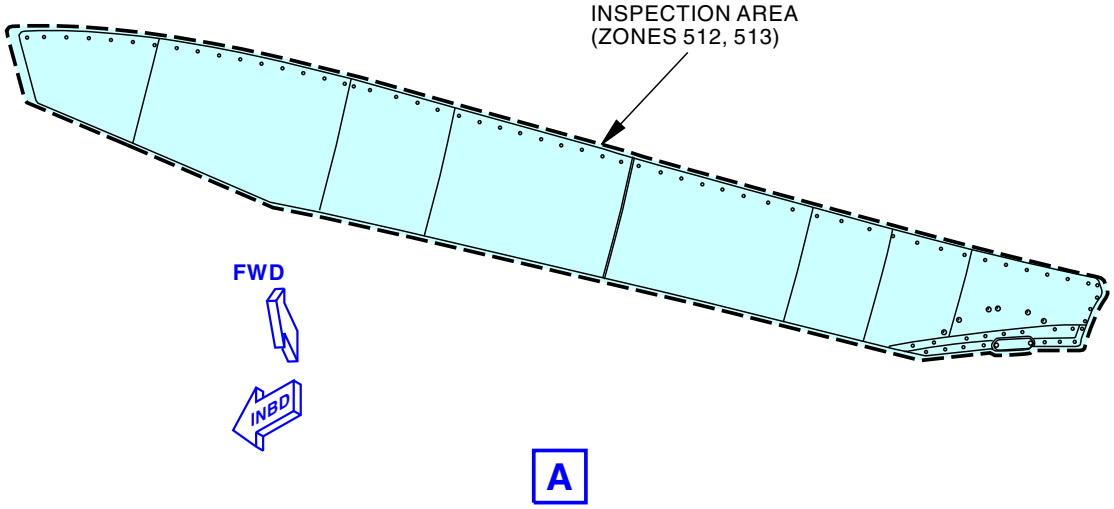
(1) Do a General Visual inspection of the Krueger flaps no. 1 and 2 - left wing.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



LEFT WING



2410220 S00061525129_V2

Krueger Flaps No. 1 and 2 General Visual (External)
Figure 206/05-41-05-990-806

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-05-210-807

7. INTERNAL - ZONAL (GV): KRUEGER FLAPS NO. 1 AND 2 - LEFT WING

(Figure 207)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
512	Left Wing - Krueger Flap No. 2
513	Left Wing - Krueger Flap No. 1

B. Zonal Inspection

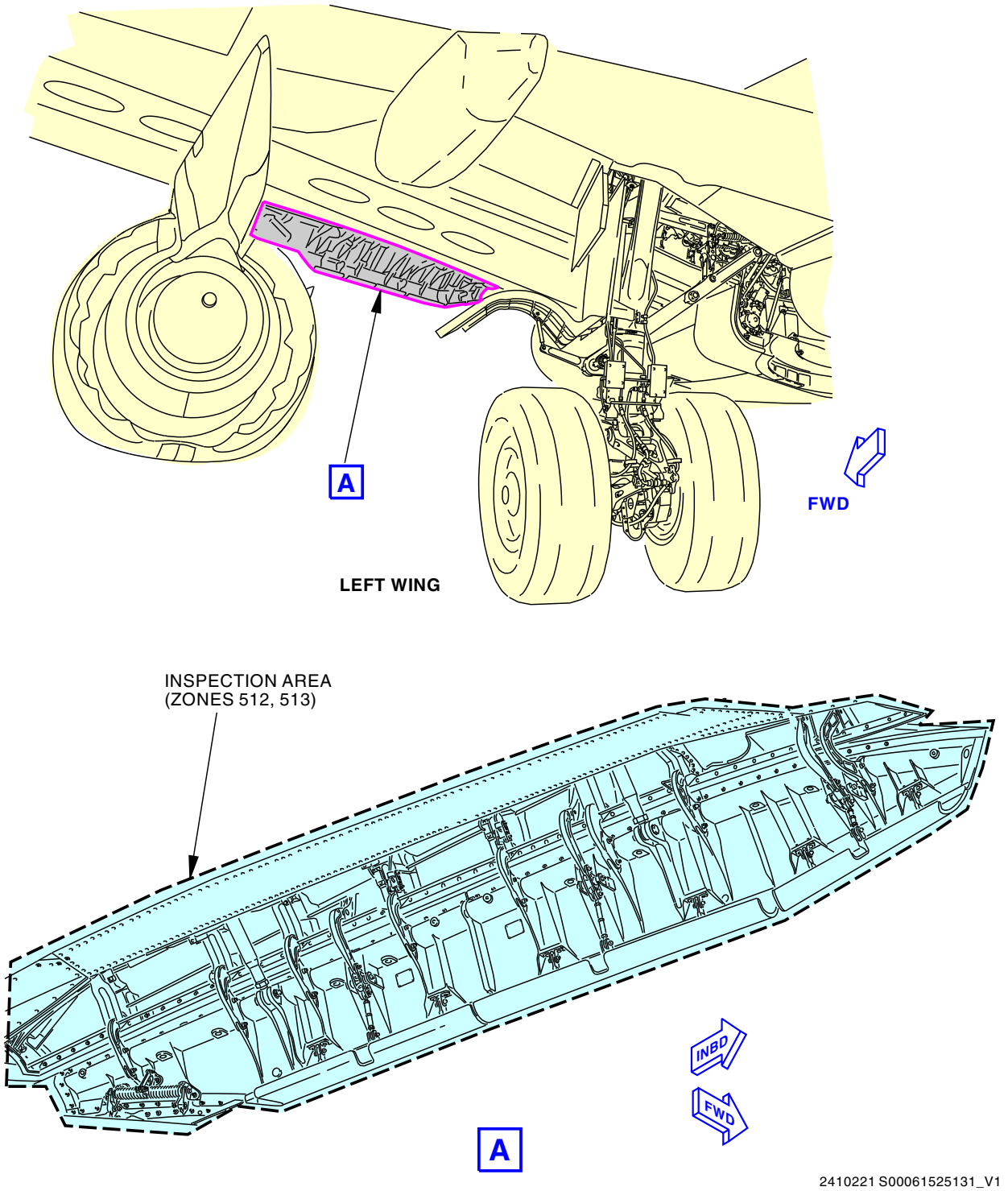
NOTE: Flaps deployed.

SUBTASK 05-41-05-210-007

(1) Do a General Visual inspection of the Krueger flaps no. 1 and 2 - left wing.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Krueger Flaps No. 1 and 2 General Visual (Internal)
Figure 207/05-41-05-990-807

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-05-210-808

8. EXTERNAL - ZONAL (GV): LEADING EDGE TO FRONT SPAR - OUTBD OF NACELLE STRUT - LEFT WING

(Figure 208)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
521	Left Wing - Leading Edge to Front Spar

B. Zonal Inspection

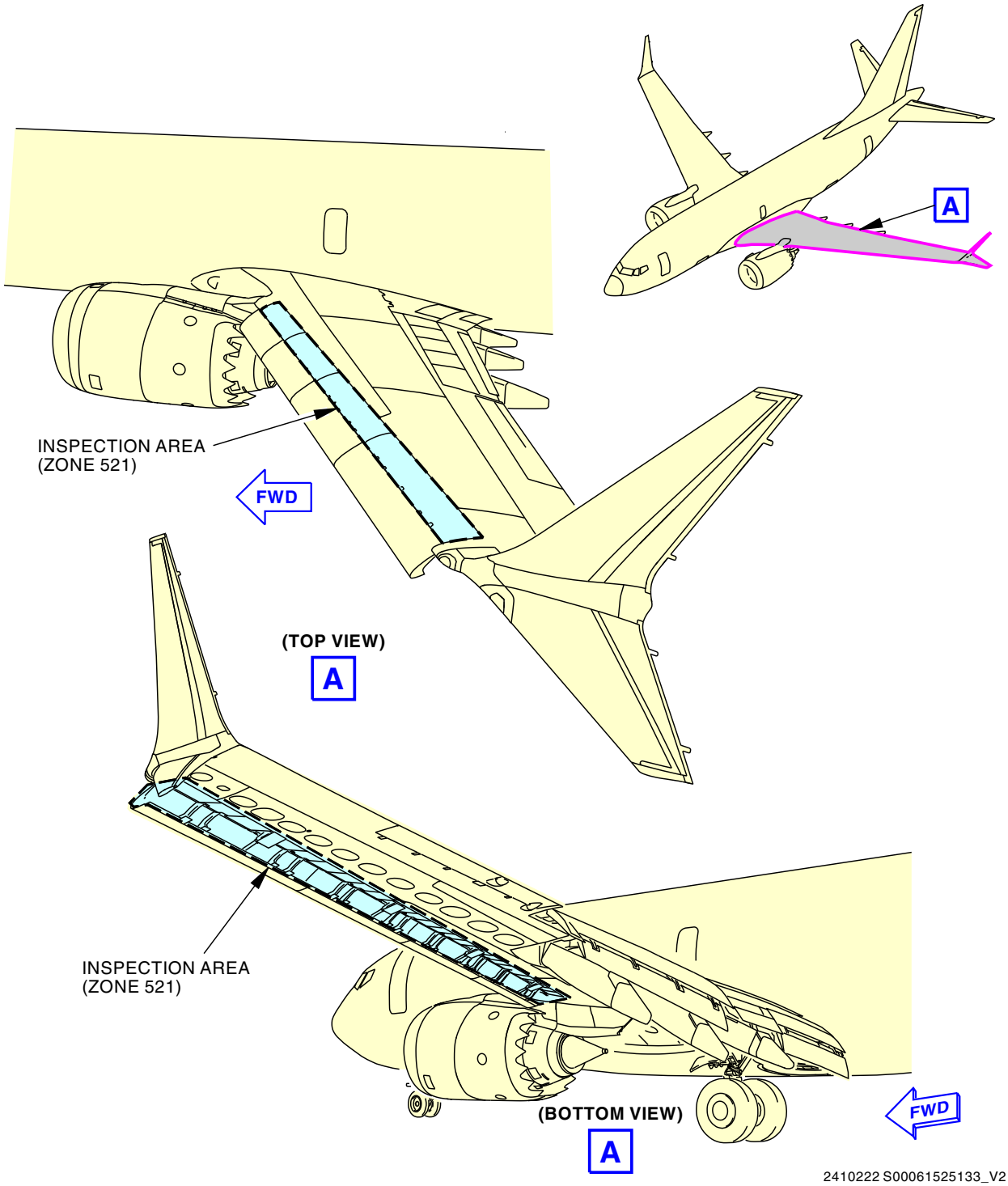
NOTE: Slats deployed.

SUBTASK 05-41-05-210-008

(1) Do a General Visual inspection of the leading edge to front spar - outboard of nacelle strut - left wing.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Leading Edge to Front Spar (Outboard of Nacelle Strut) Left Wing - General Visual (External)
Figure 208/05-41-05-990-808

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-41-05-210-809

9. INTERNAL - ZONAL (GV): Leading Edge to Front Spar - Outboard of Nacelle Strut - Left Wing

(Figure 209)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This Zonal inspection procedure satisfies the required EZAP-derived Zonal inspection requirement for this zone.

B. References

Reference	Title
05-00-00-910-802	Enhanced Zonal Inspection Program (EZAP) Precautions (P/B 201)
20-60-07-910-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
521	Left Wing - Leading Edge to Front Spar

D. Access Panels

Number	Name/Location
521AAB	Lower Leading Edge Access Panel - Slat Station 497
521AB	Outboard Leading Edge Blowout Door - Slat Station 20
521ABB	Lower Leading Edge Access Panel-Slat Station 519
521BB	Engine Fuel Valve Shutoff Access Panel - Slat Station 27
521CB	Lower Leading Edge Access Panel - Slat Station 50
521DB	Lower Leading Edge Access Panel - Slat Station 70
521EB	Lower Leading Edge Access Panel - Slat Station 91
521FB	Lower Leading Edge Access Panel - Slat Station 107
521GB	Lower Leading Edge Access Panel - Slat Station 125
521HB	Lower Leading Edge Access Panel - Slat Station 144
521JB	Lower Leading Edge Access Panel - Slat Station 161
521KB	Lower Leading Edge Access Panel - Slat Station 179
521LB	Lower Leading Edge Access Panel - Slat Station 208
521MB	Lower Leading Edge Access Panel - Slat Station 226
521NB	Lower Leading Edge Access Panel - Slat Station 244
521PB	Lower Leading Edge Access Panel - Slat Station 261
521QB	Lower Leading Edge Access Panel - Slat Station 280
521RB	Lower Leading Edge Access Panel - Slat Station 298
521SB	Lower Leading Edge Access Panel - Slat Station 328
521TB	Lower Leading Edge Access Panel - Slat Station 347
521UB	Lower Leading Edge Access Panel - Slat Station 365
521VB	Lower Leading Edge Access Panel - Slat Station 385
521WB	Lower Leading Edge Access Panel - Slat Station 406
521XB	Lower Leading Edge Access Panel - Slat Station 425
521YB	Lower Leading Edge Access Panel - Slat Station 470

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(Continued)

Number	Name/Location
521ZB	Lower Leading Edge Access Panel - Slat Station 479

E. Zonal Inspection

SUBTASK 05-41-05-010-003

(1) Open these access panels:

Number	Name/Location
521AAB	Lower Leading Edge Access Panel - Slat Station 497
521AB	Outboard Leading Edge Blowout Door - Slat Station 20
521ABB	Lower Leading Edge Access Panel-Slat Station 519
521BB	Engine Fuel Valve Shutoff Access Panel - Slat Station 27
521CB	Lower Leading Edge Access Panel - Slat Station 50
521DB	Lower Leading Edge Access Panel - Slat Station 70
521EB	Lower Leading Edge Access Panel - Slat Station 91
521FB	Lower Leading Edge Access Panel - Slat Station 107
521GB	Lower Leading Edge Access Panel - Slat Station 125
521HB	Lower Leading Edge Access Panel - Slat Station 144
521JB	Lower Leading Edge Access Panel - Slat Station 161
521KB	Lower Leading Edge Access Panel - Slat Station 179
521LB	Lower Leading Edge Access Panel - Slat Station 208
521MB	Lower Leading Edge Access Panel - Slat Station 226
521NB	Lower Leading Edge Access Panel - Slat Station 244
521PB	Lower Leading Edge Access Panel - Slat Station 261
521QB	Lower Leading Edge Access Panel - Slat Station 280
521RB	Lower Leading Edge Access Panel - Slat Station 298
521SB	Lower Leading Edge Access Panel - Slat Station 328
521TB	Lower Leading Edge Access Panel - Slat Station 347
521UB	Lower Leading Edge Access Panel - Slat Station 365
521VB	Lower Leading Edge Access Panel - Slat Station 385
521WB	Lower Leading Edge Access Panel - Slat Station 406
521XB	Lower Leading Edge Access Panel - Slat Station 425
521YB	Lower Leading Edge Access Panel - Slat Station 470
521ZB	Lower Leading Edge Access Panel - Slat Station 479

NOTE: Slats deployed.

SUBTASK 05-41-05-210-009

(2) Do the zonal inspection following the procedures in Enhanced Zonal Inspection Program (EZAP) Precautions, TASK 05-00-00-910-802.

(3) Perform an internal zonal inspection (GV) of the leading edge to front spar - outboard of nacelle strut - left wing. (EZAP)

SUBTASK 05-41-05-910-002

(4) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-910-801 for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

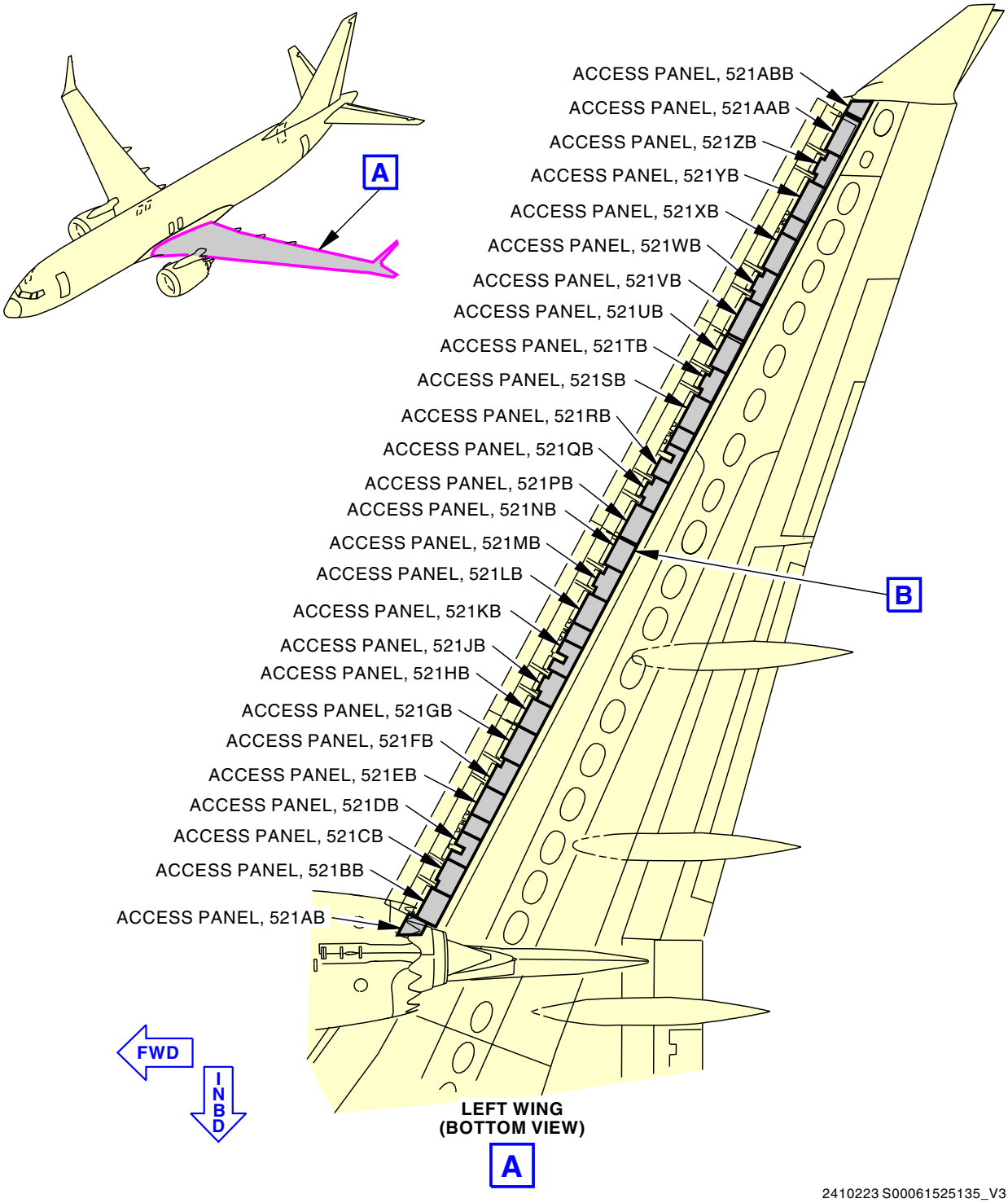
SUBTASK 05-41-05-410-003

(5) Close these access panels:

Number	Name/Location
521AAB	Lower Leading Edge Access Panel - Slat Station 497
521AB	Outboard Leading Edge Blowout Door - Slat Station 20
521ABB	Lower Leading Edge Access Panel-Slat Station 519
521BB	Engine Fuel Valve Shutoff Access Panel - Slat Station 27
521CB	Lower Leading Edge Access Panel - Slat Station 50
521DB	Lower Leading Edge Access Panel - Slat Station 70
521EB	Lower Leading Edge Access Panel - Slat Station 91
521FB	Lower Leading Edge Access Panel - Slat Station 107
521GB	Lower Leading Edge Access Panel - Slat Station 125
521HB	Lower Leading Edge Access Panel - Slat Station 144
521JB	Lower Leading Edge Access Panel - Slat Station 161
521KB	Lower Leading Edge Access Panel - Slat Station 179
521LB	Lower Leading Edge Access Panel - Slat Station 208
521MB	Lower Leading Edge Access Panel - Slat Station 226
521NB	Lower Leading Edge Access Panel - Slat Station 244
521PB	Lower Leading Edge Access Panel - Slat Station 261
521QB	Lower Leading Edge Access Panel - Slat Station 280
521RB	Lower Leading Edge Access Panel - Slat Station 298
521SB	Lower Leading Edge Access Panel - Slat Station 328
521TB	Lower Leading Edge Access Panel - Slat Station 347
521UB	Lower Leading Edge Access Panel - Slat Station 365
521VB	Lower Leading Edge Access Panel - Slat Station 385
521WB	Lower Leading Edge Access Panel - Slat Station 406
521XB	Lower Leading Edge Access Panel - Slat Station 425
521YB	Lower Leading Edge Access Panel - Slat Station 470
521ZB	Lower Leading Edge Access Panel - Slat Station 479

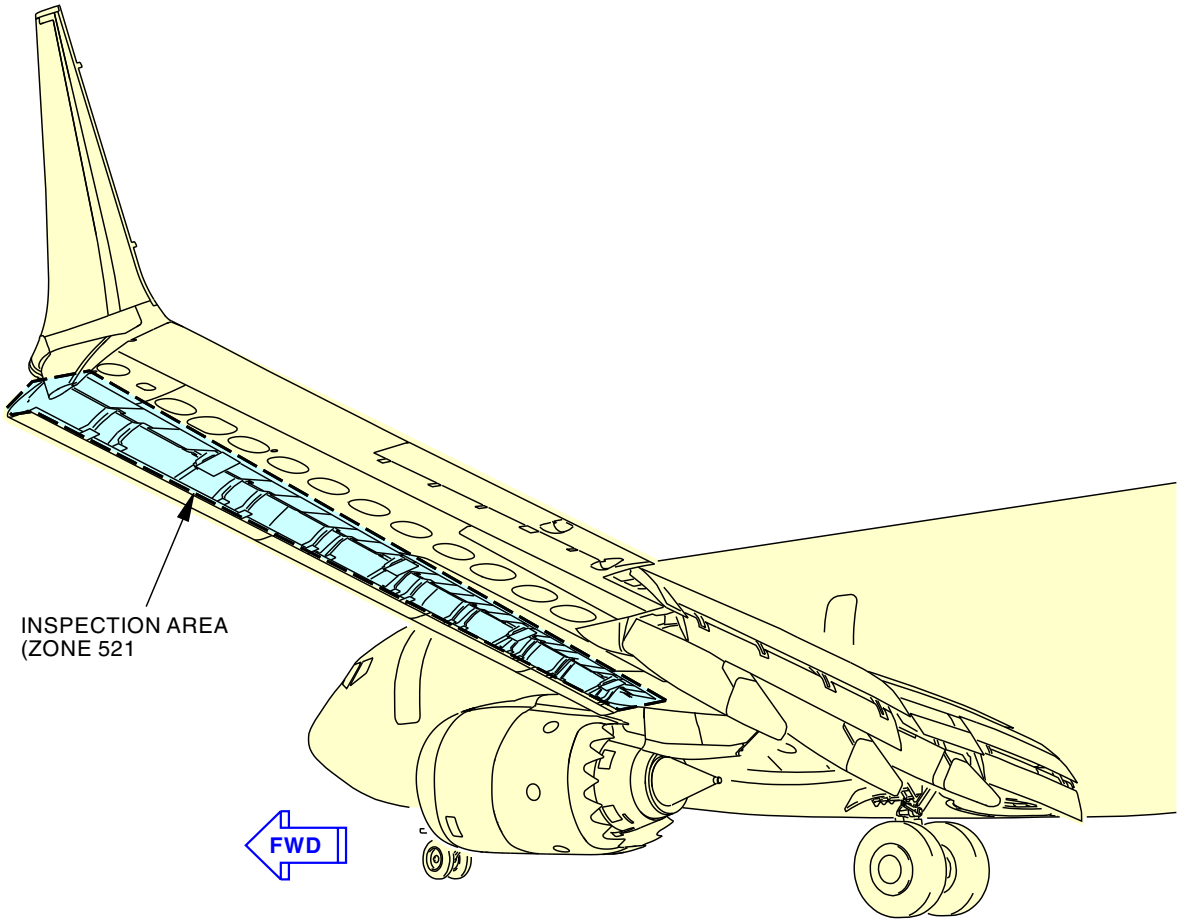
END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Leading Edge to Front Spar (Outboard of Nacelle Strut) Left Wing - General Visual (Internal)
Figure 209/05-41-05-990-809 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



(BOTTOM VIEW)

B

2410224 S00061525136_V1

Leading Edge to Front Spar (Outboard of Nacelle Strut) Left Wing - General Visual (Internal)
Figure 209/05-41-05-990-809 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-05-210-810

10. EXTERNAL - ZONAL (GV): SLATS NO. 1, 2, 3, 4 - LEFT WING

(Figure 210)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
522	Left Wing - Slat No. 4
523	Left Wing - Slat No. 3
524	Left Wing - Slat No. 2
525	Left Wing - Slat No. 1

B. Zonal Inspection

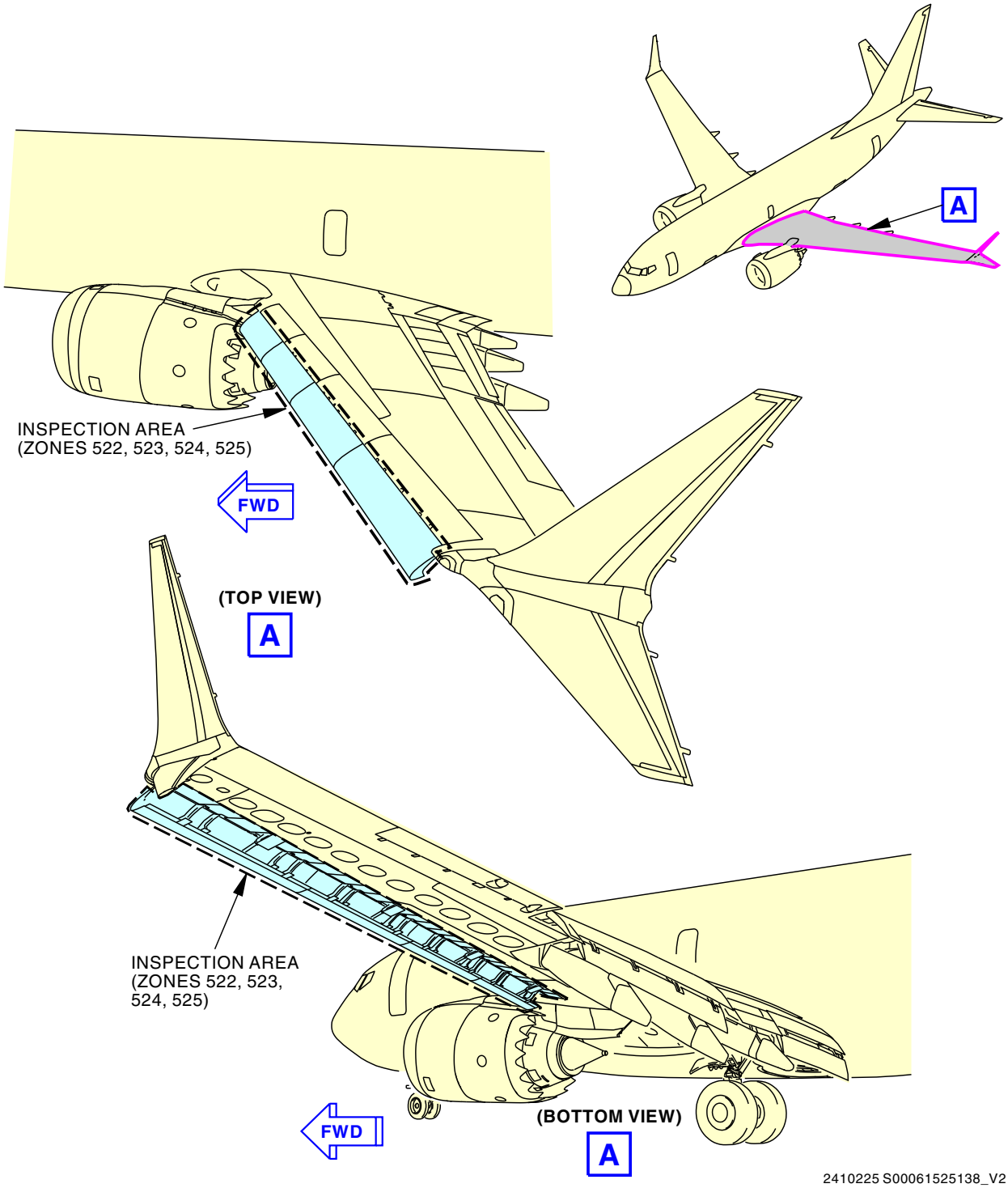
NOTE: Slats in full extend position.

SUBTASK 05-41-05-210-010

(1) Do a General Visual inspection of the slats no. 1, 2, 3, 4 - left wing.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Leading Edge Slats No. 1 through 4 General Visual (External)
Figure 210/05-41-05-990-810

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-05-210-811

11. INTERNAL - ZONAL (GV): CENTER FUEL TANK - LEFT WING

(Figure 211)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
531	Left Wing - Center Fuel Tank, Rib 1 to Rib 5

B. Access Panels

Number	Name/Location
531AB	Center Tank Access Door - Wing Station 168
531BB	Center Tank Access Door - Wing Station 192

C. Zonal Inspection

SUBTASK 05-41-05-010-004

(1) Open these access panels:

Number	Name/Location
531AB	Center Tank Access Door - Wing Station 168
531BB	Center Tank Access Door - Wing Station 192

SUBTASK 05-41-05-210-011

(2) Do a General Visual inspection of the center fuel tank - left wing.

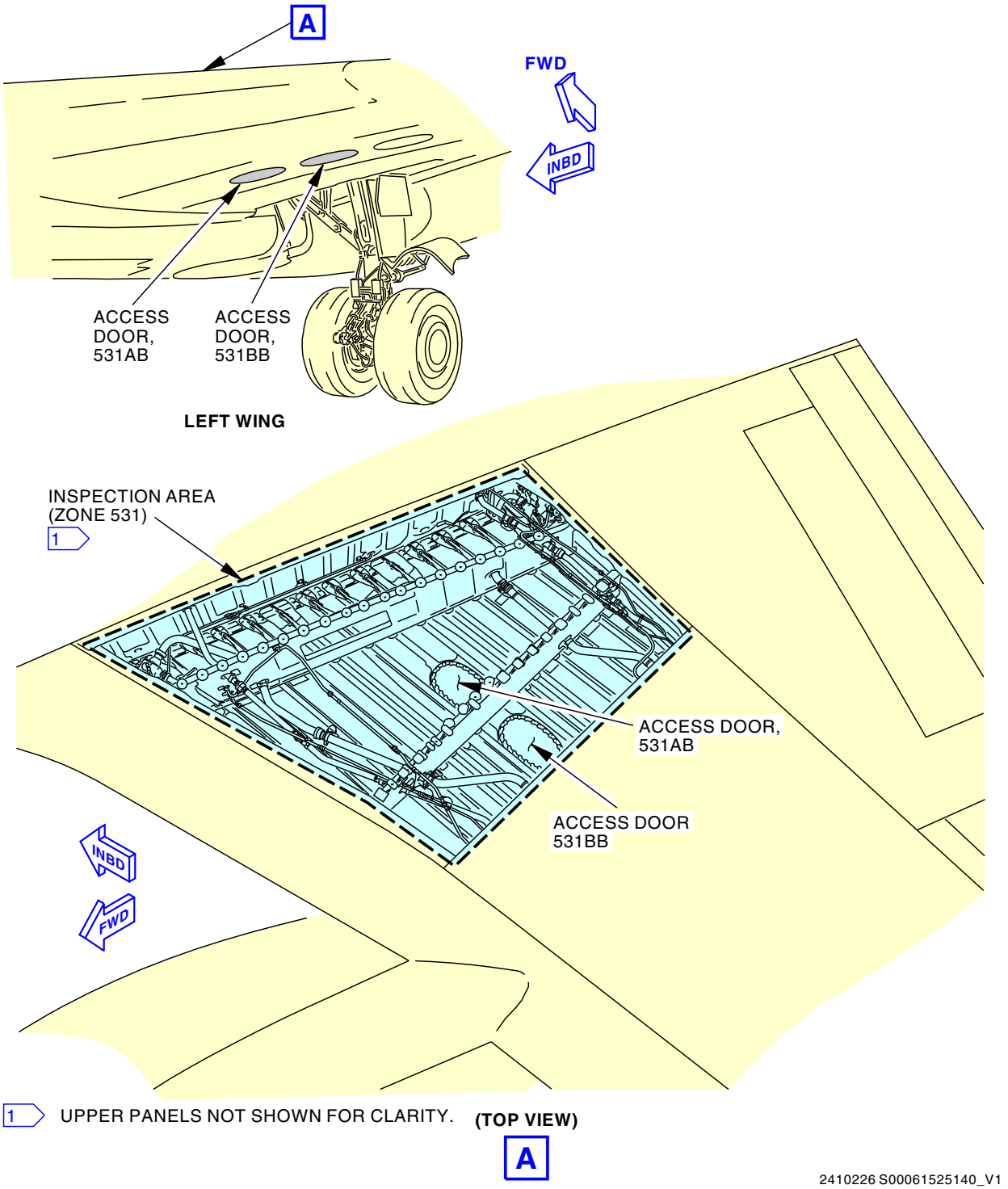
SUBTASK 05-41-05-410-004

(3) Close these access panels:

Number	Name/Location
531AB	Center Tank Access Door - Wing Station 168
531BB	Center Tank Access Door - Wing Station 192

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Center Fuel Tank - Left Wing General Visual (Internal)
Figure 211/05-41-05-990-811

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-05-210-812

12. EXTERNAL - ZONAL (GV): CENTER FUEL TANK - LEFT WING

(Figure 212)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
531	Left Wing - Center Fuel Tank, Rib 1 to Rib 5

B. Zonal Inspection

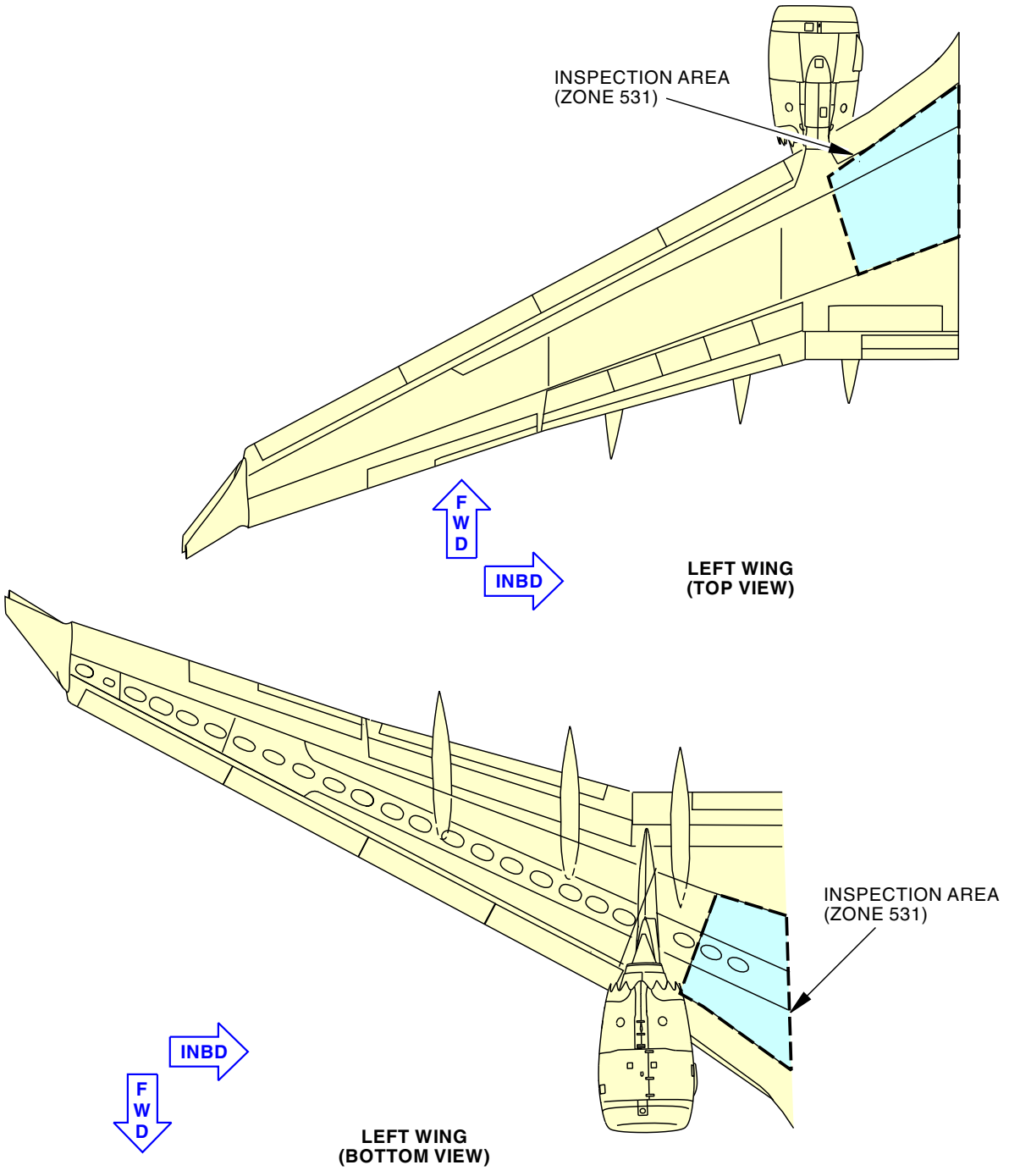
NOTE: Excluding surface under wing to body fairing.

SUBTASK 05-41-05-210-012

(1) Do a General Visual inspection of the center fuel tank - left wing.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



2410227 S00061525142_V1

Center Fuel Tank - Left Wing General Visual (External)
Figure 212/05-41-05-990-812

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-05-210-813

13. INTERNAL - ZONAL (GV): MAIN FUEL TANK - LEFT WING

(Figure 213)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
532	Left Wing - Main Tank, Rib 5 to Rib 22, Wing Station 204.25 to Wing BL 643.50

B. Access Panels

Number	Name/Location
532AB	Main Tank Access Door - Wing Station 216
532AZ	Main Tank Inner Access at Rib 6
532BB	Main Tank Access Door - Wing Station 265
532BZ	Main Tank Inner Access at Rib 6
532CB	Main Tank Access Door - Wing Station 290
532DB	Main Tank Access Door - Wing Station 313
532EB	Main Tank Access Door - Wing Station 337
532FB	Main Tank Access Door - Wing Station 367
532GB	Main Tank Access Door - Wing Station 390
532HB	Main Tank Access Door - Wing Station 417
532JB	Main Tank Access Door - Wing Station 443
532KB	Main Tank Access Door - Wing Station 470
532LB	Main Tank Access Door - Wing Station 496
532MB	Main Tank Access Door - Wing Station 523
532NB	Main Tank Access Door - Wing Station 549
532PB	Main Tank Access Door - Wing Station 576
532QB	Main Tank Access Door - Wing Station 602
532RB	Main Tank Access Door - Wing Station 629

C. Zonal Inspection

CAUTION

DO NOT REMOVE 532AZ AND 532BZ AT THE SAME TIME.

SUBTASK 05-41-05-010-005

(1) Open these access panels:

Number	Name/Location
532AB	Main Tank Access Door - Wing Station 216
532AZ	Main Tank Inner Access at Rib 6
532BB	Main Tank Access Door - Wing Station 265
532BZ	Main Tank Inner Access at Rib 6
532CB	Main Tank Access Door - Wing Station 290
532DB	Main Tank Access Door - Wing Station 313
532EB	Main Tank Access Door - Wing Station 337
532FB	Main Tank Access Door - Wing Station 367
532GB	Main Tank Access Door - Wing Station 390

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(Continued)

Number	Name/Location
532HB	Main Tank Access Door - Wing Station 417
532JB	Main Tank Access Door - Wing Station 443
532KB	Main Tank Access Door - Wing Station 470
532LB	Main Tank Access Door - Wing Station 496
532MB	Main Tank Access Door - Wing Station 523
532NB	Main Tank Access Door - Wing Station 549
532PB	Main Tank Access Door - Wing Station 576
532QB	Main Tank Access Door - Wing Station 602
532RB	Main Tank Access Door - Wing Station 629

SUBTASK 05-41-05-210-013

(2) Do a General Visual inspection of the main fuel tank - left wing.

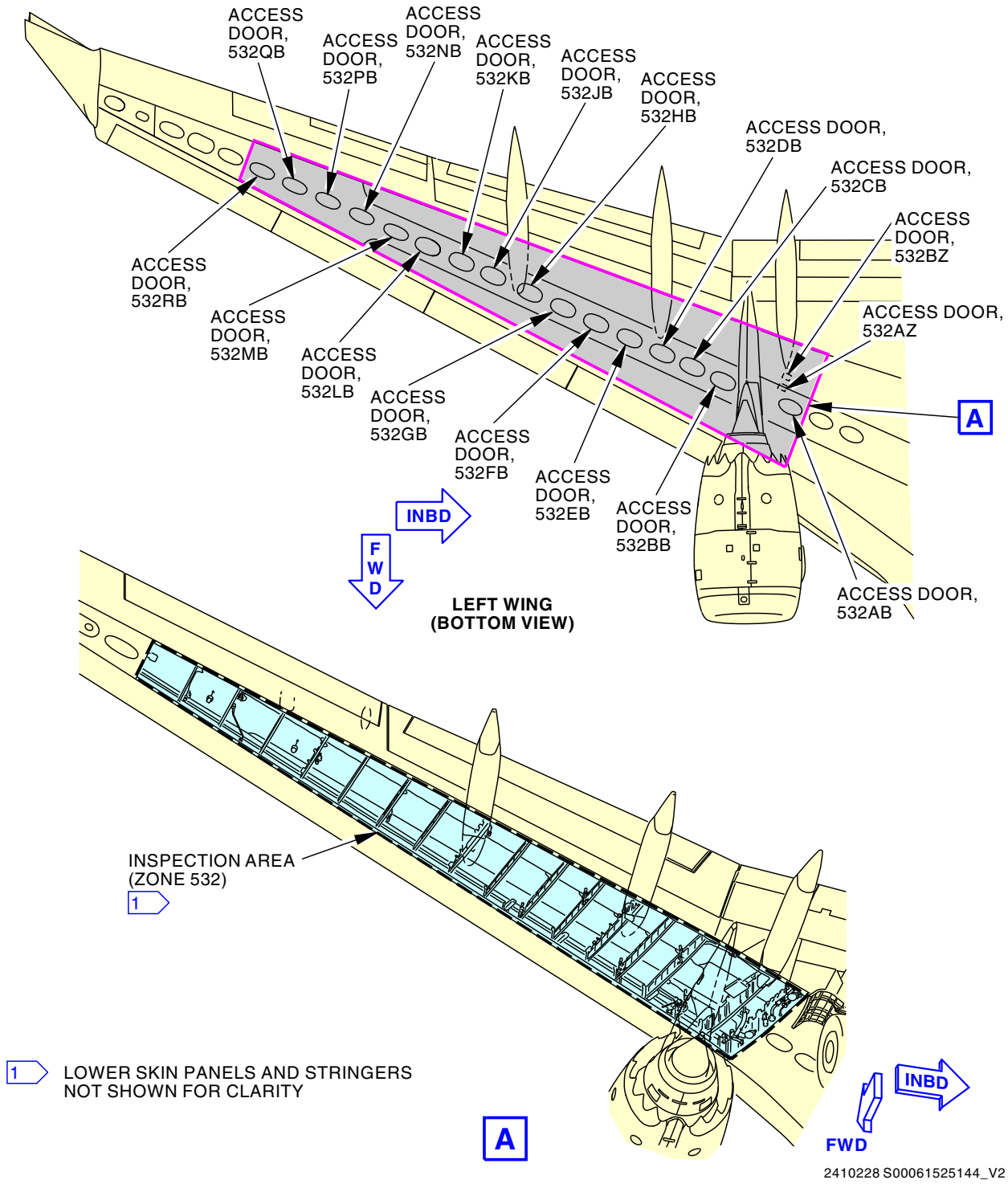
SUBTASK 05-41-05-410-005

(3) Close these access panels:

Number	Name/Location
532AB	Main Tank Access Door - Wing Station 216
532AZ	Main Tank Inner Access at Rib 6
532BB	Main Tank Access Door - Wing Station 265
532BZ	Main Tank Inner Access at Rib 6
532CB	Main Tank Access Door - Wing Station 290
532DB	Main Tank Access Door - Wing Station 313
532EB	Main Tank Access Door - Wing Station 337
532FB	Main Tank Access Door - Wing Station 367
532GB	Main Tank Access Door - Wing Station 390
532HB	Main Tank Access Door - Wing Station 417
532JB	Main Tank Access Door - Wing Station 443
532KB	Main Tank Access Door - Wing Station 470
532LB	Main Tank Access Door - Wing Station 496
532MB	Main Tank Access Door - Wing Station 523
532NB	Main Tank Access Door - Wing Station 549
532PB	Main Tank Access Door - Wing Station 576
532QB	Main Tank Access Door - Wing Station 602
532RB	Main Tank Access Door - Wing Station 629

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Main Fuel Tank - Left Wing General Visual (Internal)
Figure 213/05-41-05-990-813

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-05-210-814

14. EXTERNAL - ZONAL (GV): MAIN FUEL TANK - LEFT WING

(Figure 214)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
532	Left Wing - Main Tank, Rib 5 to Rib 22, Wing Station 204.25 to Wing BL 643.50

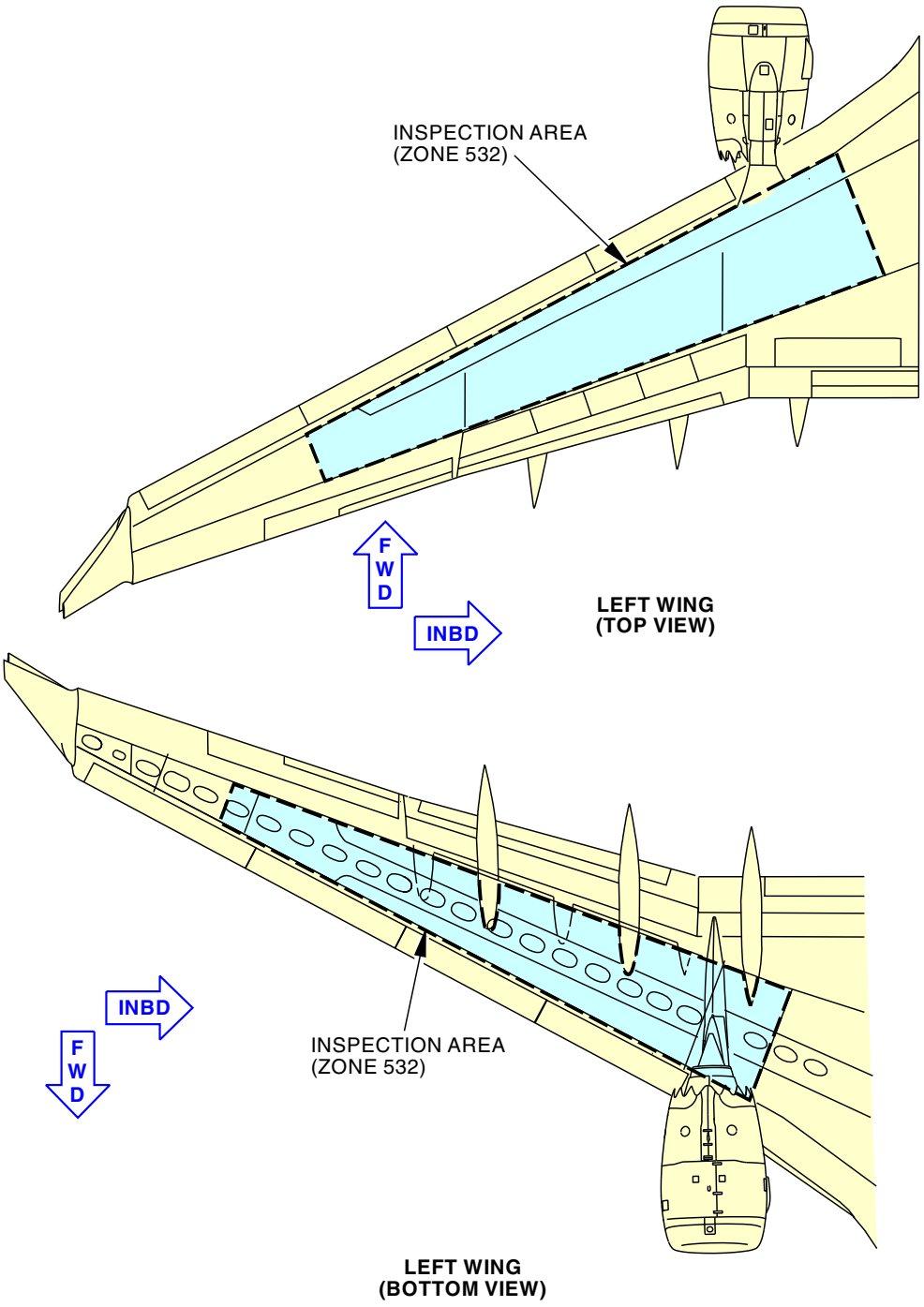
B. Zonal Inspection

SUBTASK 05-41-05-210-014

(1) Do a General Visual inspection of the main fuel tank - left wing.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Main Fuel Tank - Left Wing General Visual (External)
Figure 214/05-41-05-990-814

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-05-210-815

15. INTERNAL - ZONAL (GV): SURGE TANK - LEFT WING

(Figure 215)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
533	Left Wing - Surge Tank, Rib 22 to Rib 25, Wing Station 643.50 to Wing BL 616.75

B. Access Panels

Number	Name/Location
533AB	Surge Tank Access Door - Wing Station 655
533BB	Surge Tank Access Door - Wing Station 679
533CB	Surge Tank Access Door - Wing Station 703

C. Zonal Inspection

SUBTASK 05-41-05-010-006

(1) Open these access panels:

Number	Name/Location
533AB	Surge Tank Access Door - Wing Station 655
533BB	Surge Tank Access Door - Wing Station 679
533CB	Surge Tank Access Door - Wing Station 703

SUBTASK 05-41-05-210-015

(2) Do a General Visual inspection of the surge tank - left wing.

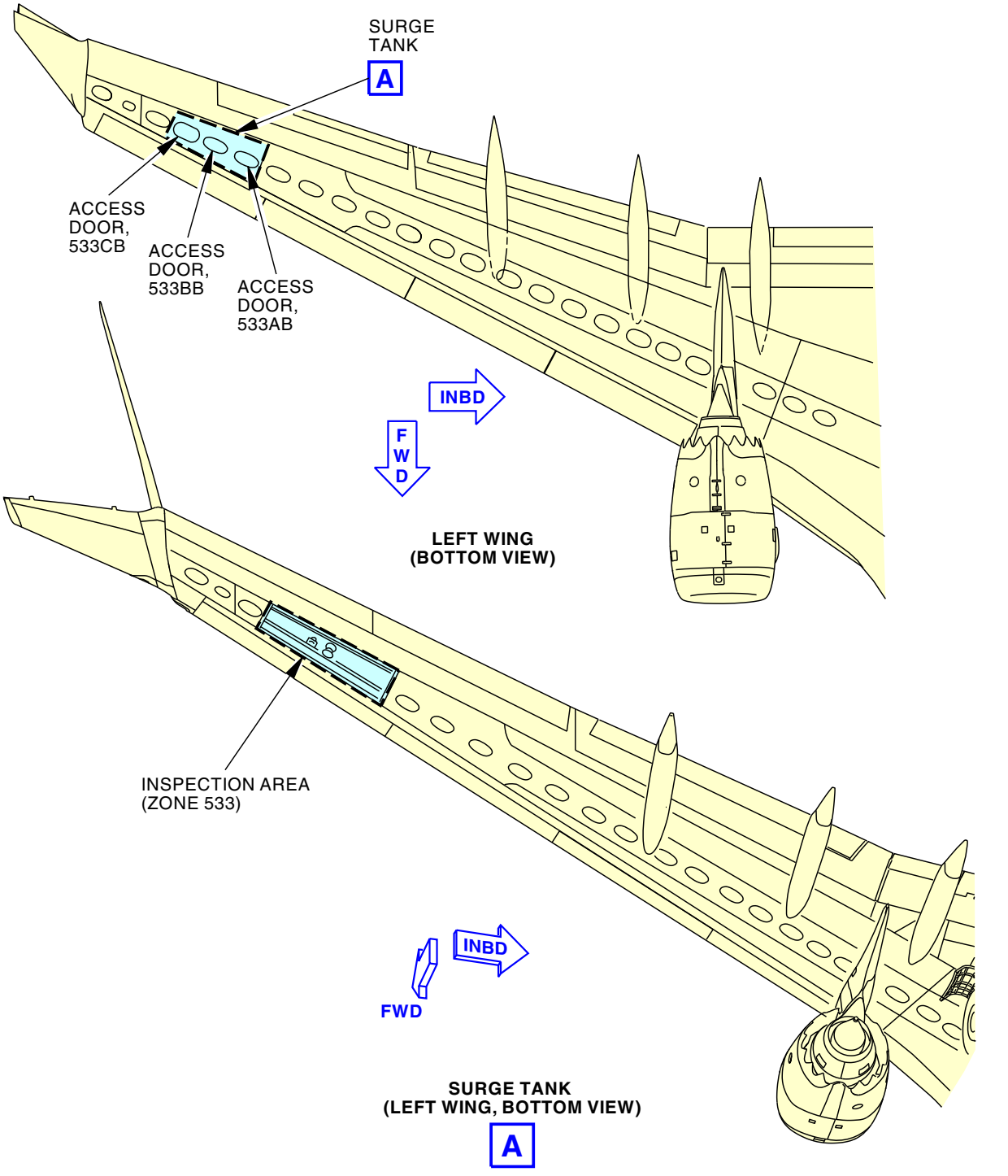
SUBTASK 05-41-05-410-006

(3) Close these access panels:

Number	Name/Location
533AB	Surge Tank Access Door - Wing Station 655
533BB	Surge Tank Access Door - Wing Station 679
533CB	Surge Tank Access Door - Wing Station 703

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Surge Tank - Left Wing General Visual (Internal)
Figure 215/05-41-05-990-815

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-05-210-816

16. EXTERNAL - ZONAL (GV): SURGE TANK - LEFT WING

(Figure 216)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
533	Left Wing - Surge Tank, Rib 22 to Rib 25, Wing Station 643.50 to Wing BL 616.75

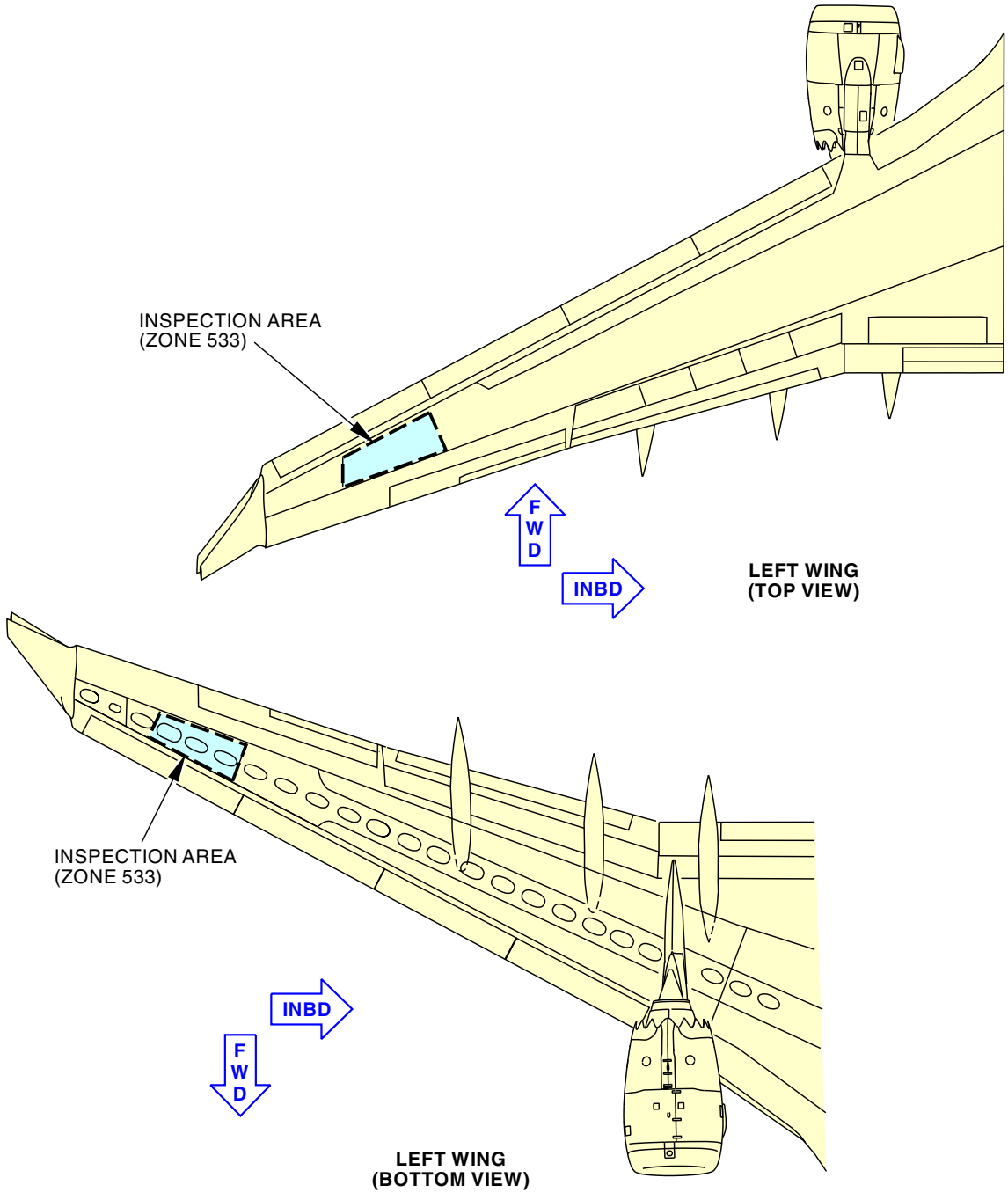
B. Zonal Inspection

SUBTASK 05-41-05-210-016

(1) Do a General Visual inspection of the surge tank - left wing.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



2410231 S00061525150_V1

Surge Tank - Left Wing General Visual (External)
Figure 216/05-41-05-990-816

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-05-210-817

17. EXTERNAL - ZONAL (GV): DRY BAY - LEFT WING

(Figure 217)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
534	Left Wing - Dry Bay

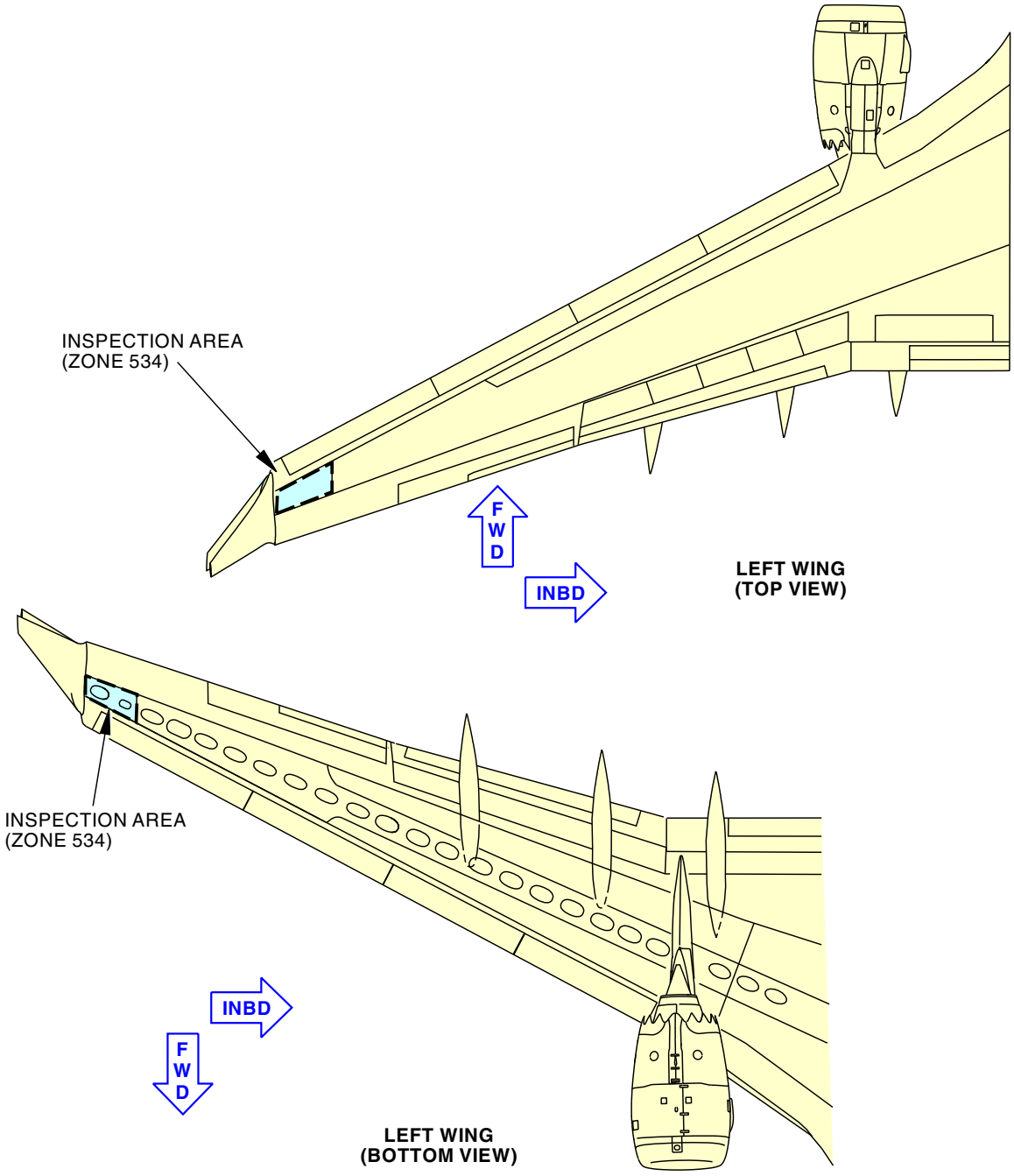
B. Zonal Inspection

SUBTASK 05-41-05-210-017

(1) Do a General Visual inspection of the dry bay - left wing.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



2410232 S00061525152_V1

Dry Bay - Left Wing General Visual (External)
Figure 217/05-41-05-990-817

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-05-210-837

18. INTERNAL - ZONAL (GVI): Dry Bay - Left Wing

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
534	Left Wing - Dry Bay

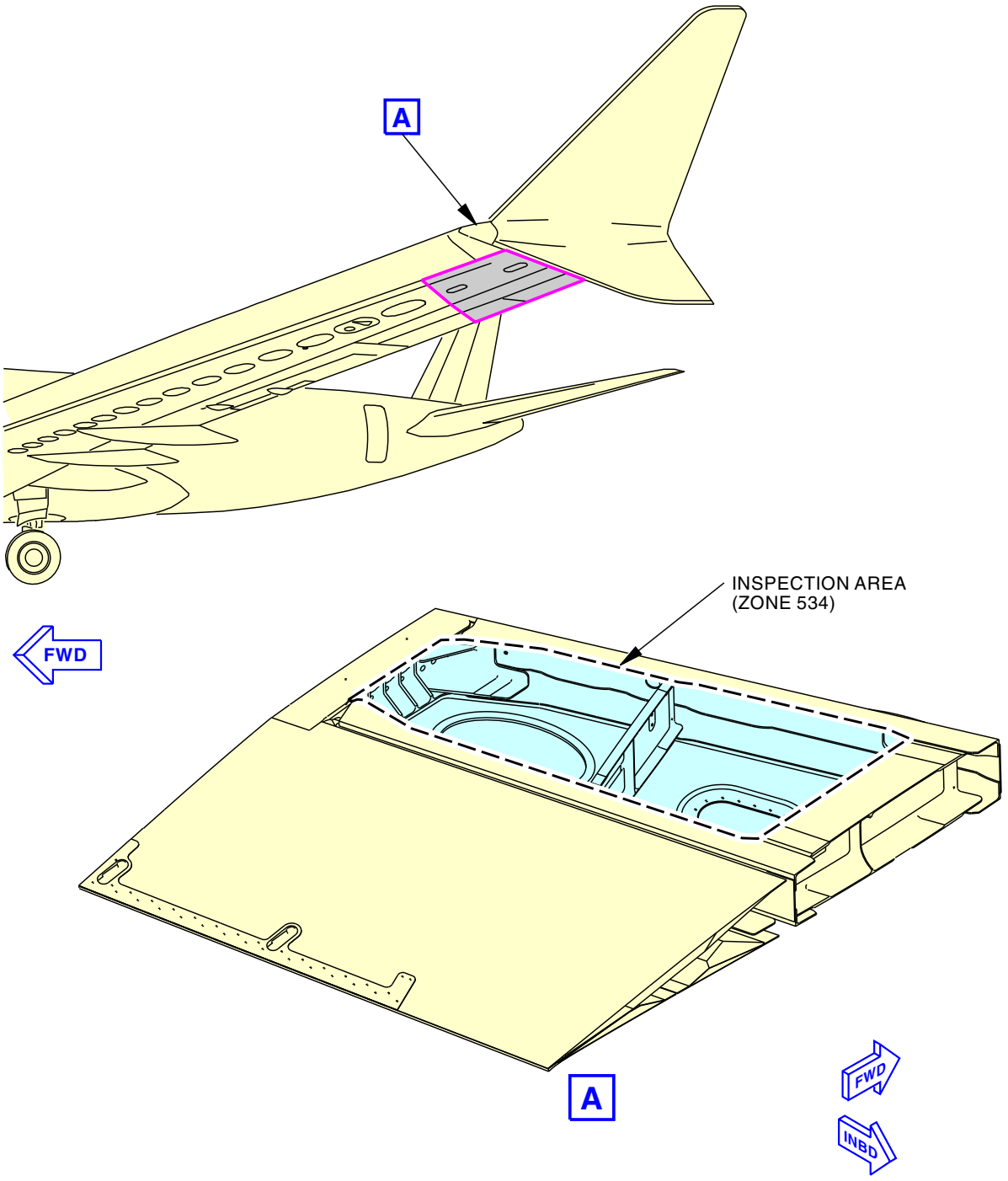
B. Zonal Inspection

SUBTASK 05-41-05-210-037

(1) Do a General Visual Inspection of the dry bay - left wing.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Dry Bay - Left General Visual (Internal)
Figure 218/05-41-05-990-837

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-41-05-210-818

19. INTERNAL - ZONAL (GV): Flap Support No. 4 - Left Wing

(Figure 219)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This Zonal inspection procedure satisfies the required EZAP-derived Zonal inspection requirement for this zone.

B. References

Reference	Title
05-00-00-910-802	Enhanced Zonal Inspection Program (EZAP) Precautions (P/B 201)
20-60-07-910-801	Protection of the EWIS During Maintenance (P/B 201)
27-51-00-860-803	Extend the Trailing Edge Flaps (P/B 201)
27-51-00-860-804	Retract the Trailing Edge Flaps (P/B 201)

C. Location Zones

Zone	Area
133	Main Landing Gear Wheel Well, Body Station 663.75 to Body Station 727.00 - Left
194	Lower Wing-To-Body Fairing - Aft of Wheel Well
541	Left Wing - Fairing Flap Support No. 4

D. Access Panels

Number	Name/Location
194BL	Flap Track Lubrication Panel - Aft

E. Zonal Inspection

SUBTASK 05-41-05-010-012

(1) Extend the trailing edge flaps, do this task: Extend the Trailing Edge Flaps, TASK 27-51-00-860-803.

SUBTASK 05-41-05-010-007

(2) Open this access panel:

Number	Name/Location
194BL	Flap Track Lubrication Panel - Aft

SUBTASK 05-41-05-210-018

(3) Do the zonal inspection following the procedures in Enhanced Zonal Inspection Program (EZAP) Precautions, TASK 05-00-00-910-802.

(4) Perform an internal zonal inspection (GV) of the flap support no. 4 - left wing - Section 46, Sta 727. (EZAP)

SUBTASK 05-41-05-910-003

(5) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-910-801 for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 05-41-05-410-007

(6) Close this access panel:

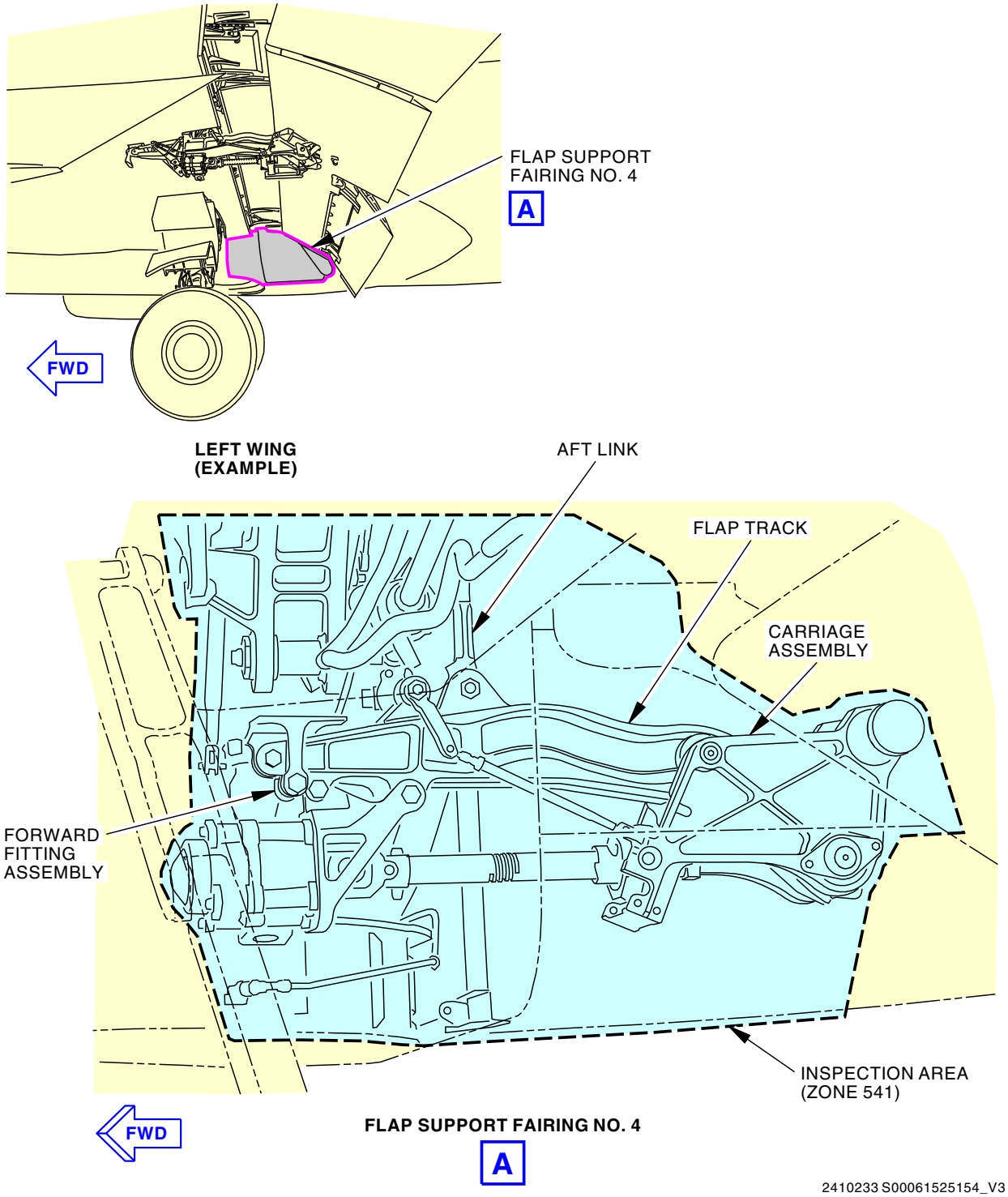
Number	Name/Location
194BL	Flap Track Lubrication Panel - Aft

SUBTASK 05-41-05-410-012

(7) Retract the trailing edge flaps, do this task: Retract the Trailing Edge Flaps, TASK 27-51-00-860-804.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Flap Support Fairing No. 4 General Visual (Internal)
Figure 219/05-41-05-990-818

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-05-210-819

20. EXTERNAL - ZONAL (GV): FAIRING FLAP SUPPORT NO. 3 - LEFT WING

(Figure 220)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
542	Left Wing - Fairing Flap Support No. 3

B. Zonal Inspection

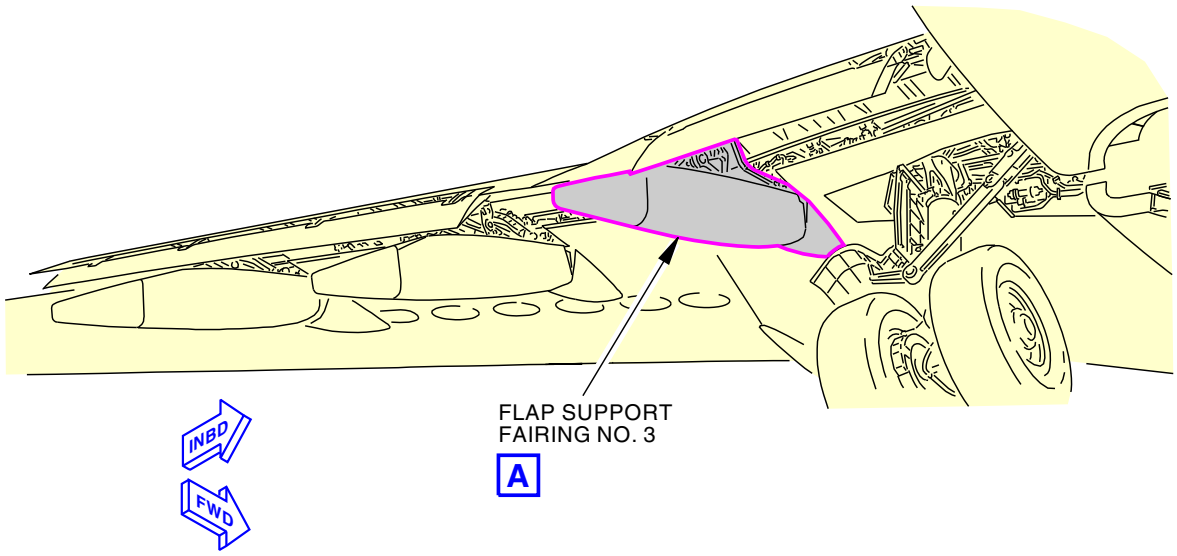
NOTE: Flaps extended.

SUBTASK 05-41-05-210-019

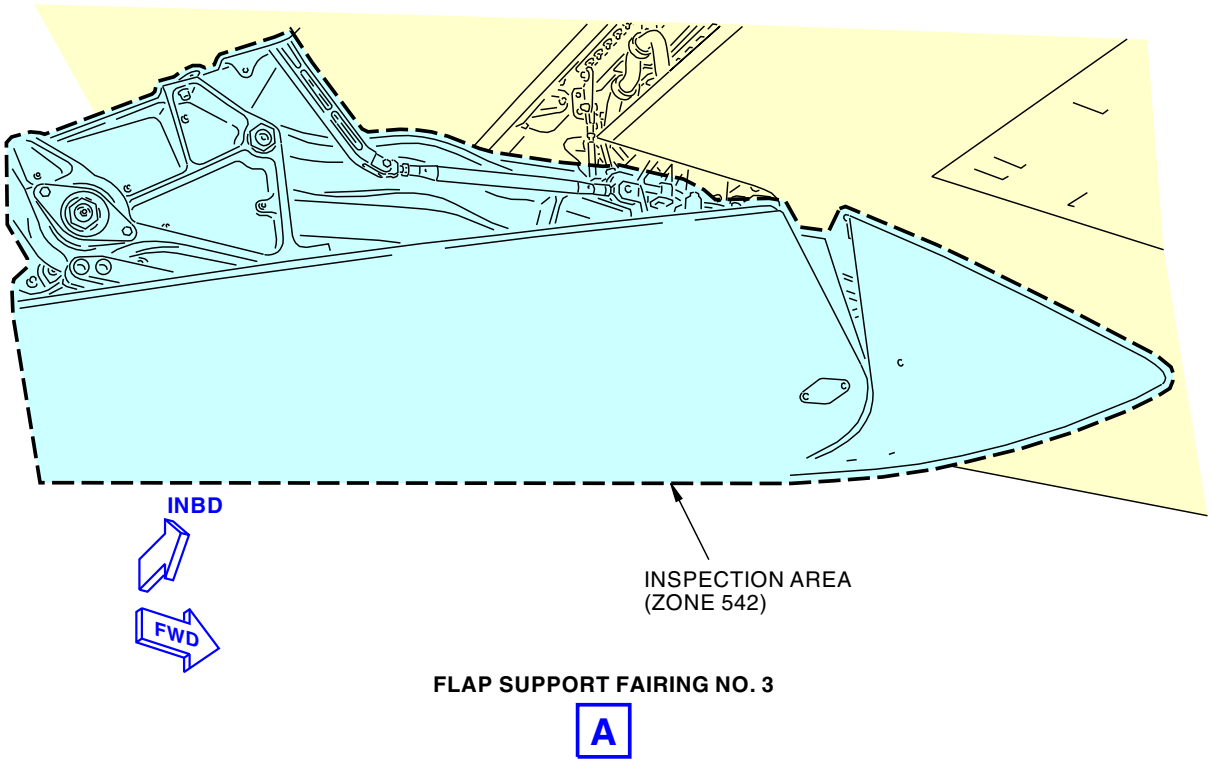
(1) Do a General Visual inspection of the fairing flap support no. 3 - left wing.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



LEFT WING



FLAP SUPPORT FAIRING NO. 3

A

2410234 S00061525156_V1

Flap Support Fairing No. 3 General Visual (External)
Figure 220/05-41-05-990-819

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-41-05-210-820

21. INTERNAL - ZONAL (GV): Fairing Flap Support No. 3 - Left Wing

(Figure 221)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This Zonal inspection procedure satisfies the required EZAP-derived Zonal inspection requirement for this zone.

B. References

Reference	Title
05-00-00-910-802	Enhanced Zonal Inspection Program (EZAP) Precautions (P/B 201)
20-60-07-910-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
542	Left Wing - Fairing Flap Support No. 3

D. Zonal Inspection

NOTE: Flaps extended, inside of fairing.

SUBTASK 05-41-05-210-020

(1) Do the zonal inspection following the procedures in Enhanced Zonal Inspection Program (EZAP) Precautions, TASK 05-00-00-910-802.

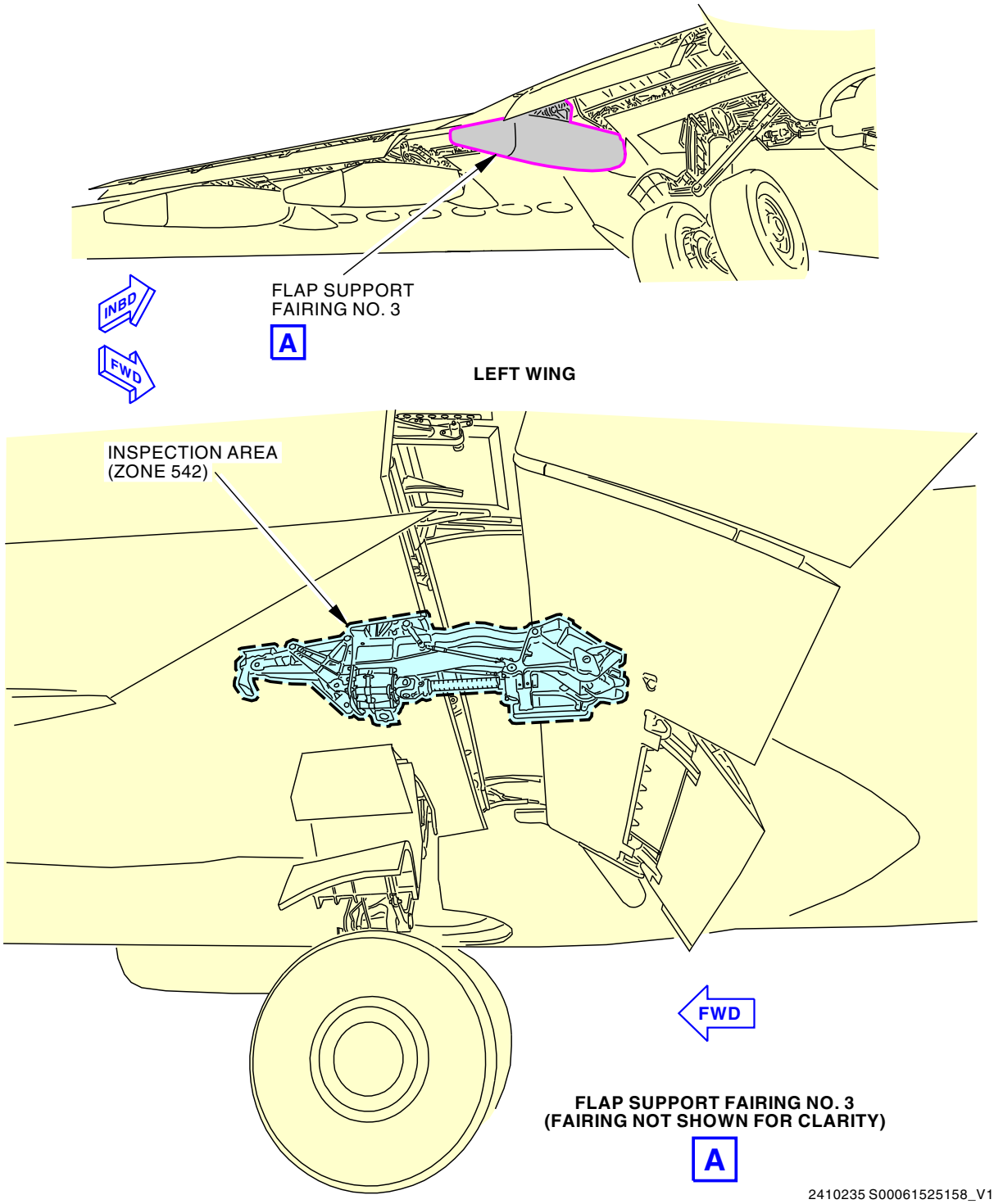
(2) Perform an internal zonal inspection (GV) of the fairing flap support no. 3 - left wing. (EZAP)

SUBTASK 05-41-05-910-004

(3) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-910-801 for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Flap Support Fairing No. 3 General Visual (Internal)
Figure 221/05-41-05-990-820

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-05-210-821

22. EXTERNAL - ZONAL (GV): FAIRING FLAP SUPPORT NO. 2 - LEFT WING

(Figure 222)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
543	Left Wing - Fairing Flap Support No. 2

B. Zonal Inspection

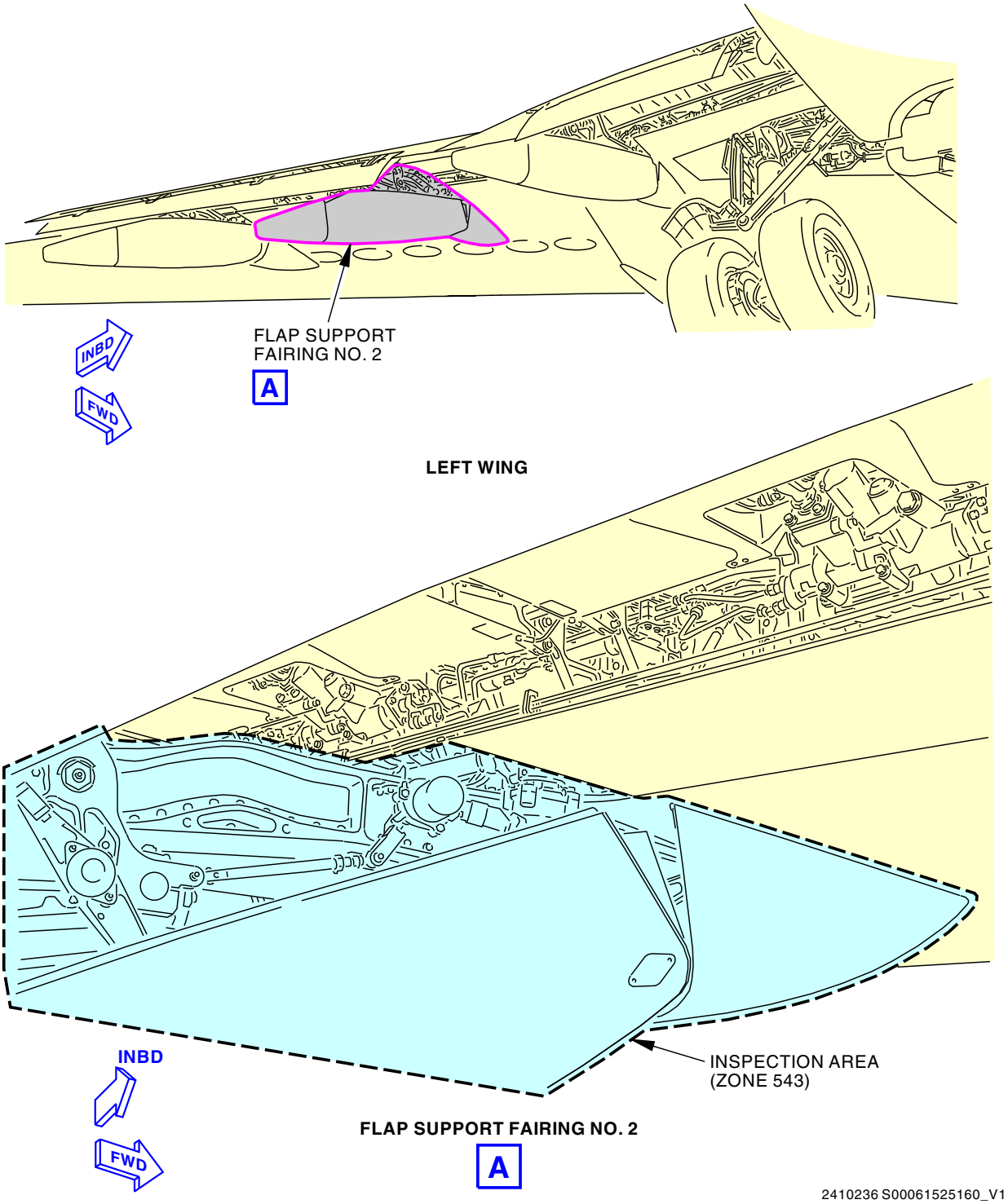
NOTE: Flaps extended.

SUBTASK 05-41-05-210-021

(1) Do a General Visual inspection of the fairing flap support no. 2 - left wing.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Flap Support Fairing No. 2 General Visual (External)
Figure 222/05-41-05-990-821

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-41-05-210-822

23. INTERNAL - ZONAL (GV): Fairing Flap Support No. 2 - Left Wing

(Figure 223)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This Zonal inspection procedure satisfies the required EZAP-derived Zonal inspection requirement for this zone.

B. References

Reference	Title
05-00-00-910-802	Enhanced Zonal Inspection Program (EZAP) Precautions (P/B 201)
20-60-07-910-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
543	Left Wing - Fairing Flap Support No. 2

D. Zonal Inspection

NOTE: Flaps extended, inside of fairing.

SUBTASK 05-41-05-210-022

(1) Do the zonal inspection following the procedures in Enhanced Zonal Inspection Program (EZAP) Precautions, TASK 05-00-00-910-802.

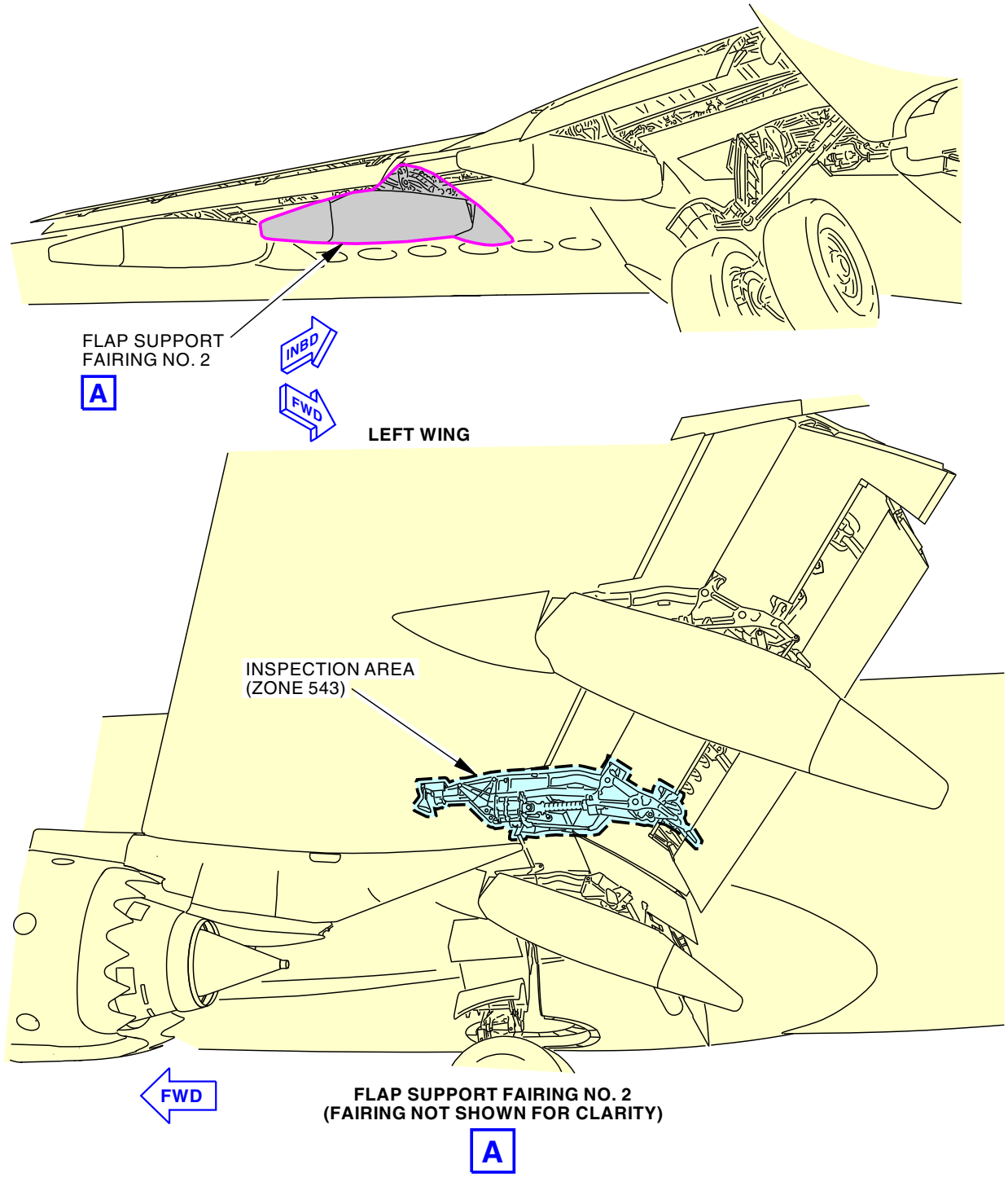
(2) Perform an internal zonal inspection (GV) of the fairing flap support no. 2 - left wing. (EZAP)

SUBTASK 05-41-05-910-005

(3) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-910-801 for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Flap Support Fairing No. 2 General Visual (Internal)
Figure 223/05-41-05-990-822

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-05-210-823

24. EXTERNAL - ZONAL (GV): FAIRING FLAP SUPPORT NO. 1 - LEFT WING

(Figure 224)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
544	Left Wing - Fairing Flap Support No. 1

B. Zonal Inspection

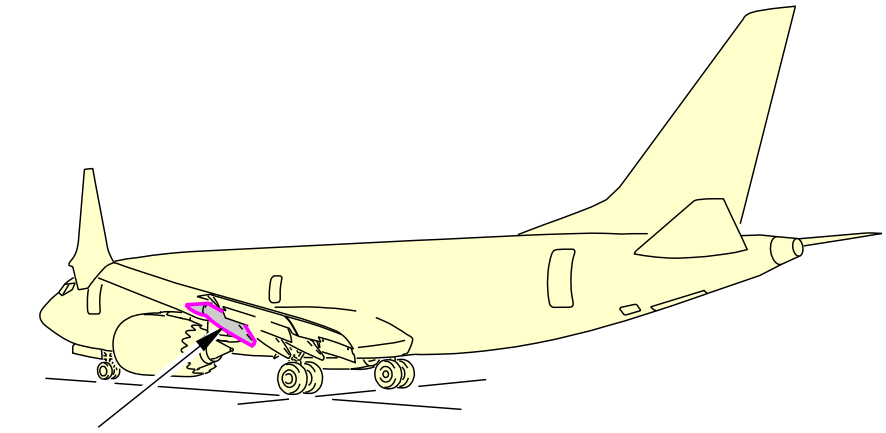
NOTE: Flaps extended.

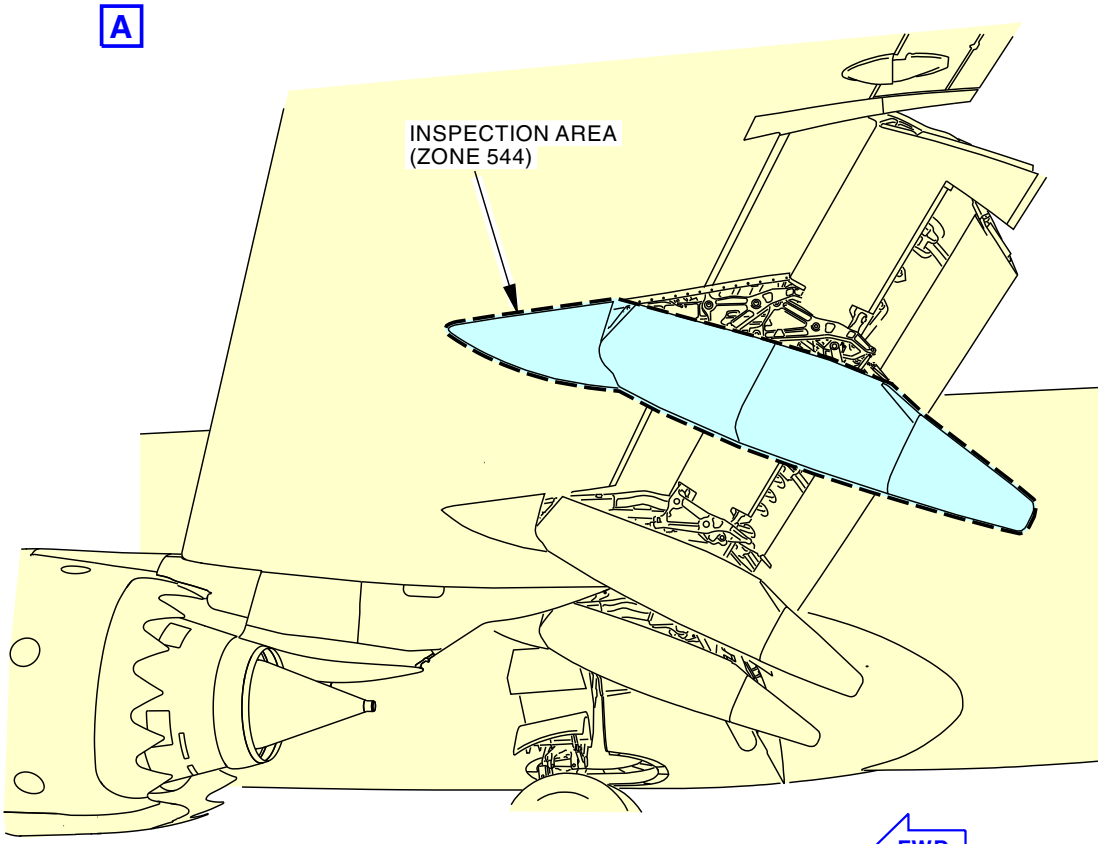
SUBTASK 05-41-05-210-023

(1) Do a General Visual inspection of the fairing flap support no. 1 - left wing.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details





FLAP SUPPORT FAIRING NO. 1
(EXAMPLE)

A

2410238 S00061525164_V3

Flap Support Fairing No. 1 General Visual (External)
Figure 224/05-41-05-990-823

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-41-05-210-824

25. INTERNAL - ZONAL (GV): Fairing Flap Support No. 1 - Left Wing

(Figure 225)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This Zonal inspection procedure satisfies the required EZAP-derived Zonal inspection requirement for this zone.

B. References

Reference	Title
05-00-00-910-802	Enhanced Zonal Inspection Program (EZAP) Precautions (P/B 201)
20-60-07-910-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
544	Left Wing - Fairing Flap Support No. 1

D. Zonal Inspection

NOTE: Flaps extended, inside of fairing.

SUBTASK 05-41-05-210-024

(1) Do the zonal inspection following the procedures in Enhanced Zonal Inspection Program (EZAP) Precautions, TASK 05-00-00-910-802.

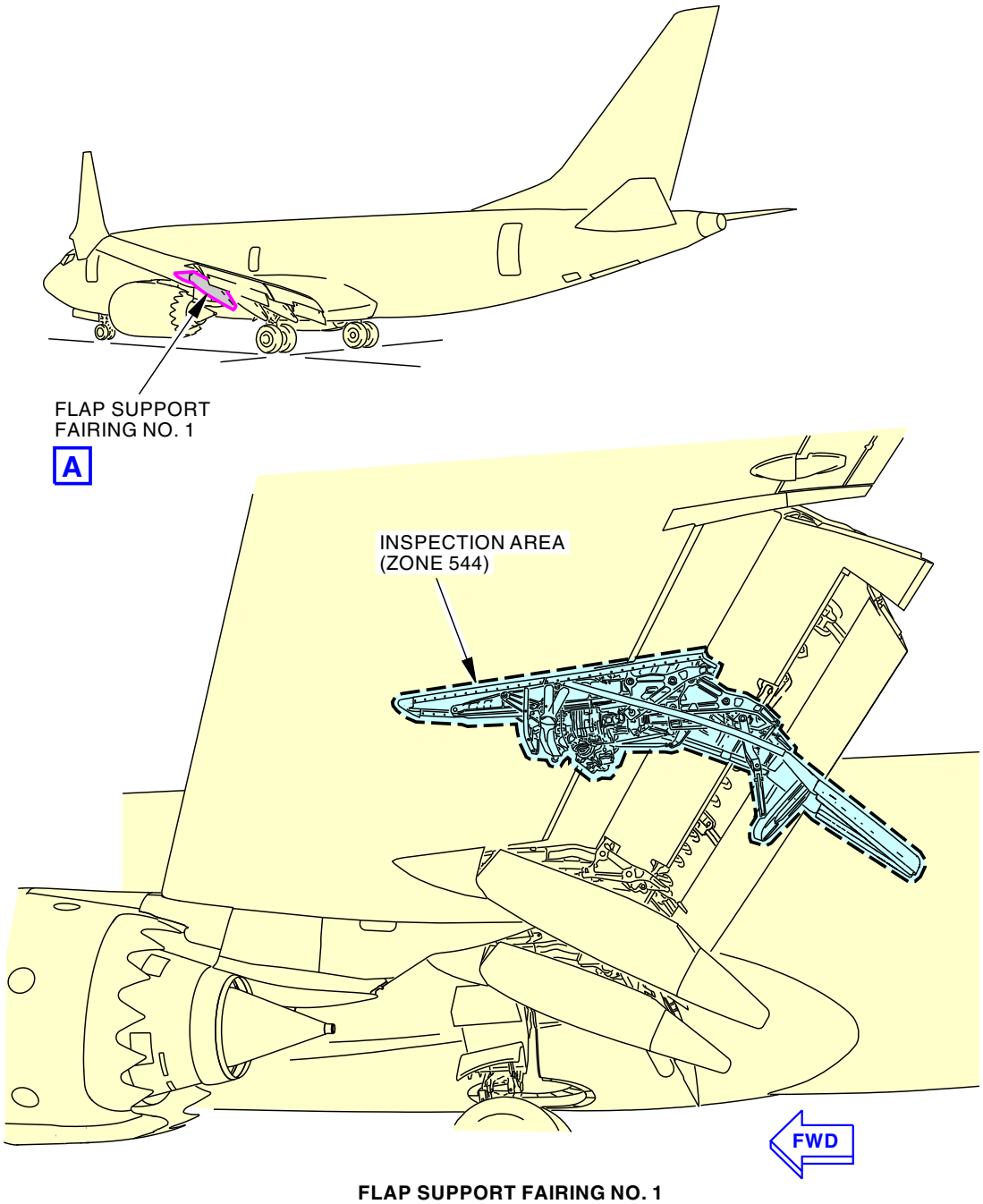
(2) Perform an internal zonal inspection (GV) of the fairing flap support no. 1 - left wing. (EZAP)

SUBTASK 05-41-05-910-006

(3) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-910-801 for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details



FLAP SUPPORT FAIRING NO. 1
(EXAMPLE)

A

2410239 S00061525166_V3

Flap Support Fairing No. 1 General Visual (Internal)
Figure 225/05-41-05-990-824

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-05-210-825

26. EXTERNAL - ZONAL (GV): REAR SPAR TO LANDING GEAR SUPPORT BEAM - LEFT WING

(Figure 226)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
551	Left Wing - Rear Spar To Landing Gear Support Beam

B. Zonal Inspection

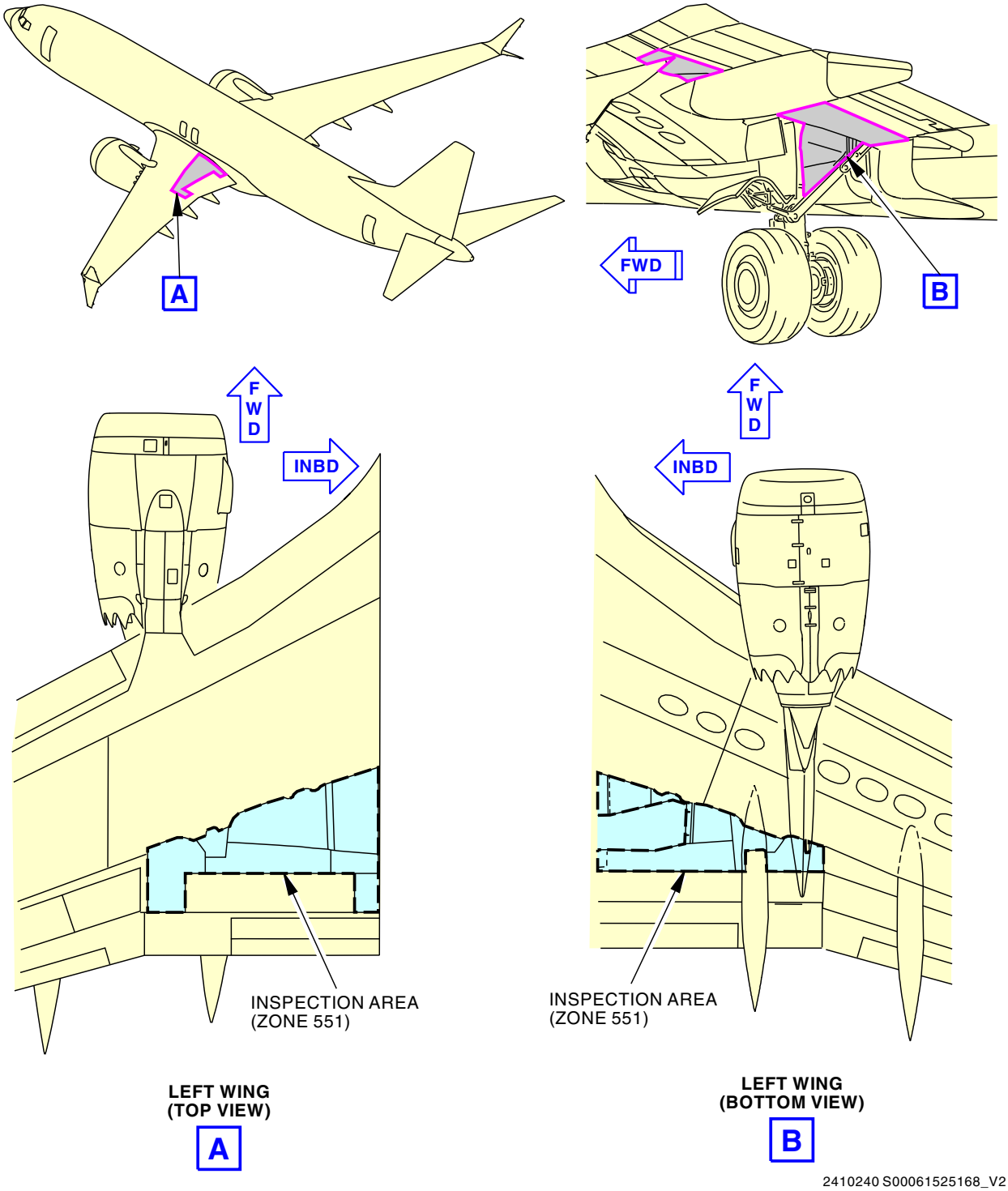
NOTE: Excluding surface under wing to body fairing.

SUBTASK 05-41-05-210-025

(1) Do a General Visual inspection of the rear spar to landing gear support beam - left wing.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Rear Spar to Landing Gear Support Beam - Left Wing General Visual (External)
Figure 226/05-41-05-990-825

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-41-05-210-826

27. INTERNAL - ZONAL (GV): REAR SPAR TO LANDING GEAR SUPPORT BEAM - LEFT WING

(Figure 227)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This Zonal inspection procedure satisfies the required EZAP-derived Zonal inspection requirement for this zone.

B. References

Reference	Title
05-00-00-910-802	Enhanced Zonal Inspection Program (EZAP) Precautions (P/B 201)
20-60-07-910-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
551	Left Wing - Rear Spar To Landing Gear Support Beam

D. Access Panels

Number	Name/Location
551AT	Upper Inboard Fixed Trailing Edge Access Panel
551BT	Upper Inboard Fixed Trailing Edge, MLG Actuator Access Panel
551CT	Upper Inboard Fixed Trailing Edge, Structural Pin Access Panel
551DB	Lower Inboard Fixed Trailing Edge, Lube Actuator & MLG Beam Outboard Attach Pin Access Panel
551FB	Lower Inboard Fixed Trailing Edge, Landing Gear Access Panel

E. Zonal Inspection

SUBTASK 05-41-05-010-008

(1) Open these access panels:

Number	Name/Location
551AT	Upper Inboard Fixed Trailing Edge Access Panel
551BT	Upper Inboard Fixed Trailing Edge, MLG Actuator Access Panel
551CT	Upper Inboard Fixed Trailing Edge, Structural Pin Access Panel
551DB	Lower Inboard Fixed Trailing Edge, Lube Actuator & MLG Beam Outboard Attach Pin Access Panel
551FB	Lower Inboard Fixed Trailing Edge, Landing Gear Access Panel

NOTE: Extend the trailing edge flaps and deploy spoilers.

SUBTASK 05-41-05-200-001

(2) Do the zonal inspection following the procedures in Enhanced Zonal Inspection Program (EZAP) Precautions, TASK 05-00-00-910-802.

SUBTASK 05-41-05-210-026

(3) Do a General Visual inspection of the rear spar to landing gear support beam - left wing (EZAP).

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 05-41-05-910-009

(4) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-910-801 for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

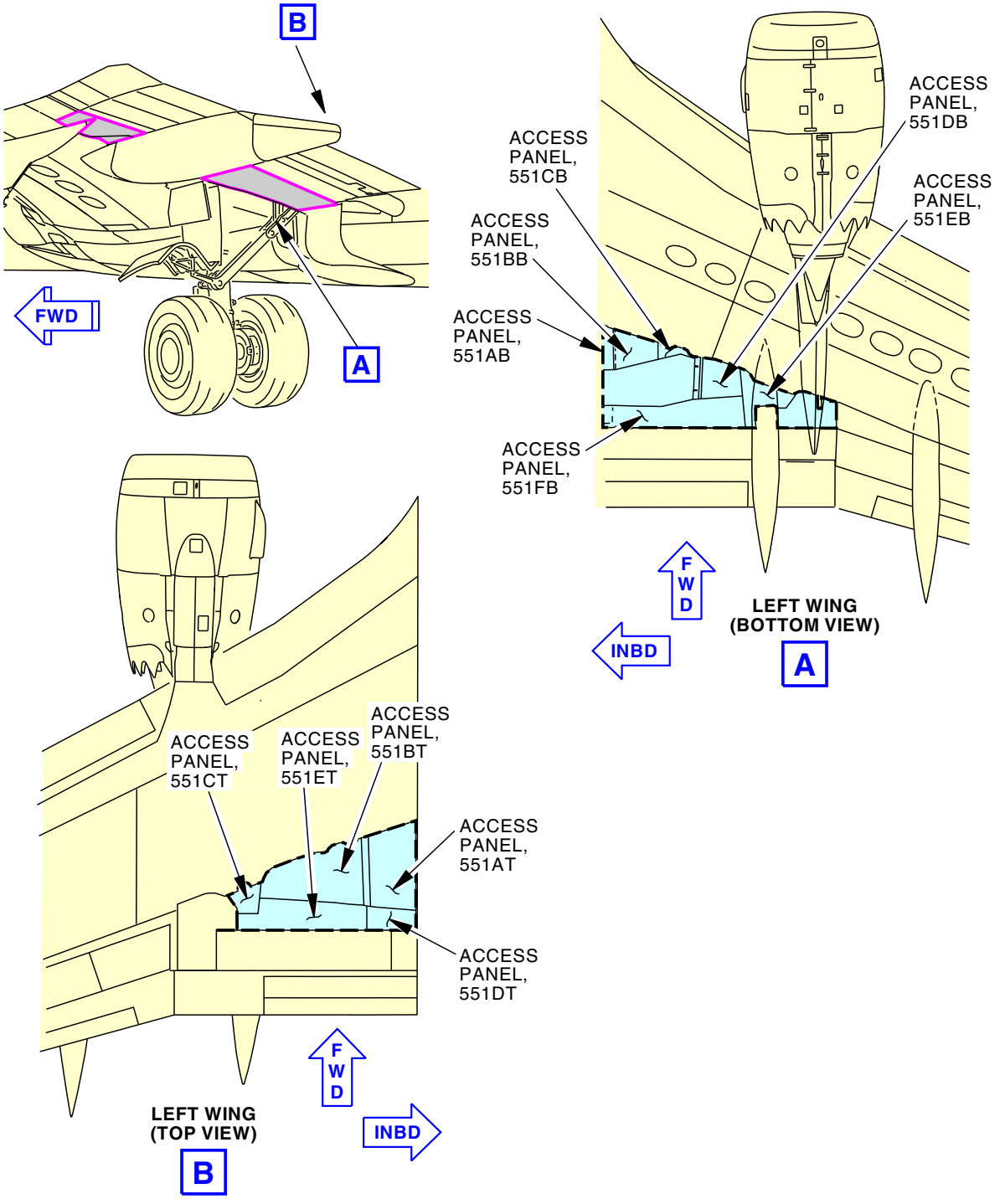
SUBTASK 05-41-05-410-008

(5) Close these access panels:

Number	Name/Location
551AT	Upper Inboard Fixed Trailing Edge Access Panel
551BT	Upper Inboard Fixed Trailing Edge, MLG Actuator Access Panel
551CT	Upper Inboard Fixed Trailing Edge, Structural Pin Access Panel
551DB	Lower Inboard Fixed Trailing Edge, Lube Actuator & MLG Beam Outboard Attach Pin Access Panel
551FB	Lower Inboard Fixed Trailing Edge, Landing Gear Access Panel

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Rear Spar to Landing Gear Support Beam - Left Wing General Visual (Internal)
Figure 227/05-41-05-990-826

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-05-210-827

28. EXTERNAL - ZONAL (GV): INBOARD SPOILER NO. 6 - L. WING

(Figure 228)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
552	Left Wing - Spoiler No. 6

B. Zonal Inspection

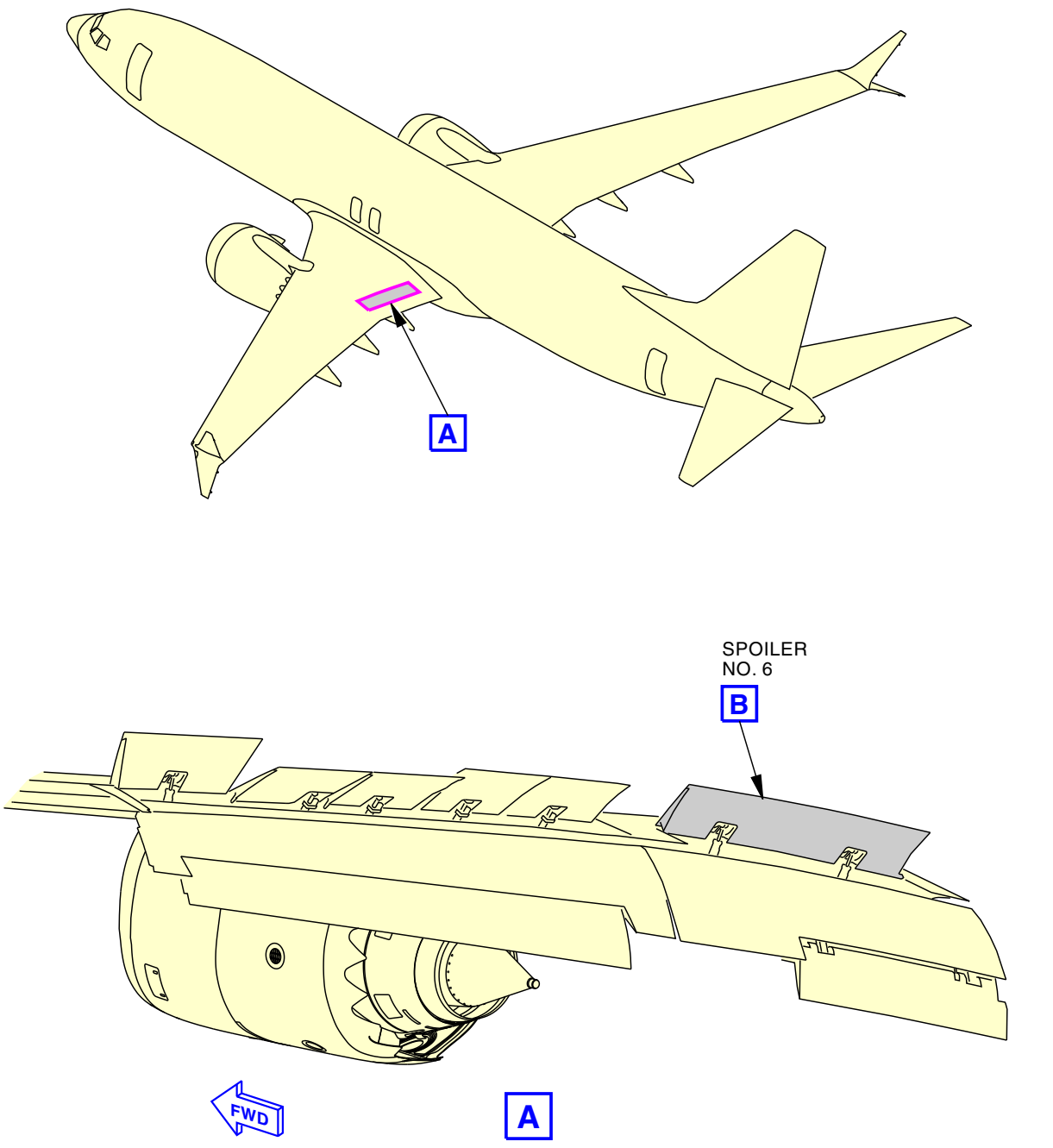
NOTE: Spoiler raised.

SUBTASK 05-41-05-210-027

(1) Do a General Visual inspection of the inboard spoiler no. 6 - left wing.

——— END OF TASK ———

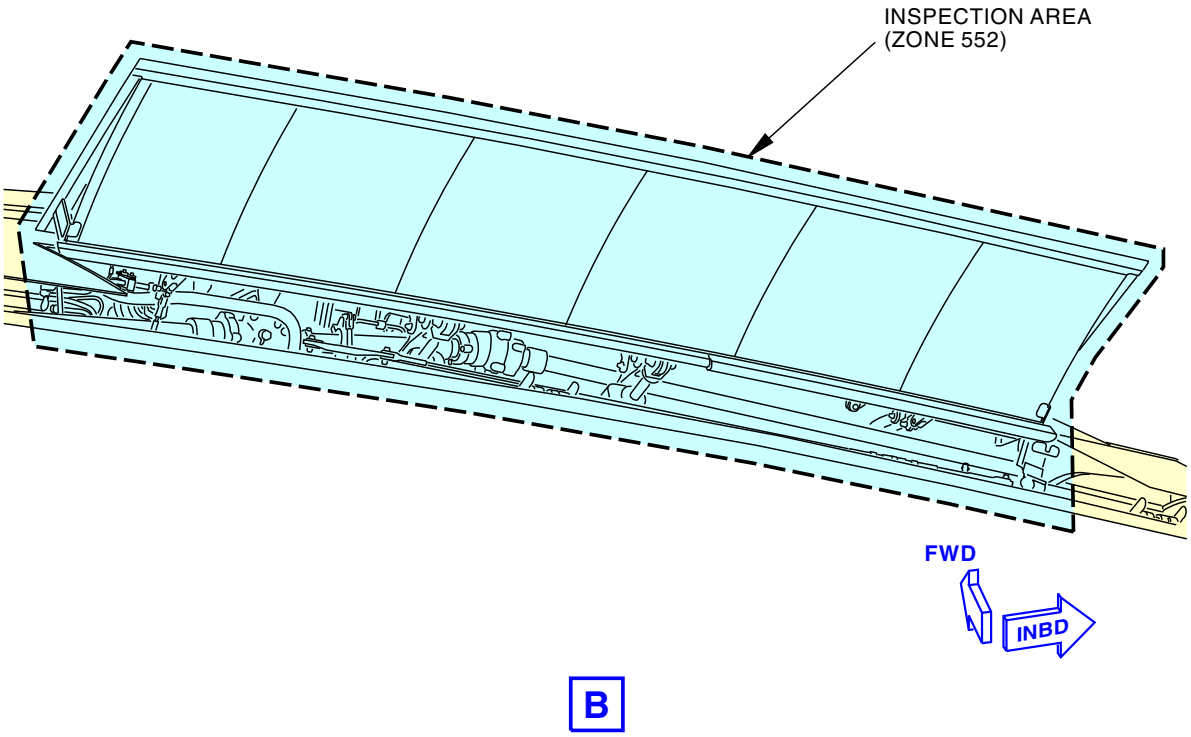
ECCN 9E991 BOEING PROPRIETARY - See title page for details



2410242 S00061525172_V2

Inboard Spoiler No. 6 General Visual (External)
Figure 228/05-41-05-990-827 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



2410243 S00061525173_V1

Inboard Spoiler No. 6 General Visual (External)
Figure 228/05-41-05-990-827 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-05-210-828

29. EXTERNAL - ZONAL (GV): INBOARD FLAPS - LEFT WING

(Figure 229)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
553	Left Wing - Inboard Flap

B. Zonal Inspection

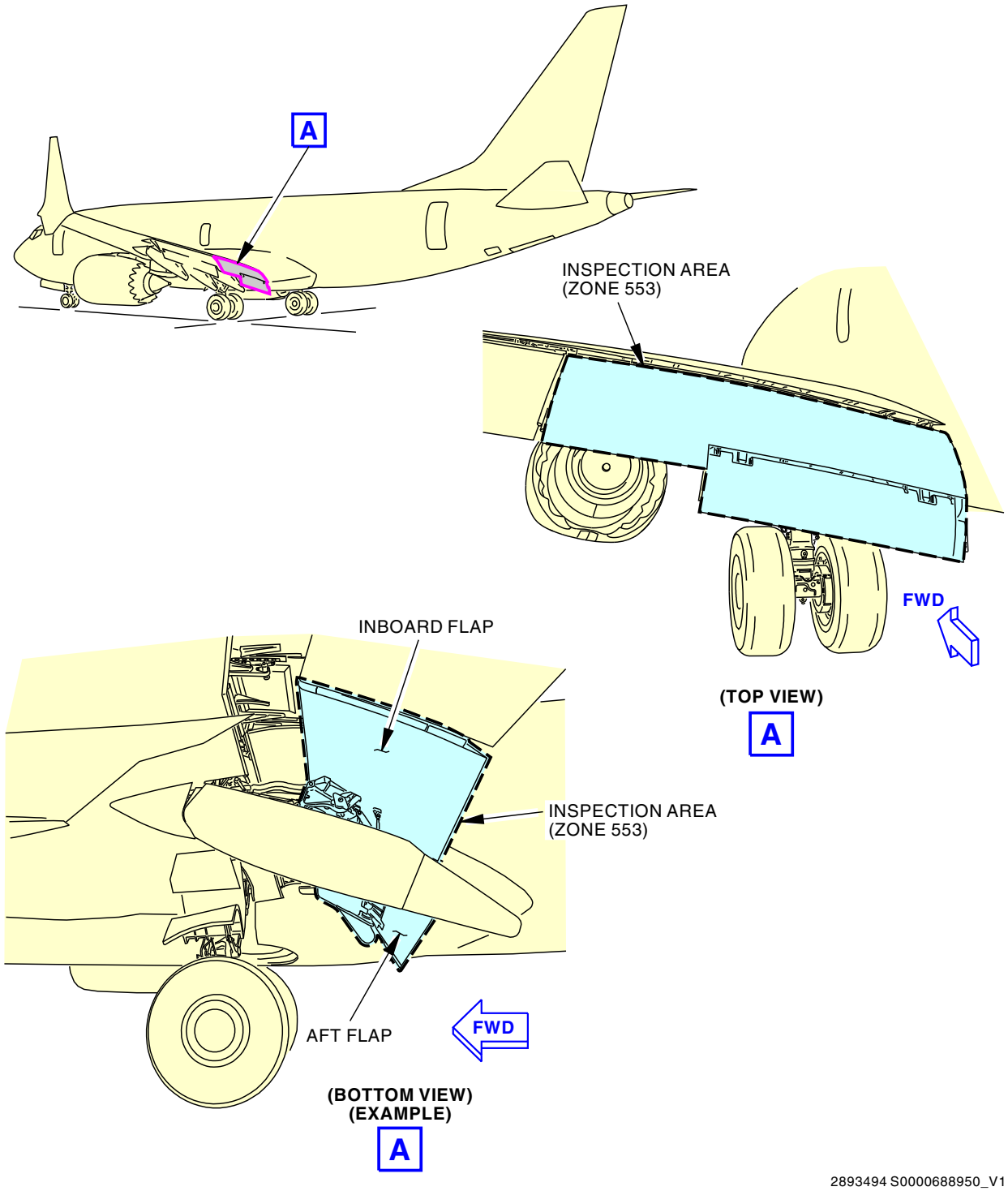
NOTE: Flaps extended.

SUBTASK 05-41-05-210-028

(1) Do a General Visual inspection of the inboard flaps - left wing.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Inboard Trailing Edge Flaps - Left Wing General Visual (External)
Figure 229/05-41-05-990-828

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-05-210-829

30. INTERNAL - ZONAL (GV): INBOARD MAIN FLAP - LEFT WING

(Figure 230)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
553	Left Wing - Inboard Flap

B. Access Panels

Number	Name/Location
553BB	Inboard Flap - Lower Skin

C. Zonal Inspection

SUBTASK 05-41-05-010-009

(1) Open this access panel:

Number	Name/Location
553BB	Inboard Flap - Lower Skin

NOTE: Flaps extended.

SUBTASK 05-41-05-210-029

(2) Do a General Visual inspection of the inboard main flap - left wing.

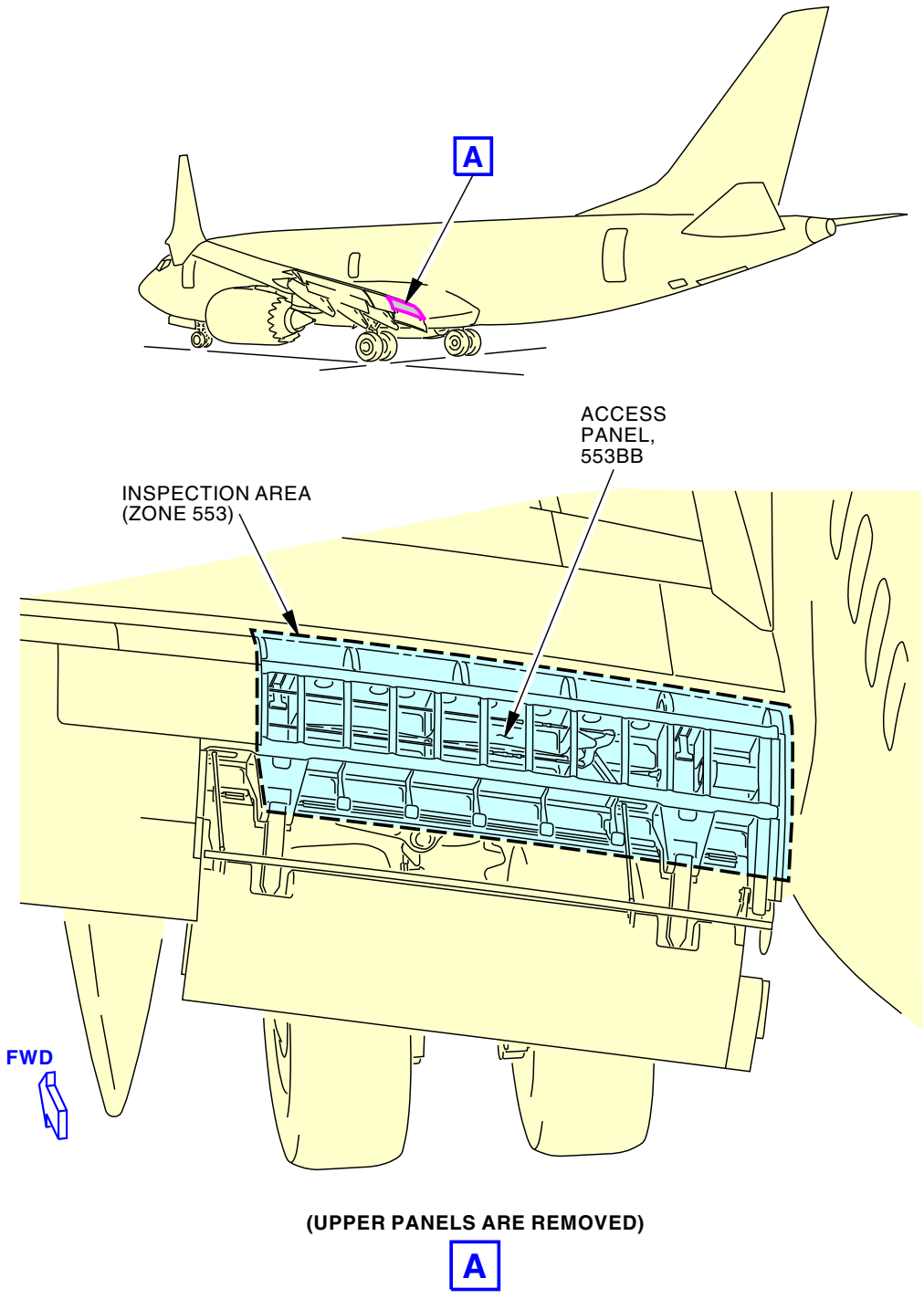
SUBTASK 05-41-05-410-009

(3) Close this access panel:

Number	Name/Location
553BB	Inboard Flap - Lower Skin

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Inboard Trailing Edge Main Flap - Left Wing General Visual (Internal)
Figure 230/05-41-05-990-829

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-41-05-210-830

31. EXTERNAL - ZONAL (GV): Rear Spar to T.E. - Outbd of Inbd Flap - Inbd of Fixed T.E. - L. Wing

(Figure 231)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This Zonal inspection procedure satisfies the required EZAP-derived Zonal inspection requirement for this zone.

B. References

Reference	Title
05-00-00-910-802	Enhanced Zonal Inspection Program (EZAP) Precautions (P/B 201)
20-60-07-910-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
561	Left Wing - Rear Spar to Trailing Edge, Outboard Of Inboard Flap, Inboard of Fixed Trailing Edge

D. Zonal Inspection

NOTE: Flaps down, spoilers raised.

SUBTASK 05-41-05-210-030

(1) Do the zonal inspection following the procedures in Enhanced Zonal Inspection Program (EZAP) Precautions, TASK 05-00-00-910-802.

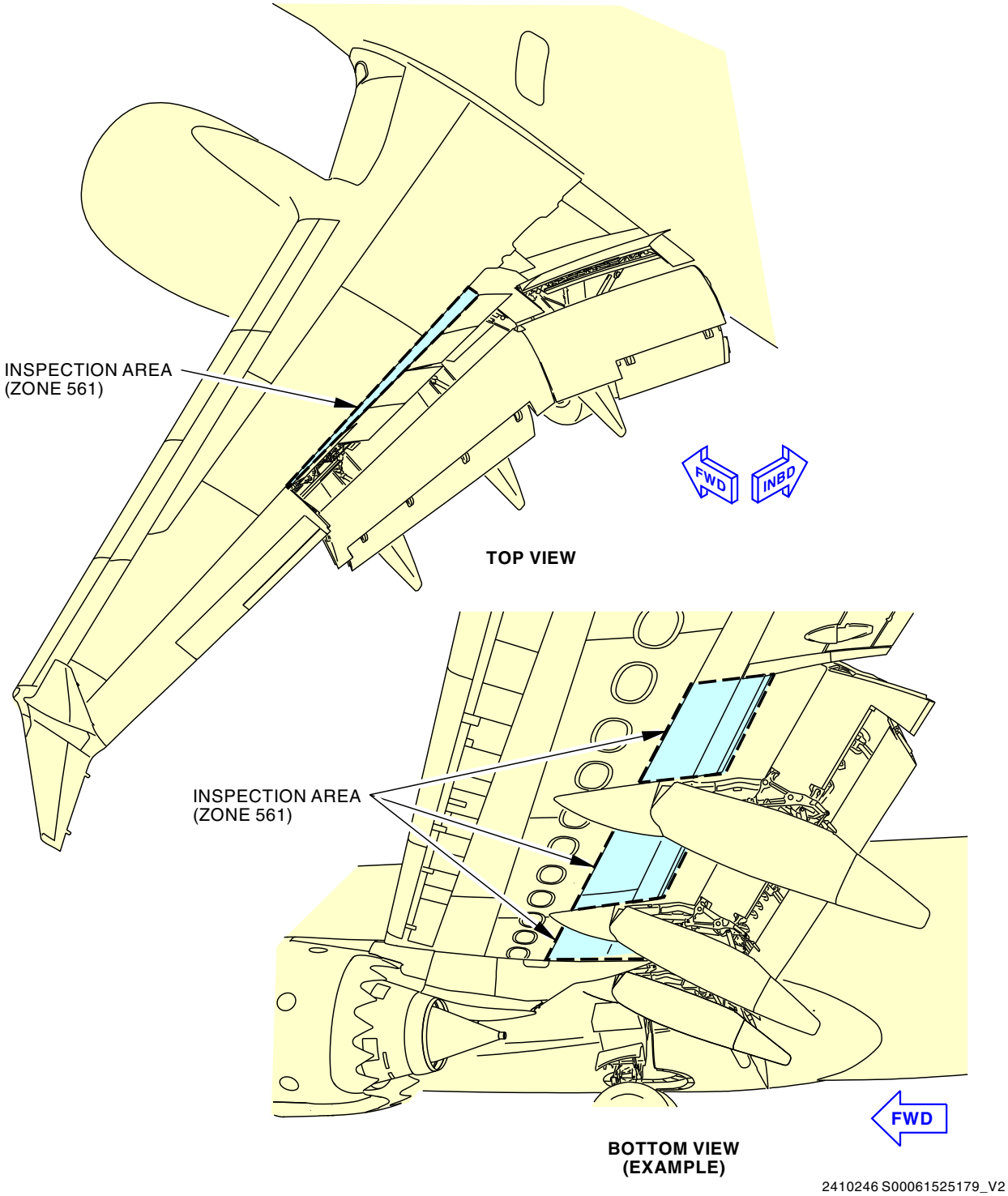
(2) Perform an external zonal inspection (GV) of the rear spar to trailing edge - outboard of inboard flap - inboard of fixed trailing edge - left wing. (EZAP)

SUBTASK 05-41-05-910-007

(3) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-910-801 for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Rear Spar to Trailing Edge (Outboard of Inboard Flap and Inboard of Fixed Trailing Edge) - Left Wing
Figure 231/05-41-05-990-830

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-05-210-831

32. EXTERNAL - ZONAL (GV): SPOILERS NO. 1, 2, 3, 4, 5 - LEFT WING

(Figure 232)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
562	Left Wing - Spoiler No. 5
563	Left Wing - Spoiler No. 4
564	Left Wing - Spoiler No. 3
565	Left Wing - Spoiler No. 2
566	Left Wing - Spoiler No. 1

B. Zonal Inspection

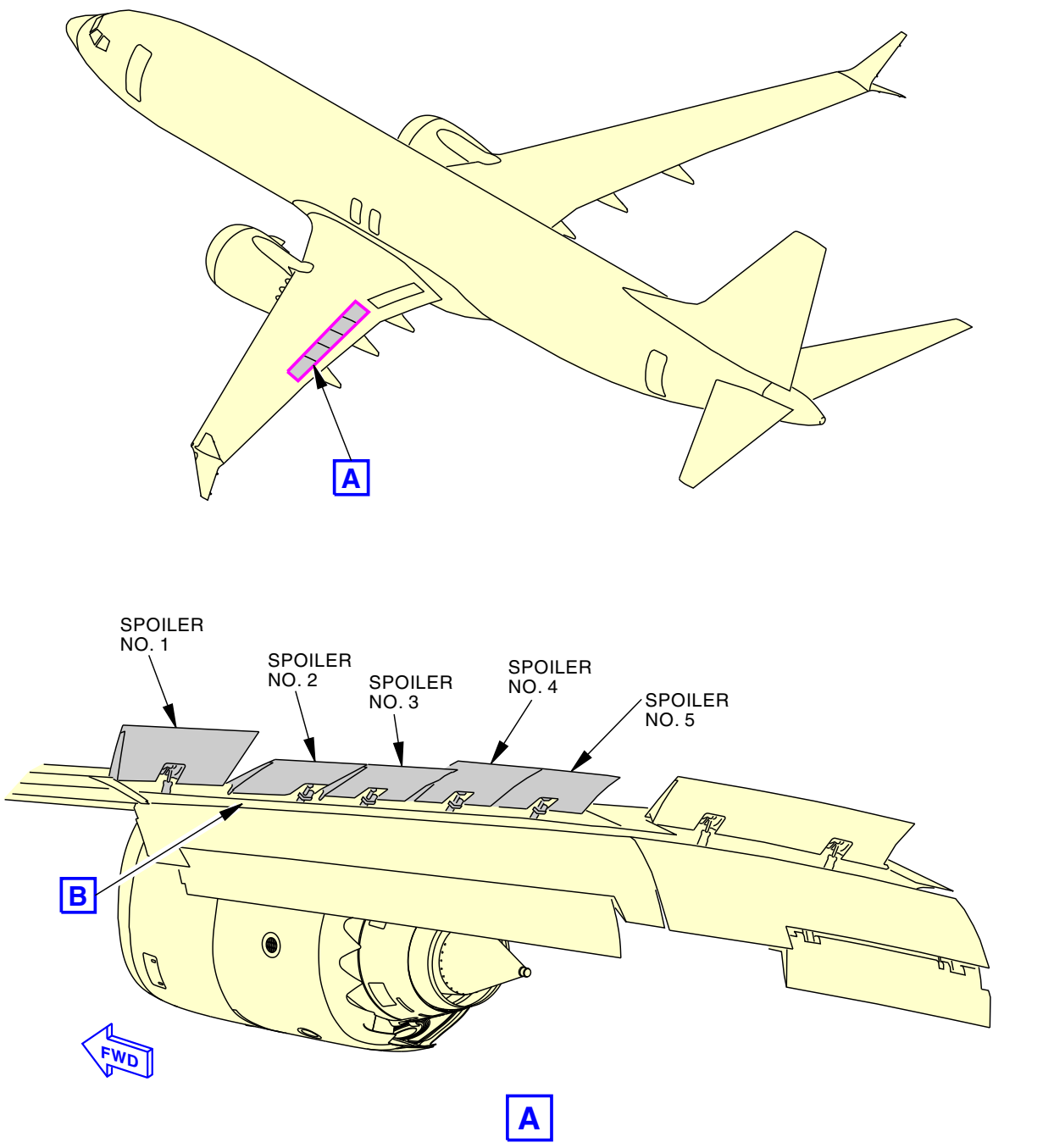
NOTE: Spoilers raised.

SUBTASK 05-41-05-210-031

(1) Do a General Visual inspection of the spoilers 1, 2, 3, 4, 5 - left wing.

——— END OF TASK ———

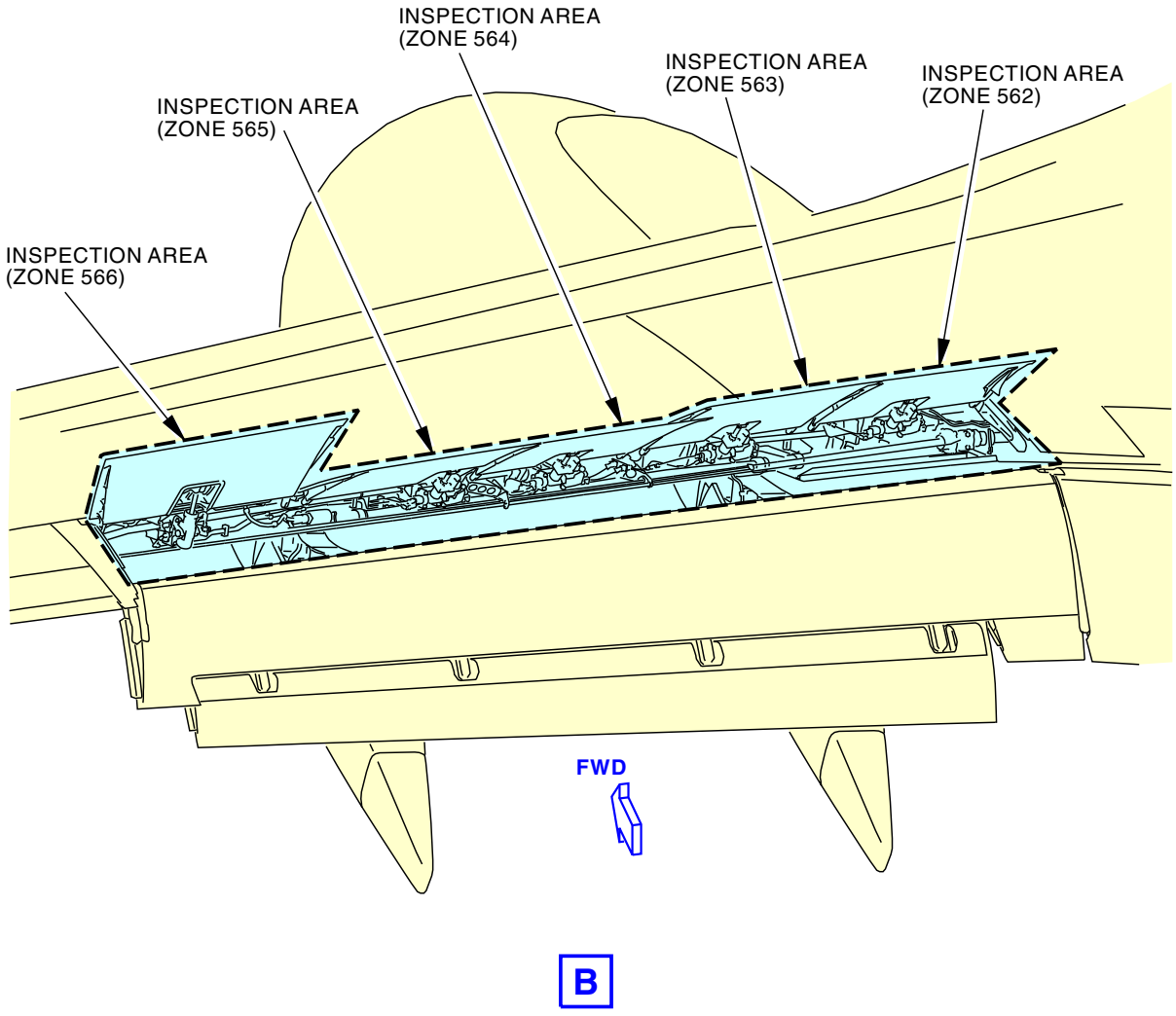
ECCN 9E991 BOEING PROPRIETARY - See title page for details



2410247 S00061525181_V2

Outboard Spoiler No. 1 through 5 General Visual (External)
Figure 232/05-41-05-990-831 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



2410248 S00061525182_V1

Outboard Spoiler No. 1 through 5 General Visual (External)
Figure 232/05-41-05-990-831 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-05-210-832

33. EXTERNAL - ZONAL (GV): OUTBOARD FLAPS - LEFT WING

(Figure 233)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
567	Left Wing - Outboard Flap

B. Zonal Inspection

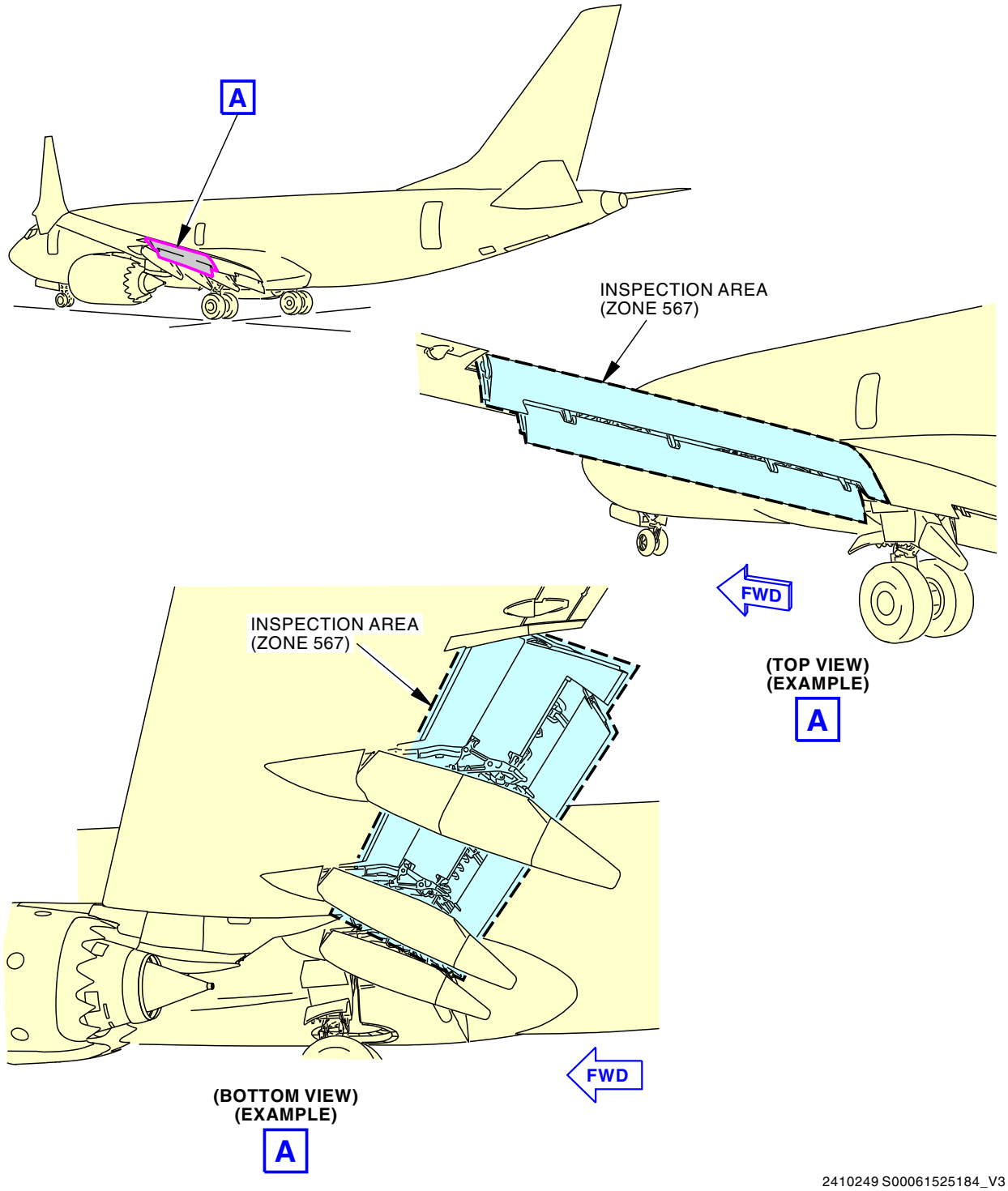
NOTE: Flaps extended.

SUBTASK 05-41-05-210-032

(1) Do a General Visual inspection of the outboard flaps - left wing.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



2410249 S00061525184_V3

Outboard Flap - Left Wing General Visual (External)
Figure 233/05-41-05-990-832

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-05-210-833

34. EXTERNAL - ZONAL (GV): FIXED TRAILING EDGE - LEFT WING

(Figure 234)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
571	Left Wing - Fixed Trailing Edge

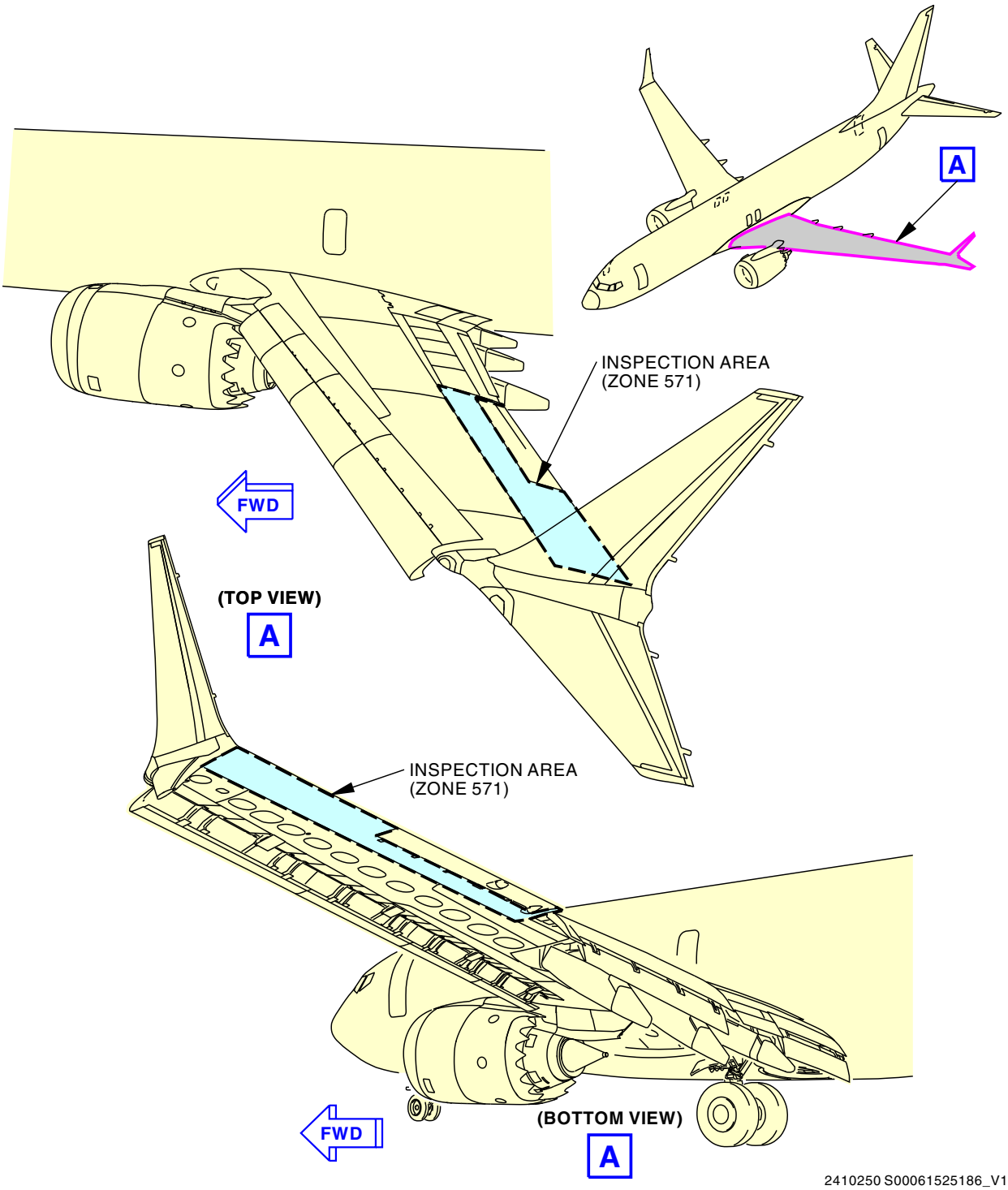
B. Zonal Inspection

SUBTASK 05-41-05-210-033

(1) Do a General Visual inspection of the fixed trailing edge - left wing.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Fixed Trailing Edge - Left Wing General Visual (External)
Figure 234/05-41-05-990-833

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-05-210-834

35. INTERNAL - ZONAL (GV): FIXED TRAILING EDGE - LEFT WING

(Figure 235)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
571	Left Wing - Fixed Trailing Edge

B. Access Panels

Number	Name/Location
571AB	Lower Outboard Fixed Trailing Edge Access Panel at Deflector Rib
571AT	Upper Outboard Fixed Trailing Edge, Quadrant Bolt Access Panel
571BB	Lower Outboard Fixed Trailing Edge Access Panel
571BT	Upper Outboard Fixed Trailing Edge, Pulley Bolt Access Panel
571CB	Lower Outboard Fixed Trailing Edge Access Panel
571DB	Lower Outboard Fixed Trailing Edge Access Panel
571EB	Lower Outboard Fixed Trailing Edge Wedge Access Panel
571FB	Lower Outboard Fixed Trailing Edge Wedge Access Panel

C. Zonal Inspection

SUBTASK 05-41-05-010-010

(1) Open these access panels:

Number	Name/Location
571AB	Lower Outboard Fixed Trailing Edge Access Panel at Deflector Rib
571AT	Upper Outboard Fixed Trailing Edge, Quadrant Bolt Access Panel
571BB	Lower Outboard Fixed Trailing Edge Access Panel
571BT	Upper Outboard Fixed Trailing Edge, Pulley Bolt Access Panel
571CB	Lower Outboard Fixed Trailing Edge Access Panel
571DB	Lower Outboard Fixed Trailing Edge Access Panel
571EB	Lower Outboard Fixed Trailing Edge Wedge Access Panel
571FB	Lower Outboard Fixed Trailing Edge Wedge Access Panel

SUBTASK 05-41-05-210-034

(2) Do a General Visual inspection of the fixed trailing edge - left wing.

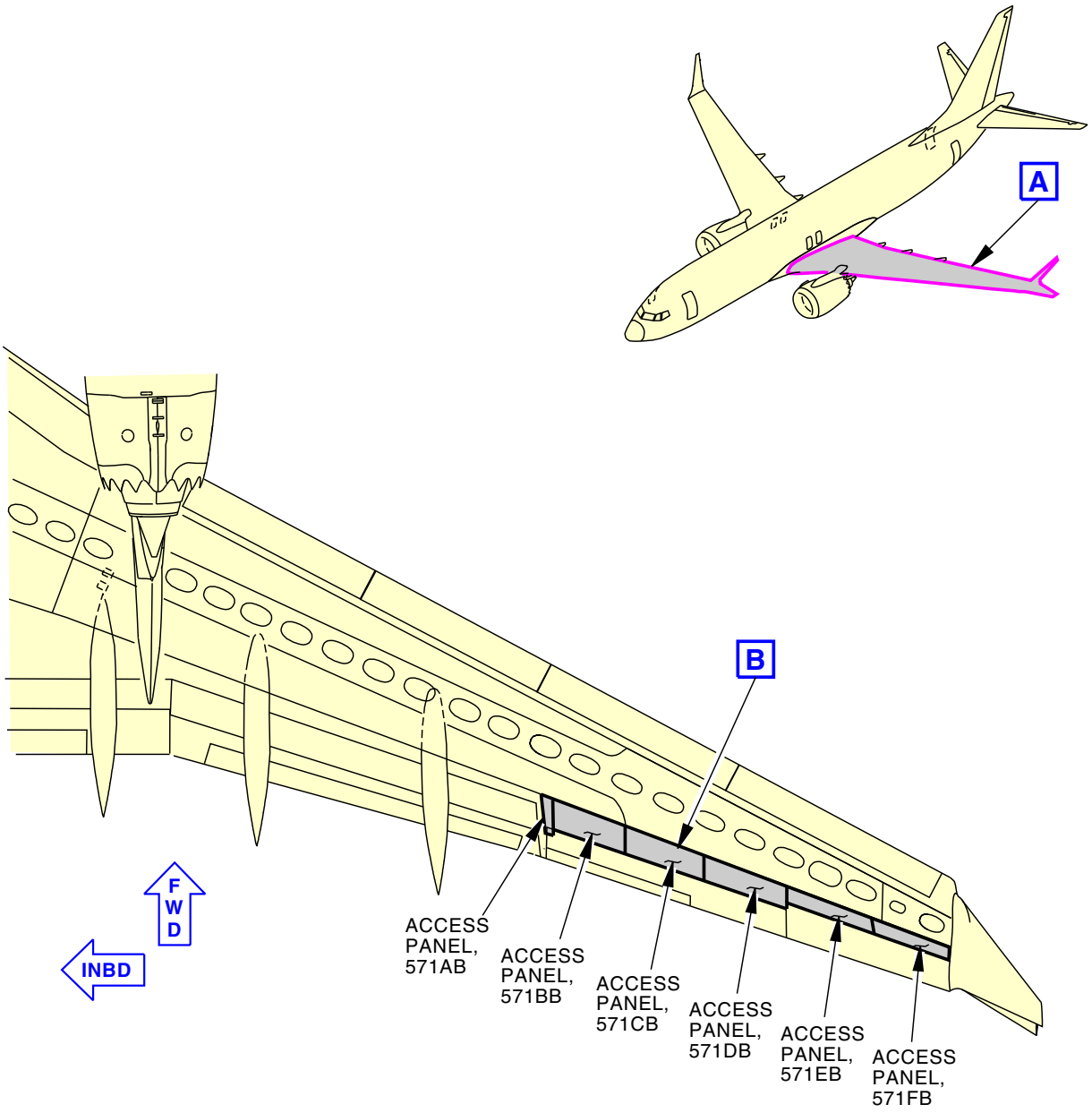
SUBTASK 05-41-05-410-010

(3) Close these access panels:

Number	Name/Location
571AB	Lower Outboard Fixed Trailing Edge Access Panel at Deflector Rib
571AT	Upper Outboard Fixed Trailing Edge, Quadrant Bolt Access Panel
571BB	Lower Outboard Fixed Trailing Edge Access Panel
571BT	Upper Outboard Fixed Trailing Edge, Pulley Bolt Access Panel
571CB	Lower Outboard Fixed Trailing Edge Access Panel
571DB	Lower Outboard Fixed Trailing Edge Access Panel
571EB	Lower Outboard Fixed Trailing Edge Wedge Access Panel
571FB	Lower Outboard Fixed Trailing Edge Wedge Access Panel

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details



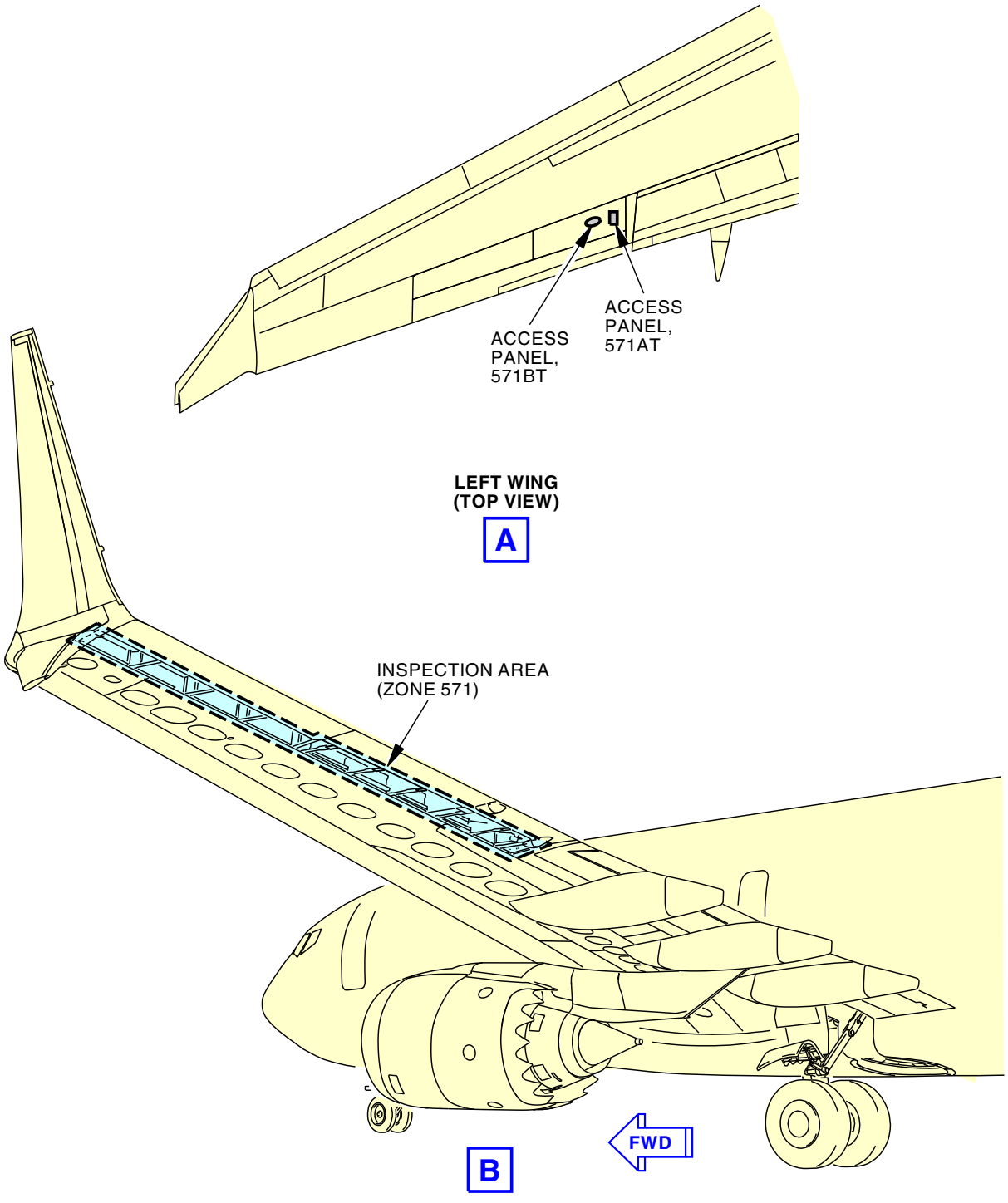
LEFT WING
(BOTTOM VIEW)

A

2410251 S00061525188_V1

Fixed Trailing Edge - Left Wing General Visual (Internal)
Figure 235/05-41-05-990-834 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Fixed Trailing Edge - Left Wing General Visual (Internal)
Figure 235/05-41-05-990-834 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-41-05-210-835

36. INTERNAL - ZONAL (GV): Fixed Trailing Edge - Left Wing

(Figure 236)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This Zonal inspection procedure satisfies the required EZAP-derived Zonal inspection requirement for this zone.

B. References

Reference	Title
05-00-00-910-802	Enhanced Zonal Inspection Program (EZAP) Precautions (P/B 201)
20-60-07-910-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
571	Left Wing - Fixed Trailing Edge

D. Access Panels

Number	Name/Location
571AB	Lower Outboard Fixed Trailing Edge Access Panel at Deflector Rib
571BB	Lower Outboard Fixed Trailing Edge Access Panel

E. Zonal Inspection

SUBTASK 05-41-05-010-011

(1) Open these access panels:

Number	Name/Location
571AB	Lower Outboard Fixed Trailing Edge Access Panel at Deflector Rib
571BB	Lower Outboard Fixed Trailing Edge Access Panel

NOTE: Aileron control area only.

SUBTASK 05-41-05-210-035

(2) Do the zonal inspection following the procedures in Enhanced Zonal Inspection Program (EZAP) Precautions, TASK 05-00-00-910-802.

(3) Perform an internal zonal inspection (GV) of the fixed trailing edge - left wing. (EZAP)

SUBTASK 05-41-05-910-008

(4) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-910-801 for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

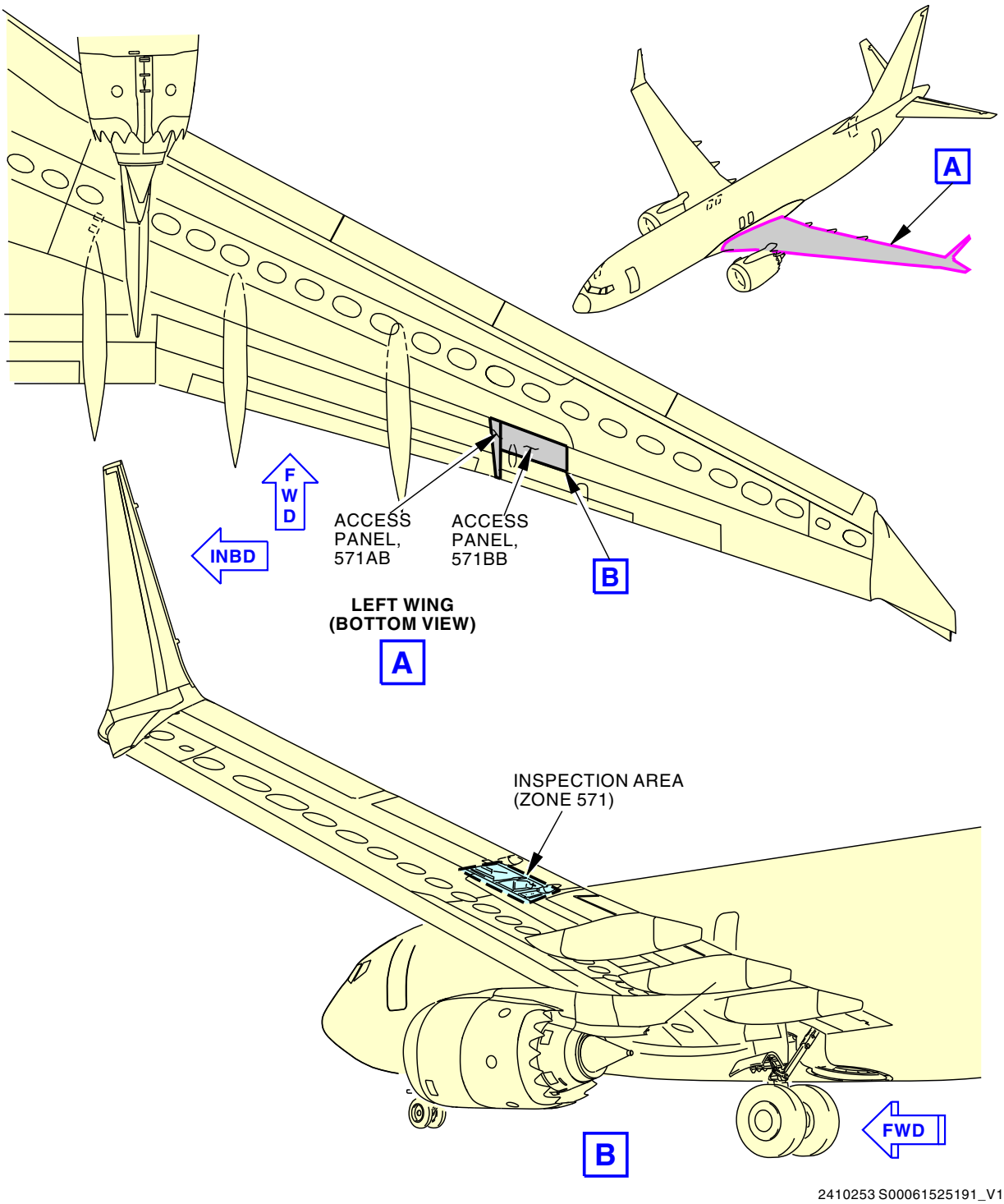
SUBTASK 05-41-05-410-011

(5) Close these access panels:

Number	Name/Location
571AB	Lower Outboard Fixed Trailing Edge Access Panel at Deflector Rib
571BB	Lower Outboard Fixed Trailing Edge Access Panel

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Fixed Trailing Edge - Left Wing General Visual (Internal)
Figure 236/05-41-05-990-835

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-05-210-836

37. EXTERNAL - ZONAL (GV): AILERON - LEFT WING

(Figure 237)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
572	Left Wing - Aileron

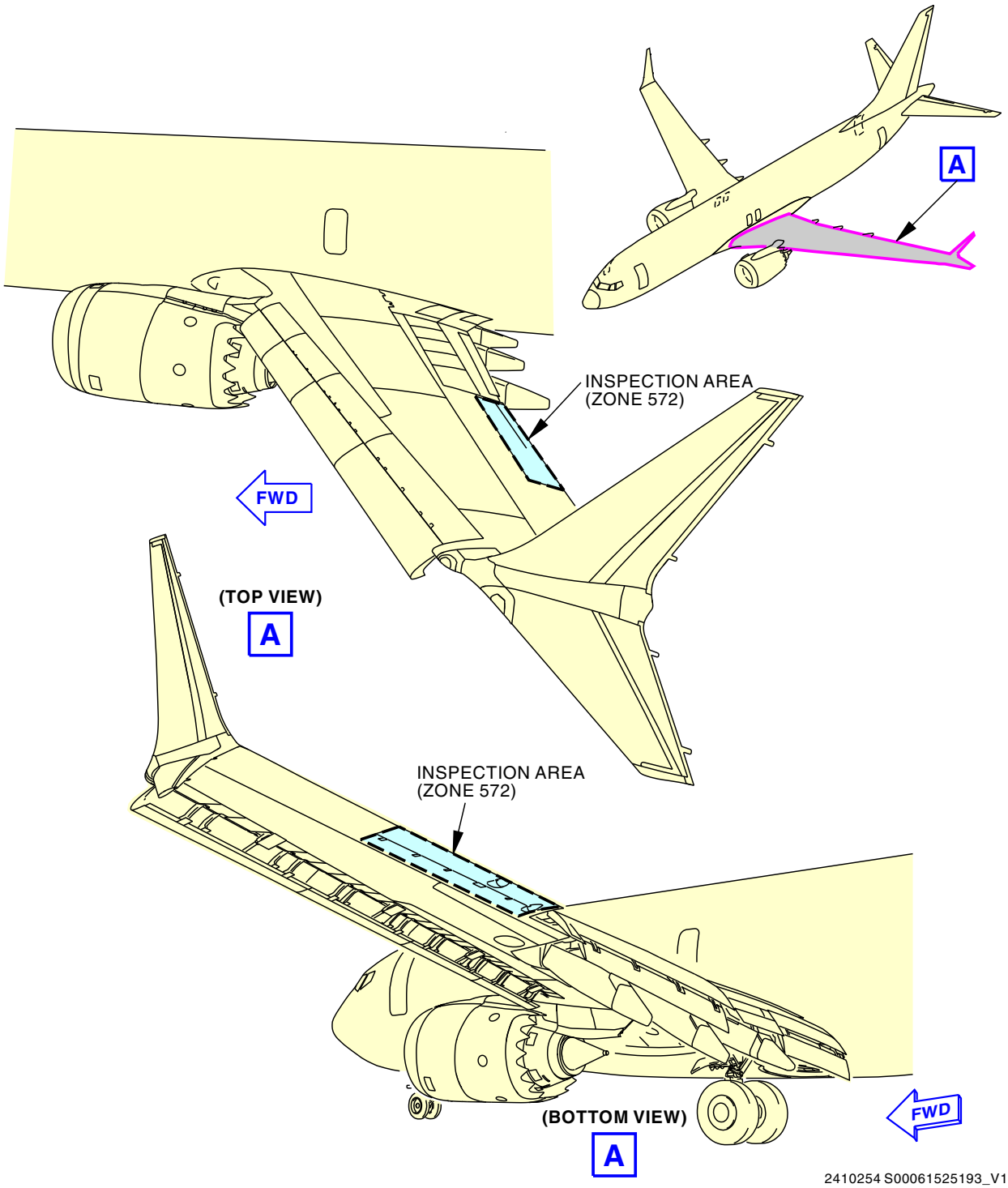
B. Zonal Inspection

SUBTASK 05-41-05-210-036

(1) Do a General Visual inspection of the aileron - left wing.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Aileron - Left Wing General Visual (External)
Figure 237/05-41-05-990-836

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-06-210-801

1. EXTERNAL - ZONAL (GV): RIGHT WING

(Figure 201)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
610	Subzone - Right Wing: Leading Edge, Forward of Front Spar, Inboard of Nacelle Strut, Including Gap Cover Area
620	Subzone - Right Wing: Leading Edge, Forward of Front Spar, Outboard of Nacelle Strut
630	Subzone - Right Wing: Inspar Area (Fuel Tanks), Inboard of Wing Rib 22, Wing Station 643.50
640	Subzone - Right Wing: Trailing Edge, Flap Track Fairings
650	Subzone - Right Wing: Trailing Edge, Aft of Rear Spar, Inboard of Outboard Trailing Edge Flap
660	Subzone - Right Wing: Trailing Edge, Aft of Rear Spar, Outboard of Inboard Trailing Edge Flap, Inboard of Fixed Trailing Edge
670	Subzone - Right Wing: Fixed Trailing Edge, Outboard of Outboard Flap, Inboard of Wing Tip, Wing Buttock Line 658.17

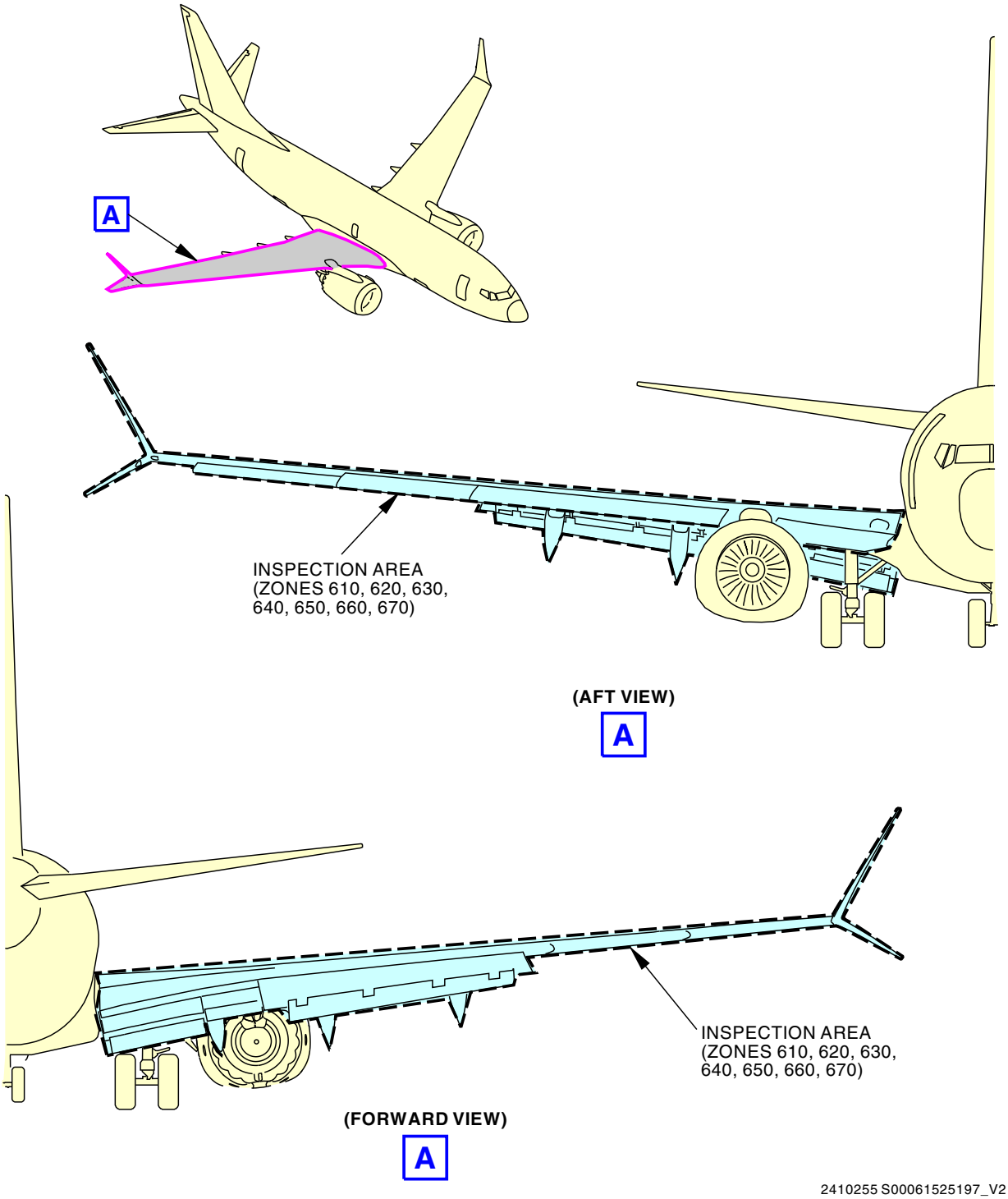
B. Zonal Inspection

SUBTASK 05-41-06-210-001

(1) Do a General Visual inspection of the right wing. Inspection is accomplished from the ground, without the use of stands or ladders. Control surfaces extended. No additional access panels required.

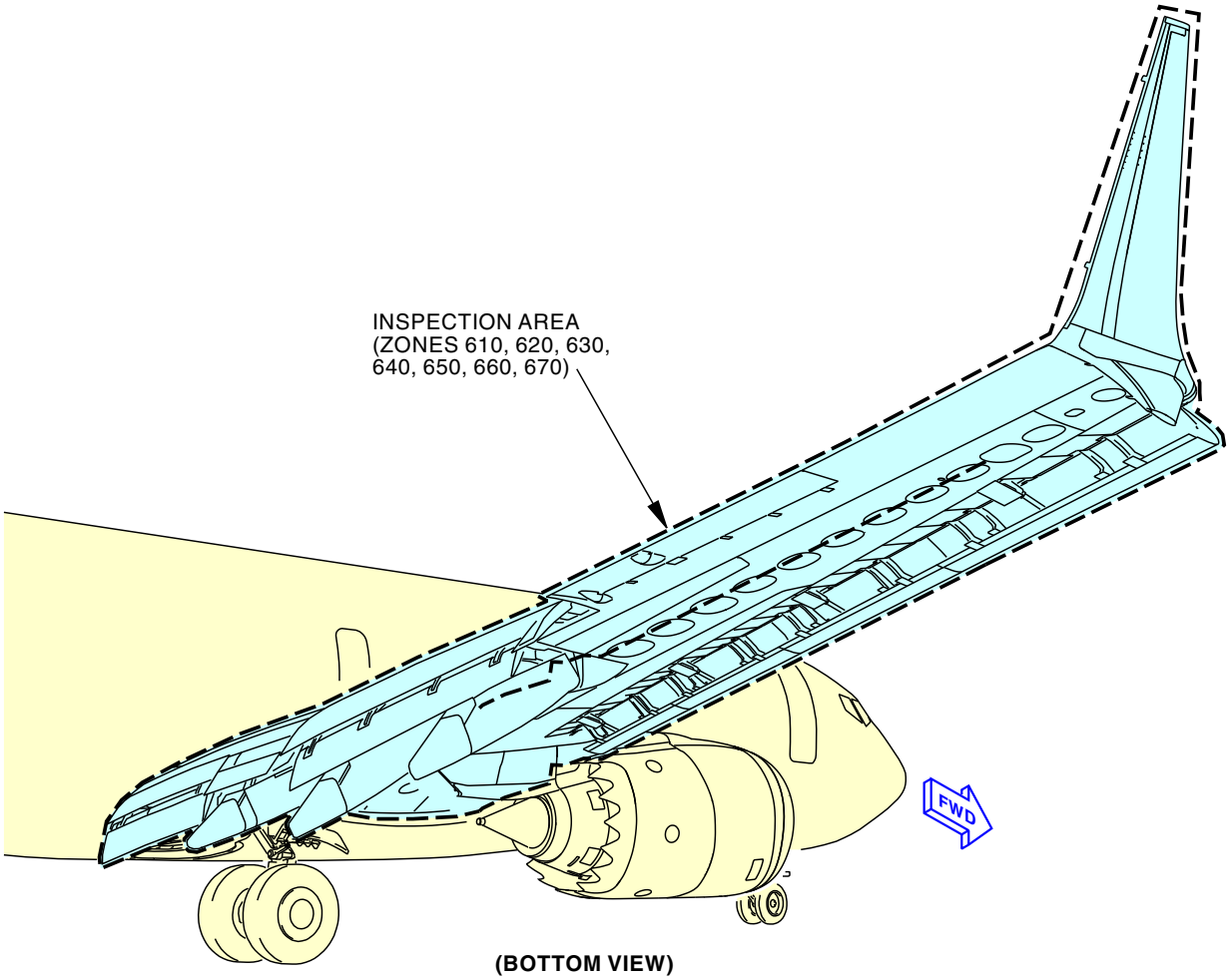
——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Right Wing - General Visual (External)
Figure 201/05-41-06-990-801 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



2410256 S00061525198_V1

Right Wing - General Visual (External)
Figure 201/05-41-06-990-801 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-06-210-802

2. EXTERNAL - ZONAL (GV): WINGLET - RIGHT WING

(Figure 202)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
627	Right Winglet

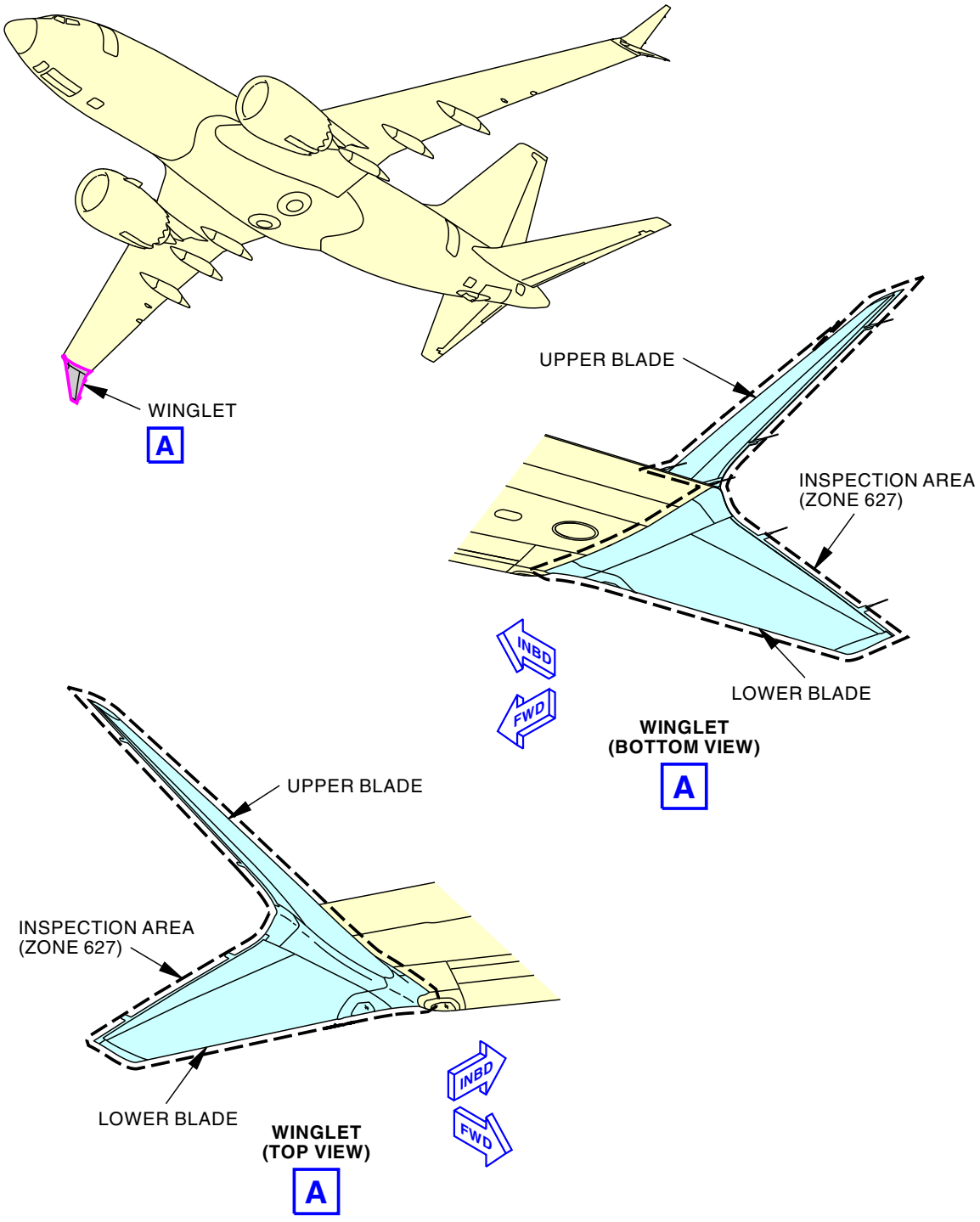
B. Zonal Inspection

SUBTASK 05-41-06-210-002

(1) Do a General Visual inspection of the upper and lower blades of the winglet - right wing.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



2410257 S00061525200_V3

Right Winglet - General Visual (External)
Figure 202/05-41-06-990-802

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-06-210-803

3. INTERNAL - ZONAL (GV): WINGLET - RIGHT WING

(Figure 203)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
627	Right Winglet

B. Access Panels

Number	Name/Location
627BB	ACCESS PANEL - CENTER INBOARD LOWER PANEL, WINGLET
627BR	ACCESS PANEL - CENTER OUTBOARD PANEL, WINGLET
627BT	ACCESS PANEL - CENTER INBOARD UPPER PANEL, WINGLET

C. Zonal Inspection

SUBTASK 05-41-06-010-001

(1) Open these access panels:

Number	Name/Location
627BB	ACCESS PANEL - CENTER INBOARD LOWER PANEL, WINGLET
627BR	ACCESS PANEL - CENTER OUTBOARD PANEL, WINGLET
627BT	ACCESS PANEL - CENTER INBOARD UPPER PANEL, WINGLET

SUBTASK 05-41-06-210-003

(2) Do a General Visual inspection of the winglet - right wing.

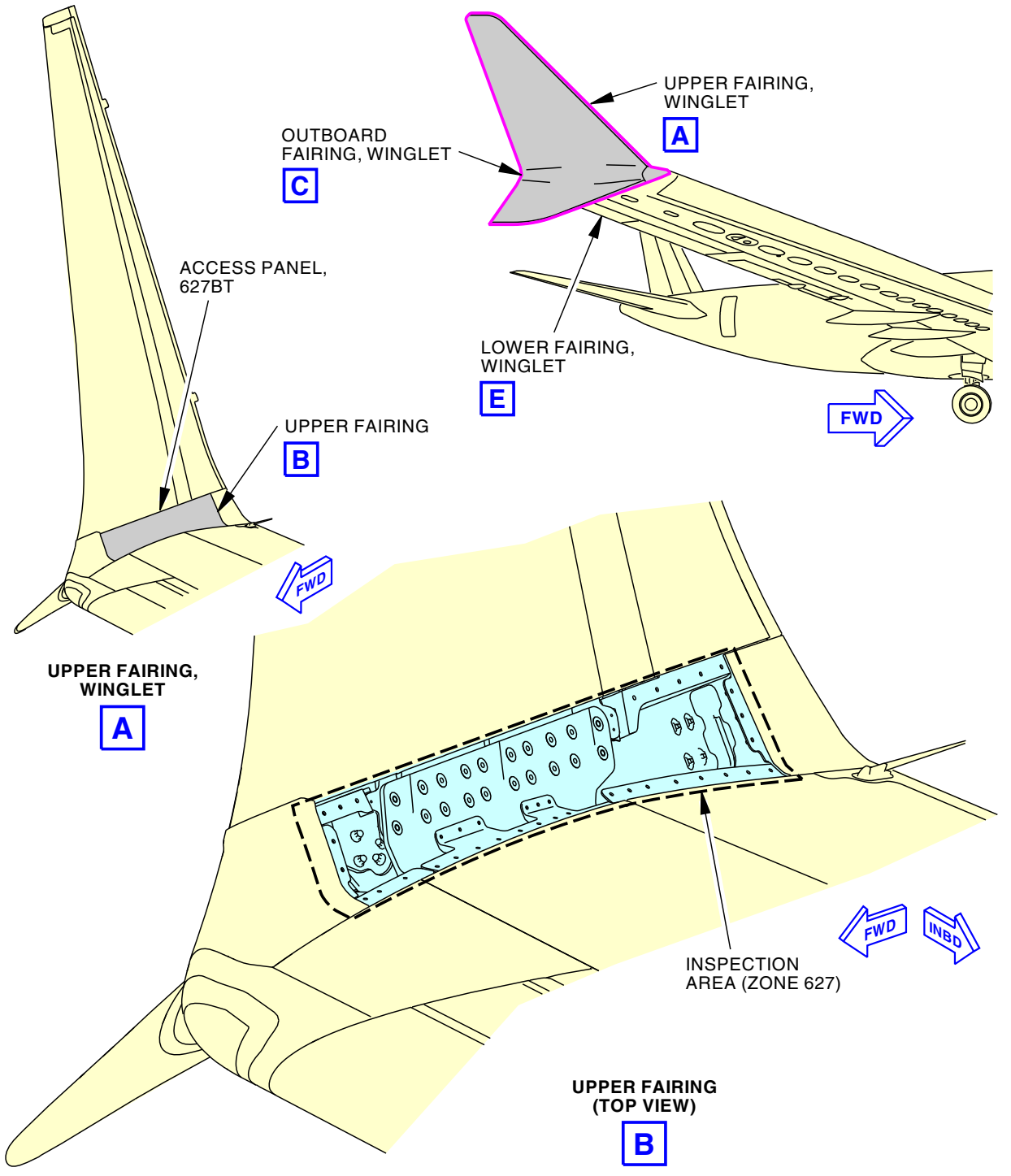
SUBTASK 05-41-06-410-001

(3) Close these access panels:

Number	Name/Location
627BB	ACCESS PANEL - CENTER INBOARD LOWER PANEL, WINGLET
627BR	ACCESS PANEL - CENTER OUTBOARD PANEL, WINGLET
627BT	ACCESS PANEL - CENTER INBOARD UPPER PANEL, WINGLET

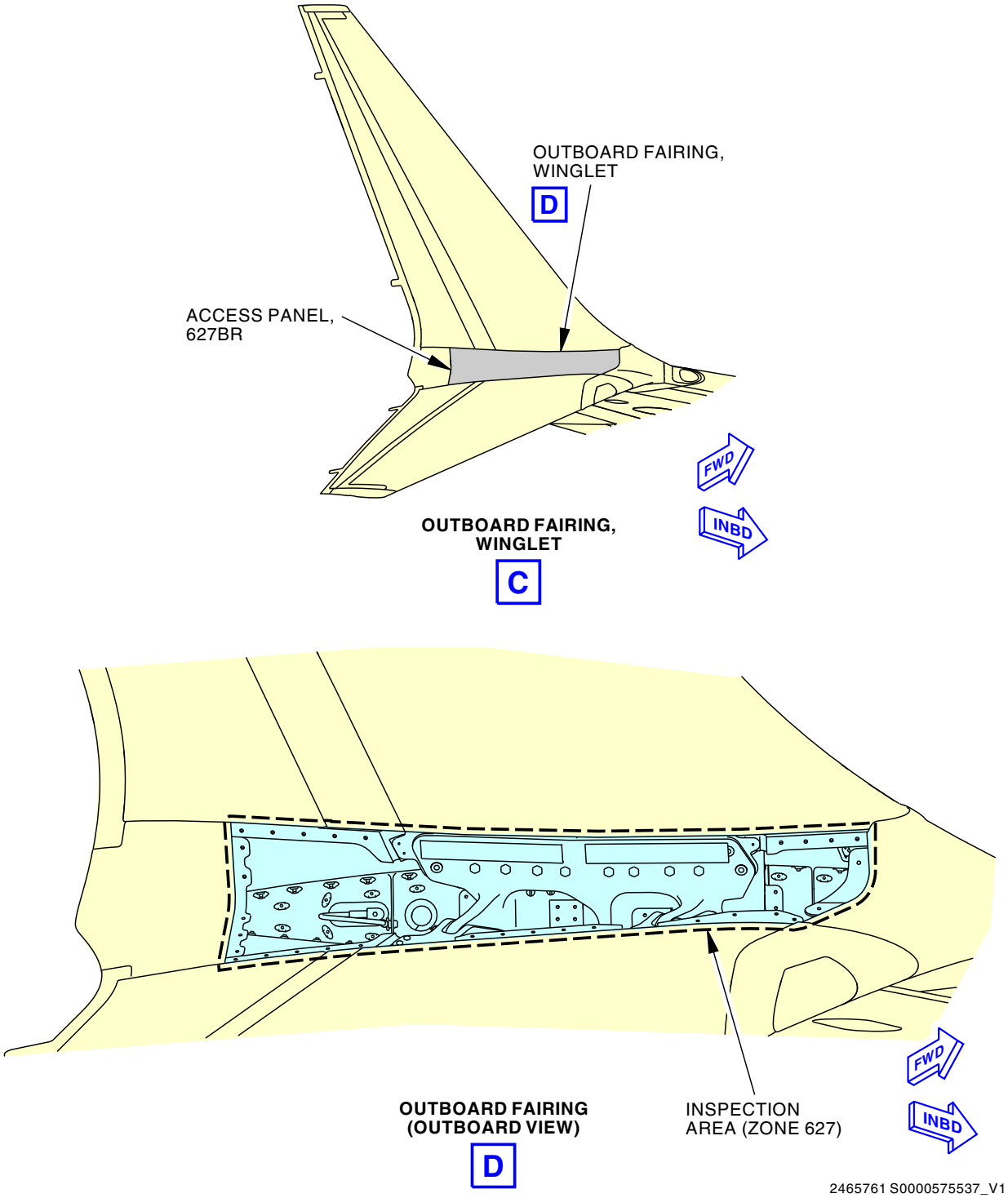
——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



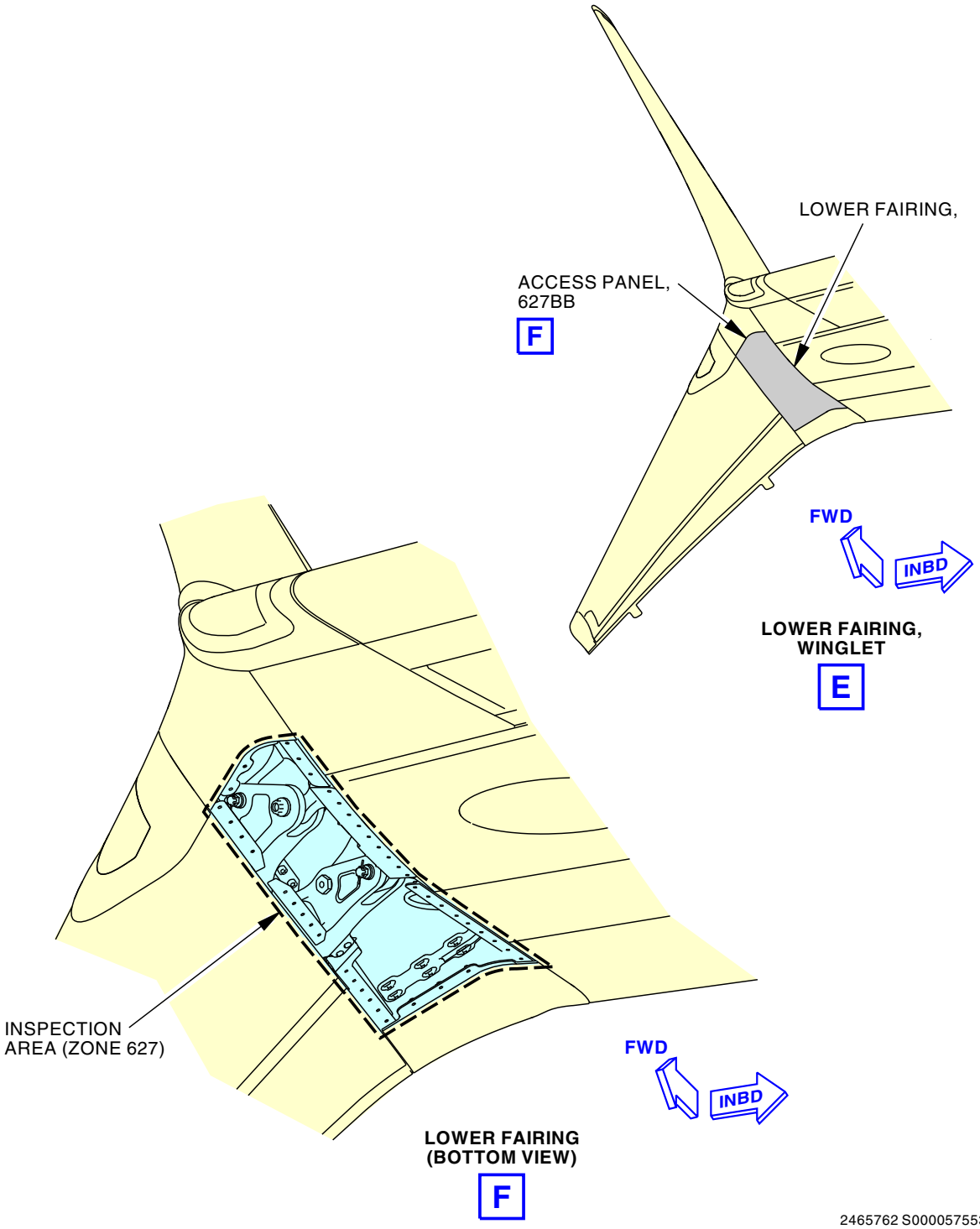
Right Winglet - General Visual (Internal)
Figure 203/05-41-06-990-803 (Sheet 1 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Right Winglet - General Visual (Internal)
Figure 203/05-41-06-990-803 (Sheet 2 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Right Winglet - General Visual (Internal)
Figure 203/05-41-06-990-803 (Sheet 3 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-06-210-804

4. EXTERNAL - ZONAL (GV): LEADING EDGE TO FRONT SPAR - INBD OF NACELLE STRUT - RIGHT WING

(Figure 204)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
611	Right Wing - Leading Edge to Front Spar

B. Zonal Inspection

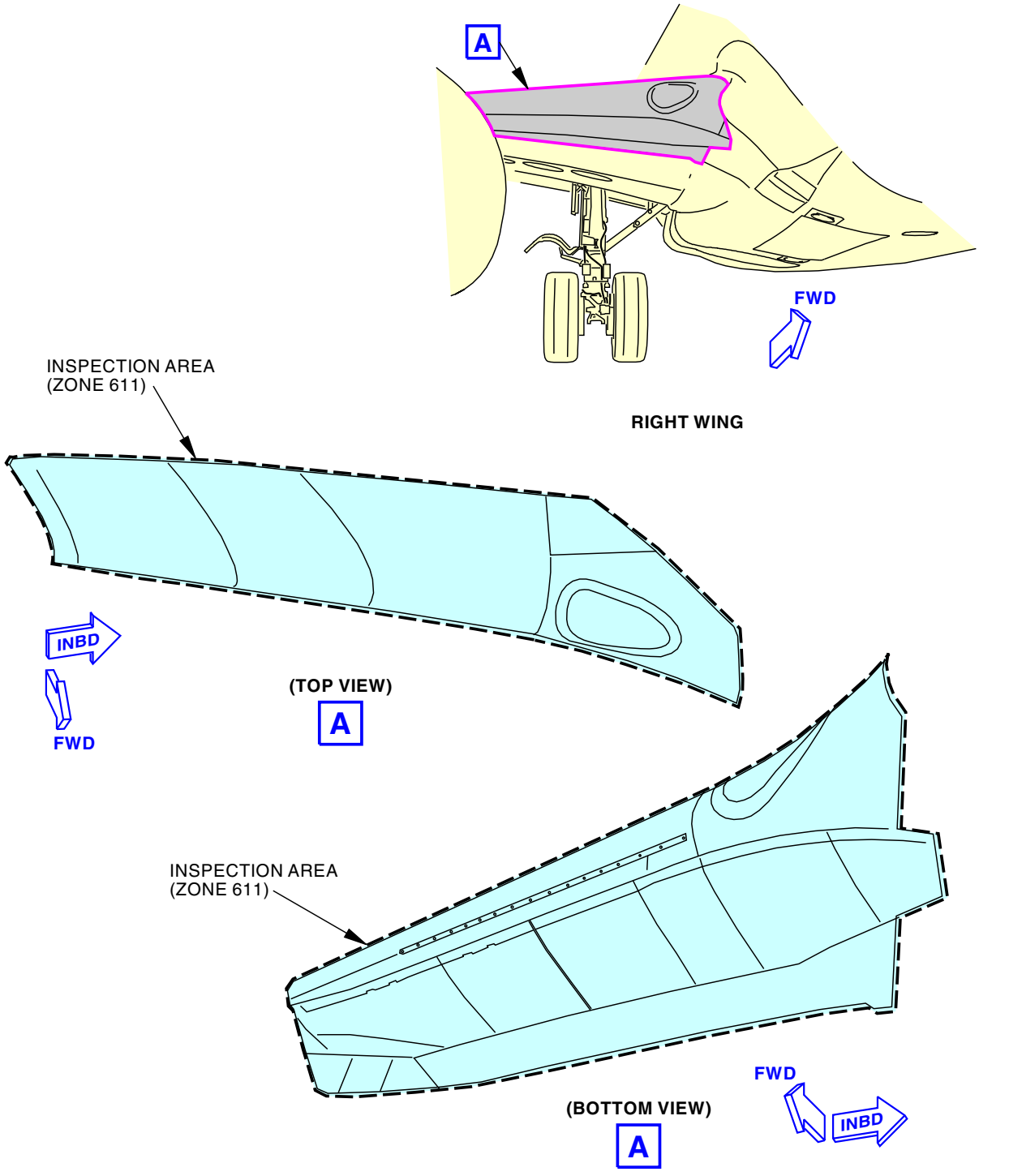
NOTE: Excluding surface under wing to body fairing.

SUBTASK 05-41-06-210-004

(1) Do a General Visual inspection of the leading edge to front spar - inboard of the nacelle strut - right wing.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Leading Edge to Front Spar (Inboard of Nacelle Strut) Right Wing - General Visual (External)
Figure 204/05-41-06-990-804

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-41-06-210-805

5. INTERNAL - ZONAL (GV): Leading Edge to Front Spar - Inbd of Nacelle Strut - Right Wing

(Figure 205)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This Zonal inspection procedure satisfies the required EZAP-derived Zonal inspection requirement for this zone.

B. References

Reference	Title
05-00-00-910-802	Enhanced Zonal Inspection Program (EZAP) Precautions (P/B 201)
20-60-07-910-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
611	Right Wing - Leading Edge to Front Spar

D. Access Panels

Number	Name/Location
611AB	Inboard Leading Edge, Lower Removable Access Panel
611AT	Inboard Leading Edge, Strakelet Upper Access Panel
611BT	Fairing

E. Zonal Inspection

SUBTASK 05-41-06-010-002

(1) Open these access panels:

Number	Name/Location
611AB	Inboard Leading Edge, Lower Removable Access Panel
611AT	Inboard Leading Edge, Strakelet Upper Access Panel
611BT	Fairing

NOTE: Flaps deployed.

SUBTASK 05-41-06-210-005

(2) Do the zonal inspection following the procedures in Enhanced Zonal Inspection Program (EZAP) Precautions, TASK 05-00-00-910-802.

(3) Perform an internal zonal inspection (GV) of the leading edge to front spar - inboard of the nacelle strut - right wing. (EZAP)

SUBTASK 05-41-06-910-001

(4) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-910-801 for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

SUBTASK 05-41-06-410-002

(5) Close these access panels:

Number	Name/Location
611AB	Inboard Leading Edge, Lower Removable Access Panel

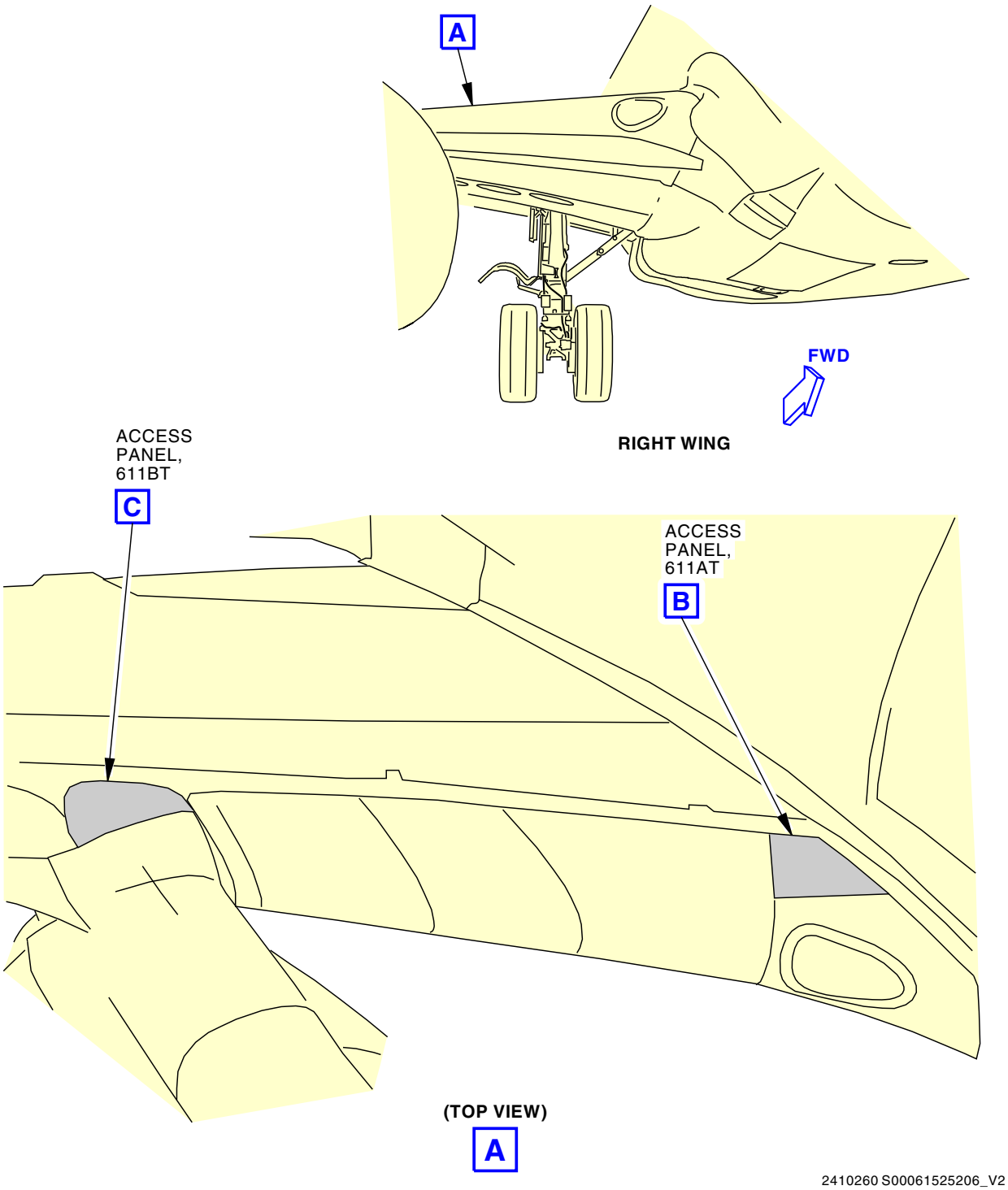
ECCN 9E991 BOEING PROPRIETARY - See title page for details

(Continued)

Number	Name/Location
611AT	Inboard Leading Edge, Strakelet Upper Access Panel
611BT	Fairing

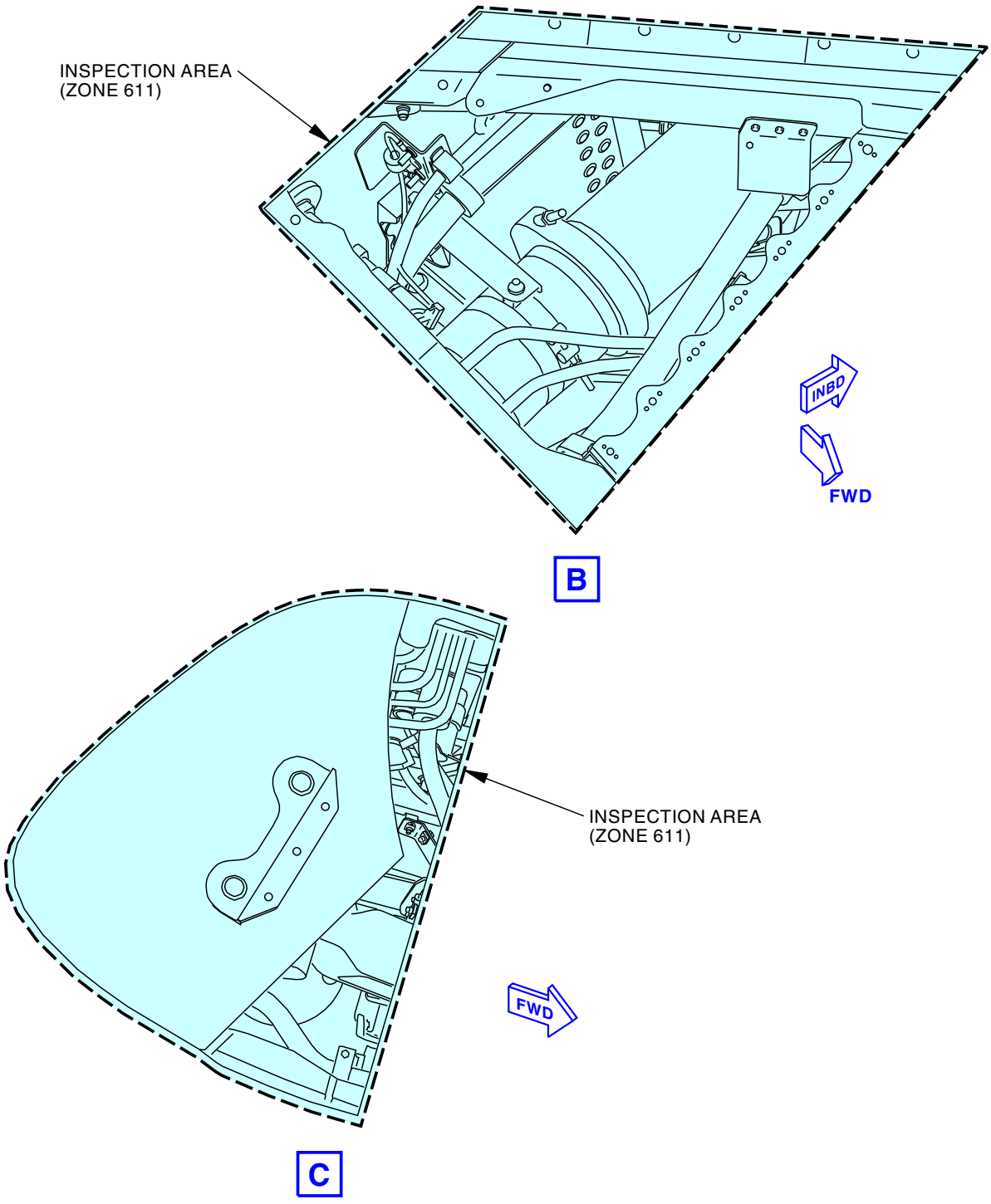
END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details



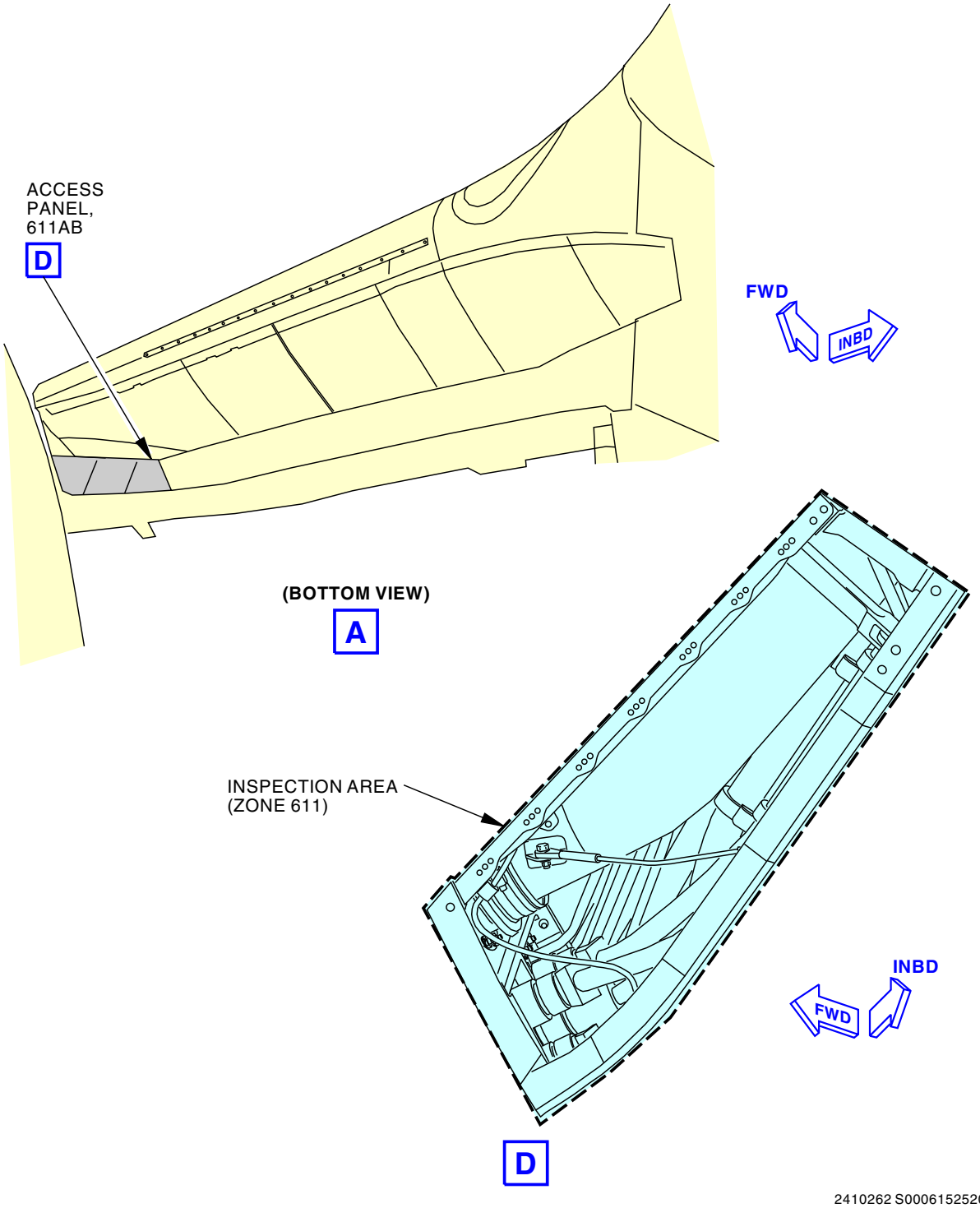
Leading Edge to Front Spar (Inboard of Nacelle Strut) Right Wing - General Visual (Internal)
Figure 205/05-41-06-990-805 (Sheet 1 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Leading Edge to Front Spar (Inboard of Nacelle Strut) Right Wing - General Visual (Internal)
Figure 205/05-41-06-990-805 (Sheet 2 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Leading Edge to Front Spar (Inboard of Nacelle Strut) Right Wing - General Visual (Internal)
Figure 205/05-41-06-990-805 (Sheet 3 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-06-210-806

6. EXTERNAL - ZONAL (GV): KRUEGER FLAPS NO. 3 AND 4 - RIGHT WING

(Figure 206)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
612	Right Wing - Krueger Flap No. 3
613	Right Wing - Krueger Flap No. 4

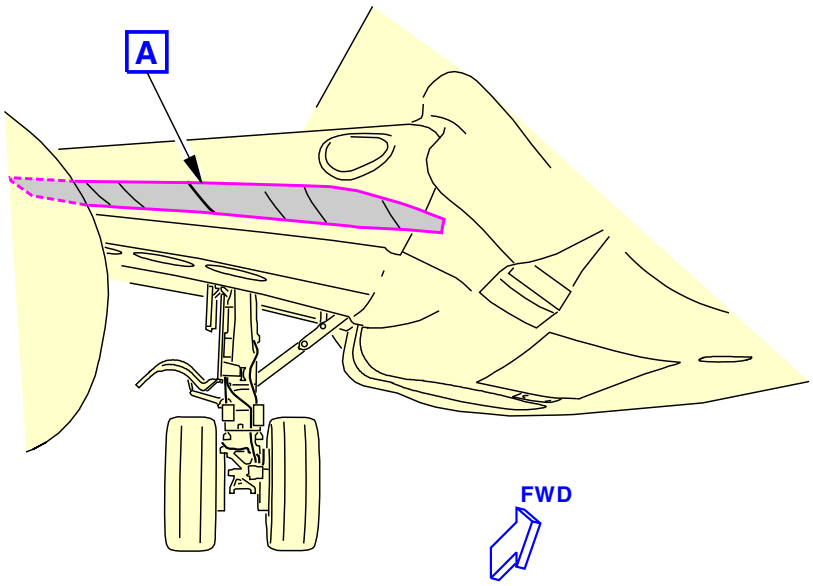
B. Zonal Inspection

SUBTASK 05-41-06-210-006

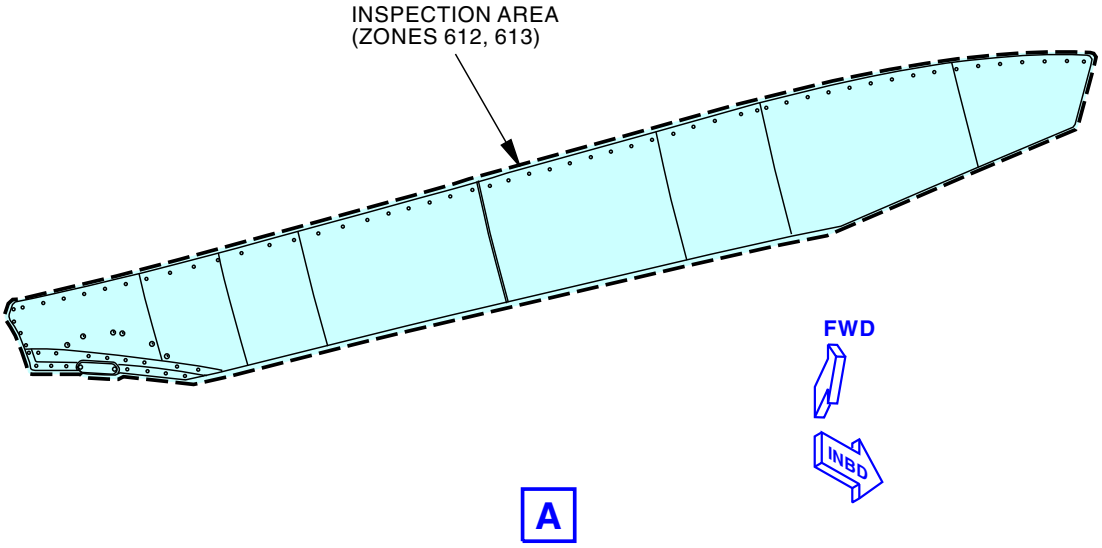
(1) Do a General Visual inspection of the Krueger flaps no. 3 and 4 - right wing.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



RIGHT WING



2410263 S00061525210_V2

Krueger Flaps No. 3 and 4 General Visual (External)
Figure 206/05-41-06-990-806

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-06-210-807

7. INTERNAL - ZONAL (GV): KRUEGER FLAPS NO. 3 AND 4 - RIGHT WING

(Figure 207)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
612	Right Wing - Krueger Flap No. 3
613	Right Wing - Krueger Flap No. 4

B. Zonal Inspection

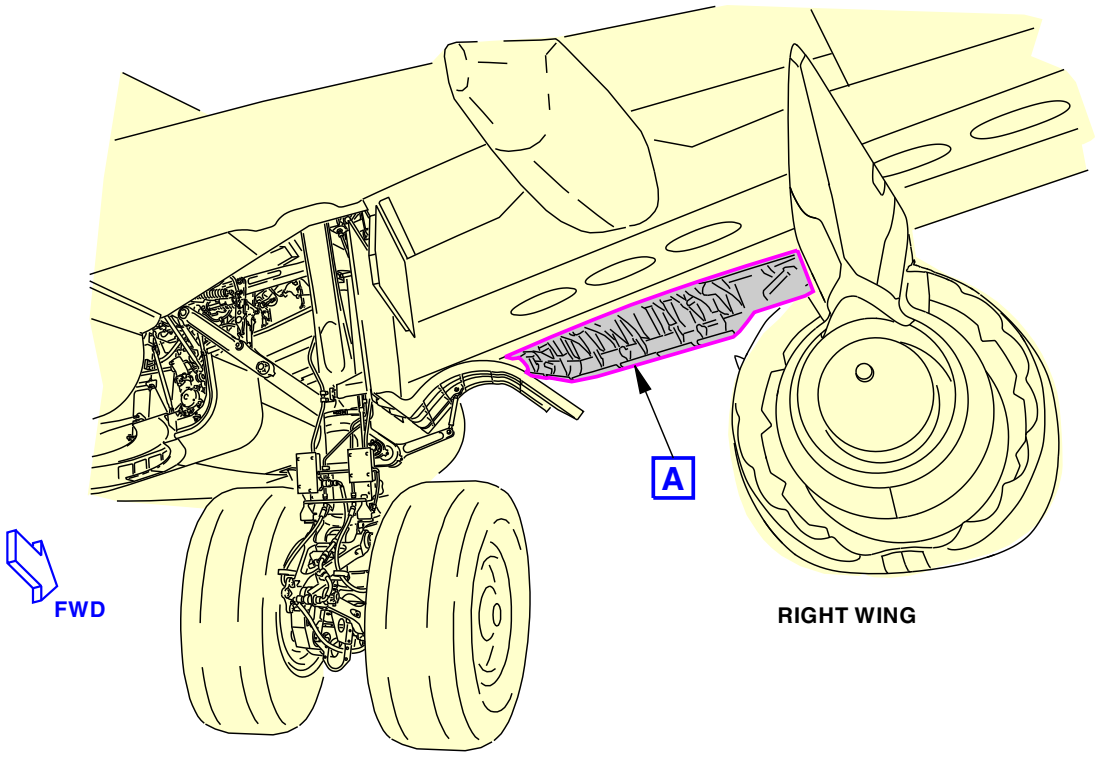
NOTE: Flaps deployed.

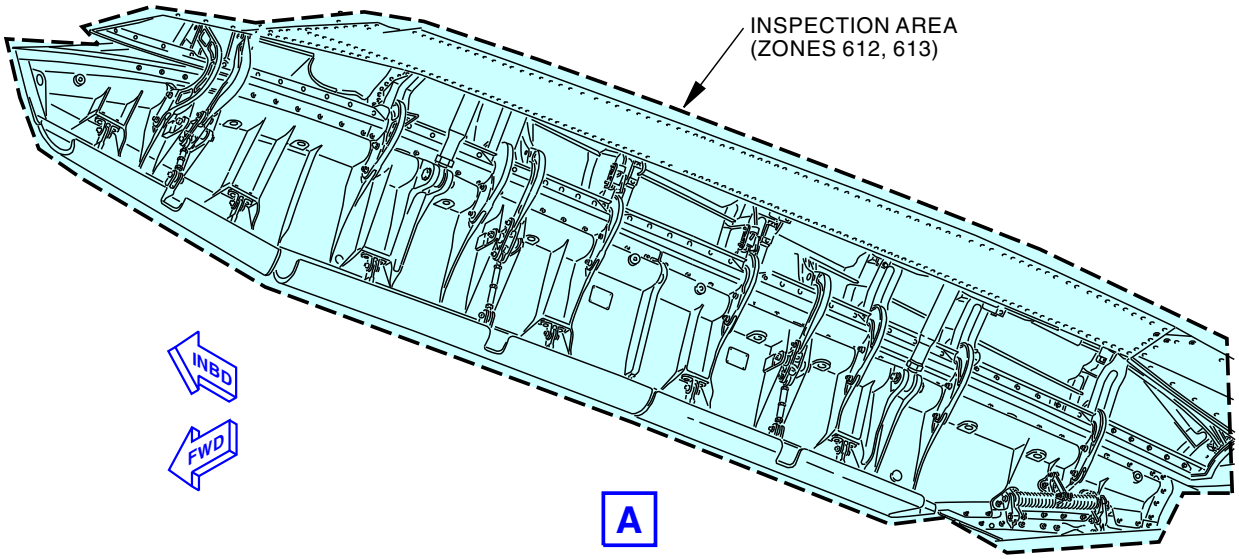
SUBTASK 05-41-06-210-007

(1) Do a General Visual inspection of the Krueger flaps no. 3 and 4 - right wing.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details





2410264 S00061525212_V1

Krueger Flaps No. 3 and 4 General Visual (Internal)
Figure 207/05-41-06-990-807

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-06-210-808

8. EXTERNAL - ZONAL (GV): LEADING EDGE TO FRONT SPAR - OUTBD OF NACELLE STRUT - RIGHT WING

(Figure 208)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
621	Right Wing - Leading Edge to Front Spar

B. Zonal Inspection

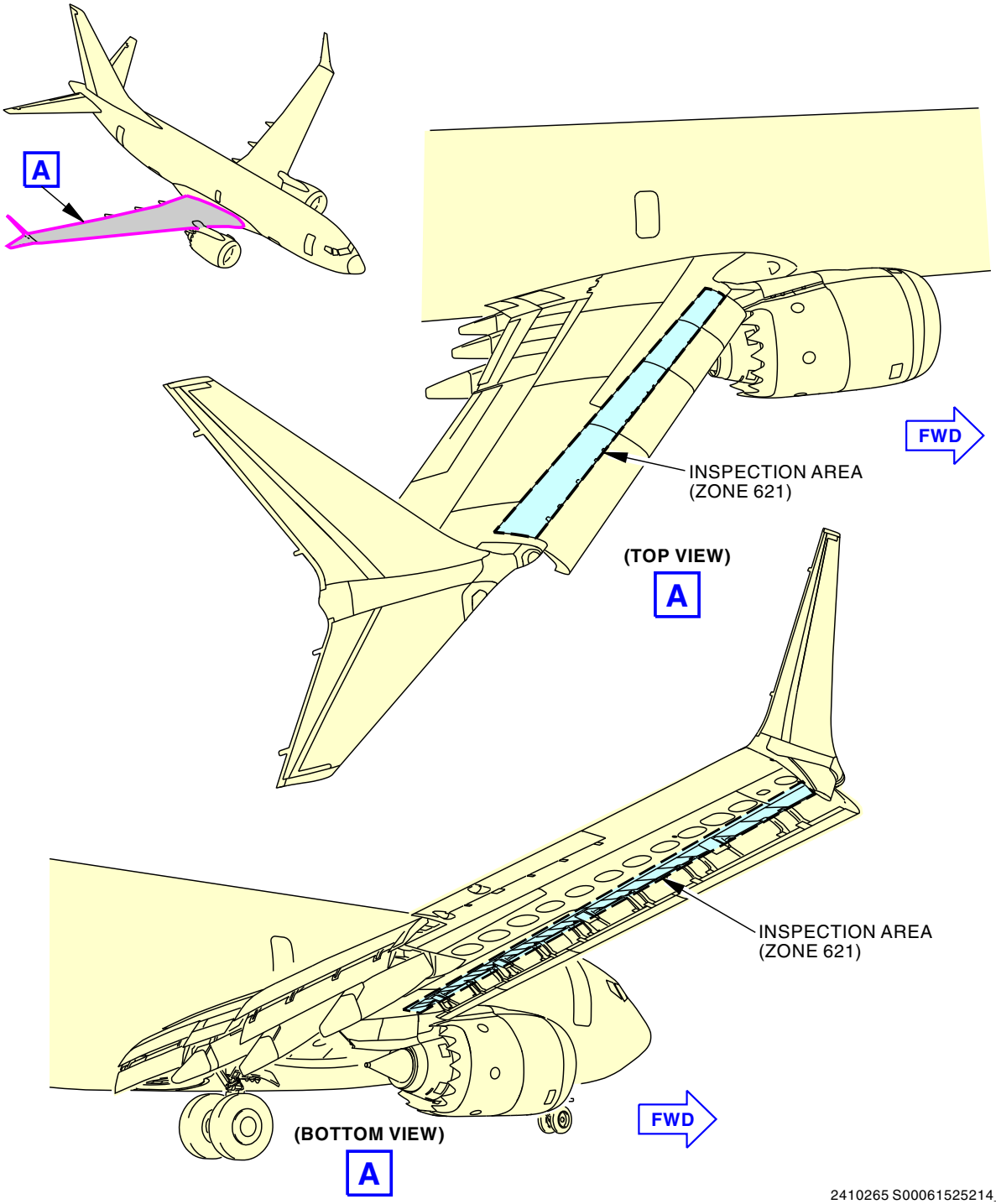
NOTE: Slats deployed.

SUBTASK 05-41-06-210-008

(1) Do a General Visual inspection of the leading edge to front spar - outboard of the nacelle strut - right wing.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Leading Edge to Front Spar (Outboard of Nacelle Strut) Right Wing - General Visual (External)
Figure 208/05-41-06-990-808

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-41-06-210-809

9. INTERNAL - ZONAL (GV): Leading Edge to Front Spar - Outbd of Nacelle Strut - Right Wing

(Figure 209)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This Zonal inspection procedure satisfies the required EZAP-derived Zonal inspection requirement for this zone.

B. References

Reference	Title
05-00-00-910-802	Enhanced Zonal Inspection Program (EZAP) Precautions (P/B 201)
20-60-07-910-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
621	Right Wing - Leading Edge to Front Spar

D. Access Panels

Number	Name/Location
621AAB	Lower Leading Edge Access Panel - Slat Station 524.31
621AB	Outboard Leading Edge Blowout Door - Slat Station 20
621ABB	Lower Leading Edge Access Panel-Slat Station 519
621BB	Engine Fuel Valve Shutoff Access Panel - Slat Station 27
621CB	Lower Leading Edge Access Panel - Slat Station 50
621DB	Lower Leading Edge Access Panel - Slat Station 70
621EB	Lower Leading Edge Access Panel - Slat Station 91
621FB	Lower Leading Edge Access Panel - Slat Station 107
621GB	Refuel Valve Door - Slat Station 125
621JB	Lower Leading Edge Access Panel - Slat Station 161
621KB	Lower Leading Edge Access Panel - Slat Station 179
621LB	Lower Leading Edge Access Panel - Slat Station 208
621MB	Lower Leading Edge Access Panel - Slat Station 226
621NB	Lower Leading Edge Access Panel - Slat Station 244
621PB	Lower Leading Edge Access Panel - Slat Station 261
621QB	Lower Leading Edge Access Panel - Slat Station 280
621RB	Lower Leading Edge Access Panel - Slat Station 298
621SB	Lower Leading Edge Access Panel - Slat Station 328
621TB	Lower Leading Edge Access Panel - Slat Station 347
621UB	Lower Leading Edge Access Panel - Slat Station 365
621VB	Lower Leading Edge Access Panel - Slat Station 385
621WB	Lower Leading Edge Access Panel - Slat Station 406
621XB	Lower Leading Edge Access Panel - Slat Station 425
621YB	Lower Leading Edge Access Panel - Slat Station 470
621ZB	Lower Leading Edge Access Panel - Slat Station 479

ECCN 9E991 BOEING PROPRIETARY - See title page for details

E. Zonal Inspection

SUBTASK 05-41-06-010-003

(1) Open these access panels:

Number	Name/Location
621AAB	Lower Leading Edge Access Panel - Slat Station 524.31
621AB	Outboard Leading Edge Blowout Door - Slat Station 20
621ABB	Lower Leading Edge Access Panel-Slat Station 519
621BB	Engine Fuel Valve Shutoff Access Panel - Slat Station 27
621CB	Lower Leading Edge Access Panel - Slat Station 50
621DB	Lower Leading Edge Access Panel - Slat Station 70
621EB	Lower Leading Edge Access Panel - Slat Station 91
621FB	Lower Leading Edge Access Panel - Slat Station 107
621GB	Refuel Valve Door - Slat Station 125
621JB	Lower Leading Edge Access Panel - Slat Station 161
621KB	Lower Leading Edge Access Panel - Slat Station 179
621LB	Lower Leading Edge Access Panel - Slat Station 208
621MB	Lower Leading Edge Access Panel - Slat Station 226
621NB	Lower Leading Edge Access Panel - Slat Station 244
621PB	Lower Leading Edge Access Panel - Slat Station 261
621QB	Lower Leading Edge Access Panel - Slat Station 280
621RB	Lower Leading Edge Access Panel - Slat Station 298
621SB	Lower Leading Edge Access Panel - Slat Station 328
621TB	Lower Leading Edge Access Panel - Slat Station 347
621UB	Lower Leading Edge Access Panel - Slat Station 365
621VB	Lower Leading Edge Access Panel - Slat Station 385
621WB	Lower Leading Edge Access Panel - Slat Station 406
621XB	Lower Leading Edge Access Panel - Slat Station 425
621YB	Lower Leading Edge Access Panel - Slat Station 470
621ZB	Lower Leading Edge Access Panel - Slat Station 479

NOTE: Slats deployed.

SUBTASK 05-41-06-210-009

(2) Do the zonal inspection following the procedures in Enhanced Zonal Inspection Program (EZAP) Precautions, TASK 05-00-00-910-802.

(3) Perform an internal zonal inspection (GV) of the leading edge to front spar - outboard of the nacelle strut - right wing. (EZAP)

SUBTASK 05-41-06-910-002

(4) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-910-801, for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

SUBTASK 05-41-06-410-003

(5) Close these access panels:

Number	Name/Location
621AAB	Lower Leading Edge Access Panel - Slat Station 524.31
621AB	Outboard Leading Edge Blowout Door - Slat Station 20
621ABB	Lower Leading Edge Access Panel-Slat Station 519
621BB	Engine Fuel Valve Shutoff Access Panel - Slat Station 27

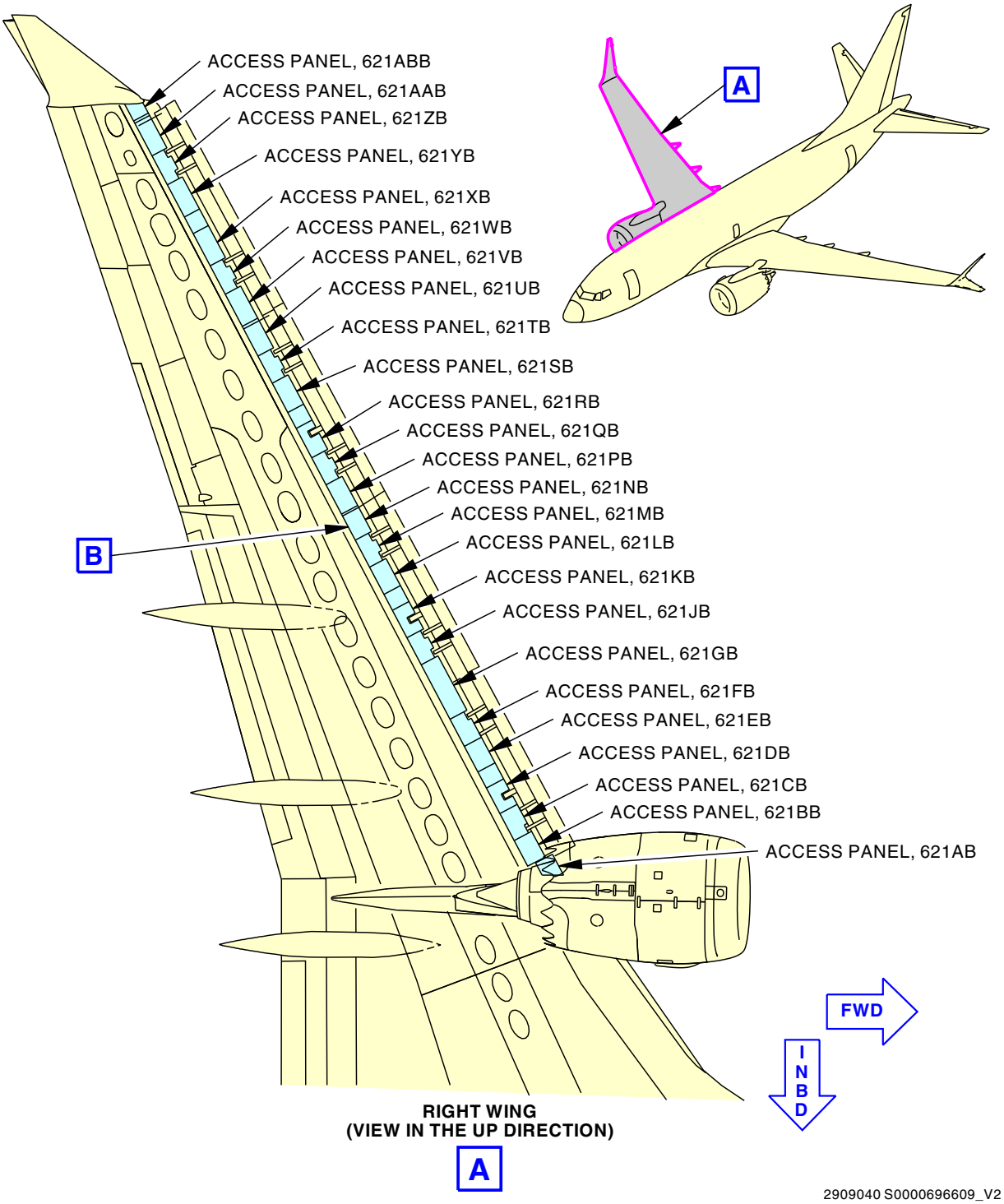
ECCN 9E991 BOEING PROPRIETARY - See title page for details

(Continued)

Number	Name/Location
621CB	Lower Leading Edge Access Panel - Slat Station 50
621DB	Lower Leading Edge Access Panel - Slat Station 70
621EB	Lower Leading Edge Access Panel - Slat Station 91
621FB	Lower Leading Edge Access Panel - Slat Station 107
621GB	Refuel Valve Door - Slat Station 125
621JB	Lower Leading Edge Access Panel - Slat Station 161
621KB	Lower Leading Edge Access Panel - Slat Station 179
621LB	Lower Leading Edge Access Panel - Slat Station 208
621MB	Lower Leading Edge Access Panel - Slat Station 226
621NB	Lower Leading Edge Access Panel - Slat Station 244
621PB	Lower Leading Edge Access Panel - Slat Station 261
621QB	Lower Leading Edge Access Panel - Slat Station 280
621RB	Lower Leading Edge Access Panel - Slat Station 298
621SB	Lower Leading Edge Access Panel - Slat Station 328
621TB	Lower Leading Edge Access Panel - Slat Station 347
621UB	Lower Leading Edge Access Panel - Slat Station 365
621VB	Lower Leading Edge Access Panel - Slat Station 385
621WB	Lower Leading Edge Access Panel - Slat Station 406
621XB	Lower Leading Edge Access Panel - Slat Station 425
621YB	Lower Leading Edge Access Panel - Slat Station 470
621ZB	Lower Leading Edge Access Panel - Slat Station 479

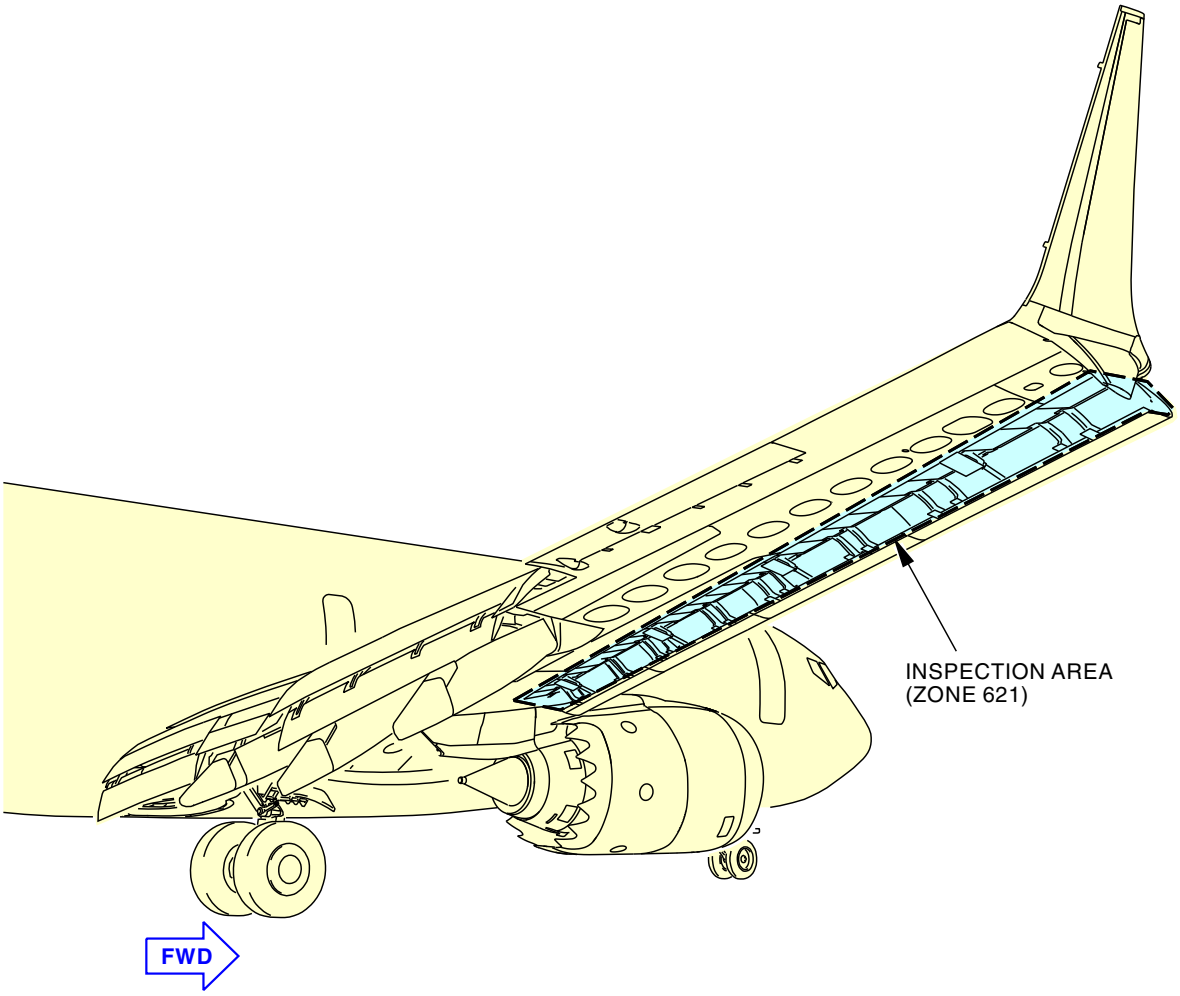
END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Leading Edge to Front Spar (Outboard of Nacelle Strut) Right Wing - General Visual (Internal)
Figure 209/05-41-06-990-809 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



2410267 S00061525217_V1

Leading Edge to Front Spar (Outboard of Nacelle Strut) Right Wing - General Visual (Internal)
Figure 209/05-41-06-990-809 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-06-210-810

10. EXTERNAL - ZONAL (GV): SLATS NO. 5, 6, 7, 8 - RIGHT WING

(Figure 210)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
622	Right Wing - Slat No. 5
623	Right Wing - Slat No. 6
624	Right Wing - Slat No. 7
625	Right Wing - Slat No. 8

B. Zonal Inspection

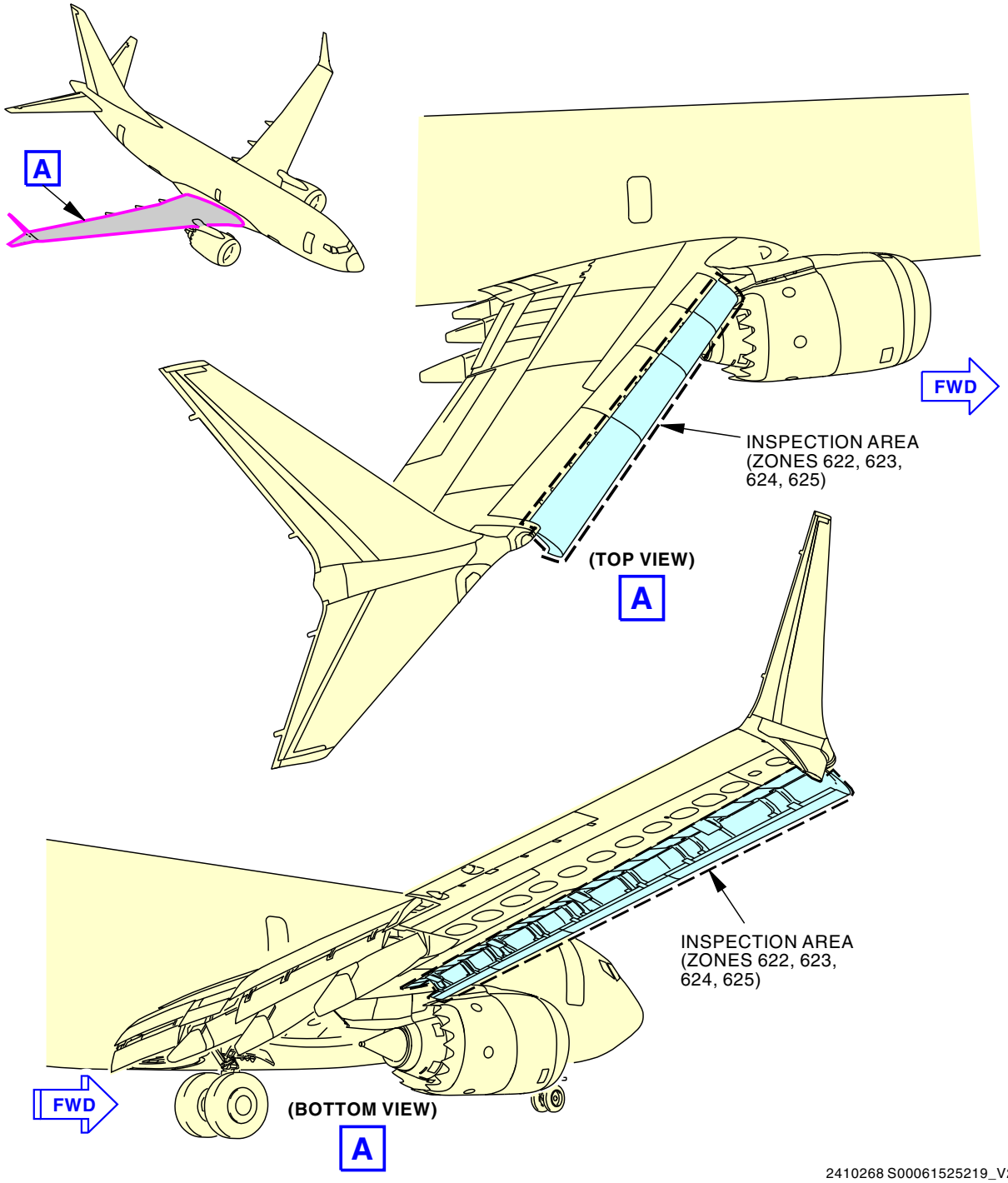
NOTE: Slats in full extend position.

SUBTASK 05-41-06-210-010

(1) Do a General Visual inspection of the slats no. 5, 6, 7, 8 - right wing.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Leading Edge Slats No. 5 through 8 General Visual (External)
Figure 210/05-41-06-990-810

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-06-210-811

11. INTERNAL - ZONAL (GV): CENTER FUEL TANK - RIGHT WING

(Figure 211)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
631	Right Wing - Center Fuel Tank, Rib 1 to Rib 5

B. Access Panels

Number	Name/Location
631AB	Center Tank Access Door - Wing Station 168
631BB	Center Tank Access Door - Wing Station 192

C. Zonal Inspection

SUBTASK 05-41-06-010-004

(1) Open these access panels:

Number	Name/Location
631AB	Center Tank Access Door - Wing Station 168
631BB	Center Tank Access Door - Wing Station 192

SUBTASK 05-41-06-210-011

(2) Do a General Visual inspection of the center fuel tank - right wing.

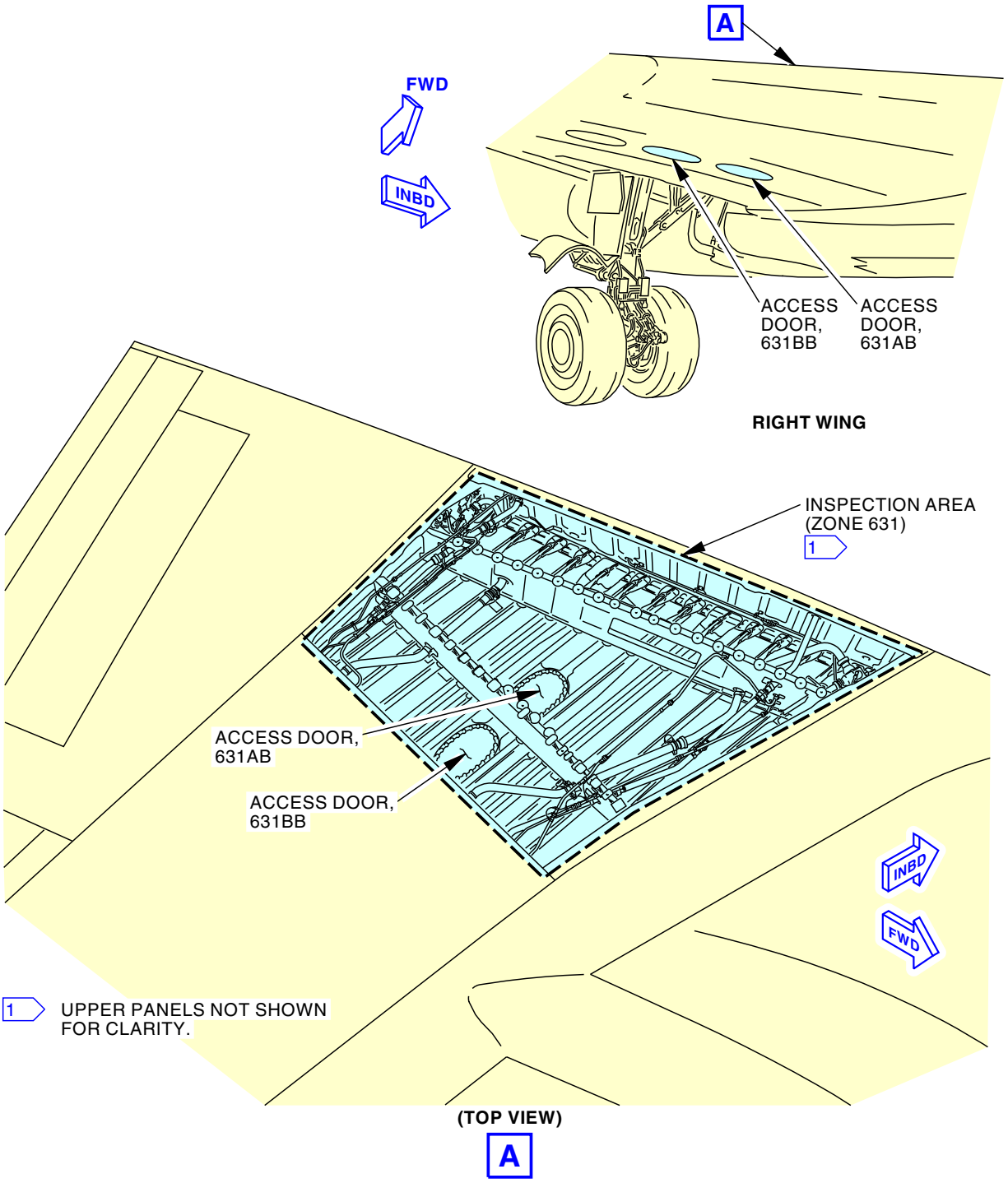
SUBTASK 05-41-06-410-004

(3) Close these access panels:

Number	Name/Location
631AB	Center Tank Access Door - Wing Station 168
631BB	Center Tank Access Door - Wing Station 192

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



2410269 S00061525221_V1

Center Fuel Tank - Right Wing General Visual (Internal)
Figure 211/05-41-06-990-811

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-06-210-812

12. EXTERNAL - ZONAL (GV): CENTER FUEL TANK - RIGHT WING

(Figure 212)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
631	Right Wing - Center Fuel Tank, Rib 1 to Rib 5

B. Zonal Inspection

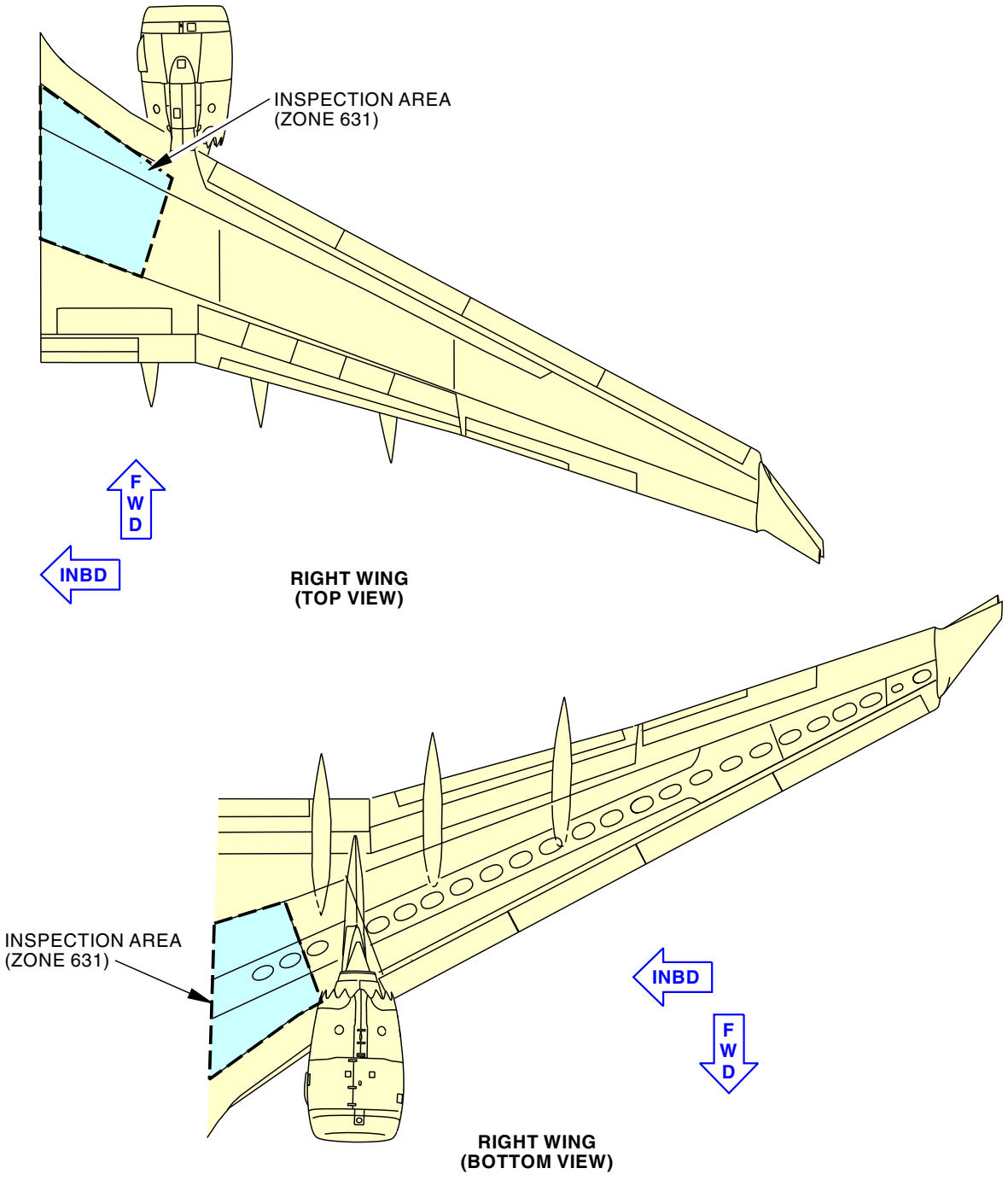
NOTE: Excluding surface under wing to body fairing.

SUBTASK 05-41-06-210-012

(1) Do a General Visual inspection of the center fuel tank - right wing.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



2410270 S00061525223_V1

Center Fuel Tank - Right Wing General Visual (External)
Figure 212/05-41-06-990-812

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-06-210-813

13. INTERNAL - ZONAL (GV): MAIN FUEL TANK - RIGHT WING

(Figure 213)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
632	Right Wing - Main Tank, Rib 5 to Rib 22, Wing Station 204.25 to Wing Station 643.50

B. Access Panels

Number	Name/Location
632AB	Main Tank Access Door - Wing Station 216
632AZ	Main Tank Inner Access at Rib 6
632BB	Main Tank Access Door - Wing Station 265
632BZ	Main Tank Inner Access at Rib 6
632CB	Main Tank Access Door - Wing Station 290
632DB	Main Tank Access Door - Wing Station 313
632EB	Main Tank Access Door - Wing Station 337
632FB	Main Tank Access Door - Wing Station 367
632GB	Main Tank Access Door - Wing Station 390
632HB	Main Tank Access Door - Wing Station 417
632JB	Main Tank Access Door - Wing Station 443
632KB	Main Tank Access Door - Wing Station 470
632LB	Main Tank Access Door - Wing Station 496
632MB	Main Tank Access Door - Wing Station 523
632NB	Main Tank Access Door - Wing Station 549
632PB	Main Tank Access Door - Wing Station 576
632QB	Main Tank Access Door - Wing Station 602
632RB	Main Tank Access Door - Wing Station 629

C. Zonal Inspection

CAUTION

DO NOT REMOVE 632AZ AND 632BZ AT THE SAME TIME.

SUBTASK 05-41-06-010-005

(1) Open these access panels:

Number	Name/Location
632AB	Main Tank Access Door - Wing Station 216
632AZ	Main Tank Inner Access at Rib 6
632BB	Main Tank Access Door - Wing Station 265
632BZ	Main Tank Inner Access at Rib 6
632CB	Main Tank Access Door - Wing Station 290
632DB	Main Tank Access Door - Wing Station 313
632EB	Main Tank Access Door - Wing Station 337
632FB	Main Tank Access Door - Wing Station 367

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(Continued)

Number	Name/Location
632GB	Main Tank Access Door - Wing Station 390
632HB	Main Tank Access Door - Wing Station 417
632JB	Main Tank Access Door - Wing Station 443
632KB	Main Tank Access Door - Wing Station 470
632LB	Main Tank Access Door - Wing Station 496
632MB	Main Tank Access Door - Wing Station 523
632NB	Main Tank Access Door - Wing Station 549
632PB	Main Tank Access Door - Wing Station 576
632QB	Main Tank Access Door - Wing Station 602
632RB	Main Tank Access Door - Wing Station 629

SUBTASK 05-41-06-210-013

(2) Do a General Visual inspection of the main fuel tank - right wing.

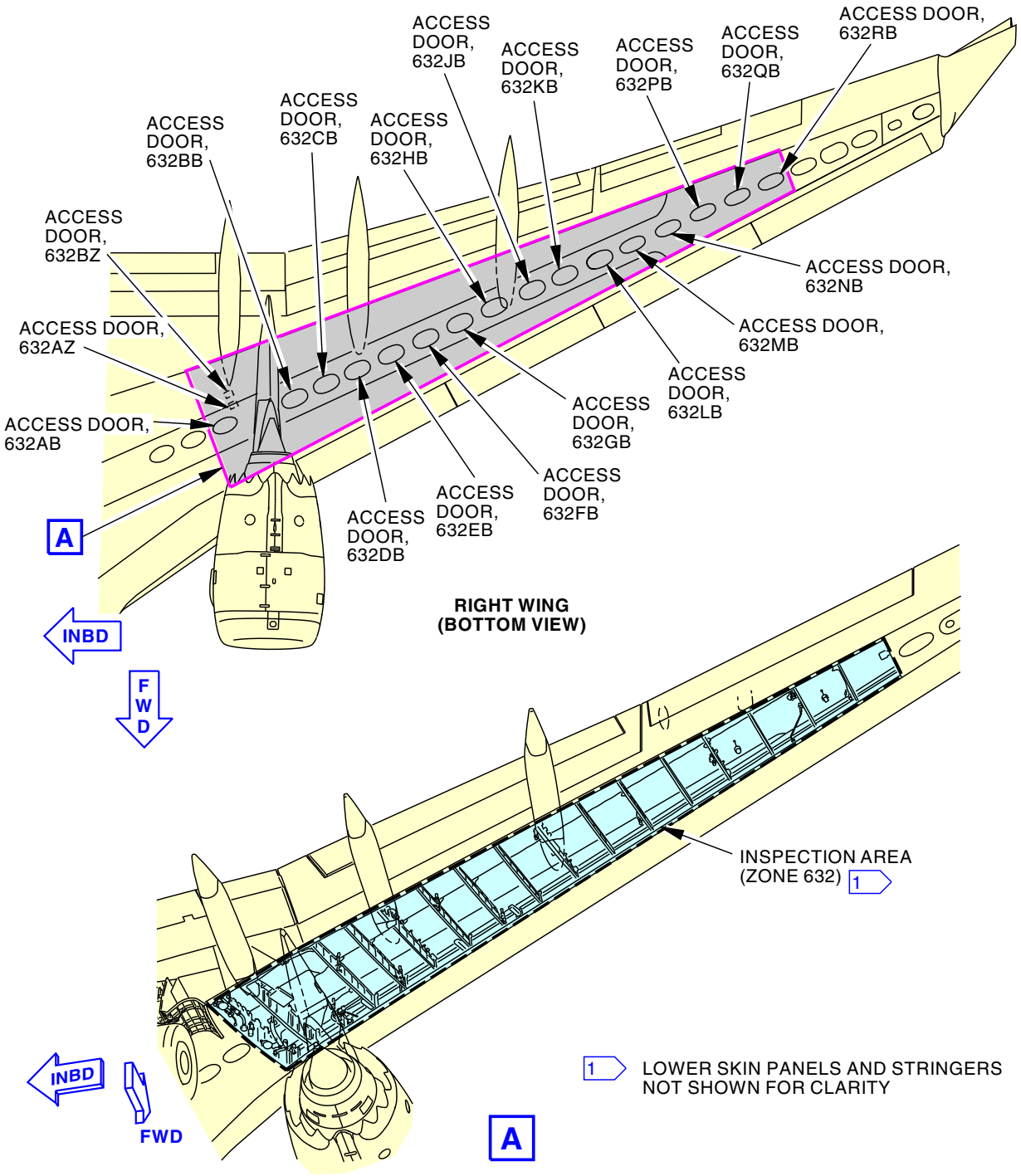
SUBTASK 05-41-06-410-005

(3) Close these access panels:

Number	Name/Location
632AB	Main Tank Access Door - Wing Station 216
632AZ	Main Tank Inner Access at Rib 6
632BB	Main Tank Access Door - Wing Station 265
632BZ	Main Tank Inner Access at Rib 6
632CB	Main Tank Access Door - Wing Station 290
632DB	Main Tank Access Door - Wing Station 313
632EB	Main Tank Access Door - Wing Station 337
632FB	Main Tank Access Door - Wing Station 367
632GB	Main Tank Access Door - Wing Station 390
632HB	Main Tank Access Door - Wing Station 417
632JB	Main Tank Access Door - Wing Station 443
632KB	Main Tank Access Door - Wing Station 470
632LB	Main Tank Access Door - Wing Station 496
632MB	Main Tank Access Door - Wing Station 523
632NB	Main Tank Access Door - Wing Station 549
632PB	Main Tank Access Door - Wing Station 576
632QB	Main Tank Access Door - Wing Station 602
632RB	Main Tank Access Door - Wing Station 629

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Main Fuel Tank - Right Wing General Visual (Internal)
Figure 213/05-41-06-990-813

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-06-210-814

14. EXTERNAL - ZONAL (GV): MAIN FUEL TANK - RIGHT WING

(Figure 214)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
632	Right Wing - Main Tank, Rib 5 to Rib 22, Wing Station 204.25 to Wing Station 643.50

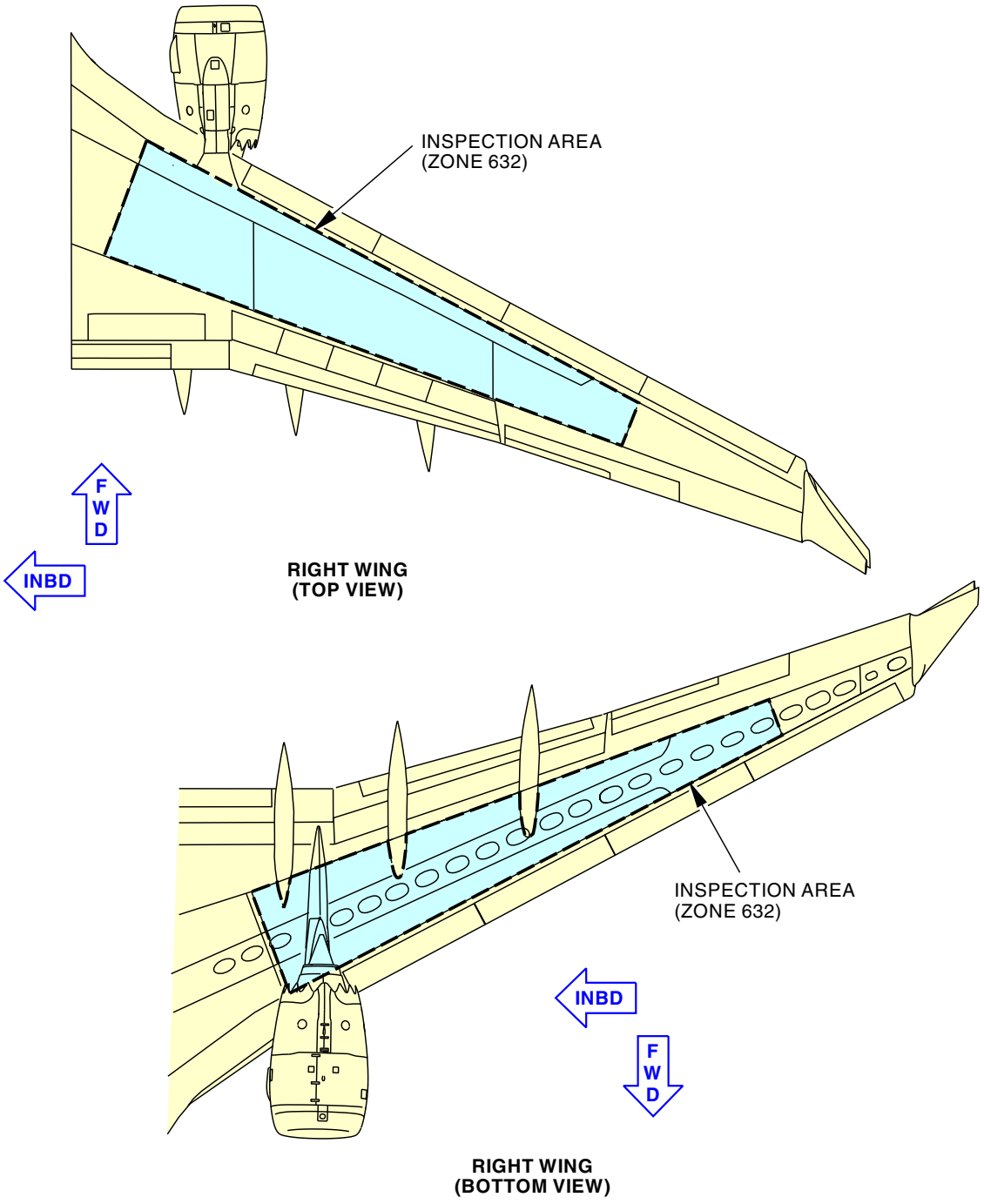
B. Zonal Inspection

SUBTASK 05-41-06-210-014

(1) Do a General Visual inspection of the main fuel tank - right wing.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



2410272 S00061525227_V1

Main Fuel Tank - Right Wing General Visual (External)
Figure 214/05-41-06-990-814

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-06-210-815

15. INTERNAL - ZONAL (GV): SURGE TANK - RIGHT WING

(Figure 215)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
633	Right Wing - Surge Tank, Rib 22 to Rib 25, Wing Station 643.50 to Wing Buttock Line 616.75

B. Access Panels

Number	Name/Location
633AB	Surge Tank Access Door - Wing Station 655
633BB	Surge Tank Access Door - Wing Station 679
633CB	Surge Tank Access Door - Wing Station 703

C. Zonal Inspection

SUBTASK 05-41-06-010-006

(1) Open these access panels:

Number	Name/Location
633AB	Surge Tank Access Door - Wing Station 655
633BB	Surge Tank Access Door - Wing Station 679
633CB	Surge Tank Access Door - Wing Station 703

SUBTASK 05-41-06-210-015

(2) Do a General Visual inspection of the surge tank - right wing.

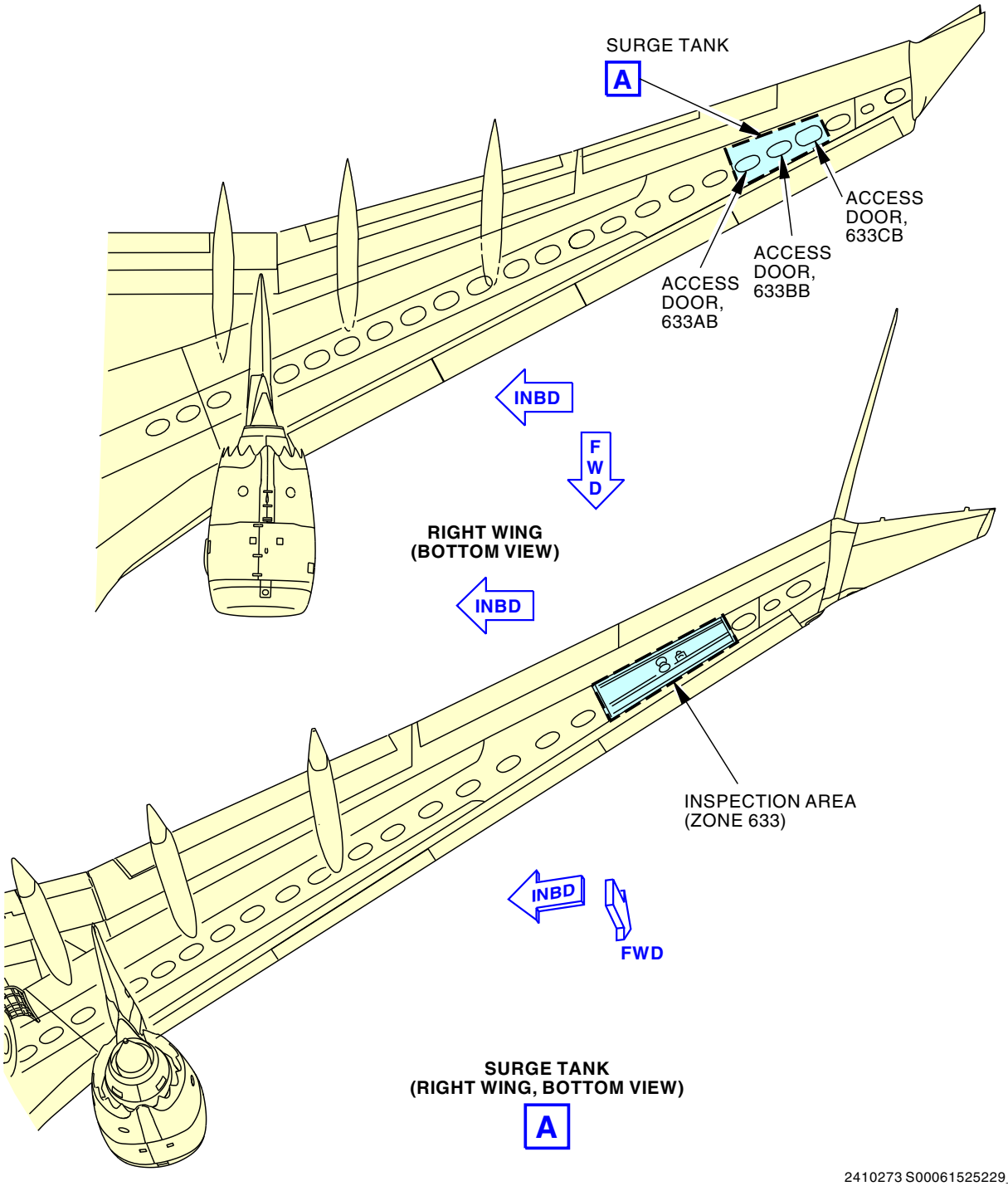
SUBTASK 05-41-06-410-006

(3) Close these access panels:

Number	Name/Location
633AB	Surge Tank Access Door - Wing Station 655
633BB	Surge Tank Access Door - Wing Station 679
633CB	Surge Tank Access Door - Wing Station 703

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Surge Tank - Right Wing General Visual (Internal)
Figure 215/05-41-06-990-815

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-06-210-816

16. EXTERNAL - ZONAL (GV): SURGE TANK - RIGHT WING

(Figure 216)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
633	Right Wing - Surge Tank, Rib 22 to Rib 25, Wing Station 643.50 to Wing Buttock Line 616.75

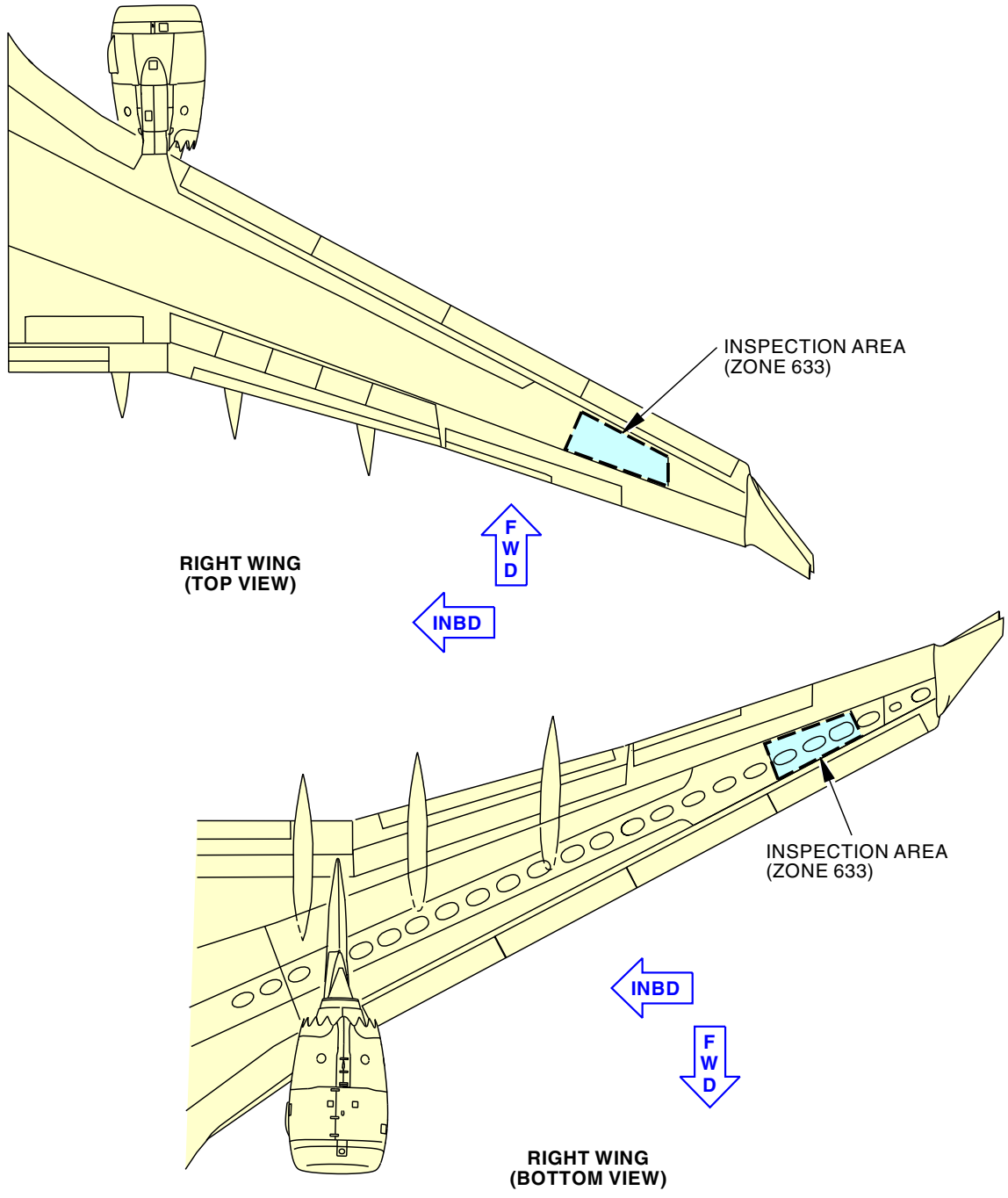
B. Zonal Inspection

SUBTASK 05-41-06-210-016

(1) Do a General Visual inspection of the surge tank - right wing.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details



2410274 S00061525231_V1

Surge Tank - Right Wing General Visual (External)
Figure 216/05-41-06-990-816

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-06-210-817

17. EXTERNAL - ZONAL (GV): DRY BAY - RIGHT WING

(Figure 217)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
634	Right Wing - Dry Bay

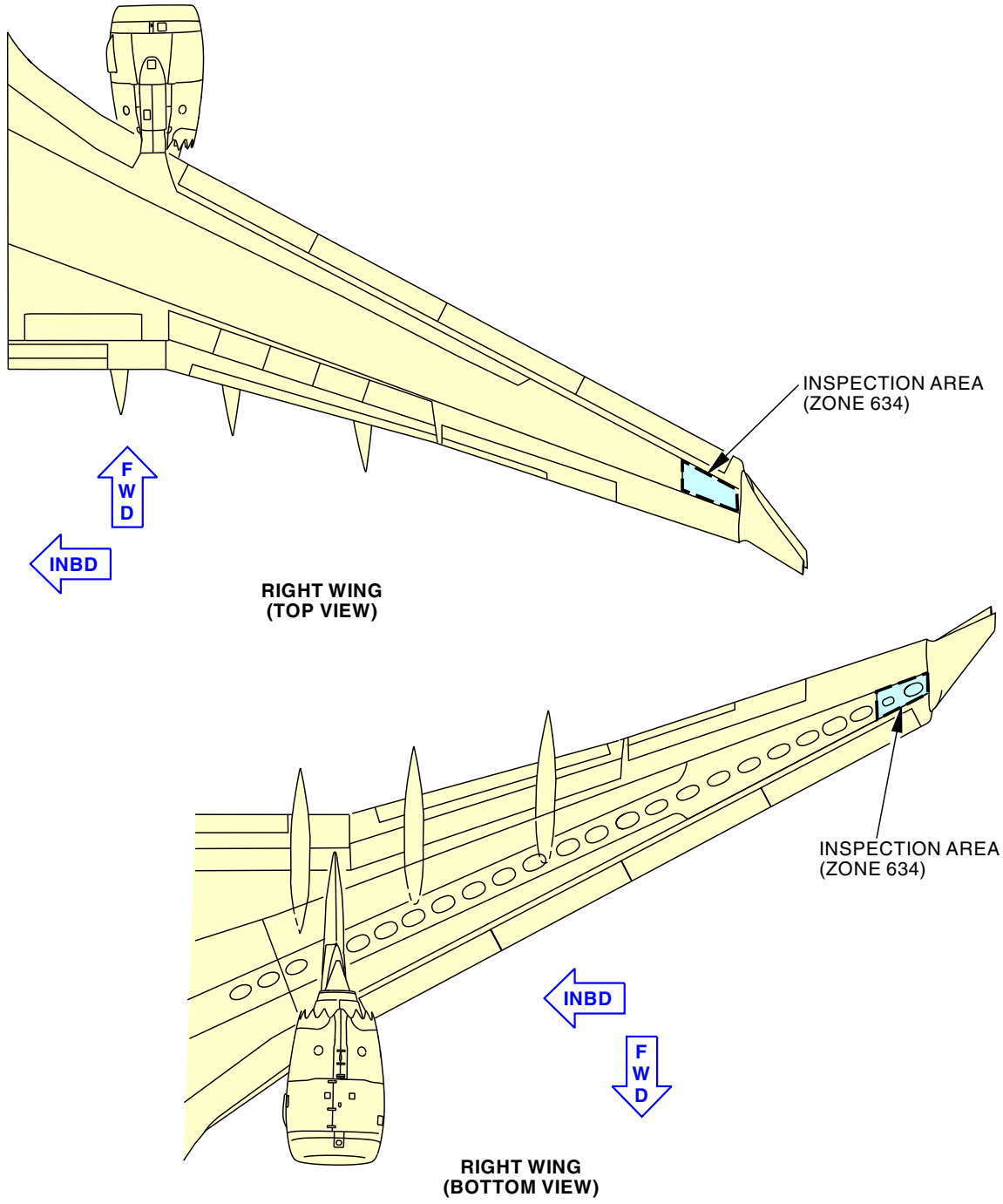
B. Zonal Inspection

SUBTASK 05-41-06-210-017

(1) Do a General Visual inspection of the dry bay - right wing.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Dry Bay - Right Wing General Visual (External)
Figure 217/05-41-06-990-817

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-06-210-837

18. INTERNAL - ZONAL (GVI): Dry Bay - Right Wing

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
634	Right Wing - Dry Bay

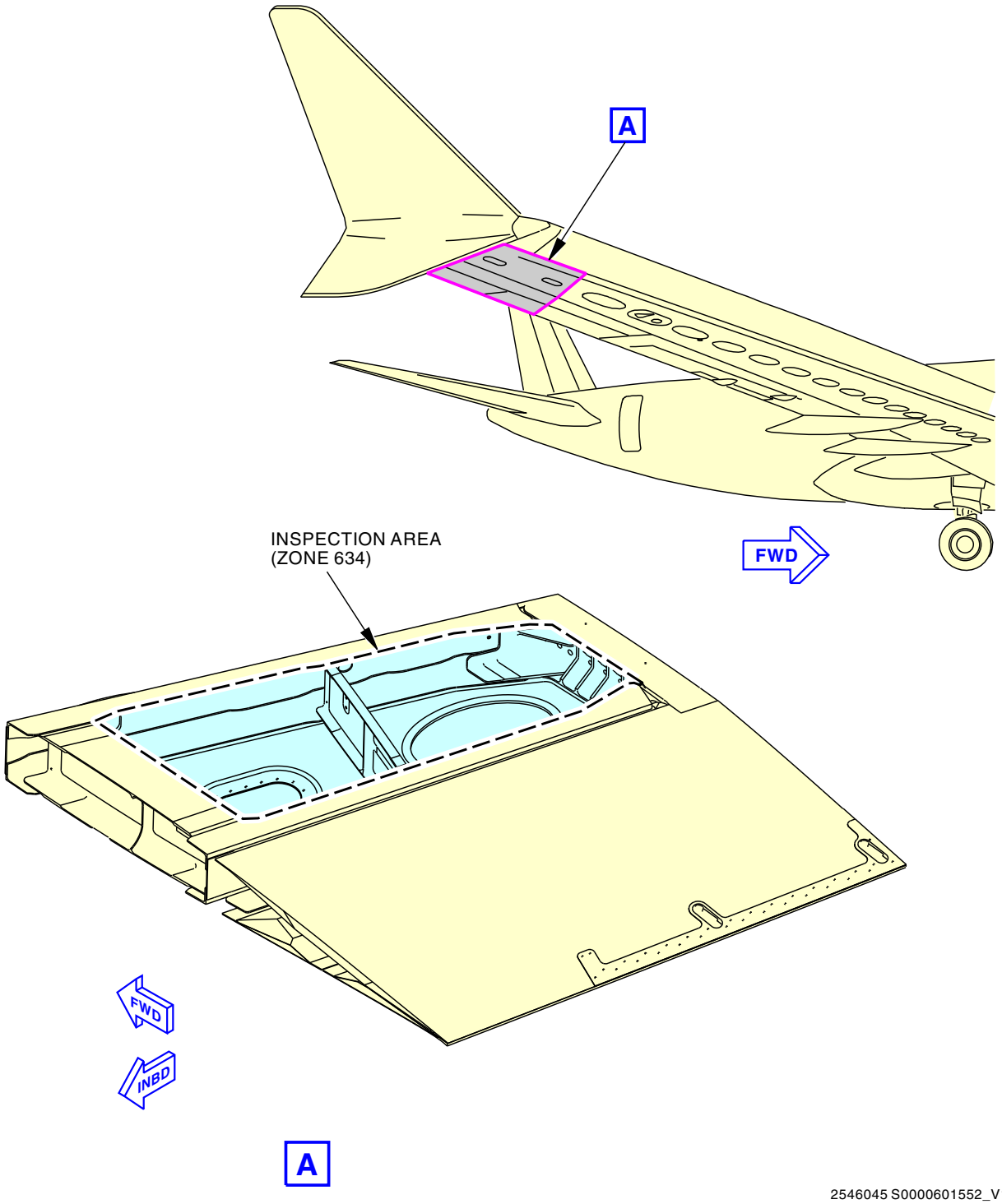
B. Zonal Inspection

SUBTASK 05-41-06-210-037

(1) Do a General Visual Inspection of the dry bay - right wing.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Dry Bay - Right General Visual (Internal)
Figure 218/05-41-06-990-837

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-41-06-210-818

19. INTERNAL - ZONAL (GV): Flap Support No. 5 - Right Wing

(Figure 219)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This Zonal inspection procedure satisfies the required EZAP-derived Zonal inspection requirement for this zone.

B. References

Reference	Title
05-00-00-910-802	Enhanced Zonal Inspection Program (EZAP) Precautions (P/B 201)
20-60-07-910-801	Protection of the EWIS During Maintenance (P/B 201)
27-51-00-860-803	Extend the Trailing Edge Flaps (P/B 201)
27-51-00-860-804	Retract the Trailing Edge Flaps (P/B 201)

C. Location Zones

Zone	Area
134	Main Landing Gear Wheel Well, Body Station 663.75 to Body Station 727.00 - Right
194	Lower Wing-To-Body Fairing - Aft of Wheel Well
641	Right Wing - Fairing Flap Support No. 5

D. Access Panels

Number	Name/Location
194BR	Flap Track Lubrication Panel - Aft

E. Zonal Inspection

SUBTASK 05-41-06-010-012

(1) Extend the trailing edge flaps, do this task: Extend the Trailing Edge Flaps, TASK 27-51-00-860-803.

SUBTASK 05-41-06-010-007

(2) Open this access panel:

Number	Name/Location
194BR	Flap Track Lubrication Panel - Aft

SUBTASK 05-41-06-210-018

(3) Do the zonal inspection following the procedures in Enhanced Zonal Inspection Program (EZAP) Precautions, TASK 05-00-00-910-802.

(4) Perform an internal zonal inspection (GV) of the flap support fairing no. 5 - right wing - Section 46, Sta 727. (EZAP)

SUBTASK 05-41-06-910-003

(5) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-910-801 for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 05-41-06-410-007

(6) Close this access panel:

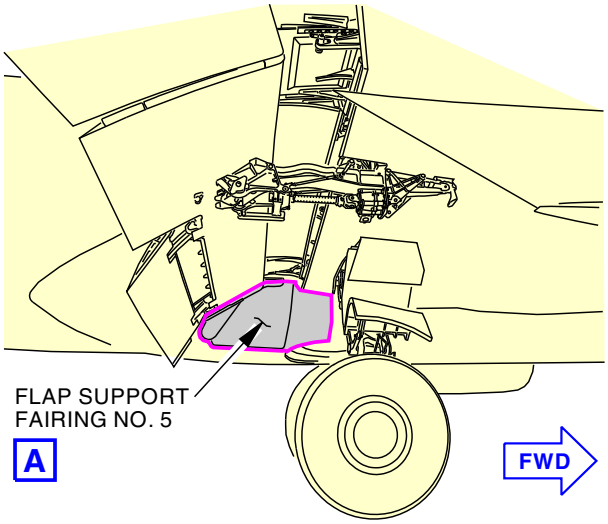
Number	Name/Location
194BR	Flap Track Lubrication Panel - Aft

SUBTASK 05-41-06-410-012

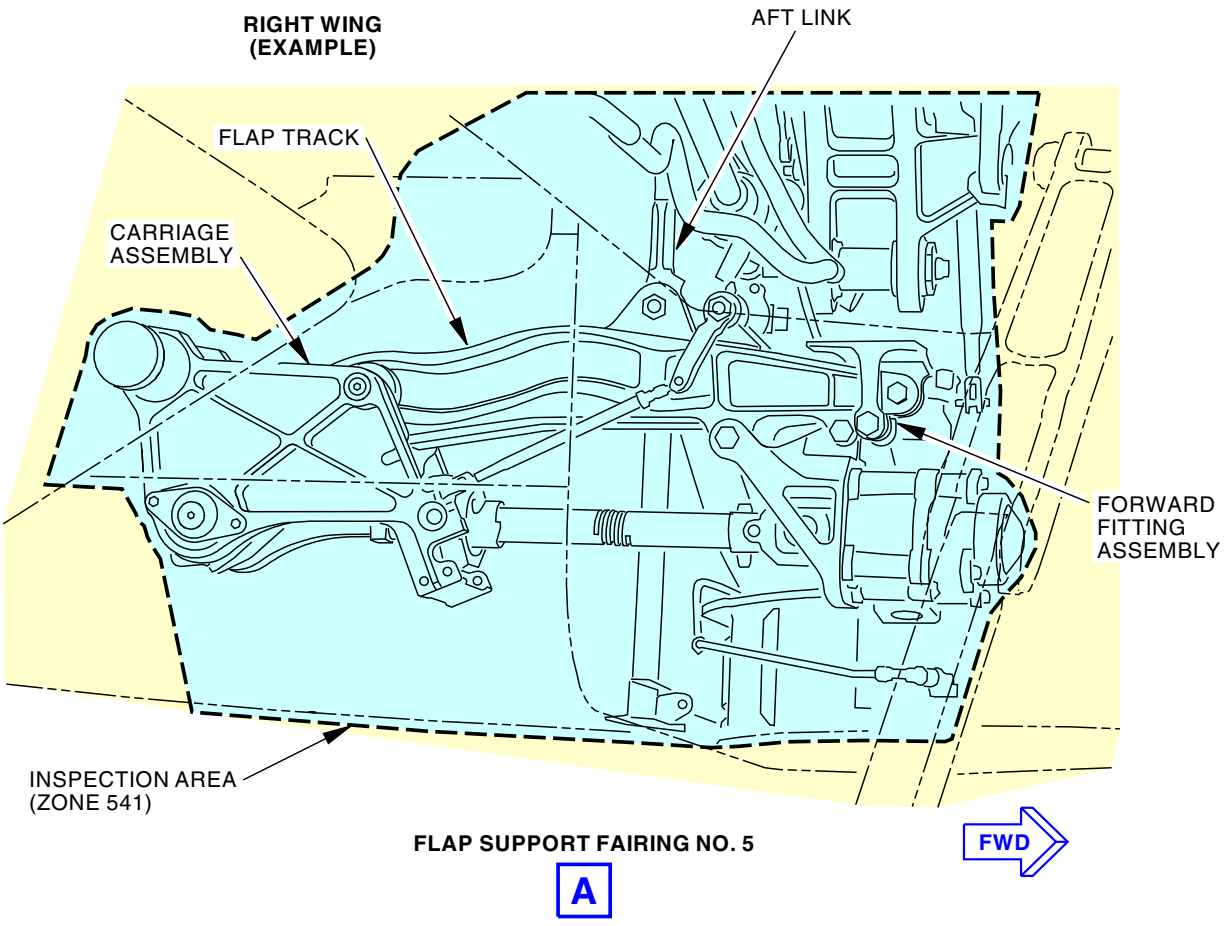
(7) Retract the trailing edge flaps, do this task: Retract the Trailing Edge Flaps, TASK 27-51-00-860-804.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



**RIGHT WING
(EXAMPLE)**



FLAP SUPPORT FAIRING NO. 5

A

2410276 S00061525235_V3

**Flap Support Fairing No. 5 General Visual (Internal)
Figure 219/05-41-06-990-818**

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-06-210-819

20. EXTERNAL - ZONAL (GV): FAIRING FLAP SUPPORT NO. 6 - RIGHT WING

(Figure 220)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
642	Right Wing - Fairing Flap Support No. 6

B. Zonal Inspection

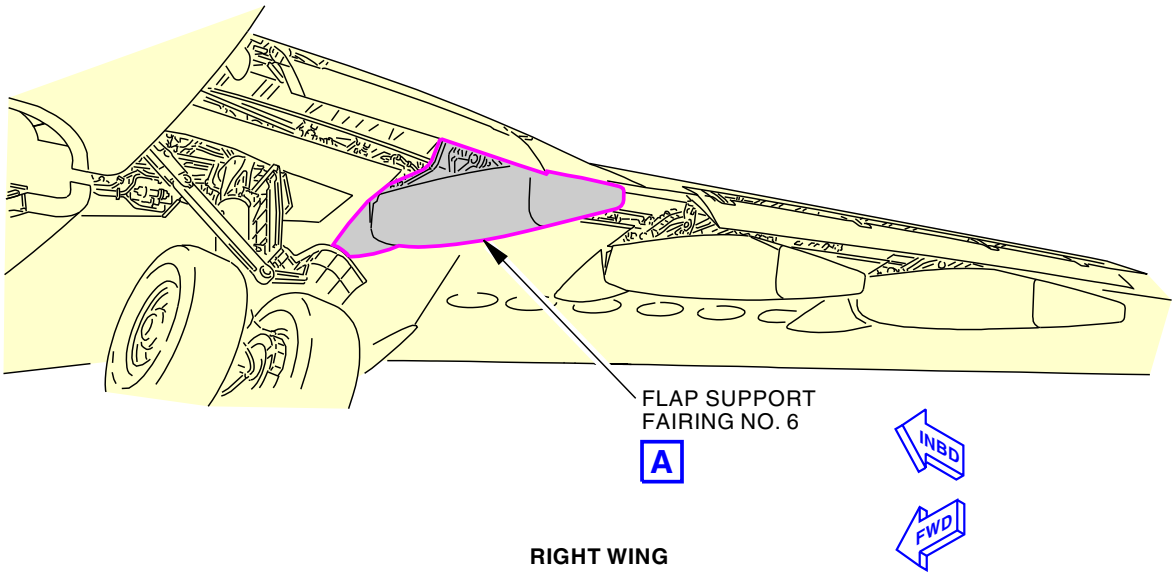
NOTE: Flaps extended.

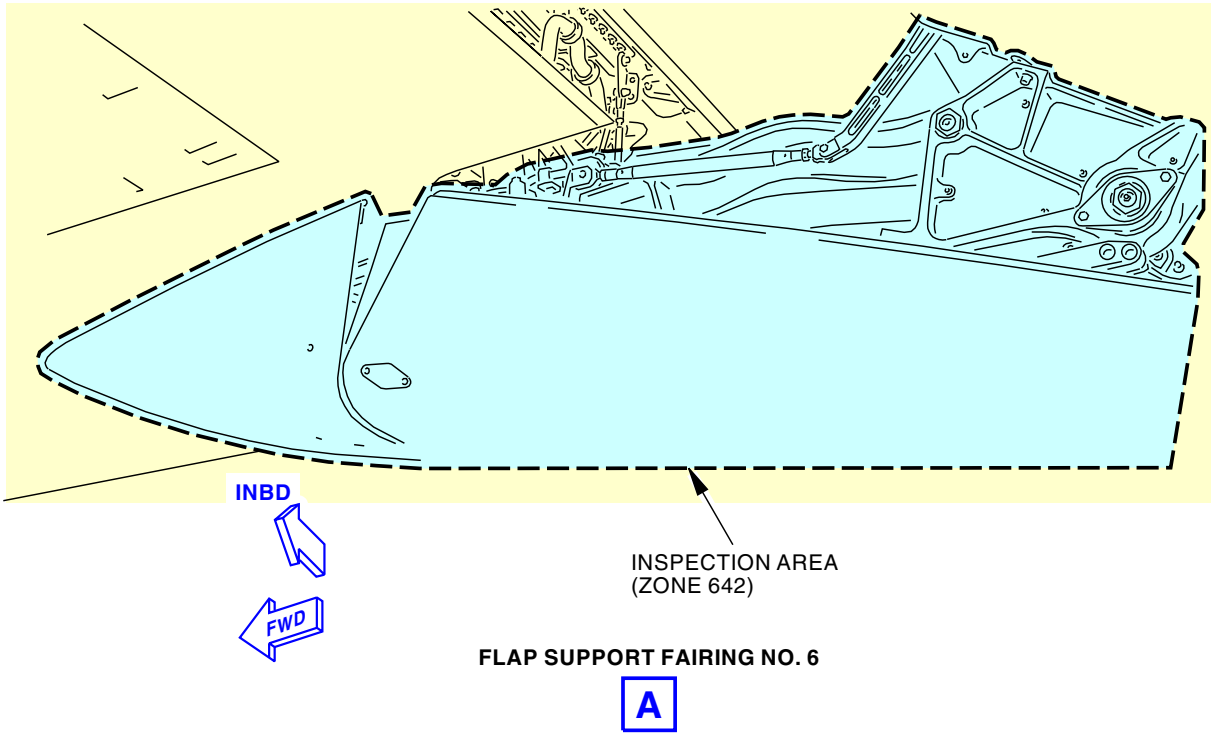
SUBTASK 05-41-06-210-019

(1) Do a General Visual inspection of the fairing flap support no. 6 - right wing.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details





2410277 S00061525237_V1

Flap Support Fairing No. 6 General Visual (External)
Figure 220/05-41-06-990-819

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-41-06-210-820

21. INTERNAL - ZONAL (GV): Fairing Flap Support No. 6 - Right Wing

(Figure 221)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This Zonal inspection procedure satisfies the required EZAP-derived Zonal inspection requirement for this zone.

B. References

Reference	Title
05-00-00-910-802	Enhanced Zonal Inspection Program (EZAP) Precautions (P/B 201)
20-60-07-910-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
642	Right Wing - Fairing Flap Support No. 6

D. Zonal Inspection

NOTE: Flaps extended, inside of fairing.

SUBTASK 05-41-06-210-020

(1) Do the zonal inspection following the procedures in Enhanced Zonal Inspection Program (EZAP) Precautions, TASK 05-00-00-910-802.

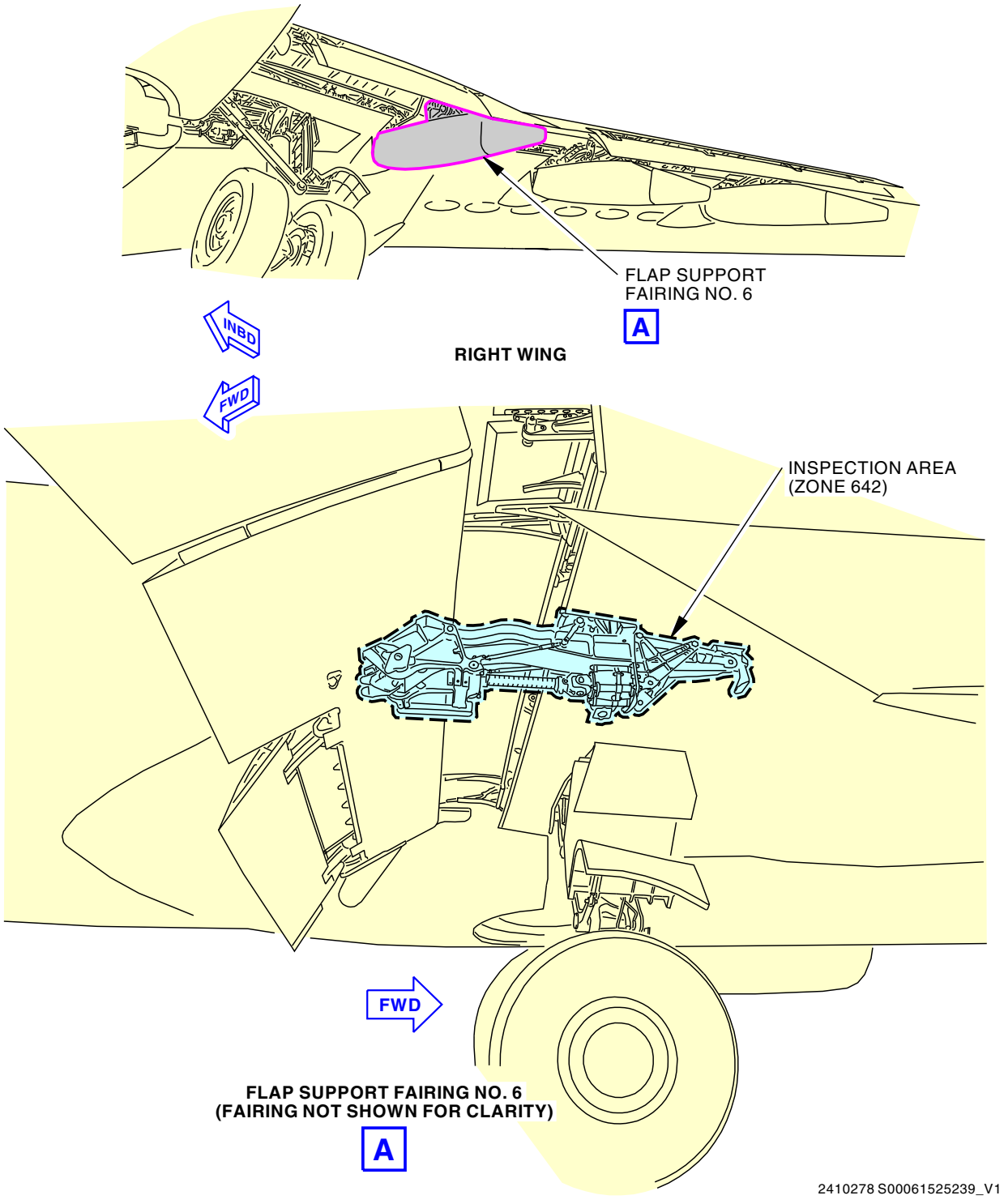
(2) Perform an internal zonal inspection (GV) of the fairing flap support no. 6 - right wing. (EZAP)

SUBTASK 05-41-06-910-004

(3) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-910-801 for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Flap Support Fairing No. 6 General Visual (Internal)
Figure 221/05-41-06-990-820

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-06-210-821

22. EXTERNAL - ZONAL (GV): FAIRING FLAP SUPPORT NO. 7 - RIGHT WING

(Figure 222)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
643	Right Wing - Fairing Flap Support No. 7

B. Zonal Inspection

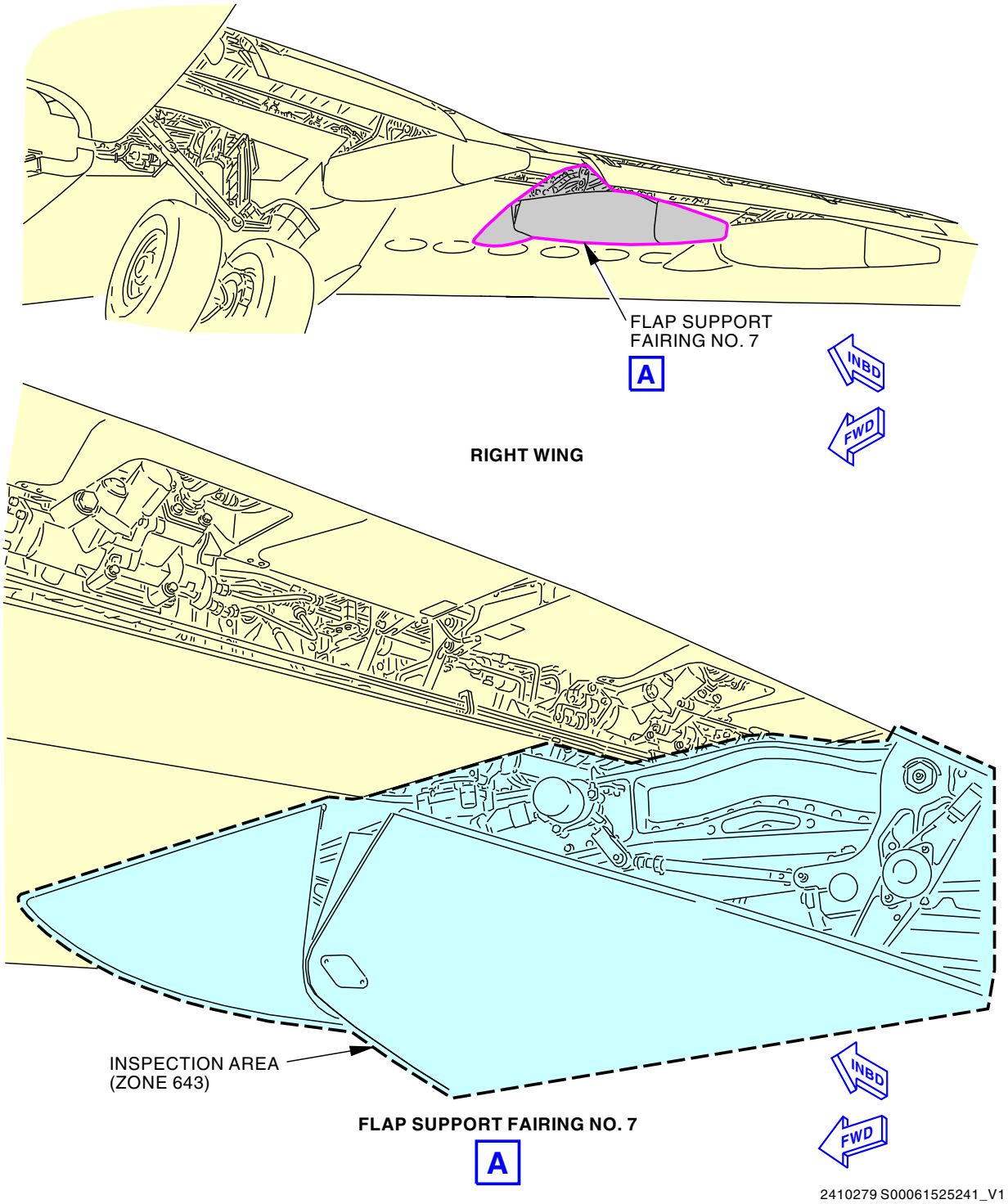
NOTE: Flaps extended.

SUBTASK 05-41-06-210-021

(1) Do a General Visual inspection of the fairing flap support no. 7 - right wing.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Flap Support Fairing No. 7 General Visual (External)
Figure 222/05-41-06-990-821

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-41-06-210-822

23. INTERNAL - ZONAL (GV): Fairing Flap Support No. 7 - Right Wing

(Figure 223)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This Zonal inspection procedure satisfies the required EZAP-derived Zonal inspection requirement for this zone.

B. References

Reference	Title
05-00-00-910-802	Enhanced Zonal Inspection Program (EZAP) Precautions (P/B 201)
20-60-07-910-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
643	Right Wing - Fairing Flap Support No. 7

D. Zonal Inspection

NOTE: Flaps extended, inside of fairing.

SUBTASK 05-41-06-210-022

(1) Do the zonal inspection following the procedures in Enhanced Zonal Inspection Program (EZAP) Precautions, TASK 05-00-00-910-802.

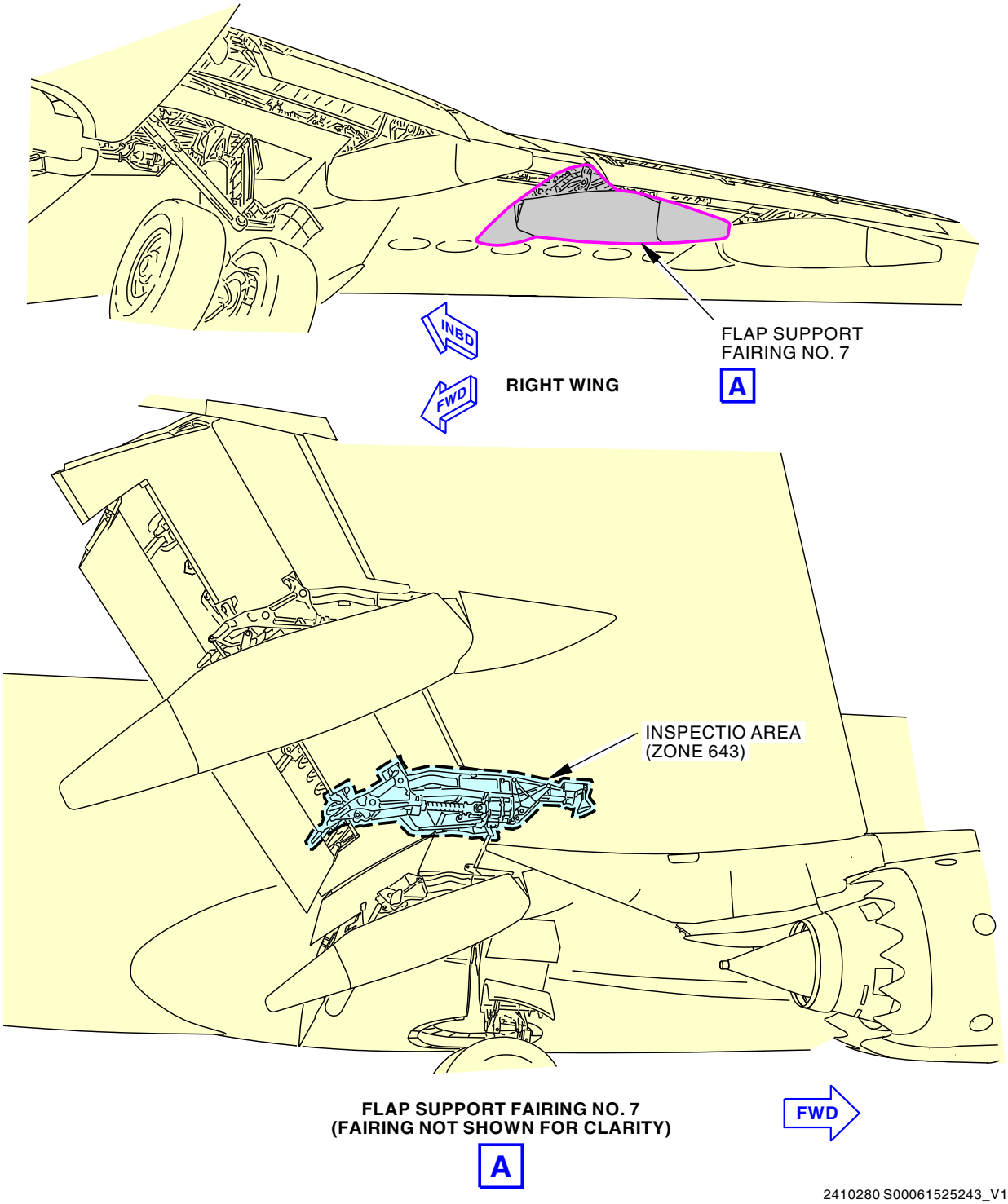
(2) Perform an internal zonal inspection (GV) of the fairing flap support no. 7 - right wing. (EZAP)

SUBTASK 05-41-06-910-005

(3) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-910-801 for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Flap Support Fairing No. 7 General Visual (Internal)
Figure 223/05-41-06-990-822

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-06-210-823

24. EXTERNAL - ZONAL (GV): FAIRING FLAP SUPPORT NO. 8 - RIGHT WING

(Figure 224)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
644	Right Wing - Fairing Flap Support No. 8

B. Zonal Inspection

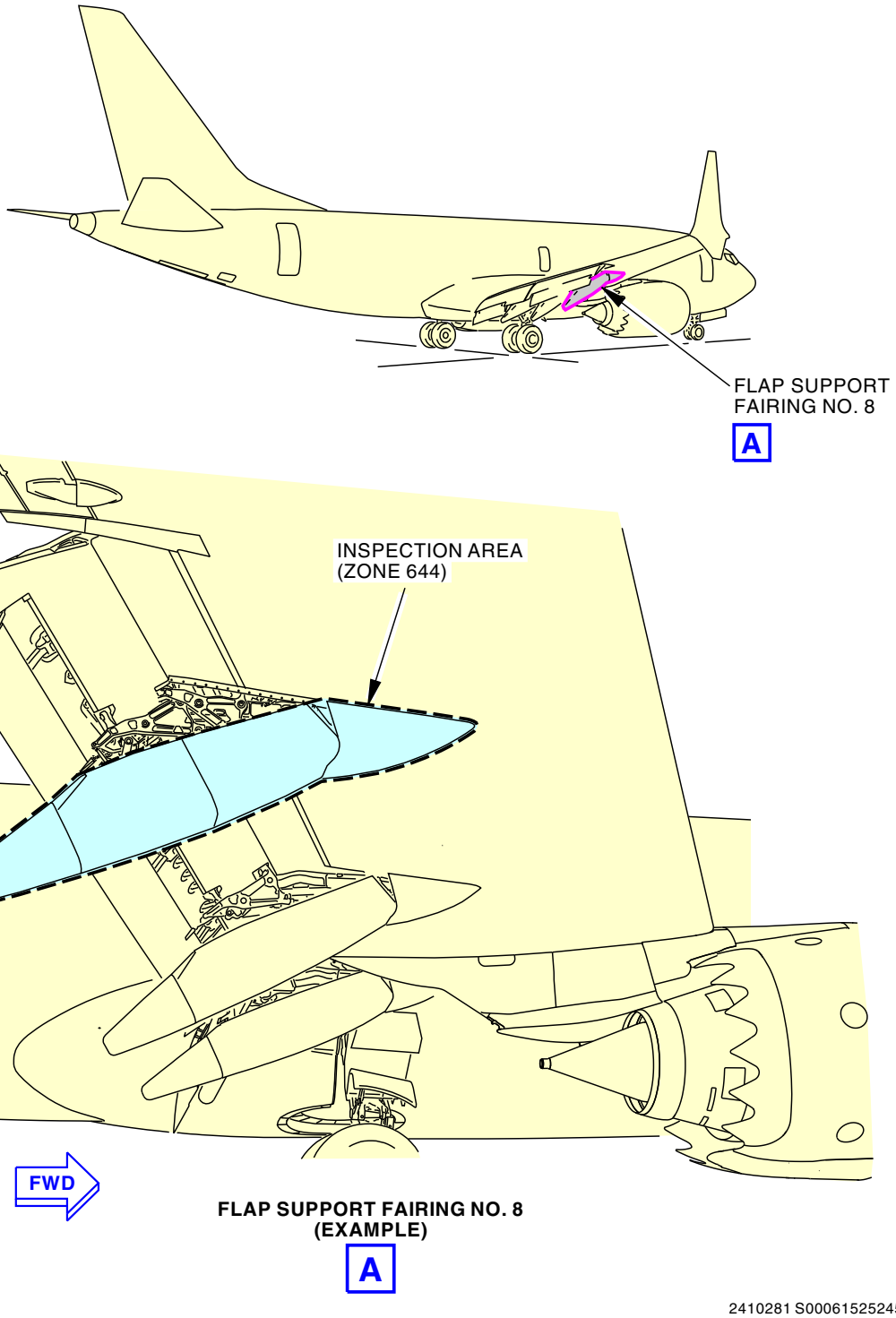
NOTE: Flaps extended.

SUBTASK 05-41-06-210-023

(1) Do a General Visual inspection of the fairing flap support no. 8 - right wing.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Flap Support Fairing No. 8 General Visual (External)
Figure 224/05-41-06-990-823

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-41-06-210-824

25. INTERNAL - ZONAL (GV): Fairing Flap Support No. 8 - Right Wing

(Figure 225)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This Zonal inspection procedure satisfies the required EZAP-derived Zonal inspection requirement for this zone.

B. References

Reference	Title
05-00-00-910-802	Enhanced Zonal Inspection Program (EZAP) Precautions (P/B 201)
20-60-07-910-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
644	Right Wing - Fairing Flap Support No. 8

D. Zonal Inspection

NOTE: Flaps extended, inside of fairing.

SUBTASK 05-41-06-210-024

(1) Do the zonal inspection following the procedures in Enhanced Zonal Inspection Program (EZAP) Precautions, TASK 05-00-00-910-802.

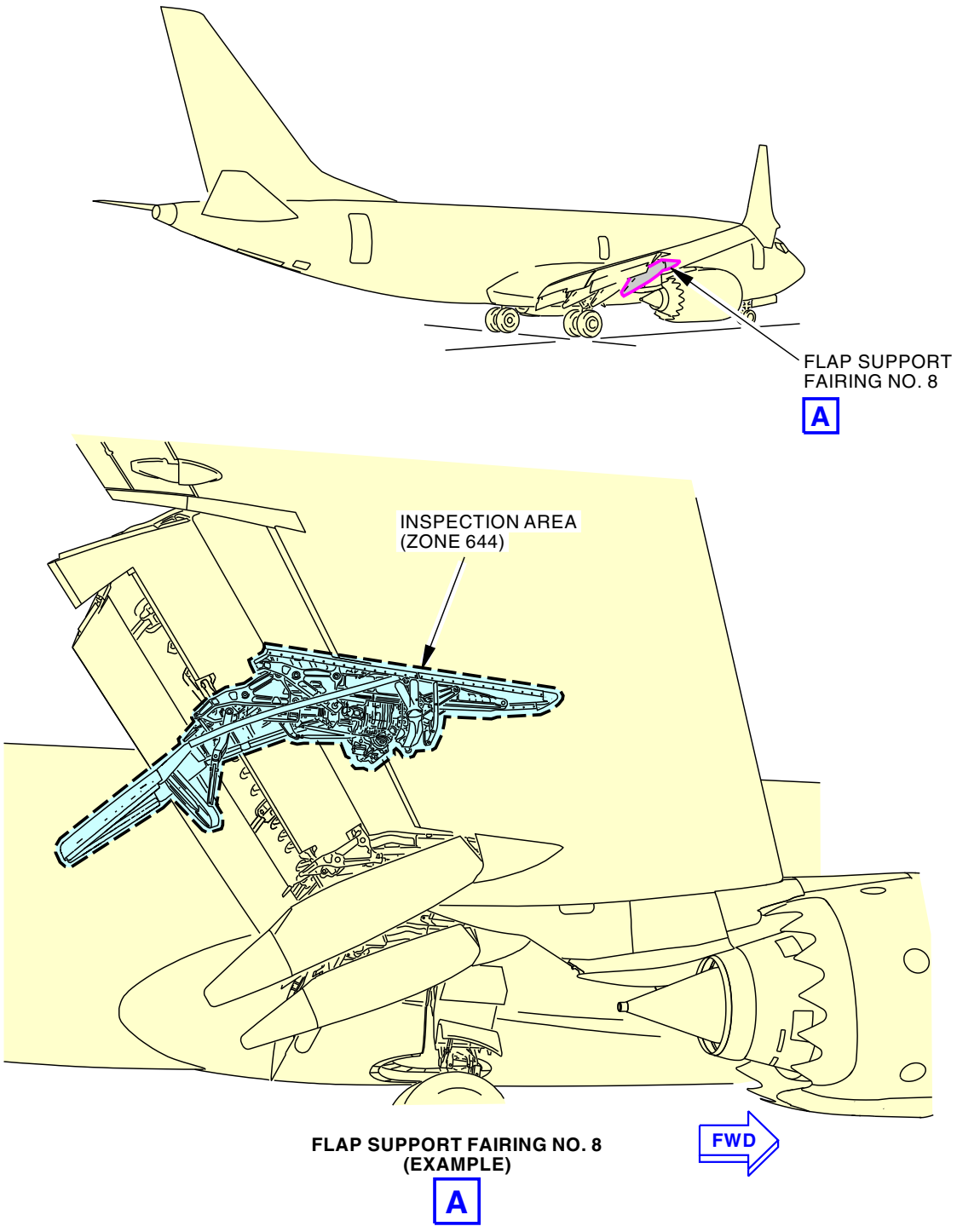
(2) Perform an internal zonal inspection (GV) of the fairing flap support no. 8 - right wing. (EZAP)

SUBTASK 05-41-06-910-006

(3) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-910-801 for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Flap Support Fairing No. 8 General Visual (Internal)
Figure 225/05-41-06-990-824

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-06-210-825

26. EXTERNAL - ZONAL (GV): REAR SPAR TO LANDING GEAR SUPPORT BEAM - RIGHT WING

(Figure 226)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
651	Right Wing - Rear Spar to Landing Gear Support Beam

B. Zonal Inspection

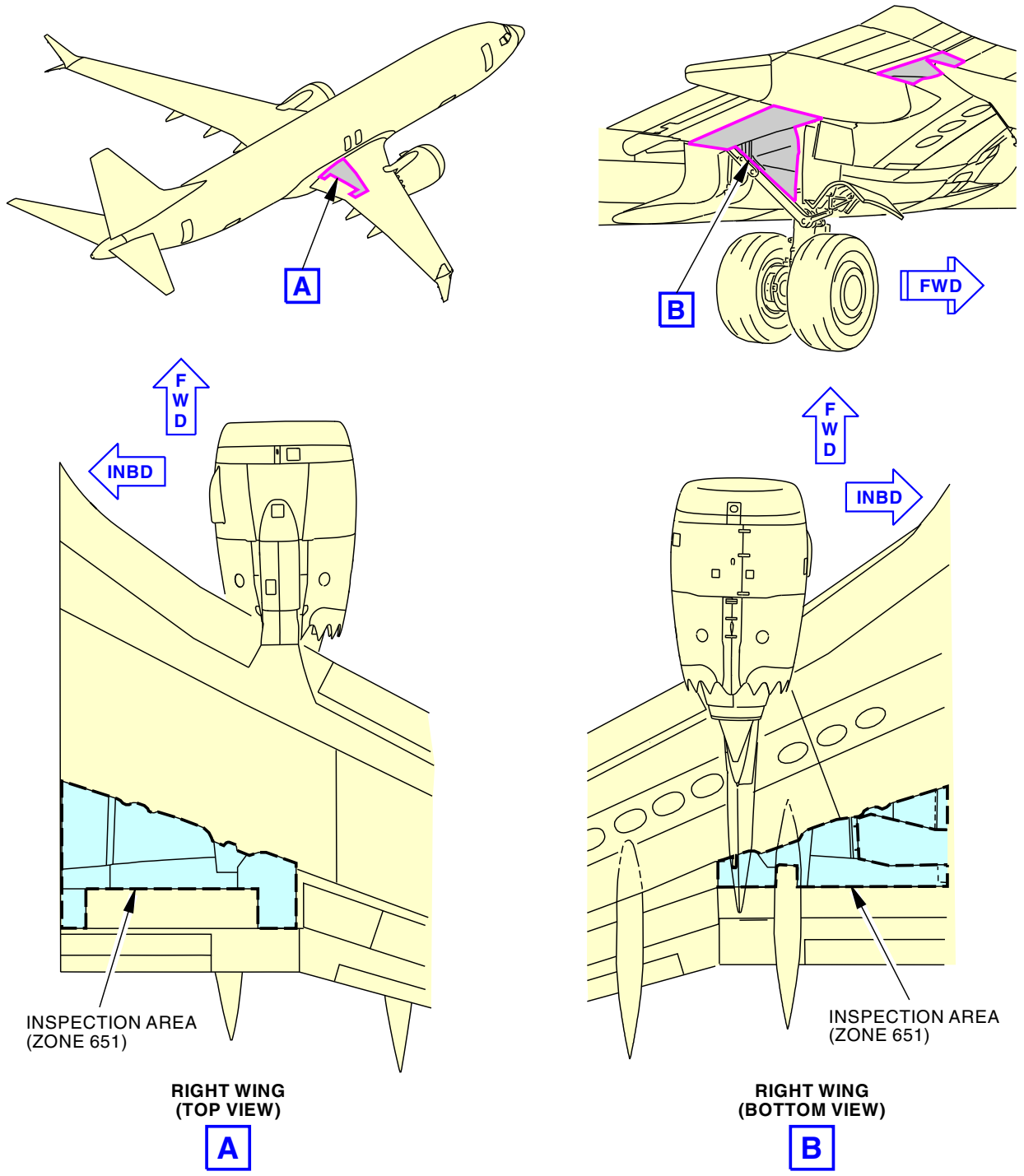
NOTE: Excluding surface under wing to body fairing.

SUBTASK 05-41-06-210-025

(1) Do a General Visual inspection of the rear spar to landing gear support beam - right wing.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



2410283 S00061525249_V3

Rear Spar to Landing Gear Support Beam - Right Wing General Visual (External)
Figure 226/05-41-06-990-825

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-41-06-210-826

27. INTERNAL - ZONAL (GV): REAR SPAR TO LANDING GEAR SUPPORT BEAM - RIGHT WING

(Figure 227)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This Zonal inspection procedure satisfies the required EZAP-derived Zonal inspection requirement for this zone.

B. References

Reference	Title
05-00-00-910-802	Enhanced Zonal Inspection Program (EZAP) Precautions (P/B 201)
20-60-07-910-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
651	Right Wing - Rear Spar to Landing Gear Support Beam

D. Access Panels

Number	Name/Location
651AT	Upper Inboard Fixed Trailing Edge Access Panel
651BT	Upper Inboard Fixed Trailing Edge, MLG Actuator Access Panel
651CT	Upper Inboard Fixed Trailing Edge, Structural Pin Access Panel
651DB	Lower Inboard Fixed Trailing Edge, Lube Actuator & MLG Beam Outboard Attach Pin Access Panel
651FB	Lower Inboard Fixed Trailing Edge, Landing Gear Access Panel

E. Zonal Inspection

SUBTASK 05-41-06-010-008

(1) Open these access panels:

Number	Name/Location
651AT	Upper Inboard Fixed Trailing Edge Access Panel
651BT	Upper Inboard Fixed Trailing Edge, MLG Actuator Access Panel
651CT	Upper Inboard Fixed Trailing Edge, Structural Pin Access Panel
651DB	Lower Inboard Fixed Trailing Edge, Lube Actuator & MLG Beam Outboard Attach Pin Access Panel
651FB	Lower Inboard Fixed Trailing Edge, Landing Gear Access Panel

NOTE: Extend the trailing edge flaps and deploy spoilers.

SUBTASK 05-41-06-200-001

(2) Do the zonal inspection following the procedures in Enhanced Zonal Inspection Program (EZAP) Precautions, TASK 05-00-00-910-802.

SUBTASK 05-41-06-210-026

(3) Do a General Visual inspection of the rear spar to landing gear support beam - right wing (EZAP).

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 05-41-06-910-009

(4) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-910-801 for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

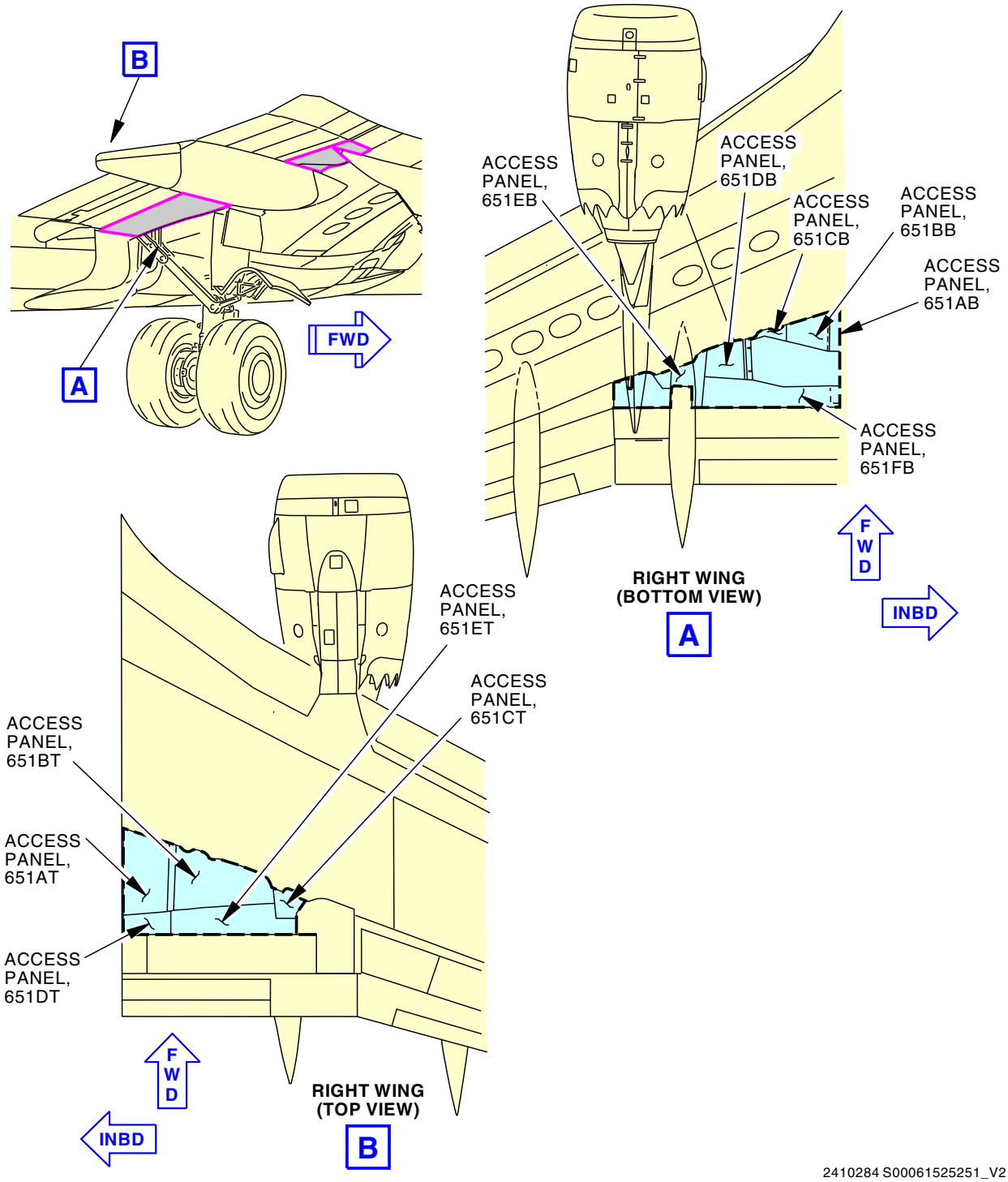
SUBTASK 05-41-06-410-008

(5) Close these access panels:

Number	Name/Location
651AT	Upper Inboard Fixed Trailing Edge Access Panel
651BT	Upper Inboard Fixed Trailing Edge, MLG Actuator Access Panel
651CT	Upper Inboard Fixed Trailing Edge, Structural Pin Access Panel
651DB	Lower Inboard Fixed Trailing Edge, Lube Actuator & MLG Beam Outboard Attach Pin Access Panel
651FB	Lower Inboard Fixed Trailing Edge, Landing Gear Access Panel

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Rear Spar to Landing Gear Support Beam - Right Wing General Visual (Internal)
Figure 227/05-41-06-990-826

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-06-210-827

28. EXTERNAL - ZONAL (GV): INBOARD SPOILER NO. 7 - RIGHT WING

(Figure 228)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
652	Right Wing - Spoiler No. 7

B. Zonal Inspection

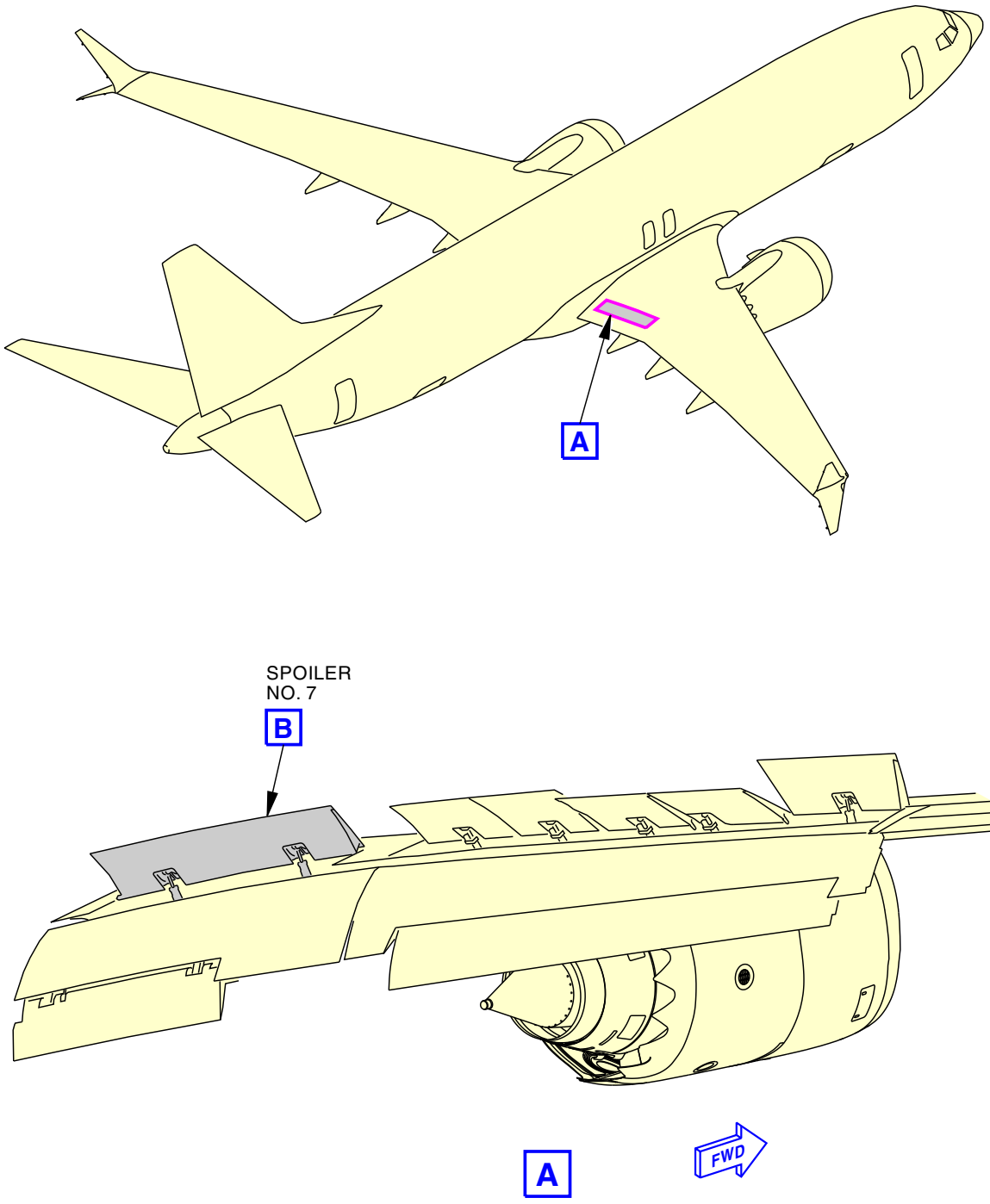
NOTE: Spoiler raised.

SUBTASK 05-41-06-210-027

(1) Do a General Visual inspection of the inboard spoiler no. 7 - right wing.

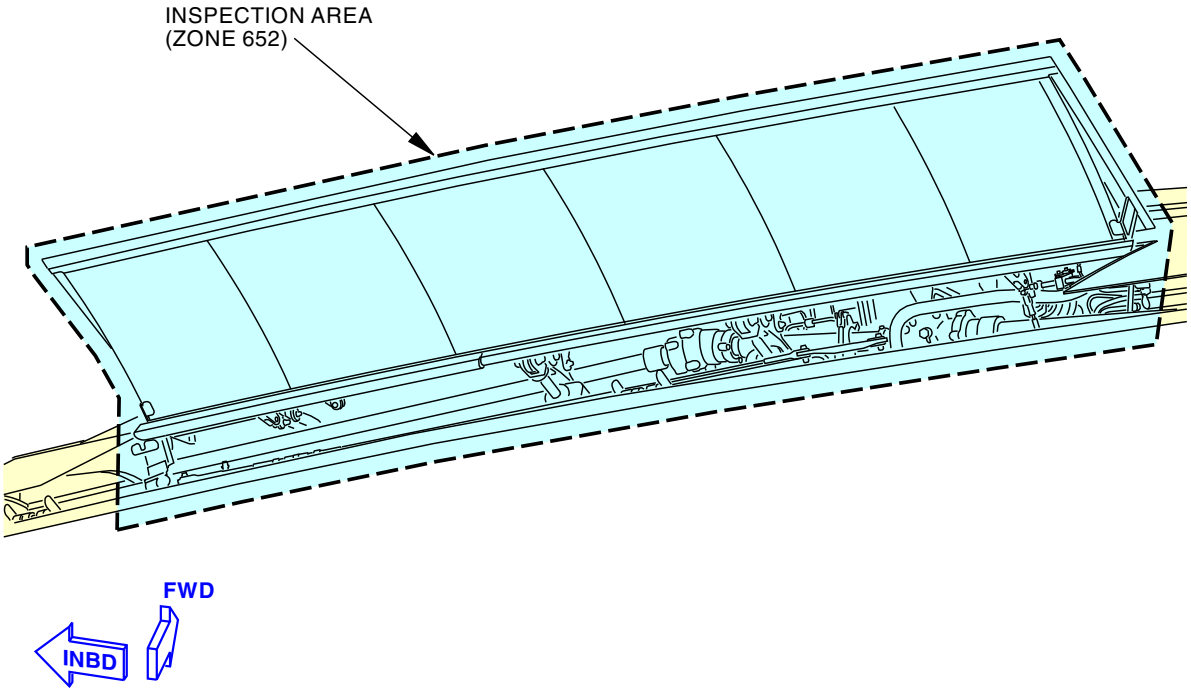
——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Inboard Spoiler No. 7 General Visual (External)
Figure 228/05-41-06-990-827 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



2410286 S00061525254_V1

Inboard Spoiler No. 7 General Visual (External)
Figure 228/05-41-06-990-827 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-06-210-828

29. EXTERNAL - ZONAL (GV): INBOARD FLAPS - RIGHT WING

(Figure 229)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
653	Right Wing - Inboard Flap

B. Zonal Inspection

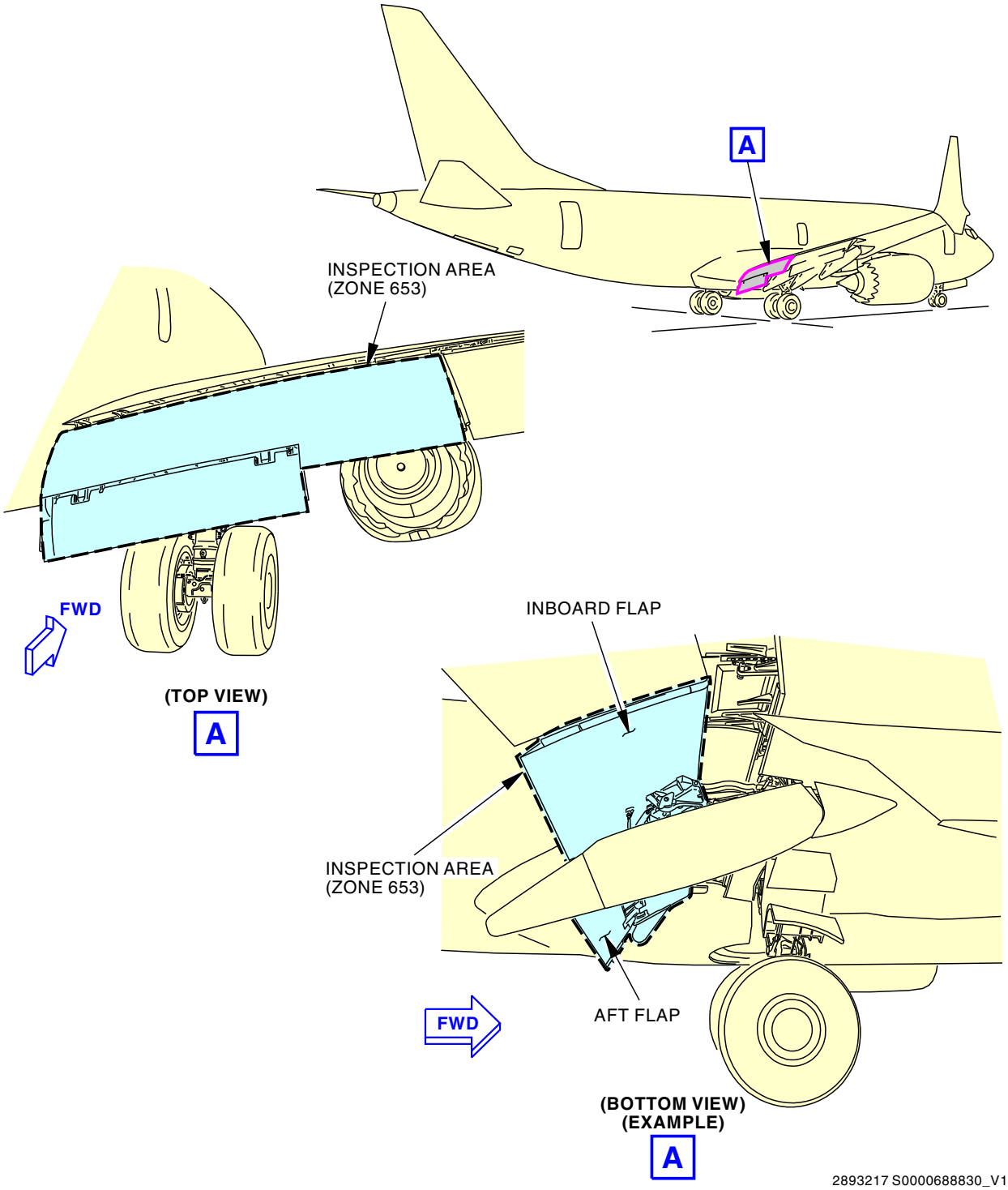
NOTE: Flaps extended.

SUBTASK 05-41-06-210-028

(1) Do a General Visual inspection of the inboard flaps - right wing.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Inboard Trailing Edge Flaps - Right Wing General Visual (External)
Figure 229/05-41-06-990-828

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-06-210-829

30. INTERNAL - ZONAL (GV): INBOARD MAIN FLAP - RIGHT WING

(Figure 230)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
653	Right Wing - Inboard Flap

B. Access Panels

Number	Name/Location
653BB	Inboard Flap - Lower Skin

C. Zonal Inspection

SUBTASK 05-41-06-010-009

(1) Open this access panel:

Number	Name/Location
653BB	Inboard Flap - Lower Skin

NOTE: Flaps extended.

SUBTASK 05-41-06-210-029

(2) Do a General Visual inspection of the inboard main flap - right wing.

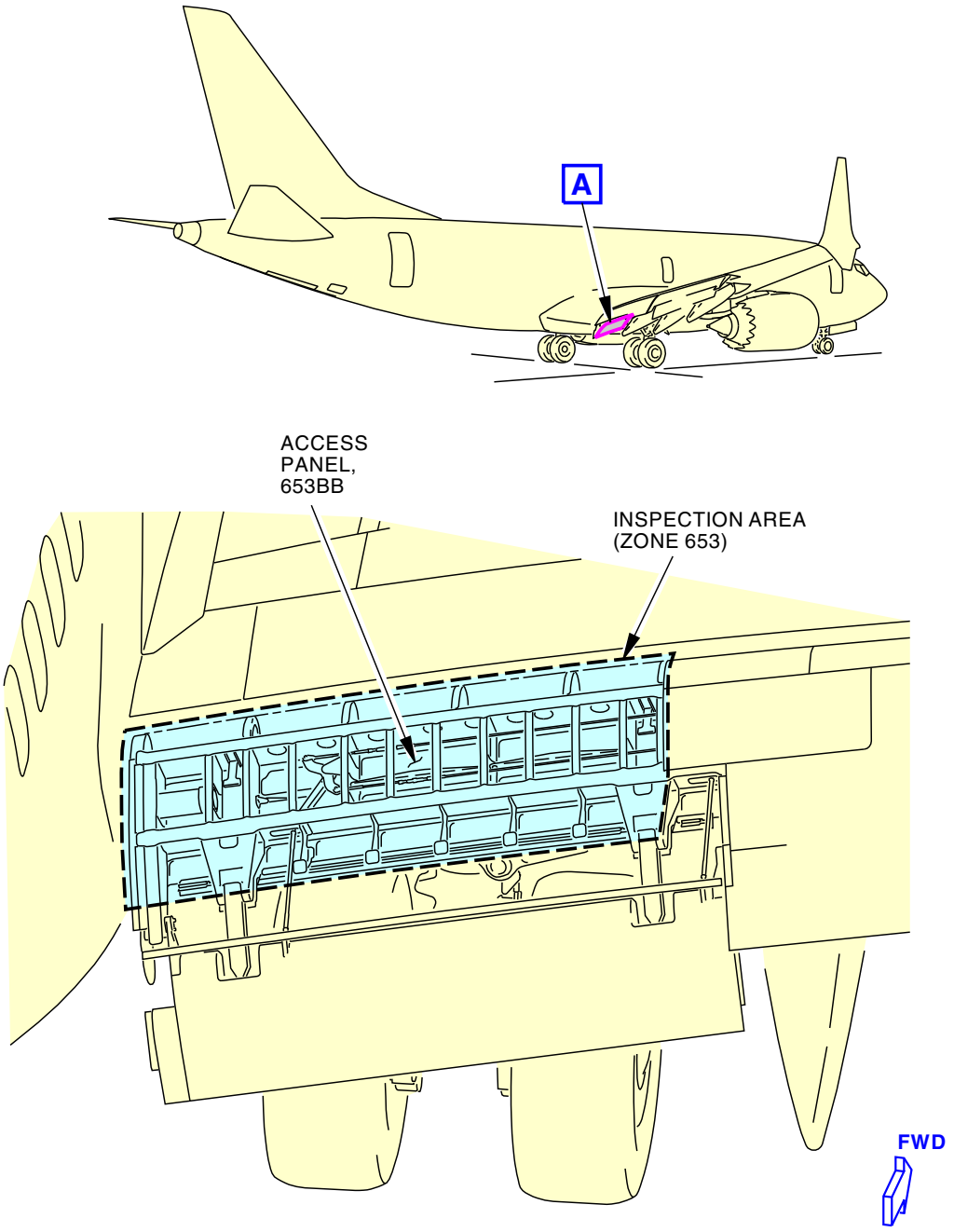
SUBTASK 05-41-06-410-009

(3) Close this access panel:

Number	Name/Location
653BB	Inboard Flap - Lower Skin

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Inboard Trailing Edge Main Flap - Right Wing General Visual (Internal)
Figure 230/05-41-06-990-829

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-41-06-210-830

31. EXTERNAL - ZONAL (GV): Rear Spar to T.E. - Outbd of Inbd Flap - Inbd of Fixed T.E. -Right Wing

(Figure 231)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This Zonal inspection procedure satisfies the required EZAP-derived Zonal inspection requirement for this zone.

B. References

Reference	Title
05-00-00-910-802	Enhanced Zonal Inspection Program (EZAP) Precautions (P/B 201)
20-60-07-910-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
661	Right Wing - Rear Spar to Trailing Edge, Outboard of Inboard Flap, Inboard of Fixed Trailing Edge

D. Zonal Inspection

NOTE: Flaps down, spoilers raised.

SUBTASK 05-41-06-210-030

(1) Do the zonal inspection following the procedures in Enhanced Zonal Inspection Program (EZAP) Precautions, TASK 05-00-00-910-802.

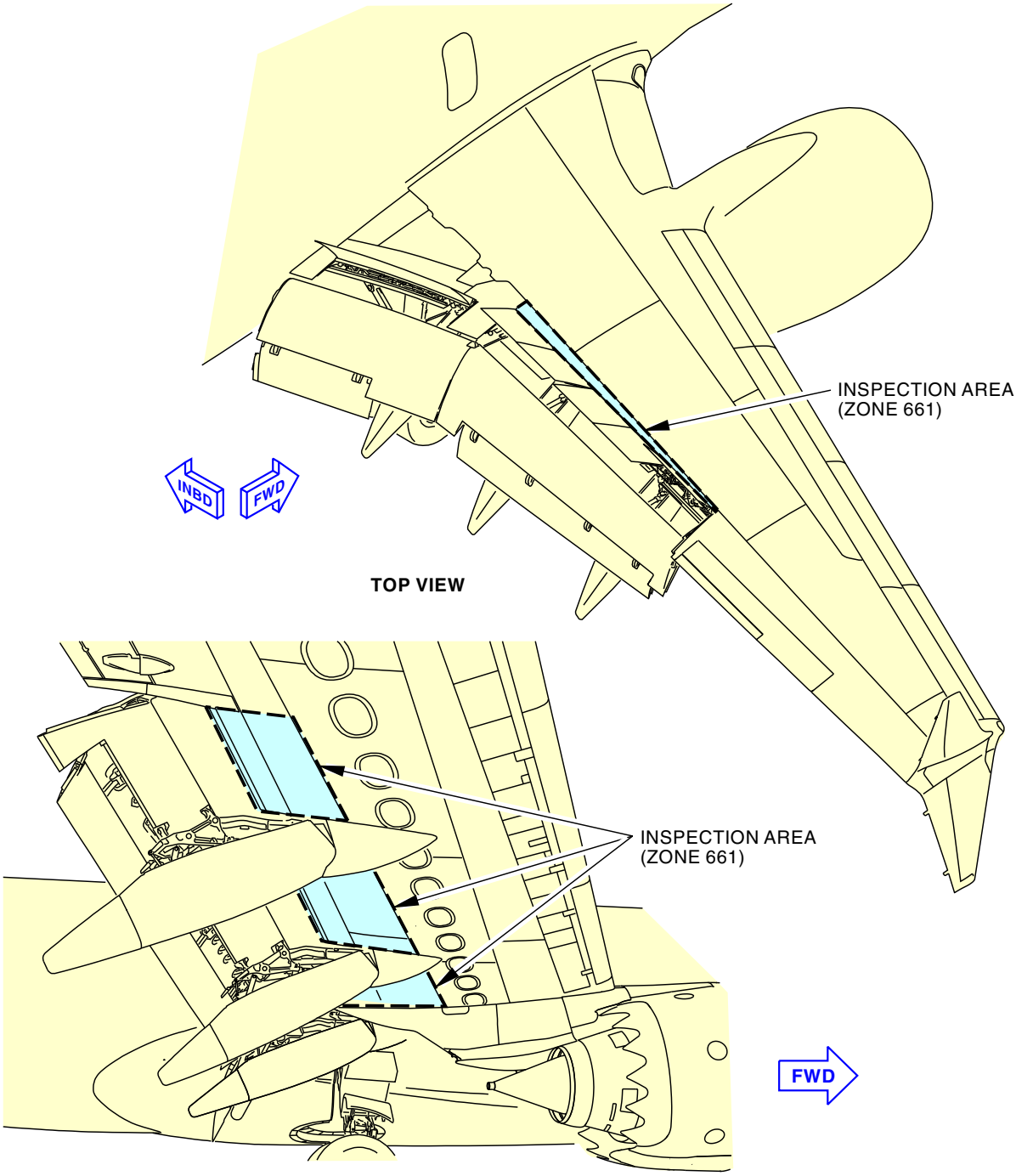
(2) Perform an external zonal inspection (GV) of the rear spar to trailing edge - outboard of inboard flap - inboard of fixed trailing edge - right wing. (EZAP)

SUBTASK 05-41-06-910-007

(3) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-910-801 for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Rear Spar to Trailing Edge (Outboard of Inboard Flap and Inboard of Fixed Trailing Edge) - Right Wing
Figure 231/05-41-06-990-830

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-06-210-831

32. EXTERNAL - ZONAL (GV): SPOILERS NO. 8, 9, 10, 11, 12 - RIGHT WING

(Figure 232)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
662	Right Wing - Spoiler No. 8
663	Right Wing - Spoiler No. 9
664	Right Wing - Spoiler No. 10
665	Right Wing - Spoiler No. 11
666	Right Wing - Spoiler No. 12

B. Zonal Inspection

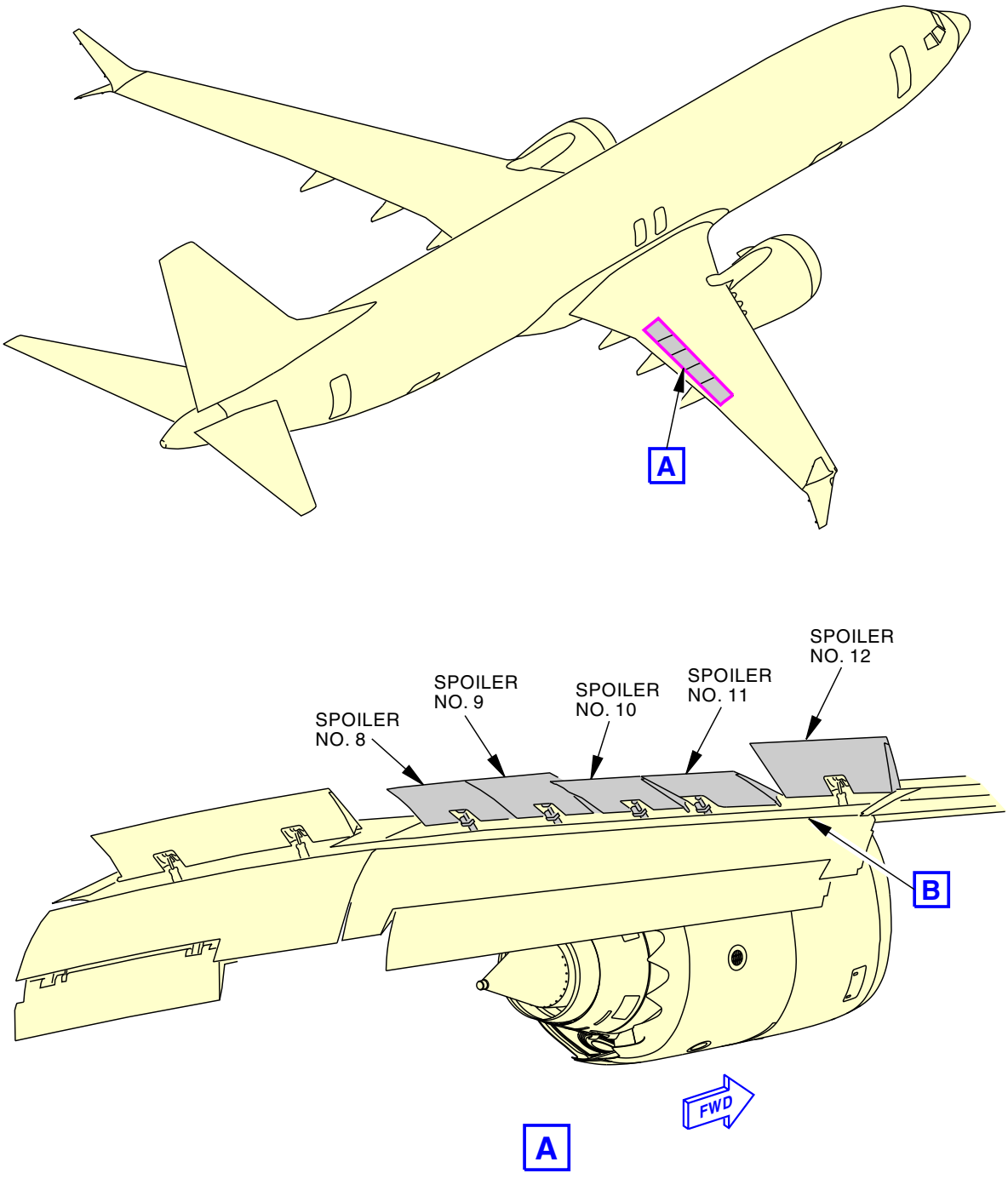
NOTE: Spoilers Raised

SUBTASK 05-41-06-210-031

(1) Do a General Visual inspection of spoilers no. 8, 9, 10, 11, 12 - right wing.

——— END OF TASK ———

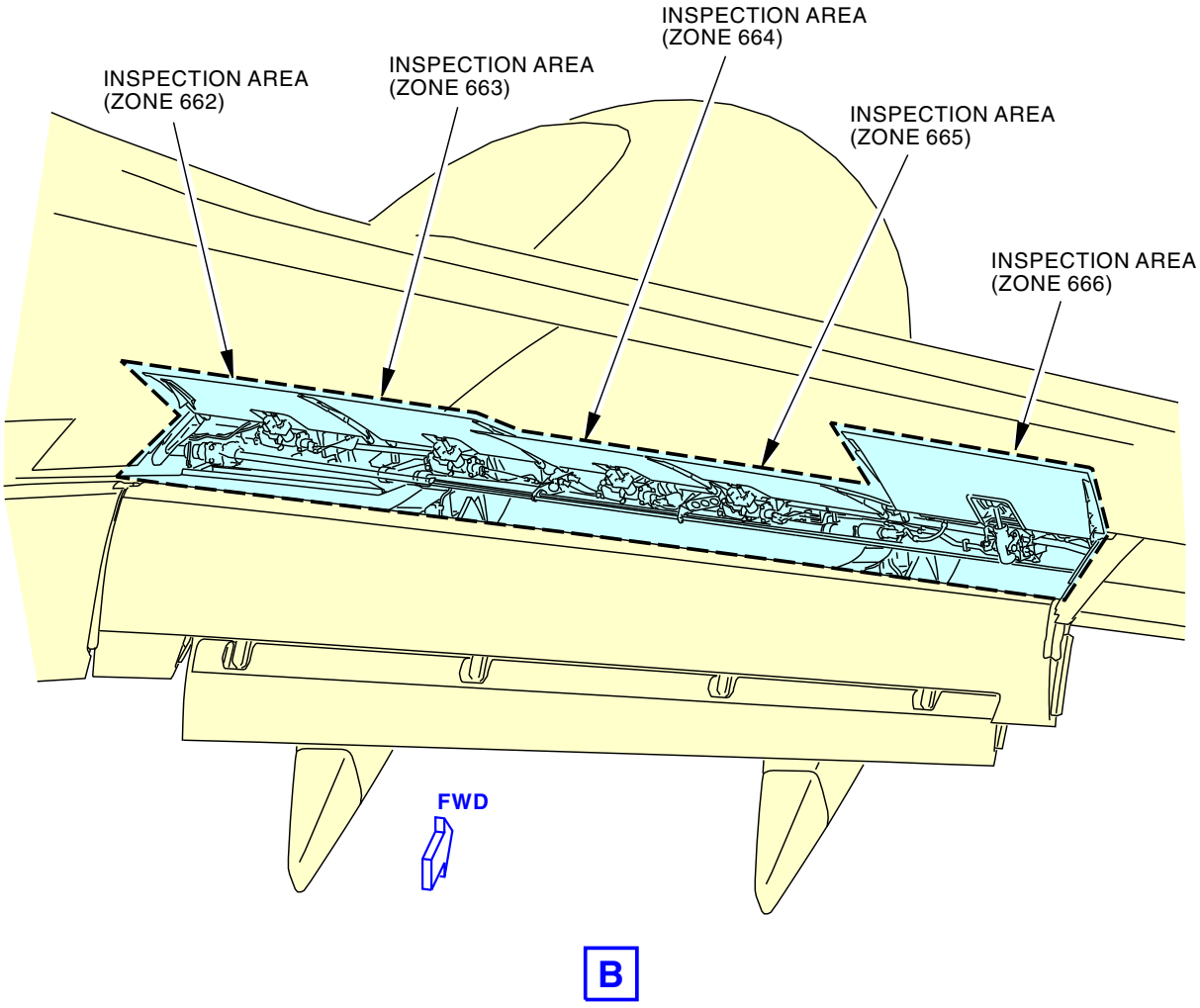
ECCN 9E991 BOEING PROPRIETARY - See title page for details



2410290 S00061525262_V2

Outboard Spoiler No. 8 through 12 General Visual (External)
Figure 232/05-41-06-990-831 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



2410291 S00061525263_V1

Outboard Spoiler No. 8 through 12 General Visual (External)
Figure 232/05-41-06-990-831 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-06-210-832

33. EXTERNAL - ZONAL (GV): OUTBOARD FLAPS - RIGHT WING

(Figure 233)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
667	Right Wing - Outboard Flap

B. Zonal Inspection

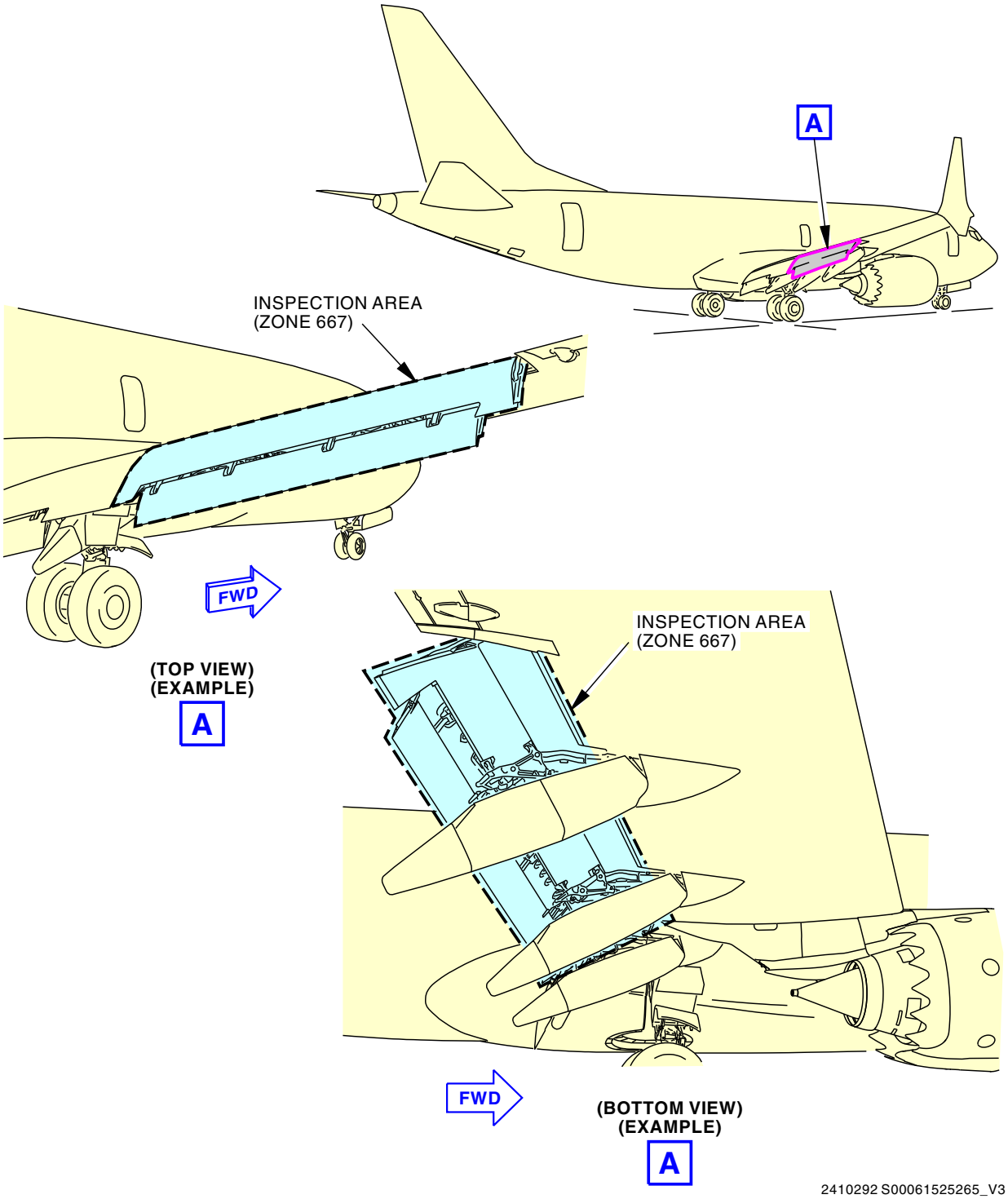
NOTE: Flaps extended.

SUBTASK 05-41-06-210-032

(1) Do a General Visual inspection of the outboard flaps - right wing.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Outboard Flap - Right Wing General Visual (External)
Figure 233/05-41-06-990-832

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-06-210-833

34. EXTERNAL - ZONAL (GV): FIXED TRAILING EDGE - RIGHT WING

(Figure 234)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
671	Right Wing - Fixed Trailing Edge

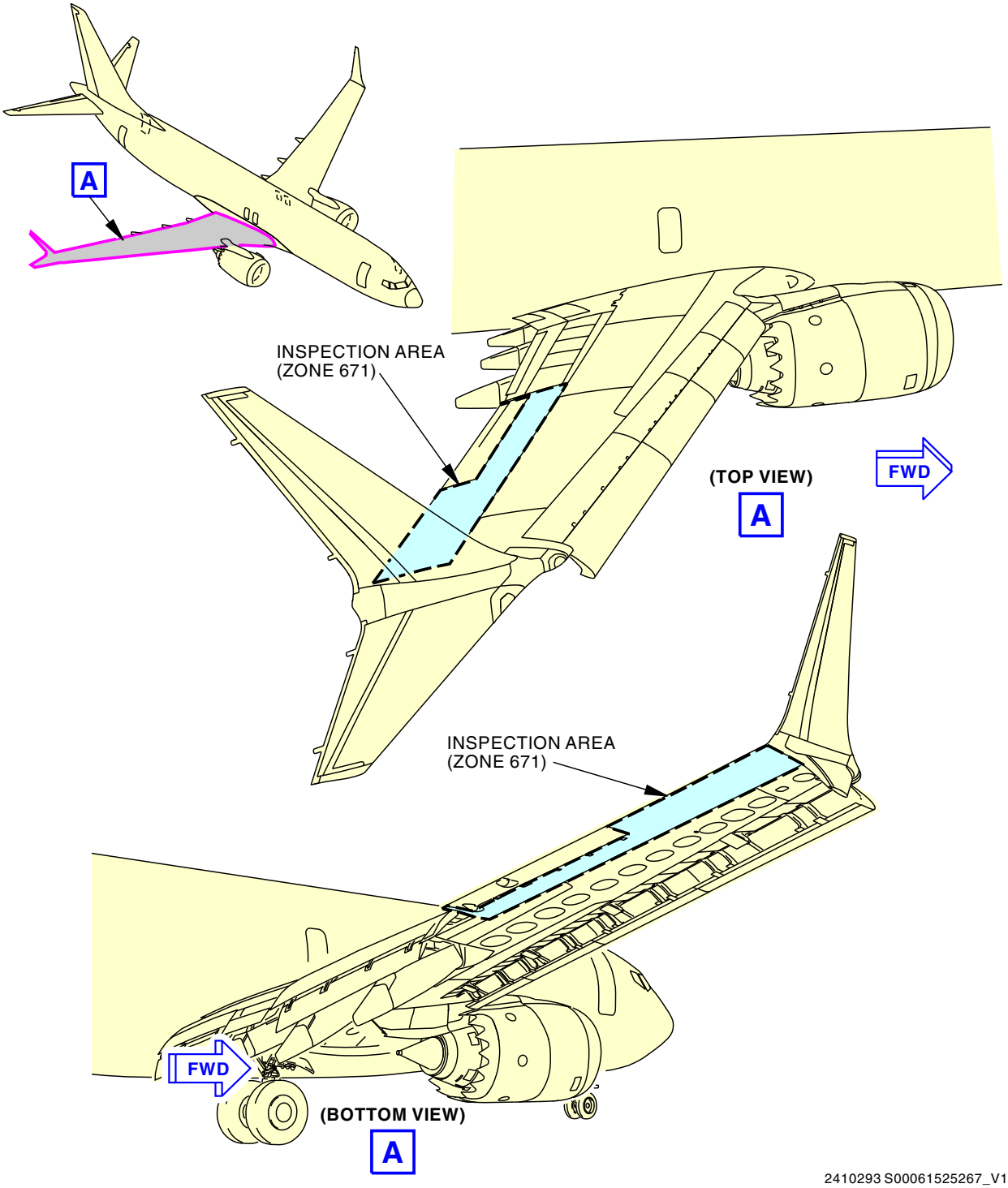
B. Zonal Inspection

SUBTASK 05-41-06-210-033

(1) Do a General Visual inspection of the fixed trailing edge - right wing.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Fixed Trailing Edge - Right Wing General Visual (External)
Figure 234/05-41-06-990-833

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-06-210-834

35. INTERNAL - ZONAL (GV): FIXED TRAILING EDGE - RIGHT WING

(Figure 235)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
671	Right Wing - Fixed Trailing Edge

B. Access Panels

Number	Name/Location
671AB	Lower Outboard Fixed Trailing Edge Access Panel
671AT	Upper Outboard Fixed Trailing Edge, Quadrant Bolt Access Panel
671BB	Lower Outboard Fixed Trailing Edge Access Panel
671BT	Upper Outboard Fixed Trailing Edge, Pulley Bolt Access Panel
671CB	Lower Outboard Fixed Trailing Edge Access Panel
671DB	Lower Outboard Fixed Trailing Edge Access Panel
671EB	Lower Outboard Fixed Trailing Edge, Wedge Access Panel
671FB	Lower Outboard Fixed Trailing Edge, Wedge Access Panel

C. Zonal Inspection

SUBTASK 05-41-06-010-010

(1) Open these access panels:

Number	Name/Location
671AB	Lower Outboard Fixed Trailing Edge Access Panel
671AT	Upper Outboard Fixed Trailing Edge, Quadrant Bolt Access Panel
671BB	Lower Outboard Fixed Trailing Edge Access Panel
671BT	Upper Outboard Fixed Trailing Edge, Pulley Bolt Access Panel
671CB	Lower Outboard Fixed Trailing Edge Access Panel
671DB	Lower Outboard Fixed Trailing Edge Access Panel
671EB	Lower Outboard Fixed Trailing Edge, Wedge Access Panel
671FB	Lower Outboard Fixed Trailing Edge, Wedge Access Panel

SUBTASK 05-41-06-210-034

(2) Do a General Visual inspection of the fixed trailing edge - right wing.

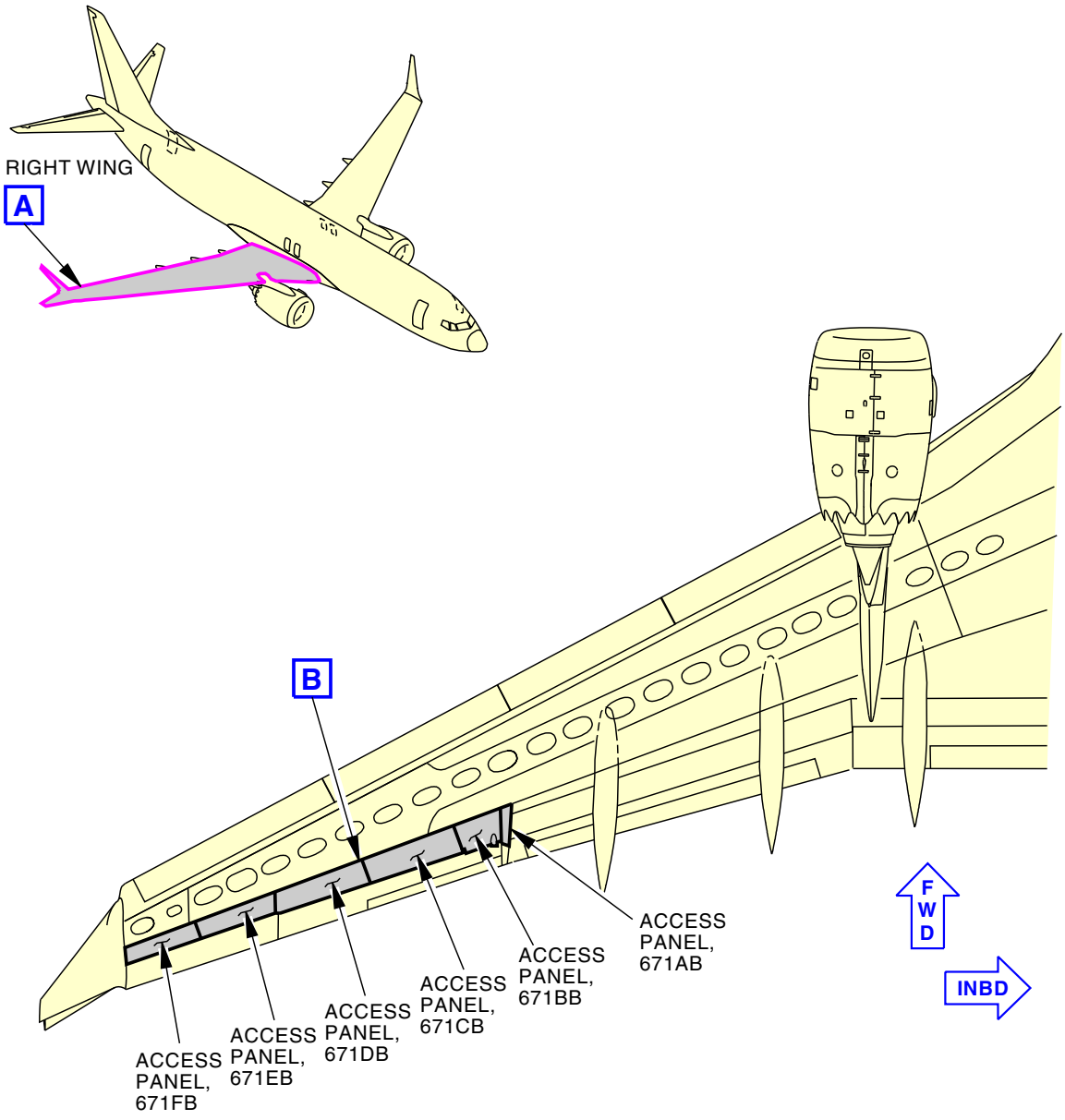
SUBTASK 05-41-06-410-010

(3) Close these access panels:

Number	Name/Location
671AB	Lower Outboard Fixed Trailing Edge Access Panel
671AT	Upper Outboard Fixed Trailing Edge, Quadrant Bolt Access Panel
671BB	Lower Outboard Fixed Trailing Edge Access Panel
671BT	Upper Outboard Fixed Trailing Edge, Pulley Bolt Access Panel
671CB	Lower Outboard Fixed Trailing Edge Access Panel
671DB	Lower Outboard Fixed Trailing Edge Access Panel
671EB	Lower Outboard Fixed Trailing Edge, Wedge Access Panel
671FB	Lower Outboard Fixed Trailing Edge, Wedge Access Panel

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details



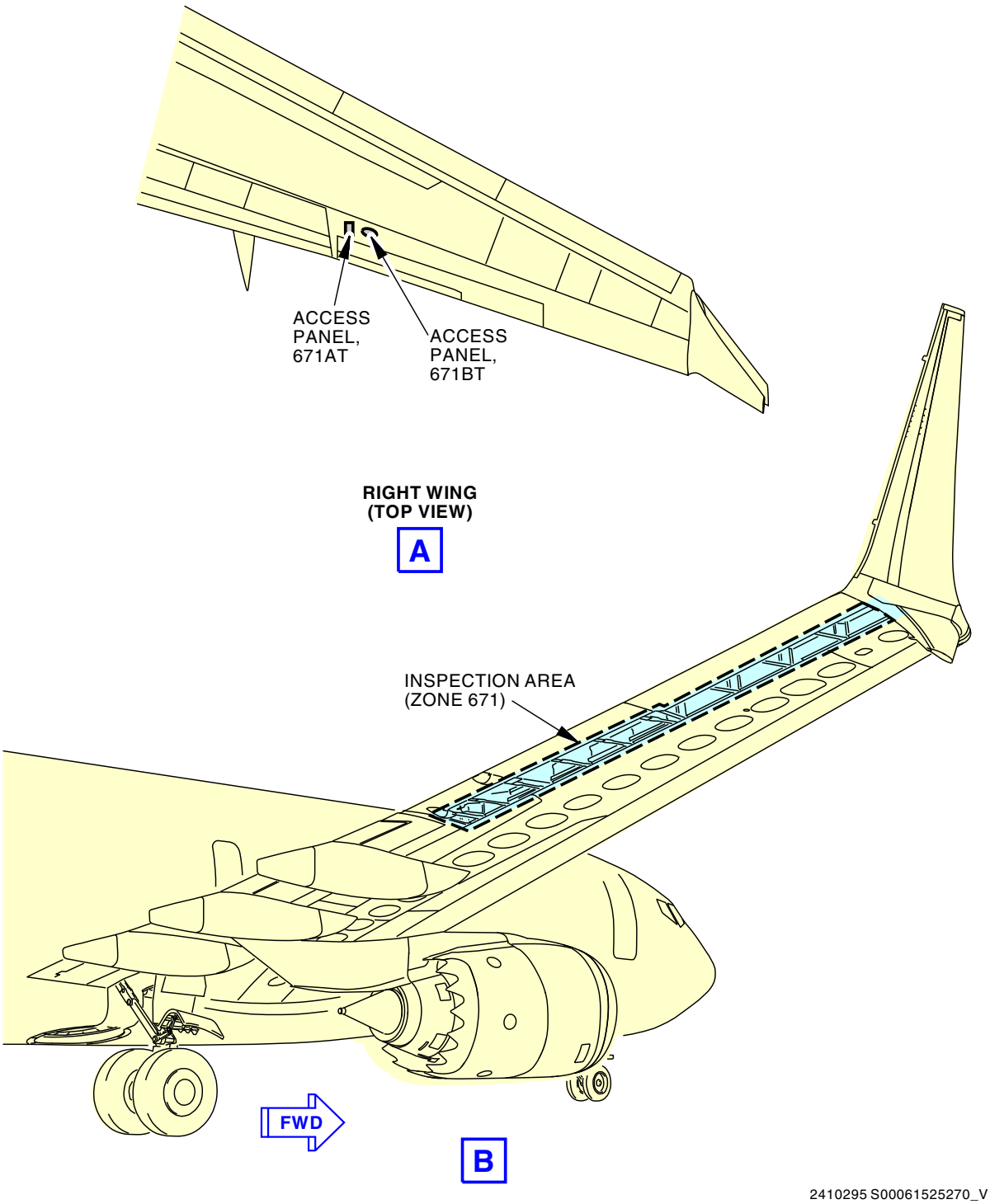
RIGHT WING
(BOTTOM VIEW)

A

2410294 S00061525269_V2

Fixed Trailing Edge - Right Wing General Visual (Internal)
Figure 235/05-41-06-990-834 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Fixed Trailing Edge - Right Wing General Visual (Internal)
Figure 235/05-41-06-990-834 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-41-06-210-835

36. INTERNAL - ZONAL (GV): Fixed Trailing Edge - Right Wing

(Figure 236)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This Zonal inspection procedure satisfies the required EZAP-derived Zonal inspection requirement for this zone.

B. References

Reference	Title
05-00-00-910-802	Enhanced Zonal Inspection Program (EZAP) Precautions (P/B 201)
20-60-07-910-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
671	Right Wing - Fixed Trailing Edge

D. Access Panels

Number	Name/Location
671AB	Lower Outboard Fixed Trailing Edge Access Panel
671BB	Lower Outboard Fixed Trailing Edge Access Panel

E. Zonal Inspection

SUBTASK 05-41-06-010-011

(1) Open these access panels:

Number	Name/Location
671AB	Lower Outboard Fixed Trailing Edge Access Panel
671BB	Lower Outboard Fixed Trailing Edge Access Panel

NOTE: Aileron control area only.

SUBTASK 05-41-06-210-035

(2) Do the zonal inspection following the procedures in Enhanced Zonal Inspection Program (EZAP) Precautions, TASK 05-00-00-910-802.

(3) Perform an internal zonal inspection (GV) of the fixed trailing edge - right wing. (EZAP)

SUBTASK 05-41-06-910-008

(4) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-910-801 for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

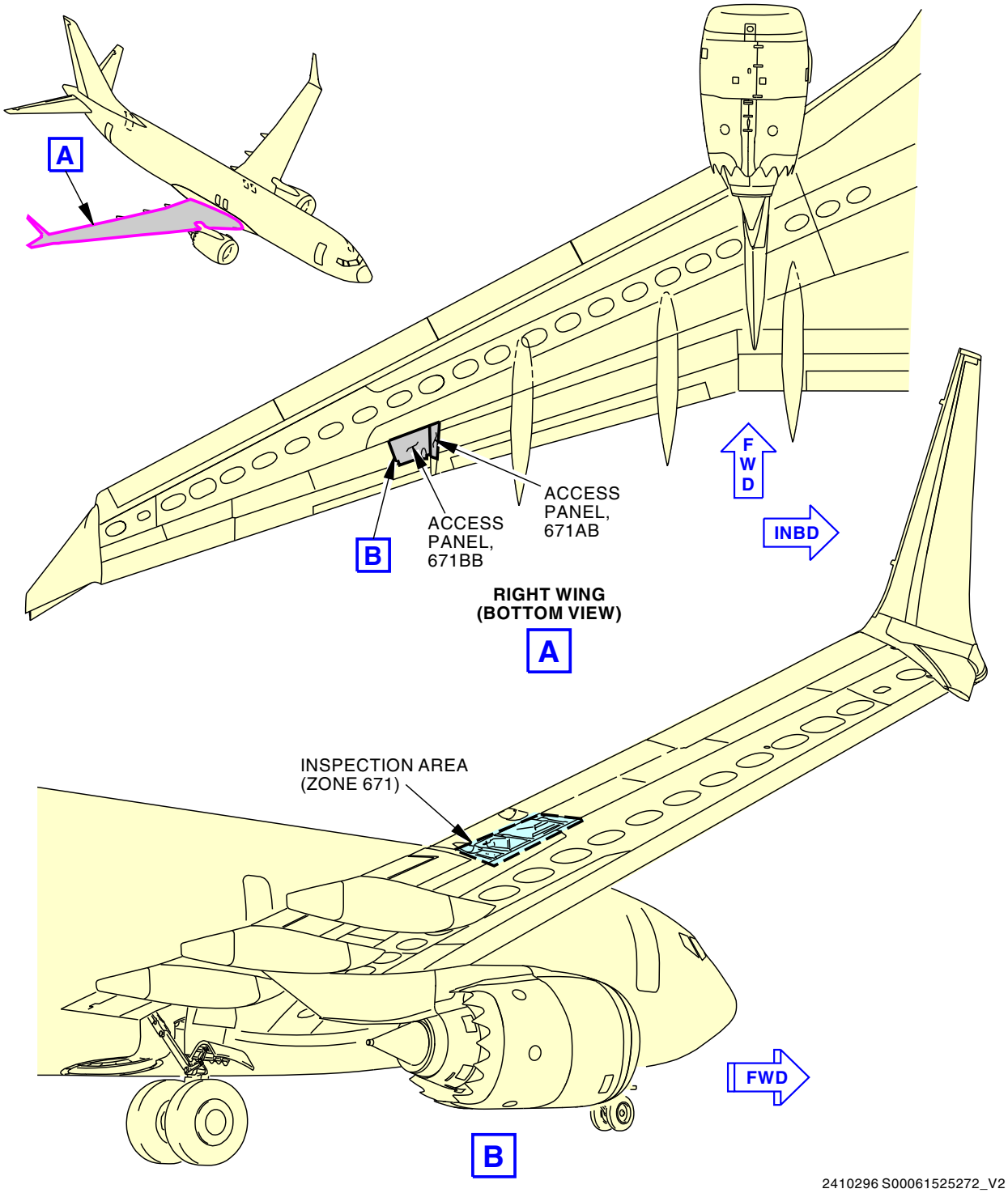
SUBTASK 05-41-06-410-011

(5) Close these access panels:

Number	Name/Location
671AB	Lower Outboard Fixed Trailing Edge Access Panel
671BB	Lower Outboard Fixed Trailing Edge Access Panel

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Fixed Trailing Edge - Right Wing General Visual (Internal)
Figure 236/05-41-06-990-835

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-06-210-836

37. EXTERNAL - ZONAL (GV): AILERON - RIGHT WING

(Figure 237)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
672	Right Wing - Aileron

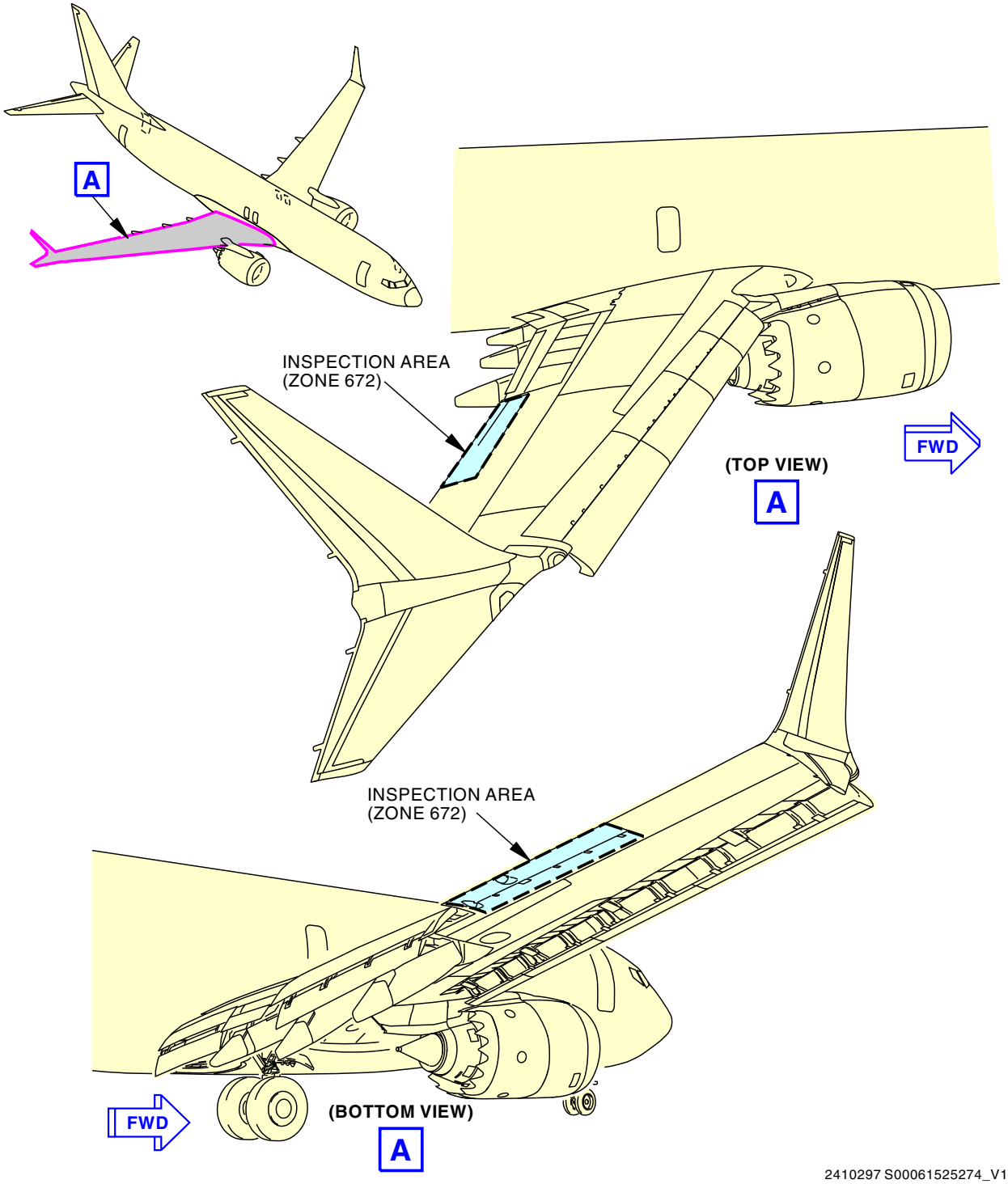
B. Zonal Inspection

SUBTASK 05-41-06-210-036

(1) Do a General Visual inspection of the aileron - right wing.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Aileron - Right Wing General Visual (External)
Figure 237/05-41-06-990-836

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-07-210-801

1. EXTERNAL - ZONAL (GVI): Nose Landing Gear and Landing Gear Doors (from Ground)
(Figure 201)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
710	Subzone - Landing Gear: Nose Landing Gear and Landing Gear Doors

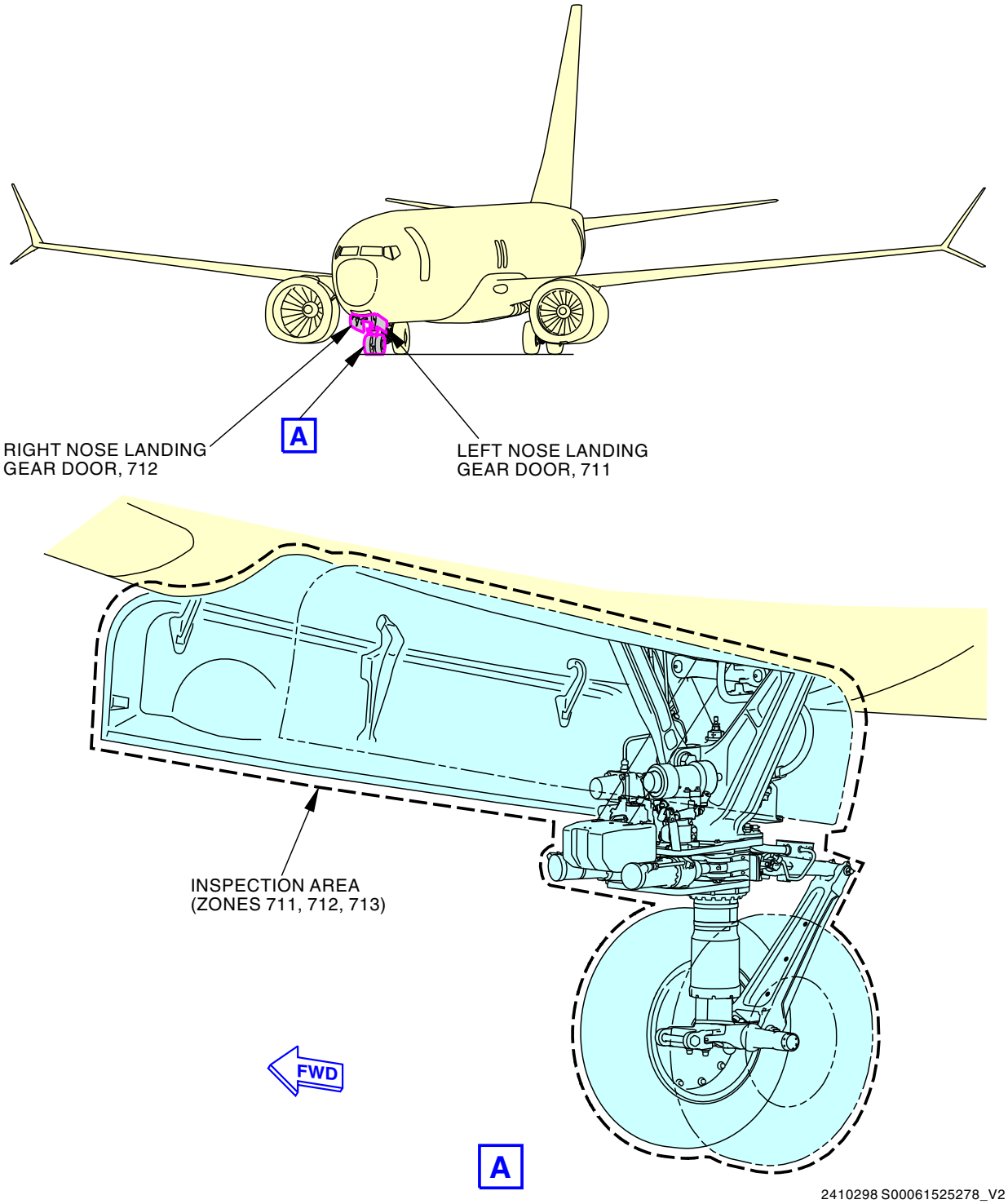
B. Zonal Inspection

SUBTASK 05-41-07-210-001

(1) Perform an external zonal inspection (GVI) of the nose landing gear and landing gear doors. Inspection is accomplished from the ground, without the use of stands or ladders.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Nose Landing Gear and Landing Gear Doors General Visual (External)
Figure 201/05-41-07-990-801

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-41-07-210-806

2. EXTERNAL - ZONAL (GVI): Nose Landing Gear and Landing Gear Doors

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This Zonal inspection procedure satisfies the required EZAP - derived Zonal inspection requirement for this zone.

B. References

Reference	Title
05-00-00-910-802	Enhanced Zonal Inspection Program (EZAP) Precautions (P/B 201)
20-60-07-910-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
710	Subzone - Landing Gear: Nose Landing Gear and Landing Gear Doors

D. Zonal Inspection

SUBTASK 05-41-07-210-006

(1) Do the zonal inspection following the procedures in the task: Enhanced Zonal Inspection Program (EZAP) Precautions, TASK 05-00-00-910-802.

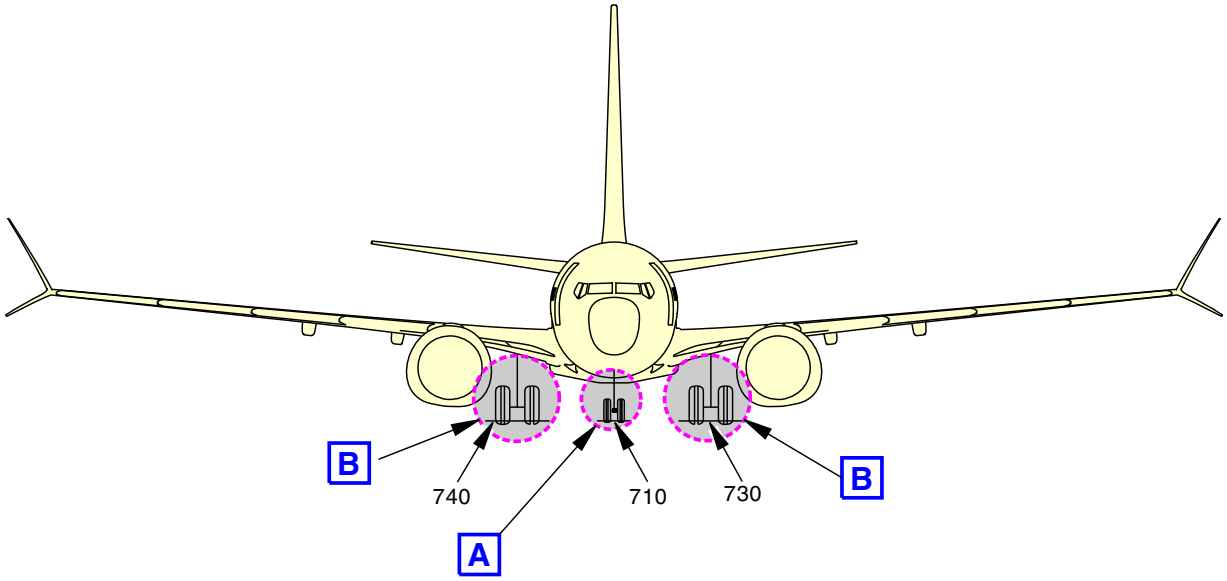
(2) Perform an external zonal inspection (GVI) of the nose landing gear and landing gear doors (EZAP).

SUBTASK 05-41-07-910-004

(3) Refer to the task: Protection of the EWIS During Maintenance, TASK 20-60-07-910-801, for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details



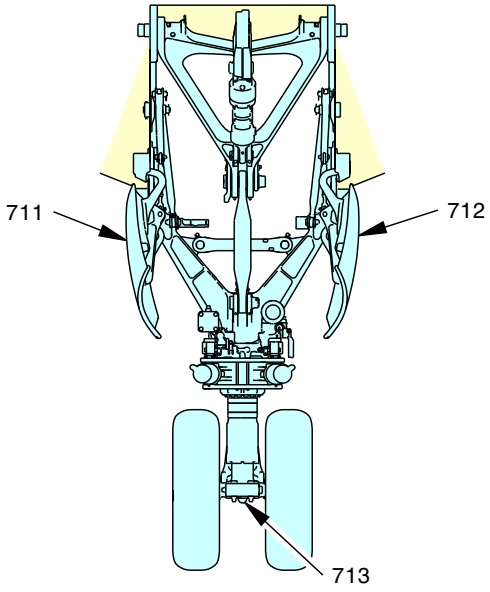
**NOSE AND MAIN LANDING GEAR
AND LANDING GEAR DOORS**

710 - NOSE LANDING GEAR AND LANDING GEAR DOORS
730 - LEFT MAIN LANDING GEAR AND LANDING GEAR DOORS
740 - RIGHT MAIN LANDING GEAR AND LANDING GEAR DOORS

2546046 S0000599253_V1

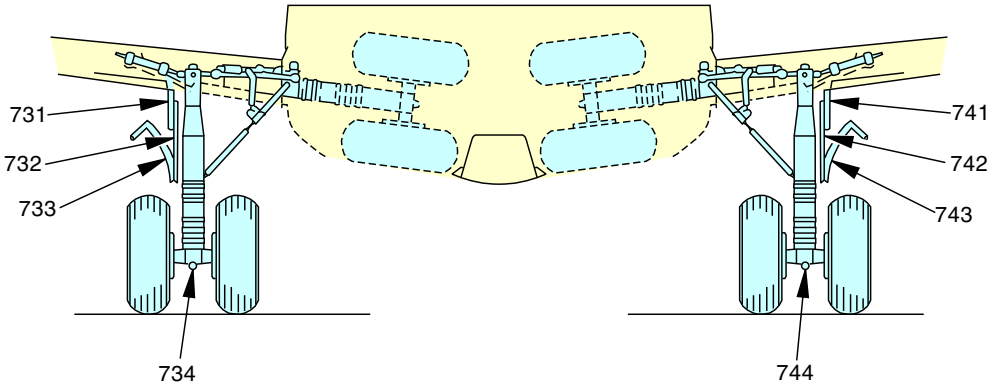
**Nose Landing Gear and Landing Gear Doors General Visual (External)
Figure 202/05-41-07-990-806 (Sheet 1 of 2)**

ECCN 9E991 BOEING PROPRIETARY - See title page for details



**NOSE LANDING GEAR
(VIEW IN THE AFT DIRECTION)**

A



**MAIN LANDING GEAR
(VIEW IN THE FORWARD DIRECTION)**

B

2546047 S0000599254_V2

**Nose Landing Gear and Landing Gear Doors General Visual (External)
Figure 202/05-41-07-990-806 (Sheet 2 of 2)**

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-07-210-802

3. EXTERNAL - ZONAL (GV): LEFT MAIN LANDING GEAR AND LANDING GEAR DOORS (FROM GROUND)

(Figure 203)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
730	Subzone - Left Main Landing Gear and Landing Gear Doors

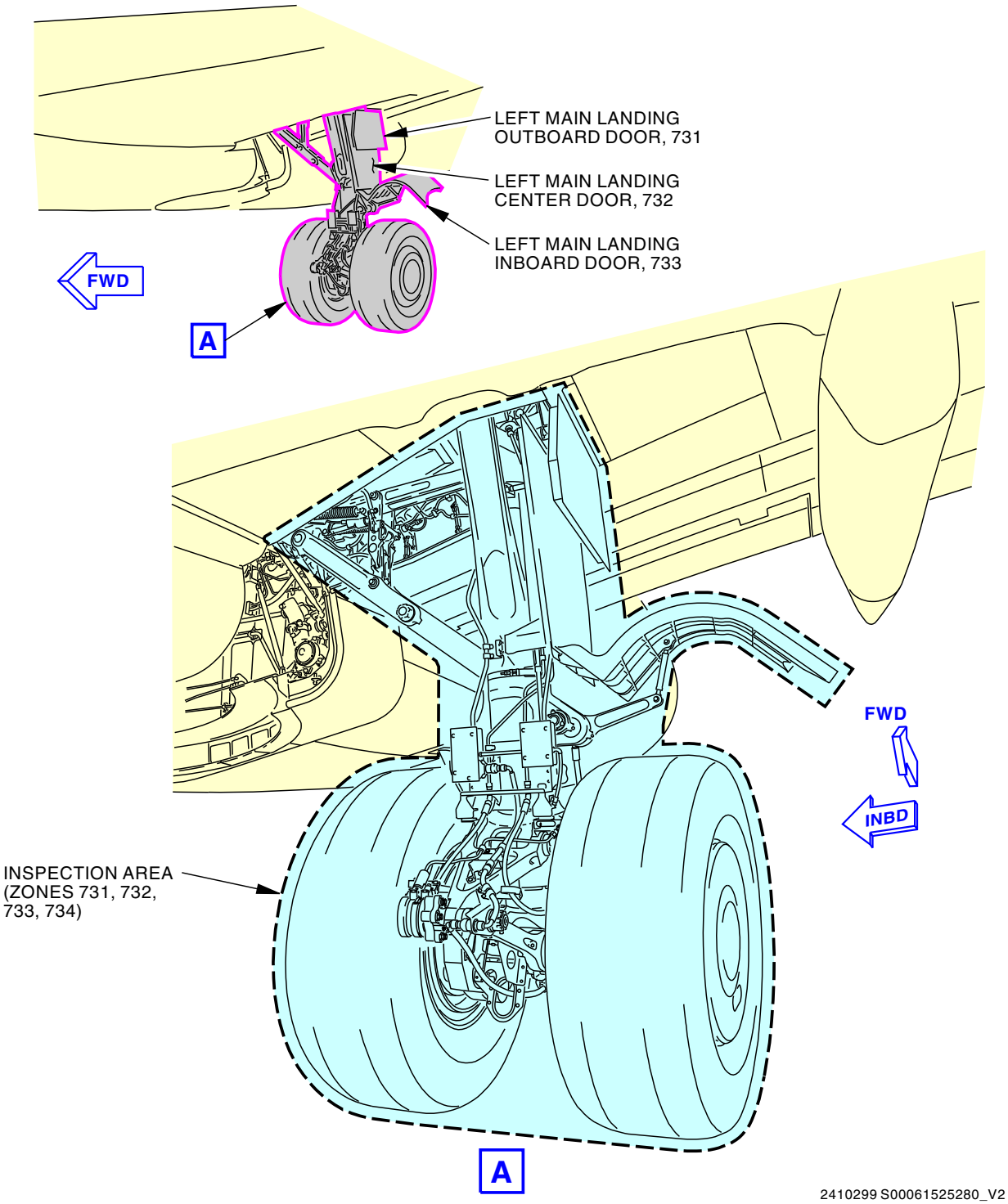
B. Zonal Inspection

SUBTASK 05-41-07-210-002

(1) Do a General Visual inspection of the left main landing gear and landing gear doors. Inspection is accomplished from the ground, without the use of stands or ladders.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Left Main Landing Gear and Landing Gear Doors General Visual (External)
Figure 203/05-41-07-990-802

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-41-07-210-803

4. EXTERNAL - ZONAL (GV): Left Main Landing Gear and Landing Gear Doors

(Figure 204)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This Zonal inspection procedure satisfies the required EZAP-derived Zonal inspection requirement for this zone.

B. References

Reference	Title
05-00-00-910-802	Enhanced Zonal Inspection Program (EZAP) Precautions (P/B 201)
20-60-07-910-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
730	Subzone - Left Main Landing Gear and Landing Gear Doors

D. Zonal Inspection

SUBTASK 05-41-07-210-003

(1) Do the zonal inspection following the procedures in task: Enhanced Zonal Inspection Program (EZAP) Precautions, TASK 05-00-00-910-802.

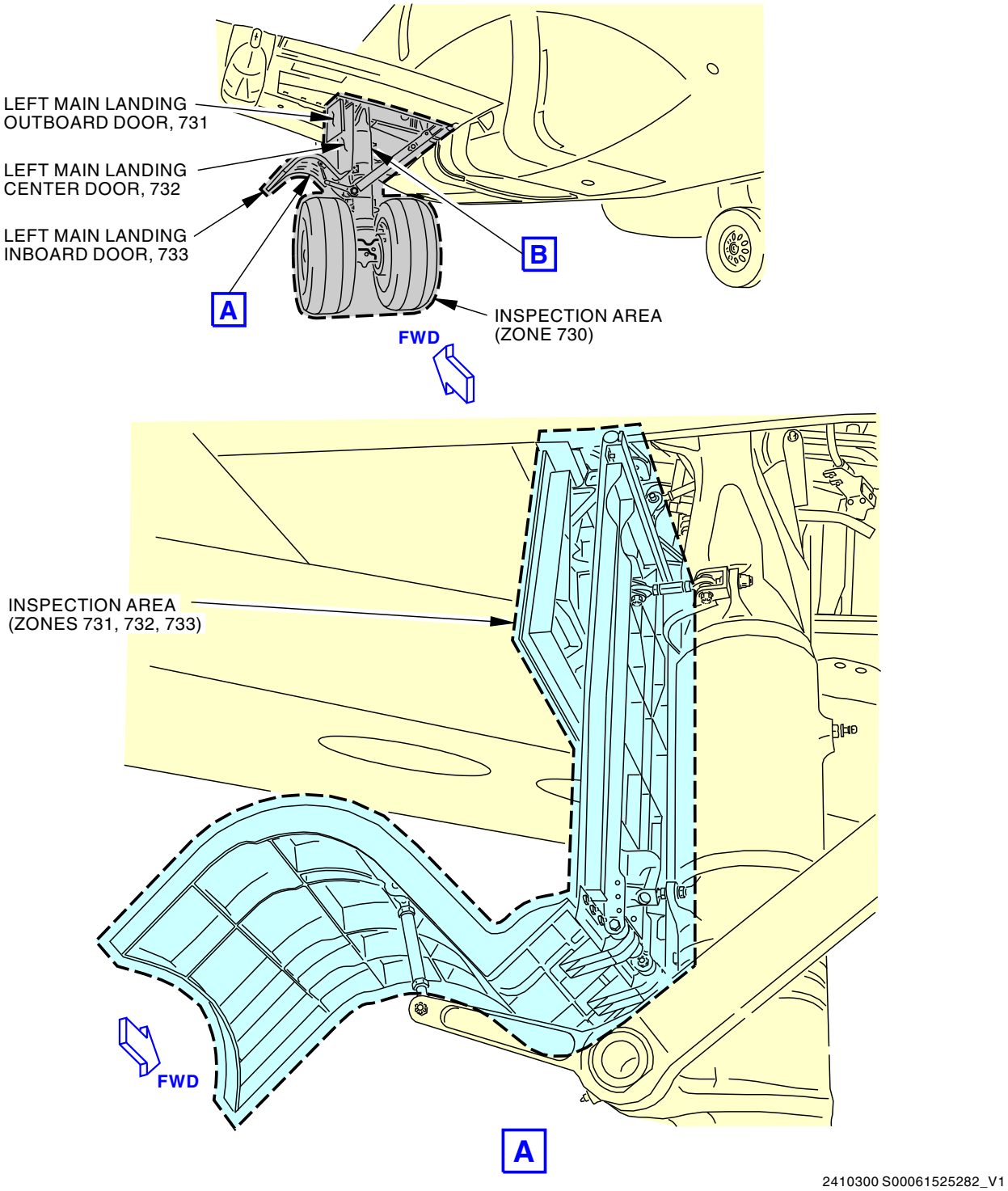
(2) Perform an external zonal inspection (GV) of the left main landing gear and landing gear doors (EZAP).

SUBTASK 05-41-07-910-002

(3) Refer to the task: Protection of the EWIS During Maintenance, TASK 20-60-07-910-801, for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

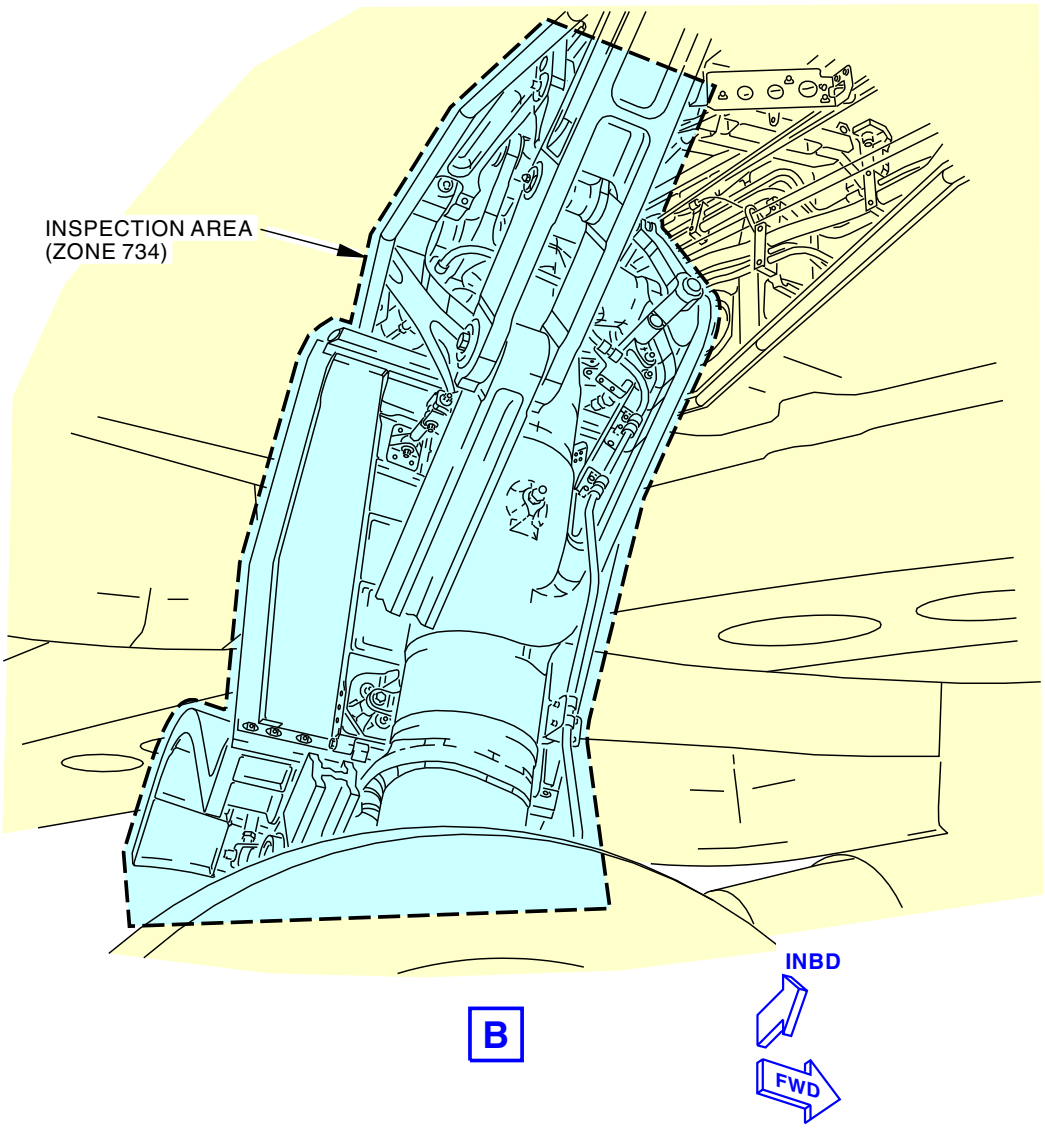
——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Landing Gear Doors - Left Main Landing Gear General Visual (External)
Figure 204/05-41-07-990-803 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



2410301 S00061525283_V1

Landing Gear Doors - Left Main Landing Gear General Visual (External)
Figure 204/05-41-07-990-803 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-07-210-804

5. EXTERNAL - ZONAL (GV): RIGHT MAIN LANDING GEAR AND LANDING GEAR DOORS (FROM GROUND)

(Figure 205)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
740	Subzone - Right Main Landing Gear and Landing Gear Doors

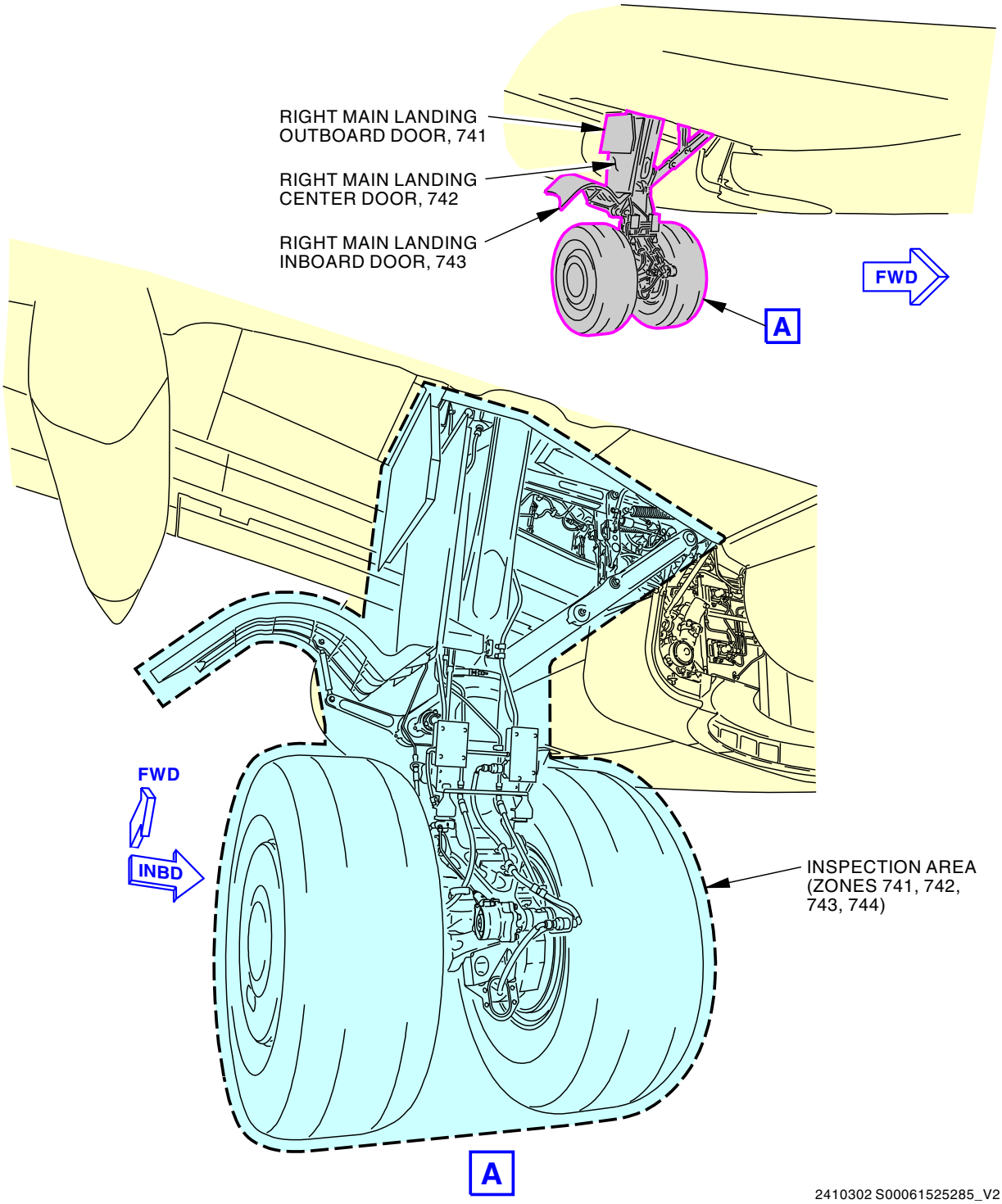
B. Zonal Inspection

SUBTASK 05-41-07-210-004

(1) Do a General Visual inspection of the right main landing gear and landing gear doors. Inspection is accomplished from the ground, without the use of stands or ladders.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Right Main Landing Gear and Landing Gear Doors General Visual (External)
Figure 205/05-41-07-990-804

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-41-07-210-805

6. EXTERNAL - ZONAL (GV): Right Main Landing Gear and Landing Gear Doors

(Figure 206)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This Zonal inspection procedure satisfies the required EZAP-derived Zonal inspection requirement for this zone.

B. References

Reference	Title
05-00-00-910-802	Enhanced Zonal Inspection Program (EZAP) Precautions (P/B 201)
20-60-07-910-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
740	Subzone - Right Main Landing Gear and Landing Gear Doors

D. Zonal Inspection

SUBTASK 05-41-07-210-005

(1) Do the zonal inspection following the procedures in task: Enhanced Zonal Inspection Program (EZAP) Precautions, TASK 05-00-00-910-802.

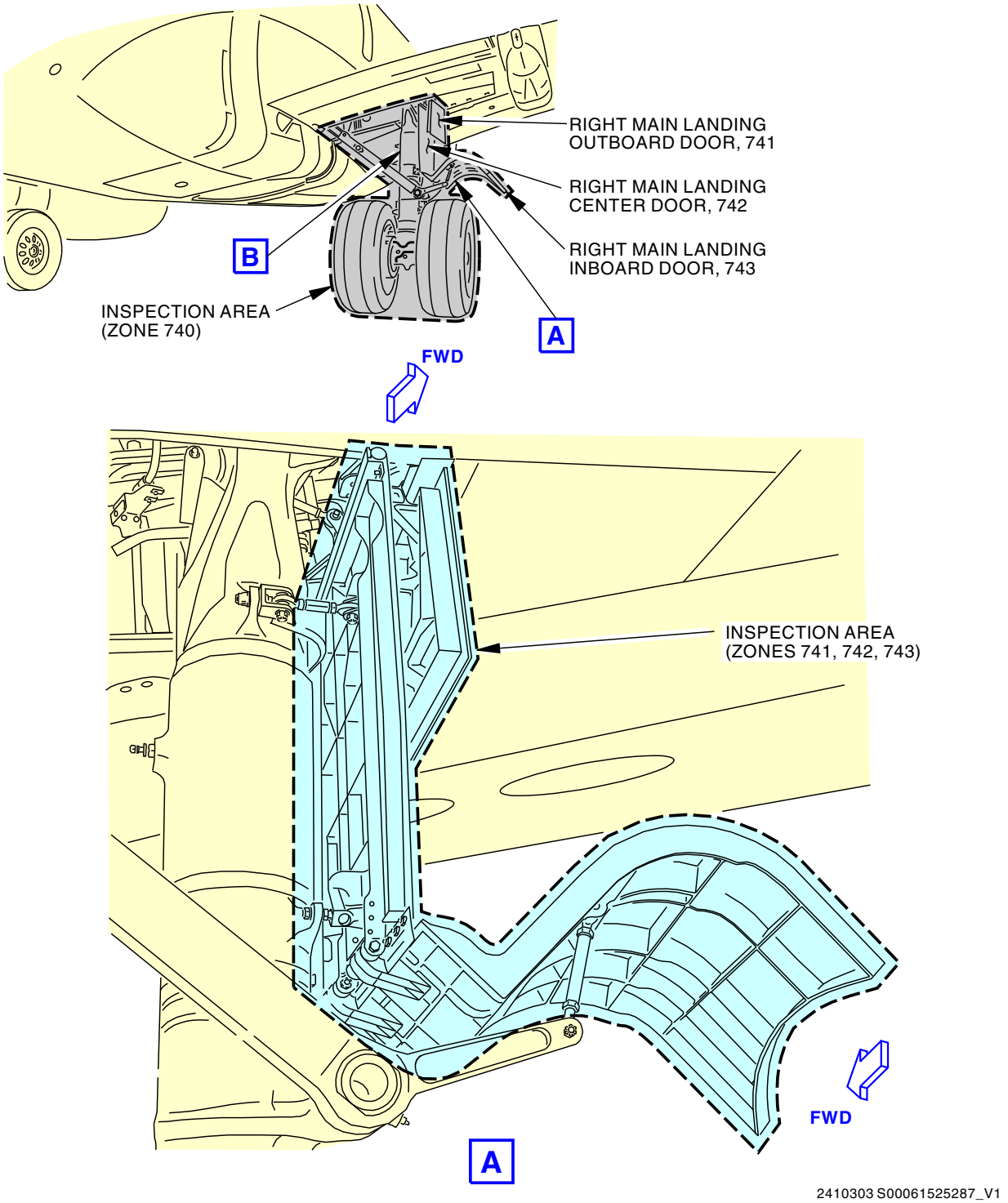
(2) Perform an external zonal inspection (GV) of the right main landing gear and landing gear doors (EZAP).

SUBTASK 05-41-07-910-003

(3) Refer to task: Protection of the EWIS During Maintenance, TASK 20-60-07-910-801, for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

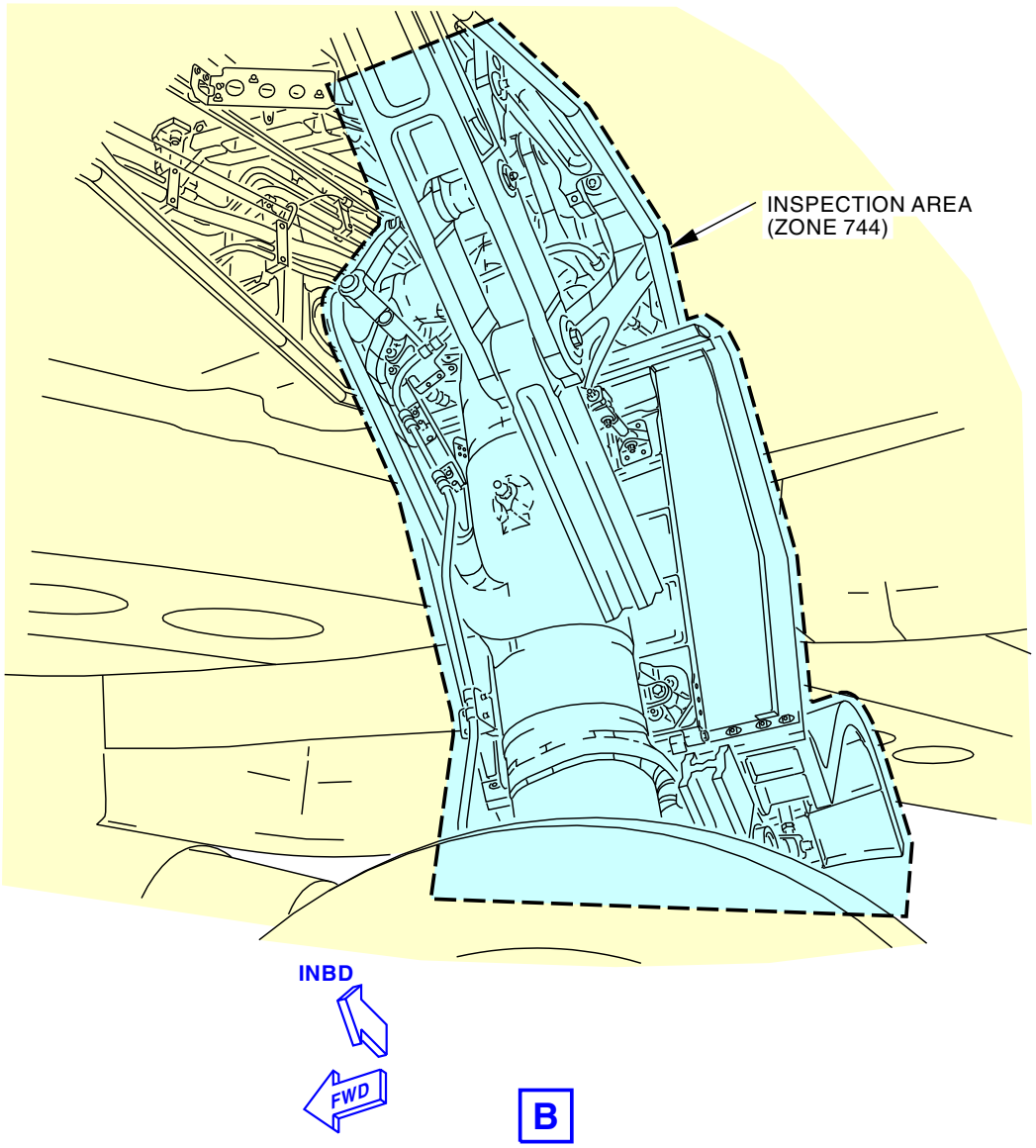
——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Landing Gear Doors - Right Main Landing Gear General Visual (External)
Figure 206/05-41-07-990-805 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



2410304 S00061525288_V1

Landing Gear Doors - Right Main Landing Gear General Visual (External)
Figure 206/05-41-07-990-805 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-08-210-801

1. EXTERNAL - ZONAL (GV): ENTRY DOORS, SERVICE DOORS, AUTOMATIC OVERWING EXITS, MID-EXIT DOORS, AND CARGO DOORS

(Figure 201)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
820	Doors - Lower Half of Fuselage - Right Side
830	Subzone - Passenger Compartment Doors, Left
840	Subzone - Passenger Compartment Doors, Right

B. Zonal Inspection

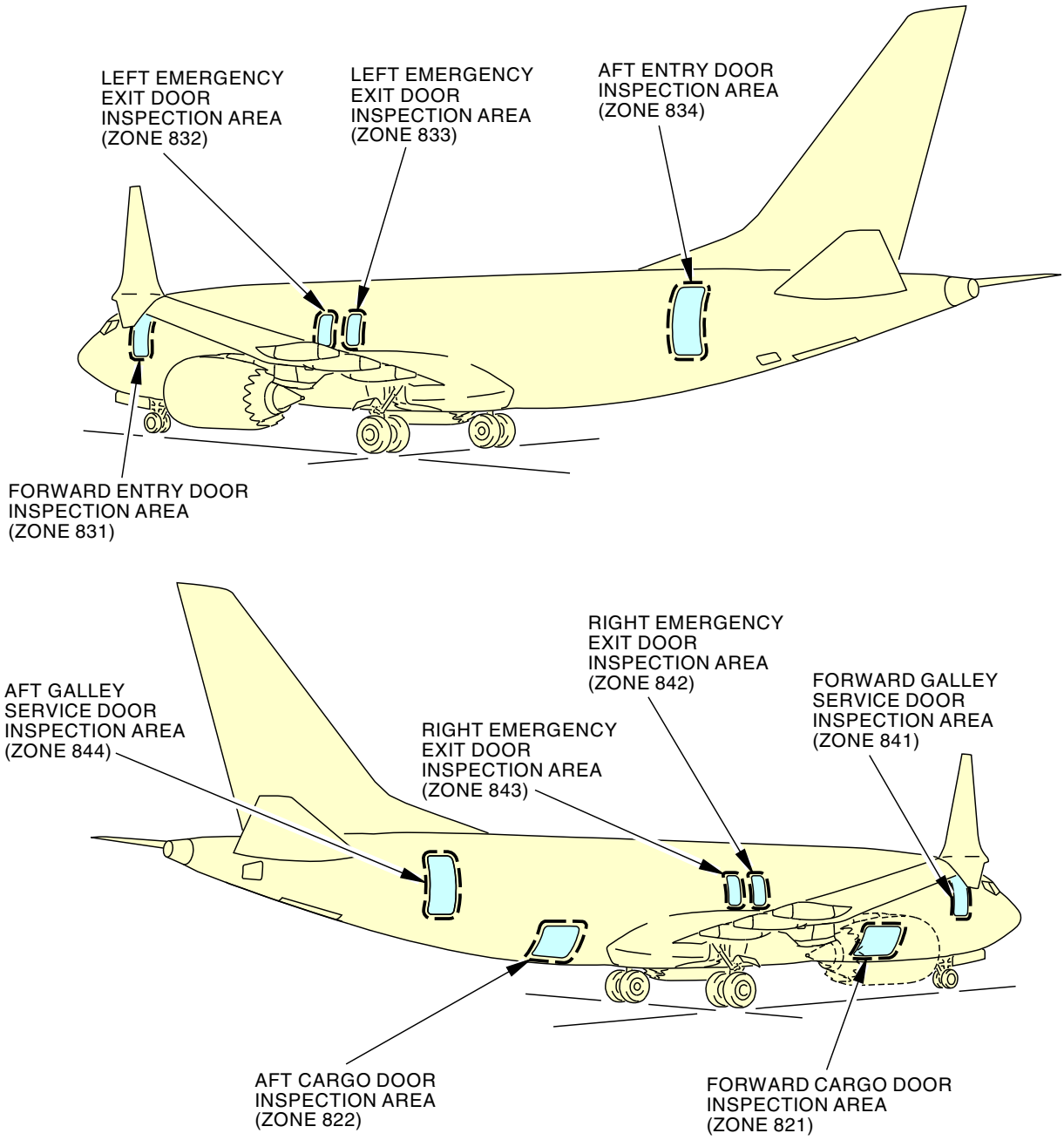
NOTE: Door closed.

SUBTASK 05-41-08-210-001

(1) Do a General Visual inspection of the doors. Inspection is accomplished from the ground, without the use of stands or ladders. No additional access panel is required.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



2410305 S00061525292_V3

Doors General Visual (External)
Figure 201/05-41-08-990-801

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-08-210-802

2. EXTERNAL - ZONAL (GV): FORWARD CARGO DOOR

(Figure 202)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
821	Forward Cargo Door

B. Access Panels

Number	Name/Location
821	Forward Cargo Door

C. Zonal Inspection

SUBTASK 05-41-08-010-001

(1) Open this access panel:

Number	Name/Location
821	Forward Cargo Door

SUBTASK 05-41-08-210-002

(2) Do a General Visual inspection of the forward cargo door - Section 43, Sta 460.

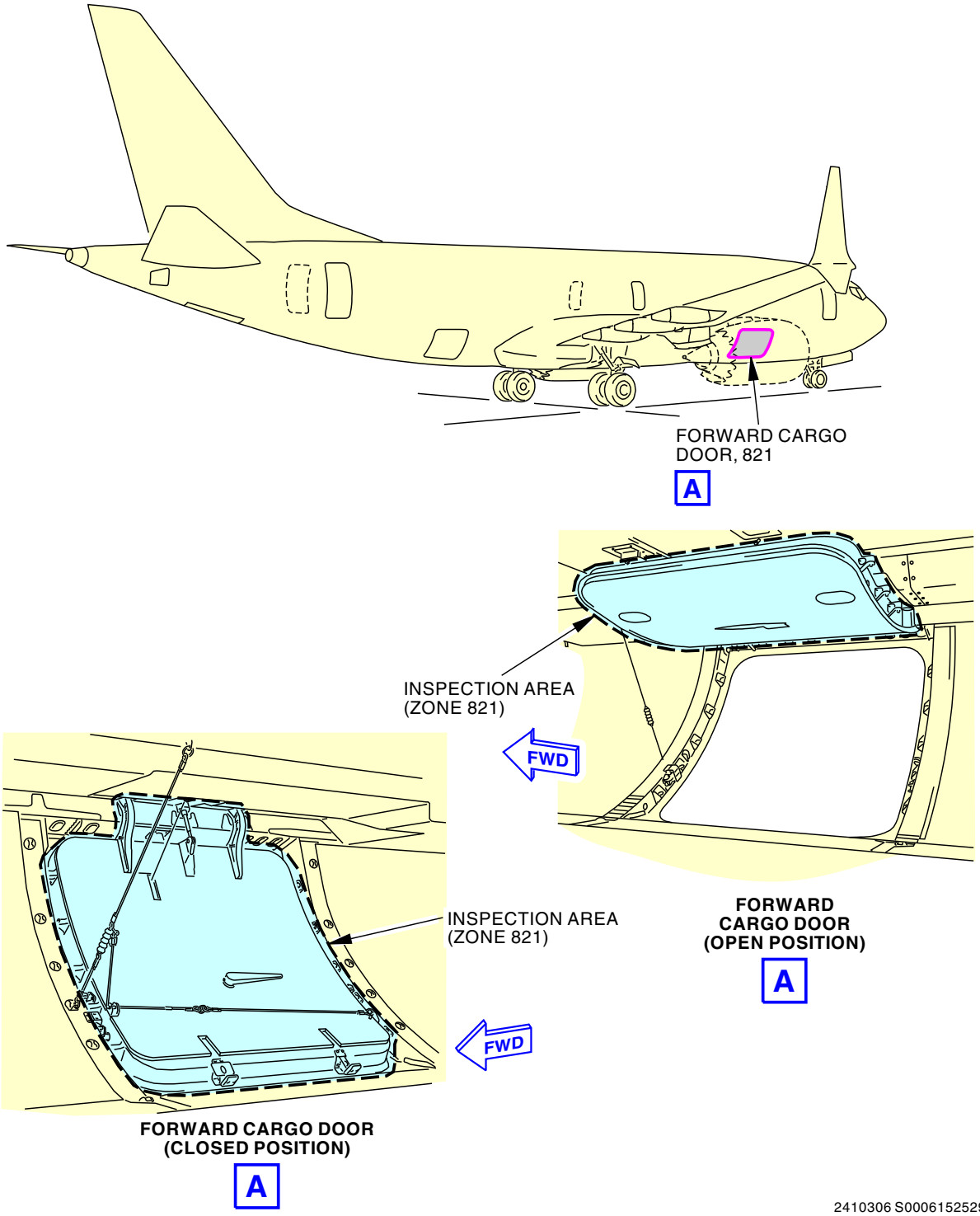
SUBTASK 05-41-08-410-001

(3) Close this access panel:

Number	Name/Location
821	Forward Cargo Door

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Forward Cargo Door General Visual (External)
Figure 202/05-41-08-990-802

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-08-210-803

3. INTERNAL - ZONAL (GV): FORWARD CARGO DOOR

(Figure 203)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
821	Forward Cargo Door

B. Access Panels

Number	Name/Location
821AR	Access Panel on Forward Cargo Door - External
821AZ	Panel Assy - Forward Cargo Door - Protective Pad Liner
821BR	Access Panel on Forward Cargo Door - External
821BZ	Panel Assy - Forward Cargo Door - Handle Box Cover Plate

C. Zonal Inspection

SUBTASK 05-41-08-010-002

(1) Open these access panels:

Number	Name/Location
821AR	Access Panel on Forward Cargo Door - External
821AZ	Panel Assy - Forward Cargo Door - Protective Pad Liner
821BR	Access Panel on Forward Cargo Door - External
821BZ	Panel Assy - Forward Cargo Door - Handle Box Cover Plate

SUBTASK 05-41-08-210-003

(2) Do a General Visual inspection of the forward cargo door - Section 43, Sta 460.

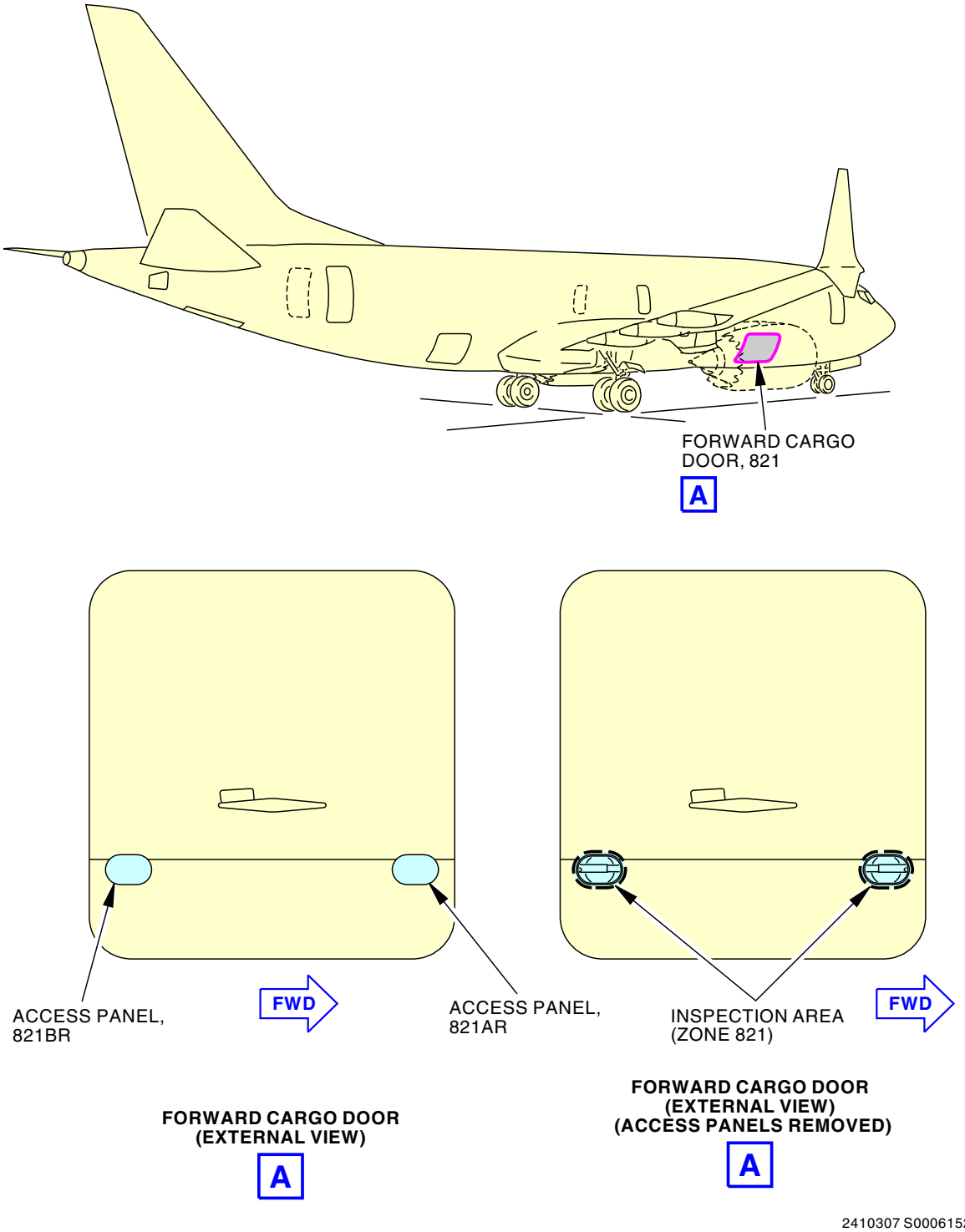
SUBTASK 05-41-08-410-002

(3) Close these access panels:

Number	Name/Location
821AR	Access Panel on Forward Cargo Door - External
821AZ	Panel Assy - Forward Cargo Door - Protective Pad Liner
821BR	Access Panel on Forward Cargo Door - External
821BZ	Panel Assy - Forward Cargo Door - Handle Box Cover Plate

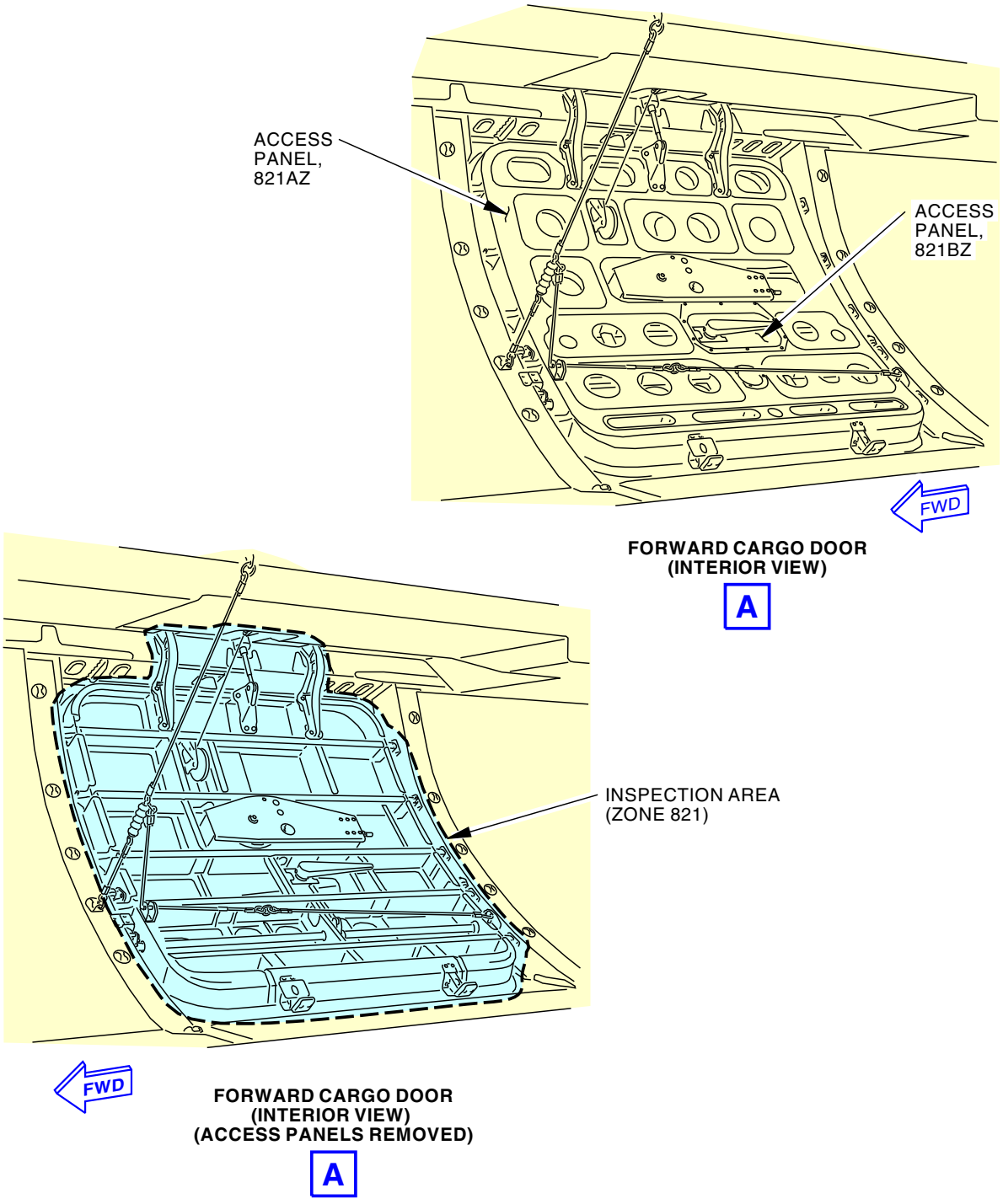
——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Forward Cargo Door General Visual (Internal)
Figure 203/05-41-08-990-803 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



2410308 S00061525297_V1

Forward Cargo Door General Visual (Internal)
Figure 203/05-41-08-990-803 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-08-210-804

4. EXTERNAL - ZONAL (GV): AFT CARGO DOOR

(Figure 204)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
822	Aft Cargo Door

B. Access Panels

Number	Name/Location
822	Aft Cargo Door

C. Zonal Inspection

SUBTASK 05-41-08-010-003

(1) Open this access panel:

Number	Name/Location
822	Aft Cargo Door

SUBTASK 05-41-08-210-004

(2) Do a General Visual inspection of the aft cargo door - Section 46, Sta 827.

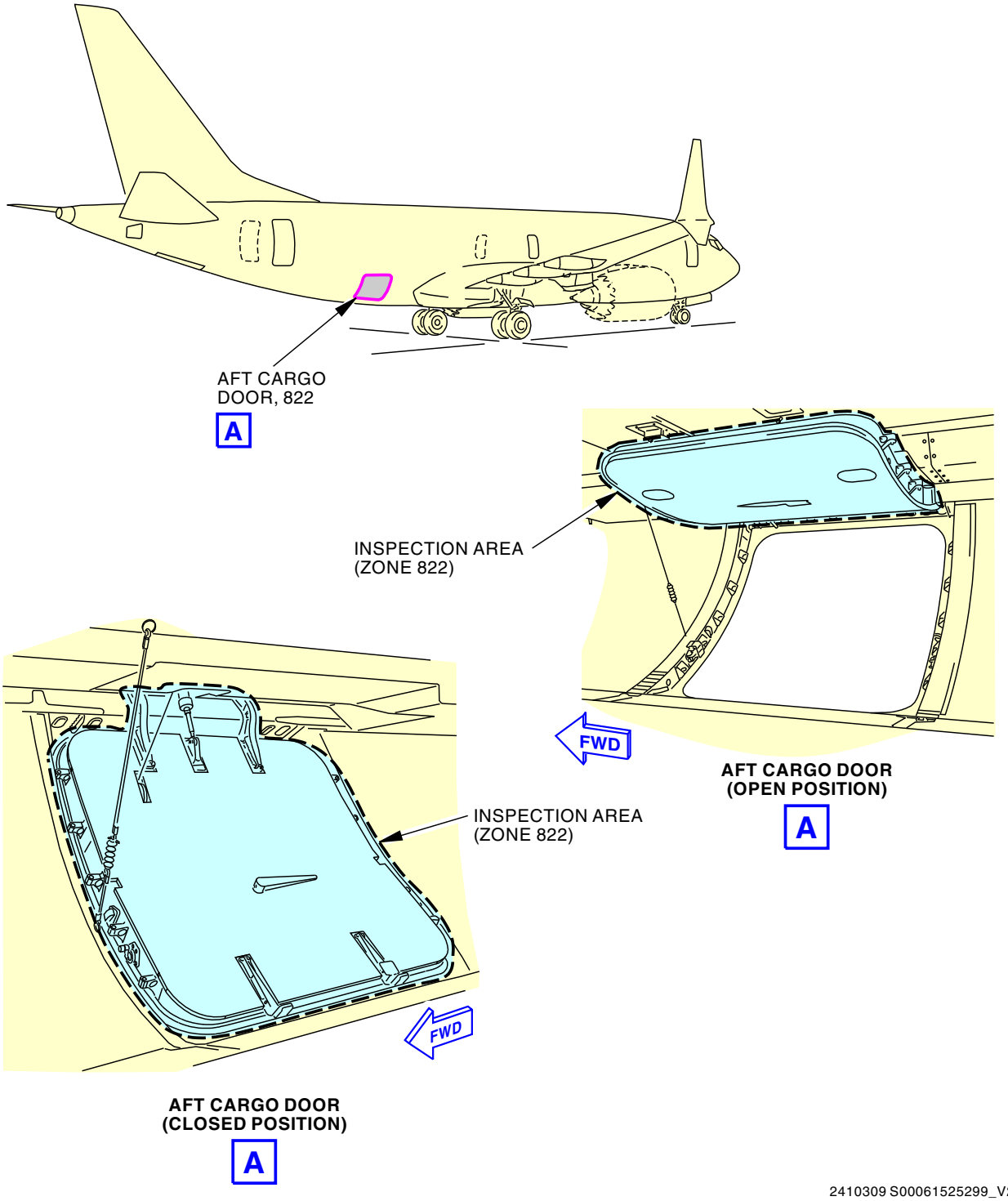
SUBTASK 05-41-08-410-003

(3) Close this access panel:

Number	Name/Location
822	Aft Cargo Door

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Aft Cargo Door General Visual (External)
Figure 204/05-41-08-990-804

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-08-210-805

5. INTERNAL - ZONAL (GV): AFT CARGO DOOR

(Figure 205)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
822	Aft Cargo Door

B. Access Panels

Number	Name/Location
822AR	Access Panel on Aft Cargo Door - External
822AZ	Panel Assy - Aft Cargo Door - Protective Pad Liner
822BR	Access Panel on Aft Cargo Door
822BZ	Panel Assy - Aft Cargo Door - Handle Box Cover Plate

C. Zonal Inspection

SUBTASK 05-41-08-010-004

(1) Open these access panels:

Number	Name/Location
822AR	Access Panel on Aft Cargo Door - External
822AZ	Panel Assy - Aft Cargo Door - Protective Pad Liner
822BR	Access Panel on Aft Cargo Door
822BZ	Panel Assy - Aft Cargo Door - Handle Box Cover Plate

SUBTASK 05-41-08-210-005

(2) Do a General Visual inspection of the aft cargo door - Section 46, Sta 827.

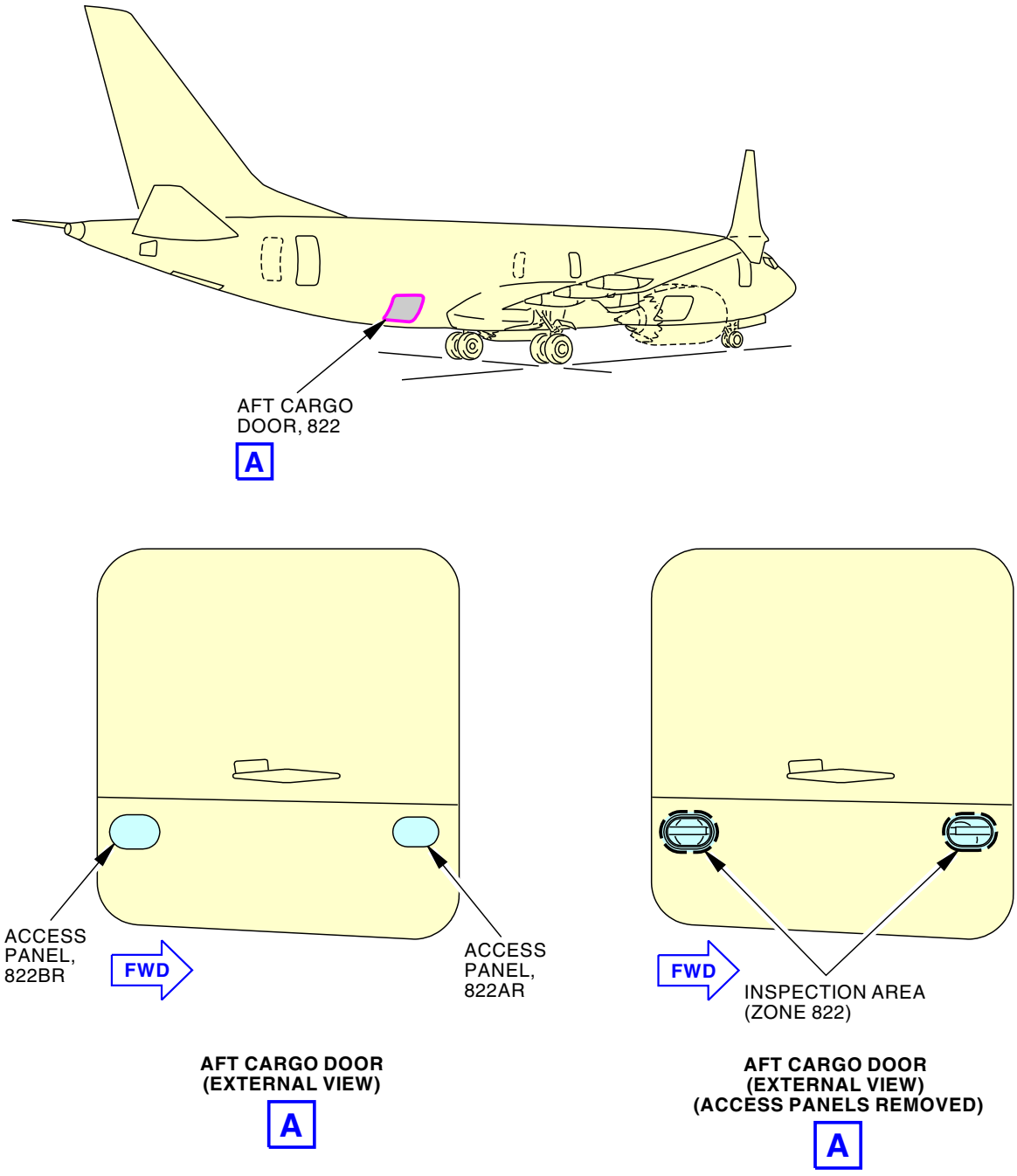
SUBTASK 05-41-08-410-004

(3) Close these access panels:

Number	Name/Location
822AR	Access Panel on Aft Cargo Door - External
822AZ	Panel Assy - Aft Cargo Door - Protective Pad Liner
822BR	Access Panel on Aft Cargo Door
822BZ	Panel Assy - Aft Cargo Door - Handle Box Cover Plate

——— END OF TASK ———

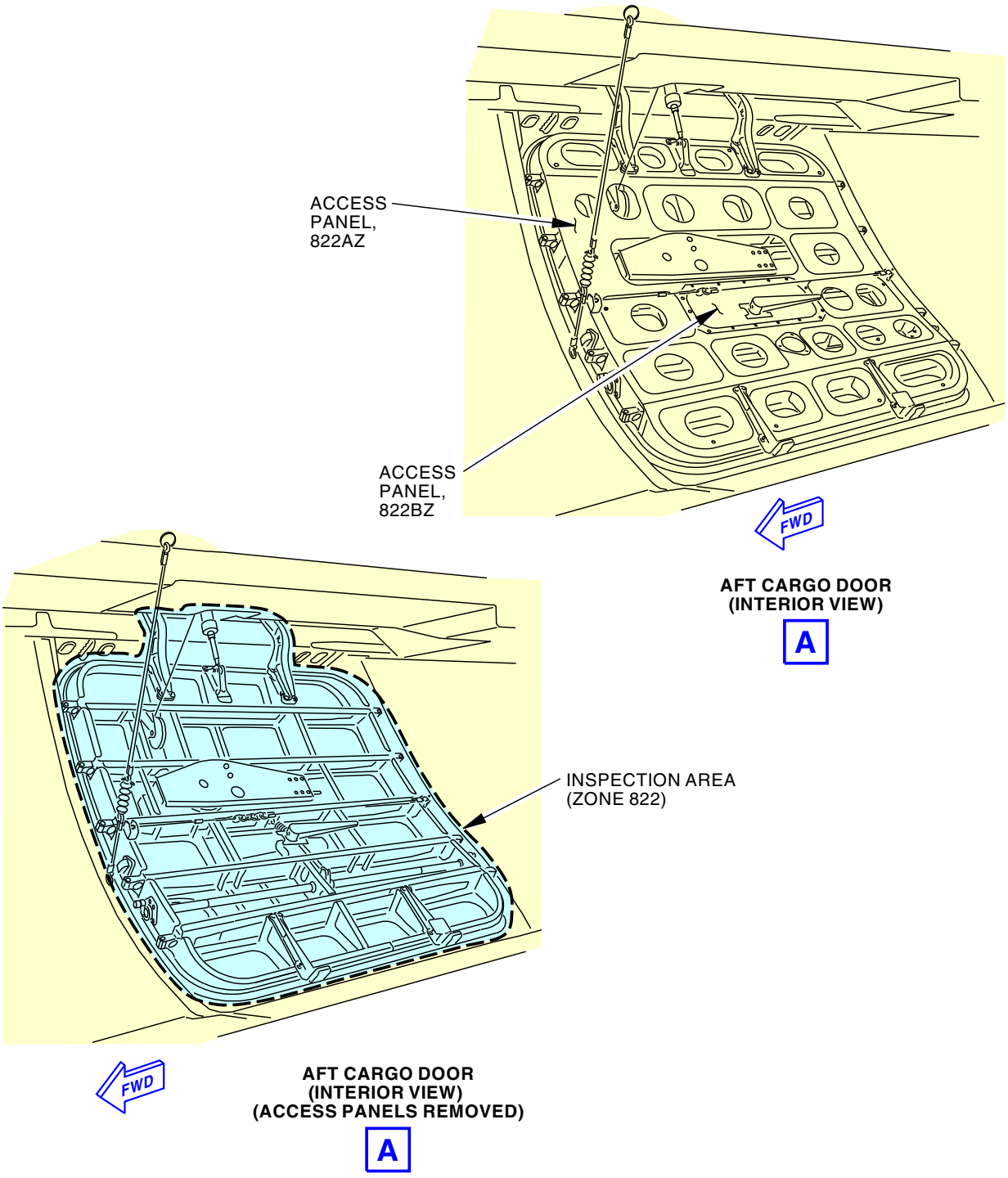
ECCN 9E991 BOEING PROPRIETARY - See title page for details



2410310 S00061525301_V2

Aft Cargo Door General Visual (Internal)
Figure 205/05-41-08-990-805 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



2410311 S00061525302_V1

Aft Cargo Door General Visual (Internal)
Figure 205/05-41-08-990-805 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-08-210-806

6. EXTERNAL - ZONAL (GV): FORWARD PASSENGER DOOR

(Figure 206)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
831	Forward Entry Door

B. Access Panels

Number	Name/Location
831	Forward Entry Door

C. Zonal Inspection

SUBTASK 05-41-08-010-005

(1) Open this access panel:

Number	Name/Location
831	Forward Entry Door

SUBTASK 05-41-08-210-006

(2) Do a General Visual inspection of the forward passenger door - Section 41, Sta 345.

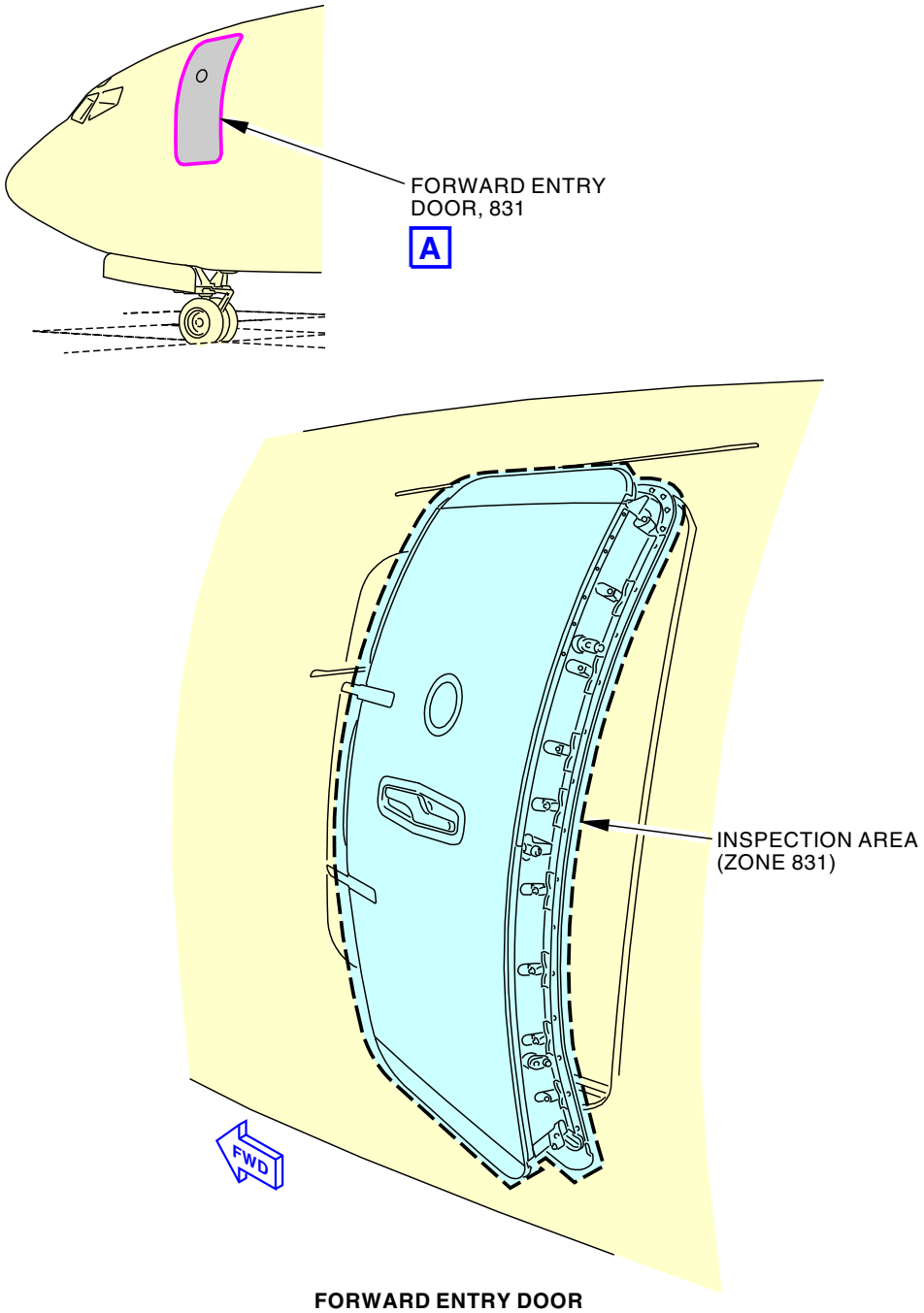
SUBTASK 05-41-08-410-005

(3) Close this access panel:

Number	Name/Location
831	Forward Entry Door

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details

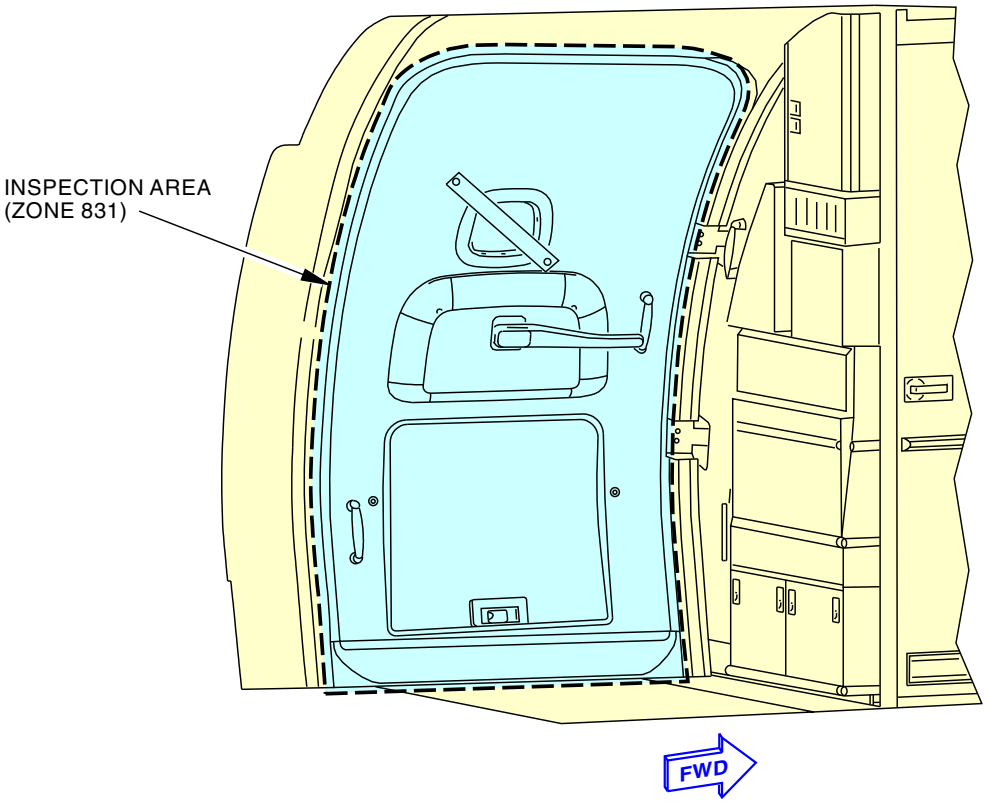


FORWARD ENTRY DOOR
(EXTERIOR VIEW)
A

2410312 S00061525304_V1

Forward Entry Door General Visual (External)
Figure 206/05-41-08-990-806 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



**FORWARD ENTRY DOOR
(INTERIOR VIEW)**

A

2410313 S00061525305_V1

**Forward Entry Door General Visual (External)
Figure 206/05-41-08-990-806 (Sheet 2 of 2)**

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-08-210-807

7. INTERNAL - ZONAL (GV): FORWARD PASSENGER DOOR

(Figure 207)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
831	Forward Entry Door

B. Access Panels

Number	Name/Location
831AW	Fwd Entry Door - Door Liner (Cosmetic)
831AZ	Forward Entry Door - Torque Tube Access
831BZ	Forward Entry Door - Handle Box and Cam for Handle Box Access
831CZ	Forward Entry Door - Handle Box Access
831DZ	Forward Entry Door - Gate Hinge Pin Access
831EZ	Forward Entry Door - Gate Hinge Pin Access

C. Zonal Inspection

SUBTASK 05-41-08-010-006

(1) Open these access panels:

Number	Name/Location
831AW	Fwd Entry Door - Door Liner (Cosmetic)
831AZ	Forward Entry Door - Torque Tube Access
831BZ	Forward Entry Door - Handle Box and Cam for Handle Box Access
831CZ	Forward Entry Door - Handle Box Access
831DZ	Forward Entry Door - Gate Hinge Pin Access
831EZ	Forward Entry Door - Gate Hinge Pin Access

SUBTASK 05-41-08-210-007

(2) Do a General Visual inspection of the forward passenger door - Section 41, Sta 345.

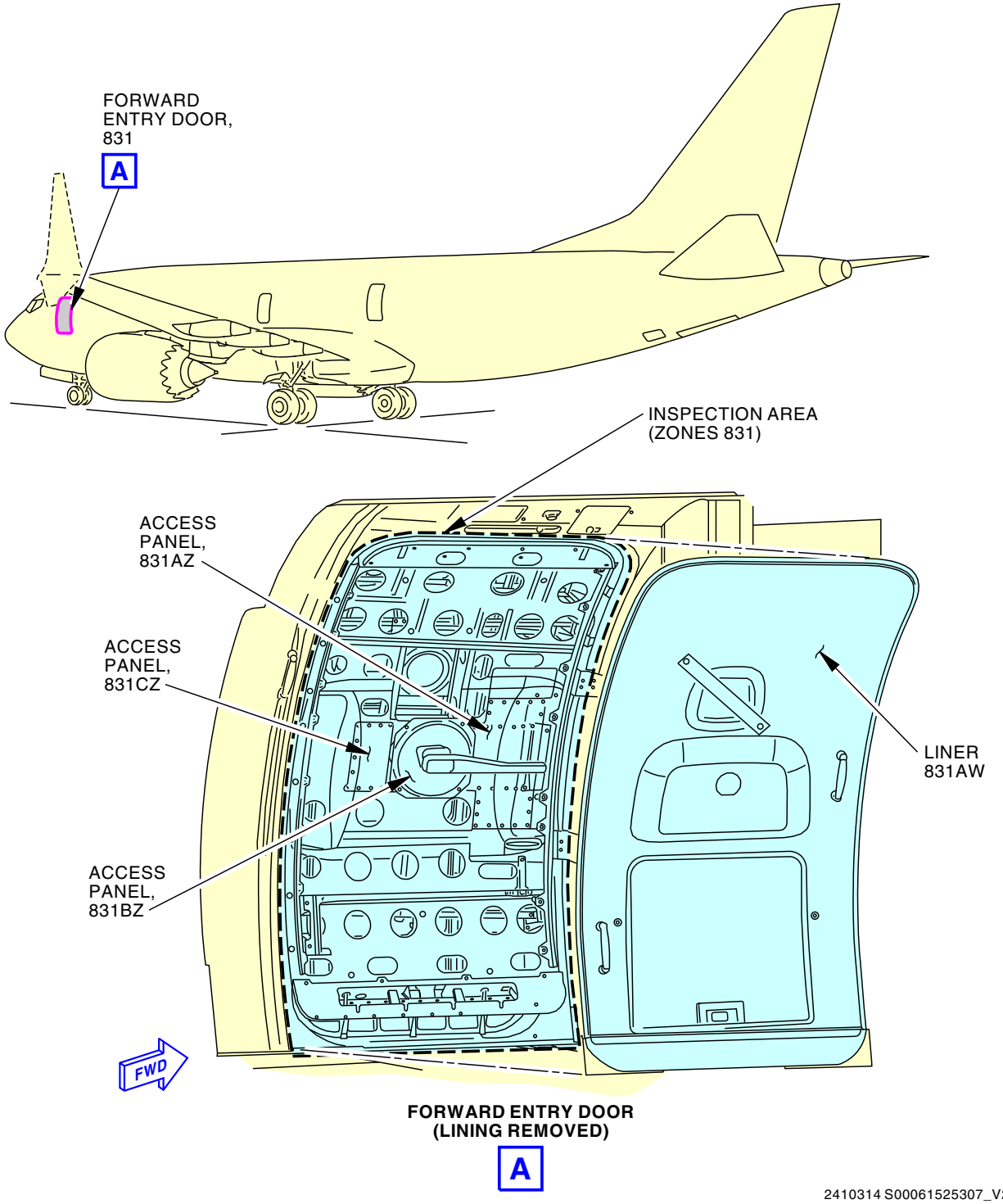
SUBTASK 05-41-08-410-006

(3) Close these access panels:

Number	Name/Location
831AW	Fwd Entry Door - Door Liner (Cosmetic)
831AZ	Forward Entry Door - Torque Tube Access
831BZ	Forward Entry Door - Handle Box and Cam for Handle Box Access
831CZ	Forward Entry Door - Handle Box Access
831DZ	Forward Entry Door - Gate Hinge Pin Access
831EZ	Forward Entry Door - Gate Hinge Pin Access

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Forward Entry Door General Visual (Internal)
Figure 207/05-41-08-990-807

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-08-210-808

8. EXTERNAL - ZONAL (GV): AUTOMATIC OVERWING EXIT

(Figure 208)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
832	Left Forward Emergency Exit

B. Access Panels

Number	Name/Location
832	Emergency Exit Door (AOE)

C. Zonal Inspection

SUBTASK 05-41-08-010-007

(1) Open this access panel:

Number	Name/Location
832	Emergency Exit Door (AOE)

SUBTASK 05-41-08-210-008

(2) Do a General Visual inspection of the automatic overwing exit - Section 44, Sta 589.5.

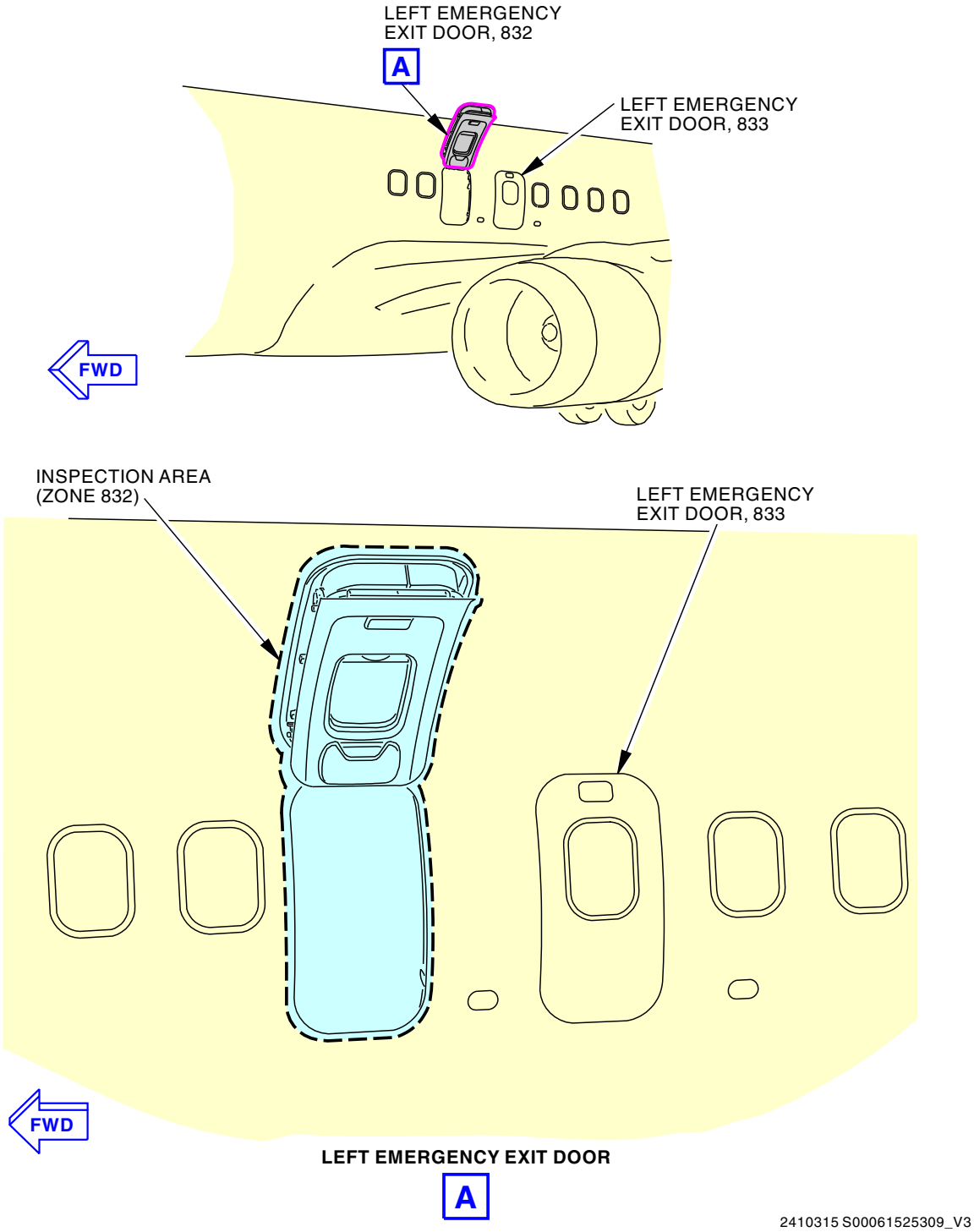
SUBTASK 05-41-08-410-007

(3) Close this access panel:

Number	Name/Location
832	Emergency Exit Door (AOE)

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Left Emergency Exit Door General Visual (External)
Figure 208/05-41-08-990-808

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-08-210-809

9. INTERNAL - ZONAL (GV): AUTOMATIC OVERWING EXIT

(Figure 209)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
832	Left Forward Emergency Exit

B. Access Panels

Number	Name/Location
832AZ	Panel Assy - Emergency Exit Door (AOE) - Door Liner

C. Zonal Inspection

SUBTASK 05-41-08-010-008

(1) Open this access panel:

Number	Name/Location
832AZ	Panel Assy - Emergency Exit Door (AOE) - Door Liner

NOTE: Automatic overwing exit door liner removal required.

SUBTASK 05-41-08-210-009

(2) Do a General Visual inspection of the automatic overwing exit - Section 44, Sta 589.5.

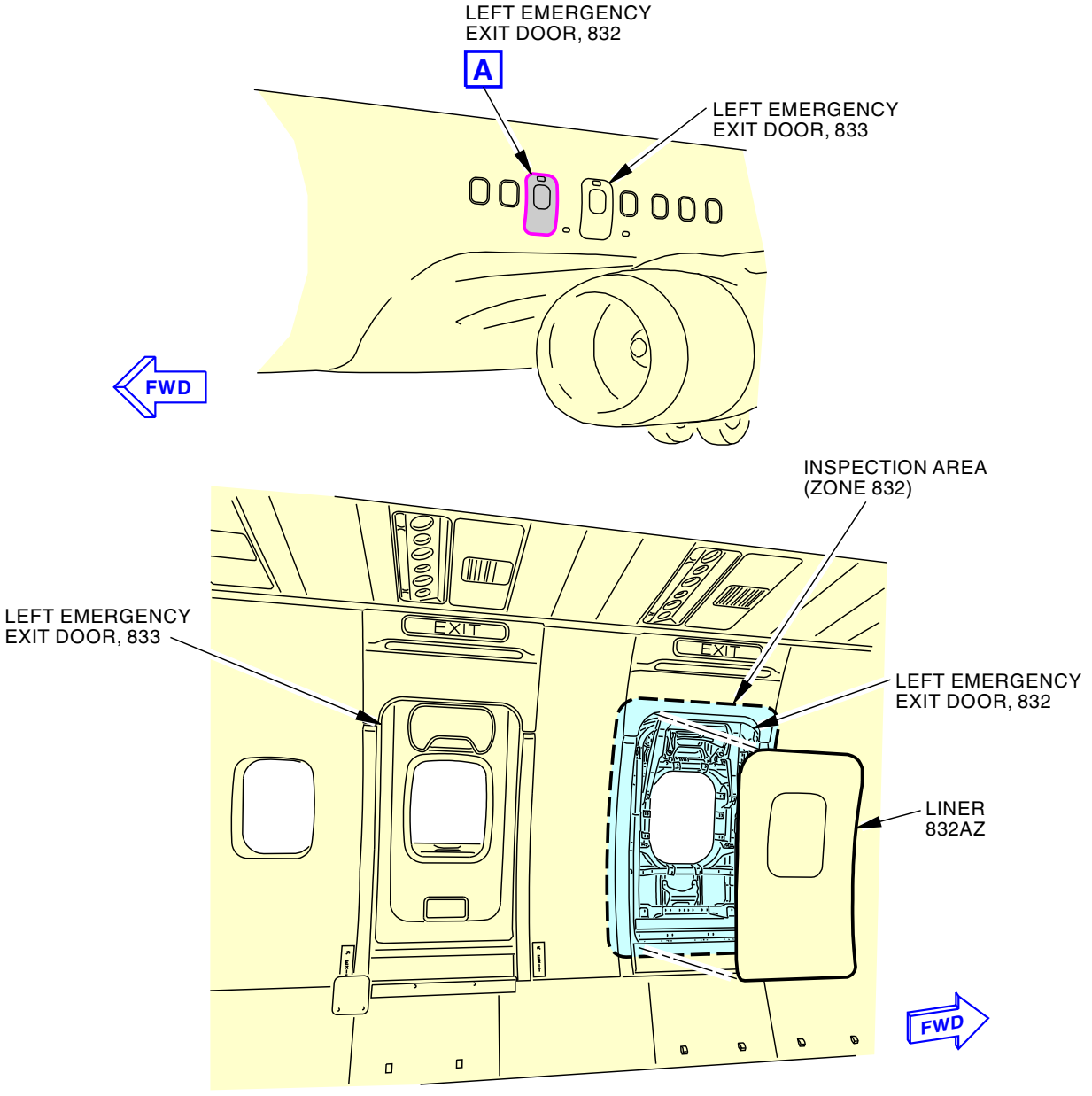
SUBTASK 05-41-08-410-008

(3) Close this access panel:

Number	Name/Location
832AZ	Panel Assy - Emergency Exit Door (AOE) - Door Liner

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



LEFT EMERGENCY EXIT DOOR
(DOOR IN THE CLOSED POSITION
WITH DOOR LINING REMOVED)

A

2410316 S00061525311_V3

Left Emergency Exit Door General Visual (Internal)
Figure 209/05-41-08-990-809

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-08-210-810

10. EXTERNAL - ZONAL (GV): AUTOMATIC OVERWING EXIT

(Figure 210)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
833	Left Emergency Exit (STA 627.5)

B. Access Panels

Number	Name/Location
833	Emergency Exit Door (AOE)

C. Zonal Inspection

SUBTASK 05-41-08-010-009

(1) Open this access panel:

Number	Name/Location
833	Emergency Exit Door (AOE)

SUBTASK 05-41-08-210-010

(2) Do a General Visual inspection of the automatic overwing exit - Section 44, Sta 627.

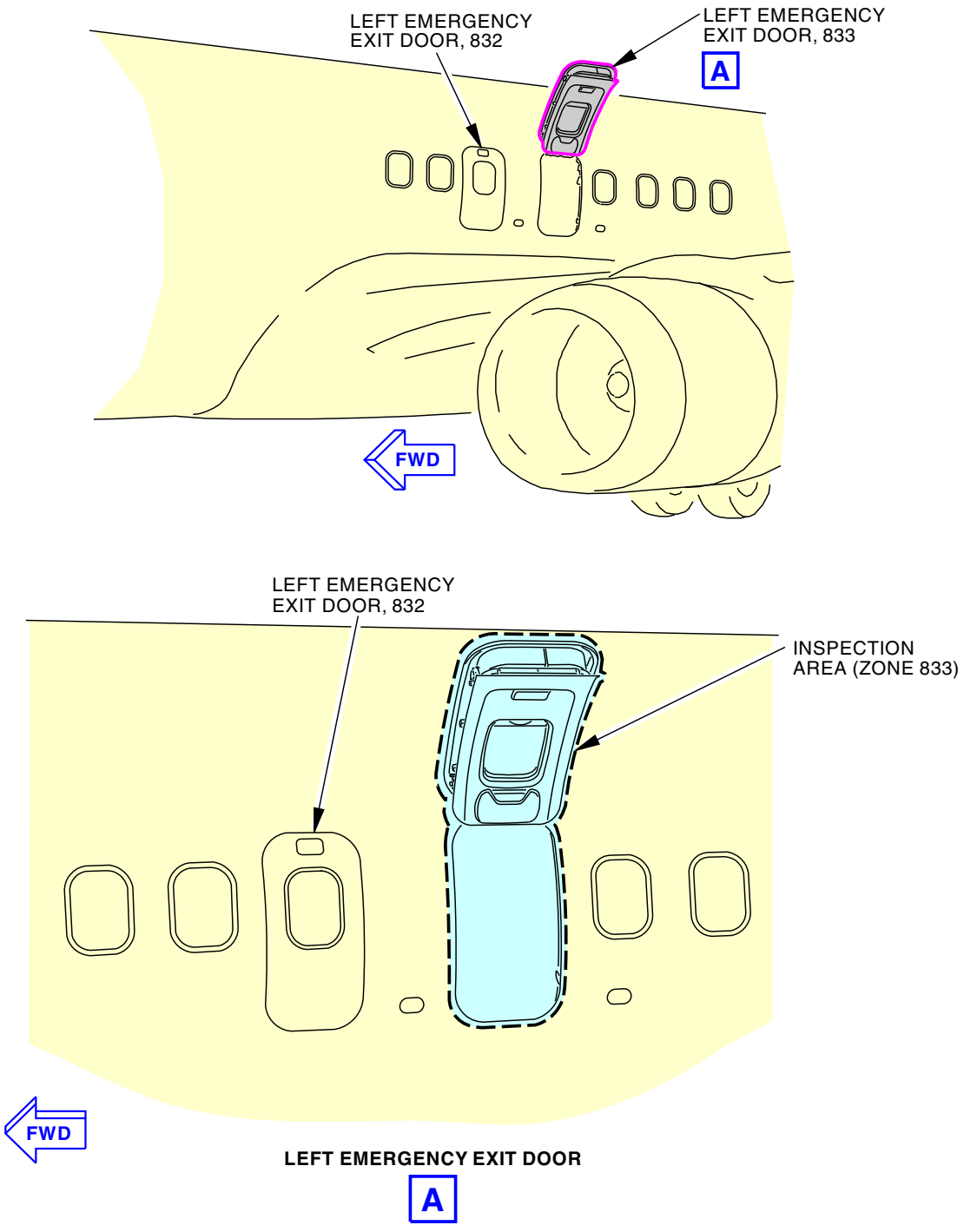
SUBTASK 05-41-08-410-009

(3) Close this access panel:

Number	Name/Location
833	Emergency Exit Door (AOE)

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Left Emergency Exit Door General Visual (External)
Figure 210/05-41-08-990-810

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-08-210-811

11. INTERNAL - ZONAL (GV): AUTOMATIC OVERWING EXIT

(Figure 211)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
833	Left Emergency Exit (STA 627.5)

B. Access Panels

Number	Name/Location
833AZ	Panel Assy - Emergency Exit Door (AOE) - Door Liner

C. Zonal Inspection

SUBTASK 05-41-08-010-010

(1) Open this access panel:

Number	Name/Location
833AZ	Panel Assy - Emergency Exit Door (AOE) - Door Liner

NOTE: Automatic overwing exit door liner removal required.

SUBTASK 05-41-08-210-011

(2) Do a General Visual inspection of the automatic overwing exit - Section 44, Sta 627.

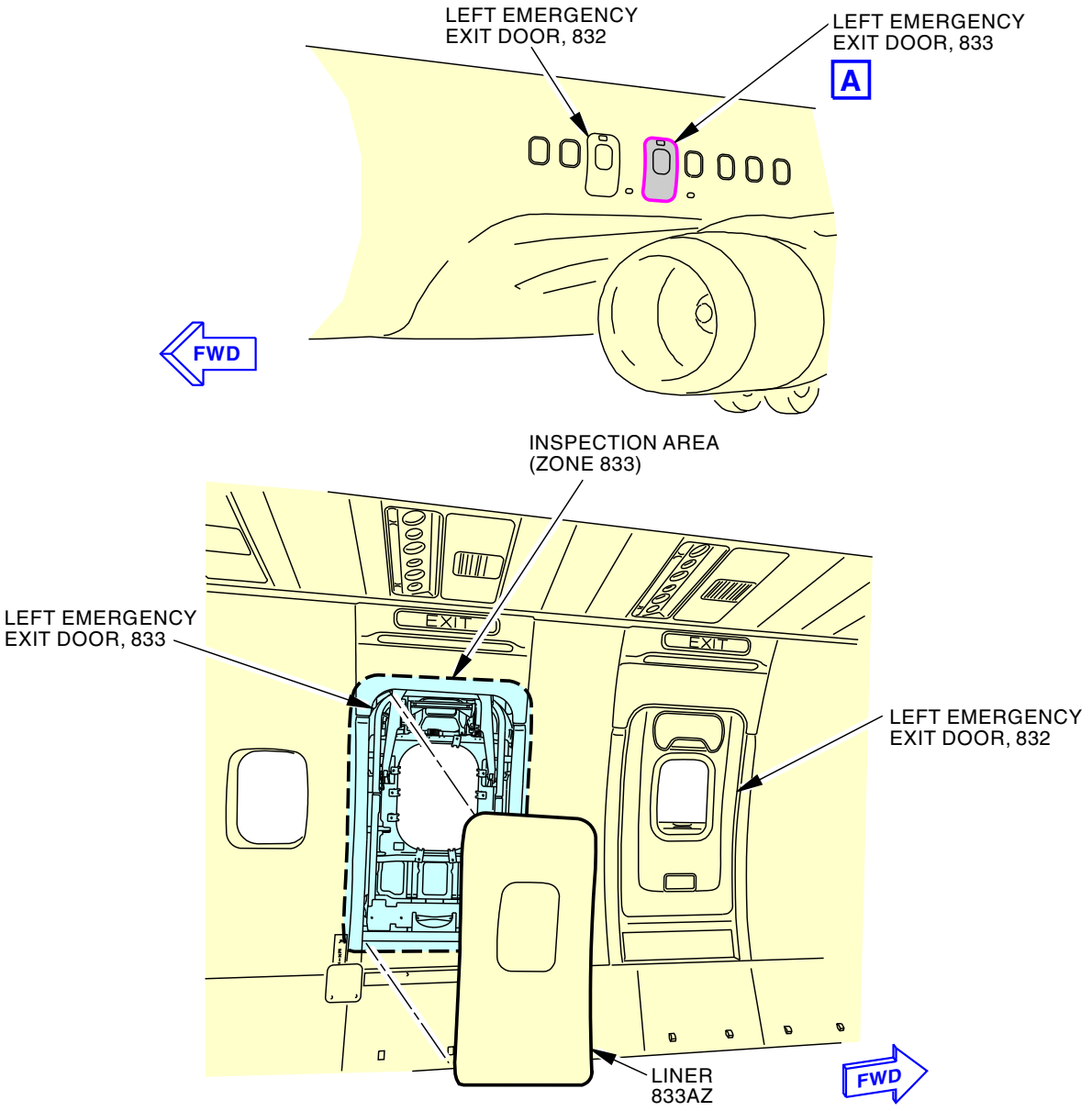
SUBTASK 05-41-08-410-010

(3) Close this access panel:

Number	Name/Location
833AZ	Panel Assy - Emergency Exit Door (AOE) - Door Liner

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



LEFT EMERGENCY EXIT DOOR
(DOOR IN THE CLOSED POSITION
WITH DOOR LINING REMOVED)

A

2410318 S00061525315_V4

Left Emergency Exit Door General Visual (Internal)
Figure 211/05-41-08-990-811

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-08-210-812

12. EXTERNAL - ZONAL (GV): AFT PASSENGER DOOR

(Figure 212)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
834	Left Aft Entry Door

B. Access Panels

Number	Name/Location
834	Aft Entry Door

C. Zonal Inspection

SUBTASK 05-41-08-010-011

(1) Open this access panel:

Number	Name/Location
834	Aft Entry Door

SUBTASK 05-41-08-210-012

(2) Do a General Visual inspection of the aft passenger door - Section 47, Sta 980.

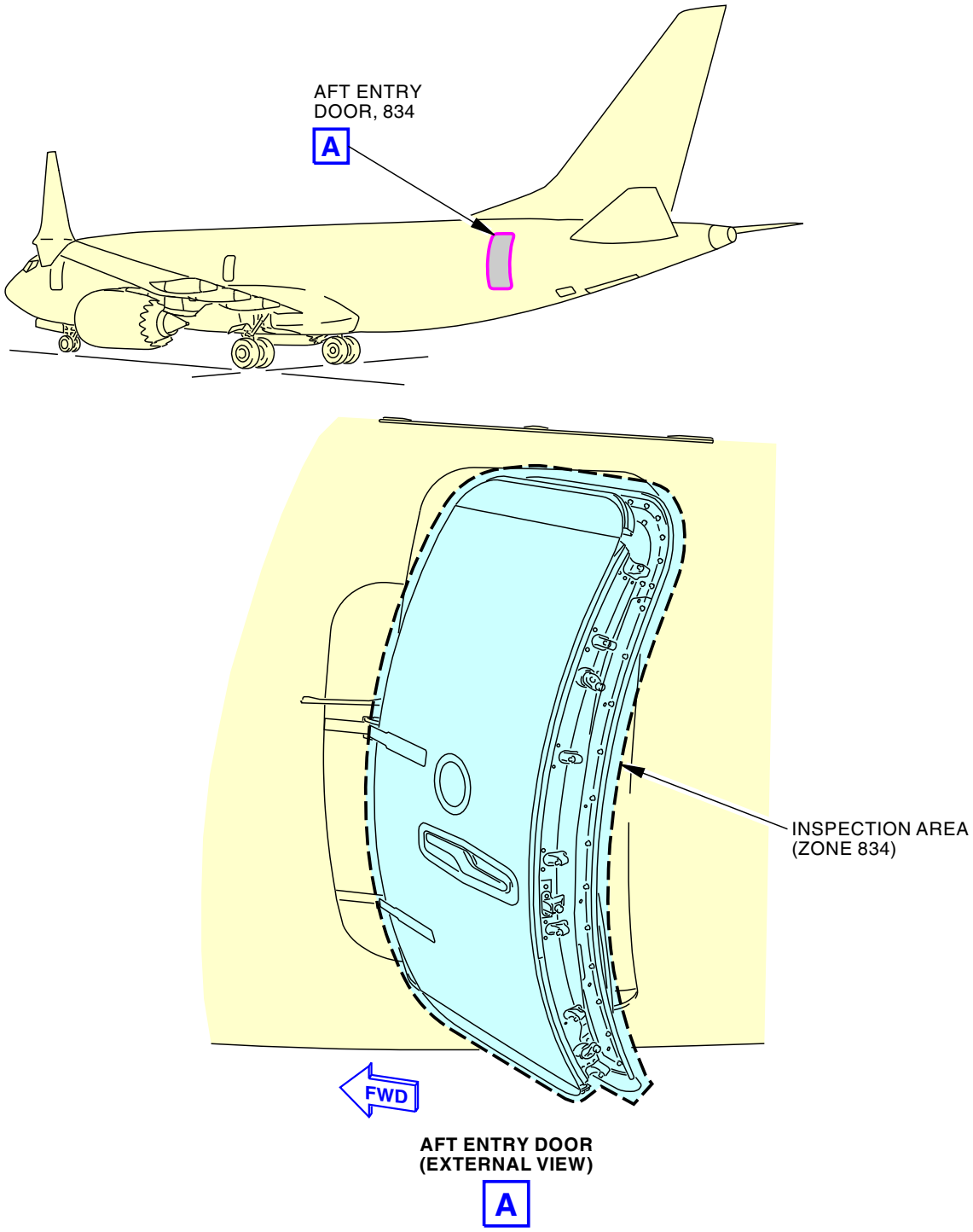
SUBTASK 05-41-08-410-011

(3) Close this access panel:

Number	Name/Location
834	Aft Entry Door

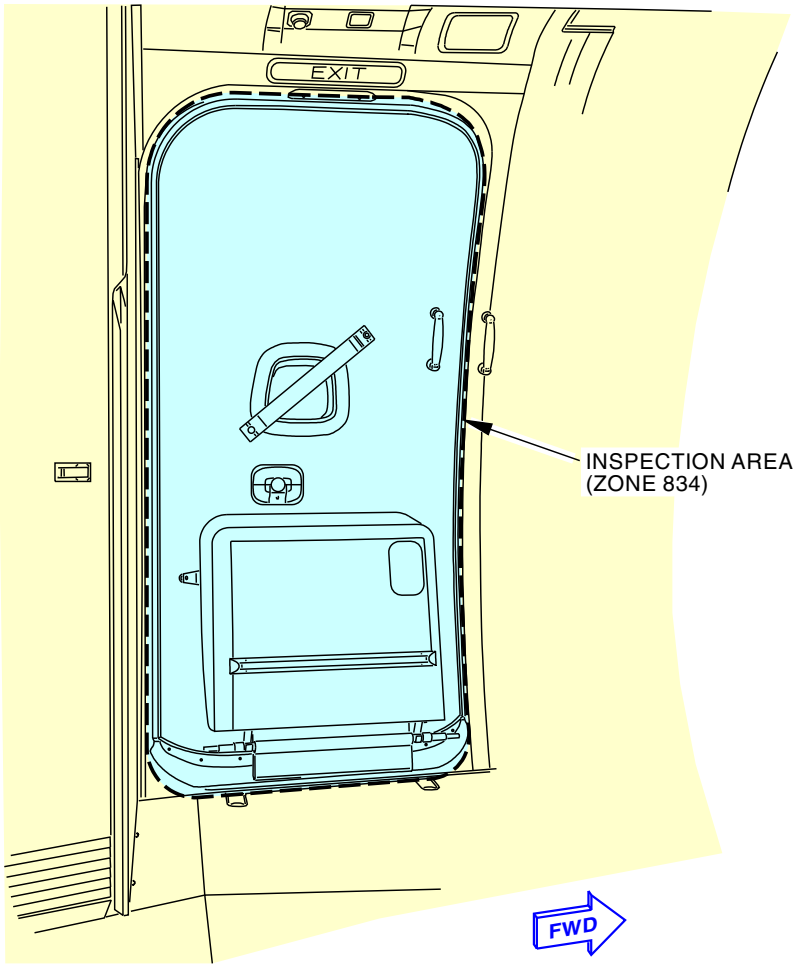
——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Aft Entry Door General Visual (External)
Figure 212/05-41-08-990-812 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



**AFT ENTRY DOOR
(INTERIOR VIEW)**

A

2410320 S00061525318_V1

**Aft Entry Door General Visual (External)
Figure 212/05-41-08-990-812 (Sheet 2 of 2)**

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-08-210-813

13. INTERNAL - ZONAL (GV): AFT PASSENGER DOOR

(Figure 213)

NOTE: This procedure is a scheduled maintenance task.

A. References

Reference	Title
52-13-31-000-801	Aft Entry Door Lining Removal (P/B 401)
52-13-31-400-801	Aft Entry Door Lining Installation (P/B 401)
SOPM 20-50-19	General Sealing

B. Consumable Materials

Reference	Description	Specification
A00247	Sealant - Pressure And Environmental - Chromate Type	BMS5-95

C. Location Zones

Zone	Area
834	Left Aft Entry Door

D. Access Panels

Number	Name/Location
834AW	Aft Entry Door - Door Liner
834AZ	Aft Entry Door - Torque Tube Access
834BZ	Aft Entry Door - Handle Box and Cam for Handle Box Access
834CZ	Aft Entry Door - Handle Box Access
834DZ	Aft Entry Door - Lower Hinge Access
834EZ	Aft Entry Door - Upper Hinge Access
834FZ	Aft Entry Door - Torque Tube Access
834GZ	AFT Entry Door - Torque Tube Access

E. Zonal Inspection

SUBTASK 05-41-08-010-022

(1) Do this task: Aft Entry Door Lining Removal, TASK 52-13-31-000-801.

SUBTASK 05-41-08-010-012

(2) Open these access panels:

Number	Name/Location
834AW	Aft Entry Door - Door Liner
834AZ	Aft Entry Door - Torque Tube Access
834BZ	Aft Entry Door - Handle Box and Cam for Handle Box Access
834CZ	Aft Entry Door - Handle Box Access
834DZ	Aft Entry Door - Lower Hinge Access
834EZ	Aft Entry Door - Upper Hinge Access

SUBTASK 05-41-08-010-027

(3) Remove these access doors:

Number	Name/Location
834FZ	Aft Entry Door - Torque Tube Access
834GZ	AFT Entry Door - Torque Tube Access

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(a) Remove a pressure fay surface seal that was previously applied between the mating surfaces of the cover plate and the inner skin (SOPM 20-50-19).

(b) Remove a parting agent that was previously applied on the mating surfaces of the cover plate (SOPM 20-50-19).

SUBTASK 05-41-08-210-013

(4) Do a General Visual inspection of the aft passenger door - Section 47, Sta 980.

SUBTASK 05-41-08-410-012

(5) Close these access panels:

Number	Name/Location
834AW	Aft Entry Door - Door Liner
834AZ	Aft Entry Door - Torque Tube Access
834BZ	Aft Entry Door - Handle Box and Cam for Handle Box Access
834CZ	Aft Entry Door - Handle Box Access
834DZ	Aft Entry Door - Lower Hinge Access
834EZ	Aft Entry Door - Upper Hinge Access

SUBTASK 05-41-08-410-027

(6) Install these access doors:

Number	Name/Location
834FZ	Aft Entry Door - Torque Tube Access
834GZ	AFT Entry Door - Torque Tube Access

(a) Apply a parting agent to the mating surfaces of the cover plate (SOPM 20-50-19).

(b) Apply a pressure fay surface seal with sealant, A00247, between the mating surfaces of the cover plate and the inner skin (SOPM 20-50-19).

(c) Install the cover plate onto the door structure with the bolts and the washers.

1) If a new bolt is to be used, make sure that the grip length is the same as the original bolt.

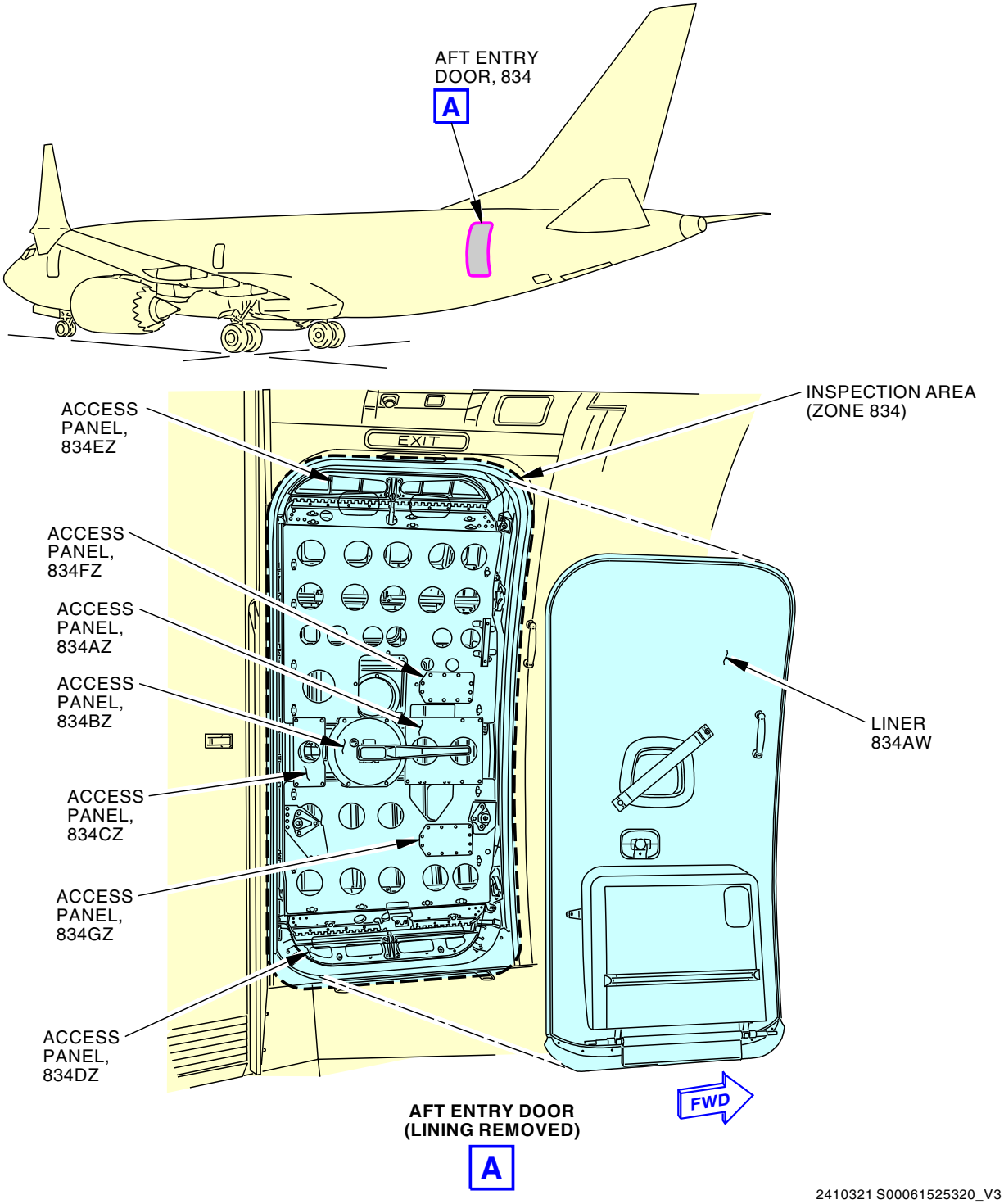
NOTE: Grip length is important.

SUBTASK 05-41-08-410-022

(7) Do this task: Aft Entry Door Lining Installation, TASK 52-13-31-400-801.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Aft Entry Door General Visual (Internal)
Figure 213/05-41-08-990-813

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-08-210-814

14. EXTERNAL - ZONAL (GV): FORWARD GALLEY SERVICE DOOR

(Figure 214)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
841	Forward Galley Service Door

B. Access Panels

Number	Name/Location
841	Forward Galley Service Door

C. Zonal Inspection

SUBTASK 05-41-08-010-013

(1) Open this access panel:

Number	Name/Location
841	Forward Galley Service Door

SUBTASK 05-41-08-210-014

(2) Do a General Visual inspection of the forward galley service door - Section 41, Sta 340.

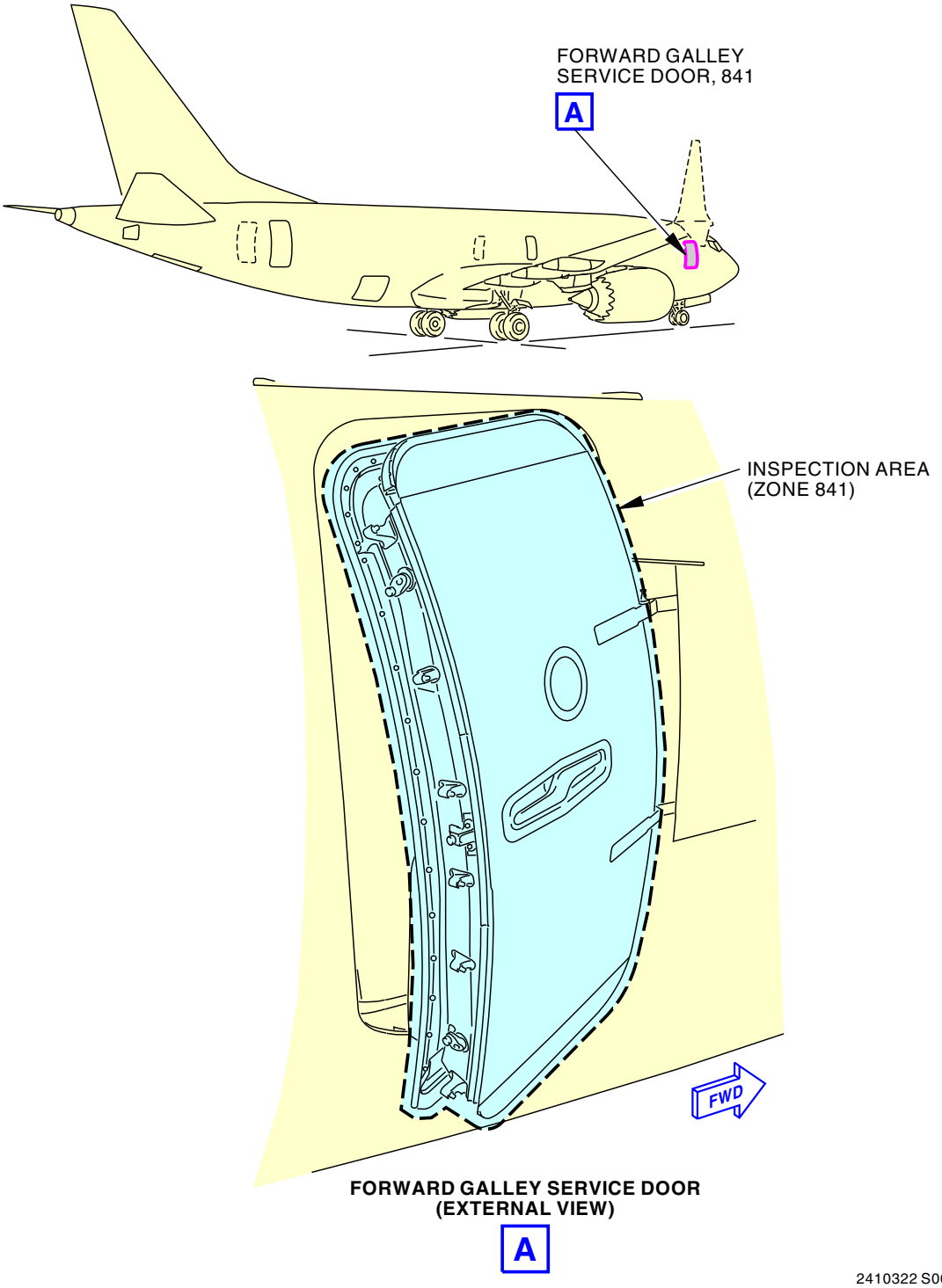
SUBTASK 05-41-08-410-013

(3) Close this access panel:

Number	Name/Location
841	Forward Galley Service Door

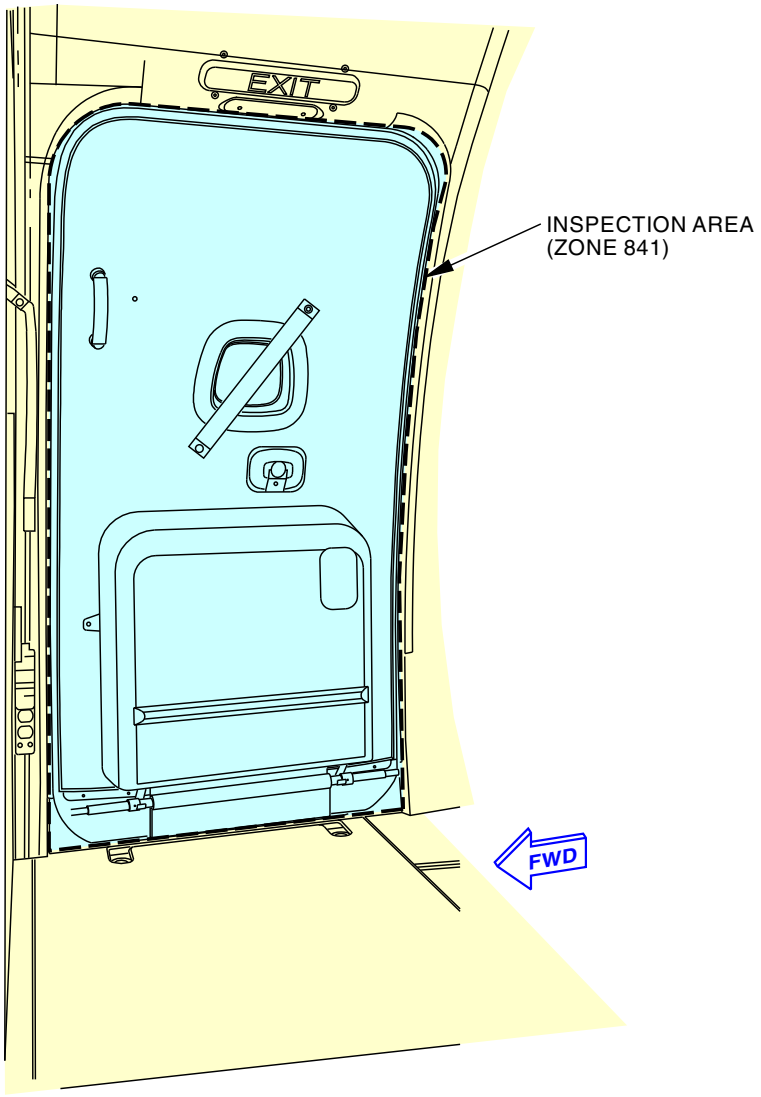
——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Forward Galley Service Door General Visual (External)
Figure 214/05-41-08-990-814 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



**FORWARD GALLEY SERVICE DOOR
(INTERIOR VIEW)**

A

2410323 S00061525323_V1

**Forward Galley Service Door General Visual (External)
Figure 214/05-41-08-990-814 (Sheet 2 of 2)**

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-08-210-815

15. INTERNAL - ZONAL (GV): FORWARD GALLEY SERVICE DOOR

(Figure 215)

NOTE: This procedure is a scheduled maintenance task.

A. References

Reference	Title
SOPM 20-50-19	General Sealing

B. Consumable Materials

Reference	Description	Specification
A00247	Sealant - Pressure And Environmental - Chromate Type	BMS5-95

C. Location Zones

Zone	Area
841	Forward Galley Service Door

D. Access Panels

Number	Name/Location
841AW	Fwd Galley Service Door - Door Liner
841AZ	Forward Galley Service Door - Torque Tube Access
841BZ	Forward Galley Service Door - Handle Box and Cam for Handle Box Access
841CZ	Forward Galley Service Door - Handle Box Access
841DZ	Forward Galley Service Door - Lower Hinge Access
841EZ	Forward Galley Service Door - Upper Hinge Access
841FZ	Forward Galley Service Door - Torque Tube Access
841GZ	Forward Galley Service Door - Torque Tube Access

E. Zonal Inspection

SUBTASK 05-41-08-010-014

(1) Open these access panels:

Number	Name/Location
841AW	Fwd Galley Service Door - Door Liner
841AZ	Forward Galley Service Door - Torque Tube Access
841BZ	Forward Galley Service Door - Handle Box and Cam for Handle Box Access
841CZ	Forward Galley Service Door - Handle Box Access
841DZ	Forward Galley Service Door - Lower Hinge Access
841EZ	Forward Galley Service Door - Upper Hinge Access

SUBTASK 05-41-08-010-028

(2) Remove these access doors:

Number	Name/Location
841FZ	Forward Galley Service Door - Torque Tube Access
841GZ	Forward Galley Service Door - Torque Tube Access

(a) Remove a pressure fay surface seal that was previously applied between the mating surfaces of the cover plate and the inner skin (SOPM 20-50-19).

(b) Remove a parting agent that was previously applied on the mating surfaces of the cover plate (SOPM 20-50-19).

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 05-41-08-210-015

(3) Do a General Visual inspection of the forward galley service door - Section 41, Sta 340.

SUBTASK 05-41-08-410-014

(4) Close these access panels:

Number	Name/Location
841AW	Fwd Galley Service Door - Door Liner
841AZ	Forward Galley Service Door - Torque Tube Access
841BZ	Forward Galley Service Door - Handle Box and Cam for Handle Box Access
841CZ	Forward Galley Service Door - Handle Box Access
841DZ	Forward Galley Service Door - Lower Hinge Access
841EZ	Forward Galley Service Door - Upper Hinge Access

SUBTASK 05-41-08-410-028

(5) Install these access doors:

Number	Name/Location
841FZ	Forward Galley Service Door - Torque Tube Access
841GZ	Forward Galley Service Door - Torque Tube Access

(a) Apply a parting agent to the mating surfaces of the cover plate (SOPM 20-50-19).

(b) Apply a pressure fay surface seal with sealant, A00247, between the mating surfaces of the cover plate and the inner skin (SOPM 20-50-19).

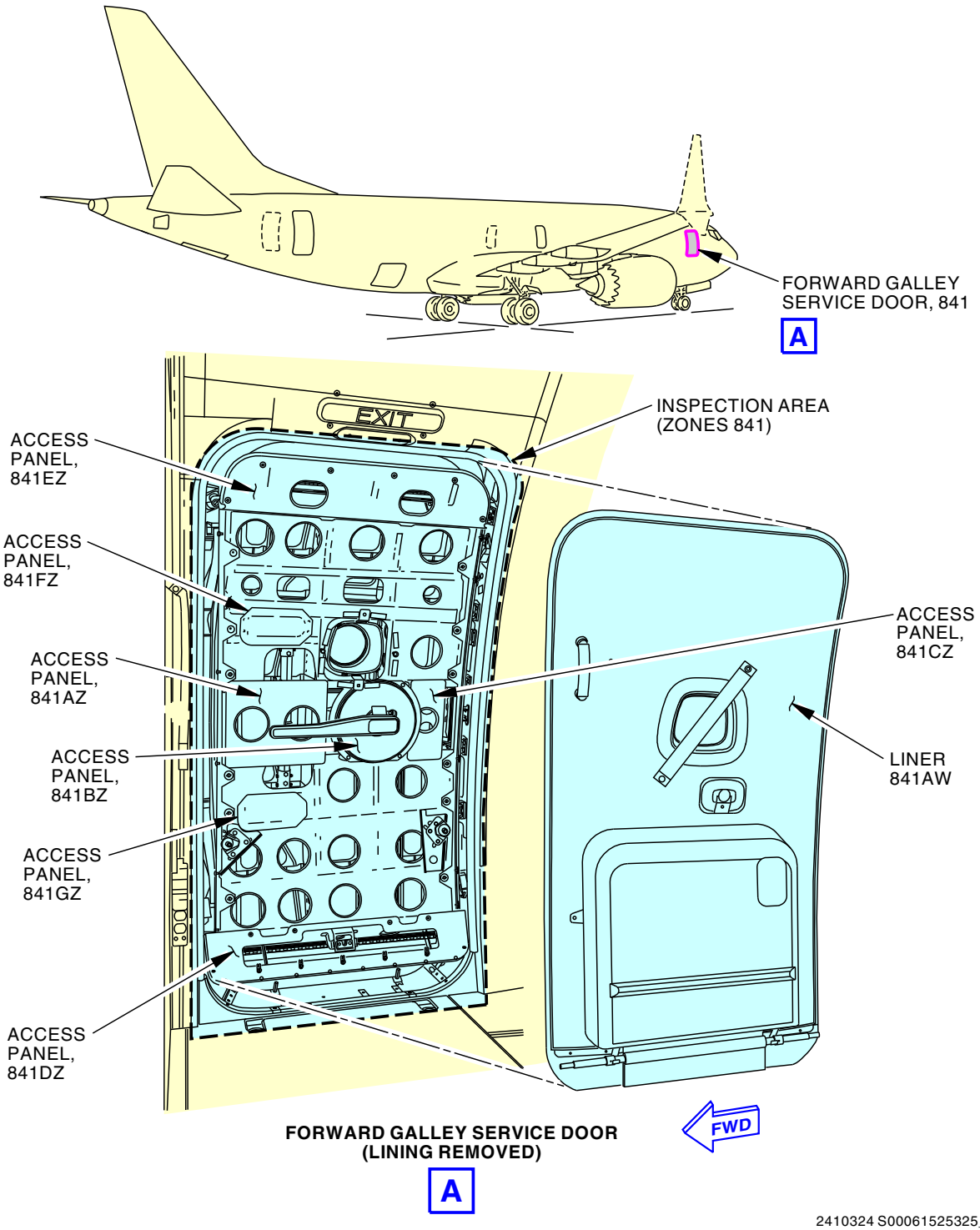
(c) Install the cover plate onto the door structure with the bolts and the washers.

1) If a new bolt is to be used, make sure that the grip length is the same as the original bolt.

NOTE: Grip length is important.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Forward Galley Service Door General Visual (Internal)
Figure 215/05-41-08-990-815

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-08-210-816

16. EXTERNAL - ZONAL (GV): AUTOMATIC OVERWING EXIT

(Figure 216)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
842	Right Forward Emergency Exit

B. Access Panels

Number	Name/Location
842	Emergency Exit Door (AOE)

C. Zonal Inspection

SUBTASK 05-41-08-010-015

(1) Open this access panel:

Number	Name/Location
842	Emergency Exit Door (AOE)

SUBTASK 05-41-08-210-016

(2) Do a General Visual inspection of the automatic overwing exit - Section 44, Sta 589.5.

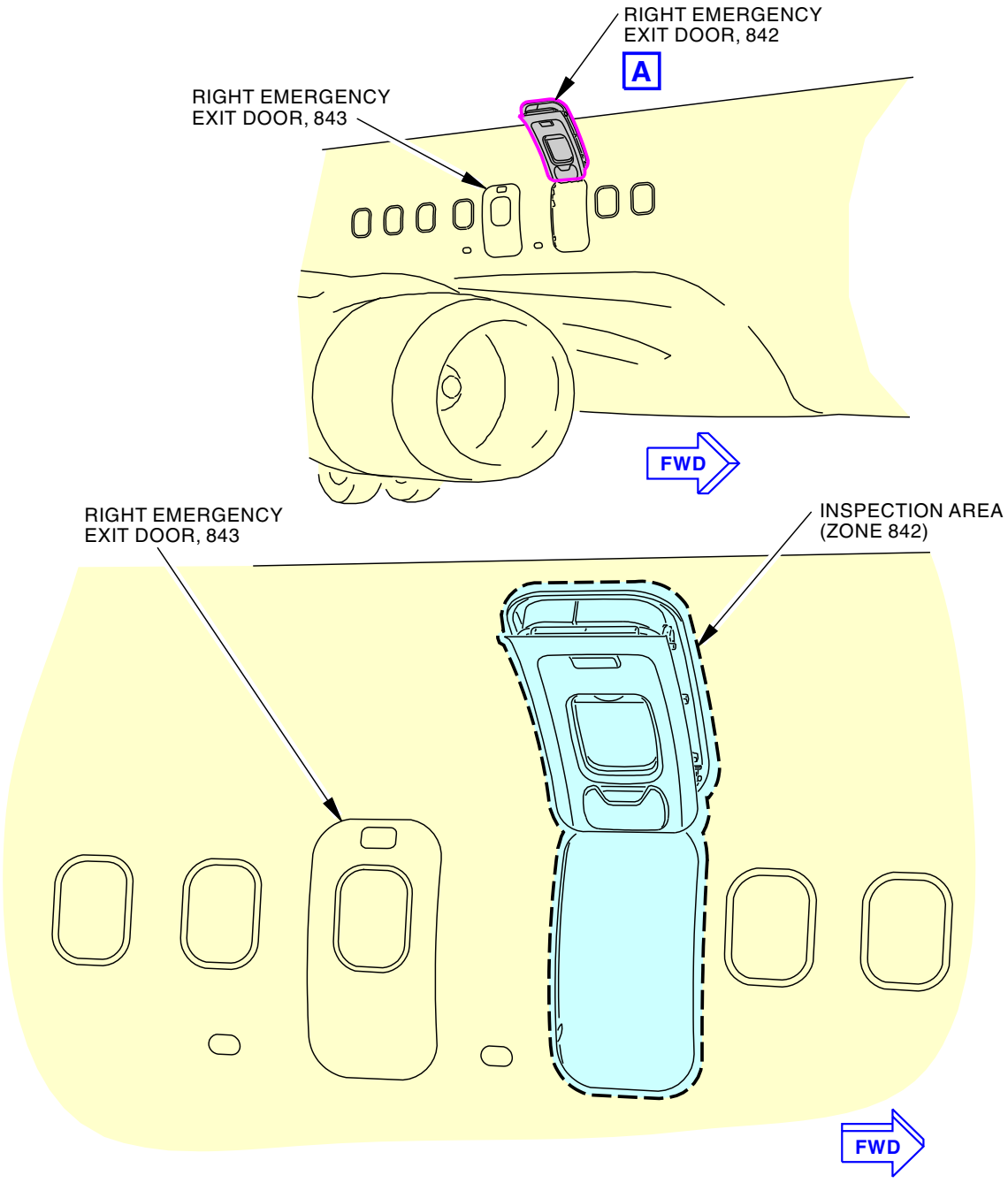
SUBTASK 05-41-08-410-015

(3) Close this access panel:

Number	Name/Location
842	Emergency Exit Door (AOE)

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Right Emergency Exit Door General Visual (External)
Figure 216/05-41-08-990-816

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-08-210-817

17. INTERNAL - ZONAL (GV): AUTOMATIC OVERWING EXIT

(Figure 217)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
842	Right Forward Emergency Exit

B. Access Panels

Number	Name/Location
842AZ	Panel Assy - Emergency Exit Door (AOE) - Door Liner

C. Zonal Inspection

SUBTASK 05-41-08-010-016

(1) Open this access panel:

Number	Name/Location
842AZ	Panel Assy - Emergency Exit Door (AOE) - Door Liner

NOTE: Automatic overwing exit door liner removal required.

SUBTASK 05-41-08-210-017

(2) Do a General Visual inspection of the automatic overwing exit - Section 44, Sta 589.5.

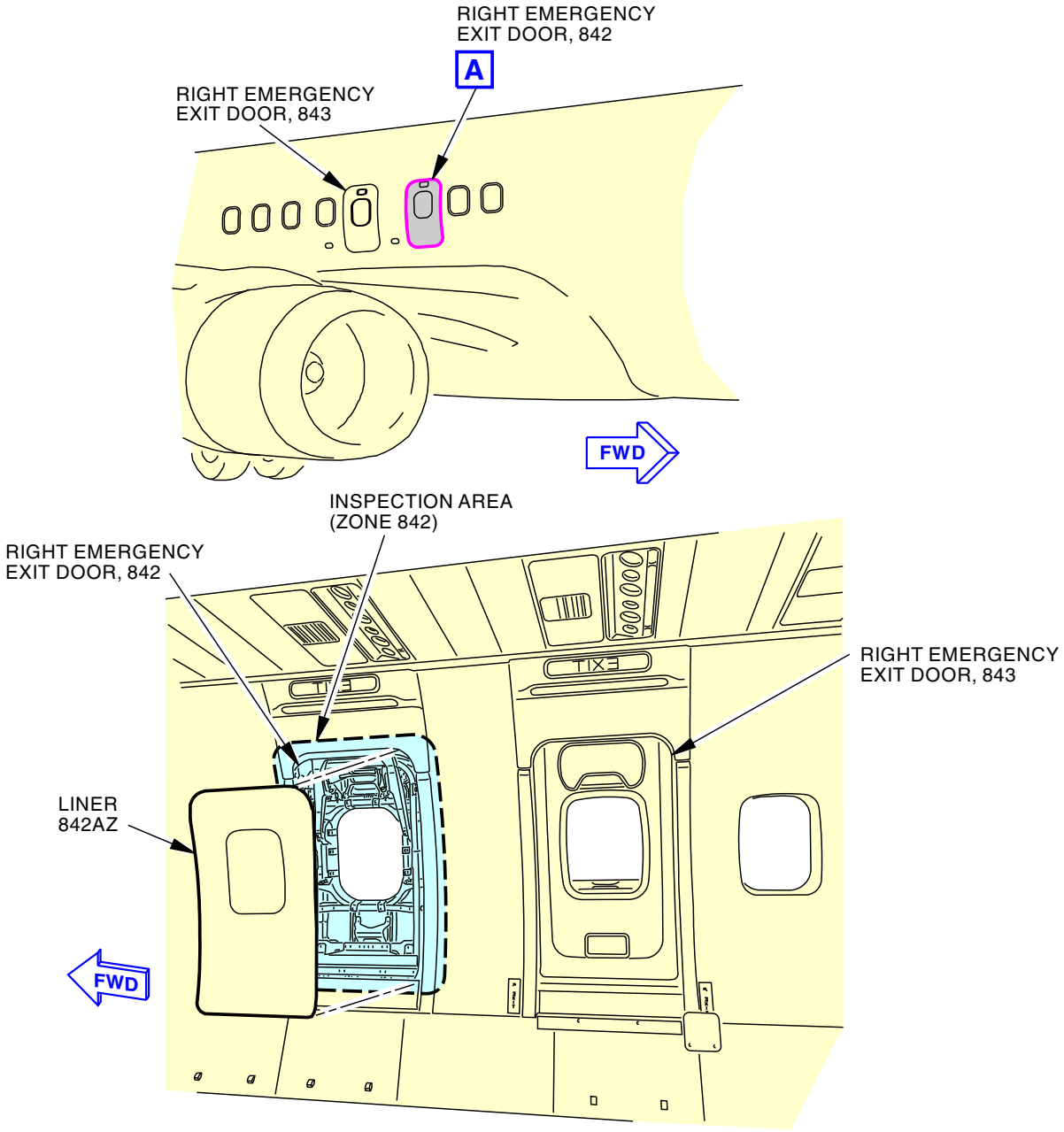
SUBTASK 05-41-08-410-016

(3) Close this access panel:

Number	Name/Location
842AZ	Panel Assy - Emergency Exit Door (AOE) - Door Liner

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



RIGHT EMERGENCY EXIT DOOR
(DOOR IN THE CLOSED POSITION WITH DOOR LINING REMOVED)

A

2410326 S00061525329_V4

Right Emergency Exit Door General Visual (Internal)
Figure 217/05-41-08-990-817

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-08-210-818

18. EXTERNAL - ZONAL (GV): AUTOMATIC OVERWING EXIT

(Figure 218)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
843	Right Emergency Exit (STA 627.5)

B. Access Panels

Number	Name/Location
843	Emergency Exit Door (AOE)

C. Zonal Inspection

SUBTASK 05-41-08-010-017

(1) Open this access panel:

Number	Name/Location
843	Emergency Exit Door (AOE)

SUBTASK 05-41-08-210-018

(2) Do a General Visual inspection of the automatic overwing exit - Section 44, Sta 627.

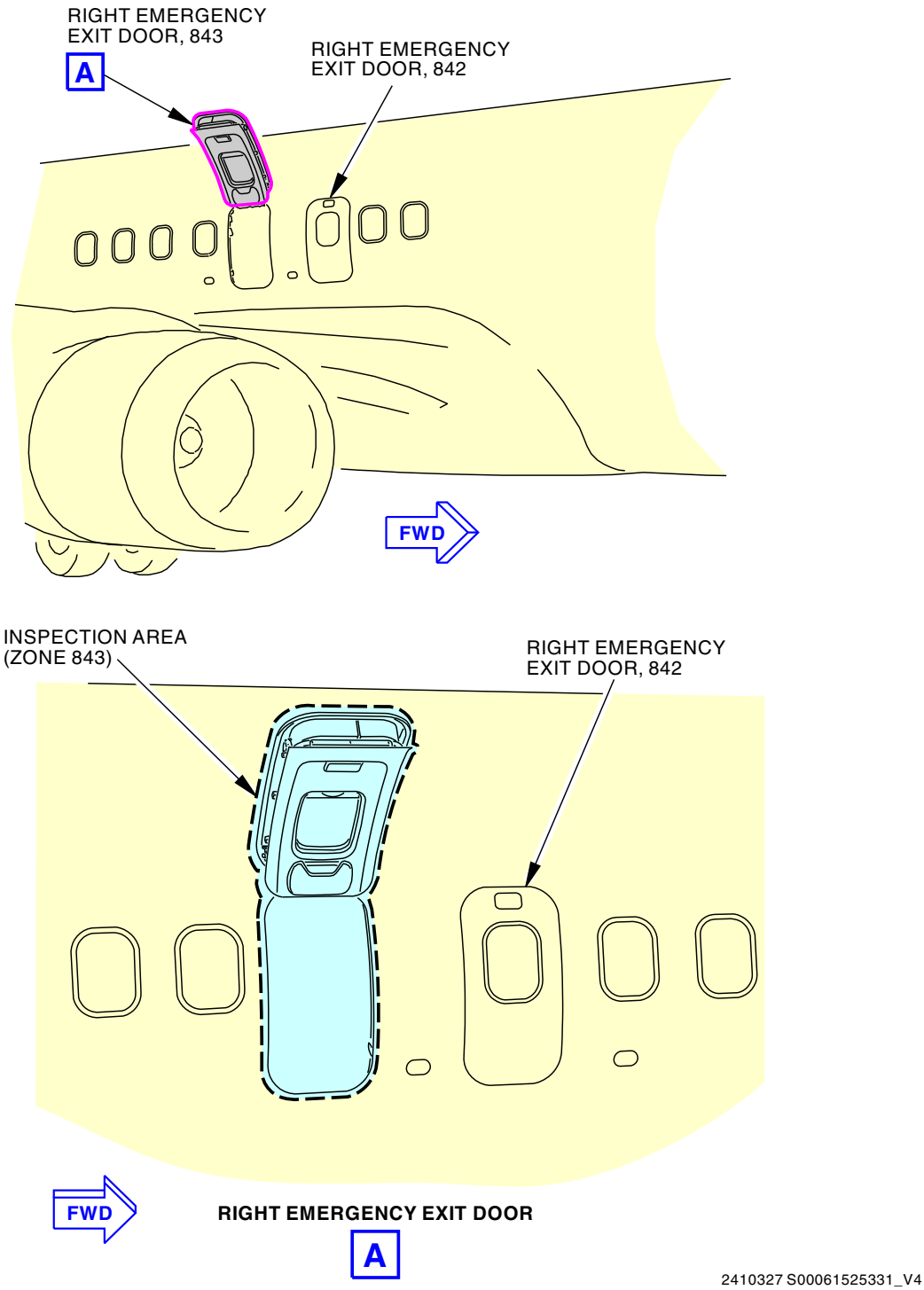
SUBTASK 05-41-08-410-017

(3) Close this access panel:

Number	Name/Location
843	Emergency Exit Door (AOE)

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Right Emergency Exit Door General Visual (External)
Figure 218/05-41-08-990-818

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-08-210-819

19. INTERNAL - ZONAL (GV): AUTOMATIC OVERWING EXIT

(Figure 219)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
843	Right Emergency Exit (STA 627.5)

B. Access Panels

Number	Name/Location
843AZ	Panel Assy - Emergency Exit Door (AOE) - Door Liner

C. Zonal Inspection

SUBTASK 05-41-08-010-018

(1) Open this access panel:

Number	Name/Location
843AZ	Panel Assy - Emergency Exit Door (AOE) - Door Liner

NOTE: Automatic overwing exit door liner removal required.

SUBTASK 05-41-08-210-019

(2) Do a General Visual inspection of the automatic overwing exit - Section 44, Sta 627.

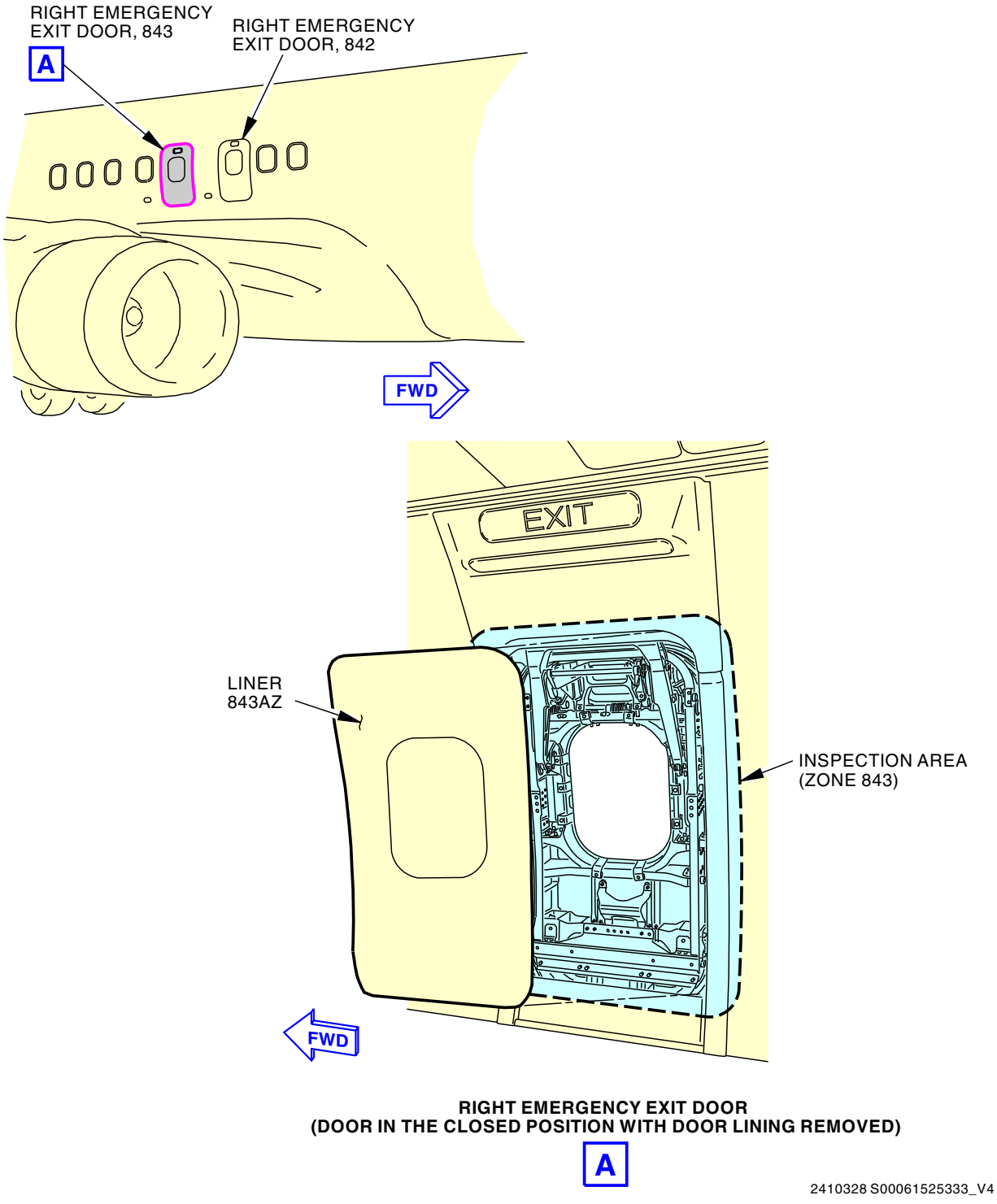
SUBTASK 05-41-08-410-018

(3) Close this access panel:

Number	Name/Location
843AZ	Panel Assy - Emergency Exit Door (AOE) - Door Liner

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Right Emergency Exit Door General Visual (Internal)
Figure 219/05-41-08-990-819

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-08-210-820

20. EXTERNAL - ZONAL (GV): AFT GALLEY SERVICE DOOR

(Figure 220)

NOTE: This procedure is a scheduled maintenance task.

A. Location Zones

Zone	Area
844	Aft Galley Service Door

B. Access Panels

Number	Name/Location
844	Aft Galley Service Door

C. Zonal Inspection

SUBTASK 05-41-08-010-019

(1) Open this access panel:

Number	Name/Location
844	Aft Galley Service Door

SUBTASK 05-41-08-210-020

(2) Do a General Visual inspection of the aft galley service door - Section 47, Sta 980.

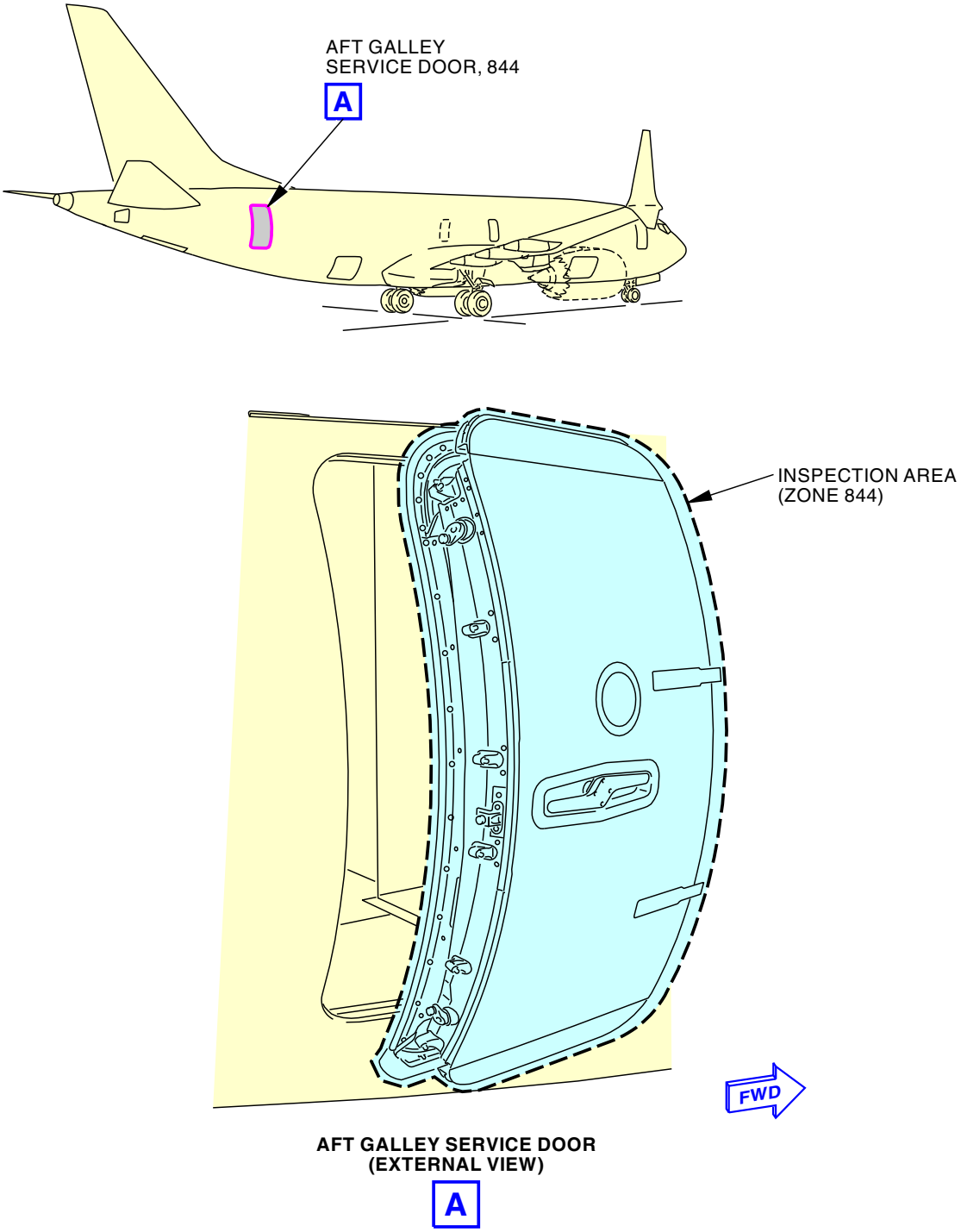
SUBTASK 05-41-08-410-019

(3) Close this access panel:

Number	Name/Location
844	Aft Galley Service Door

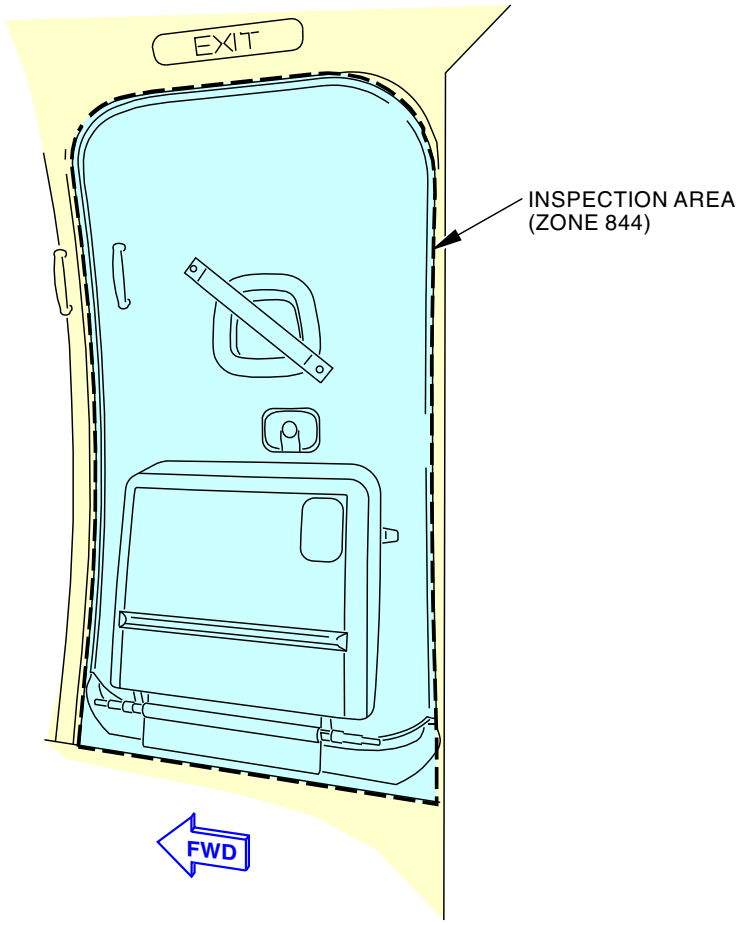
——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Aft Galley Service Door General Visual (External)
Figure 220/05-41-08-990-820 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



**AFT GALLEY SERVICE DOOR
(INTERIOR VIEW)**

A

2410330 S00061525336_V1

**Aft Galley Service Door General Visual (External)
Figure 220/05-41-08-990-820 (Sheet 2 of 2)**

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-41-08-210-821

21. INTERNAL - ZONAL (GV): AFT GALLEY SERVICE DOOR

(Figure 221)

NOTE: This procedure is a scheduled maintenance task.

A. References

Reference	Title
SOPM 20-50-19	General Sealing

B. Consumable Materials

Reference	Description	Specification
A00247	Sealant - Pressure And Environmental - Chromate Type	BMS5-95

C. Location Zones

Zone	Area
844	Aft Galley Service Door

D. Access Panels

Number	Name/Location
844AW	Aft Galley Service Door - Door Liner (Cosmetic)
844AZ	Aft Galley Service Door - Torque Tube Access
844BZ	Aft Galley Service Door - Handle Box and Cam for Handle Box Access
844CZ	Aft Galley Service Door - Handle Box Access
844DZ	Aft Galley Service Door - Lower Hinge Access
844EZ	Aft Galley Service Door - Upper Hinge Access
844FZ	Aft Galley Service Door - Torque Tube Access
844GZ	Aft Galley Service Door - Torque Tube Access

E. Zonal Inspection

SUBTASK 05-41-08-010-020

(1) Open these access panels:

Number	Name/Location
844AW	Aft Galley Service Door - Door Liner (Cosmetic)
844AZ	Aft Galley Service Door - Torque Tube Access
844BZ	Aft Galley Service Door - Handle Box and Cam for Handle Box Access
844CZ	Aft Galley Service Door - Handle Box Access
844DZ	Aft Galley Service Door - Lower Hinge Access
844EZ	Aft Galley Service Door - Upper Hinge Access

SUBTASK 05-41-08-010-029

(2) Remove these access doors:

Number	Name/Location
844FZ	Aft Galley Service Door - Torque Tube Access
844GZ	Aft Galley Service Door - Torque Tube Access

(a) Remove a pressure fay surface seal that was previously applied between the mating surfaces of the cover plate and the inner skin (SOPM 20-50-19).

(b) Remove a parting agent that was previously applied on the mating surfaces of the cover plate (SOPM 20-50-19).

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 05-41-08-210-021

(3) Do a General Visual inspection of the aft galley service door - Section 47, Sta 980.

SUBTASK 05-41-08-410-020

(4) Close these access panels:

Number	Name/Location
844AW	Aft Galley Service Door - Door Liner (Cosmetic)
844AZ	Aft Galley Service Door - Torque Tube Access
844BZ	Aft Galley Service Door - Handle Box and Cam for Handle Box Access
844CZ	Aft Galley Service Door - Handle Box Access
844DZ	Aft Galley Service Door - Lower Hinge Access
844EZ	Aft Galley Service Door - Upper Hinge Access

SUBTASK 05-41-08-410-029

(5) Install these access doors:

Number	Name/Location
844FZ	Aft Galley Service Door - Torque Tube Access
844GZ	Aft Galley Service Door - Torque Tube Access

(a) Apply a parting agent to the mating surfaces of the cover plate (SOPM 20-50-19).

(b) Apply a pressure fay surface seal with sealant, A00247, between the mating surfaces of the cover plate and the inner skin (SOPM 20-50-19).

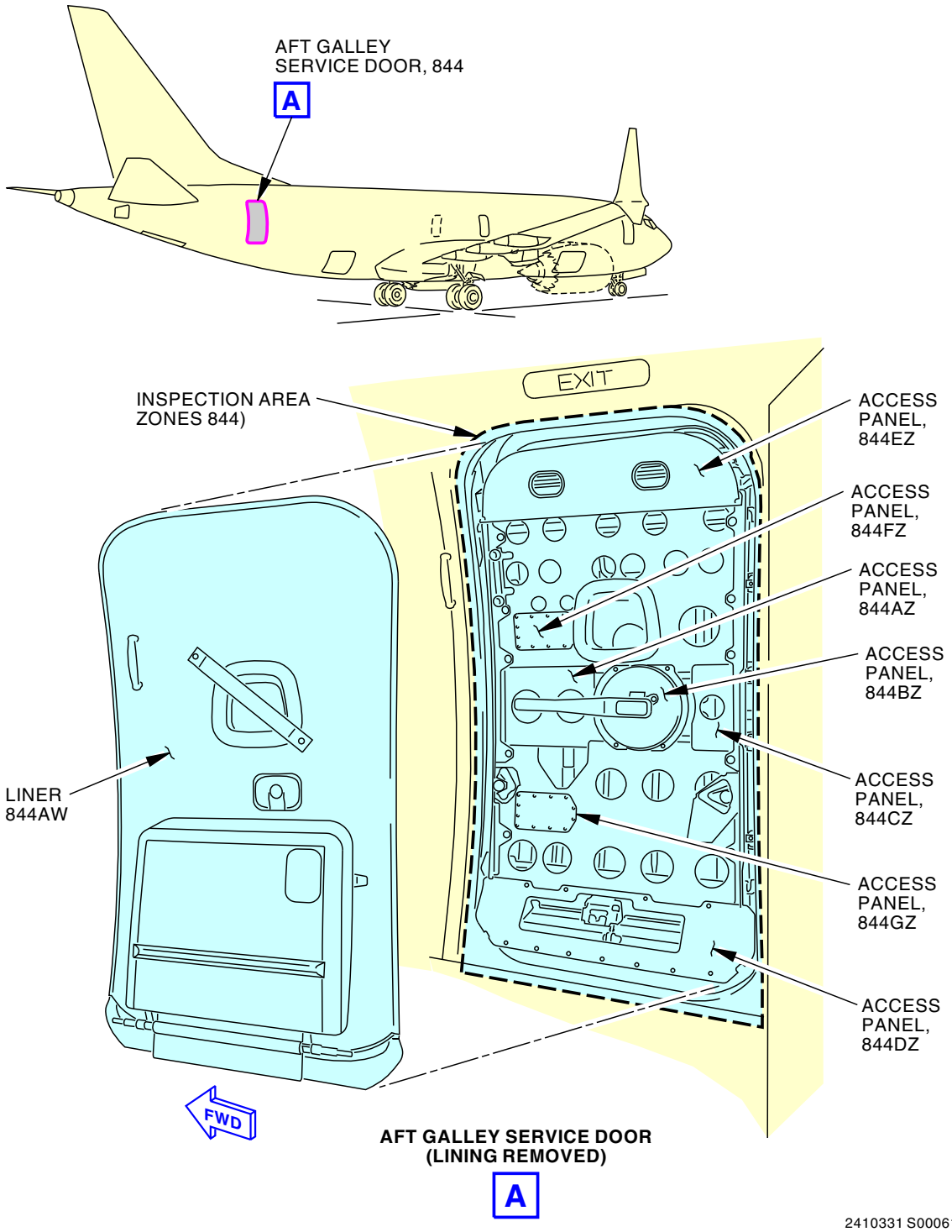
(c) Install the cover plate onto the door structure with the bolts and the washers.

1) If a new bolt is to be used, make sure that the grip length is the same as the original bolt.

NOTE: Grip length is important.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Aft Galley Service Door General Visual (Internal)
Figure 221/05-41-08-990-821

ECCN 9E991 BOEING PROPRIETARY - See title page for details

ZONE 100 - LOWER FUSELAGE - (EZAP)

1. General

A. This pageblock contains MSG-3 task card data.

EWIS

TASK 05-42-01-100-801

2. Restore: Area Forward of Nose Wheel Well. (EZAP)

(Figure 201)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This procedure is an Enhanced Zonal Analysis Procedure (EZAP) task.

B. References

Reference	Title
20-60-02-100-803	Cleaning to Remove Combustible Material (P/B 701)
20-60-07-910-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
112	Area Forward of Nose Landing Gear Wheel Well

D. Access Panels

Number	Name/Location
112A	Forward Access Door

E. Procedure

SUBTASK 05-42-01-010-001

(1) Open this access panel:

Number	Name/Location
112A	Forward Access Door

SUBTASK 05-42-01-160-001

(2) Do this task: Cleaning to Remove Combustible Material, TASK 20-60-02-100-803.

(3) Restore (Clean) Area Forward of Nose Wheel Well. (EZAP)

SUBTASK 05-42-01-910-001

(4) Refer to the task: Protection of the EWIS During Maintenance, TASK 20-60-07-910-801, for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

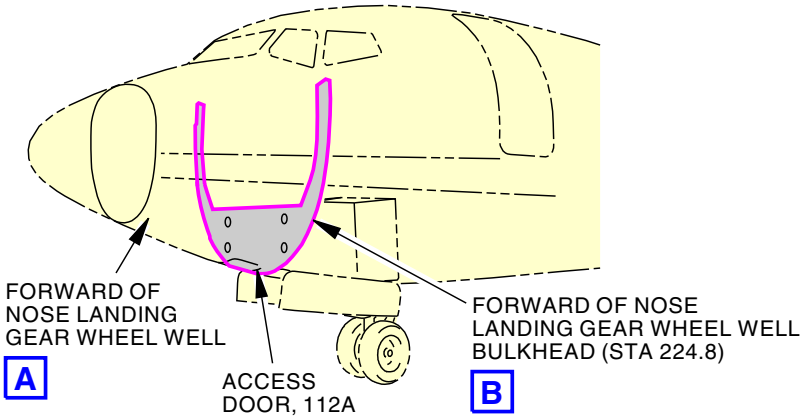
SUBTASK 05-42-01-410-001

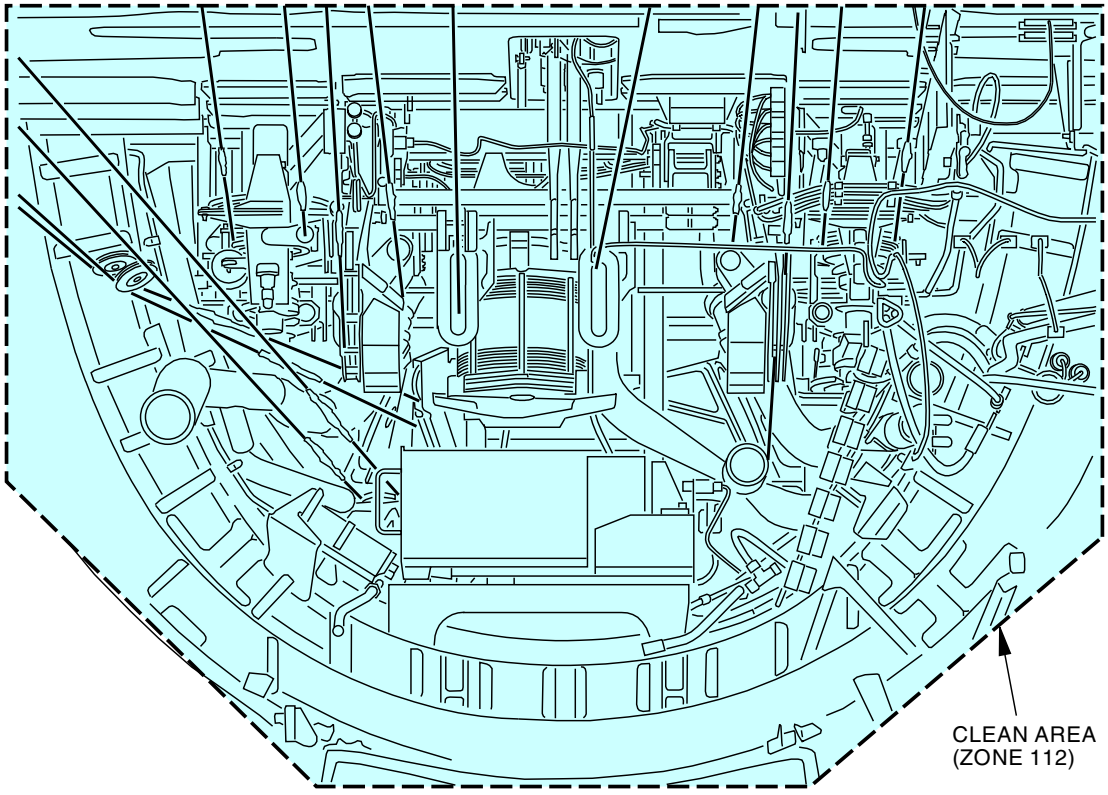
(5) Close this access panel:

Number	Name/Location
112A	Forward Access Door

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details





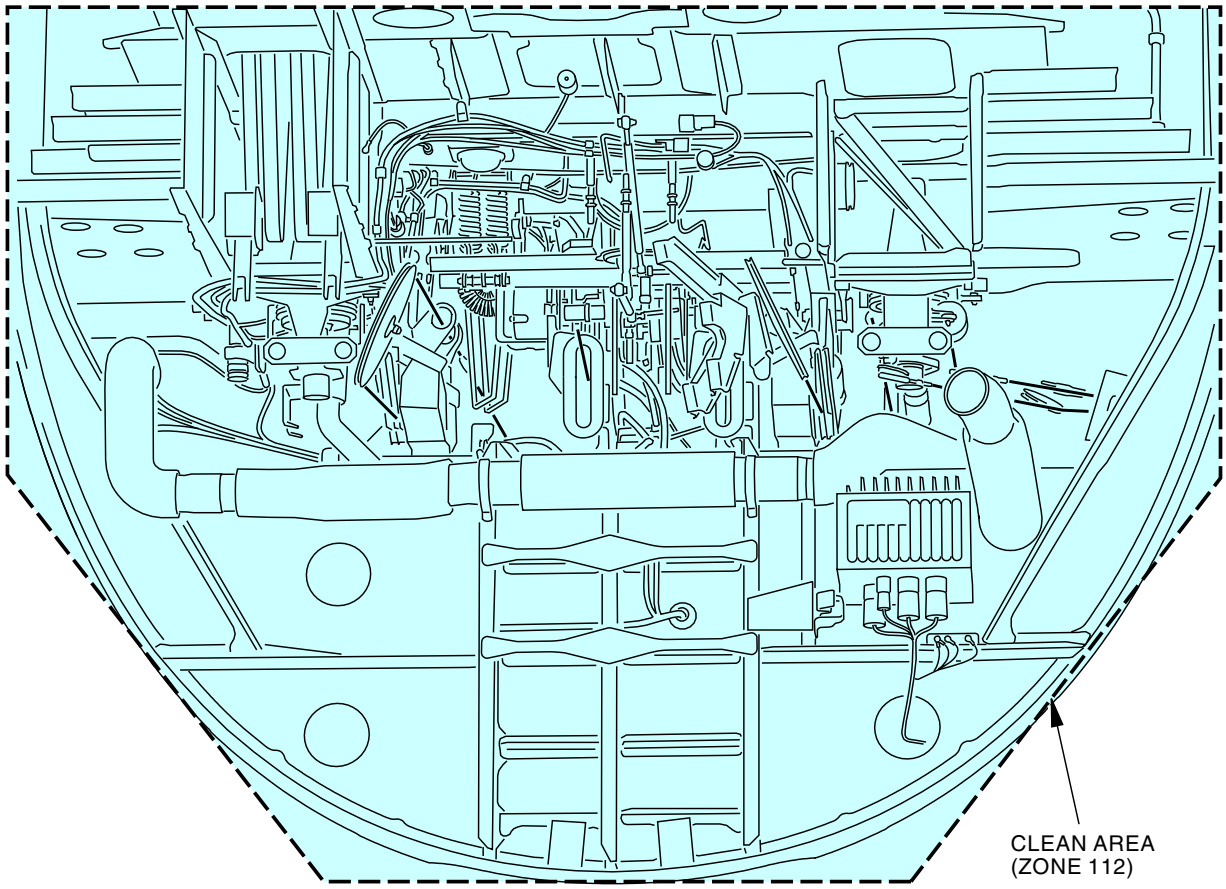
**FORWARD OF NOSE LANDING GEAR WHEEL WELL
(VIEW IN THE FORWARD DIRECTION)**

A

2410332 S00061525343_V1

**Area Forward of Nose Wheel Well
Figure 201/05-42-01-990-801 (Sheet 1 of 2)**

ECCN 9E991 BOEING PROPRIETARY - See title page for details



**FORWARD OF NOSE LANDING GEAR WHEEL WELL BULKHEAD (STA 224.8)
(VIEW IN THE AFT DIRECTION)**

B

2410333 S00061525344_V1

**Area Forward of Nose Wheel Well
Figure 201/05-42-01-990-801 (Sheet 2 of 2)**

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-42-01-100-802

3. Restore: Areas Behind the Equipment Racks in the Electrical and Electronics Compartment. (EZAP)

(Figure 202)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This procedure is an Enhanced Zonal Analysis Procedure (EZAP) task.

B. References

Reference	Title
20-60-02-100-803	Cleaning to Remove Combustible Material (P/B 701)
20-60-07-910-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
117	Electrical and Electronics Compartment - Left
118	Electrical and Electronics Compartment - Right

D. Access Panels

Number	Name/Location
117A	Electronic Equipment Access Door
117BL	Forward Airstair Door
121MW	PANEL ASSY - FORWARD CARGO COMPARTMENT FWD BULKHEAD
121NW	PANEL ASSY - FORWARD CARGO COMPARTMENT FWD BULKHEAD
122JW	PANEL ASSY - FORWARD CARGO COMPARTMENT FWD BULKHEAD

E. Procedure

SUBTASK 05-42-01-010-002

(1) Open these access panels:

Number	Name/Location
117A	Electronic Equipment Access Door
117BL	Forward Airstair Door
121MW	PANEL ASSY - FORWARD CARGO COMPARTMENT FWD BULKHEAD
121NW	PANEL ASSY - FORWARD CARGO COMPARTMENT FWD BULKHEAD
122JW	PANEL ASSY - FORWARD CARGO COMPARTMENT FWD BULKHEAD

SUBTASK 05-42-01-160-002

(2) Do this task: Cleaning to Remove Combustible Material, TASK 20-60-02-100-803.

(3) Restore (Clean) areas behind the equipment racks in the Electrical and Electronics Compartment, and inside the Airstair Compartment (if installed). (EZAP)

SUBTASK 05-42-01-910-002

(4) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-910-801, for the protection and caution information that will minimize contamination and accidental damage to Electrical Wiring Interconnect Systems (EWIS) during maintenance.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

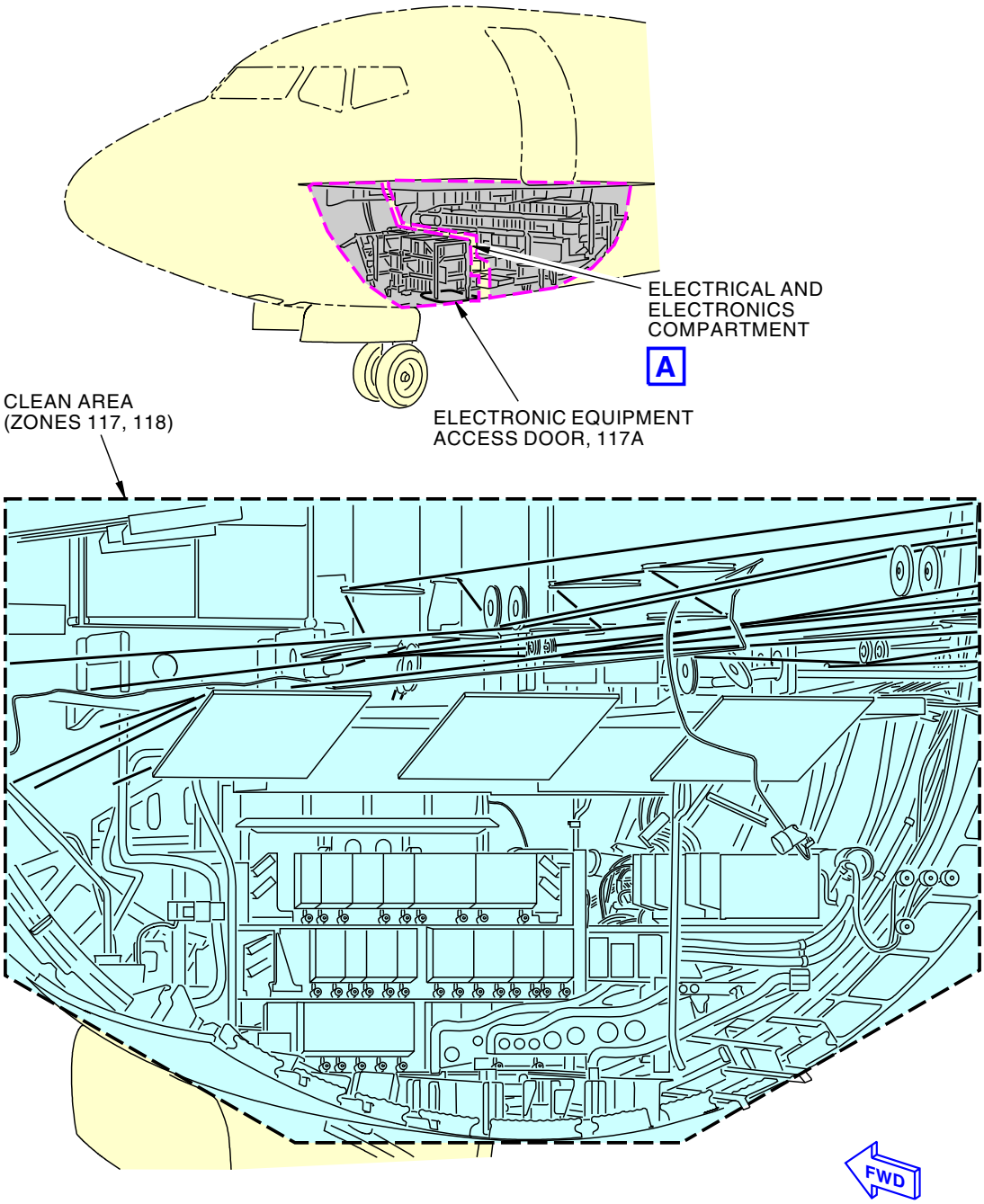
SUBTASK 05-42-01-410-002

(5) Close these access panels:

Number	Name/Location
117A	Electronic Equipment Access Door
117BL	Forward Airstair Door
121MW	PANEL ASSY - FORWARD CARGO COMPARTMENT FWD BULKHEAD
121NW	PANEL ASSY - FORWARD CARGO COMPARTMENT FWD BULKHEAD
122JW	PANEL ASSY - FORWARD CARGO COMPARTMENT FWD BULKHEAD

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details



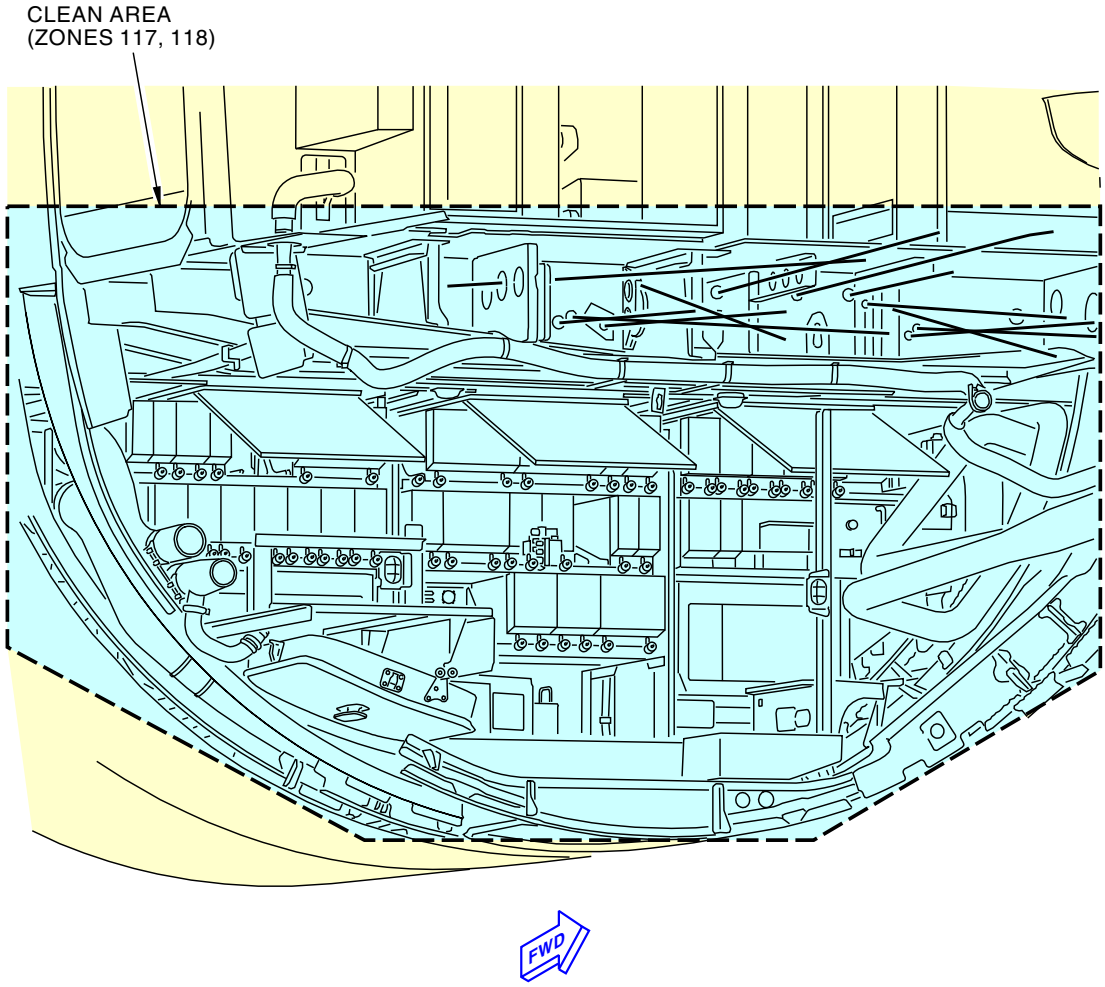
ELECTRICAL AND ELECTRONICS COMPARTMENT
(VIEW IN THE FORWARD DIRECTION)

A

2410334 S00061525346_V1

Electrical and Electronics Compartment
Figure 202/05-42-01-990-802 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



**ELECTRICAL AND ELECTRONICS COMPARTMENT
(VIEW IN THE AFT DIRECTION)**

A

2410335 S00061525347_V1

**Electrical and Electronics Compartment
Figure 202/05-42-01-990-802 (Sheet 2 of 2)**

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-42-01-100-803

4. Restore: Area Above and Outboard of Nose Wheel Well. (EZAP)

(Figure 203)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This procedure is an Enhanced Zonal Analysis Procedure (EZAP) task.

B. References

Reference	Title
05-51-91-790-801	Cabin Pressure Leak Test (P/B 201)
20-60-02-100-803	Cleaning to Remove Combustible Material (P/B 701)
20-60-07-910-801	Protection of the EWIS During Maintenance (P/B 201)
53-14-01-020-801	Nose Wheel Well Access Panels Removal (P/B 401)
53-14-01-420-801	Nose Wheel Well Access Panels Installation (P/B 401)

C. Location Zones

Zone	Area
113	Area Above and Outboard of Nose Landing Gear Wheel Well - Left
114	Area Above and Outboard of Nose Landing Gear Wheel Well - Right

D. Access Panels

Number	Name/Location
113AC	Fwd Nose Wheel Well Upper Access Panel
113AW	Forward Nose Wheel Well Panel
113BW	Forward Nose Wheel Well Panel
114AC	Fwd Nose Wheel Well Upper Access Panel
114AW	Forward Nose Wheel Well Panel
114BW	Forward Nose Wheel Well Panel

E. Procedure

SUBTASK 05-42-01-010-003

(1) Open these access panels:

Number	Name/Location
113AC	Fwd Nose Wheel Well Upper Access Panel
113AW	Forward Nose Wheel Well Panel
113BW	Forward Nose Wheel Well Panel
114AC	Fwd Nose Wheel Well Upper Access Panel
114AW	Forward Nose Wheel Well Panel
114BW	Forward Nose Wheel Well Panel

NOTE: Remove/displace insulation blankets if it is required.

(a) Do this task: Nose Wheel Well Access Panels Removal, TASK 53-14-01-020-801.

SUBTASK 05-42-01-160-003

(2) Do this task: Cleaning to Remove Combustible Material, TASK 20-60-02-100-803.

(3) Restore (Clean) area above and outboard of Nose Wheel Well. (EZAP)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 05-42-01-910-003

(4) Refer to the task: Protection of the EWIS During Maintenance, TASK 20-60-07-910-801, for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

SUBTASK 05-42-01-410-003

(5) Close these access panels:

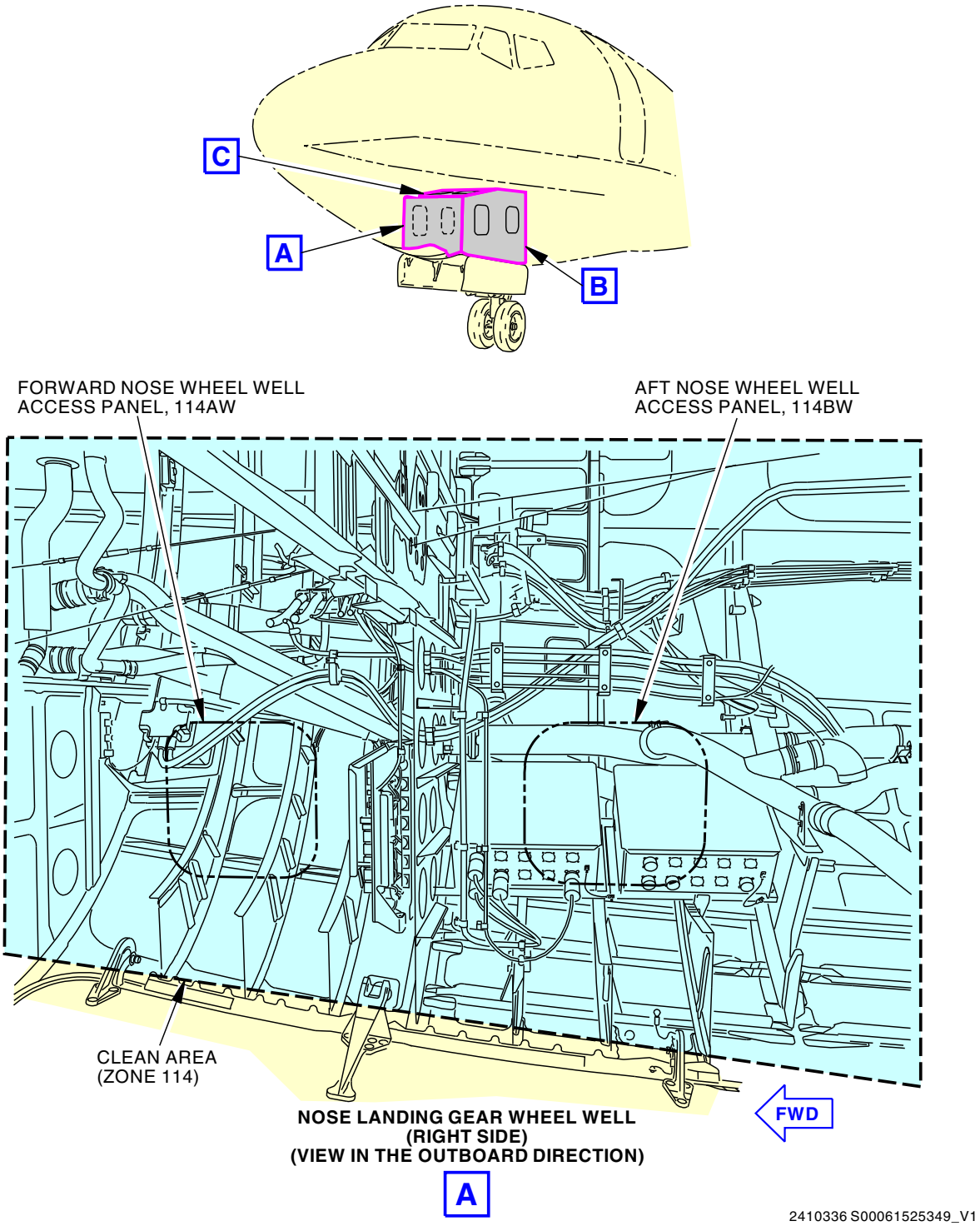
Number	Name/Location
113AC	Fwd Nose Wheel Well Upper Access Panel
113AW	Forward Nose Wheel Well Panel
113BW	Forward Nose Wheel Well Panel
114AC	Fwd Nose Wheel Well Upper Access Panel
114AW	Forward Nose Wheel Well Panel
114BW	Forward Nose Wheel Well Panel

(a) Do this task: Nose Wheel Well Access Panels Installation, TASK 53-14-01-420-801.

(b) Do this task: Cabin Pressure Leak Test, TASK 05-51-91-790-801.

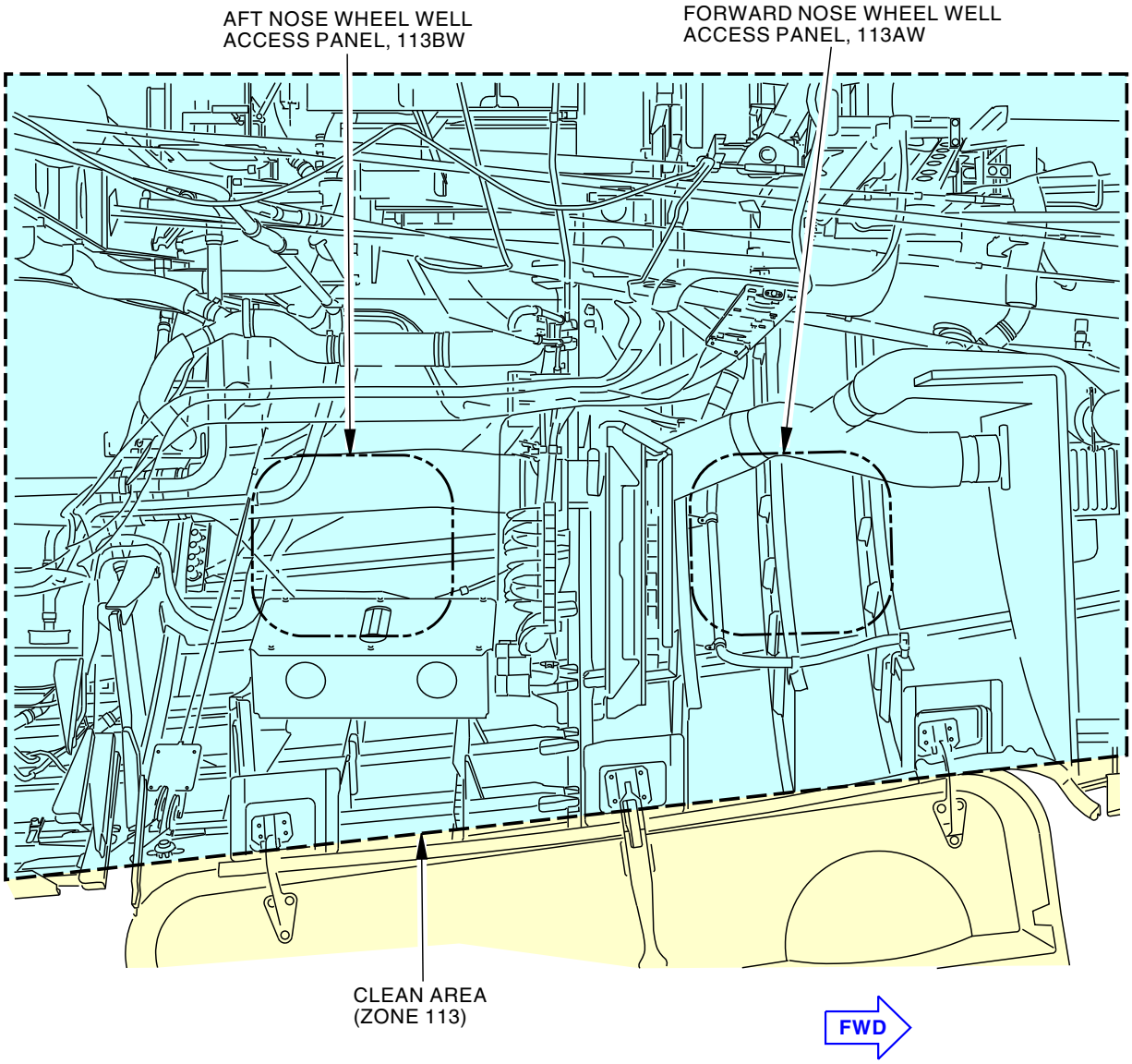
——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Nose Landing Gear Wheel Well
Figure 203/05-42-01-990-803 (Sheet 1 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



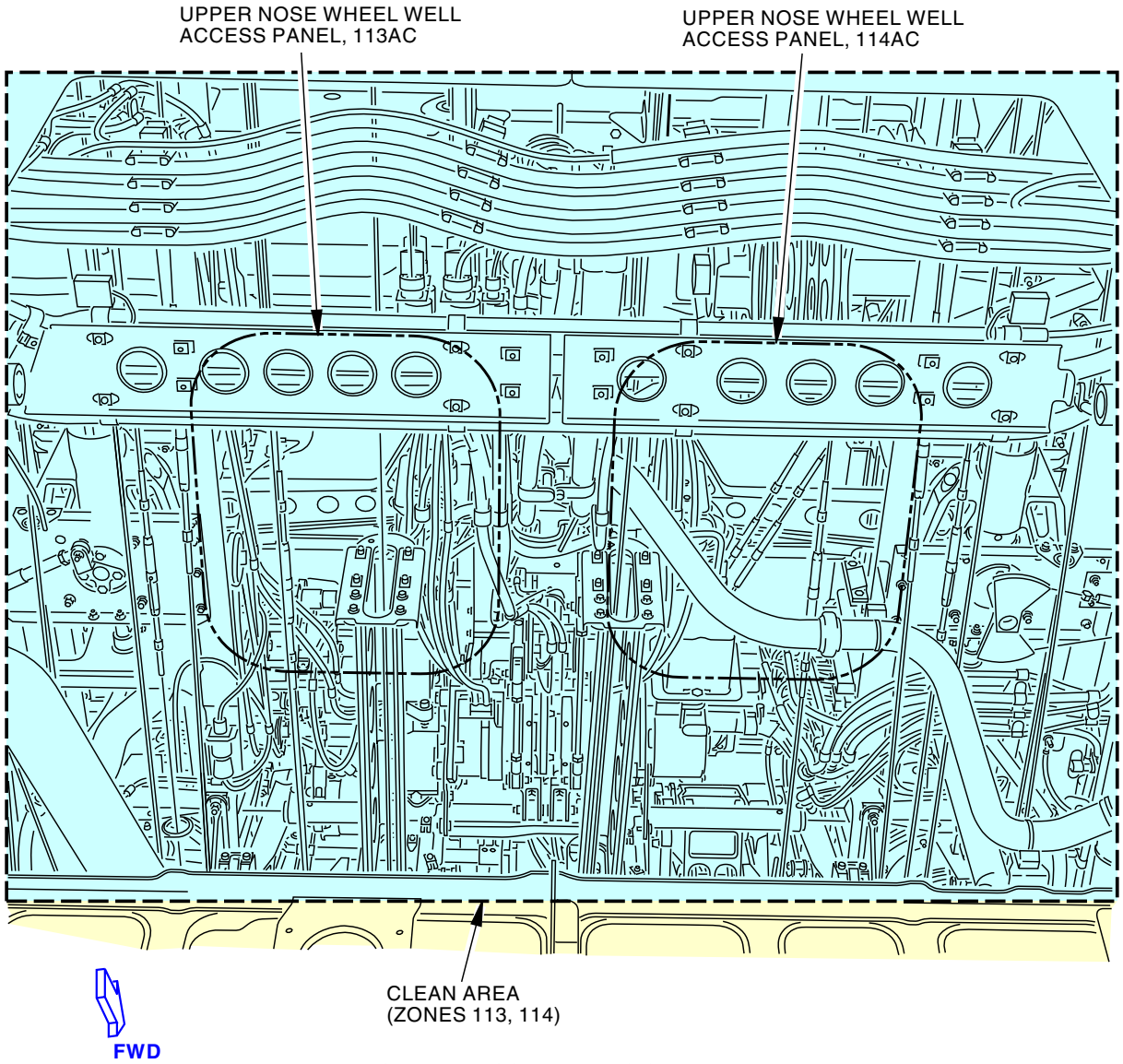
NOSE LANDING GEAR WHEEL WELL
(LEFT SIDE)
(VIEW IN THE OUTBOARD DIRECTION)

B

2410337 S00061525350_V1

Nose Landing Gear Wheel Well
Figure 203/05-42-01-990-803 (Sheet 2 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Nose Landing Gear Wheel Well
Figure 203/05-42-01-990-803 (Sheet 3 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-42-01-100-804

5. Restore: Areas Behind Ceiling and Sidewall Panels in the Aft Cargo Compartment. (EZAP)

(Figure 204)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This procedure is an Enhanced Zonal Analysis Procedure (EZAP) task.

B. References

Reference	Title
20-60-02-100-803	Cleaning to Remove Combustible Material (P/B 701)
20-60-07-910-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
141	Aft Cargo Compartment - Left
142	Aft Cargo Compartment - Right

D. Procedure

NOTE: Ceiling and sidewall panels removal required.

SUBTASK 05-42-01-160-004

(1) Do this task: Cleaning to Remove Combustible Material, TASK 20-60-02-100-803.

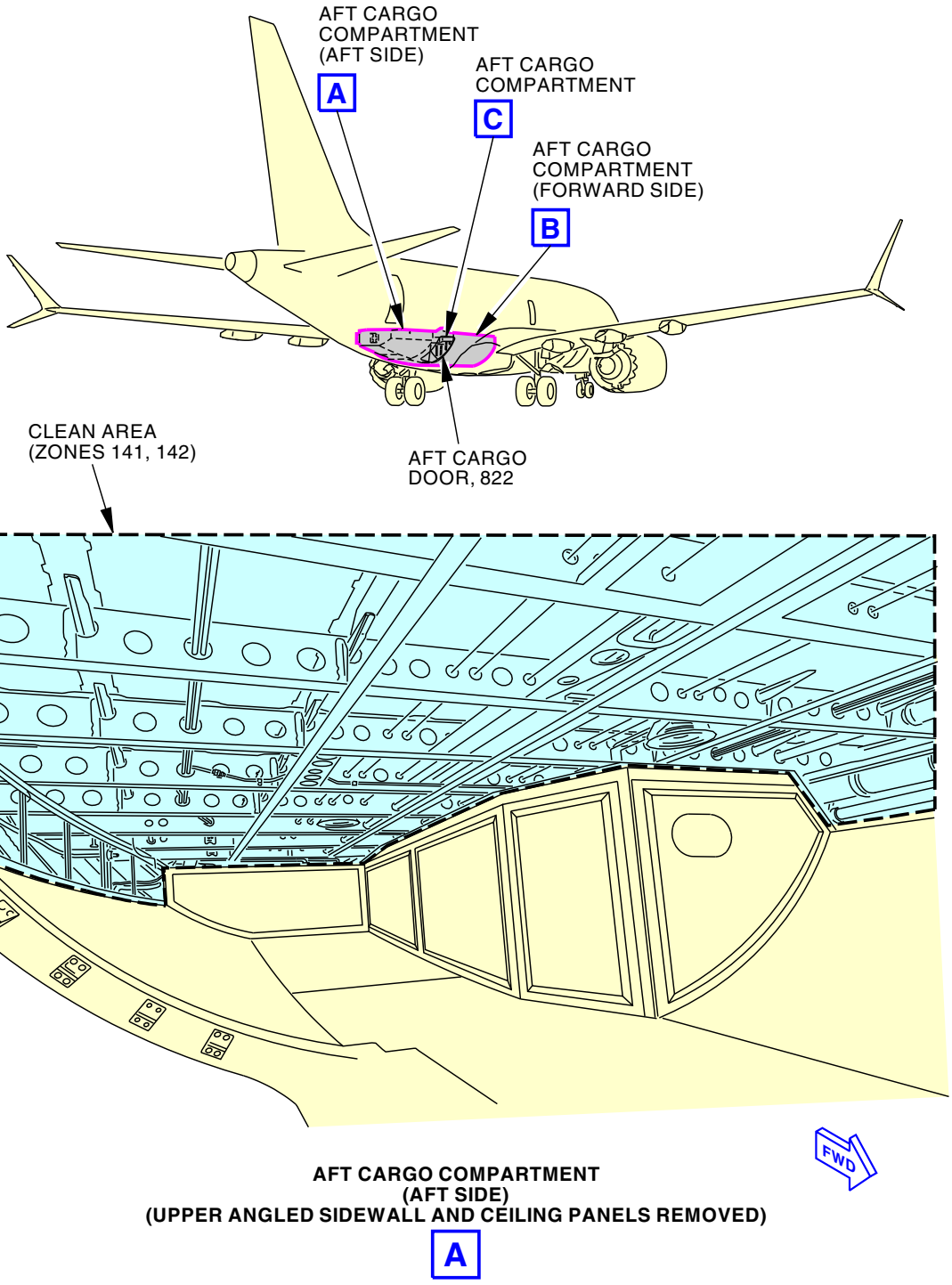
(2) Restore (Clean) areas behind ceiling and sidewall panels in the Aft Cargo Compartment. (EZAP)

SUBTASK 05-42-01-910-004

(3) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-910-801, for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



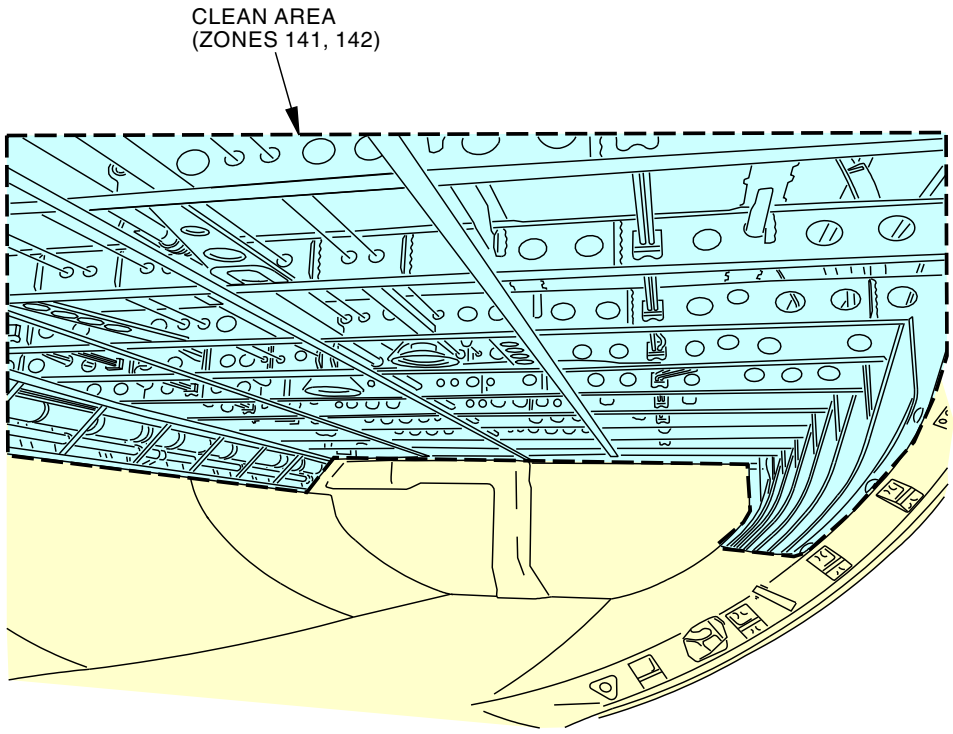
AFT CARGO COMPARTMENT
(AFT SIDE)
(UPPER ANGLED SIDEWALL AND CEILING PANELS REMOVED)

A

2410339 S00061525353_V1

Aft Cargo Compartment
Figure 204/05-42-01-990-804 (Sheet 1 of 5)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



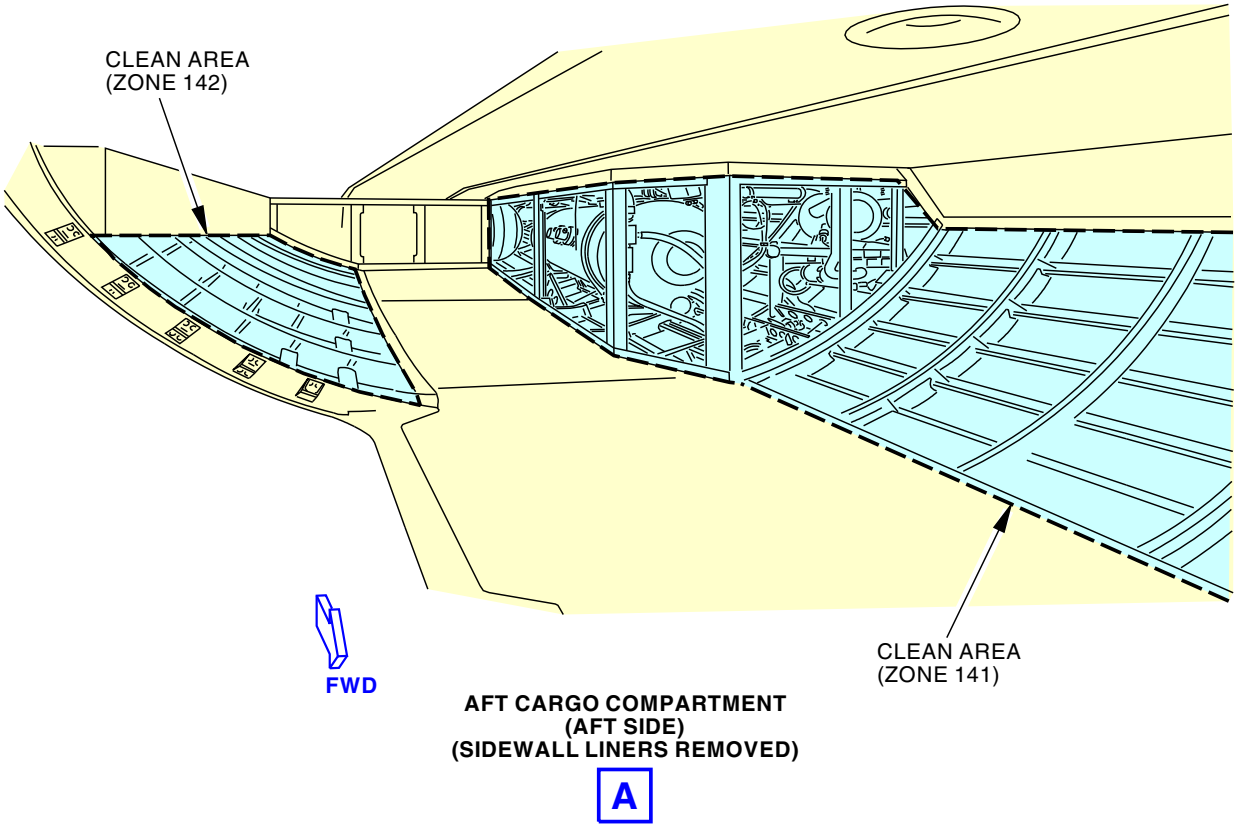
**AFT CARGO COMPARTMENT
(FORWARD SIDE)
(UPPER ANGLED SIDEWALL AND CEILING PANELS REMOVED)**

B

2410340 S00061525354_V1

**Aft Cargo Compartment
Figure 204/05-42-01-990-804 (Sheet 2 of 5)**

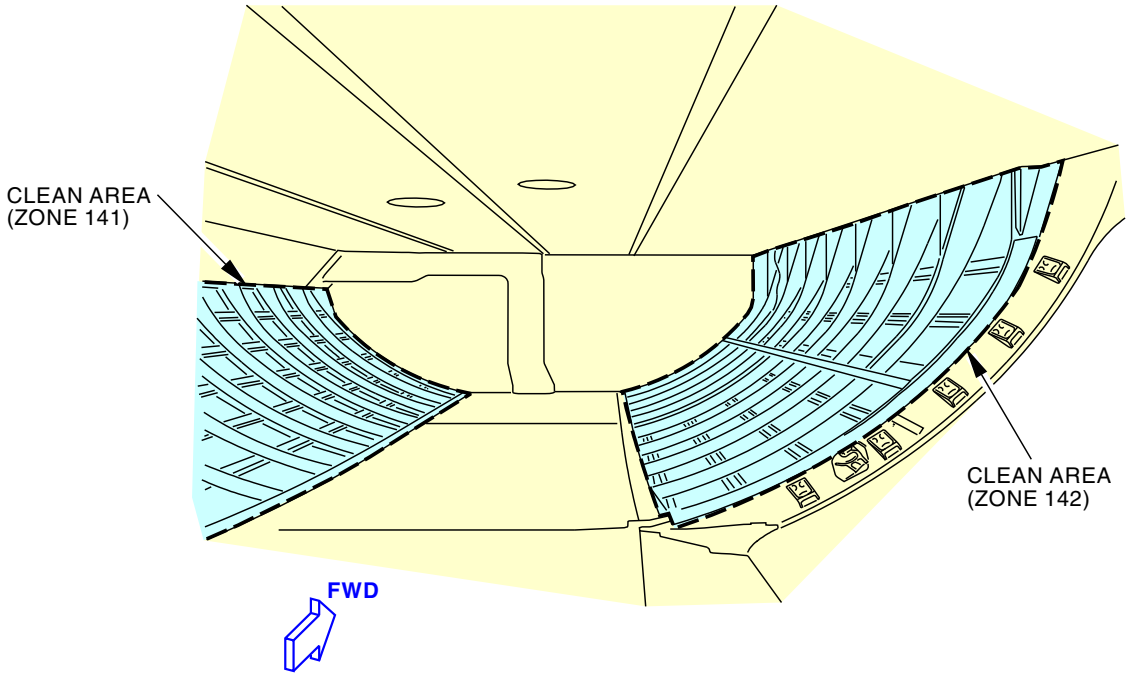
ECCN 9E991 BOEING PROPRIETARY - See title page for details



2410341 S00061525355_V1

Aft Cargo Compartment
Figure 204/05-42-01-990-804 (Sheet 3 of 5)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



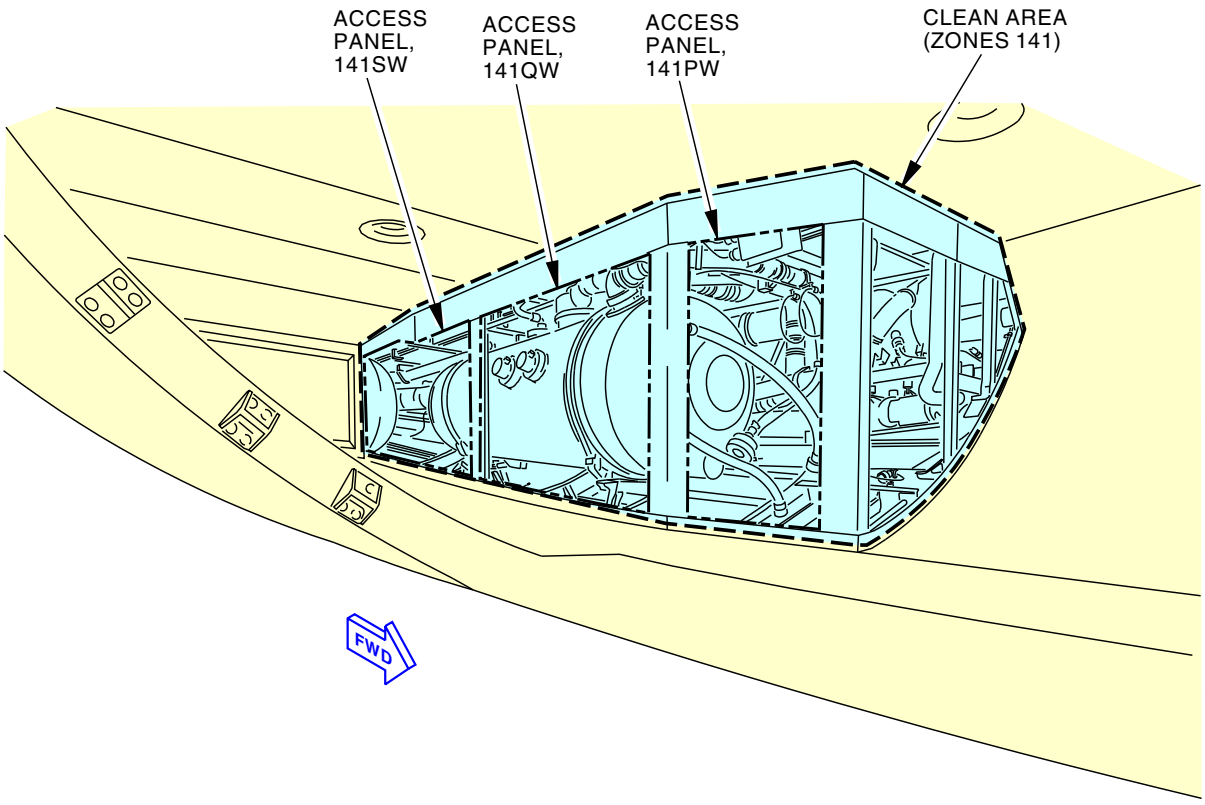
**AFT CARGO COMPARTMENT
(FORWARD SIDE)
(SIDEWALL LINERS REMOVED)**

B

2410342 S00061525356_V1

**Aft Cargo Compartment
Figure 204/05-42-01-990-804 (Sheet 4 of 5)**

ECCN 9E991 BOEING PROPRIETARY - See title page for details



AFT CARGO COMPARTMENT
(VACUUM WASTE COMPARTMENT PANELS REMOVED)

C

2410343 S00061525357_V1

Aft Cargo Compartment
Figure 204/05-42-01-990-804 (Sheet 5 of 5)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-42-01-100-805

6. Restore: Area Aft of Forward Cargo Compartment. (EZAP)

(Figure 205)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This procedure is an Enhanced Zonal Analysis Procedure (EZAP) task.

B. References

Reference	Title
20-60-02-100-803	Cleaning to Remove Combustible Material (P/B 701)
20-60-07-910-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
125	Air Conditioning Distribution Bay - Left
126	Air Conditioning Distribution Bay - Right

D. Access Panels

Number	Name/Location
121EW	Panel Assy - FWD Cargo Compartment Aft Bulkhead
121HW	Panel Assy - FWD Cargo Compartment Aft Bulkhead
122GW	Panel Assy - FWD Cargo Compartment Aft Bulkhead

E. Procedure

SUBTASK 05-42-01-010-004

(1) Open these access panels:

Number	Name/Location
121EW	Panel Assy - FWD Cargo Compartment Aft Bulkhead
121HW	Panel Assy - FWD Cargo Compartment Aft Bulkhead
122GW	Panel Assy - FWD Cargo Compartment Aft Bulkhead

SUBTASK 05-42-01-160-005

(2) Do this task: Cleaning to Remove Combustible Material, TASK 20-60-02-100-803.

(3) Restore (Clean) area aft of Forward Cargo Compartment. (EZAP)

SUBTASK 05-42-01-910-005

(4) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-910-801, for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

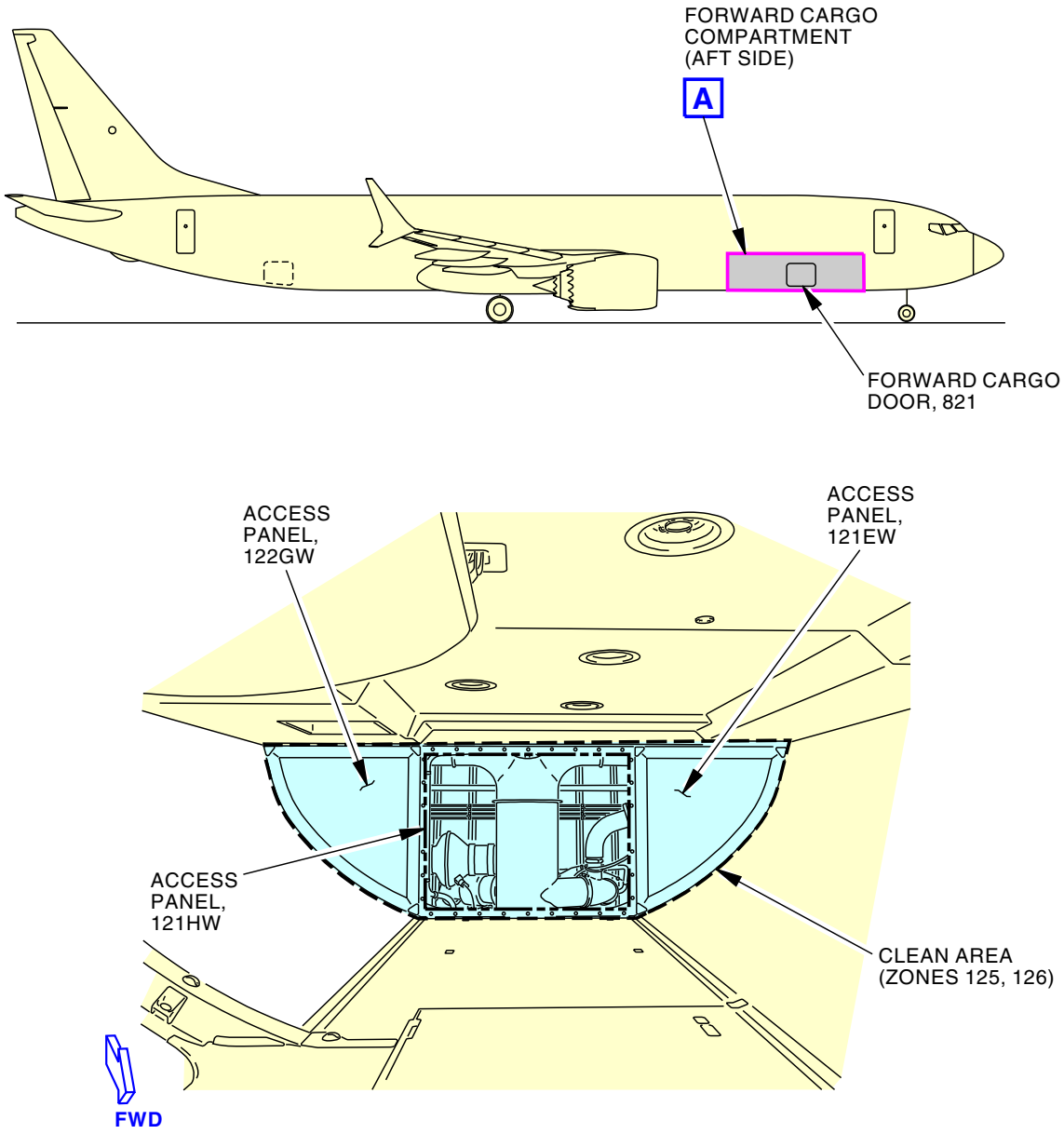
SUBTASK 05-42-01-410-004

(5) Close these access panels:

Number	Name/Location
121EW	Panel Assy - FWD Cargo Compartment Aft Bulkhead
121HW	Panel Assy - FWD Cargo Compartment Aft Bulkhead
122GW	Panel Assy - FWD Cargo Compartment Aft Bulkhead

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details



FORWARD CARGO COMPARTMENT
(AFT SIDE)
(AFT BULKHEAD CENTER PANEL REMOVED)

A

2410344 S00061525359_V1

Area Aft of Forward Cargo Compartment
Figure 205/05-42-01-990-805

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-42-01-100-806

7. Restore: Area Below Forward Cargo Compartment. (EZAP)

(Figure 206)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This procedure is an Enhanced Zonal Analysis Procedure (EZAP) task.

B. References

Reference	Title
20-60-02-100-803	Cleaning to Remove Combustible Material (P/B 701)
20-60-07-910-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
123	Forward Cargo Compartment - Left
124	Forward Cargo Compartment - Right

D. Procedure

NOTE: Center floor panels removal required. Cargo loading system removed/displaced as required.

SUBTASK 05-42-01-160-006

(1) Do this task: Cleaning to Remove Combustible Material, TASK 20-60-02-100-803.

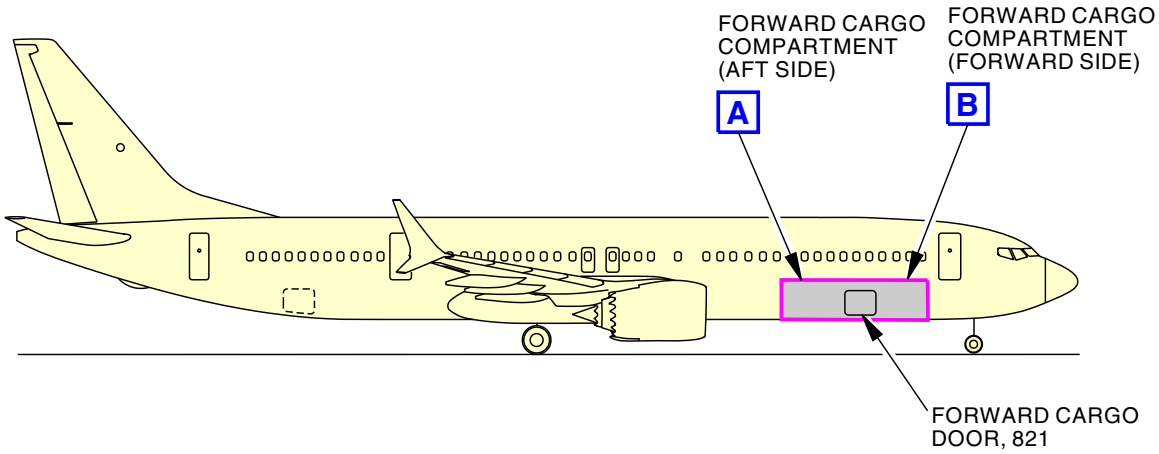
(2) Restore (Clean) area below Forward Cargo Compartment. (EZAP)

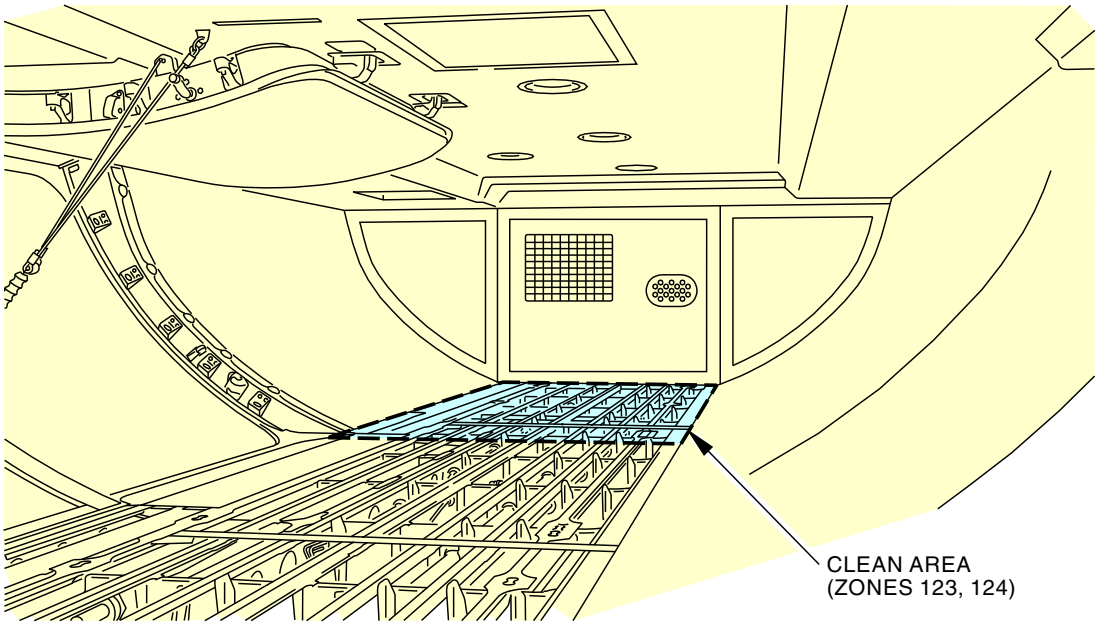
SUBTASK 05-42-01-910-006

(3) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-910-801, for the protection and caution information that will minimize contamination and accidental damage to Electrical Wiring Interconnect Systems (EWIS) during maintenance.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details





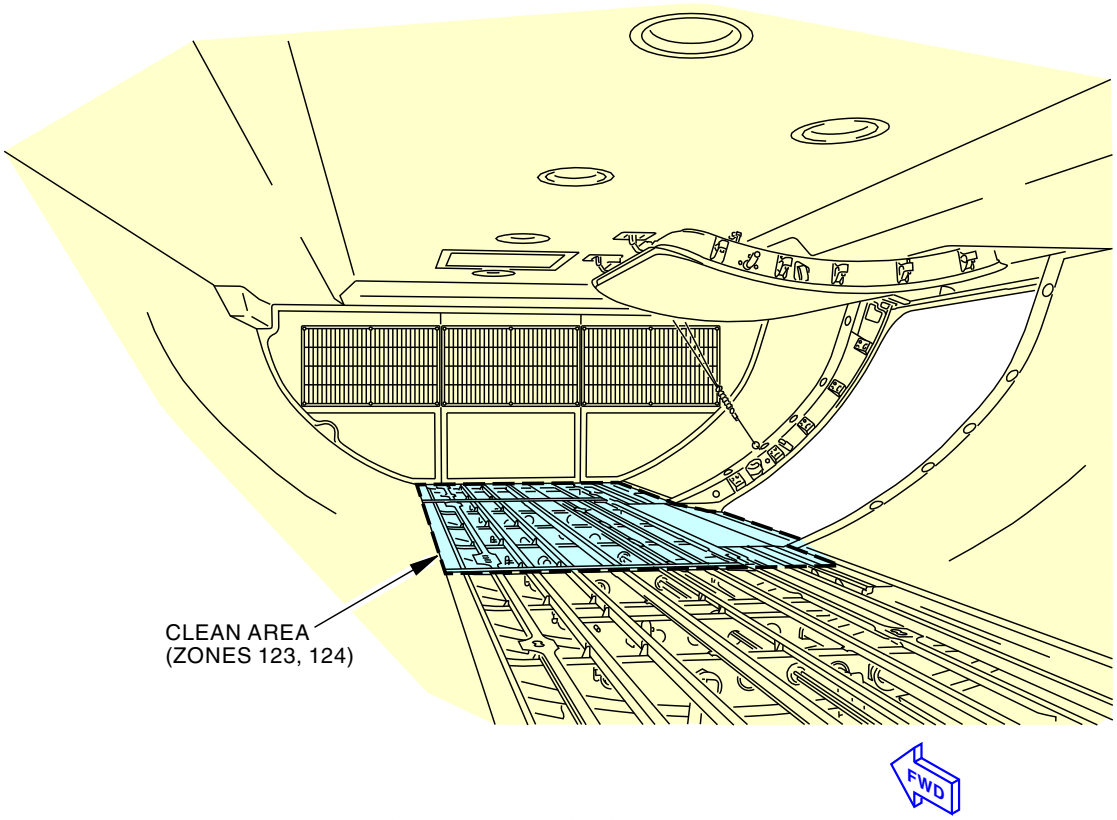
FORWARD CARGO COMPARTMENT
(AFT SIDE)
(FLOOR PANELS REMOVED)

A

2410345 S00061525361_V1

Area Below Forward Cargo Compartment
Figure 206/05-42-01-990-806 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



**FORWARD CARGO COMPARTMENT
(FORWARD SIDE)
(FLOOR PANELS REMOVED)**

B

2410346 S00061525362_V2

**Area Below Forward Cargo Compartment
Figure 206/05-42-01-990-806 (Sheet 2 of 2)**

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-42-01-100-807

8. Restore: Areas Behind Ceiling and Sidewall Panels in the Forward Cargo Compartment. (EZAP)

(Figure 207)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This procedure is an Enhanced Zonal Analysis Procedure (EZAP) task.

B. References

Reference	Title
20-60-02-100-803	Cleaning to Remove Combustible Material (P/B 701)
20-60-07-910-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
121	Forward Cargo Compartment - Left
122	Forward Cargo Compartment - Right

D. Procedure

NOTE: Ceiling and sidewall panels removal required.

SUBTASK 05-42-01-160-007

(1) Do this task: Cleaning to Remove Combustible Material, TASK 20-60-02-100-803.

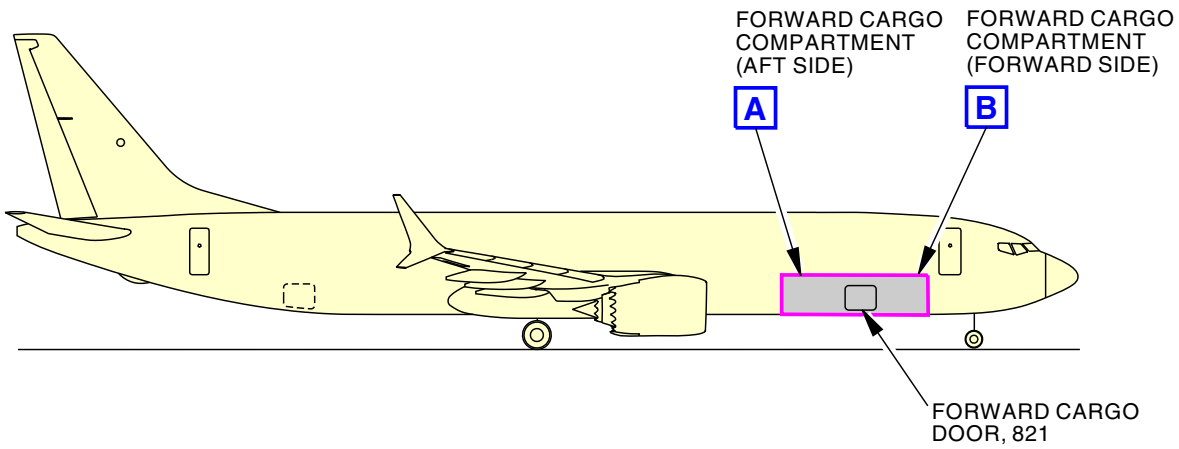
(2) Restore (Clean) areas behind ceiling and sidewall panels in the Forward Cargo Compartment. (EZAP)

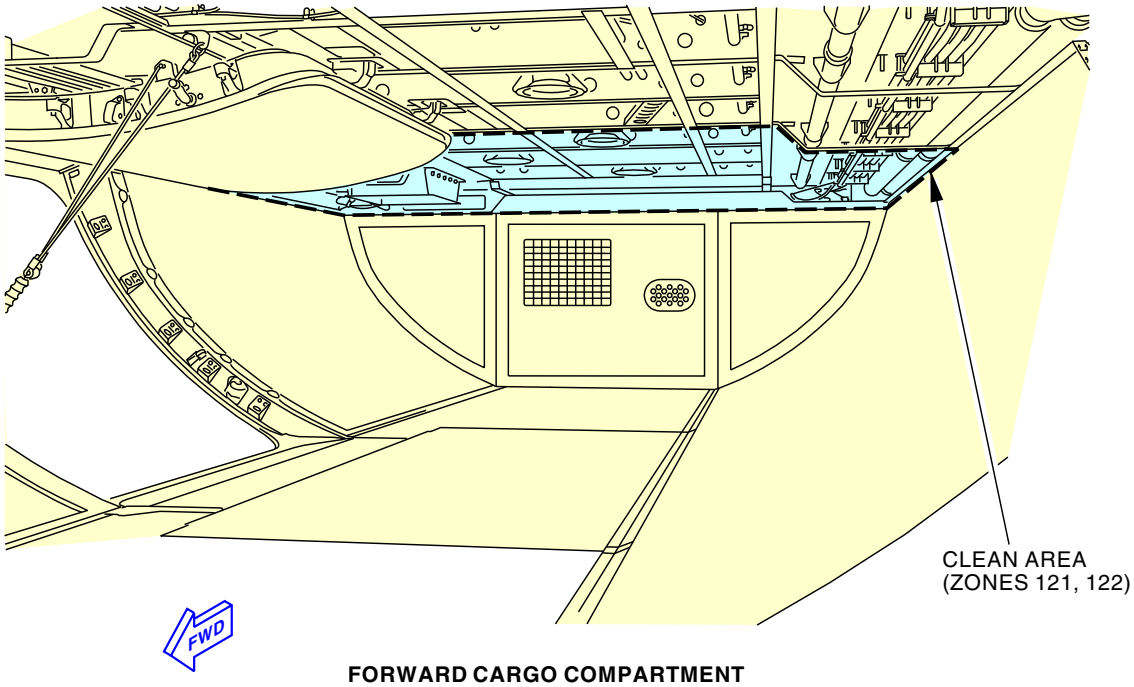
SUBTASK 05-42-01-910-007

(3) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-910-801, for the protection and caution information that will minimize contamination and accidental damage to Electrical Wiring Interconnect Systems (EWIS) during maintenance.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details





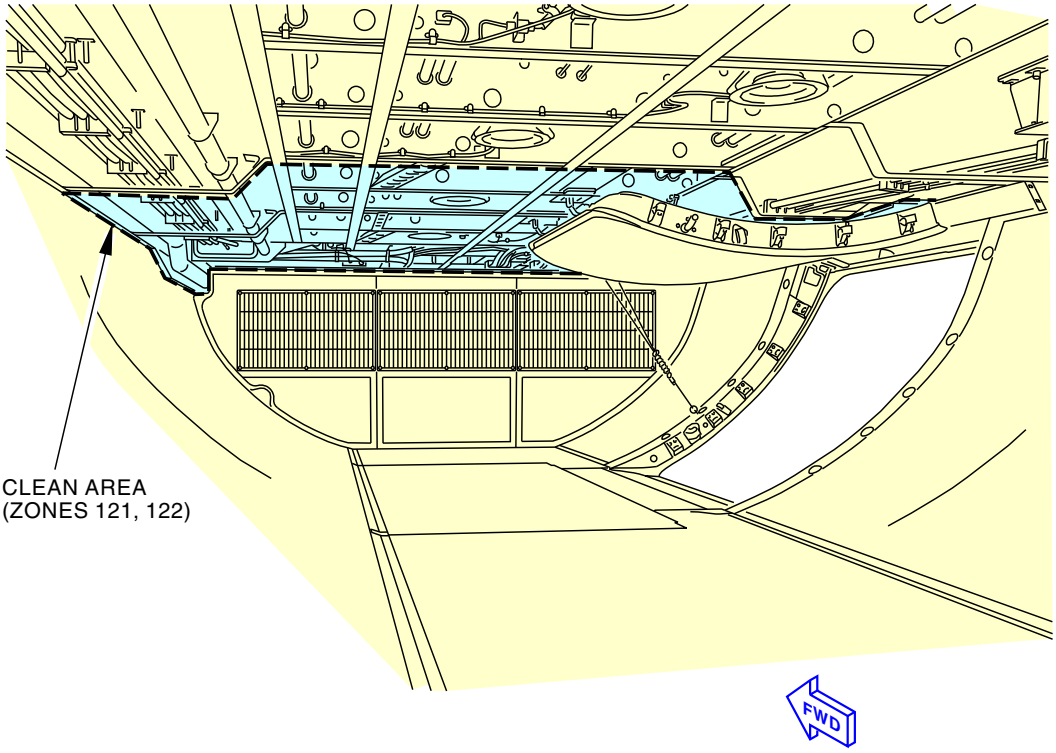
FORWARD CARGO COMPARTMENT
(AFT SIDE)
(CEILING LINERS REMOVED)

A

2410347 S00061525364_V1

Areas Behind Ceiling and Sidewalls in the Forward Cargo Compartment
Figure 207/05-42-01-990-807 (Sheet 1 of 4)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



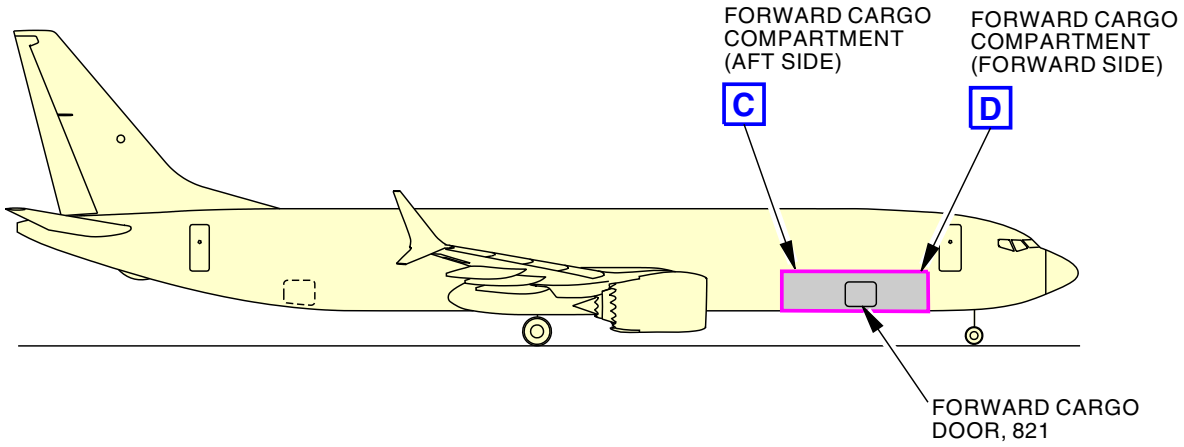
**FORWARD CARGO COMPARTMENT
(FORWARD SIDE)
(CEILING LINERS REMOVED)**

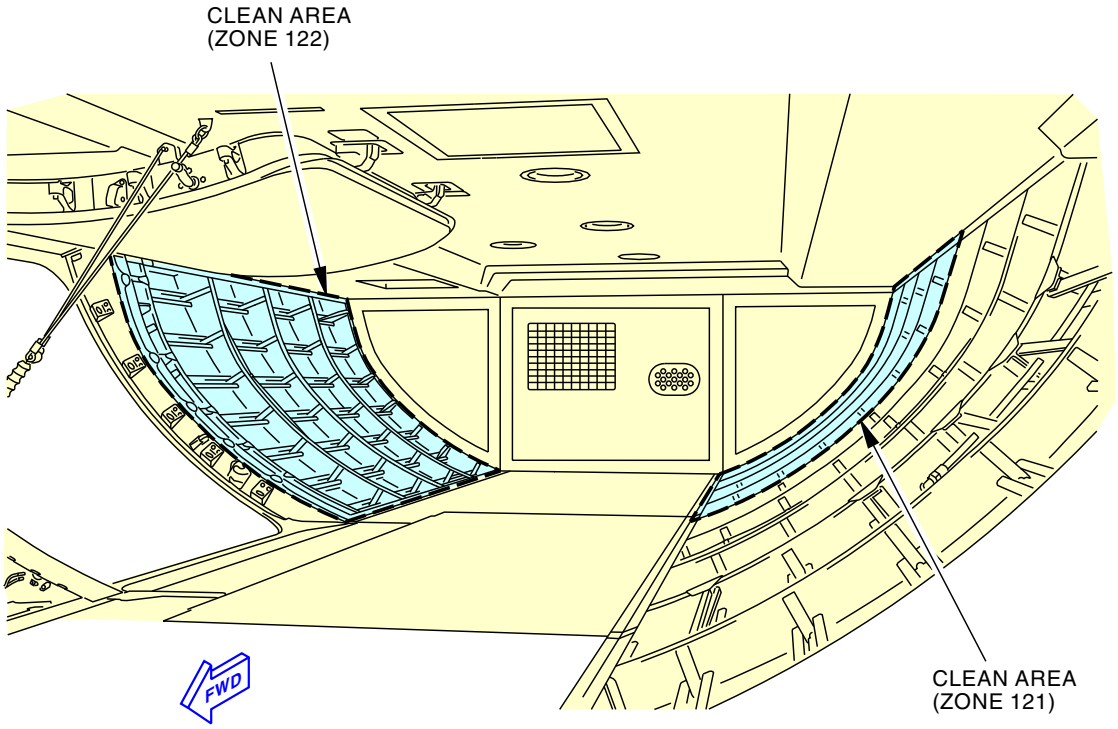
B

2410348 S00061525365_V2

**Areas Behind Ceiling and Sidewalls in the Forward Cargo Compartment
Figure 207/05-42-01-990-807 (Sheet 2 of 4)**

ECCN 9E991 BOEING PROPRIETARY - See title page for details





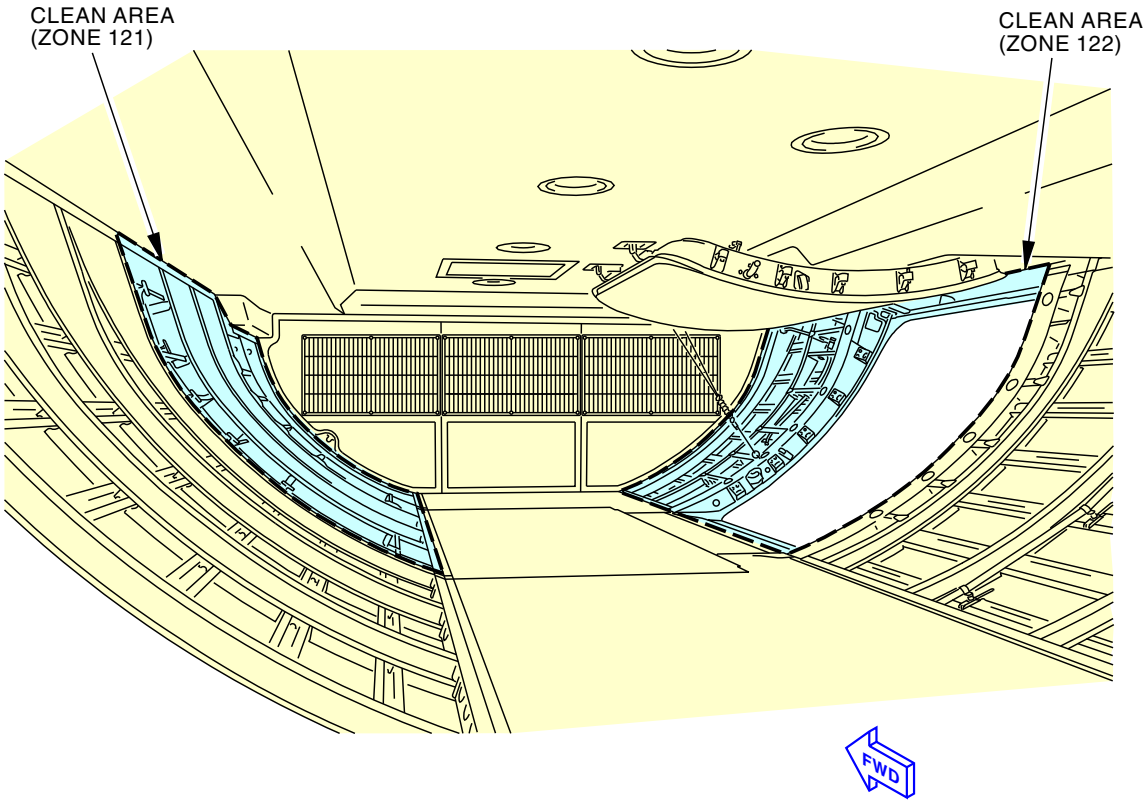
FORWARD CARGO COMPARTMENT
(AFT SIDE)
(SIDEWALL LINERS REMOVED)

C

2410349 S00061525366_V1

Areas Behind Ceiling and Sidewalls in the Forward Cargo Compartment
Figure 207/05-42-01-990-807 (Sheet 3 of 4)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



**FORWARD CARGO COMPARTMENT
(FORWARD SIDE)
(SIDEWALL LINERS REMOVED)**

D

2410350 S00061525367_V2

**Areas Behind Ceiling and Sidewalls in the Forward Cargo Compartment
Figure 207/05-42-01-990-807 (Sheet 4 of 4)**

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-42-01-100-808

9. Restore: Area Aft of Aft Cargo Compartment. (EZAP)

(Figure 208)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This procedure is an Enhanced Zonal Analysis Procedure (EZAP) task.

B. References

Reference	Title
20-60-02-100-803	Cleaning to Remove Combustible Material (P/B 701)
20-60-07-910-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
145	Aft Cargo Compartment Equipment Bay - Left
146	Aft Cargo Compartment Equipment Bay - Right

D. Procedure

NOTE: Removal of aft cargo panels at Sta. 947 bulkhead required.

SUBTASK 05-42-01-160-008

(1) Do this task: Cleaning to Remove Combustible Material, TASK 20-60-02-100-803.

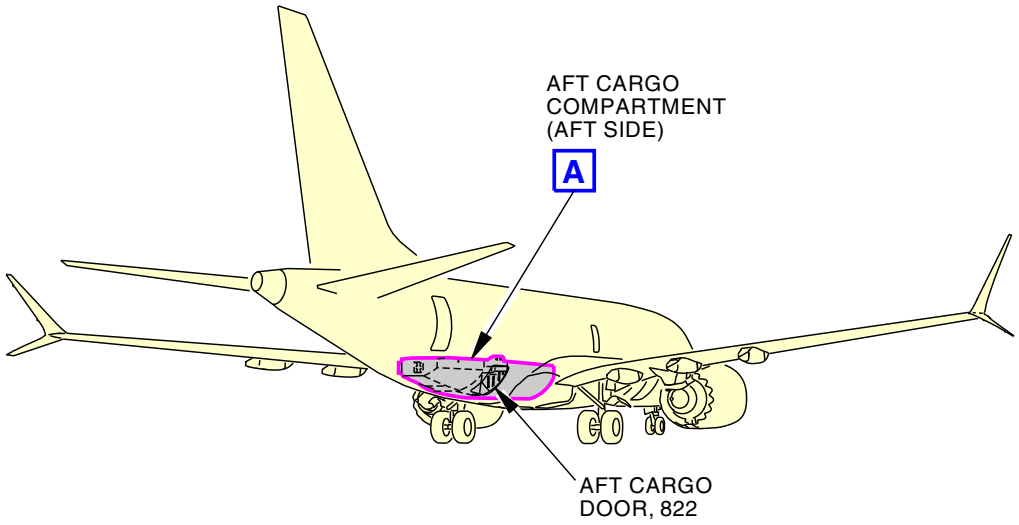
(2) Restore (Clean) Area Aft of Aft Cargo Compartment. (EZAP)

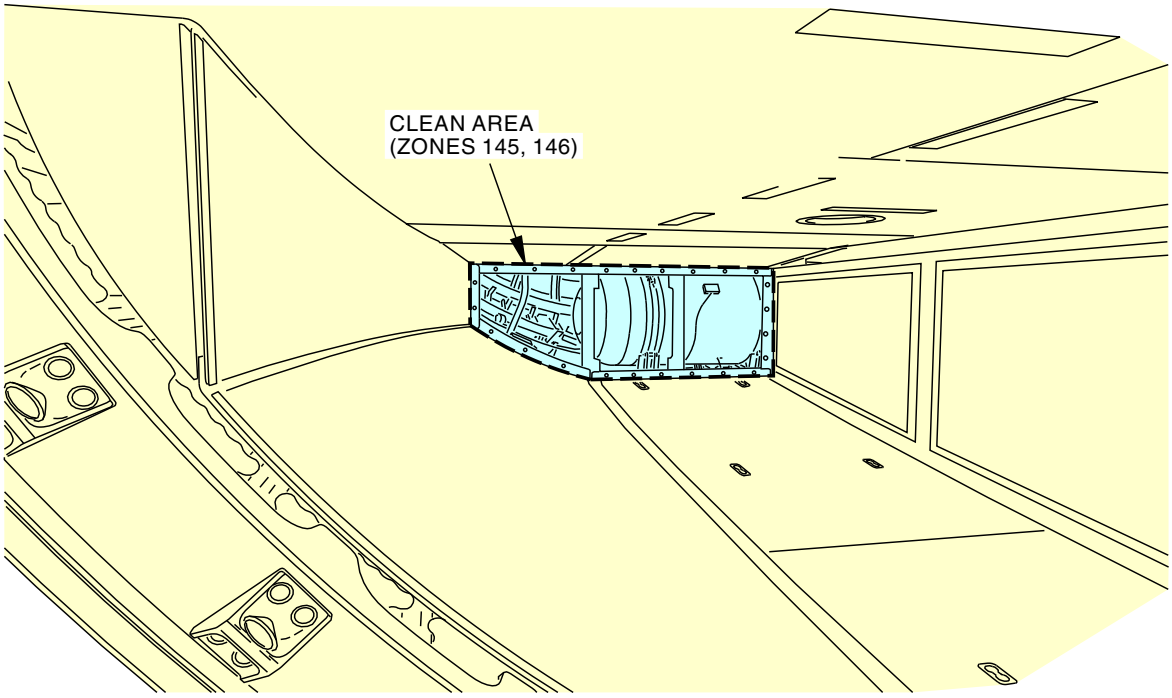
SUBTASK 05-42-01-910-008

(3) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-910-801, for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details





AFT CARGO COMPARTMENT
(AFT SIDE)
(ENDWALL LINERS REMOVED)

A

FWD

2410351 S00061525369_V1

Aft Cargo Compartment
Figure 208/05-42-01-990-808

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-42-01-100-809

10. Restore: Area Below Aft Cargo Compartment. (EZAP)

(Figure 209)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This procedure is an Enhanced Zonal Analysis Procedure (EZAP) task.

B. References

Reference	Title
20-60-02-100-803	Cleaning to Remove Combustible Material (P/B 701)
20-60-07-910-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
143	Area Below Aft Cargo Compartment - Left
144	Area Below Aft Cargo Compartment - Right

D. Procedure

NOTE: Center floor panels removal required. Cargo loading system (if installed) removed/displaced as required.

SUBTASK 05-42-01-160-009

(1) Do this task: Cleaning to Remove Combustible Material, TASK 20-60-02-100-803.

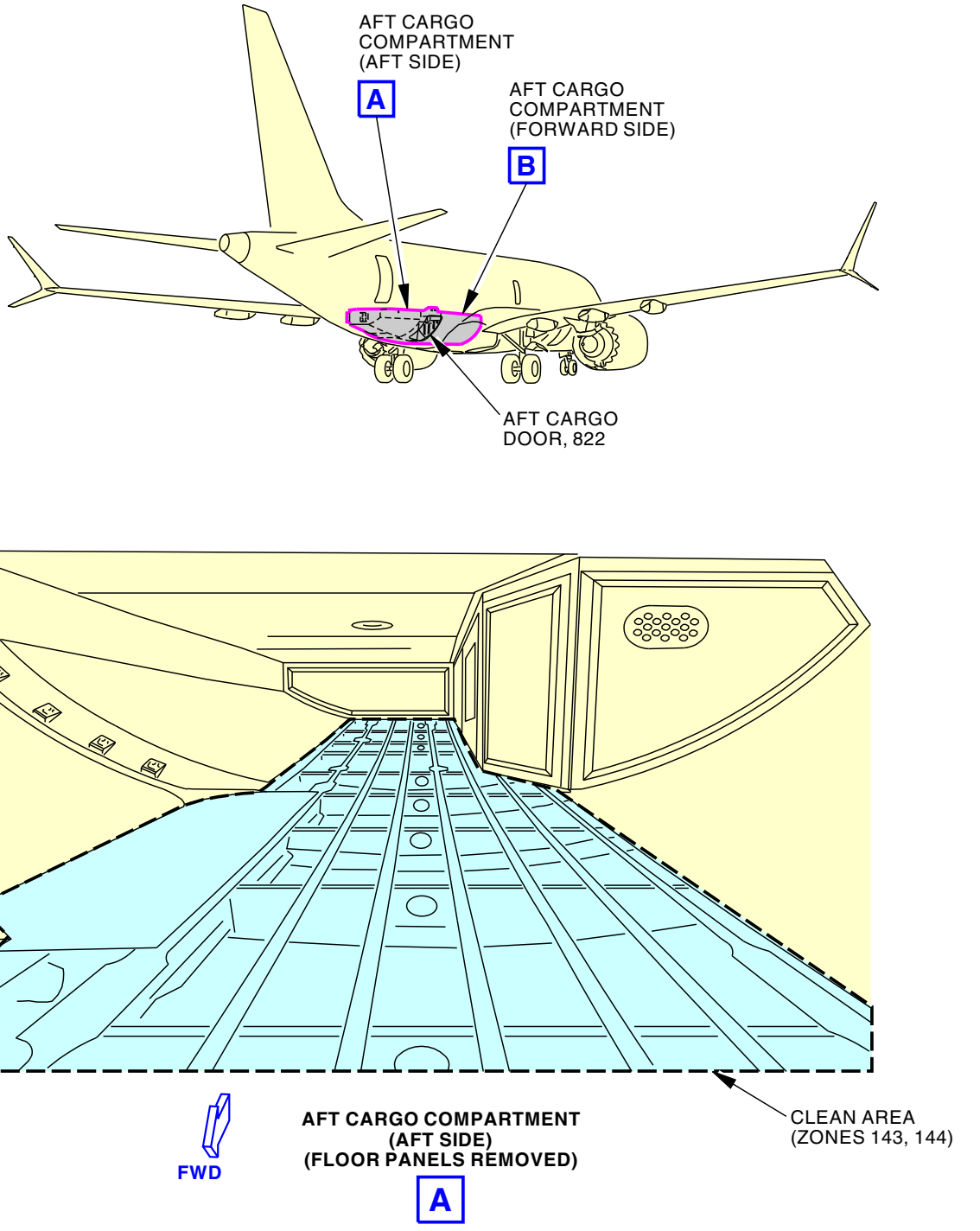
(2) Restore (Clean) Area Below Aft Cargo Compartment. (EZAP)

SUBTASK 05-42-01-910-009

(3) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-910-801, for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

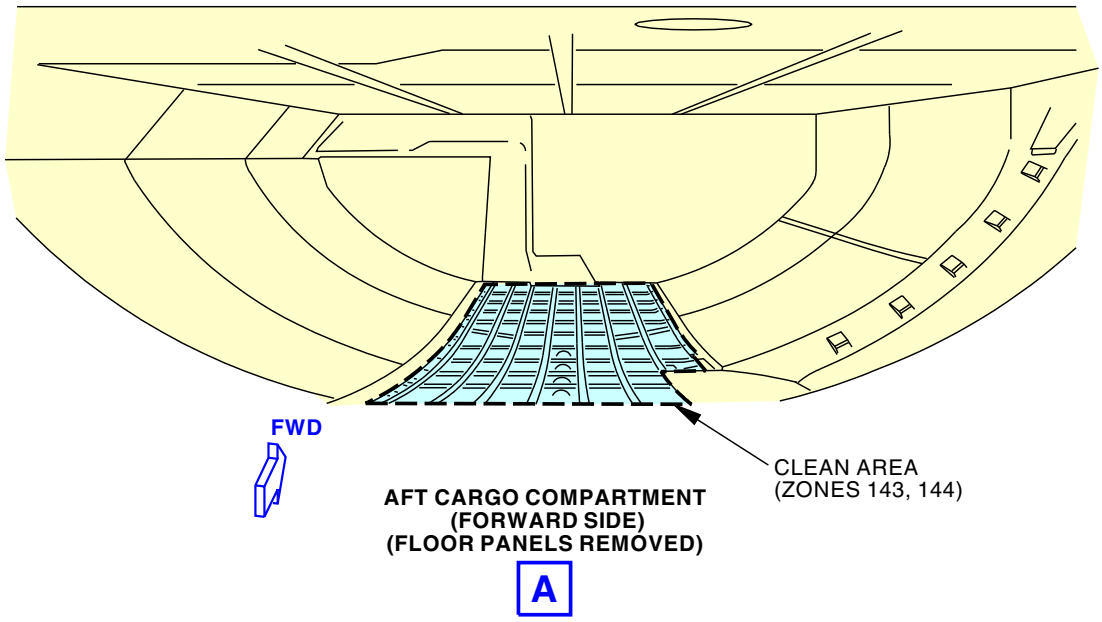
——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Area Below Aft Cargo Compartment
Figure 209/05-42-01-990-809 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



2410353 S00061525372_V1

Area Below Aft Cargo Compartment
Figure 209/05-42-01-990-809 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-42-01-210-801

11. General Visual Inspection: Exposed EWIS in Main Landing Gear Wheel Well. (EZAP)

(Figure 210)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This procedure is an Enhanced Zonal Analysis Procedure (EZAP) task.

B. References

Reference	Title
20-60-02-100-801	General Visual Inspection of EWIS (P/B 201)
20-60-07-910-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
133	Main Landing Gear Wheel Well, Body Station 663.75 to Body Station 727.00 - Left
134	Main Landing Gear Wheel Well, Body Station 663.75 to Body Station 727.00 - Right

D. Inspection

NOTE: Through main landing gear opening.

SUBTASK 05-42-01-210-001

(1) Do this task: General Visual Inspection of EWIS, TASK 20-60-02-100-801.

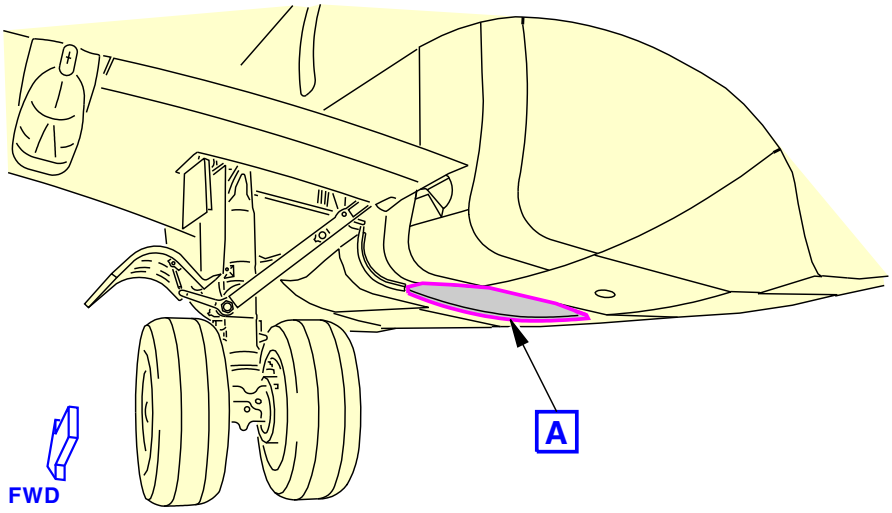
(2) Inspect (General Visual) all exposed EWIS in the Main Landing Gear Wheel Well. (EZAP)

SUBTASK 05-42-01-910-010

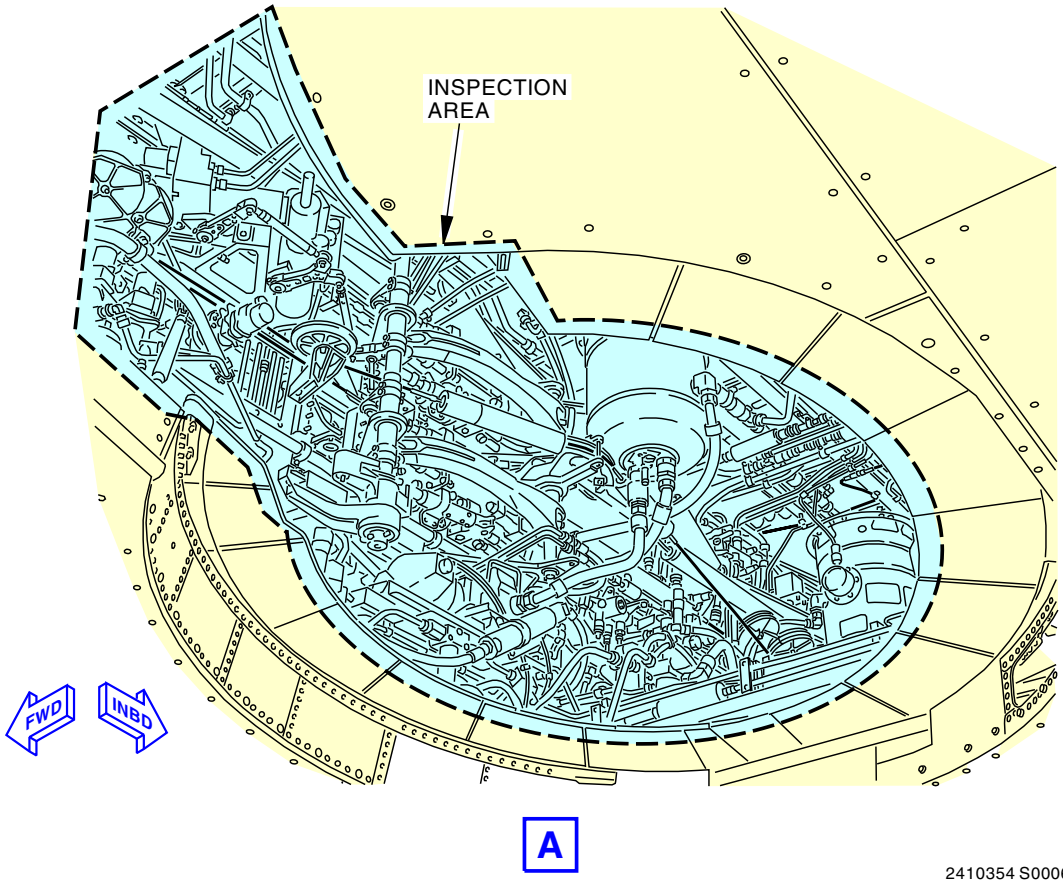
(3) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-910-801, for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



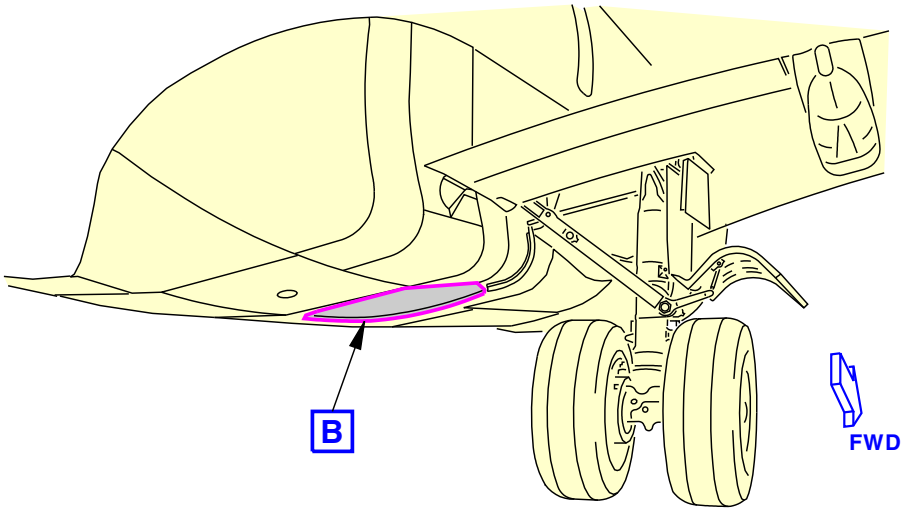
LEFT MAIN LANDING GEAR WHEEL WELL



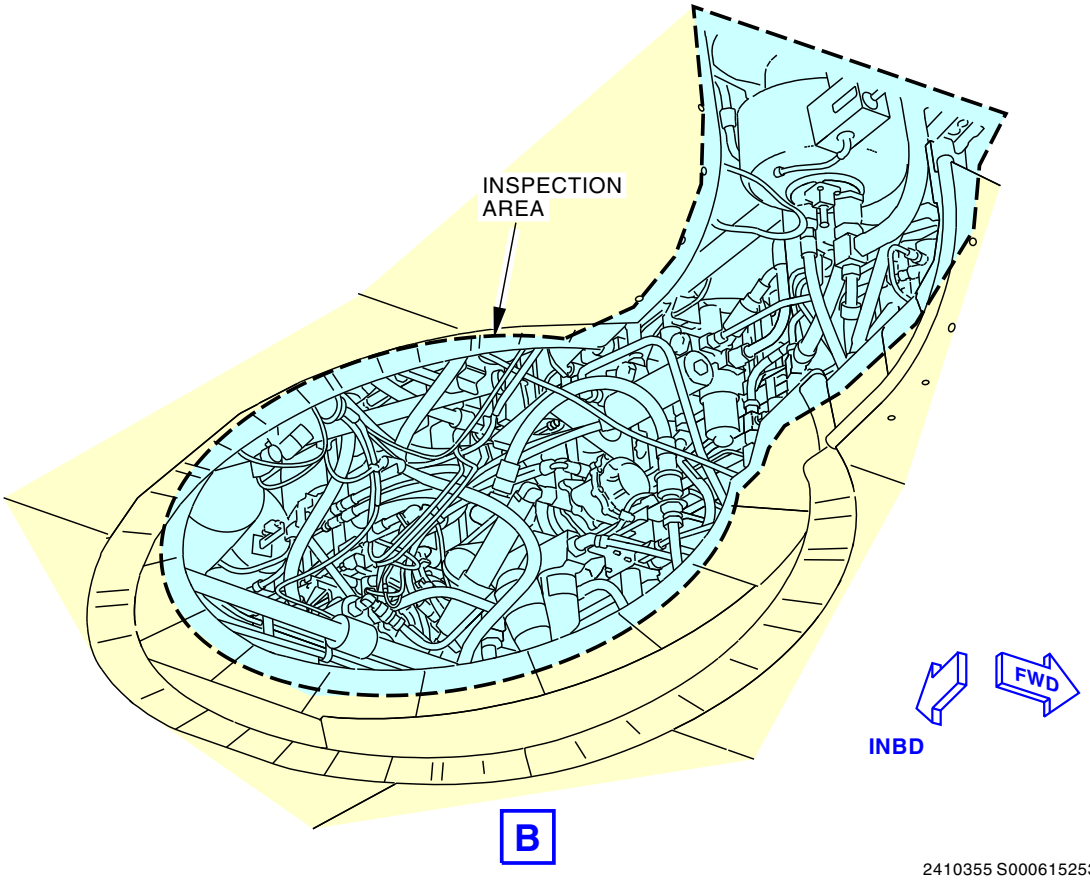
2410354 S00061525374_V1

Inspect (General Visual) - Exposed EWIS Main Landing Gear Wheel Well
Figure 210/05-42-01-990-810 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



RIGHT MAIN LANDING GEAR WHEEL WELL



2410355 S00061525375_V1

Inspect (General Visual) - Exposed EWIS Main Landing Gear Wheel Well
Figure 210/05-42-01-990-810 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-42-01-210-802

12. General Visual Inspection: Exposed EWIS in the Forward Cargo Compartment. (EZAP)

(Figure 211)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This procedure is an Enhanced Zonal Analysis Procedure (EZAP) task.

B. References

Reference	Title
20-60-02-100-801	General Visual Inspection of EWIS (P/B 201)
20-60-07-910-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
121	Forward Cargo Compartment - Left
122	Forward Cargo Compartment - Right

D. Inspection

NOTE: Ceiling and sidewall panels removal required.

SUBTASK 05-42-01-210-002

(1) Do this task: General Visual Inspection of EWIS, TASK 20-60-02-100-801.

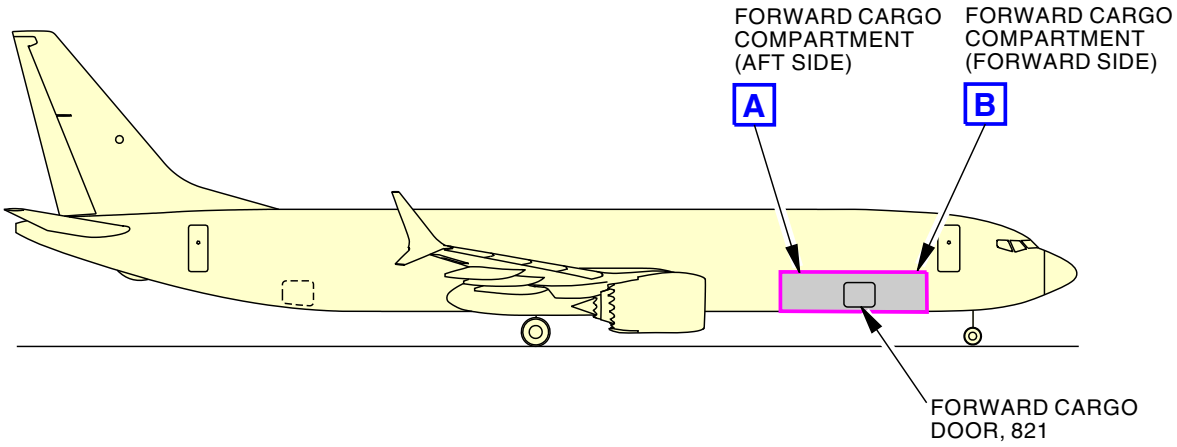
(2) Inspect (General Visual) all exposed Electrical Wiring Interconnect Systems (EWIS) in the Forward Cargo Compartment. (EZAP)

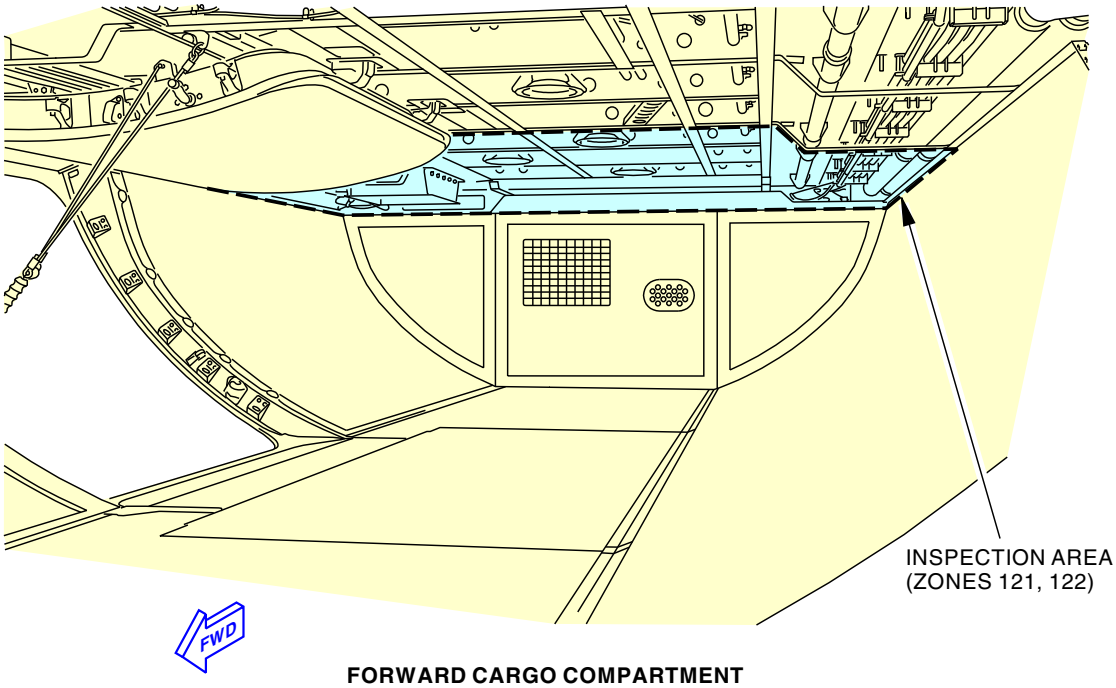
SUBTASK 05-42-01-910-011

(3) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-910-801, for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details





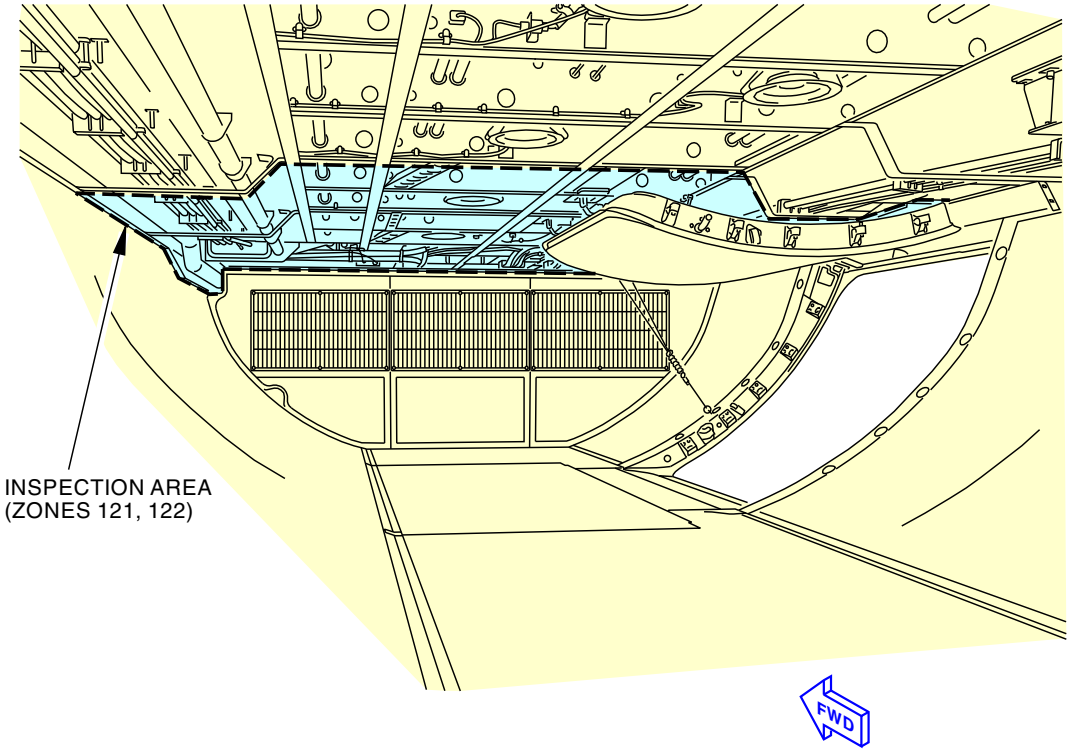
FORWARD CARGO COMPARTMENT
(AFT SIDE)
(CEILING LINERS REMOVED)

A

2410356 S00061525377_V1

Inspect (General Visual) - Exposed EWIS Forward Cargo Compartment (Ceiling Liners Removed)
Figure 211/05-42-01-990-811 (Sheet 1 of 4)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



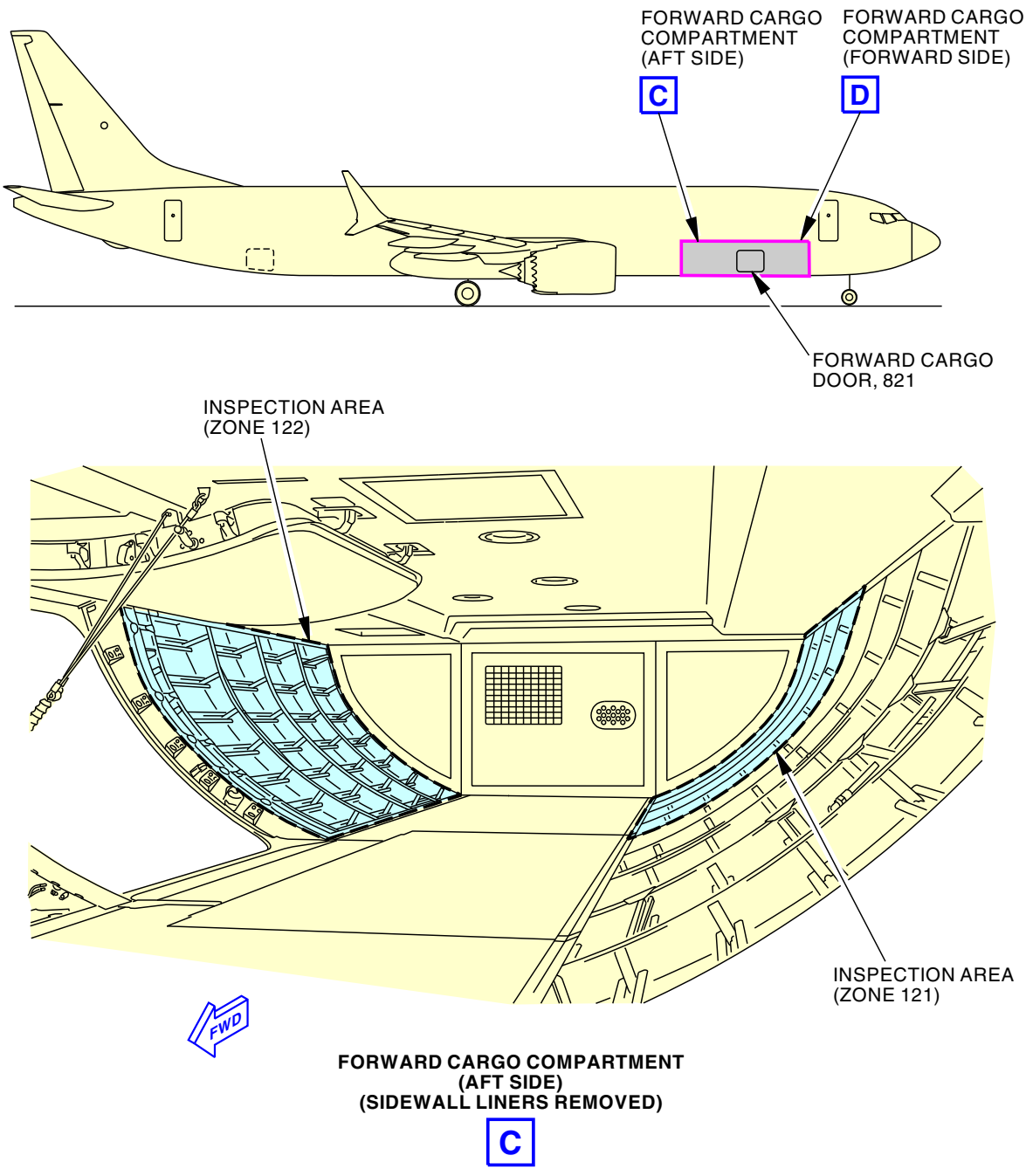
**FORWARD CARGO COMPARTMENT
(FORWARD SIDE)
(CEILING LINERS REMOVED)**

B

2410357 S00061525378_V2

**Inspect (General Visual) - Exposed EWIS Forward Cargo Compartment (Ceiling Liners Removed)
Figure 211/05-42-01-990-811 (Sheet 2 of 4)**

ECCN 9E991 BOEING PROPRIETARY - See title page for details



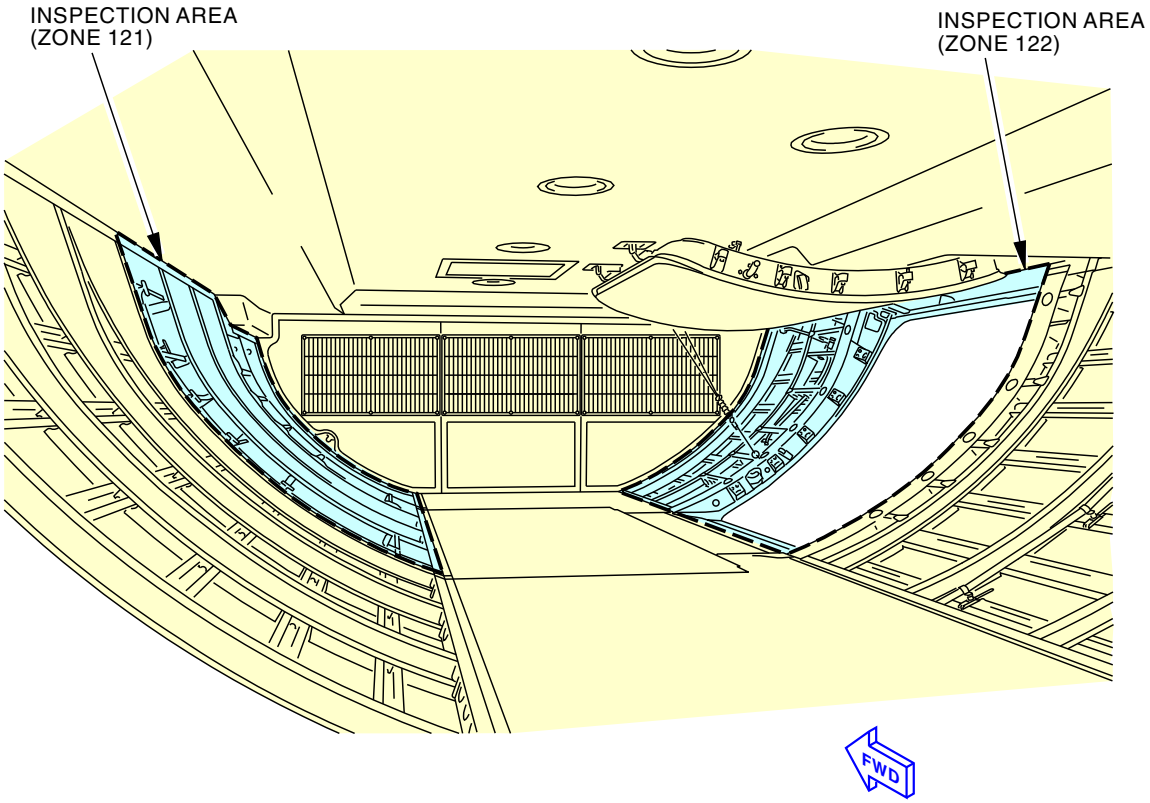
FORWARD CARGO COMPARTMENT
(AFT SIDE)
(SIDEWALL LINERS REMOVED)

C

2410358 S00061525379_V1

Inspect (General Visual) - Exposed EWIS Forward Cargo Compartment (Ceiling Liners Removed)
Figure 211/05-42-01-990-811 (Sheet 3 of 4)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



**FORWARD CARGO COMPARTMENT
(FORWARD SIDE)
(SIDEWALL LINERS REMOVED)**

D

2410359 S00061525380_V2

**Inspect (General Visual) - Exposed EWIS Forward Cargo Compartment (Ceiling Liners Removed)
Figure 211/05-42-01-990-811 (Sheet 4 of 4)**

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-42-01-210-803

13. General Visual Inspection: Exposed EWIS in the Electrical and Electronics Compartment. (EZAP)

(Figure 212)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This procedure is an Enhanced Zonal Analysis Procedure (EZAP) task.

B. References

Reference	Title
20-60-02-100-801	General Visual Inspection of EWIS (P/B 201)
20-60-07-910-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
117	Electrical and Electronics Compartment - Left
118	Electrical and Electronics Compartment - Right

D. Access Panels

Number	Name/Location
117A	Electronic Equipment Access Door
121MW	PANEL ASSY - FORWARD CARGO COMPARTMENT FWD BULKHEAD
121NW	PANEL ASSY - FORWARD CARGO COMPARTMENT FWD BULKHEAD
122JW	PANEL ASSY - FORWARD CARGO COMPARTMENT FWD BULKHEAD

E. Inspection

SUBTASK 05-42-01-010-005

(1) Open these access panels:

Number	Name/Location
117A	Electronic Equipment Access Door
121MW	PANEL ASSY - FORWARD CARGO COMPARTMENT FWD BULKHEAD
121NW	PANEL ASSY - FORWARD CARGO COMPARTMENT FWD BULKHEAD
122JW	PANEL ASSY - FORWARD CARGO COMPARTMENT FWD BULKHEAD

NOTE: Alternate access through panels 121MW, 121NW and 122JW is from Forward Cargo Compartment.

SUBTASK 05-42-01-210-003

(2) Do this task: General Visual Inspection of EWIS, TASK 20-60-02-100-801.

(3) Inspect (General Visual) all exposed Electrical Wiring Interconnect Systems (EWIS) in the Electrical and Electronics Compartment excluding the Integrated Drive Generator (IDG), Auxiliary Power Unit (APU) starter/generator, battery, and external power feeder wiring and connected EWIS. (EZAP)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 05-42-01-910-012

(4) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-910-801, for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

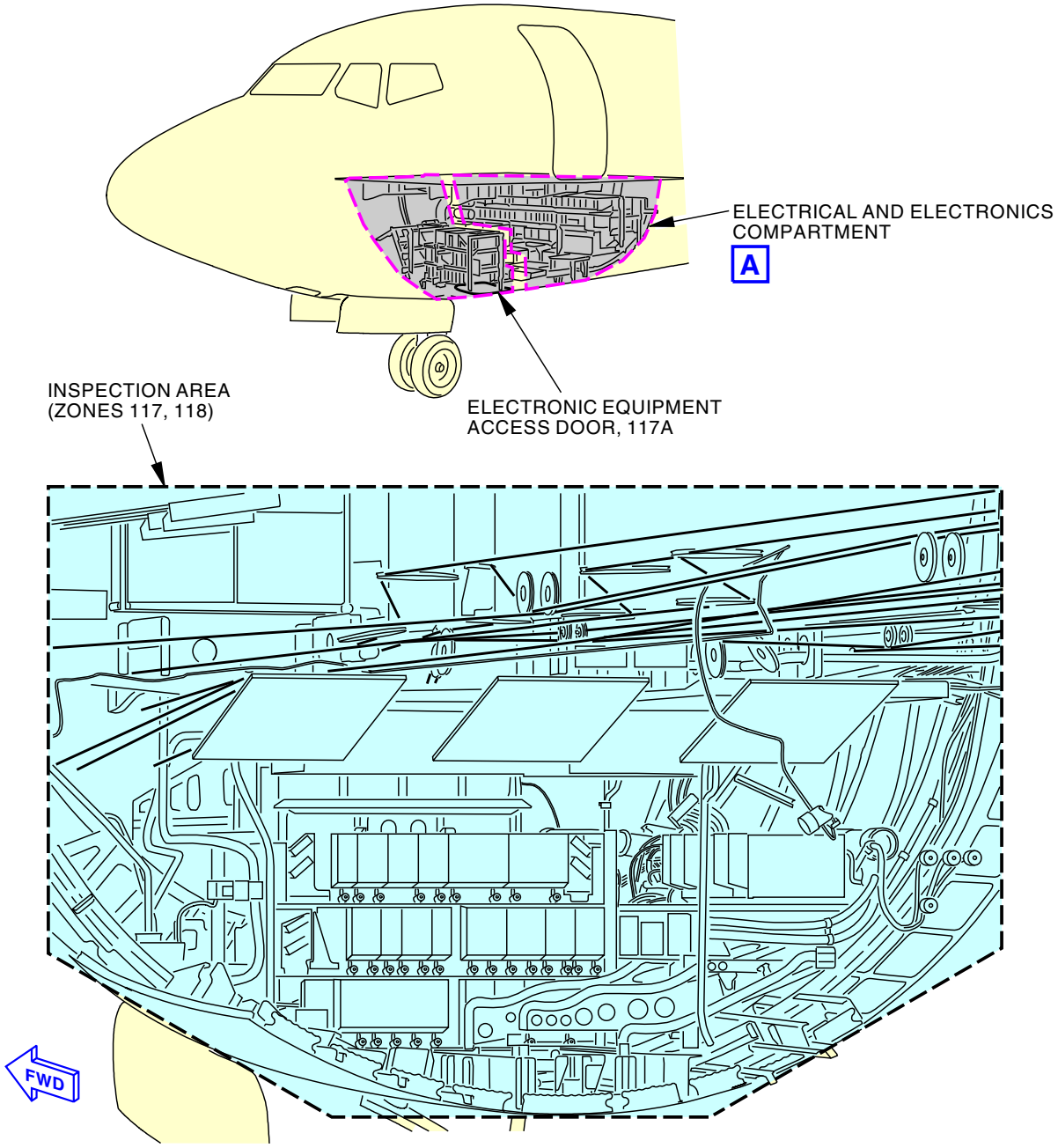
SUBTASK 05-42-01-410-005

(5) Close these access panels:

Number	Name/Location
117A	Electronic Equipment Access Door
121MW	PANEL ASSY - FORWARD CARGO COMPARTMENT FWD BULKHEAD
121NW	PANEL ASSY - FORWARD CARGO COMPARTMENT FWD BULKHEAD
122JW	PANEL ASSY - FORWARD CARGO COMPARTMENT FWD BULKHEAD

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details



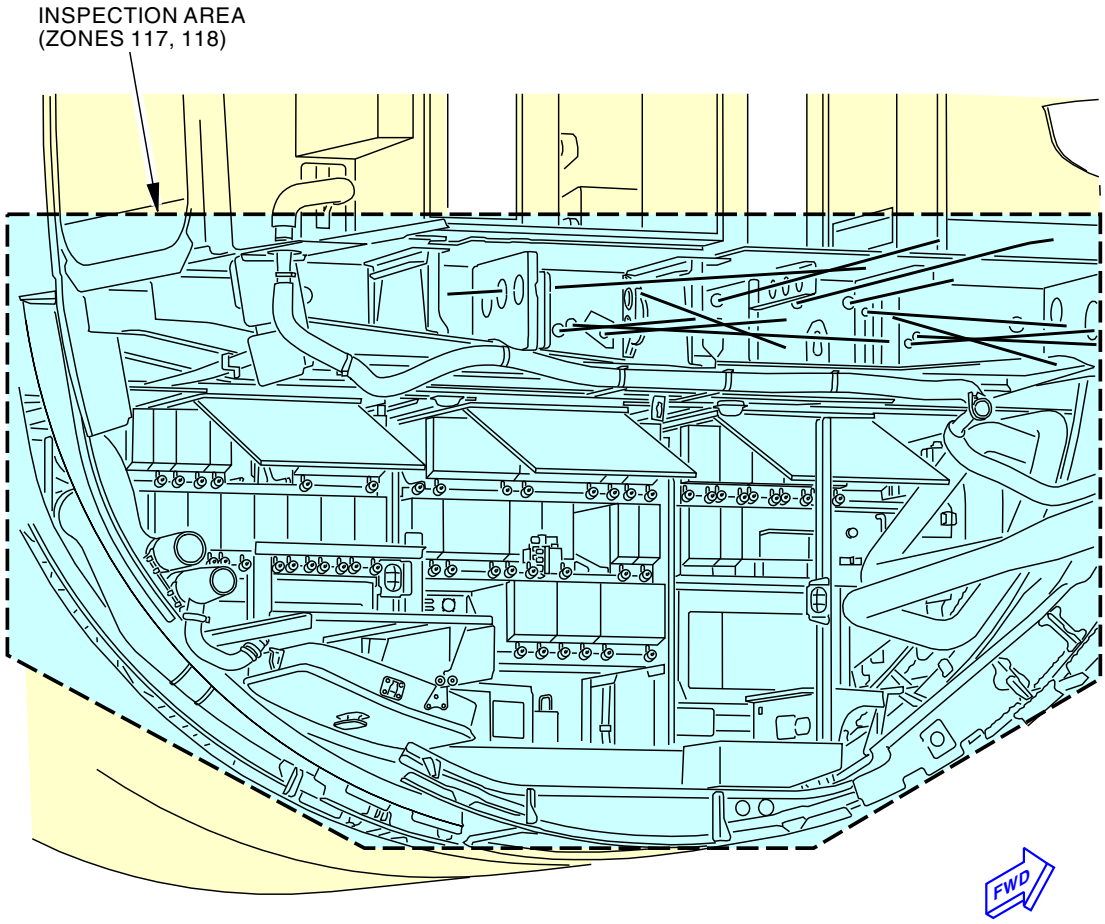
ELECTRICAL AND ELECTRONICS COMPARTMENT (VIEW IN THE FORWARD DIRECTION)

A

2410360 S00061525382_V1

Inspect (General Visual) - Exposed EWIS In Electrical and Electronics Compartment
Figure 212/05-42-01-990-812 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



**ELECTRICAL AND ELECTRONICS COMPARTMENT
(VIEW IN THE AFT DIRECTION)**

A

2410361 S00061525383_V1

**Inspect (General Visual) - Exposed EWIS In Electrical and Electronics Compartment
Figure 212/05-42-01-990-812 (Sheet 2 of 2)**

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-42-01-210-804

14. General Visual Inspection: Exposed EWIS in the Aft Cargo Compartment. (EZAP)

(Figure 213)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This procedure is an Enhanced Zonal Analysis Procedure (EZAP) task.

B. References

Reference	Title
20-60-02-100-801	General Visual Inspection of EWIS (P/B 201)
20-60-07-910-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
141	Aft Cargo Compartment - Left
142	Aft Cargo Compartment - Right

D. Inspection

NOTE: Ceiling and sidewall panels removal required.

SUBTASK 05-42-01-210-004

(1) Do this task: General Visual Inspection of EWIS, TASK 20-60-02-100-801.

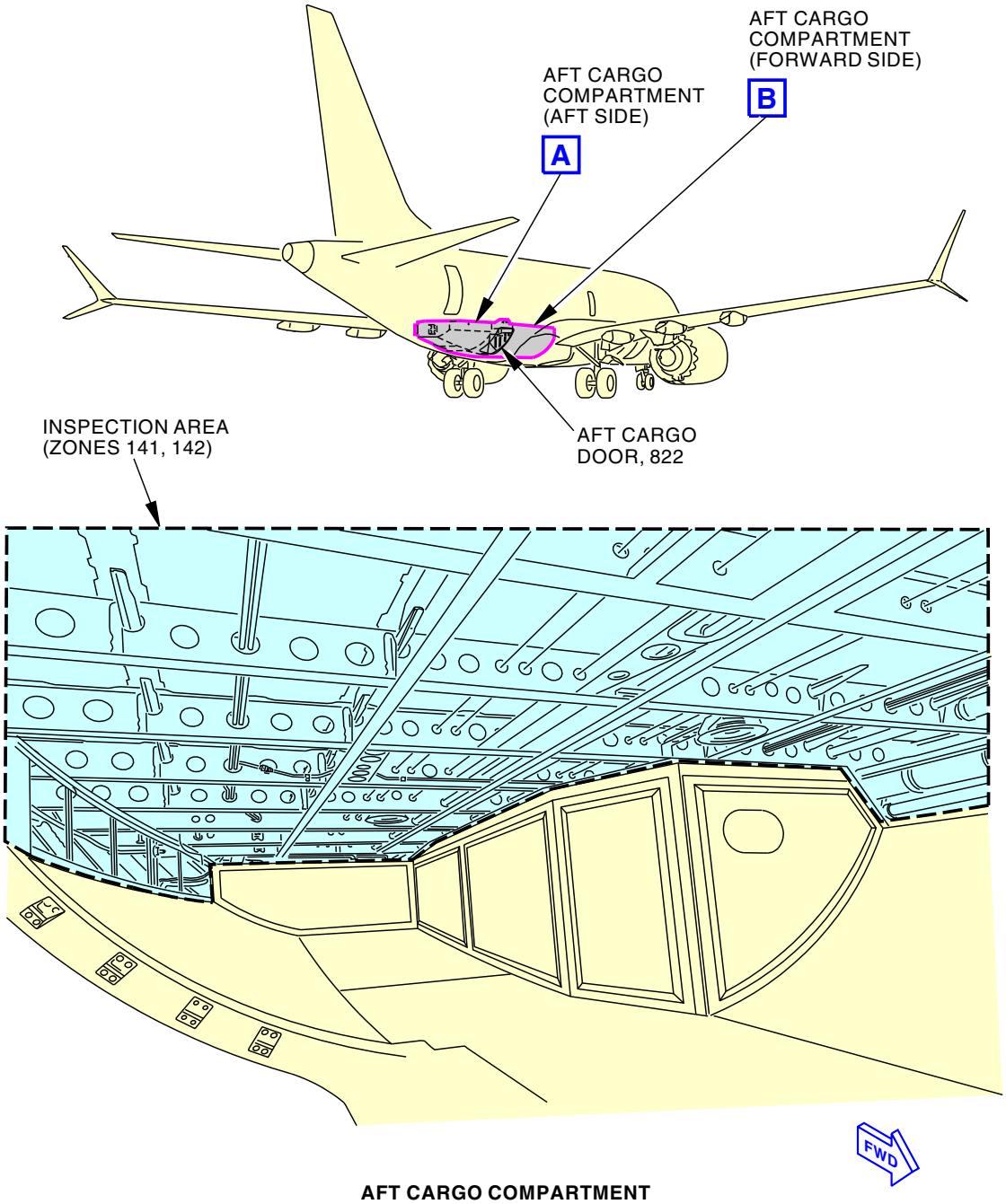
(2) Inspect (General Visual) all exposed Electrical Wiring Interconnect Systems (EWIS) in the Aft Cargo Compartment. (EZAP)

SUBTASK 05-42-01-910-013

(3) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-910-801, for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details

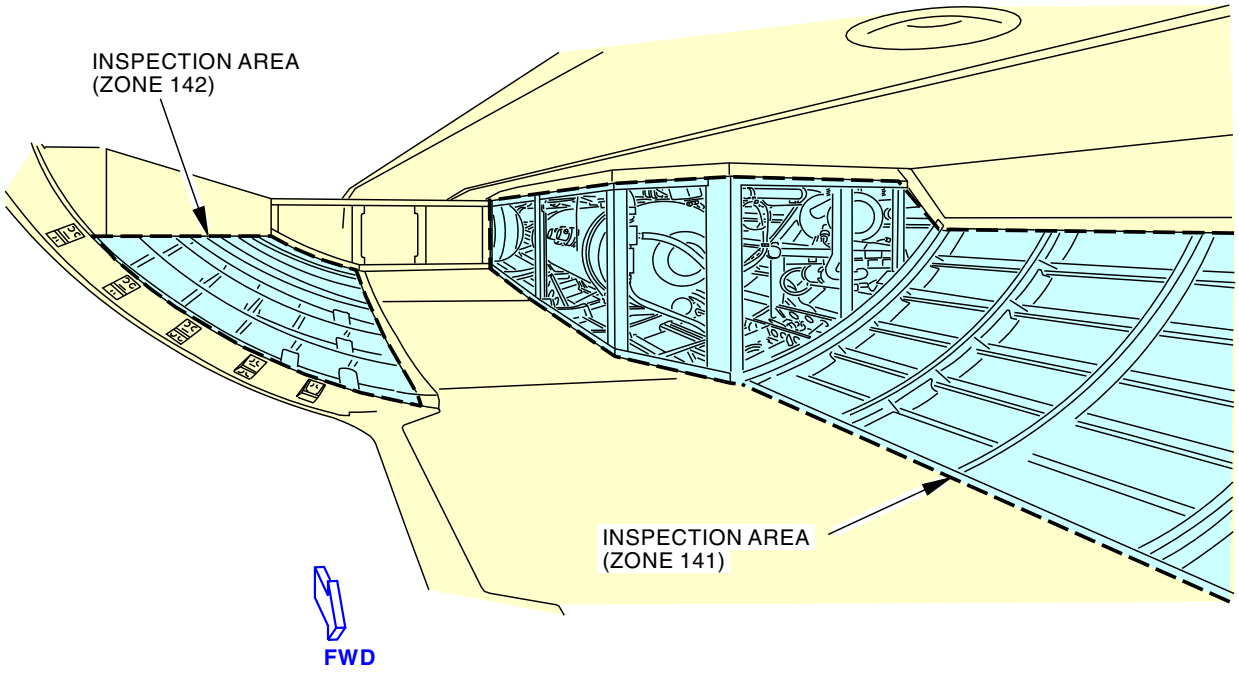


AFT CARGO COMPARTMENT
(AFT SIDE)
(UPPER ANGLED SIDEWALL AND CEILING PANELS REMOVED)
A

2410362 S00061525385_V1

Aft Cargo Compartment
Figure 213/05-42-01-990-813 (Sheet 1 of 4)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



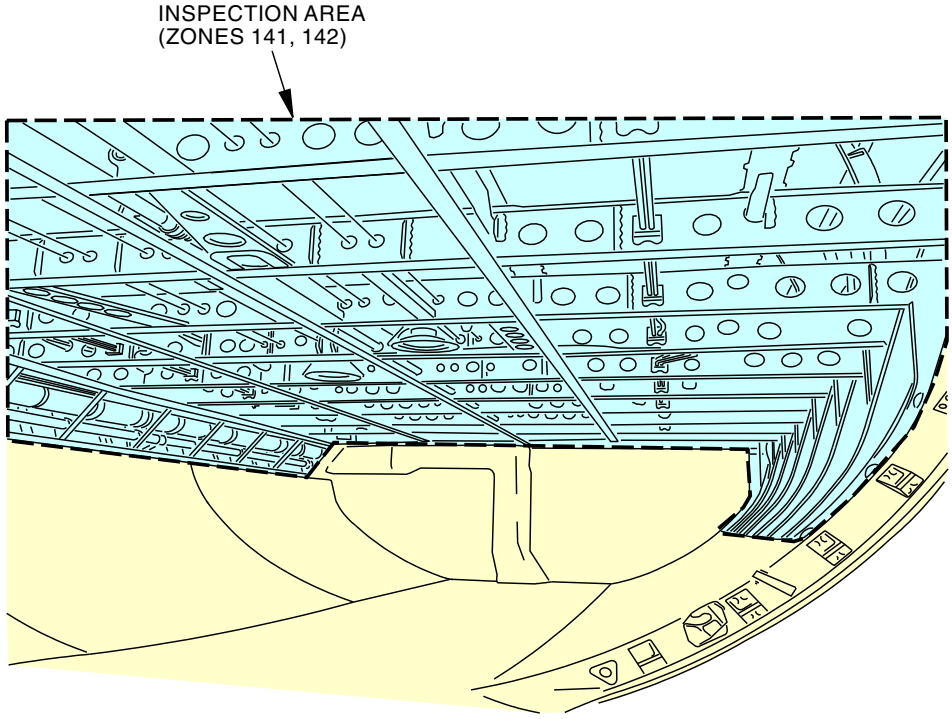
**AFT CARGO COMPARTMENT
(AFT SIDE)
(SIDEWALL LINERS REMOVED)**

A

2410363 S00061525386_V1

**Aft Cargo Compartment
Figure 213/05-42-01-990-813 (Sheet 2 of 4)**

ECCN 9E991 BOEING PROPRIETARY - See title page for details



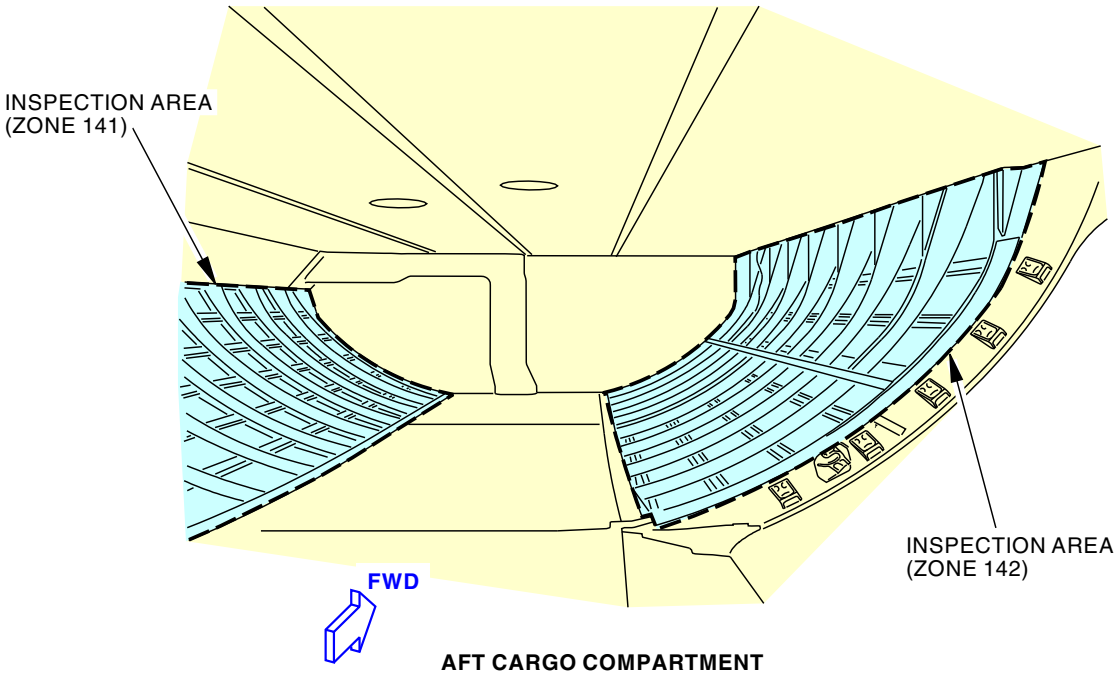
**AFT CARGO COMPARTMENT
(FORWARD SIDE)
(UPPER ANGLED SIDEWALL AND CEILING PANELS REMOVED)**

B

2410364 S00061525387_V1

**Aft Cargo Compartment
Figure 213/05-42-01-990-813 (Sheet 3 of 4)**

ECCN 9E991 BOEING PROPRIETARY - See title page for details



2410365 S00061525388_V1

Aft Cargo Compartment
Figure 213/05-42-01-990-813 (Sheet 4 of 4)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-42-01-211-801

15. Detailed Inspection: IDG, APU Starter/Generator, Battery, and External Power Feeder Wiring/ EWIS. (EZAP)

(Figure 214)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This procedure is an Enhanced Zonal Analysis Procedure (EZAP) task.

B. References

Reference	Title
20-60-02-100-802	Detailed Inspection of EWIS (P/B 601)
20-60-07-910-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
117	Electrical and Electronics Compartment - Left
118	Electrical and Electronics Compartment - Right

D. Access Panels

Number	Name/Location
117A	Electronic Equipment Access Door
121MW	PANEL ASSY - FORWARD CARGO COMPARTMENT FWD BULKHEAD
121NW	PANEL ASSY - FORWARD CARGO COMPARTMENT FWD BULKHEAD
122JW	PANEL ASSY - FORWARD CARGO COMPARTMENT FWD BULKHEAD

E. Inspection

SUBTASK 05-42-01-010-006

(1) Open these access panels:

Number	Name/Location
117A	Electronic Equipment Access Door
121MW	PANEL ASSY - FORWARD CARGO COMPARTMENT FWD BULKHEAD
121NW	PANEL ASSY - FORWARD CARGO COMPARTMENT FWD BULKHEAD
122JW	PANEL ASSY - FORWARD CARGO COMPARTMENT FWD BULKHEAD

NOTE: Alternate access through panels 121MW, 121NW and 122JW is from Forward Cargo Compartment.

SUBTASK 05-42-01-211-001

(2) Do this task: Detailed Inspection of EWIS, TASK 20-60-02-100-802.

(3) Inspect (Detailed) the Integrated Drive Generator (IDG), Auxiliary Power Unit (APU) starter/generator, battery, and external power feeder wiring and connected Electrical Wiring Interconnect Systems (EWIS). (EZAP)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 05-42-01-910-014

(4) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-910-801, for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

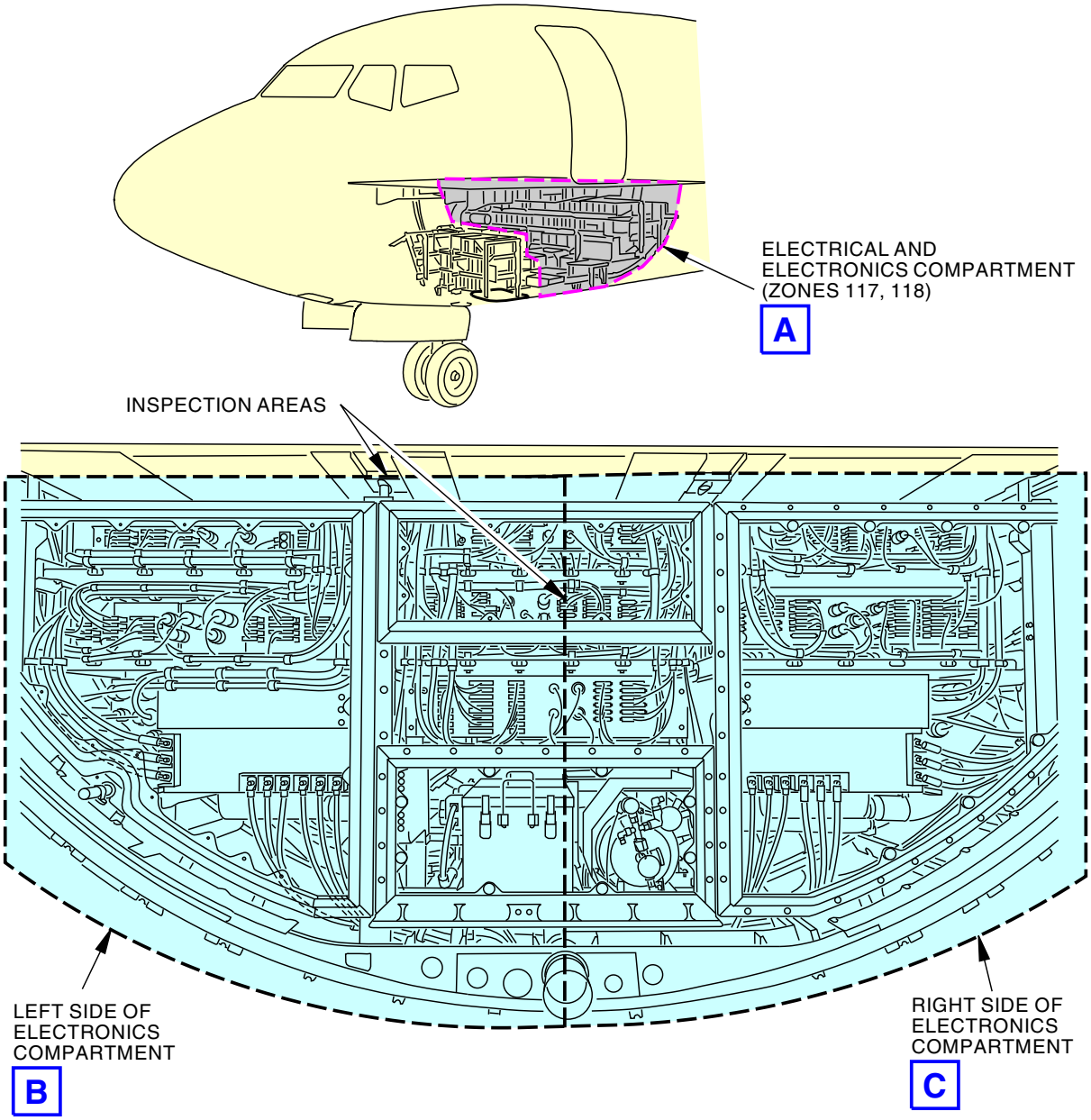
SUBTASK 05-42-01-410-006

(5) Close these access panels:

Number	Name/Location
117A	Electronic Equipment Access Door
121MW	PANEL ASSY - FORWARD CARGO COMPARTMENT FWD BULKHEAD
121NW	PANEL ASSY - FORWARD CARGO COMPARTMENT FWD BULKHEAD
122JW	PANEL ASSY - FORWARD CARGO COMPARTMENT FWD BULKHEAD

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



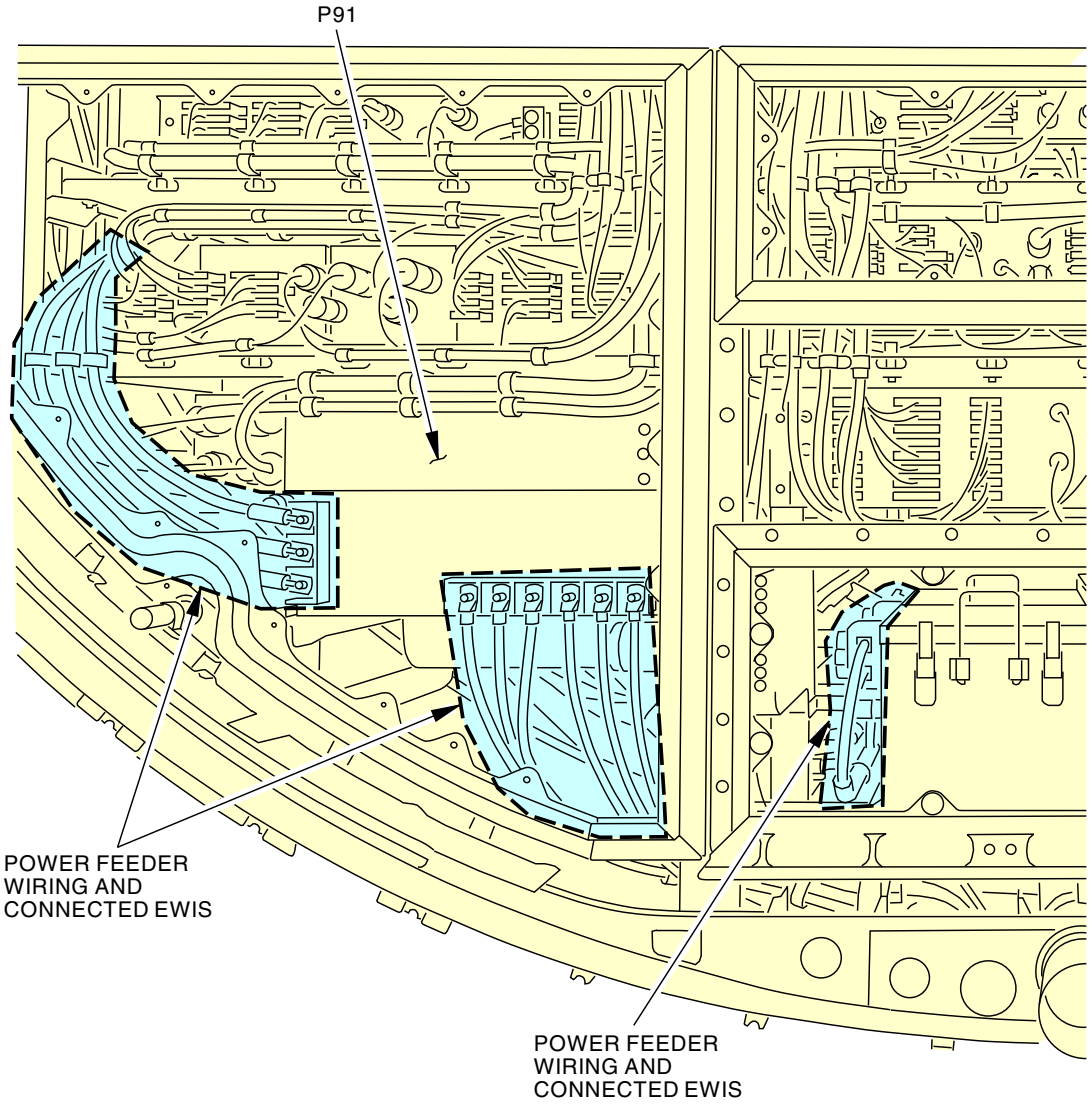
ELECTRICAL AND ELECTRONICS COMPARTMENT
(VIEW IN THE FORWARD DIRECTION)
(FORWARD CARGO COMPARTMENT ACCESS PANELS REMOVED)

A

2410366 S00061525390_V1

Electrical and Electronics Compartment (view in the forward direction)
Figure 214/05-42-01-990-814 (Sheet 1 of 3)

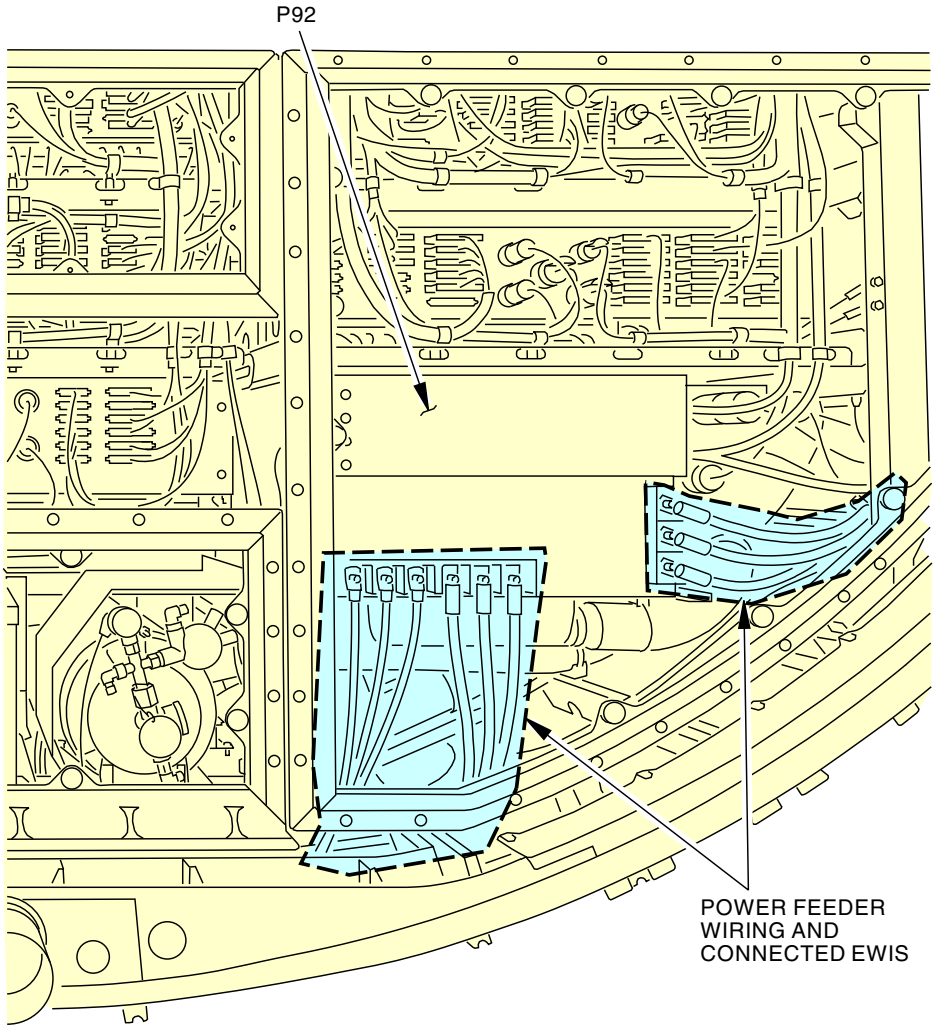
ECCN 9E991 BOEING PROPRIETARY - See title page for details



2410367 S00061525391_V1

Electrical and Electronics Compartment (view in the forward direction)
Figure 214/05-42-01-990-814 (Sheet 2 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



RIGHT SIDE OF ELECTRONICS COMPARTMENT

C

2410368 S00061525392_V1

Electrical and Electronics Compartment (view in the forward direction)
Figure 214/05-42-01-990-814 (Sheet 3 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-42-01-211-802

16. Detailed Inspection: External Power Feeder Wiring/ EWIS in the area outboard of Nose Wheel Well. (EZAP)

(Figure 215)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This procedure is an Enhanced Zonal Analysis Procedure (EZAP) task.

B. References

Reference	Title
05-51-91-790-801	Cabin Pressure Leak Test (P/B 201)
20-60-02-100-802	Detailed Inspection of EWIS (P/B 601)
20-60-07-910-801	Protection of the EWIS During Maintenance (P/B 201)
53-14-01-020-801	Nose Wheel Well Access Panels Removal (P/B 401)
53-14-01-420-801	Nose Wheel Well Access Panels Installation (P/B 401)

C. Location Zones

Zone	Area
114	Area Above and Outboard of Nose Landing Gear Wheel Well - Right

D. Access Panels

Number	Name/Location
112A	Forward Access Door
114AC	Fwd Nose Wheel Well Upper Access Panel
114AW	Forward Nose Wheel Well Panel
114BW	Forward Nose Wheel Well Panel

E. Inspection

SUBTASK 05-42-01-010-007

(1) Open this access panel:

Number	Name/Location
112A	Forward Access Door

SUBTASK 05-42-01-010-009

(2) Open these access panels:

Number	Name/Location
114AC	Fwd Nose Wheel Well Upper Access Panel
114AW	Forward Nose Wheel Well Panel
114BW	Forward Nose Wheel Well Panel

(a) Do this task: Nose Wheel Well Access Panels Removal, TASK 53-14-01-020-801.

SUBTASK 05-42-01-211-002

(3) Do this task: Detailed Inspection of EWIS, TASK 20-60-02-100-802.

(4) Inspect (Detailed) the external power feeder wiring and connected EWIS in the area outboard of Nose Wheel Well (Right Side). (EZAP)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 05-42-01-910-015

(5) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-910-801, for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

SUBTASK 05-42-01-410-007

(6) Close this access panel:

Number	Name/Location
112A	Forward Access Door

SUBTASK 05-42-01-410-009

(7) Close these access panels:

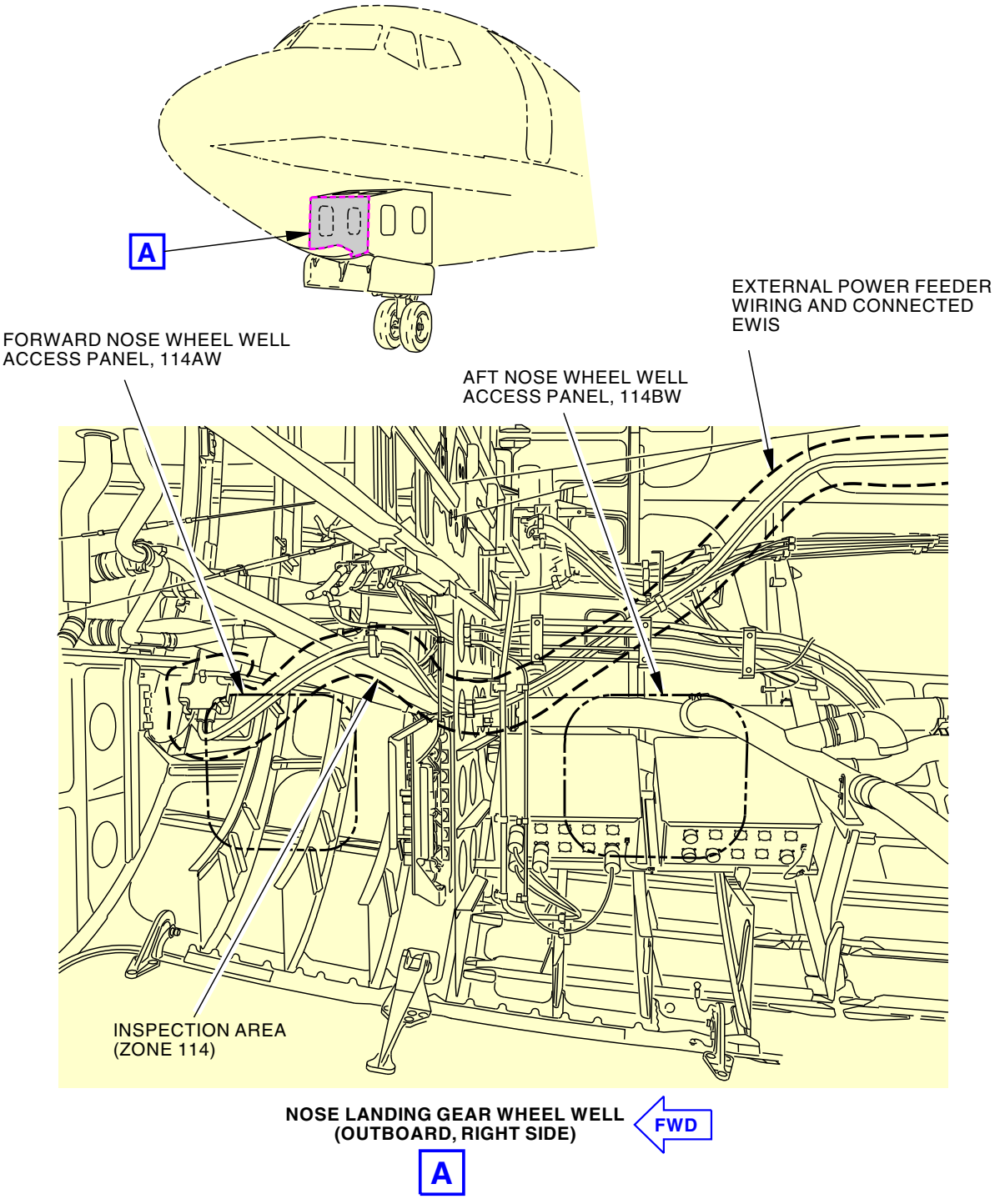
Number	Name/Location
114AC	Fwd Nose Wheel Well Upper Access Panel
114AW	Forward Nose Wheel Well Panel
114BW	Forward Nose Wheel Well Panel

(a) Do this task: Nose Wheel Well Access Panels Installation, TASK 53-14-01-420-801.

(b) Do this task: Cabin Pressure Leak Test, TASK 05-51-91-790-801.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



2410369 S00061525394_V1

EWIS in Area Outboard of Nose Wheel Well - Right Side
Figure 215/05-42-01-990-815

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-42-01-211-803

17. Detailed Inspection: Exposed EWIS in the Center Section Wing Box (EZAP)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This procedure is an Enhanced Zonal Analysis Procedure (EZAP) task.

B. References

Reference	Title
20-60-02-100-802	Detailed Inspection of EWIS (P/B 601)
20-60-07-910-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
131	Center Section Wing Box, Body Station 540.00 to Body Station 663.75 - Left
132	Center Section Wing Box, Body Station 540.00 to Body Station 663.75 - Right

D. Access Panels

Number	Name/Location
131AB	Center Tank Access

E. Inspection

SUBTASK 05-42-01-010-008

(1) Open this access panel:

Number	Name/Location
131AB	Center Tank Access

SUBTASK 05-42-01-211-003

(2) Do this task: Detailed Inspection of EWIS, TASK 20-60-02-100-802

(3) Inspect (Detailed) all exposed EWIS in the Center Section Wing Box. (EZAP)

SUBTASK 05-42-01-910-016

(4) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-910-801 for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

SUBTASK 05-42-01-410-008

(5) Close this access panel:

Number	Name/Location
131AB	Center Tank Access

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

1. General

A. This pageblock contains MSG-3 task card data.

EWIS

TASK 05-42-02-100-801

2. Restore: Aft Passenger Compartment, Wet Areas, Sta 663.75 to Aft Pressure Bulkhead. (EZAP) (Figure 201)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This procedure is an Enhanced Zonal Analysis Procedure (EZAP) task

B. References

Reference	Title
20-60-02-100-803	Cleaning to Remove Combustible Material (P/B 701)
20-60-07-910-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
241	Aft Passenger Compartment - Station 663.75 to Aft Pressure Bulkhead - Left
242	Aft Passenger Compartment - Station 663.75 to Aft Pressure Bulkhead - Right

D. Procedure

NOTE: Galleys and lavs removed. Removal of sidewall panels, ceiling panels and return air grilles required in areas where galleys and lavs are located.

SUBTASK 05-42-02-160-001

(1) Do this task: Cleaning to Remove Combustible Material, TASK 20-60-02-100-803.

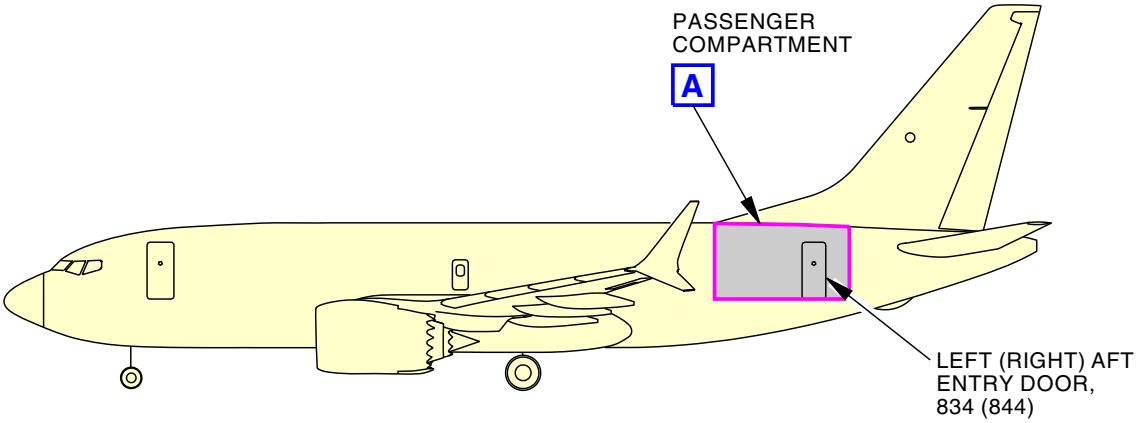
(2) Restore (Clean) areas above ceiling, and behind sidewalls and return air grilles in Aft Passenger Compartment, Wet Areas, Sta. 663.75 to Aft Pressure Bulkhead. (EZAP)

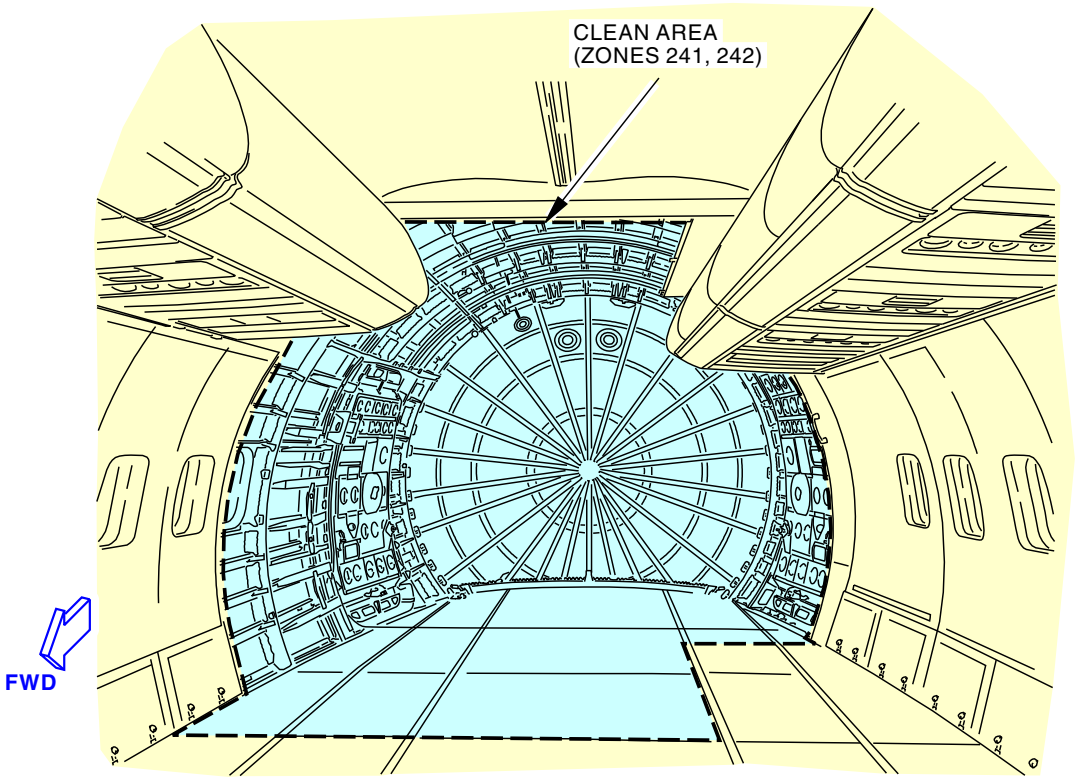
SUBTASK 05-42-02-910-001

(3) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-910-801, for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details





PASSENGER COMPARTMENT
(LAVS, GALLEYS, CEILING, SIDEWALL PANELS, AND RETURN AIR GRILLES REMOVED)

A

2410370 S00061525398_V1

Passenger Compartment
Figure 201/05-42-02-990-801

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-42-02-100-802

3. Restore: Aft Passenger Compartment, Dry Area, Sta 663.75 to Aft Pressure Bulkhead. (EZAP)

(Figure 202)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This procedure is an Enhanced Zonal Analysis Procedure (EZAP) task.

B. References

Reference	Title
20-60-02-100-803	Cleaning to Remove Combustible Material (P/B 701)
20-60-07-910-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
241	Aft Passenger Compartment - Station 663.75 to Aft Pressure Bulkhead - Left
242	Aft Passenger Compartment - Station 663.75 to Aft Pressure Bulkhead - Right

D. Procedure

NOTE: Removal of sidewall panels, ceiling panels and return air grilles required.

SUBTASK 05-42-02-160-002

(1) Do this task: Cleaning to Remove Combustible Material, TASK 20-60-02-100-803.

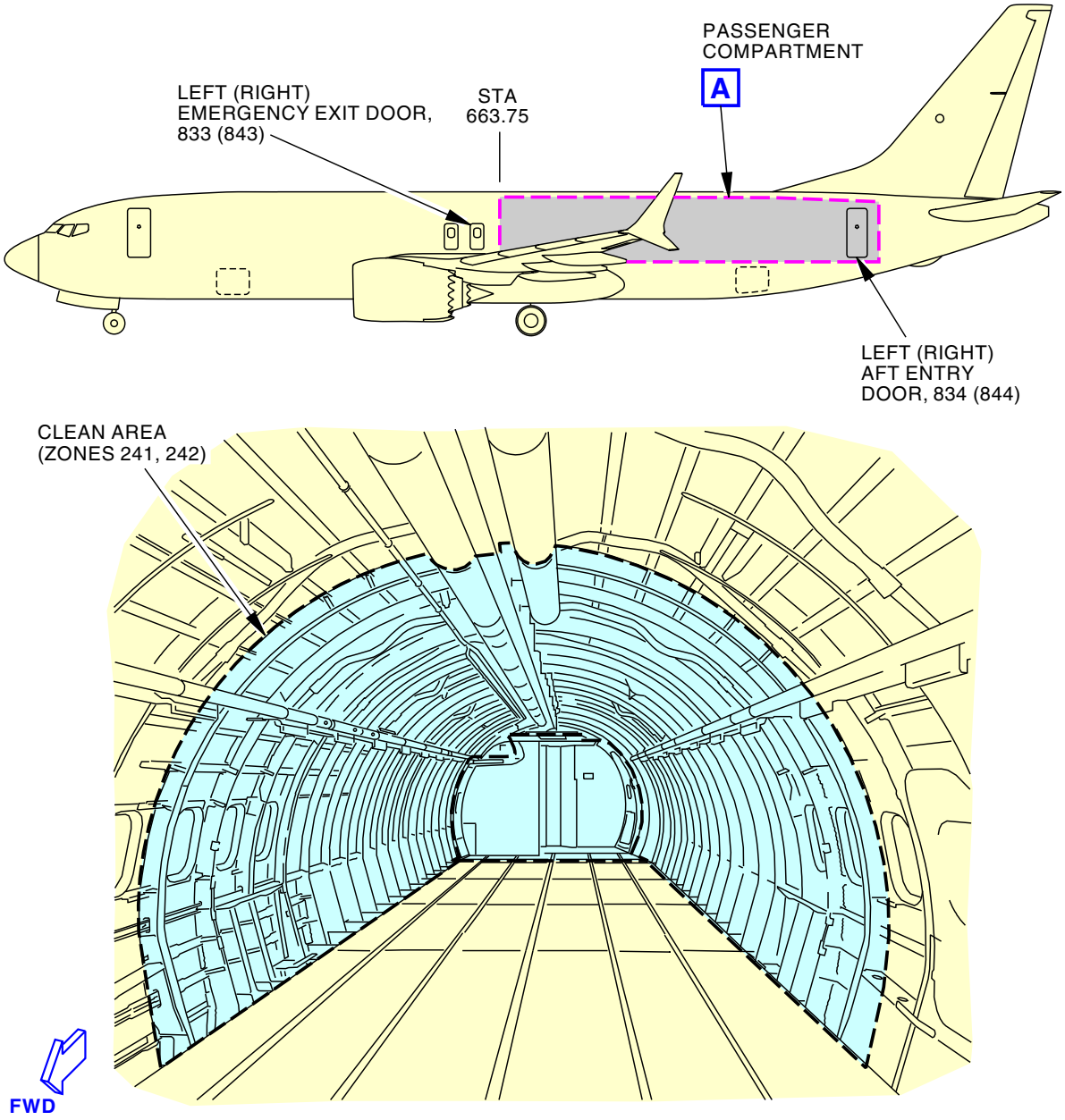
(2) Restore (Clean) areas above ceiling, and behind sidewalls and return air grilles in Aft Passenger Compartment, Dry Area, Sta. 663.75 to Aft Pressure Bulkhead. (EZAP)

SUBTASK 05-42-02-910-002

(3) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-910-801, for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



PASSENGER COMPARTMENT
(SIDEWALL PANELS, CEILING PANELS AND RETURN AIR GRILLES REMOVED)

A

2410371 S00061525400_V1

Passenger Compartment
Figure 202/05-42-02-990-802

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-42-02-100-803

4. Restore: Forward Passenger Compartment, Wet Areas, Sta 360 to 663.75. (EZAP)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This procedure is an Enhanced Zonal Analysis Procedure (EZAP) task

B. References

Reference	Title
20-60-02-100-803	Cleaning to Remove Combustible Material (P/B 701)
20-60-07-910-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
231	Forward Passenger Compartment - Forward Entry Door to STA 663.75 - Left
232	Forward Passenger Compartment - Forward Entry Door to STA 663.75 - Right

D. Procedure

NOTE: Galleys and lavs removed. Removal of sidewall panels, ceiling panels and return air grilles required in areas where galleys and lavs are located.

SUBTASK 05-42-02-160-003

(1) Do this task: Cleaning to Remove Combustible Material, TASK 20-60-02-100-803.

(2) Restore (Clean) areas above ceiling, and behind sidewalls and return air grilles in Forward Passenger Compartment, Wet Areas, Sta. 360 to 663.75. (EZAP)

SUBTASK 05-42-02-910-003

(3) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-910-801, for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

END OF TASK

EWIS

TASK 05-42-02-100-804

5. Restore: Forward Passenger Compartment, Dry Area, Sta 360 to 663.75. (EZAP)
(Figure 203)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This procedure is an Enhanced Zonal Analysis Procedure (EZAP) task.

B. References

Reference	Title
20-60-02-100-803	Cleaning to Remove Combustible Material (P/B 701)
20-60-07-910-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
231	Forward Passenger Compartment - Forward Entry Door to STA 663.75 - Left
232	Forward Passenger Compartment - Forward Entry Door to STA 663.75 - Right

ECCN 9E991 BOEING PROPRIETARY - See title page for details

D. Procedure

NOTE: Removal of sidewall panels, ceiling panels and return air grilles required.

SUBTASK 05-42-02-160-004

(1) Do this task: Cleaning to Remove Combustible Material, TASK 20-60-02-100-803.

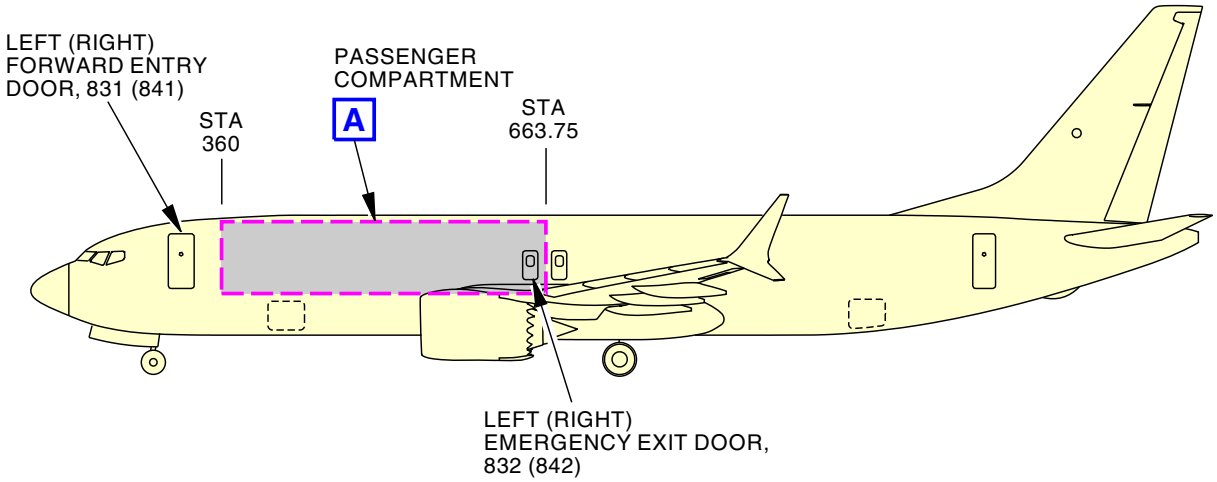
(2) Restore (Clean) areas above ceiling, and behind sidewalls and return air grilles in Forward Passenger Compartment, Dry Area, Sta. 360 to 663.75. (EZAP)

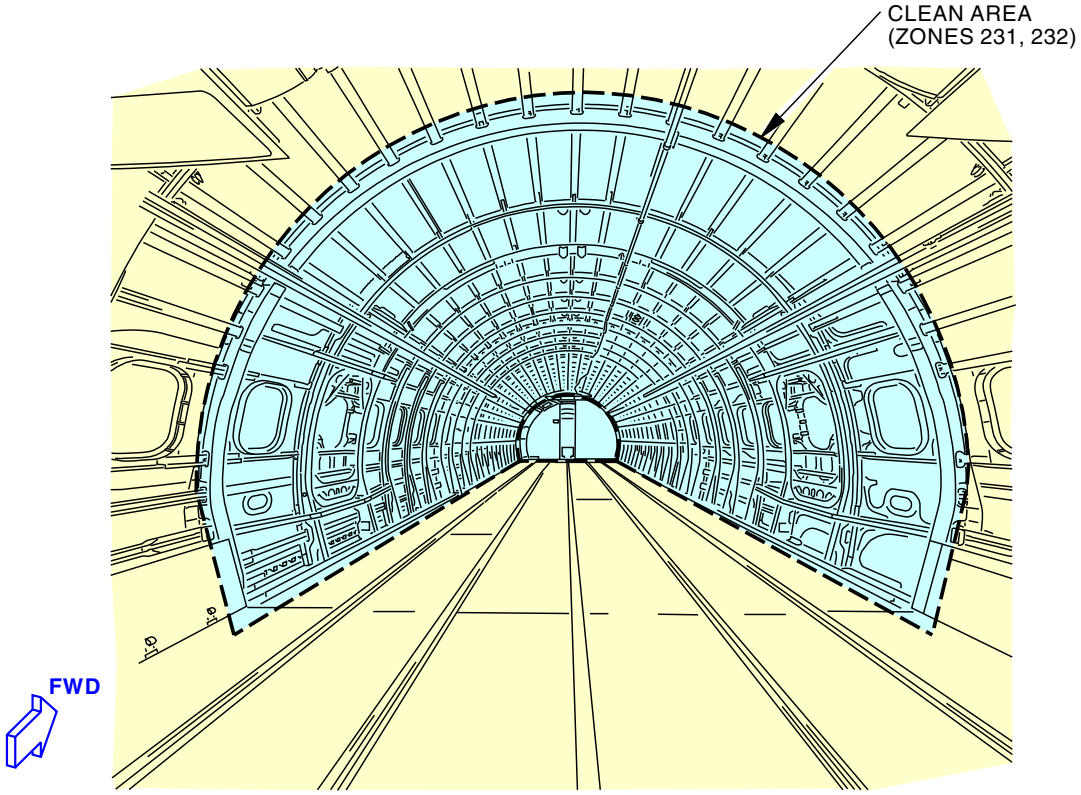
SUBTASK 05-42-02-910-004

(3) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-910-801, for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details





PASSENGER COMPARTMENT
(SIDEWALL PANELS, CEILING PANELS AND RETURN AIR GRILLES REMOVED)

A

2410372 S00061525403_V1

Passenger Compartment
Figure 203/05-42-02-990-803

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-42-02-100-805

6. Restore: Areas Aft of Flight Compartment to Forward Entry Door. (EZAP)

(Figure 204)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This procedure is an Enhanced Zonal Analysis Procedure (EZAP) task.

B. References

Reference	Title
20-60-02-100-803	Cleaning to Remove Combustible Material (P/B 701)
20-60-07-910-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
221	Passenger Compartment - Aft of Control Compartment to Forward Entry Door - Left
222	Passenger Compartment - Aft of Control Compartment to Forward Entry Door - Right

D. Procedure

NOTE: With access provided. Galleys and lavs removed. Ceiling and sidewall panels removal required.

SUBTASK 05-42-02-160-005

(1) Do this task: Cleaning to Remove Combustible Material, TASK 20-60-02-100-803.

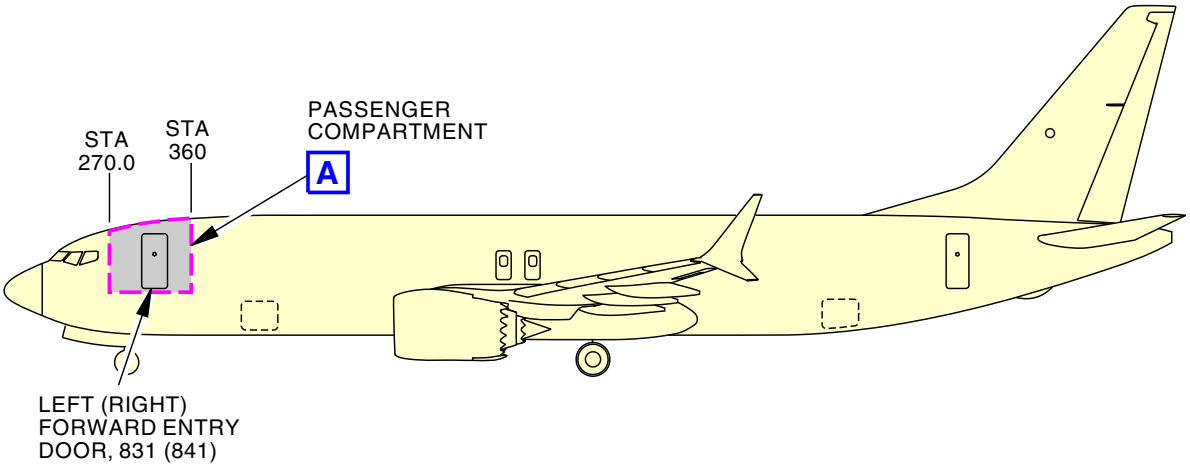
(2) Restore (Clean) areas above ceiling, behind sidewalls and under the raceway cover plates on both sides of the passenger compartment, aft of Flight Compartment to forward entry door. (EZAP)

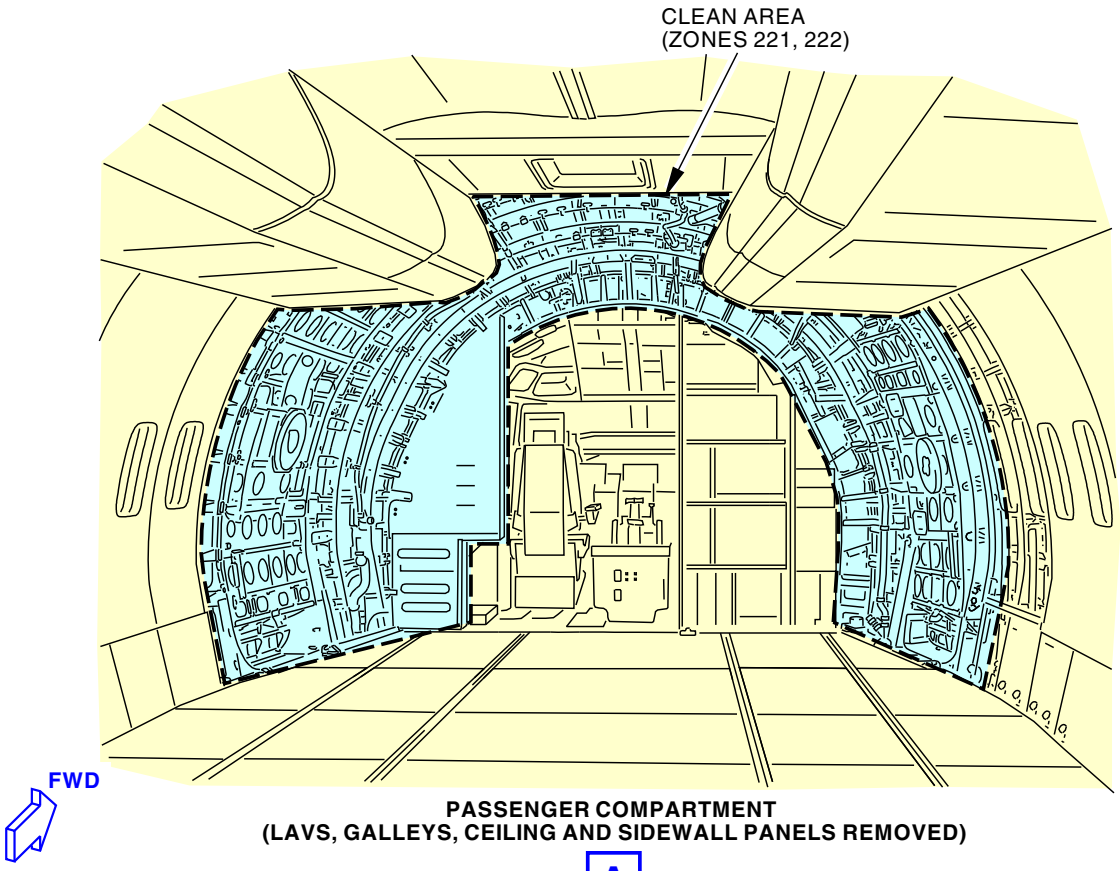
SUBTASK 05-42-02-910-005

(3) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-910-801, for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details





Passenger Compartment
Figure 204/05-42-02-990-804

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-42-02-100-806

7. Restore: Area in Flight Compartment from Sta 186 to 211, WL 208 to 232. (EZAP)

(Figure 205)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This procedure is an Enhanced Zonal Analysis Procedure (EZAP) task.

B. References

Reference	Title
20-60-02-100-803	Cleaning to Remove Combustible Material (P/B 701)
20-60-07-910-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
211	Flight Compartment - Left
212	Flight Compartment - Right

D. Procedure

NOTE: Accessible areas forward and above the rudder pedals including areas under rudder heel rest access panels.

SUBTASK 05-42-02-160-006

(1) Do this task: Cleaning to Remove Combustible Material, TASK 20-60-02-100-803.

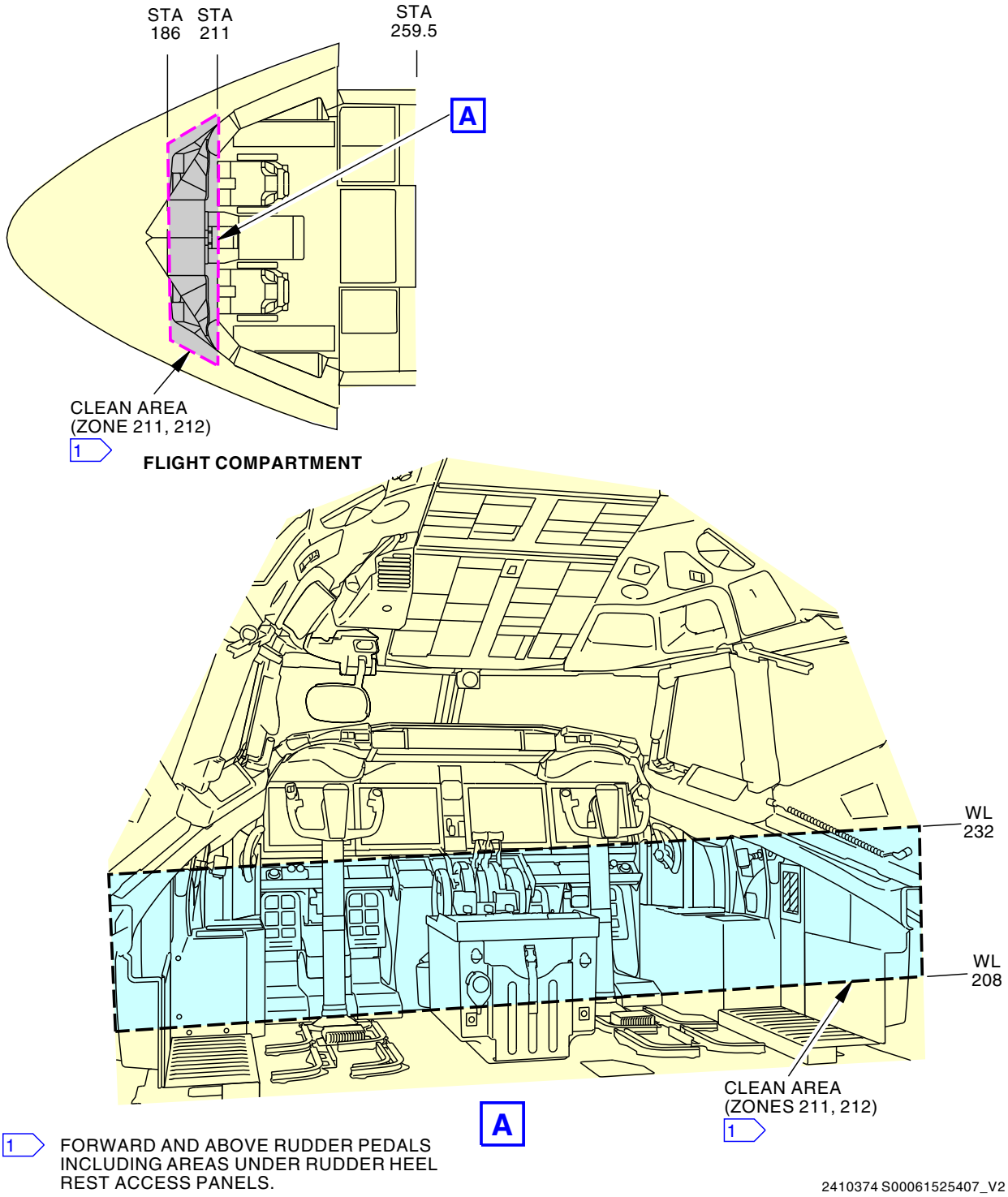
(2) Restore (Clean) area in Flight Compartment from Sta. 186 to 211, WL 208 to 232. (EZAP)

SUBTASK 05-42-02-910-006

(3) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-910-801, for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Flight Compartment
Figure 205/05-42-02-990-805

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-42-02-210-801

8. General Visual Inspection: Exposed EWIS in the Flight Compartment excluding exposed EWIS in the P5, P6 and P18 panels. (EZAP)

(Figure 206)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This procedure is an Enhanced Zonal Analysis Procedure (EZAP) task.

B. References

Reference	Title
20-60-02-100-801	General Visual Inspection of EWIS (P/B 201)
20-60-07-910-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
211	Flight Compartment - Left
212	Flight Compartment - Right

D. Inspection

NOTE: With access provided. Seats removed. Control stand access panels, overhead & sidewall panels, glareshield, instruments/panels removal required.

SUBTASK 05-42-02-210-001

(1) Do this task: General Visual Inspection of EWIS, TASK 20-60-02-100-801.

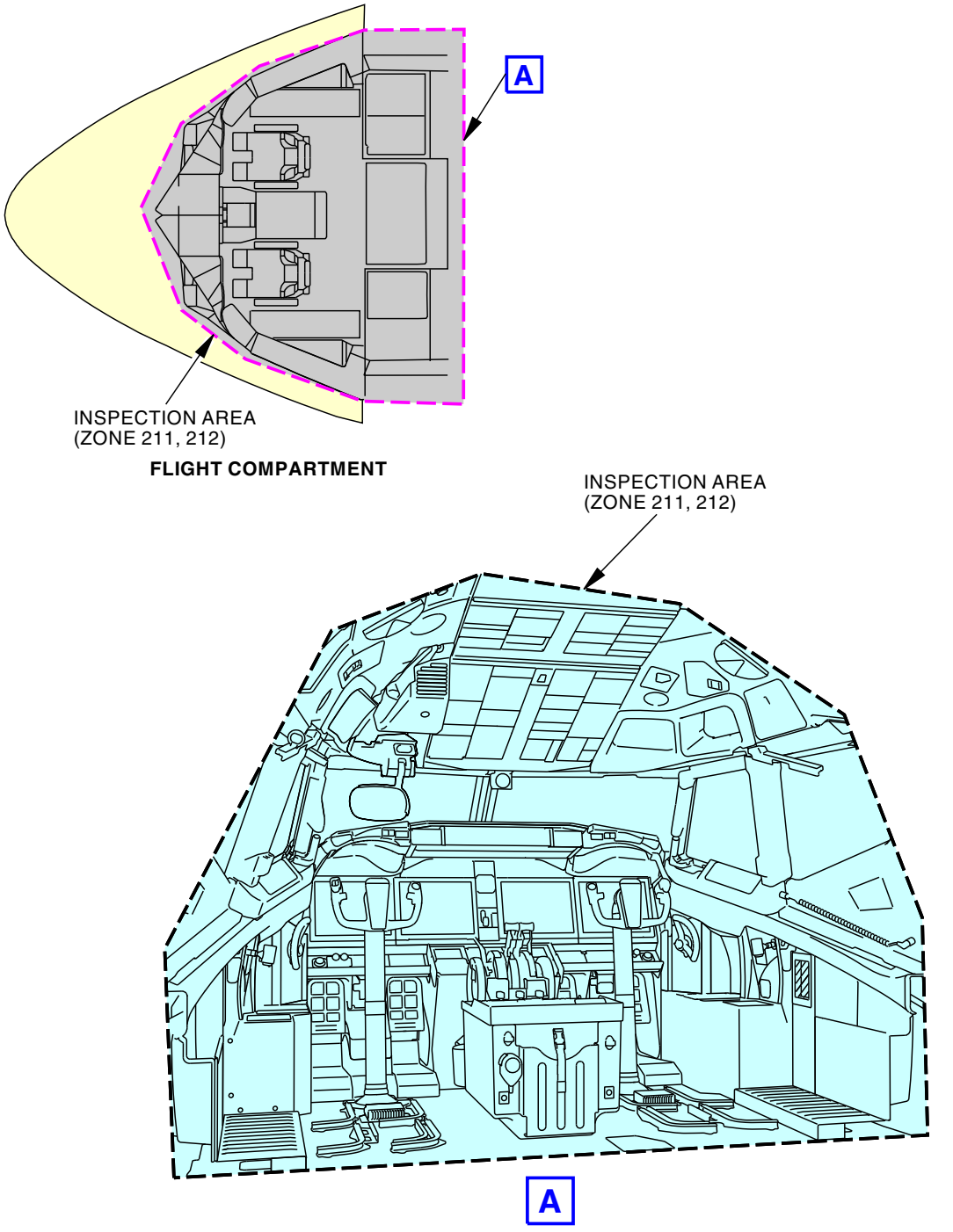
(2) Inspect (General Visual) all exposed EWIS in the Flight Compartment excluding exposed EWIS in the P5, P6 and P18 panels. (EZAP)

SUBTASK 05-42-02-910-007

(3) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-910-801, for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Inspect (General Visual) - Exposed EWIS In Flight Compartment Excluding Exposed EWIS In the P3, P6, and P18 Panels
Figure 206/05-42-02-990-806

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-42-02-211-801

9. Detailed Inspection: Exposed EWIS in the P5, P6 and P18 panels. (EZAP)

(Figure 207)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This procedure is an Enhanced Zonal Analysis Procedure (EZAP) task.

B. References

Reference	Title
20-60-02-100-802	Detailed Inspection of EWIS (P/B 601)
20-60-07-910-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
211	Flight Compartment - Left
212	Flight Compartment - Right

D. Inspection

NOTE: Opening P5 (fwd/aft), P6 and P18 panels required.

SUBTASK 05-42-02-211-001

(1) Do this task: Detailed Inspection of EWIS, TASK 20-60-02-100-802.

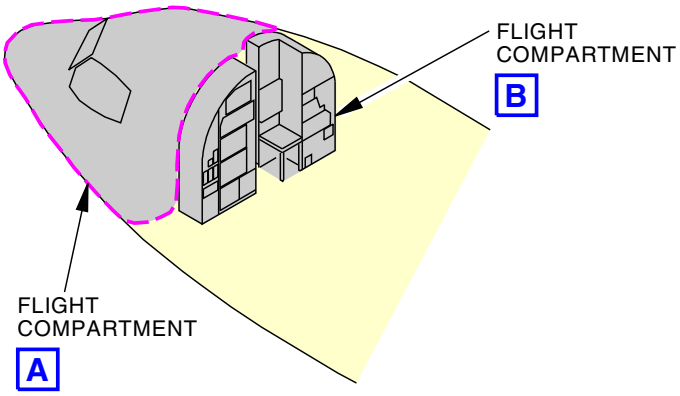
(2) Inspect (Detailed) all exposed EWIS in the P5 (fwd/aft), P6 and P18 panels. (EZAP)

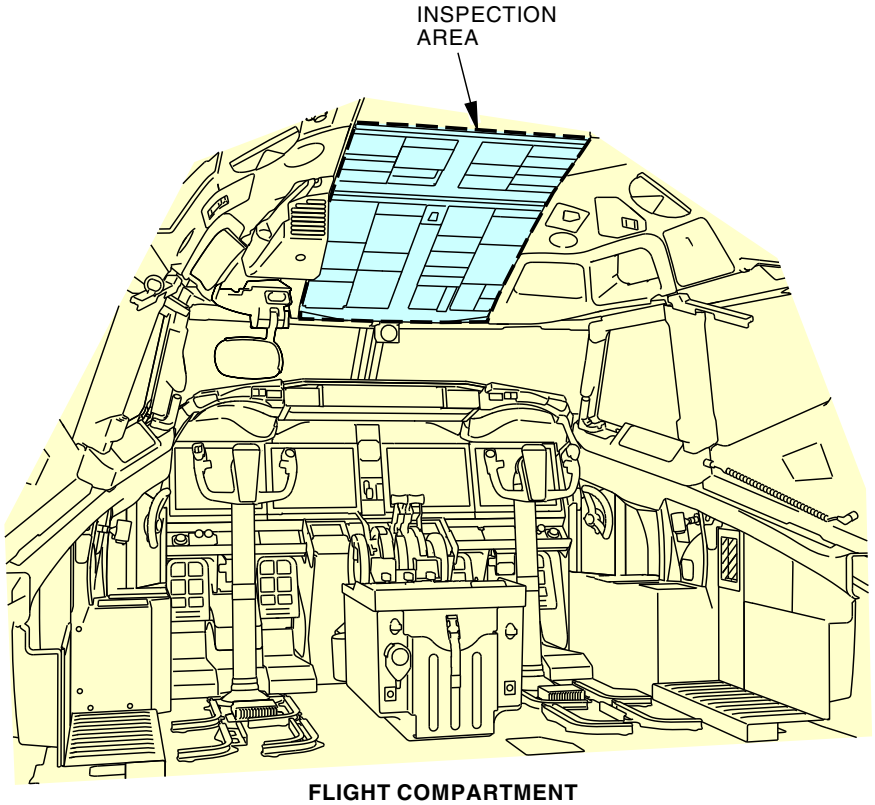
SUBTASK 05-42-02-910-008

(3) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-910-801, for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details

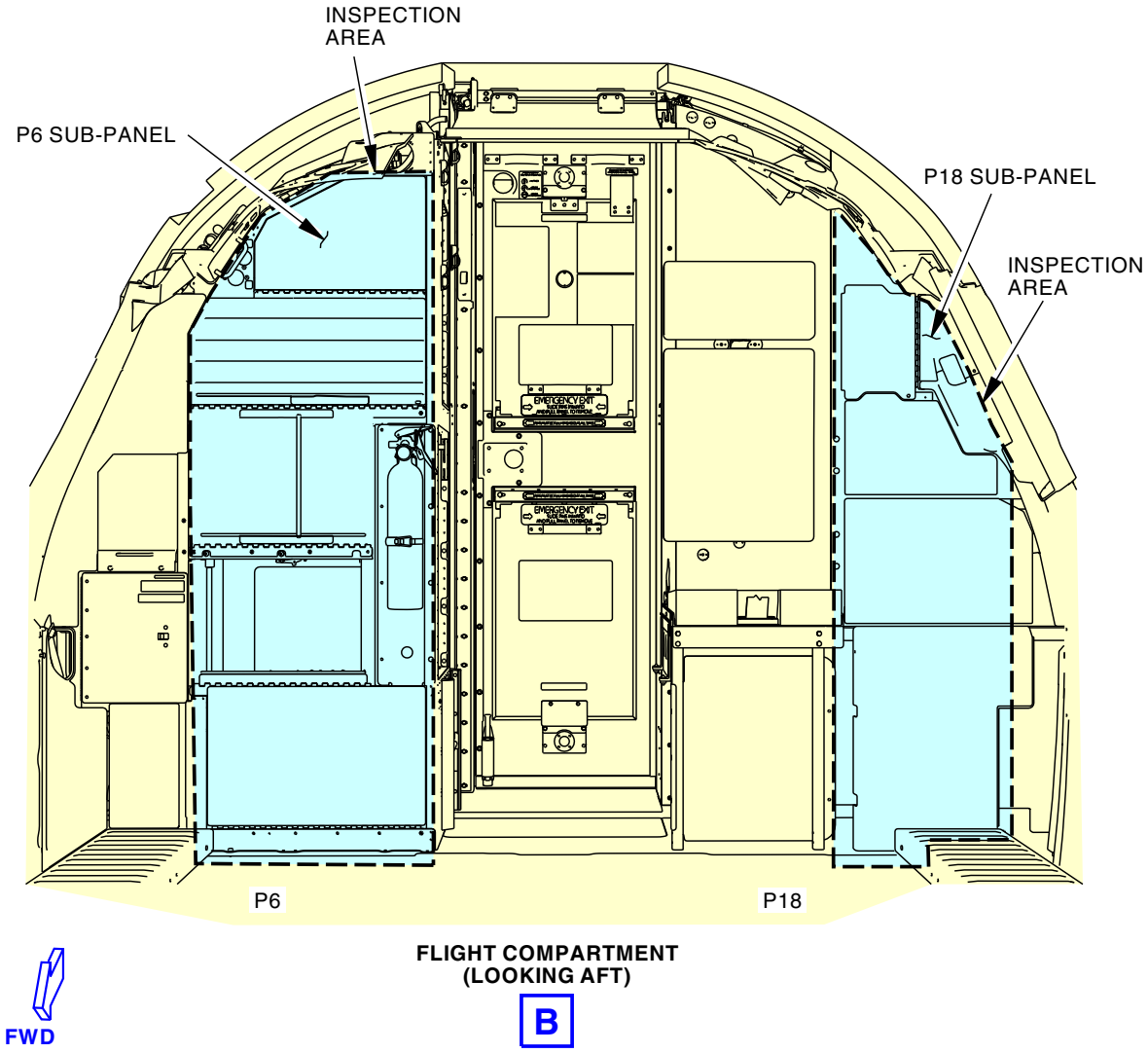




2410376 S00061525411_V1

Exposed EWIS in P5, P6, and P18 Panels
Figure 207/05-42-02-990-807 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



2410377 S00061525412_V1

Exposed EWIS in P5, P6, and P18 Panels
Figure 207/05-42-02-990-807 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

1. General

A. This pageblock contains MSG-3 task card data.

EWIS

TASK 05-42-03-210-801

2. General Visual Inspection: Exposed EWIS in the Tail Cone. (EZAP)

(Figure 201)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This procedure is an Enhanced Zonal Analysis Procedure (EZAP) task.

B. References

Reference	Title
20-60-02-100-801	General Visual Inspection of EWIS (P/B 201)
20-60-07-910-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
317	Tail Cone Compartment - Left
318	Tail Cone Compartment - Right

D. Access Panels

Number	Name/Location
317BL	Tailcone Access Door
318BR	Tailcone Access Door

E. Inspection

SUBTASK 05-42-03-010-001

(1) Open these access panels:

Number	Name/Location
317BL	Tailcone Access Door
318BR	Tailcone Access Door

SUBTASK 05-42-03-210-001

(2) Do this task: General Visual Inspection of EWIS, TASK 20-60-02-100-801.

(3) Inspect (General Visual) all exposed EWIS in the Tail Cone. (EZAP)

SUBTASK 05-42-03-910-001

(4) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-910-801, for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

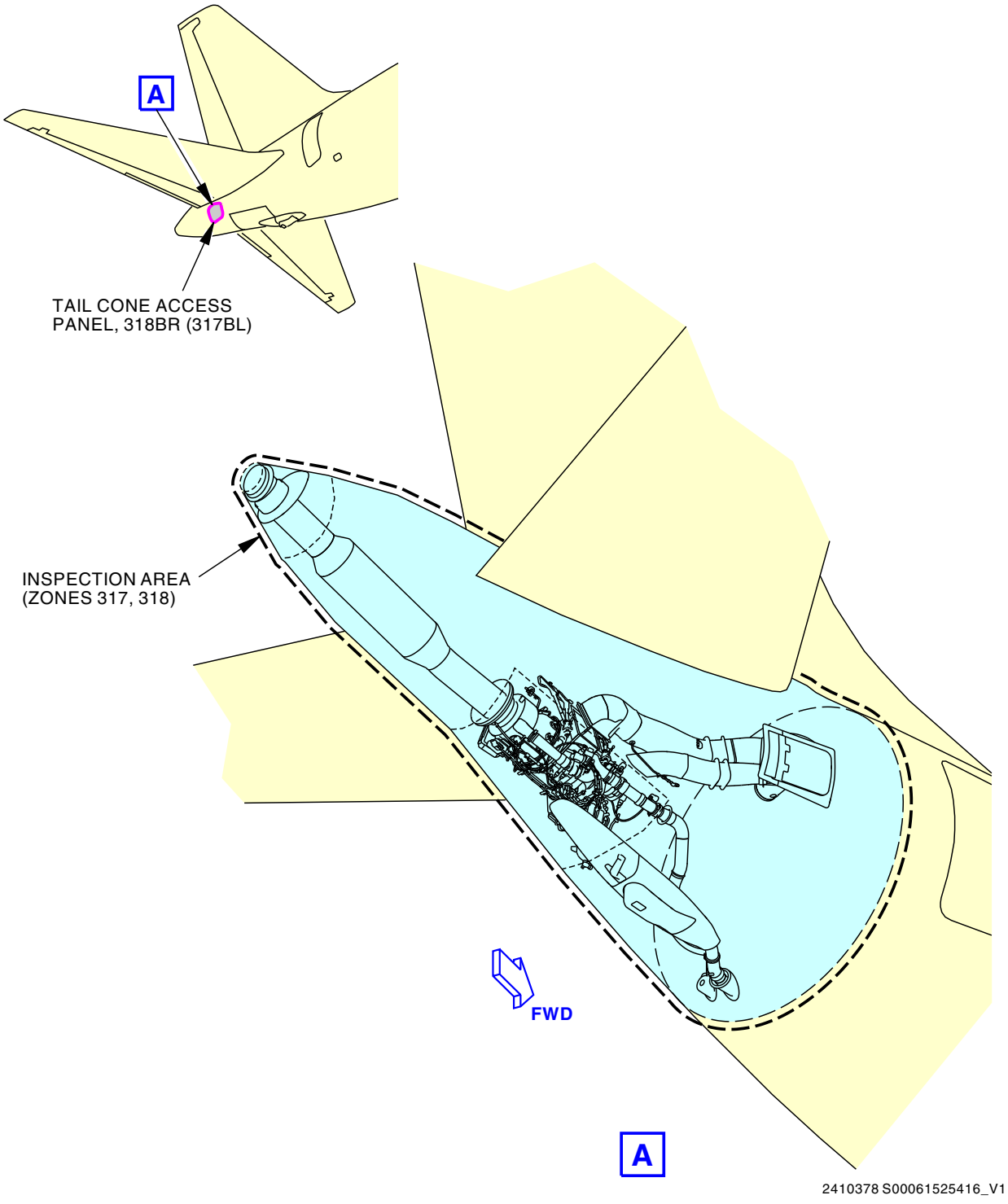
SUBTASK 05-42-03-410-001

(5) Close these access panels:

Number	Name/Location
317BL	Tailcone Access Door
318BR	Tailcone Access Door

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Inspect (General Visual) - Exposed EWIS In Tail Cone
Figure 201/05-42-03-990-801

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-42-03-211-801

3. Detailed Inspection: APU Starter/Generator Power Feeder Wiring/Ignition Leads/ and connected EWIS in the APU compartment. (EZAP)

(Figure 202)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This procedure is an Enhanced Zonal Analysis Procedure (EZAP) task.

B. References

Reference	Title
20-60-02-100-802	Detailed Inspection of EWIS (P/B 601)
20-60-07-910-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
315	APU Compartment - Left
316	APU Compartment - Right

D. Access Panels

Number	Name/Location
315A	APU Cowl Door

E. Inspection

SUBTASK 05-42-03-010-002

(1) Open this access panel:

Number	Name/Location
315A	APU Cowl Door

SUBTASK 05-42-03-211-001

(2) Do this task: Detailed Inspection of EWIS, TASK 20-60-02-100-802.

(a) Inspect (Detailed) the APU starter/generator power feeder wiring, ignition leads and connected EWIS in the APU Compartment. (EZAP)

SUBTASK 05-42-03-910-002

(3) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-910-801, for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

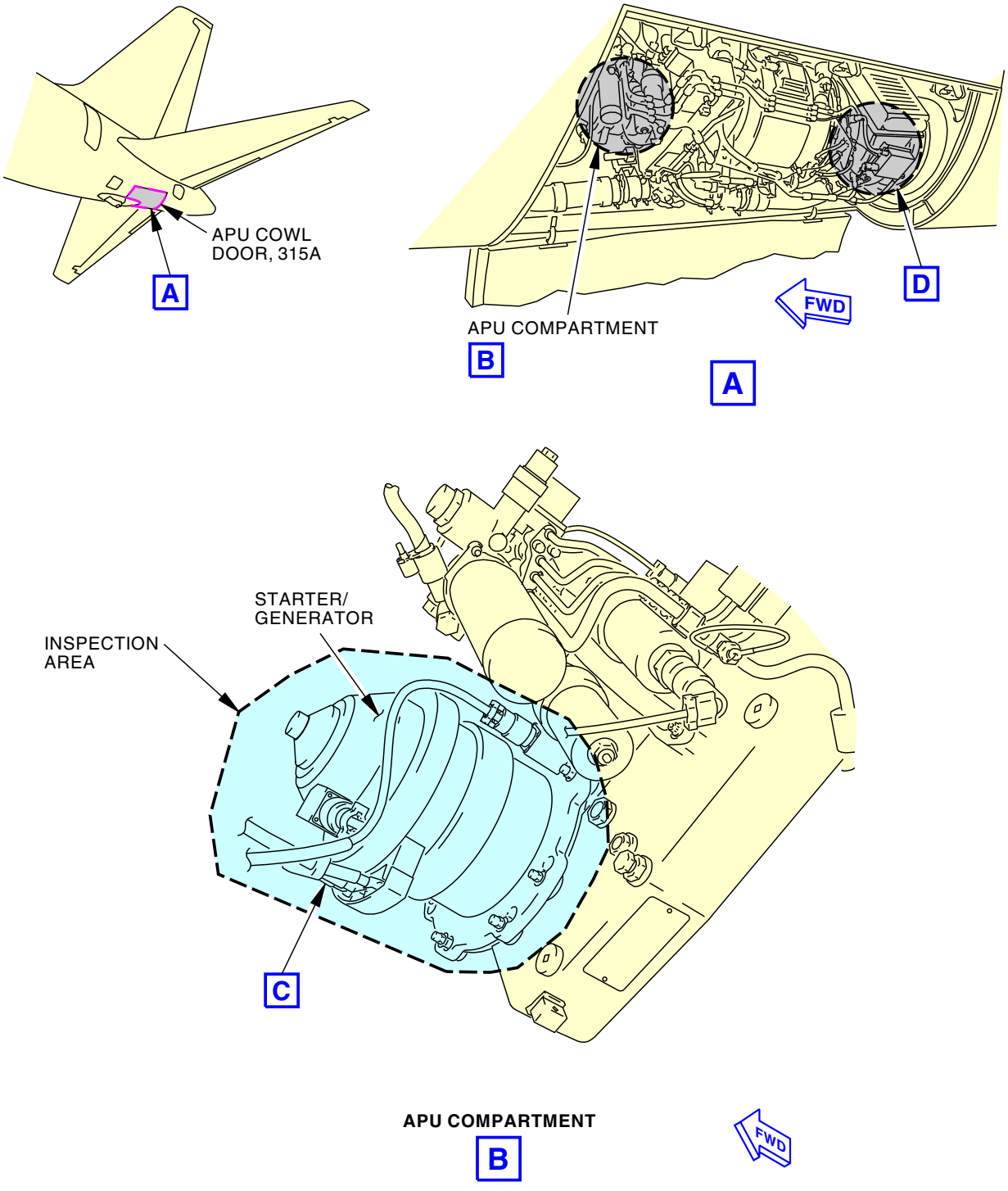
SUBTASK 05-42-03-410-002

(4) Close this access panel:

Number	Name/Location
315A	APU Cowl Door

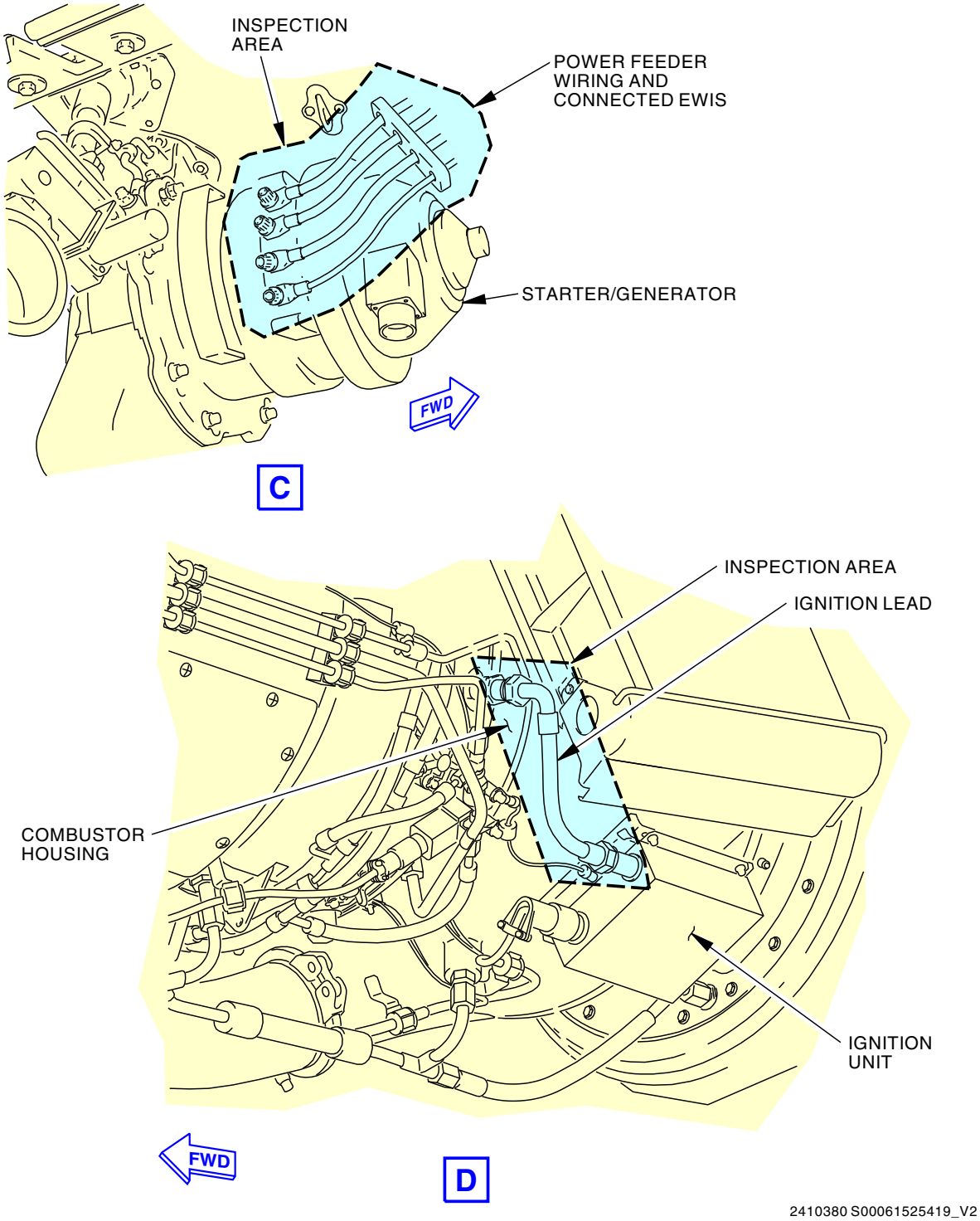
END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details



APU Starter/Generator Power Feeder Wiring, Ignition Leads, and Connected EWIS
Figure 202/05-42-03-990-802 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



APU Starter/Generator Power Feeder Wiring, Ignition Leads, and Connected EWIS
Figure 202/05-42-03-990-802 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-42-03-211-802

4. Detailed Inspection: APU Starter/Generator Power Feeder Wiring/EWIS in the area aft of Pressure Bulkhead. (EZAP)

(Figure 203)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This procedure is an Enhanced Zonal Analysis Procedure (EZAP) task.

B. References

Reference	Title
20-60-02-100-802	Detailed Inspection of EWIS (P/B 601)
20-60-07-910-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
311	Area Aft of Pressure Bulkhead - Left
312	Area Aft of Pressure Bulkhead - Right

D. Access Panels

Number	Name/Location
311BL	Stabilizer Trim Access Door

E. Inspection

SUBTASK 05-42-03-010-003

(1) Open this access panel:

Number	Name/Location
311BL	Stabilizer Trim Access Door

SUBTASK 05-42-03-211-002

(2) Do this task: Detailed Inspection of EWIS, TASK 20-60-02-100-802.

(3) Inspect (Detailed) the APU starter/generator power feeder wiring and connected EWIS in the area aft of pressure bulkhead. (EZAP)

SUBTASK 05-42-03-910-003

(4) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-910-801, for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

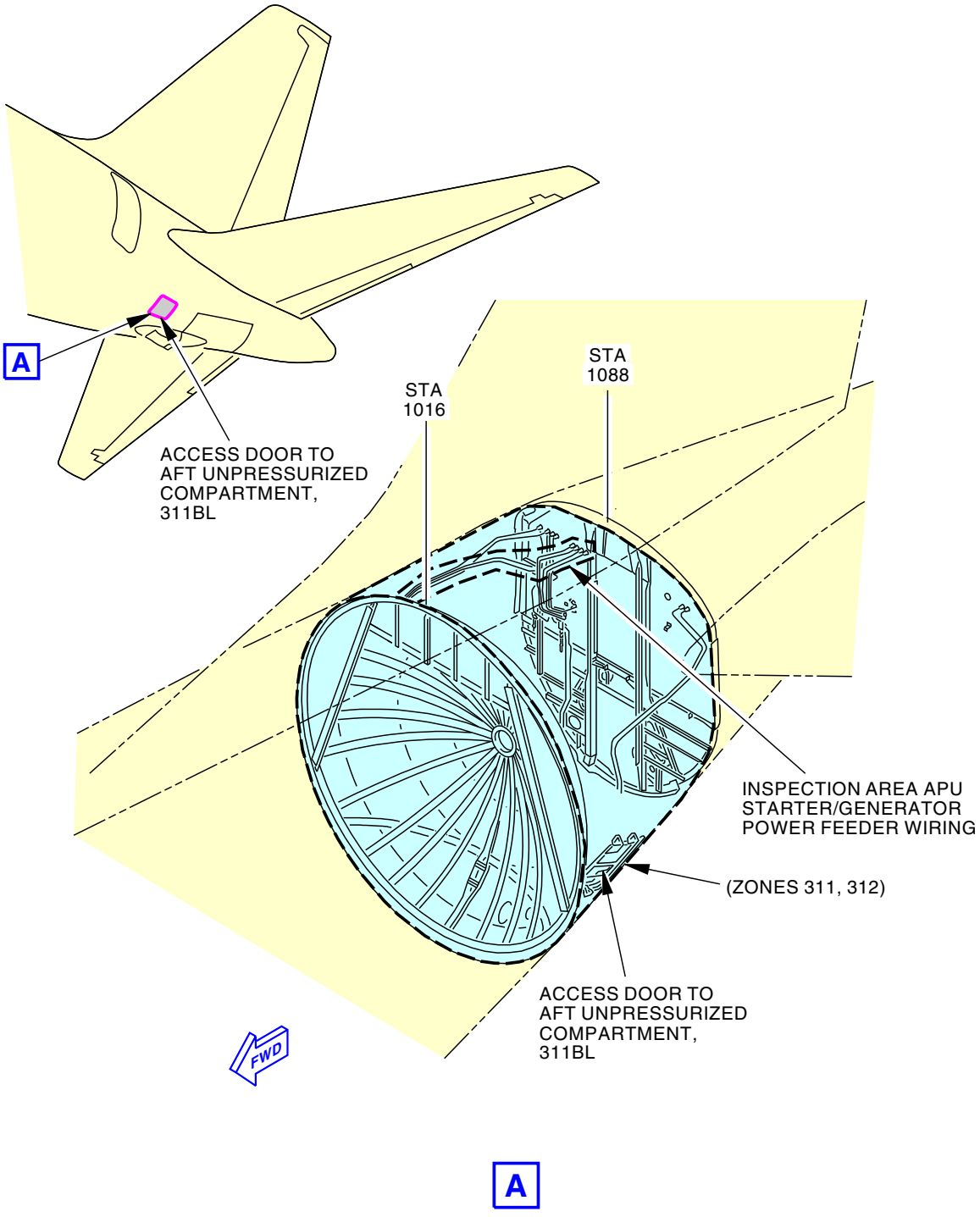
SUBTASK 05-42-03-410-003

(5) Close this access panel:

Number	Name/Location
311BL	Stabilizer Trim Access Door

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



2410381 S00061525421_V1

Aft Pressure Bulkhead APU EWIS
Figure 203/05-42-03-990-803

ECCN 9E991 BOEING PROPRIETARY - See title page for details

1. General

A. This pageblock contains MSG-3 task card data.

EWIS

TASK 05-42-04-211-801

2. Detailed Inspection: Exposed EWIS in Engine 1 (Engine fan and core sections). (EZAP)

(Figure 201)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This procedure is an Enhanced Zonal Analysis Procedure (EZAP) task.

B. References

Reference	Title
20-60-02-100-802	Detailed Inspection of EWIS (P/B 601)
20-60-07-910-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
411	Engine 1 - Engine

D. Access Panels

Number	Name/Location
413	Left Fan Cowl, Engine 1
414	Right Fan Cowl, Engine 1
415	Left Thrust Reverser, Engine 1
416	Right Thrust Reverser, Engine 1

E. Inspection

SUBTASK 05-42-04-010-001

(1) Open these access panels:

Number	Name/Location
413	Left Fan Cowl, Engine 1
414	Right Fan Cowl, Engine 1
415	Left Thrust Reverser, Engine 1
416	Right Thrust Reverser, Engine 1

SUBTASK 05-42-04-211-001

(2) Do this task: Detailed Inspection of EWIS, TASK 20-60-02-100-802.

(3) Inspect (Detailed) all exposed EWIS in Engine 1 (Engine fan and core sections). (EZAP)

SUBTASK 05-42-04-910-001

(4) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-910-801, for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

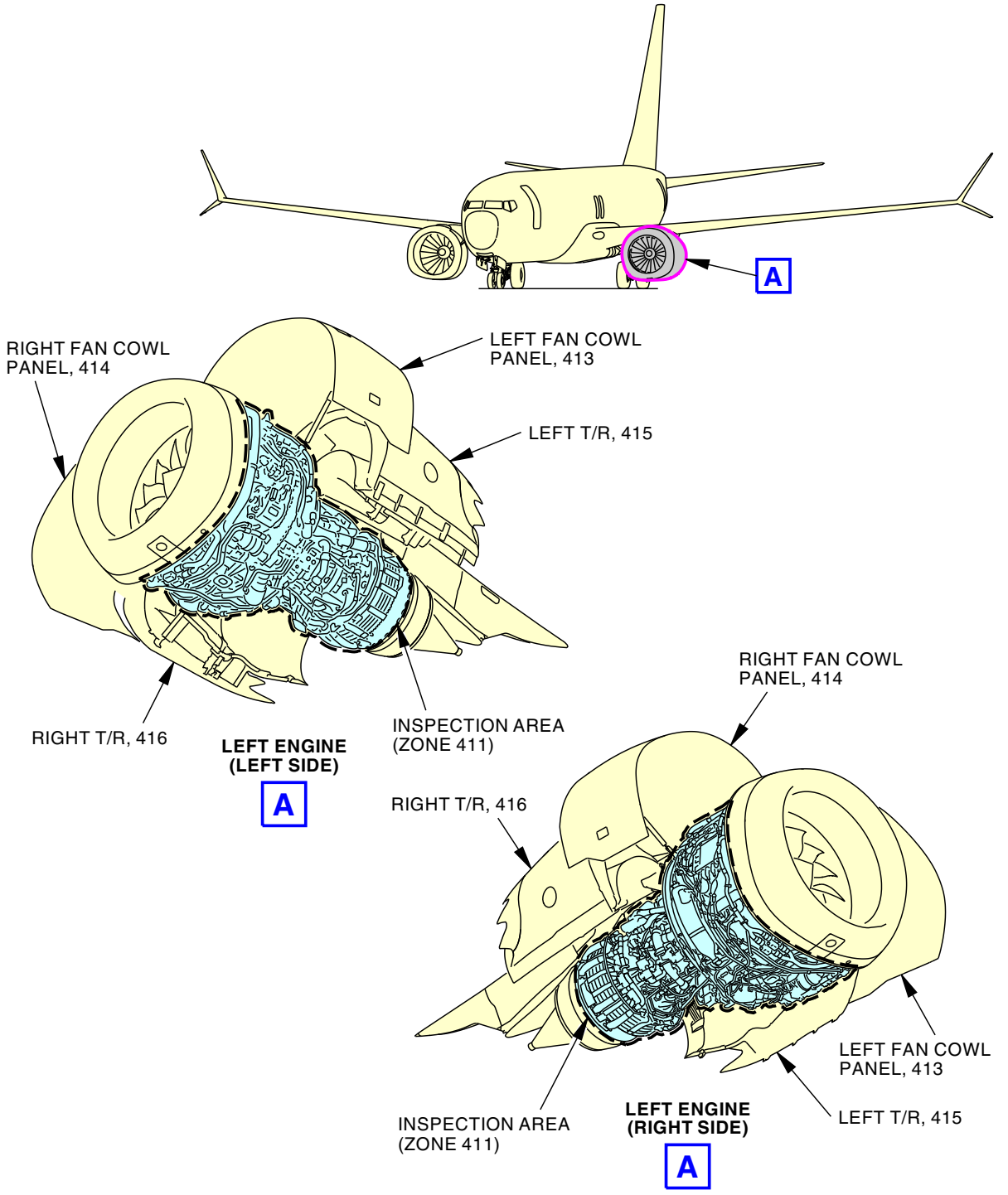
SUBTASK 05-42-04-410-001

(5) Close these access panels:

Number	Name/Location
413	Left Fan Cowl, Engine 1
414	Right Fan Cowl, Engine 1
415	Left Thrust Reverser, Engine 1
416	Right Thrust Reverser, Engine 1

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details



IDG Power Feeder and Connected EWIS
Figure 201/05-42-04-990-801

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-42-04-211-802

3. Detailed Inspection: Exposed EWIS in Engine 2 (Engine fan and core sections). (EZAP)

(Figure 202)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This procedure is an Enhanced Zonal Analysis Procedure (EZAP) task.

B. References

Reference	Title
20-60-02-100-802	Detailed Inspection of EWIS (P/B 601)
20-60-07-910-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
421	Engine 2 - Engine

D. Access Panels

Number	Name/Location
423	Left Fan Cowl, Engine 2
424	Right Fan Cowl, Engine 2
425	Left Thrust Reverser, Engine 2
426	Right Thrust Reverser, Engine 2

E. Inspection

SUBTASK 05-42-04-010-002

(1) Open these access panels:

Number	Name/Location
423	Left Fan Cowl, Engine 2
424	Right Fan Cowl, Engine 2
425	Left Thrust Reverser, Engine 2
426	Right Thrust Reverser, Engine 2

SUBTASK 05-42-04-211-002

(2) Do this task: Detailed Inspection of EWIS, TASK 20-60-02-100-802.

(3) Inspect (Detailed) all exposed EWIS in Engine 2 (Engine fan and core sections). (EZAP)

SUBTASK 05-42-04-910-002

(4) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-910-801, for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

SUBTASK 05-42-04-410-002

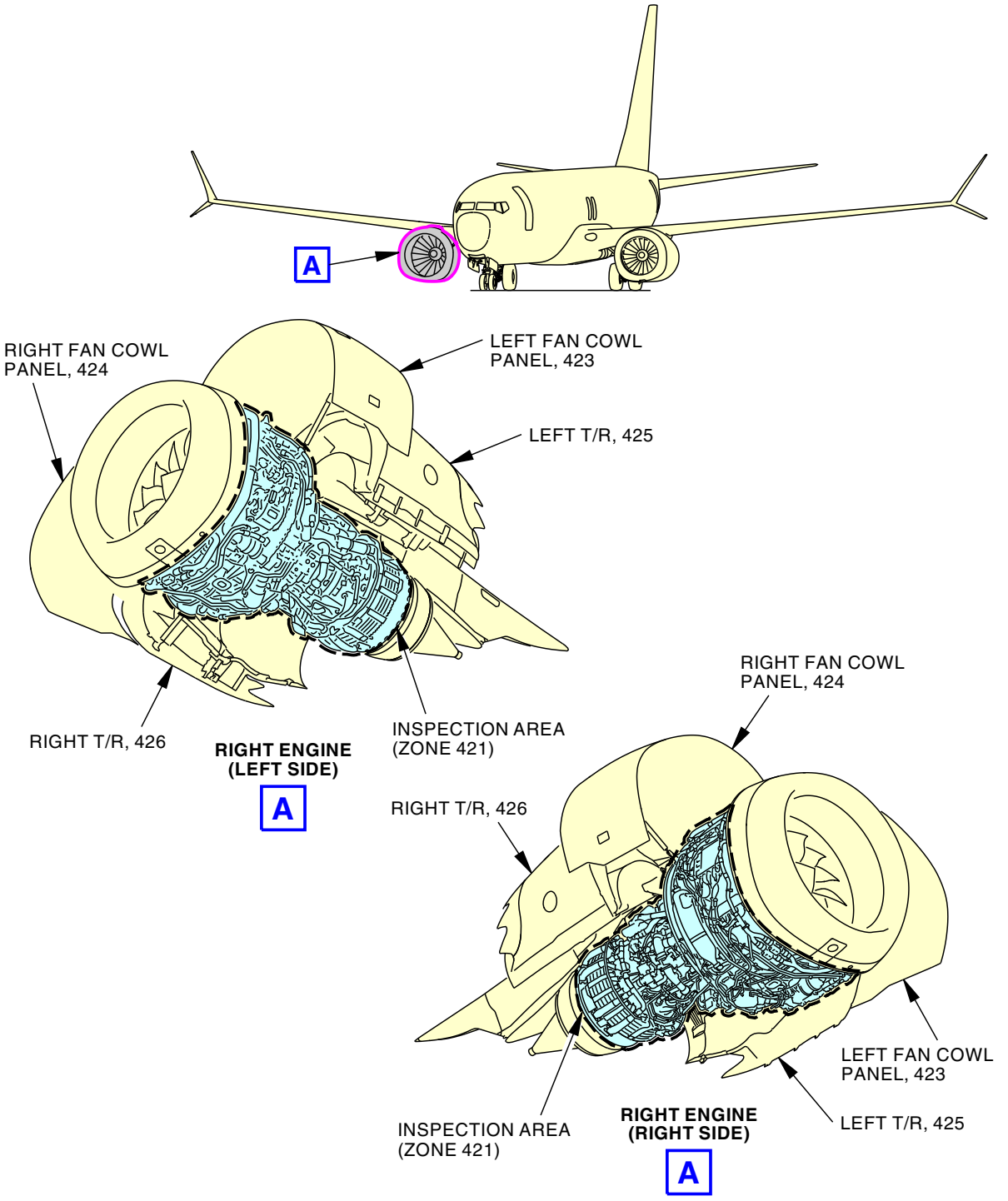
(5) Close these access panels:

Number	Name/Location
423	Left Fan Cowl, Engine 2
424	Right Fan Cowl, Engine 2
425	Left Thrust Reverser, Engine 2
426	Right Thrust Reverser, Engine 2

ECCN 9E991 BOEING PROPRIETARY - See title page for details

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details



IDG Power Feeder and Connected EWIS
Figure 202/05-42-04-990-802

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-42-04-211-803

4. Detailed Inspection: Exposed EWIS in the Forward Strut Fairing - Engine No. 1. (EZAP)

(Figure 203)

A. General

(1) This procedure is an Enhanced Zonal Analysis Procedure (EZAP) task.

B. References

Reference	Title
20-60-02-100-802	Detailed Inspection of EWIS (P/B 601)
20-60-07-910-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
431	Engine 1 - Forward Strut Fairing

D. Access Panels

Number	Name/Location
431AT	Forward Strut Fairing, Thumbnail Fairing, Strut 1
431BL	Forward Strut Fairing, Left Mid Strut Fairing, Strut 1
431BR	Forward Strut Fairing, Right Mid Strut Fairing, Strut 1
431CL	Forward Strut Fairing, Left Overwing Fairing, Strut 1
431CR	Forward Strut Fairing, Right Overwing Fairing, Strut 1
431DL	Forward Strut Fairing, Left Underwing Fairing, Strut 1
431DR	Forward Strut Fairing, Right Underwing Fairing, Strut 1

E. Detailed Inspection Exposed EWIS in the Forward Strut Fairing Engine No. 1. (EZAP)

SUBTASK 05-42-04-010-003

(1) Open these access panels:

Number	Name/Location
431AT	Forward Strut Fairing, Thumbnail Fairing, Strut 1
431BL	Forward Strut Fairing, Left Mid Strut Fairing, Strut 1
431BR	Forward Strut Fairing, Right Mid Strut Fairing, Strut 1
431CL	Forward Strut Fairing, Left Overwing Fairing, Strut 1
431CR	Forward Strut Fairing, Right Overwing Fairing, Strut 1
431DL	Forward Strut Fairing, Left Underwing Fairing, Strut 1
431DR	Forward Strut Fairing, Right Underwing Fairing, Strut 1

SUBTASK 05-42-04-211-003

(2) Do this task: Detailed Inspection of EWIS, TASK 20-60-02-100-802.

(a) Inspect (Detailed) all exposed EWIS in the Forward Strut Fairing - Engine No. 1. (EZAP).

SUBTASK 05-42-04-910-003

(3) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-910-801, for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

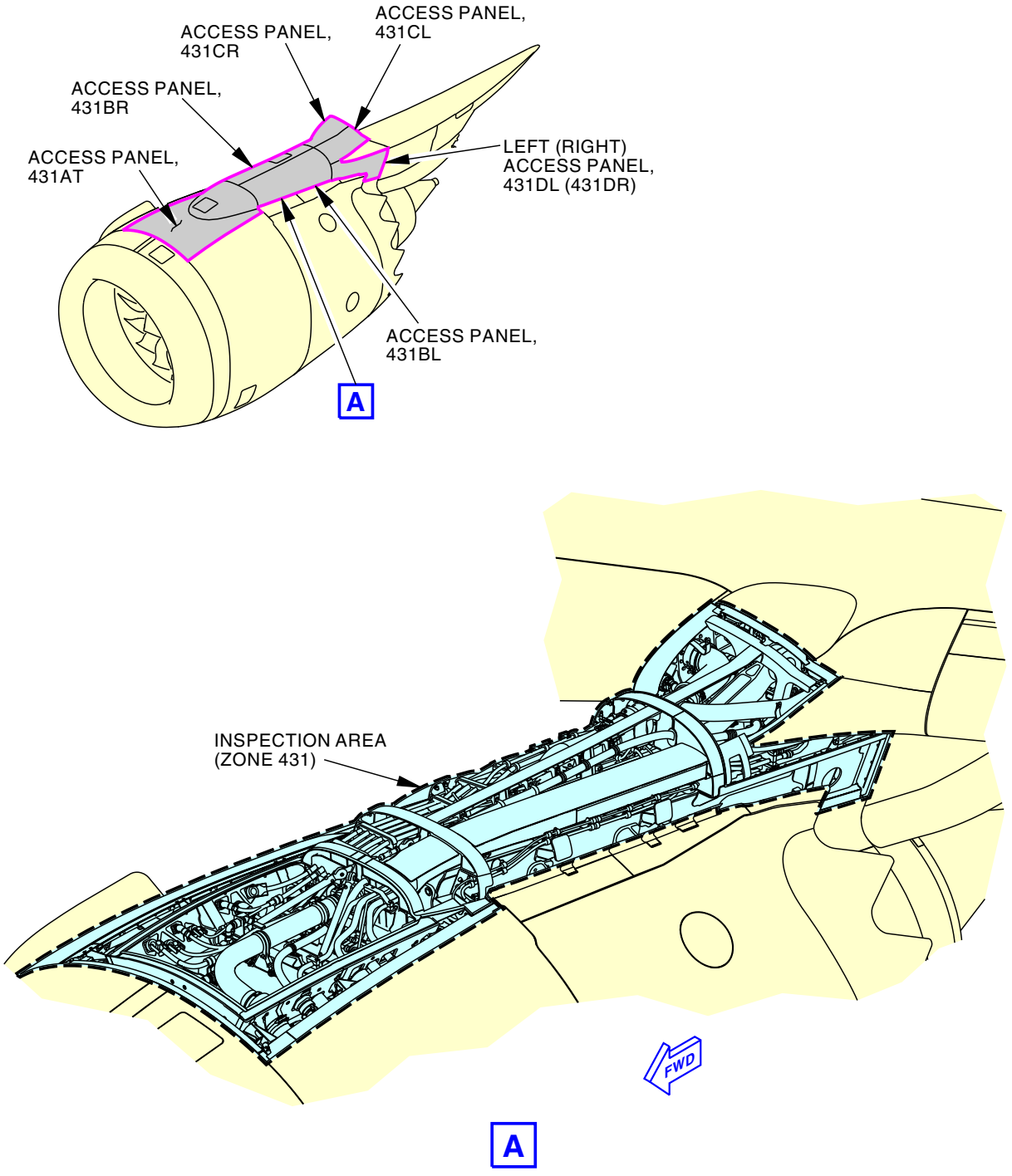
SUBTASK 05-42-04-410-003

(4) Close these access panels:

Number	Name/Location
431AT	Forward Strut Fairing, Thumbnail Fairing, Strut 1
431BL	Forward Strut Fairing, Left Mid Strut Fairing, Strut 1
431BR	Forward Strut Fairing, Right Mid Strut Fairing, Strut 1
431CL	Forward Strut Fairing, Left Overwing Fairing, Strut 1
431CR	Forward Strut Fairing, Right Overwing Fairing, Strut 1
431DL	Forward Strut Fairing, Left Underwing Fairing, Strut 1
431DR	Forward Strut Fairing, Right Underwing Fairing, Strut 1

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Forward Strut Fairing - Engine 1
Figure 203/05-42-04-990-803

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-42-04-211-804

5. Detailed Inspection: Exposed EWIS in Fan Cowl Support Beam - Engine No. 1. (EZAP)

(Figure 204)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This procedure is an Enhanced Zonal Analysis Procedure (EZAP) task.

B. References

Reference	Title
20-60-02-100-802	Detailed Inspection of EWIS (P/B 601)
20-60-07-910-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
432	Engine 1 - Fan Cowl Support Beam

D. Access Panels

Number	Name/Location
431AT	Forward Strut Fairing, Thumbnail Fairing, Strut 1

E. Inspection

SUBTASK 05-42-04-010-004

(1) Open this access panel:

Number	Name/Location
431AT	Forward Strut Fairing, Thumbnail Fairing, Strut 1

SUBTASK 05-42-04-211-004

(2) Do this task: Detailed Inspection of EWIS, TASK 20-60-02-100-802.

(a) Inspect (Detailed) all exposed EWIS in Fan Cowl Support Beam - Engine No. 1. (EZAP).

SUBTASK 05-42-04-910-004

(3) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-910-801, for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

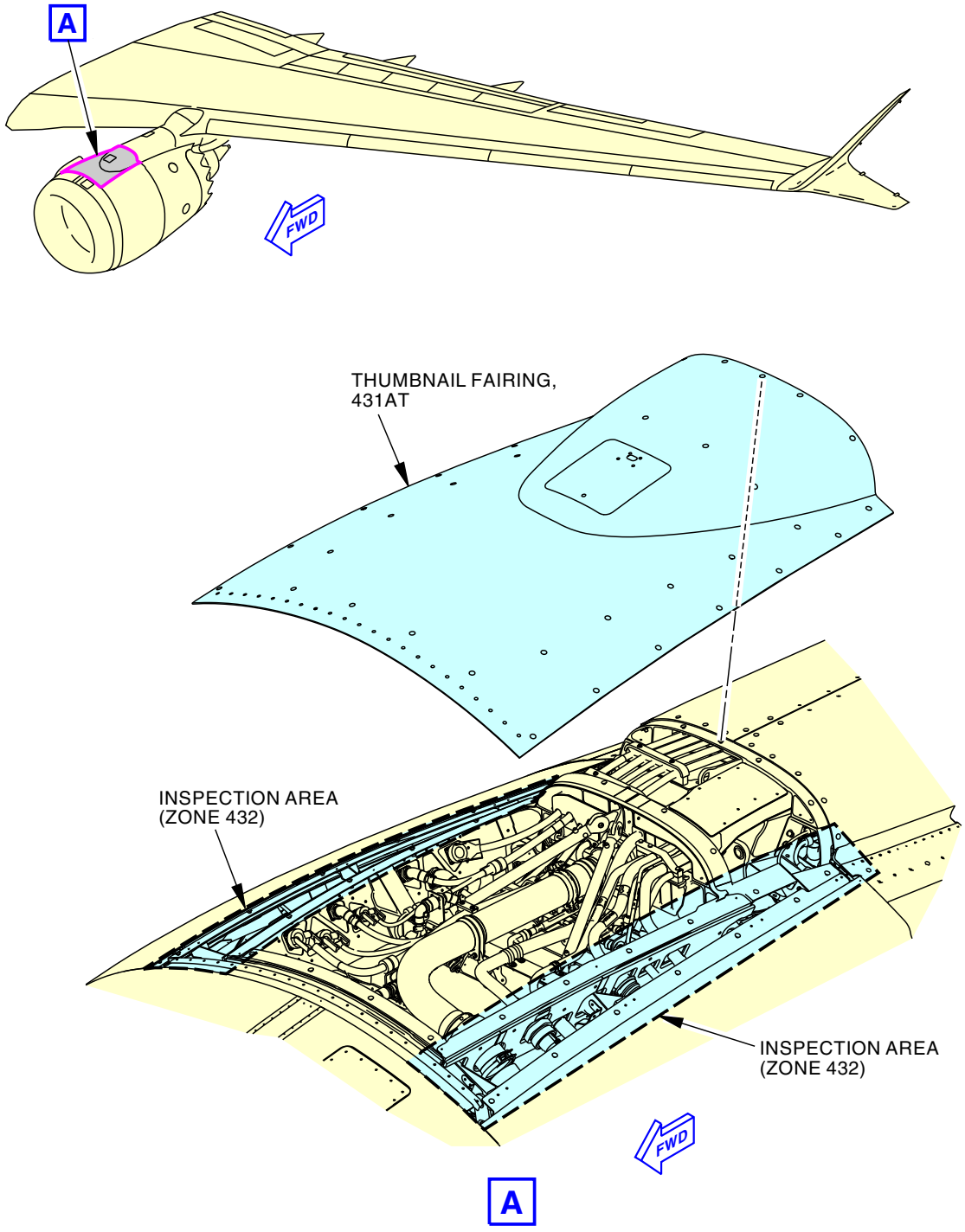
SUBTASK 05-42-04-410-004

(4) Close this access panel:

Number	Name/Location
431AT	Forward Strut Fairing, Thumbnail Fairing, Strut 1

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



2410384 S00061525430_V2

Fan Cowl Support Beam
Figure 204/05-42-04-990-804

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-42-04-211-805

6. Detailed Inspection: Exposed EWIS common to the Strut Torque Box - Engine No. 1. (EZAP)

(Figure 205)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This procedure is an Enhanced Zonal Analysis Procedure (EZAP) task.

B. References

Reference	Title
20-60-02-100-802	Detailed Inspection of EWIS (P/B 601)
20-60-07-910-801	Protection of the EWIS During Maintenance (P/B 201)
54-55-01-720-802	Strut Seal Plane Access Panels - Functional Test (P/B 201)

C. Location Zones

Zone	Area
433	Engine 1 - Strut Torque Box

D. Access Panels

Number	Name/Location
431BL	Forward Strut Fairing, Left Mid Strut Fairing, Strut 1
431BR	Forward Strut Fairing, Right Mid Strut Fairing, Strut 1
431CL	Forward Strut Fairing, Left Overwing Fairing, Strut 1
431CR	Forward Strut Fairing, Right Overwing Fairing, Strut 1
431CT	Forward Strut Fairing, Right Mid-Strut Fairing Pressure Relief Door, Strut 1

E. Inspection

SUBTASK 05-42-04-010-005

(1) Open these access panels:

Number	Name/Location
431BL	Forward Strut Fairing, Left Mid Strut Fairing, Strut 1
431BR	Forward Strut Fairing, Right Mid Strut Fairing, Strut 1
431CL	Forward Strut Fairing, Left Overwing Fairing, Strut 1
431CR	Forward Strut Fairing, Right Overwing Fairing, Strut 1
431CT	Forward Strut Fairing, Right Mid-Strut Fairing Pressure Relief Door, Strut 1

SUBTASK 05-42-04-211-005

(2) Do this task: Detailed Inspection of EWIS, TASK 20-60-02-100-802.

(a) Inspect (Detailed) all exposed EWIS common to the Strut Torque Box - Engine No. 1. (EZAP).

SUBTASK 05-42-04-910-005

(3) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-910-801, for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 05-42-04-410-005

(4) Close these access panels:

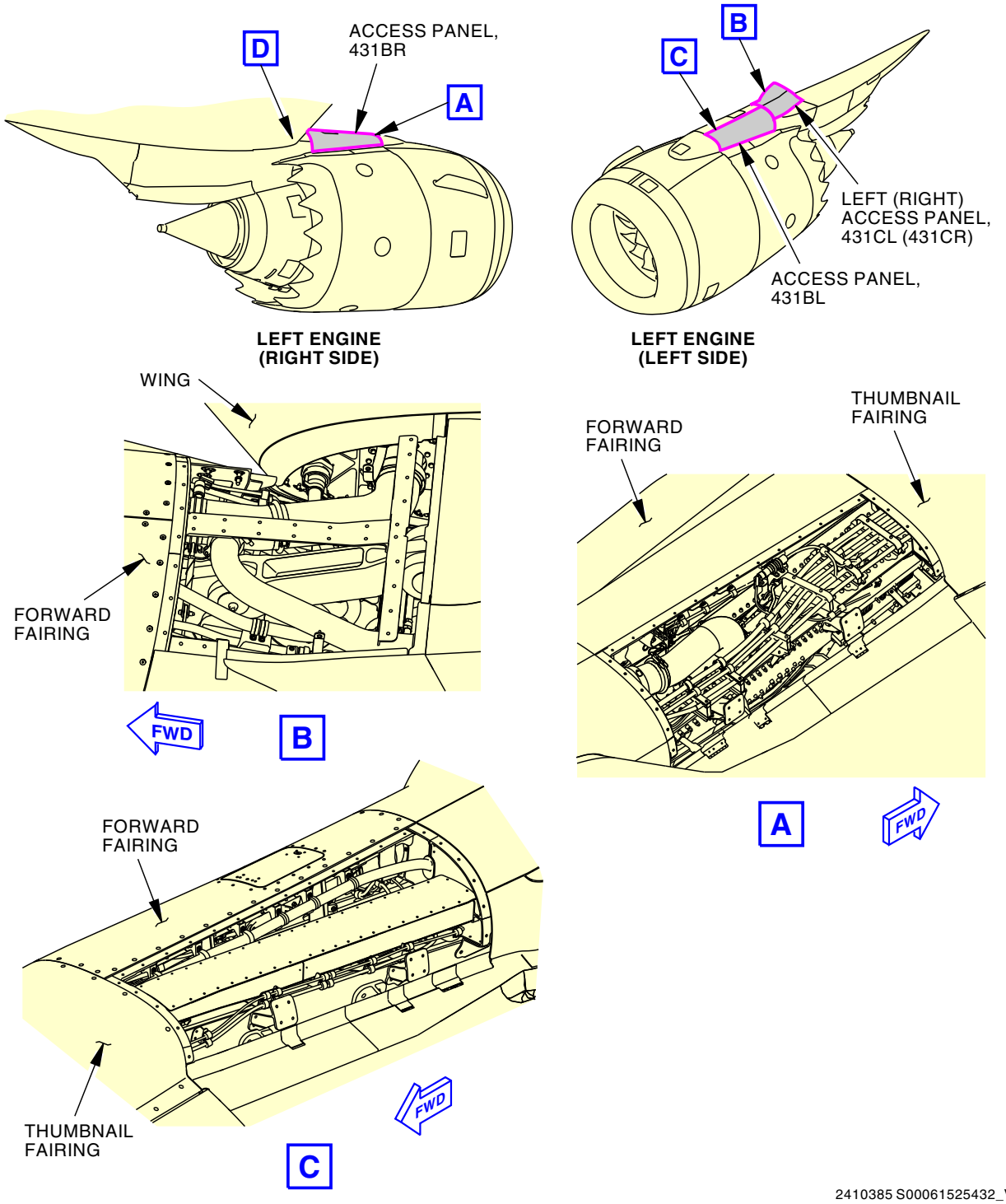
Number	Name/Location
431BL	Forward Strut Fairing, Left Mid Strut Fairing, Strut 1
431BR	Forward Strut Fairing, Right Mid Strut Fairing, Strut 1
431CL	Forward Strut Fairing, Left Overwing Fairing, Strut 1
431CR	Forward Strut Fairing, Right Overwing Fairing, Strut 1
431CT	Forward Strut Fairing, Right Mid-Strut Fairing Pressure Relief Door, Strut 1

SUBTASK 05-42-04-720-001

(5) Make sure that the access panels do not leak, do this task: Strut Seal Plane Access Panels - Functional Test, TASK 54-55-01-720-802.

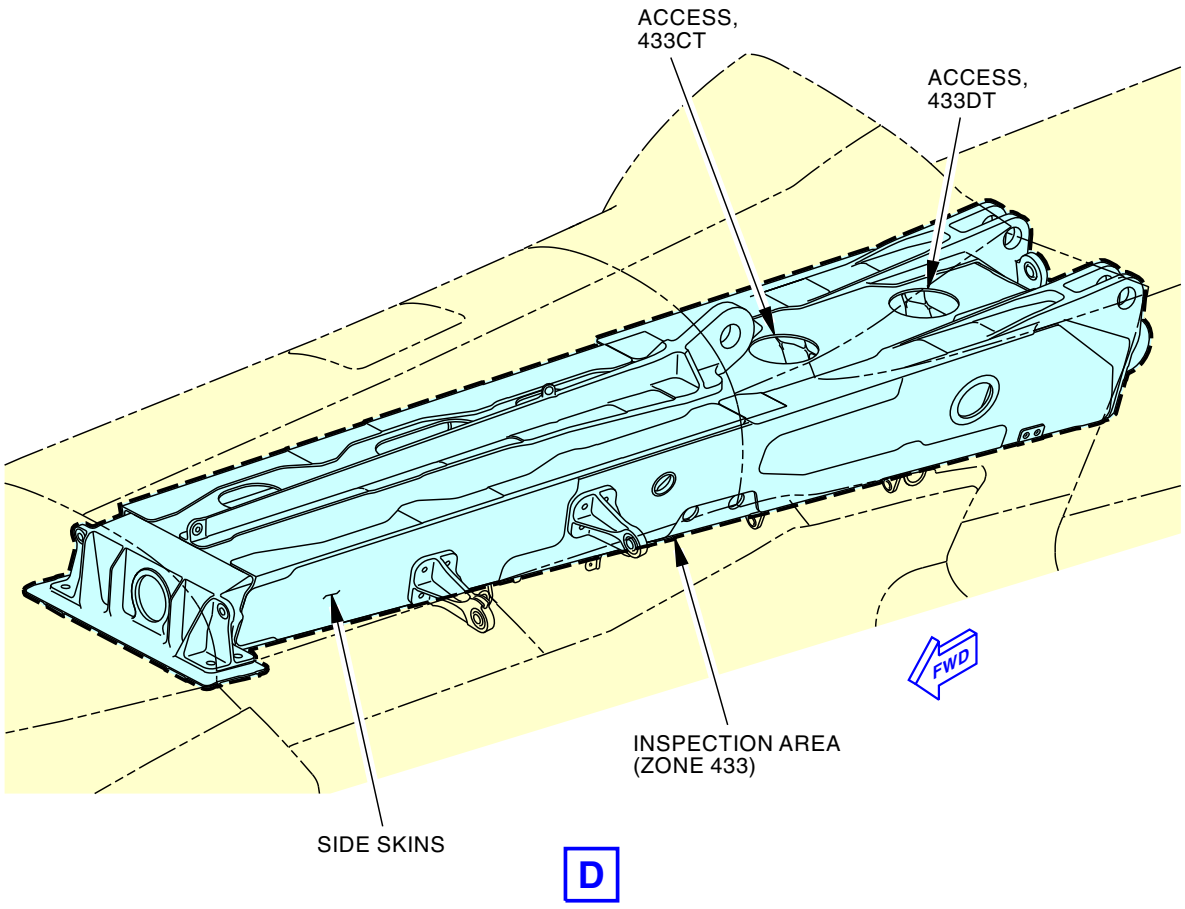
END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Exposed EWIS in Strut Torque Box - Engine 1
Figure 205/05-42-04-990-805 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



2410386 S00061525433_V3

Exposed EWIS in Strut Torque Box - Engine 1
Figure 205/05-42-04-990-805 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-42-04-211-806

7. Detailed Inspection: Exposed EWIS in the Forward Strut Fairing - Engine No. 2. (EZAP)

(Figure 206)

A. General

(1) This procedure is an Enhanced Zonal Analysis Procedure (EZAP) task.

B. References

Reference	Title
20-60-02-100-802	Detailed Inspection of EWIS (P/B 601)
20-60-07-910-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
441	Engine 2 - Forward Strut Fairing

D. Access Panels

Number	Name/Location
441AT	Forward Strut Fairing, Thumbnail Fairing, Strut 2
441BL	Forward Strut Fairing, Left Mid Strut Fairing, Strut 2
441BR	Forward Strut Fairing, Right Mid Strut Fairing, Strut 2
441CL	Forward Strut Fairing, Left Overwing Fairing, Strut 2
441CR	Forward Strut Fairing, Right Overwing Fairing, Strut 2
441DL	Forward Strut Fairing, Left Underwing Fairing, Strut 2
441DR	Forward Strut Fairing, Right Underwing Fairing, Strut 2

E. Detailed Inspection Exposed EWIS in the Forward Strut Fairing Engine No. 2. (EZAP)

SUBTASK 05-42-04-010-006

(1) Open these access panels:

Number	Name/Location
441AT	Forward Strut Fairing, Thumbnail Fairing, Strut 2
441BL	Forward Strut Fairing, Left Mid Strut Fairing, Strut 2
441BR	Forward Strut Fairing, Right Mid Strut Fairing, Strut 2
441CL	Forward Strut Fairing, Left Overwing Fairing, Strut 2
441CR	Forward Strut Fairing, Right Overwing Fairing, Strut 2
441DL	Forward Strut Fairing, Left Underwing Fairing, Strut 2
441DR	Forward Strut Fairing, Right Underwing Fairing, Strut 2

SUBTASK 05-42-04-211-006

(2) Do this task: Detailed Inspection of EWIS, TASK 20-60-02-100-802.

(a) Inspect (Detailed) all exposed EWIS in the Forward Strut Fairing - Engine No. 2. (EZAP).

SUBTASK 05-42-04-910-006

(3) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-910-801, for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

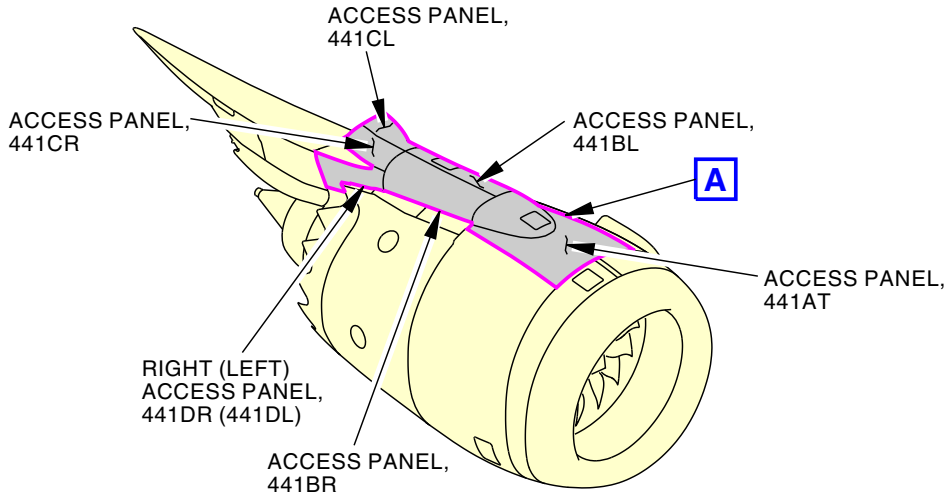
SUBTASK 05-42-04-410-006

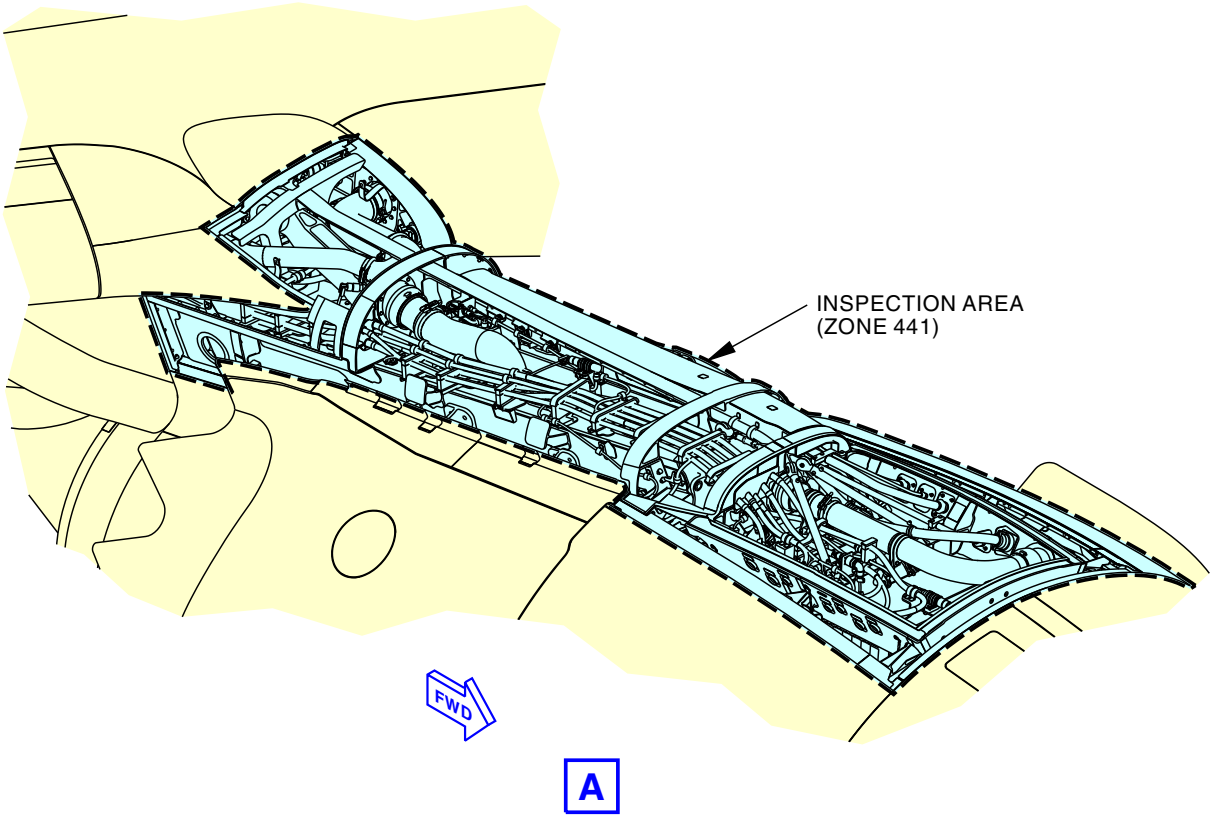
(4) Close these access panels:

Number	Name/Location
441AT	Forward Strut Fairing, Thumbnail Fairing, Strut 2
441BL	Forward Strut Fairing, Left Mid Strut Fairing, Strut 2
441BR	Forward Strut Fairing, Right Mid Strut Fairing, Strut 2
441CL	Forward Strut Fairing, Left Overwing Fairing, Strut 2
441CR	Forward Strut Fairing, Right Overwing Fairing, Strut 2
441DL	Forward Strut Fairing, Left Underwing Fairing, Strut 2
441DR	Forward Strut Fairing, Right Underwing Fairing, Strut 2

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details





2410387 S00061525435_V3

Forward Strut Fairing - Engine 2
Figure 206/05-42-04-990-806

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-42-04-211-807

8. Detailed Inspection: Exposed EWIS in Fan Cowl Support Beam - Engine No. 2. (EZAP)

(Figure 207)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This procedure is an Enhanced Zonal Analysis Procedure (EZAP) task.

B. References

Reference	Title
20-60-02-100-802	Detailed Inspection of EWIS (P/B 601)
20-60-07-910-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
442	Engine 2 - Fan Cowl Support Beam

D. Access Panels

Number	Name/Location
441AT	Forward Strut Fairing, Thumbnail Fairing, Strut 2

E. Inspection

SUBTASK 05-42-04-010-007

(1) Open this access panel:

Number	Name/Location
441AT	Forward Strut Fairing, Thumbnail Fairing, Strut 2

SUBTASK 05-42-04-211-007

(2) Do this task: Detailed Inspection of EWIS, TASK 20-60-02-100-802.

(a) Inspect (Detailed) all exposed EWIS in Fan Cowl Support Beam - Engine No. 2. (EZAP).

SUBTASK 05-42-04-910-007

(3) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-910-801, for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

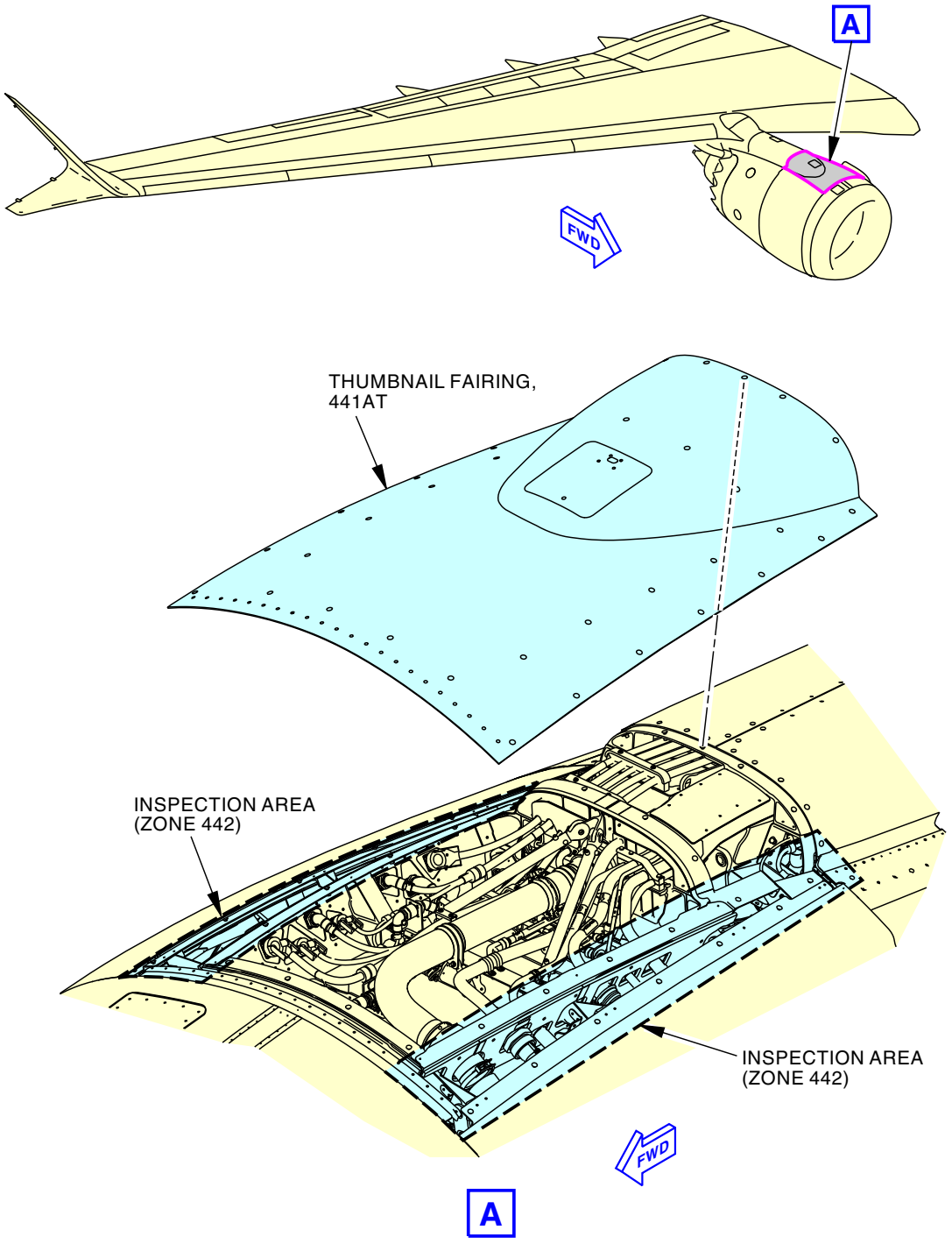
SUBTASK 05-42-04-410-007

(4) Close this access panel:

Number	Name/Location
441AT	Forward Strut Fairing, Thumbnail Fairing, Strut 2

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Fan Cowl Support Beam - Engine 2
Figure 207/05-42-04-990-807

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-42-04-211-808

9. Detailed Inspection: Exposed EWIS common to the Strut Torque Box - Engine No. 2. (EZAP)

(Figure 208)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This procedure is an Enhanced Zonal Analysis Procedure (EZAP) task.

B. References

Reference	Title
20-60-02-100-802	Detailed Inspection of EWIS (P/B 601)
20-60-07-910-801	Protection of the EWIS During Maintenance (P/B 201)
54-55-01-720-802	Strut Seal Plane Access Panels - Functional Test (P/B 201)

C. Location Zones

Zone	Area
443	Engine 2 - Strut Torque Box

D. Access Panels

Number	Name/Location
441BL	Forward Strut Fairing, Left Mid Strut Fairing, Strut 2
441BR	Forward Strut Fairing, Right Mid Strut Fairing, Strut 2
441CL	Forward Strut Fairing, Left Overwing Fairing, Strut 2
441CR	Forward Strut Fairing, Right Overwing Fairing, Strut 2
441CT	Forward Strut Fairing, Forward Fuel/Hydraulic Tube Shroud Access, Strut 2

E. Inspection

SUBTASK 05-42-04-010-008

(1) Open these access panels:

Number	Name/Location
441BL	Forward Strut Fairing, Left Mid Strut Fairing, Strut 2
441BR	Forward Strut Fairing, Right Mid Strut Fairing, Strut 2
441CL	Forward Strut Fairing, Left Overwing Fairing, Strut 2
441CR	Forward Strut Fairing, Right Overwing Fairing, Strut 2
441CT	Forward Strut Fairing, Forward Fuel/Hydraulic Tube Shroud Access, Strut 2

SUBTASK 05-42-04-211-008

(2) Do this task: Detailed Inspection of EWIS, TASK 20-60-02-100-802.

(a) Inspect (Detailed) all exposed EWIS common to the Strut Torque Box - Engine No. 2. (EZAP).

SUBTASK 05-42-04-910-008

(3) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-910-801, for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 05-42-04-410-008

(4) Close these access panels:

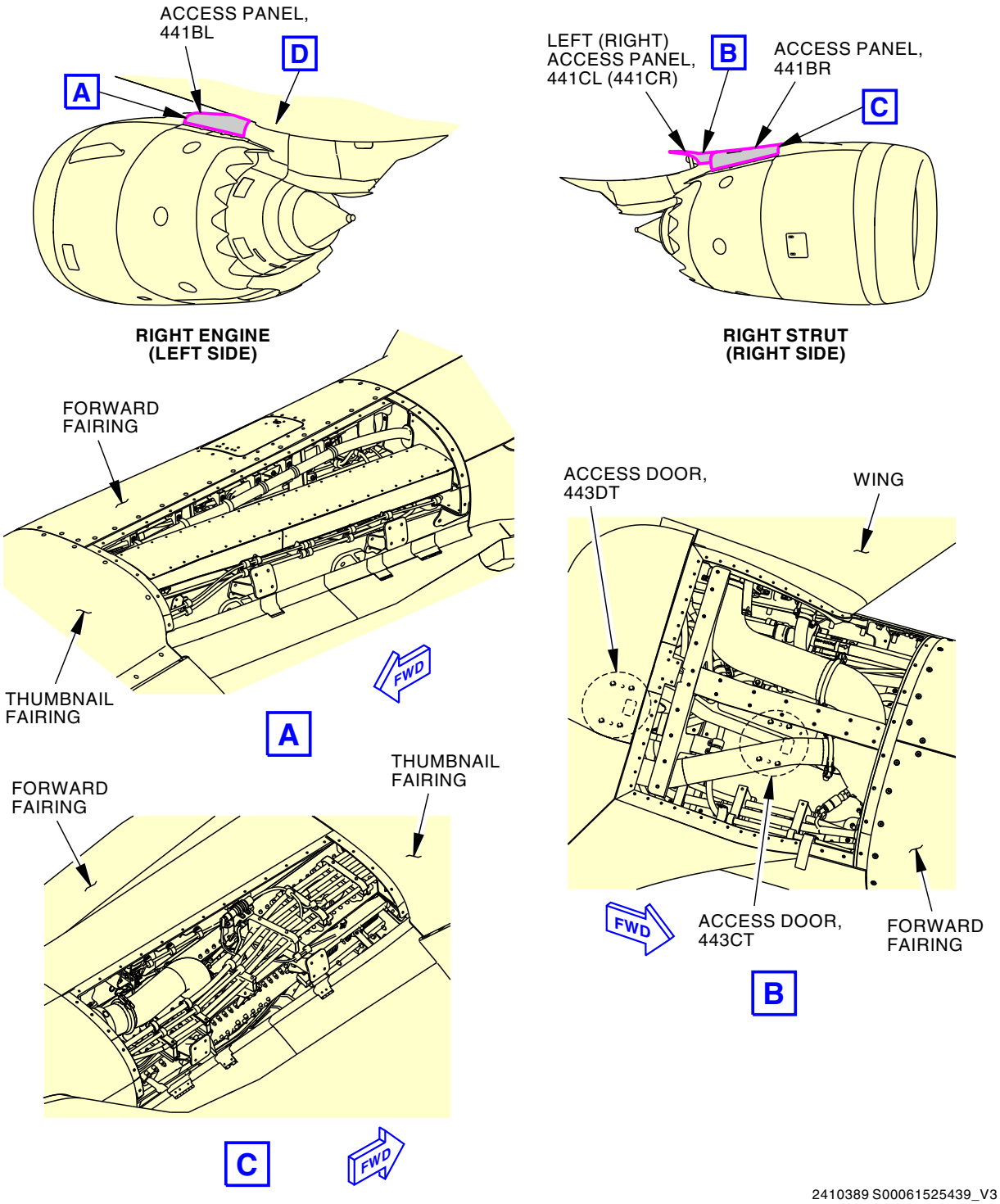
Number	Name/Location
441BL	Forward Strut Fairing, Left Mid Strut Fairing, Strut 2
441BR	Forward Strut Fairing, Right Mid Strut Fairing, Strut 2
441CL	Forward Strut Fairing, Left Overwing Fairing, Strut 2
441CR	Forward Strut Fairing, Right Overwing Fairing, Strut 2
441CT	Forward Strut Fairing, Forward Fuel/Hydraulic Tube Shroud Access, Strut 2

SUBTASK 05-42-04-720-002

(5) Make sure that the access panels do not leak, do this task: Strut Seal Plane Access Panels - Functional Test, TASK 54-55-01-720-802.

——— END OF TASK ———

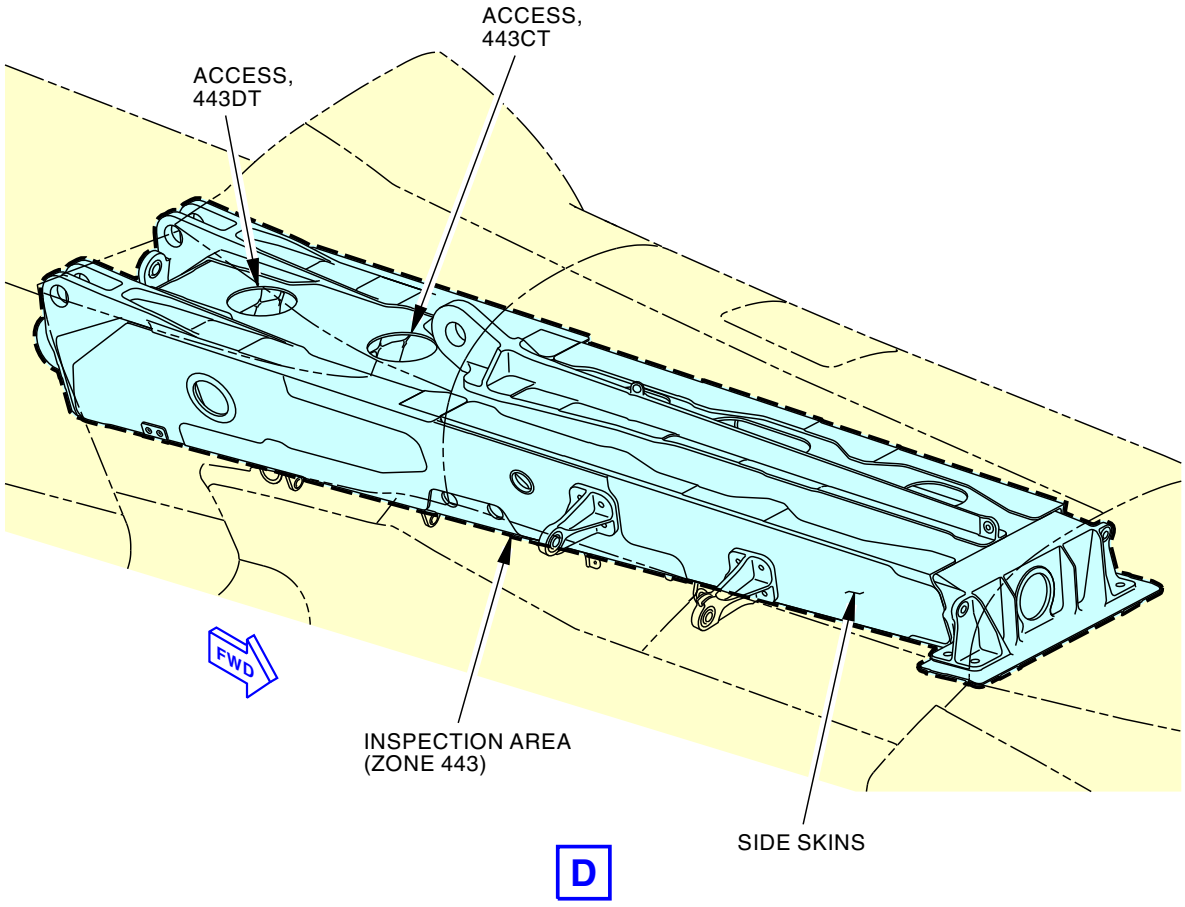
ECCN 9E991 BOEING PROPRIETARY - See title page for details



2410389 S00061525439_V3

Exposed EWIS in Strut Torque Box - Engine 2
Figure 208/05-42-04-990-808 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



2410390 S00061525440_V3

Exposed EWIS in Strut Torque Box - Engine 2
Figure 208/05-42-04-990-808 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

1. General

A. This pageblock contains MSG-3 task card data.

EWIS

TASK 05-42-05-211-801

2. **Detailed Inspection: Exposed EWIS in the area from Leading Edge to Front Spar - Inboard of Nacelle Strut - Left Wing. (EZAP)**

(Figure 201)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This procedure is an Enhanced Zonal Analysis Procedure (EZAP) task.

B. References

Reference	Title
20-60-02-100-802	Detailed Inspection of EWIS (P/B 601)
20-60-07-910-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
511	Left Wing - Leading Edge To Front Spar

D. Access Panels

Number	Name/Location
511AB	Inboard Leading Edge, Lower Removable Panel
511AT	Inboard Leading Edge, Strakelet Upper Panel
511BT	Fairing

E. Inspection

SUBTASK 05-42-05-010-001

(1) Open these access panels:

Number	Name/Location
511AB	Inboard Leading Edge, Lower Removable Panel
511AT	Inboard Leading Edge, Strakelet Upper Panel
511BT	Fairing

NOTE: Leading edge flaps extended.

SUBTASK 05-42-05-211-001

(2) Do this task: Detailed Inspection of EWIS, TASK 20-60-02-100-802.

(3) Inspect (Detailed) all exposed EWIS in the area from Leading Edge to Front Spar - Inboard of Nacelle Strut - Left Wing. (EZAP)

SUBTASK 05-42-05-910-001

(4) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-910-801, for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

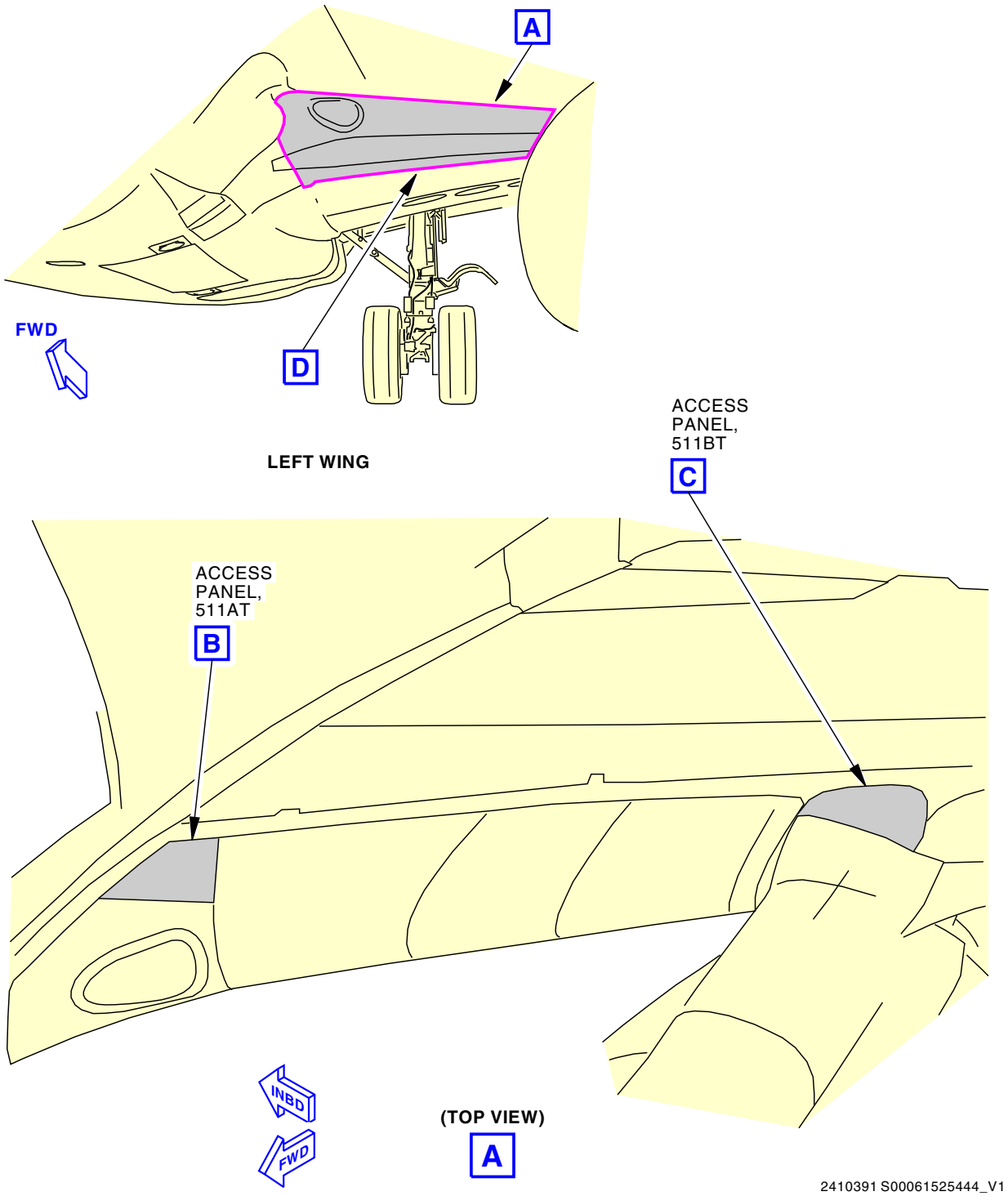
SUBTASK 05-42-05-410-001

(5) Close these access panels:

Number	Name/Location
511AB	Inboard Leading Edge, Lower Removable Panel
511AT	Inboard Leading Edge, Strakelet Upper Panel
511BT	Fairing

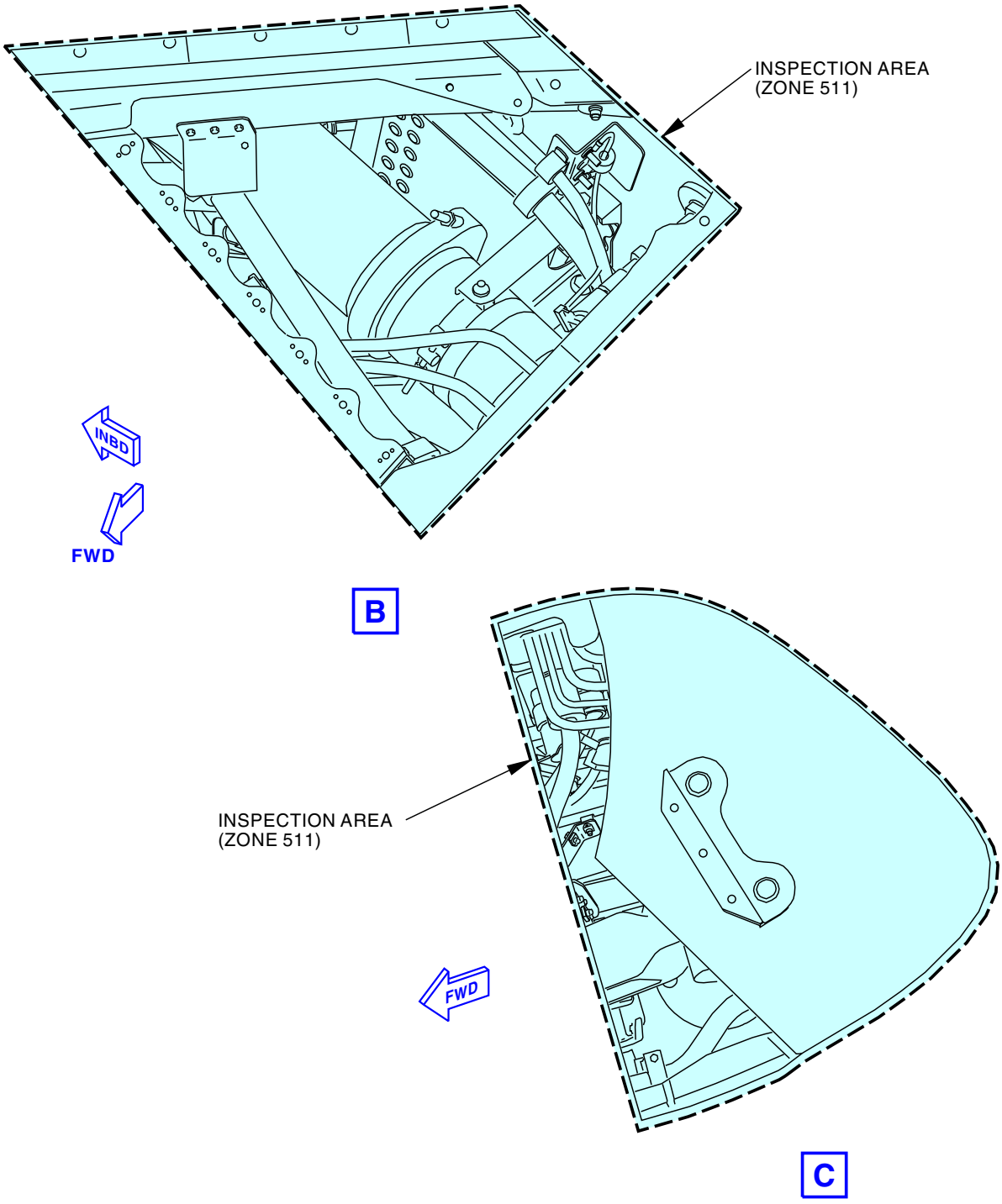
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ECCN 9E991 BOEING PROPRIETARY - See title page for details



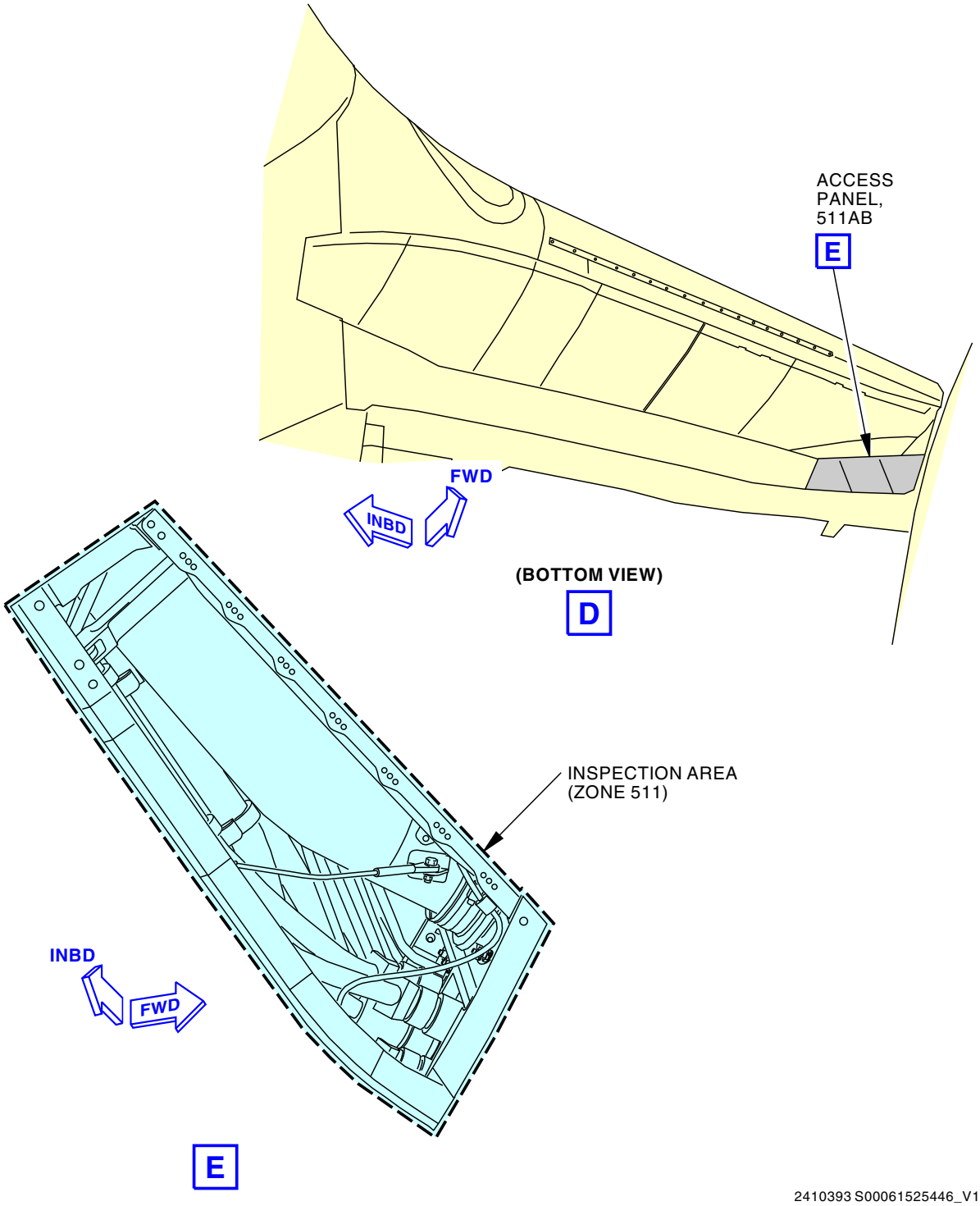
Leading Edge to Front Spar - Left Wing - Inboard
Figure 201/05-42-05-990-801 (Sheet 1 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Leading Edge to Front Spar - Left Wing - Inboard
Figure 201/05-42-05-990-801 (Sheet 2 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Leading Edge to Front Spar - Left Wing - Inboard
Figure 201/05-42-05-990-801 (Sheet 3 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-42-05-211-802

3. Detailed Inspection: Exposed EWIS in the area from Leading Edge to Front Spar - Outboard of Nacelle Strut - Left Wing. (EZAP)

(Figure 202)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This procedure is an Enhanced Zonal Analysis Procedure (EZAP) task.

B. References

Reference	Title
20-60-02-100-802	Detailed Inspection of EWIS (P/B 601)
20-60-07-910-801	Protection of the EWIS During Maintenance (P/B 201)
57-41-02-000-801	Leading Edge Access Panel Removal (P/B 201)
57-41-02-400-801	Leading Edge Access Panel Installation (P/B 201)

C. Location Zones

Zone	Area
521	Left Wing - Leading Edge to Front Spar

D. Access Panels

Number	Name/Location
521AAB	Lower Leading Edge Access Panel - Slat Station 497
521AB	Outboard Leading Edge Blowout Door - Slat Station 20
521ABB	Lower Leading Edge Access Panel-Slat Station 519
521AT	Outbd Leading Edge - Gap Cover Access
521BB	Engine Fuel Valve Shutoff Access Panel - Slat Station 27
521CB	Lower Leading Edge Access Panel - Slat Station 50
521DB	Lower Leading Edge Access Panel - Slat Station 70
521EB	Lower Leading Edge Access Panel - Slat Station 91
521FB	Lower Leading Edge Access Panel - Slat Station 107
521GB	Lower Leading Edge Access Panel - Slat Station 125
521HB	Lower Leading Edge Access Panel - Slat Station 144
521JB	Lower Leading Edge Access Panel - Slat Station 161
521KB	Lower Leading Edge Access Panel - Slat Station 179
521LB	Lower Leading Edge Access Panel - Slat Station 208
521MB	Lower Leading Edge Access Panel - Slat Station 226
521NB	Lower Leading Edge Access Panel - Slat Station 244
521PB	Lower Leading Edge Access Panel - Slat Station 261
521QB	Lower Leading Edge Access Panel - Slat Station 280
521RB	Lower Leading Edge Access Panel - Slat Station 298
521SB	Lower Leading Edge Access Panel - Slat Station 328
521TB	Lower Leading Edge Access Panel - Slat Station 347
521UB	Lower Leading Edge Access Panel - Slat Station 365
521VB	Lower Leading Edge Access Panel - Slat Station 385
521WB	Lower Leading Edge Access Panel - Slat Station 406

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(Continued)

Number	Name/Location
521XB	Lower Leading Edge Access Panel - Slat Station 425
521YB	Lower Leading Edge Access Panel - Slat Station 470
521ZB	Lower Leading Edge Access Panel - Slat Station 479

E. Inspection

SUBTASK 05-42-05-010-002

(1) Open these access panels:

(TASK 57-41-02-000-801)

Number	Name/Location
521AAB	Lower Leading Edge Access Panel - Slat Station 497
521AB	Outboard Leading Edge Blowout Door - Slat Station 20
521ABB	Lower Leading Edge Access Panel-Slat Station 519
521AT	Outbd Leading Edge - Gap Cover Access
521BB	Engine Fuel Valve Shutoff Access Panel - Slat Station 27
521CB	Lower Leading Edge Access Panel - Slat Station 50
521DB	Lower Leading Edge Access Panel - Slat Station 70
521EB	Lower Leading Edge Access Panel - Slat Station 91
521FB	Lower Leading Edge Access Panel - Slat Station 107
521GB	Lower Leading Edge Access Panel - Slat Station 125
521HB	Lower Leading Edge Access Panel - Slat Station 144
521JB	Lower Leading Edge Access Panel - Slat Station 161
521KB	Lower Leading Edge Access Panel - Slat Station 179
521LB	Lower Leading Edge Access Panel - Slat Station 208
521MB	Lower Leading Edge Access Panel - Slat Station 226
521NB	Lower Leading Edge Access Panel - Slat Station 244
521PB	Lower Leading Edge Access Panel - Slat Station 261
521QB	Lower Leading Edge Access Panel - Slat Station 280
521RB	Lower Leading Edge Access Panel - Slat Station 298
521SB	Lower Leading Edge Access Panel - Slat Station 328
521TB	Lower Leading Edge Access Panel - Slat Station 347
521UB	Lower Leading Edge Access Panel - Slat Station 365
521VB	Lower Leading Edge Access Panel - Slat Station 385
521WB	Lower Leading Edge Access Panel - Slat Station 406
521XB	Lower Leading Edge Access Panel - Slat Station 425
521YB	Lower Leading Edge Access Panel - Slat Station 470
521ZB	Lower Leading Edge Access Panel - Slat Station 479

NOTE: Access is gained by extending slats, and through lower wing surface access panels.

SUBTASK 05-42-05-211-002

(2) Do this task: Detailed Inspection of EWIS, TASK 20-60-02-100-802.

(3) Inspect (Detailed) all exposed EWIS in the area from Leading Edge to Front Spar - Outboard of Nacelle Strut - Left Wing. (EZAP)

SUBTASK 05-42-05-910-002

(4) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-910-801, for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 05-42-05-410-002

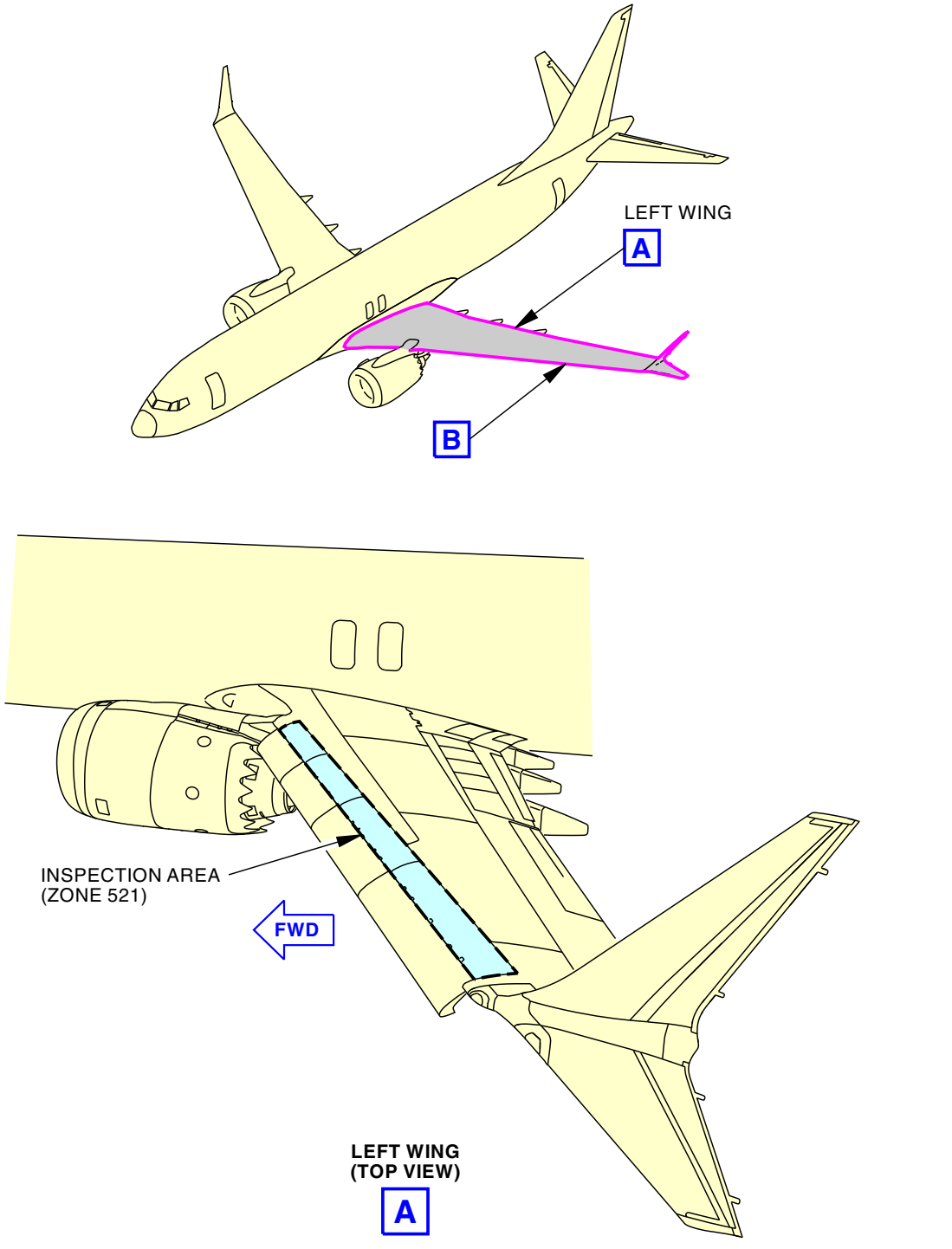
(5) Close these access panels:

(TASK 57-41-02-400-801)

Number	Name/Location
521AAB	Lower Leading Edge Access Panel - Slat Station 497
521AB	Outboard Leading Edge Blowout Door - Slat Station 20
521ABB	Lower Leading Edge Access Panel-Slat Station 519
521AT	Outbd Leading Edge - Gap Cover Access
521BB	Engine Fuel Valve Shutoff Access Panel - Slat Station 27
521CB	Lower Leading Edge Access Panel - Slat Station 50
521DB	Lower Leading Edge Access Panel - Slat Station 70
521EB	Lower Leading Edge Access Panel - Slat Station 91
521FB	Lower Leading Edge Access Panel - Slat Station 107
521GB	Lower Leading Edge Access Panel - Slat Station 125
521HB	Lower Leading Edge Access Panel - Slat Station 144
521JB	Lower Leading Edge Access Panel - Slat Station 161
521KB	Lower Leading Edge Access Panel - Slat Station 179
521LB	Lower Leading Edge Access Panel - Slat Station 208
521MB	Lower Leading Edge Access Panel - Slat Station 226
521NB	Lower Leading Edge Access Panel - Slat Station 244
521PB	Lower Leading Edge Access Panel - Slat Station 261
521QB	Lower Leading Edge Access Panel - Slat Station 280
521RB	Lower Leading Edge Access Panel - Slat Station 298
521SB	Lower Leading Edge Access Panel - Slat Station 328
521TB	Lower Leading Edge Access Panel - Slat Station 347
521UB	Lower Leading Edge Access Panel - Slat Station 365
521VB	Lower Leading Edge Access Panel - Slat Station 385
521WB	Lower Leading Edge Access Panel - Slat Station 406
521XB	Lower Leading Edge Access Panel - Slat Station 425
521YB	Lower Leading Edge Access Panel - Slat Station 470
521ZB	Lower Leading Edge Access Panel - Slat Station 479

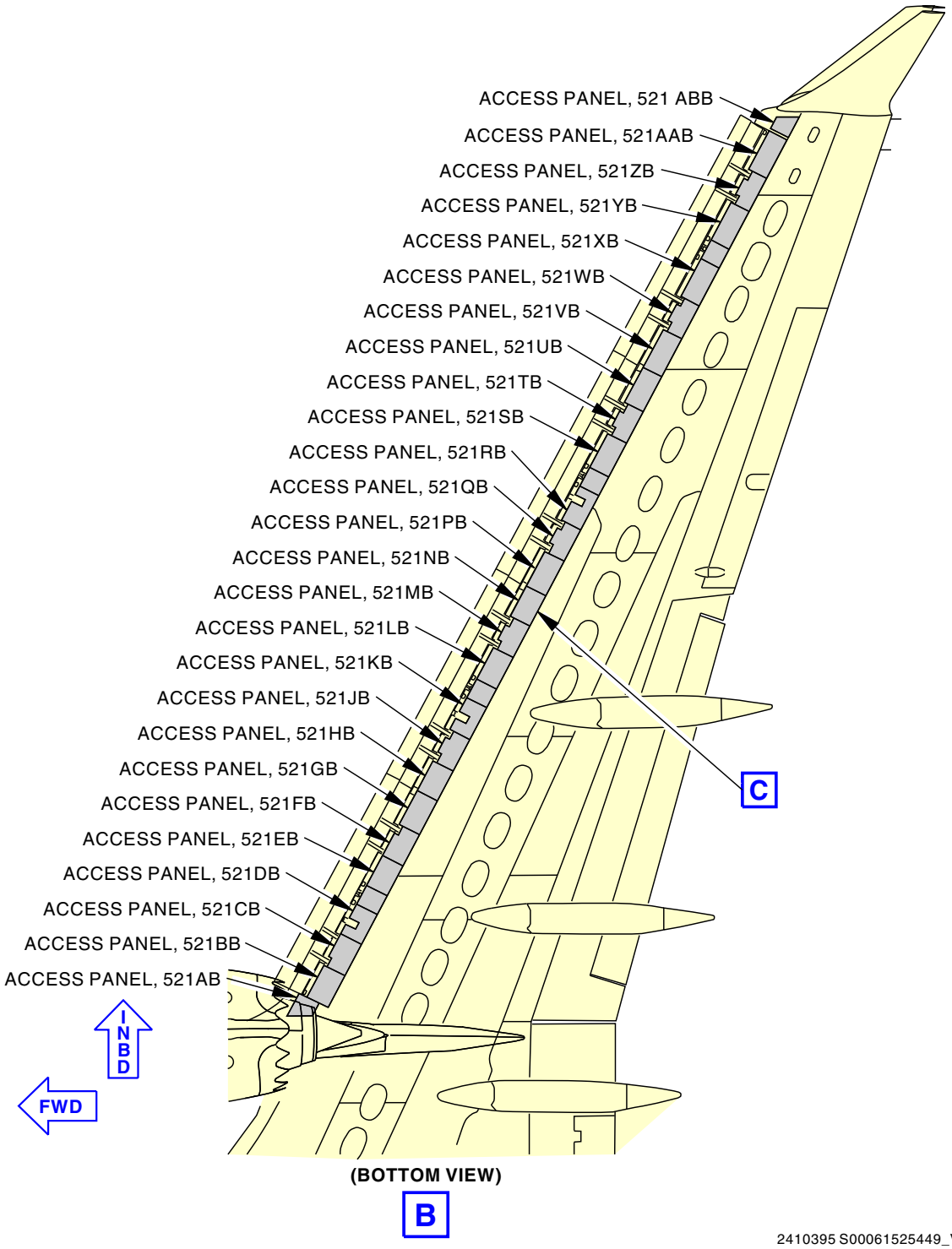
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ECCN 9E991 BOEING PROPRIETARY - See title page for details



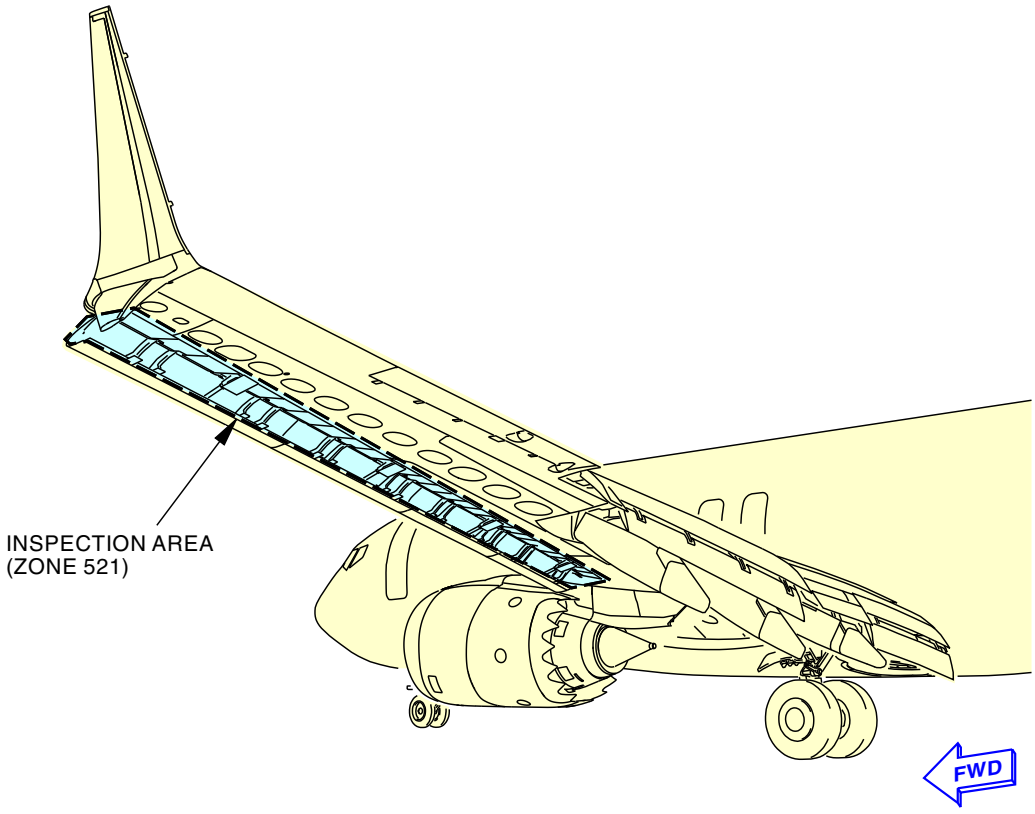
Leading Edge to Front Spar - Left Wing - Outboard
Figure 202/05-42-05-990-802 (Sheet 1 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Leading Edge to Front Spar - Left Wing - Outboard
Figure 202/05-42-05-990-802 (Sheet 2 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



(BOTTOM VIEW)

C

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Leading Edge to Front Spar - Left Wing - Outboard
Figure 202/05-42-05-990-802 (Sheet 3 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-42-05-211-803

4. Detailed Inspection: Exposed EWIS in the area from Rear Spar to Main Landing Gear Support Beam - Left Wing. (EZAP)

(Figure 203)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This procedure is an Enhanced Zonal Analysis Procedure (EZAP) task.

B. References

Reference	Title
20-60-02-100-802	Detailed Inspection of EWIS (P/B 601)
20-60-07-910-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
551	Left Wing - Rear Spar To Landing Gear Support Beam

D. Access Panels

Number	Name/Location
551DB	Lower Inboard Fixed Trailing Edge, Lube Actuator & MLG Beam Outboard Attach Pin Access Panel

E. Inspection

SUBTASK 05-42-05-010-003

(1) Open this access panel:

Number	Name/Location
551DB	Lower Inboard Fixed Trailing Edge, Lube Actuator & MLG Beam Outboard Attach Pin Access Panel

SUBTASK 05-42-05-211-003

(2) Do this task: Detailed Inspection of EWIS, TASK 20-60-02-100-802.

(3) Inspect (Detailed) all exposed EWIS in the area from Rear Spar to Main Landing Gear Support Beam - Left Wing. (EZAP)

SUBTASK 05-42-05-910-003

(4) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-910-801, for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

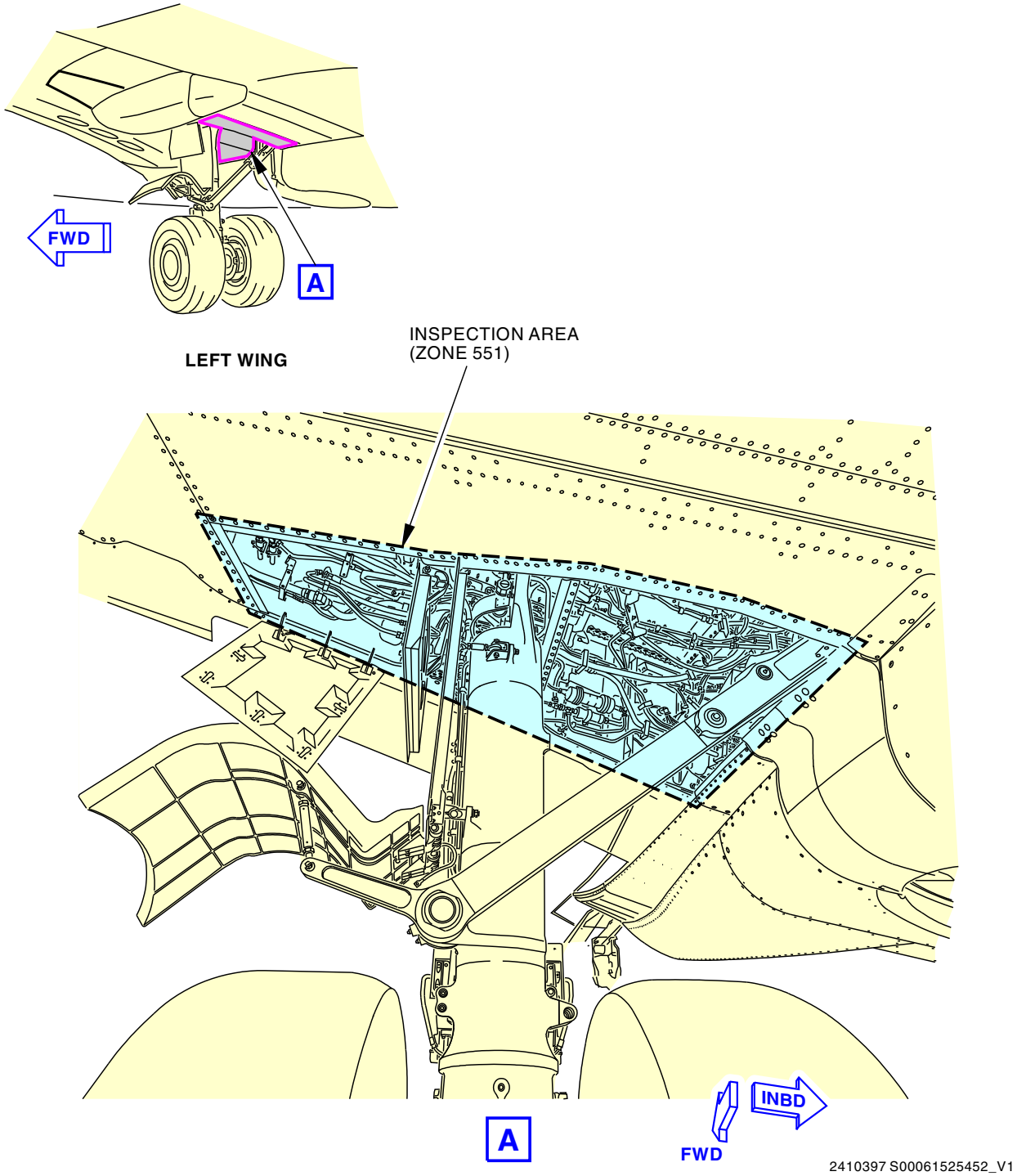
SUBTASK 05-42-05-410-003

(5) Close this access panel:

Number	Name/Location
551DB	Lower Inboard Fixed Trailing Edge, Lube Actuator & MLG Beam Outboard Attach Pin Access Panel

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Rear Spar to Main Landing Gear Support Beam - Left Wing
Figure 203/05-42-05-990-803

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-42-05-211-804

5. Detailed Inspection: Exposed EWIS in the area from Rear Spar to Trailing Edge - Outbd of Inbd Flap - Inbd of Fixed T.E. - Left Wing. (EZAP)

(Figure 204)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This procedure is an Enhanced Zonal Analysis Procedure (EZAP) task.

B. References

Reference	Title
20-60-02-100-802	Detailed Inspection of EWIS (P/B 601)
20-60-07-910-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
561	Left Wing - Rear Spar to Trailing Edge, Outboard Of Inboard Flap, Inboard of Fixed Trailing Edge

D. Inspection

SUBTASK 05-42-05-211-004

(1) Do this task: Detailed Inspection of EWIS, TASK 20-60-02-100-802.

NOTE: Flaps extended, spoilers raised.

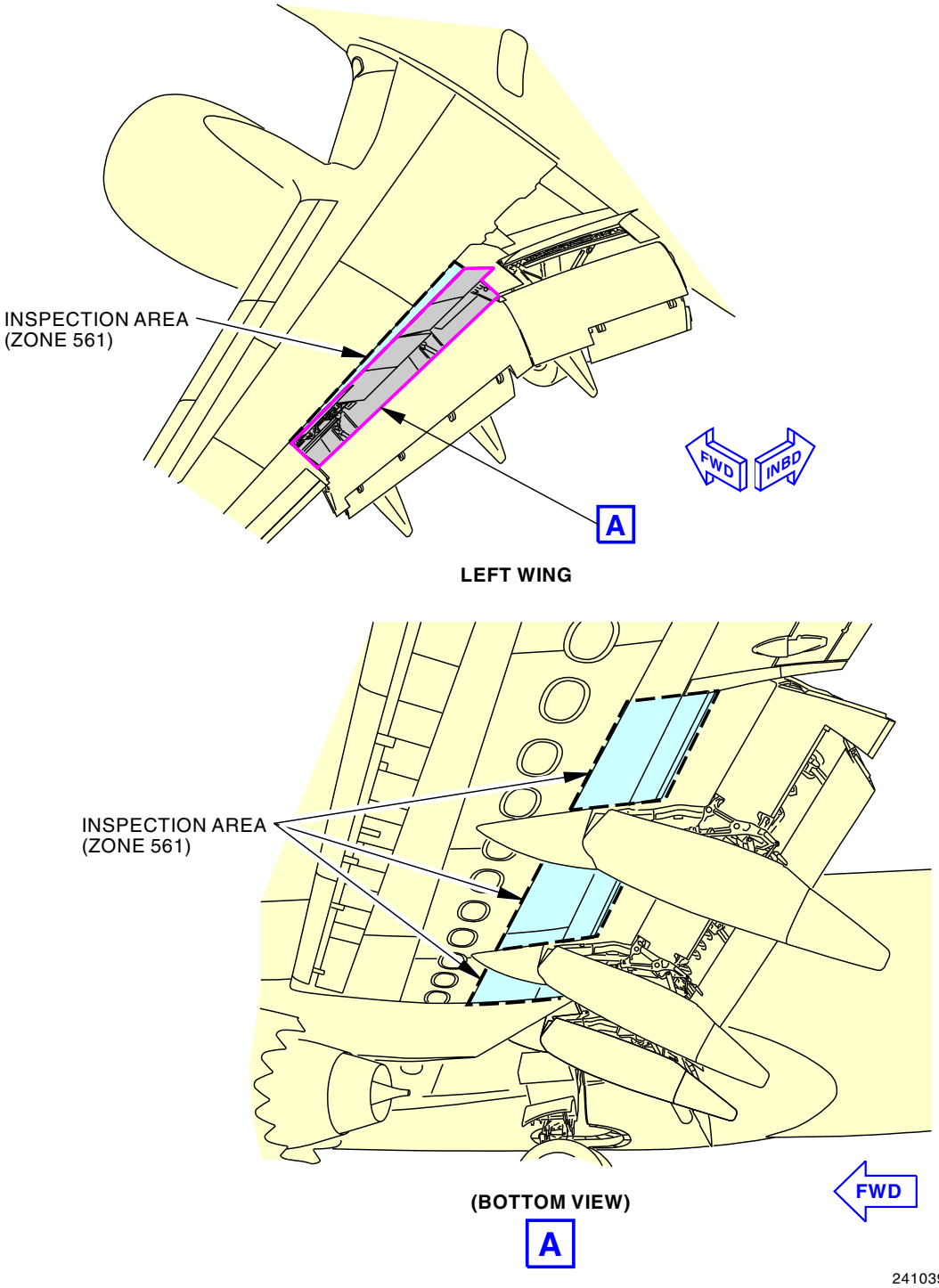
(2) Inspect (Detailed) all exposed EWIS in the area from Rear Spar to Trailing Edge - Outbd of Inbd Flap - Inbd of Fixed T.E. - Left Wing. (EZAP)

SUBTASK 05-42-05-910-004

(3) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-910-801, for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Rear Spar to Trailing Edge - Left Wing
Figure 204/05-42-05-990-804

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-42-05-211-805

6. Detailed Inspection: Exposed EWIS in the Center Fuel Tank - Left Wing (EZAP)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This procedure is an Enhanced Zonal Analysis Procedure (EZAP) task.

B. References

Reference	Title
20-60-02-100-802	Detailed Inspection of EWIS (P/B 601)
20-60-07-910-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
531	Left Wing - Center Fuel Tank, Rib 1 to Rib 5

D. Access Panels

Number	Name/Location
531AB	Center Tank Access Door - Wing Station 168
531BB	Center Tank Access Door - Wing Station 192

E. Inspection

SUBTASK 05-42-05-010-004

(1) Open these access panels:

Number	Name/Location
531AB	Center Tank Access Door - Wing Station 168
531BB	Center Tank Access Door - Wing Station 192

SUBTASK 05-42-05-211-005

(2) Do this task: Detailed Inspection of EWIS, TASK 20-60-02-100-802

(3) Inspect (Detailed) all exposed EWIS in the Center Fuel Tank - Left Wing. (EZAP)

SUBTASK 05-42-05-910-005

(4) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-910-801 for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

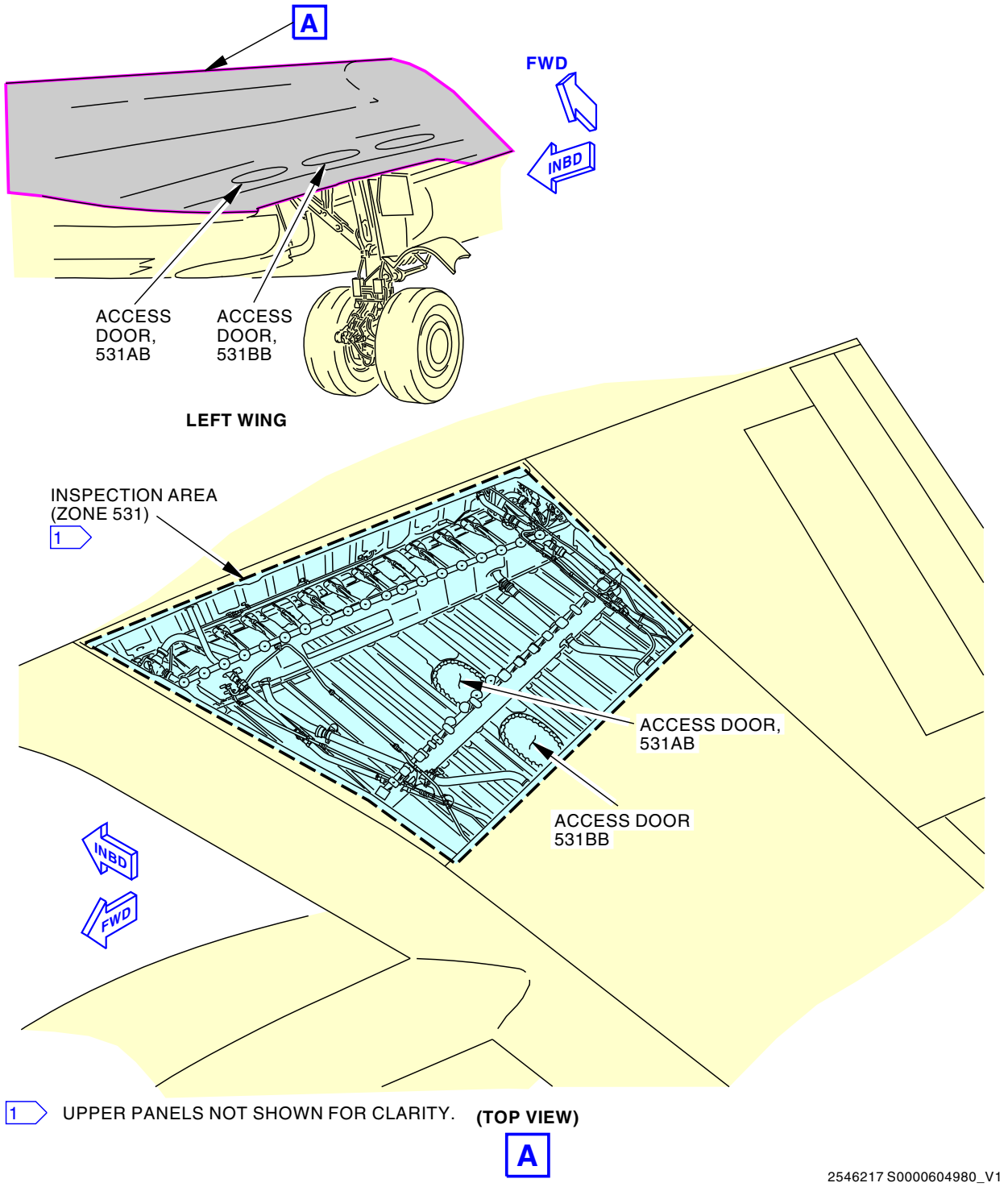
SUBTASK 05-42-05-410-004

(5) Close these access panels:

Number	Name/Location
531AB	Center Tank Access Door - Wing Station 168
531BB	Center Tank Access Door - Wing Station 192

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Center Fuel Tank - Left Wing
Figure 205/05-42-05-990-805

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-42-05-211-806

7. Detailed Inspection: Exposed EWIS in the Main Fuel Tank - Left Wing

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This procedure is an Enhanced Zonal Analysis Procedure (EZAP) task.

B. References

Reference	Title
20-60-02-100-802	Detailed Inspection of EWIS (P/B 601)
20-60-07-910-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
532	Left Wing - Main Tank, Rib 5 to Rib 22, Wing Station 204.25 to Wing BL 643.50

D. Access Panels

Number	Name/Location
532AB	Main Tank Access Door - Wing Station 216
532AZ	Main Tank Inner Access at Rib 6
532BB	Main Tank Access Door - Wing Station 265
532BZ	Main Tank Inner Access at Rib 6
532CB	Main Tank Access Door - Wing Station 290
532DB	Main Tank Access Door - Wing Station 313
532EB	Main Tank Access Door - Wing Station 337
532FB	Main Tank Access Door - Wing Station 367
532GB	Main Tank Access Door - Wing Station 390
532HB	Main Tank Access Door - Wing Station 417
532JB	Main Tank Access Door - Wing Station 443
532KB	Main Tank Access Door - Wing Station 470
532LB	Main Tank Access Door - Wing Station 496
532MB	Main Tank Access Door - Wing Station 523
532NB	Main Tank Access Door - Wing Station 549
532PB	Main Tank Access Door - Wing Station 576
532QB	Main Tank Access Door - Wing Station 602
532RB	Main Tank Access Door - Wing Station 629

E. Inspection

SUBTASK 05-42-05-010-005

(1) Open these access panels:

Number	Name/Location
532AB	Main Tank Access Door - Wing Station 216
532AZ	Main Tank Inner Access at Rib 6
532BB	Main Tank Access Door - Wing Station 265
532BZ	Main Tank Inner Access at Rib 6
532CB	Main Tank Access Door - Wing Station 290
532DB	Main Tank Access Door - Wing Station 313

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(Continued)

Number	Name/Location
532EB	Main Tank Access Door - Wing Station 337
532FB	Main Tank Access Door - Wing Station 367
532GB	Main Tank Access Door - Wing Station 390
532HB	Main Tank Access Door - Wing Station 417
532JB	Main Tank Access Door - Wing Station 443
532KB	Main Tank Access Door - Wing Station 470
532LB	Main Tank Access Door - Wing Station 496
532MB	Main Tank Access Door - Wing Station 523
532NB	Main Tank Access Door - Wing Station 549
532PB	Main Tank Access Door - Wing Station 576
532QB	Main Tank Access Door - Wing Station 602
532RB	Main Tank Access Door - Wing Station 629

SUBTASK 05-42-05-211-006

(2) Do this task: Detailed Inspection of EWIS, TASK 20-60-02-100-802

(3) Inspect (Detailed) all exposed EWIS in the Main Fuel Tank - Left Wing. (EZAP)

SUBTASK 05-42-05-910-006

(4) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-910-801 for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

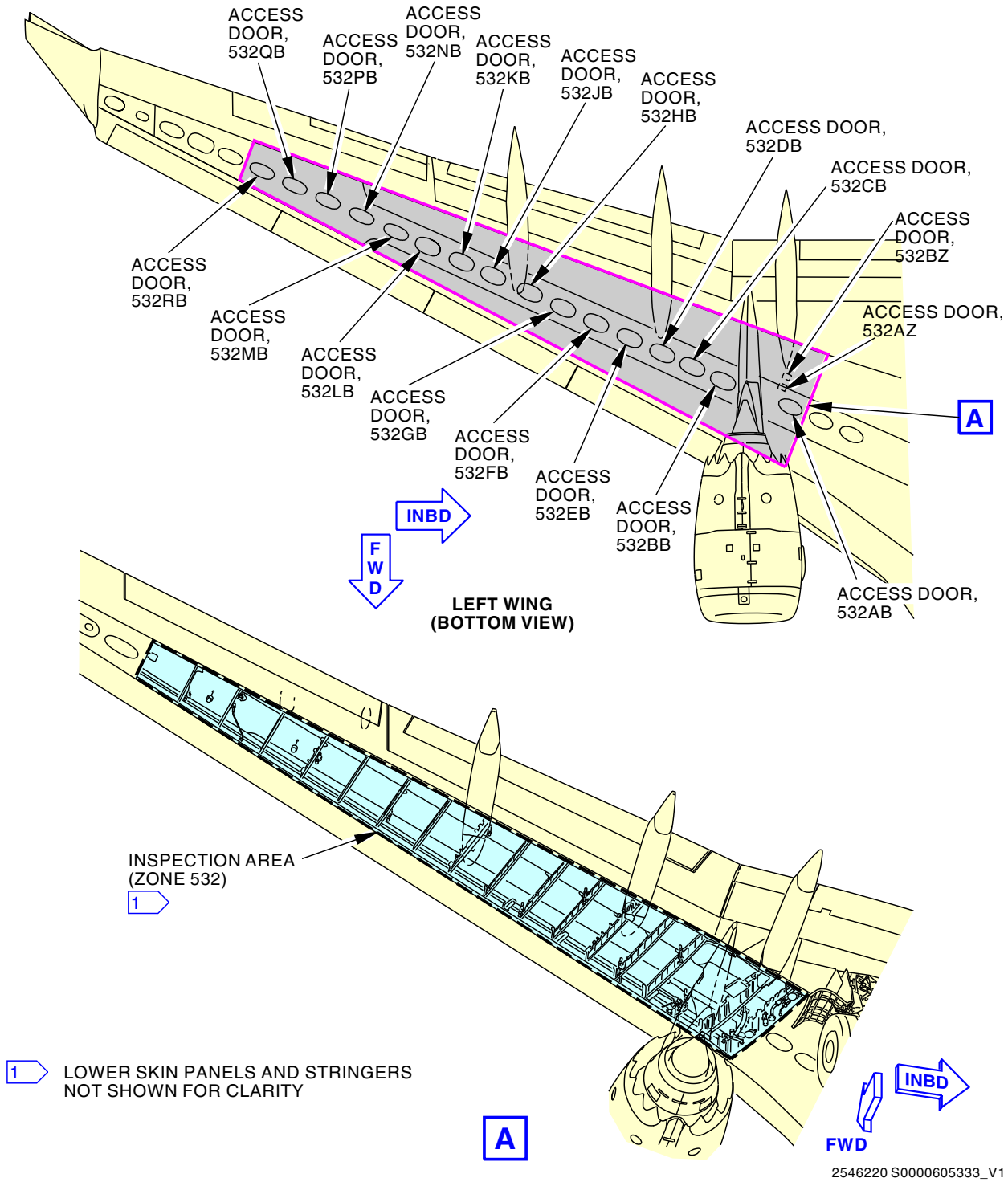
SUBTASK 05-42-05-410-005

(5) Close these access panels:

Number	Name/Location
532AB	Main Tank Access Door - Wing Station 216
532AZ	Main Tank Inner Access at Rib 6
532BB	Main Tank Access Door - Wing Station 265
532BZ	Main Tank Inner Access at Rib 6
532CB	Main Tank Access Door - Wing Station 290
532DB	Main Tank Access Door - Wing Station 313
532EB	Main Tank Access Door - Wing Station 337
532FB	Main Tank Access Door - Wing Station 367
532GB	Main Tank Access Door - Wing Station 390
532HB	Main Tank Access Door - Wing Station 417
532JB	Main Tank Access Door - Wing Station 443
532KB	Main Tank Access Door - Wing Station 470
532LB	Main Tank Access Door - Wing Station 496
532MB	Main Tank Access Door - Wing Station 523
532NB	Main Tank Access Door - Wing Station 549
532PB	Main Tank Access Door - Wing Station 576
532QB	Main Tank Access Door - Wing Station 602
532RB	Main Tank Access Door - Wing Station 629

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details



EWIS in the Main Tank - Left Wing (EZAP)
Figure 206/05-42-05-990-806

ECCN 9E991 BOEING PROPRIETARY - See title page for details

ZONE 600 - RIGHT WING - (EZAP)

1. General

A. This pageblock contains MSG-3 task card data.

EWIS

TASK 05-42-06-211-801

2. **Detailed Inspection: Exposed EWIS in the area from Leading Edge to Front Spar - Inboard of Nacelle Strut - Right Wing. (EZAP)**

(Figure 201)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This procedure is an Enhanced Zonal Analysis Procedure (EZAP) task.

B. References

Reference	Title
20-60-02-100-802	Detailed Inspection of EWIS (P/B 601)
20-60-07-910-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
611	Right Wing - Leading Edge to Front Spar

D. Access Panels

Number	Name/Location
611AB	Inboard Leading Edge, Lower Removable Access Panel
611AT	Inboard Leading Edge, Strakelet Upper Access Panel
611BT	Fairing

E. Inspection

SUBTASK 05-42-06-010-001

(1) Open these access panels:

Number	Name/Location
611AB	Inboard Leading Edge, Lower Removable Access Panel
611AT	Inboard Leading Edge, Strakelet Upper Access Panel
611BT	Fairing

NOTE: Leading edge flaps extended.

SUBTASK 05-42-06-211-001

(2) Do this task: Detailed Inspection of EWIS, TASK 20-60-02-100-802.

SUBTASK 05-42-06-200-001

(3) Inspect (Detailed) all exposed EWIS in the area from Leading Edge to Front Spar - Inboard of Nacelle Strut - Right Wing. (EZAP)

SUBTASK 05-42-06-910-001

(4) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-910-801, for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

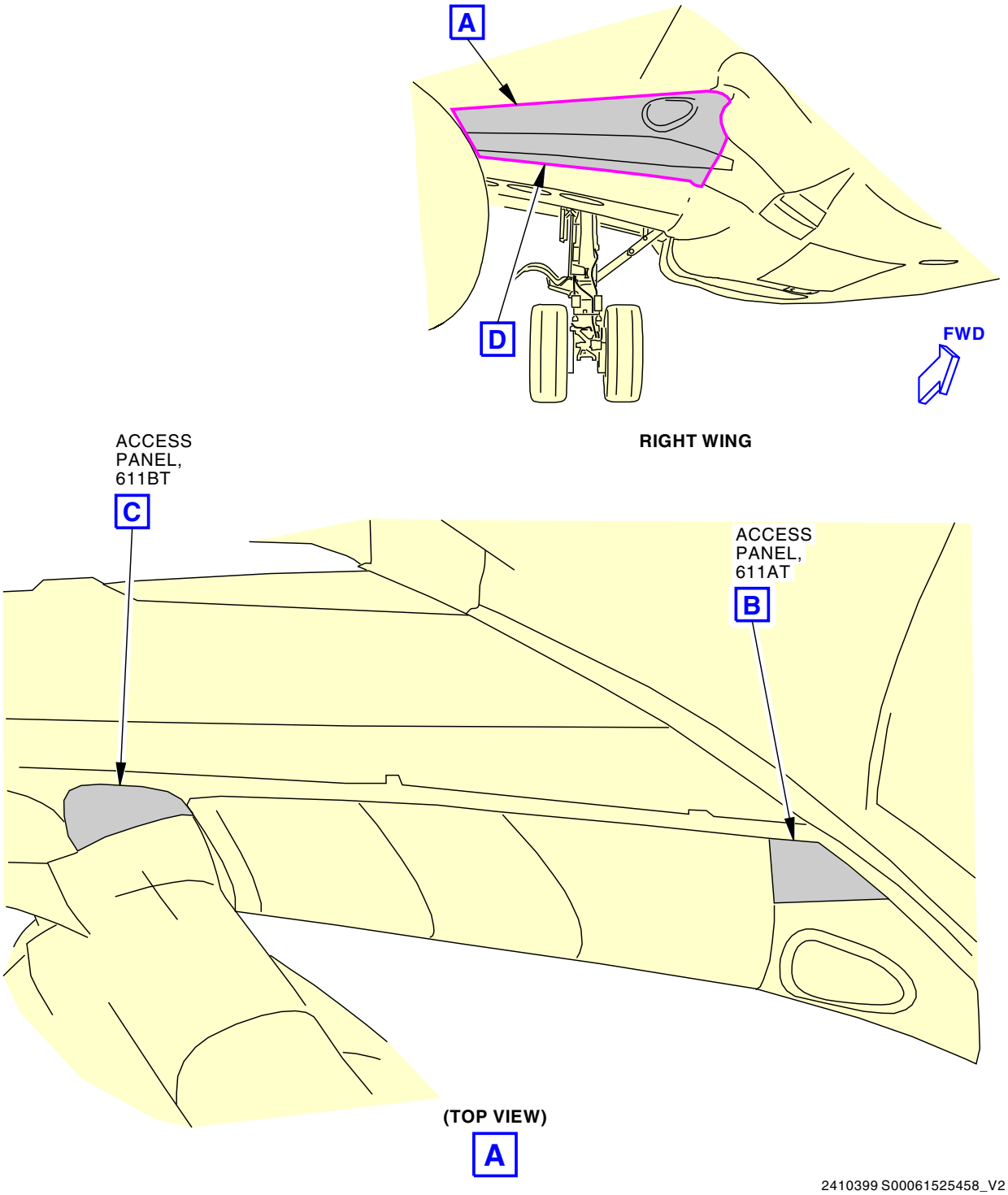
SUBTASK 05-42-06-410-001

(5) Close these access panels:

Number	Name/Location
611AB	Inboard Leading Edge, Lower Removable Access Panel
611AT	Inboard Leading Edge, Strakelet Upper Access Panel
611BT	Fairing

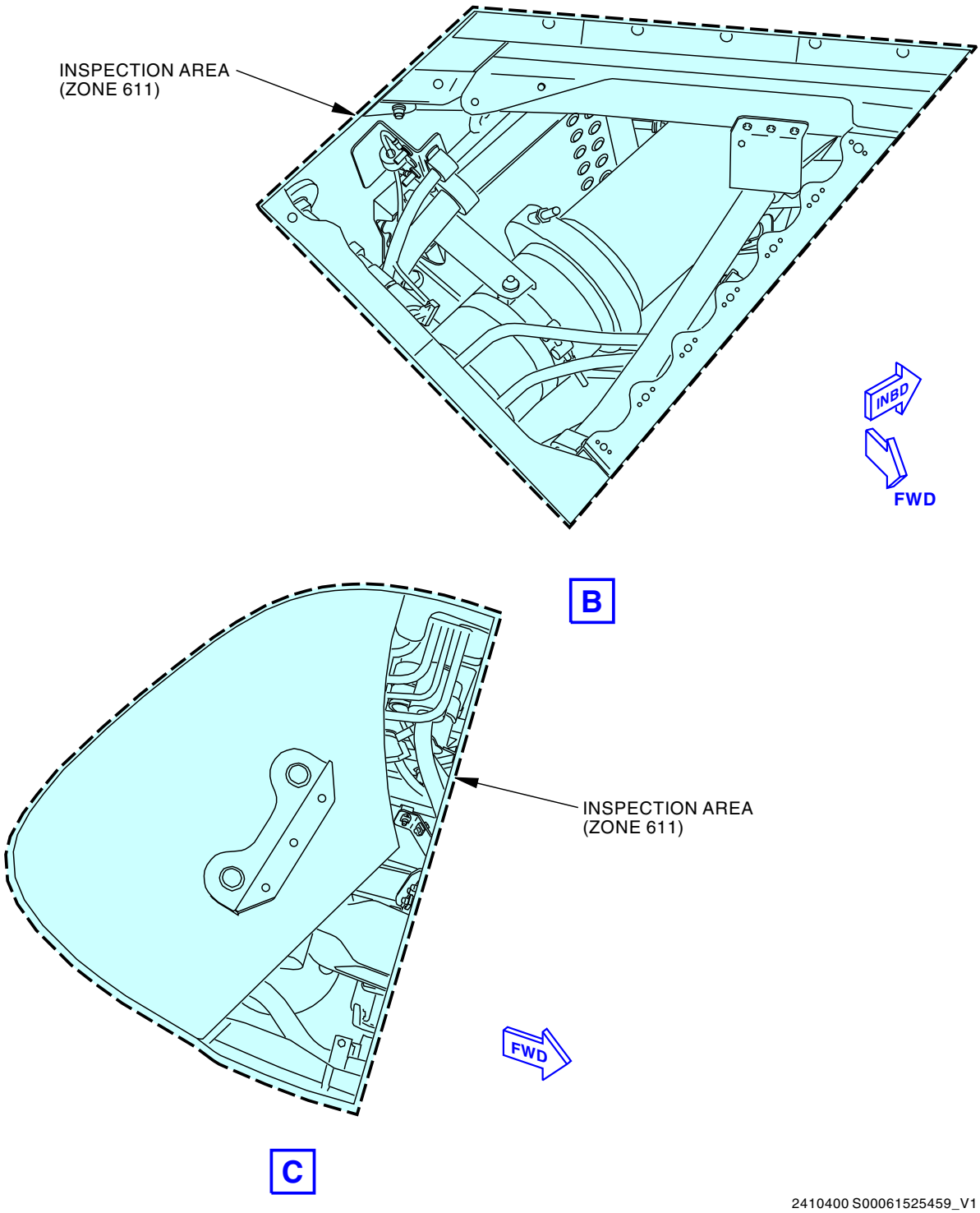
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ECCN 9E991 BOEING PROPRIETARY - See title page for details



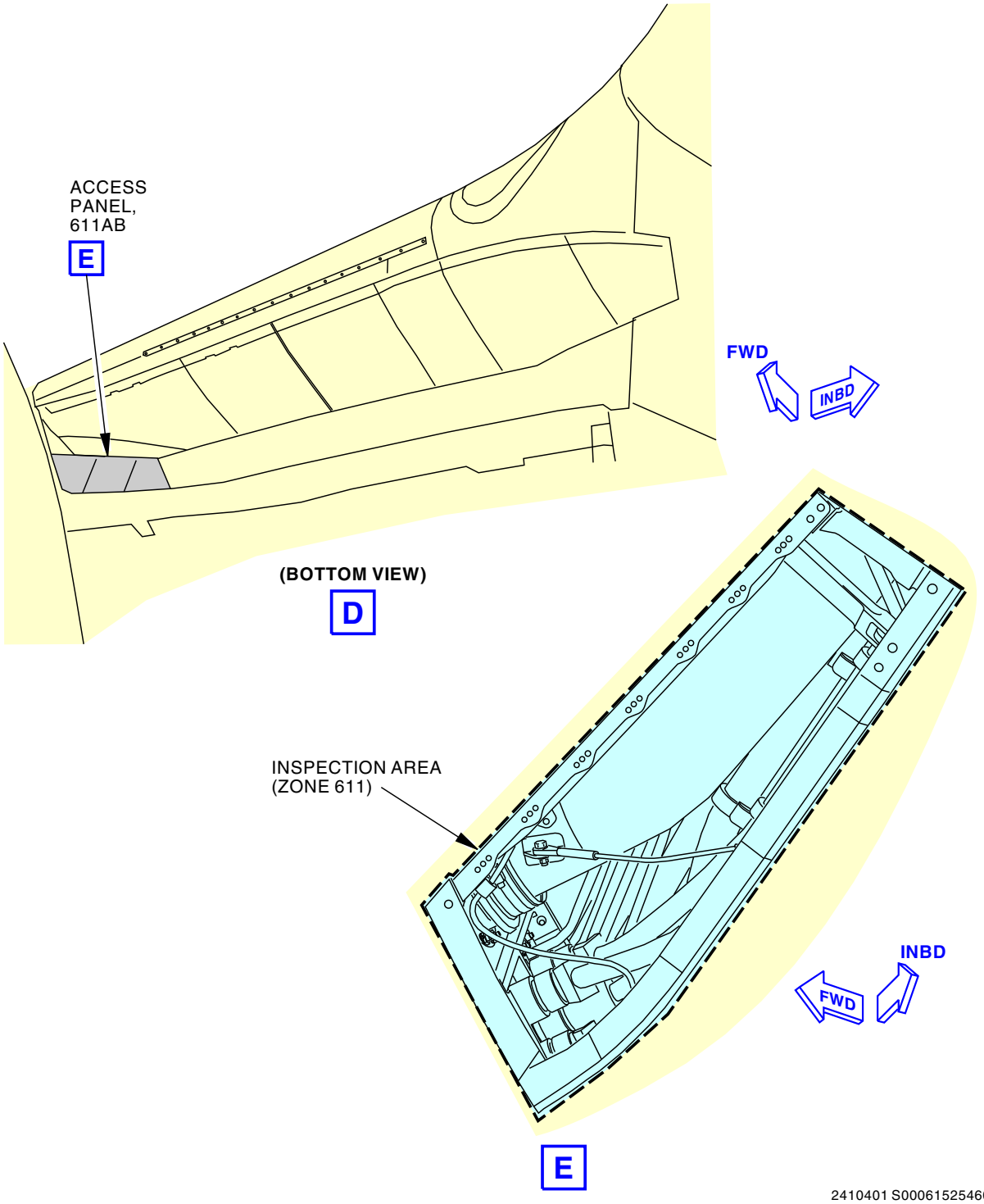
Leading Edge to Front Spar - Right Wing - Inboard
Figure 201/05-42-06-990-801 (Sheet 1 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Leading Edge to Front Spar - Right Wing - Inboard
Figure 201/05-42-06-990-801 (Sheet 2 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Leading Edge to Front Spar - Right Wing - Inboard
Figure 201/05-42-06-990-801 (Sheet 3 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-42-06-211-802

3. **Detailed Inspection: Exposed EWIS in the area from Leading Edge to Front Spar - Outboard of Nacelle Strut - Right Wing. (EZAP)**

(Figure 202)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This procedure is an Enhanced Zonal Analysis Procedure (EZAP) task.

B. References

Reference	Title
20-60-02-100-802	Detailed Inspection of EWIS (P/B 601)
20-60-07-910-801	Protection of the EWIS During Maintenance (P/B 201)
57-41-02-000-801	Leading Edge Access Panel Removal (P/B 201)
57-41-02-400-801	Leading Edge Access Panel Installation (P/B 201)

C. Location Zones

Zone	Area
621	Right Wing - Leading Edge to Front Spar

D. Access Panels

Number	Name/Location
621AAB	Lower Leading Edge Access Panel - Slat Station 524.31
621AB	Outboard Leading Edge Blowout Door - Slat Station 20
621ABB	Lower Leading Edge Access Panel-Slat Station 519
621AT	Outbd Leading Edge - Gap Cover Access
621BB	Engine Fuel Valve Shutoff Access Panel - Slat Station 27
621CB	Lower Leading Edge Access Panel - Slat Station 50
621DB	Lower Leading Edge Access Panel - Slat Station 70
621EB	Lower Leading Edge Access Panel - Slat Station 91
621FB	Lower Leading Edge Access Panel - Slat Station 107
621GB	Refuel Valve Door - Slat Station 125
621JB	Lower Leading Edge Access Panel - Slat Station 161
621KB	Lower Leading Edge Access Panel - Slat Station 179
621LB	Lower Leading Edge Access Panel - Slat Station 208
621MB	Lower Leading Edge Access Panel - Slat Station 226
621NB	Lower Leading Edge Access Panel - Slat Station 244
621PB	Lower Leading Edge Access Panel - Slat Station 261
621QB	Lower Leading Edge Access Panel - Slat Station 280
621RB	Lower Leading Edge Access Panel - Slat Station 298
621SB	Lower Leading Edge Access Panel - Slat Station 328
621TB	Lower Leading Edge Access Panel - Slat Station 347
621UB	Lower Leading Edge Access Panel - Slat Station 365
621VB	Lower Leading Edge Access Panel - Slat Station 385
621WB	Lower Leading Edge Access Panel - Slat Station 406
621XB	Lower Leading Edge Access Panel - Slat Station 425

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(Continued)

Number	Name/Location
621YB	Lower Leading Edge Access Panel - Slat Station 470
621ZB	Lower Leading Edge Access Panel - Slat Station 479

E. Inspection

SUBTASK 05-42-06-010-002

(1) Open these access panels:

(TASK 57-41-02-000-801)

Number	Name/Location
621AAB	Lower Leading Edge Access Panel - Slat Station 524.31
621AB	Outboard Leading Edge Blowout Door - Slat Station 20
621ABB	Lower Leading Edge Access Panel-Slat Station 519
621AT	Outbd Leading Edge - Gap Cover Access
621BB	Engine Fuel Valve Shutoff Access Panel - Slat Station 27
621CB	Lower Leading Edge Access Panel - Slat Station 50
621DB	Lower Leading Edge Access Panel - Slat Station 70
621EB	Lower Leading Edge Access Panel - Slat Station 91
621FB	Lower Leading Edge Access Panel - Slat Station 107
621GB	Refuel Valve Door - Slat Station 125
621JB	Lower Leading Edge Access Panel - Slat Station 161
621KB	Lower Leading Edge Access Panel - Slat Station 179
621LB	Lower Leading Edge Access Panel - Slat Station 208
621MB	Lower Leading Edge Access Panel - Slat Station 226
621NB	Lower Leading Edge Access Panel - Slat Station 244
621PB	Lower Leading Edge Access Panel - Slat Station 261
621QB	Lower Leading Edge Access Panel - Slat Station 280
621RB	Lower Leading Edge Access Panel - Slat Station 298
621SB	Lower Leading Edge Access Panel - Slat Station 328
621TB	Lower Leading Edge Access Panel - Slat Station 347
621UB	Lower Leading Edge Access Panel - Slat Station 365
621VB	Lower Leading Edge Access Panel - Slat Station 385
621WB	Lower Leading Edge Access Panel - Slat Station 406
621XB	Lower Leading Edge Access Panel - Slat Station 425
621YB	Lower Leading Edge Access Panel - Slat Station 470
621ZB	Lower Leading Edge Access Panel - Slat Station 479

SUBTASK 05-42-06-211-002

(2) Do this task: Detailed Inspection of EWIS, TASK 20-60-02-100-802.

NOTE: Access is gained by extending slats, and through lower wing surface access panels.

SUBTASK 05-42-06-200-002

(3) Inspect (Detailed) all exposed EWIS in the area from Leading Edge to Front Spar - Outboard of Nacelle Strut - Right Wing. (EZAP)

SUBTASK 05-42-06-910-002

(4) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-910-801, for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 05-42-06-410-002

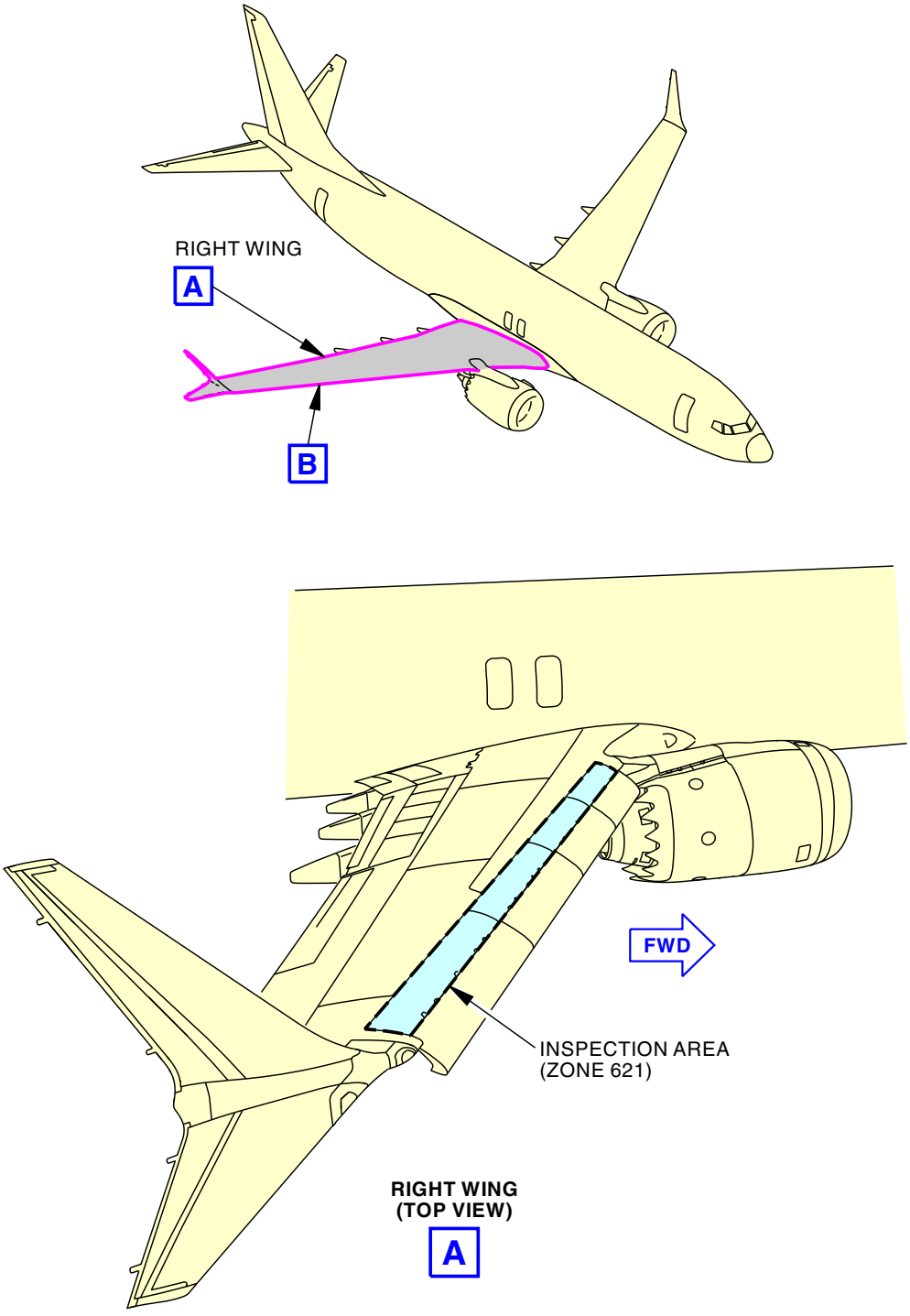
(5) Close these access panels:

(TASK 57-41-02-400-801)

Number	Name/Location
621AAB	Lower Leading Edge Access Panel - Slat Station 524.31
621AB	Outboard Leading Edge Blowout Door - Slat Station 20
621ABB	Lower Leading Edge Access Panel-Slat Station 519
621AT	Outbd Leading Edge - Gap Cover Access
621BB	Engine Fuel Valve Shutoff Access Panel - Slat Station 27
621CB	Lower Leading Edge Access Panel - Slat Station 50
621DB	Lower Leading Edge Access Panel - Slat Station 70
621EB	Lower Leading Edge Access Panel - Slat Station 91
621FB	Lower Leading Edge Access Panel - Slat Station 107
621GB	Refuel Valve Door - Slat Station 125
621JB	Lower Leading Edge Access Panel - Slat Station 161
621KB	Lower Leading Edge Access Panel - Slat Station 179
621LB	Lower Leading Edge Access Panel - Slat Station 208
621MB	Lower Leading Edge Access Panel - Slat Station 226
621NB	Lower Leading Edge Access Panel - Slat Station 244
621PB	Lower Leading Edge Access Panel - Slat Station 261
621QB	Lower Leading Edge Access Panel - Slat Station 280
621RB	Lower Leading Edge Access Panel - Slat Station 298
621SB	Lower Leading Edge Access Panel - Slat Station 328
621TB	Lower Leading Edge Access Panel - Slat Station 347
621UB	Lower Leading Edge Access Panel - Slat Station 365
621VB	Lower Leading Edge Access Panel - Slat Station 385
621WB	Lower Leading Edge Access Panel - Slat Station 406
621XB	Lower Leading Edge Access Panel - Slat Station 425
621YB	Lower Leading Edge Access Panel - Slat Station 470
621ZB	Lower Leading Edge Access Panel - Slat Station 479

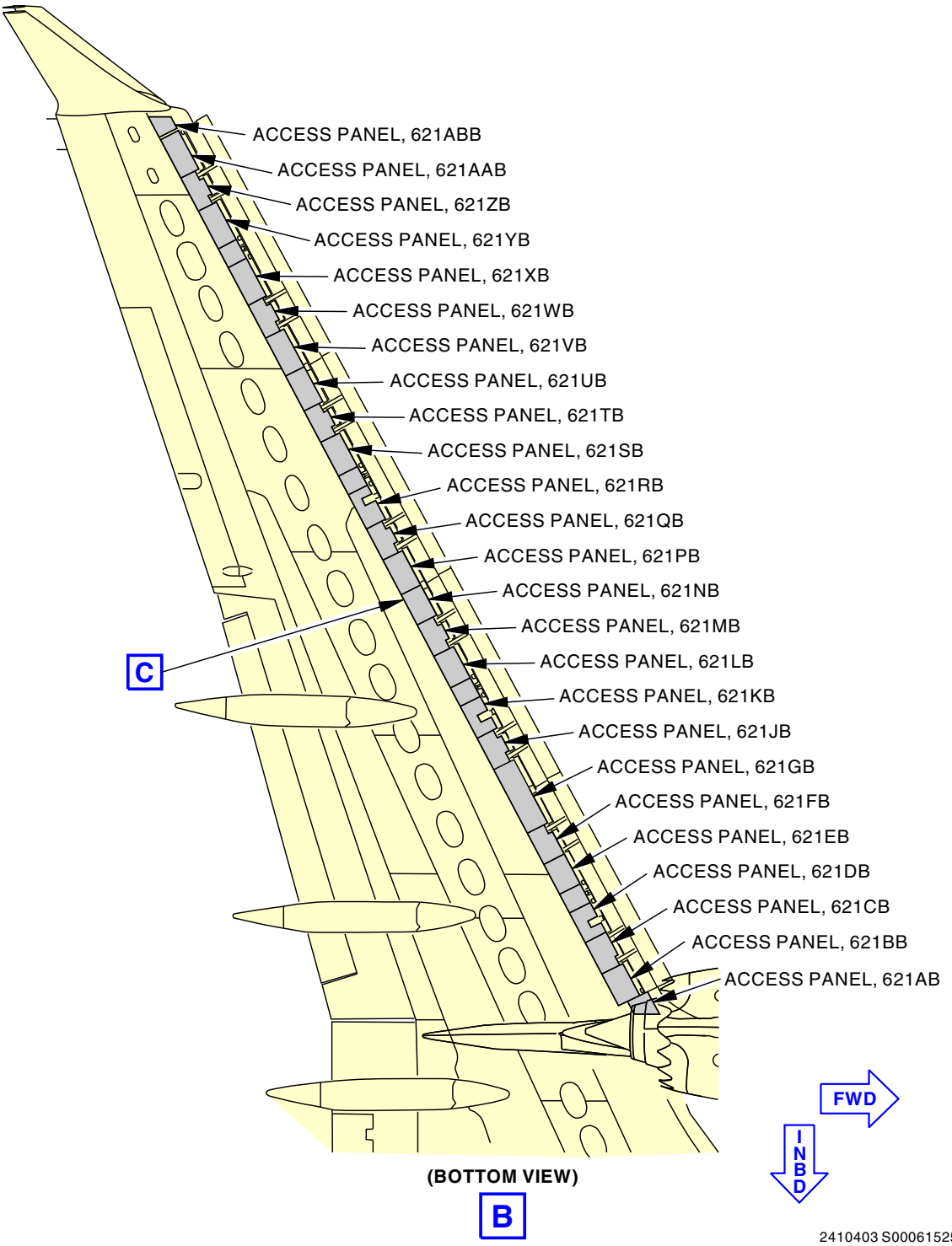
——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



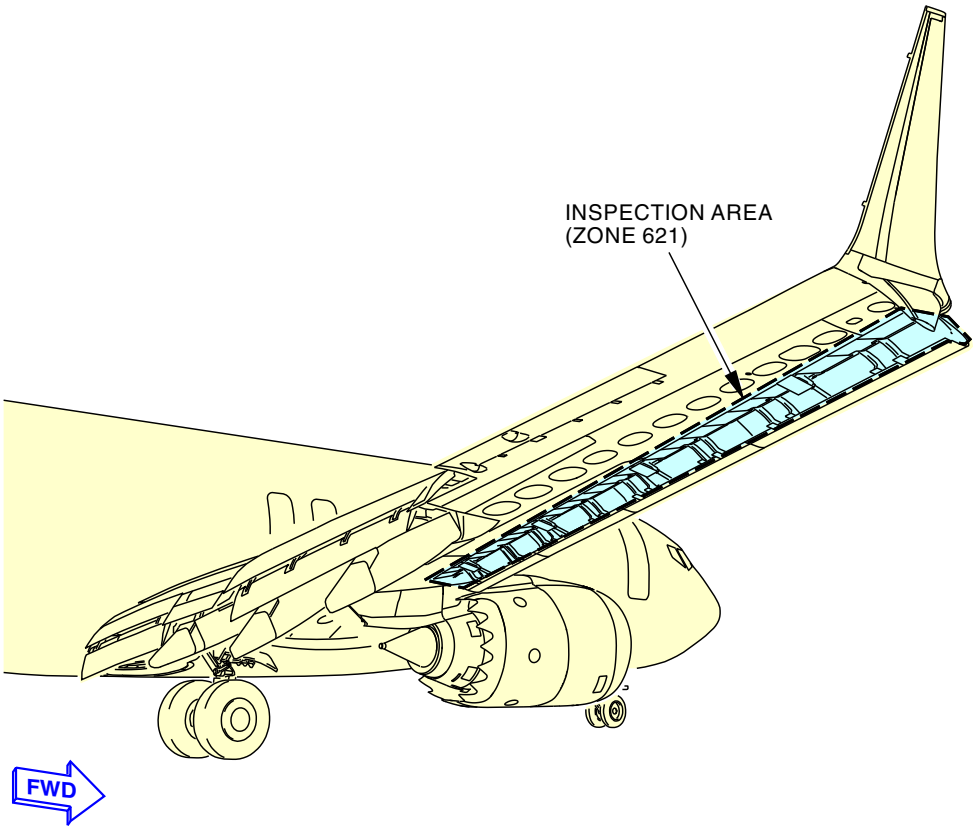
Leading Edge to Front Spar - Right Wing - Outboard
Figure 202/05-42-06-990-802 (Sheet 1 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Leading Edge to Front Spar - Right Wing - Outboard
Figure 202/05-42-06-990-802 (Sheet 2 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



(BOTTOM VIEW)

C

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Leading Edge to Front Spar - Right Wing - Outboard
Figure 202/05-42-06-990-802 (Sheet 3 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-42-06-211-803

4. Detailed Inspection: Exposed EWIS in the area from Rear Spar to Main Landing Gear Support Beam - Right Wing. (EZAP)

(Figure 203)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This procedure is an Enhanced Zonal Analysis Procedure (EZAP) task.

B. References

Reference	Title
20-60-02-100-802	Detailed Inspection of EWIS (P/B 601)
20-60-07-910-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
651	Right Wing - Rear Spar to Landing Gear Support Beam

D. Access Panels

Number	Name/Location
651DB	Lower Inboard Fixed Trailing Edge, Lube Actuator & MLG Beam Outboard Attach Pin Access Panel

E. Inspection

SUBTASK 05-42-06-010-003

(1) Open this access panel:

Number	Name/Location
651DB	Lower Inboard Fixed Trailing Edge, Lube Actuator & MLG Beam Outboard Attach Pin Access Panel

SUBTASK 05-42-06-211-003

(2) Do this task: Detailed Inspection of EWIS, TASK 20-60-02-100-802.

SUBTASK 05-42-06-200-003

(3) Inspect (Detailed) all exposed EWIS in the area from Rear Spar to Main Landing Gear Support Beam - Right Wing. (EZAP)

SUBTASK 05-42-06-910-003

(4) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-910-801, for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

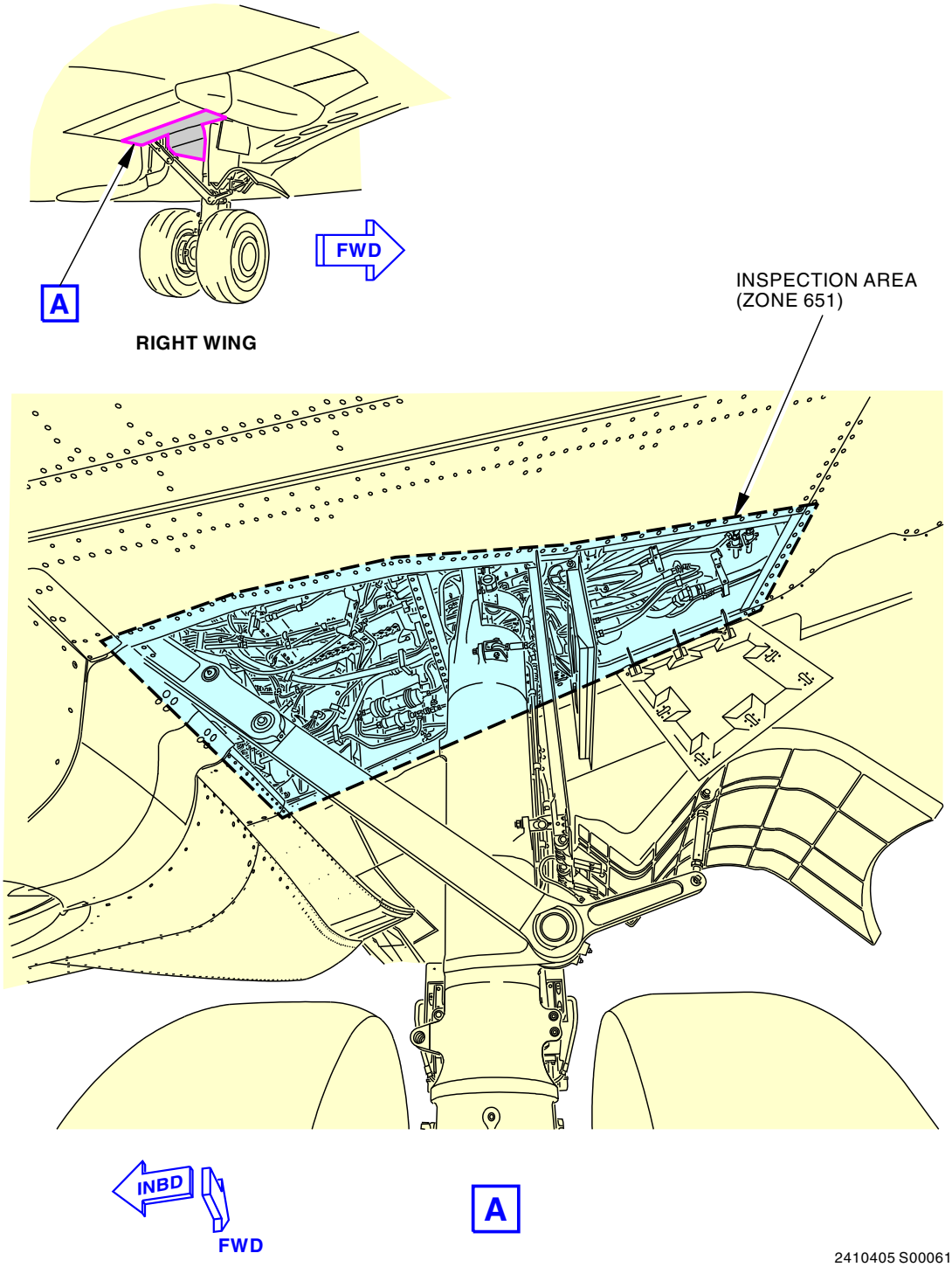
SUBTASK 05-42-06-410-003

(5) Close this access panel:

Number	Name/Location
651DB	Lower Inboard Fixed Trailing Edge, Lube Actuator & MLG Beam Outboard Attach Pin Access Panel

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Rear Spar to Main Landing Gear Support Beam - Right Wing
Figure 203/05-42-06-990-803

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-42-06-211-804

5. Detailed Inspection: Exposed EWIS in the area from Rear Spar to Trailing Edge - Outbd of Inbd Flap - Inbd of Fixed T.E. - Right Wing. (EZAP)

(Figure 204)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This procedure is an Enhanced Zonal Analysis Procedure (EZAP) task.

B. References

Reference	Title
20-60-02-100-802	Detailed Inspection of EWIS (P/B 601)
20-60-07-910-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
661	Right Wing - Rear Spar to Trailing Edge, Outboard of Inboard Flap, Inboard of Fixed Trailing Edge

D. Inspection

SUBTASK 05-42-06-211-004

(1) Do this task: Detailed Inspection of EWIS, TASK 20-60-02-100-802.

NOTE: Flaps extended, spoilers raised.

SUBTASK 05-42-06-200-004

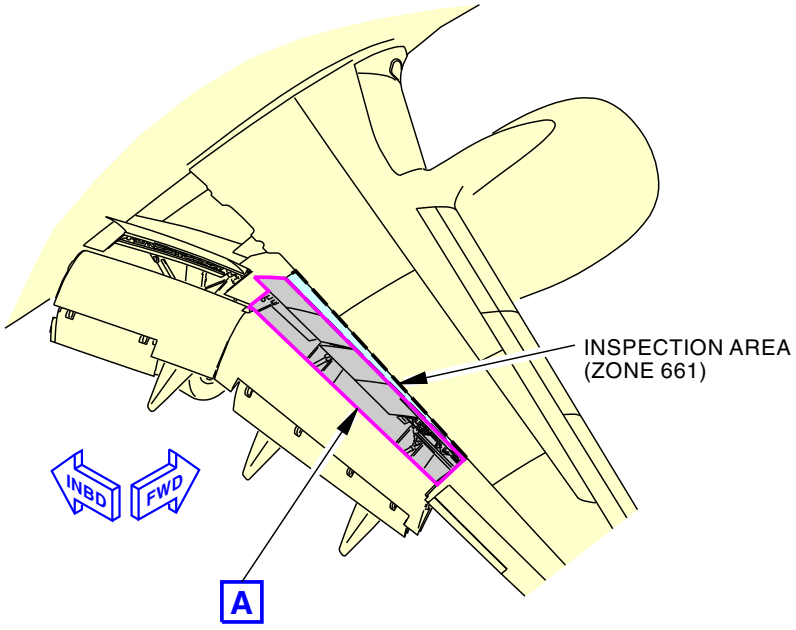
(2) Inspect (Detailed) all exposed EWIS in the area from Rear Spar to Trailing Edge - Outbd of Inbd Flap - Inbd of Fixed T.E. - Right Wing. (EZAP)

SUBTASK 05-42-06-910-004

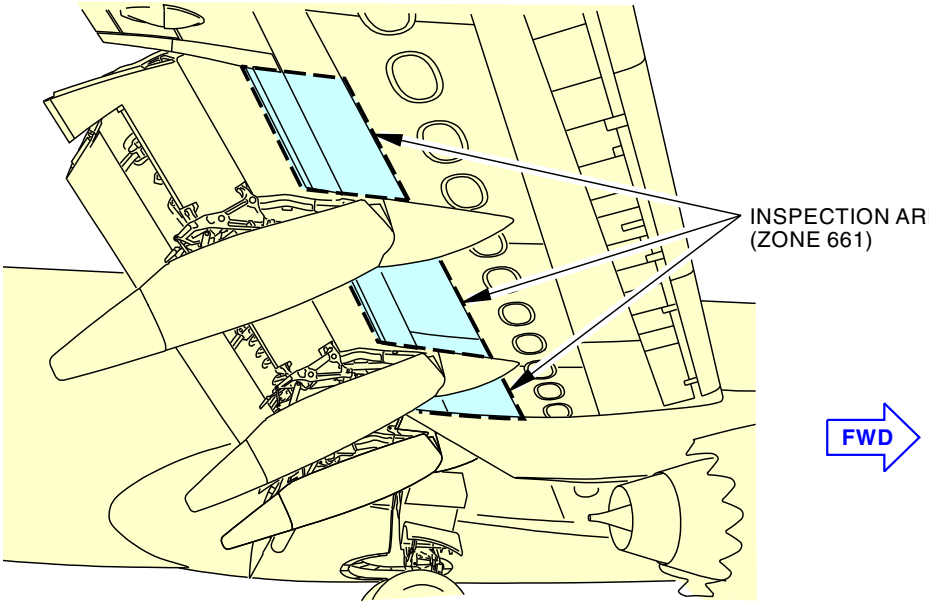
(3) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-910-801, for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



RIGHT WING



BOTTOM VIEW

A

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Rear Spar to Trailing Edge - Right Wing
Figure 204/05-42-06-990-804

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-42-06-211-805

6. Detailed Inspection: Exposed EWIS in the Center Tank - Right Wing

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This procedure is an Enhanced Zonal Analysis Procedure (EZAP) task.

B. References

Reference	Title
20-60-02-100-802	Detailed Inspection of EWIS (P/B 601)
20-60-07-910-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
631	Right Wing - Center Fuel Tank, Rib 1 to Rib 5

D. Access Panels

Number	Name/Location
631AB	Center Tank Access Door - Wing Station 168
631BB	Center Tank Access Door - Wing Station 192

E. Inspection

SUBTASK 05-42-06-010-004

(1) Open these access panels:

Number	Name/Location
631AB	Center Tank Access Door - Wing Station 168
631BB	Center Tank Access Door - Wing Station 192

SUBTASK 05-42-06-211-005

(2) Do the task: Detailed Inspection of EWIS, TASK 20-60-02-100-802

SUBTASK 05-42-06-200-005

(3) Inspect (Detailed) all exposed EWIS in the Center Fuel Tank - Right Wing. (EZAP)

SUBTASK 05-42-06-910-005

(4) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-910-801 for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

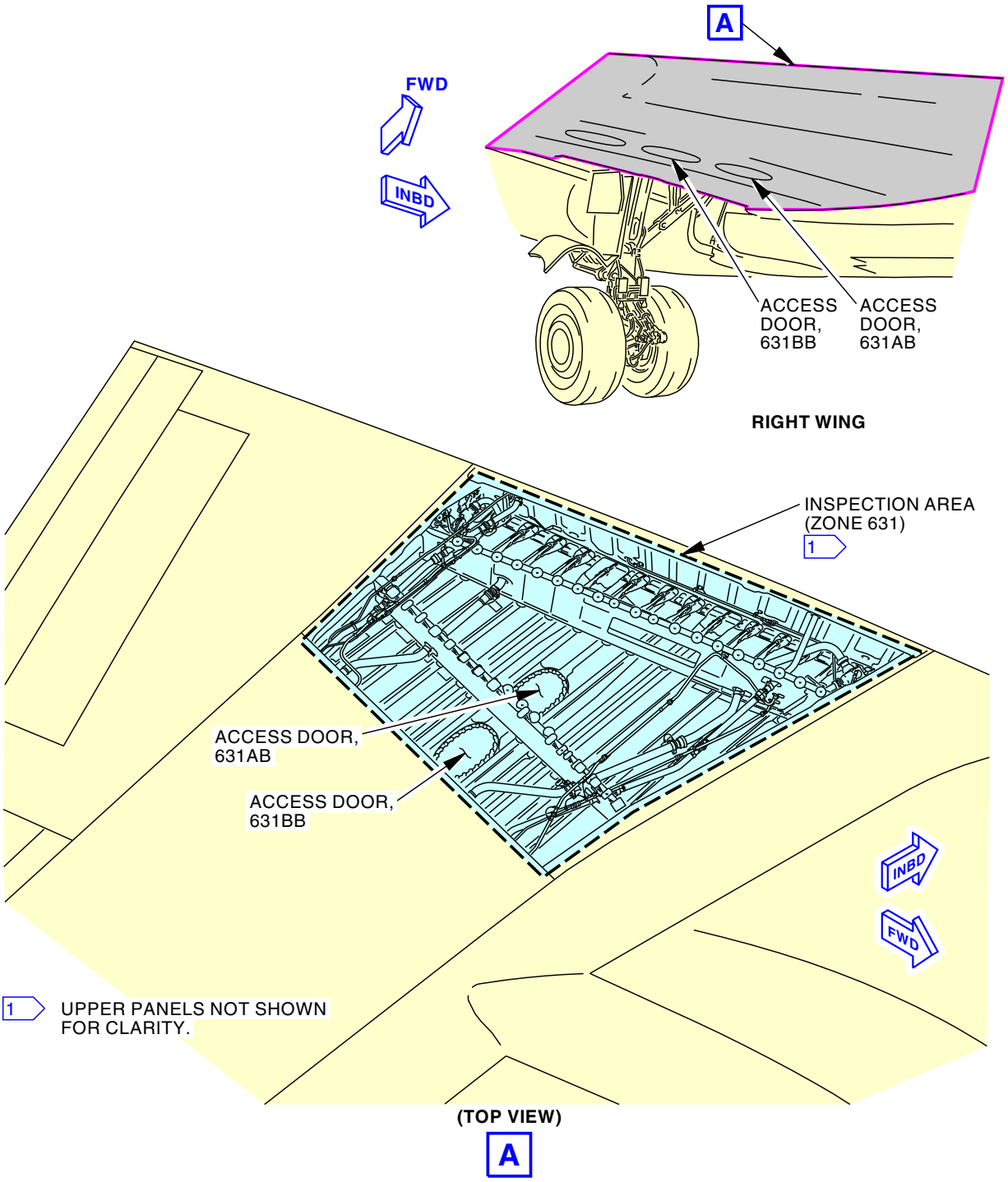
SUBTASK 05-42-06-410-004

(5) Close these access panels:

Number	Name/Location
631AB	Center Tank Access Door - Wing Station 168
631BB	Center Tank Access Door - Wing Station 192

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details



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EWIS in the Center Fuel Tank - Right Wing (EZAP)
Figure 205/05-42-06-990-805

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EWIS

TASK 05-42-06-211-806

7. Detailed Inspection: Exposed EWIS in the Main Tank - Right Wing

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This procedure is an Enhanced Zonal Analysis Procedure (EZAP) task.

B. References

Reference	Title
20-60-02-100-802	Detailed Inspection of EWIS (P/B 601)
20-60-07-910-801	Protection of the EWIS During Maintenance (P/B 201)

C. Location Zones

Zone	Area
632	Right Wing - Main Tank, Rib 5 to Rib 22, Wing Station 204.25 to Wing Station 643.50

D. Access Panels

Number	Name/Location
632AB	Main Tank Access Door - Wing Station 216
632AZ	Main Tank Inner Access at Rib 6
632BB	Main Tank Access Door - Wing Station 265
632BZ	Main Tank Inner Access at Rib 6
632CB	Main Tank Access Door - Wing Station 290
632DB	Main Tank Access Door - Wing Station 313
632EB	Main Tank Access Door - Wing Station 337
632FB	Main Tank Access Door - Wing Station 367
632GB	Main Tank Access Door - Wing Station 390
632HB	Main Tank Access Door - Wing Station 417
632JB	Main Tank Access Door - Wing Station 443
632KB	Main Tank Access Door - Wing Station 470
632LB	Main Tank Access Door - Wing Station 496
632MB	Main Tank Access Door - Wing Station 523
632NB	Main Tank Access Door - Wing Station 549
632PB	Main Tank Access Door - Wing Station 576
632QB	Main Tank Access Door - Wing Station 602
632RB	Main Tank Access Door - Wing Station 629

E. Inspection

SUBTASK 05-42-06-010-005

(1) Open these access panels:

Number	Name/Location
632AB	Main Tank Access Door - Wing Station 216
632AZ	Main Tank Inner Access at Rib 6
632BB	Main Tank Access Door - Wing Station 265
632BZ	Main Tank Inner Access at Rib 6
632CB	Main Tank Access Door - Wing Station 290

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(Continued)

Number	Name/Location
632DB	Main Tank Access Door - Wing Station 313
632EB	Main Tank Access Door - Wing Station 337
632FB	Main Tank Access Door - Wing Station 367
632GB	Main Tank Access Door - Wing Station 390
632HB	Main Tank Access Door - Wing Station 417
632JB	Main Tank Access Door - Wing Station 443
632KB	Main Tank Access Door - Wing Station 470
632LB	Main Tank Access Door - Wing Station 496
632MB	Main Tank Access Door - Wing Station 523
632NB	Main Tank Access Door - Wing Station 549
632PB	Main Tank Access Door - Wing Station 576
632QB	Main Tank Access Door - Wing Station 602
632RB	Main Tank Access Door - Wing Station 629

SUBTASK 05-42-06-211-006

(2) Do this task: Detailed Inspection of EWIS, TASK 20-60-02-100-802

SUBTASK 05-42-06-200-006

(3) Inspect (Detailed) all exposed EWIS in the Main Fuel Tank - Right Wing. (EZAP)

SUBTASK 05-42-06-910-006

(4) Refer to Protection of the EWIS During Maintenance, TASK 20-60-07-910-801 for the protection and caution information that will minimize contamination and accidental damage to EWIS during maintenance.

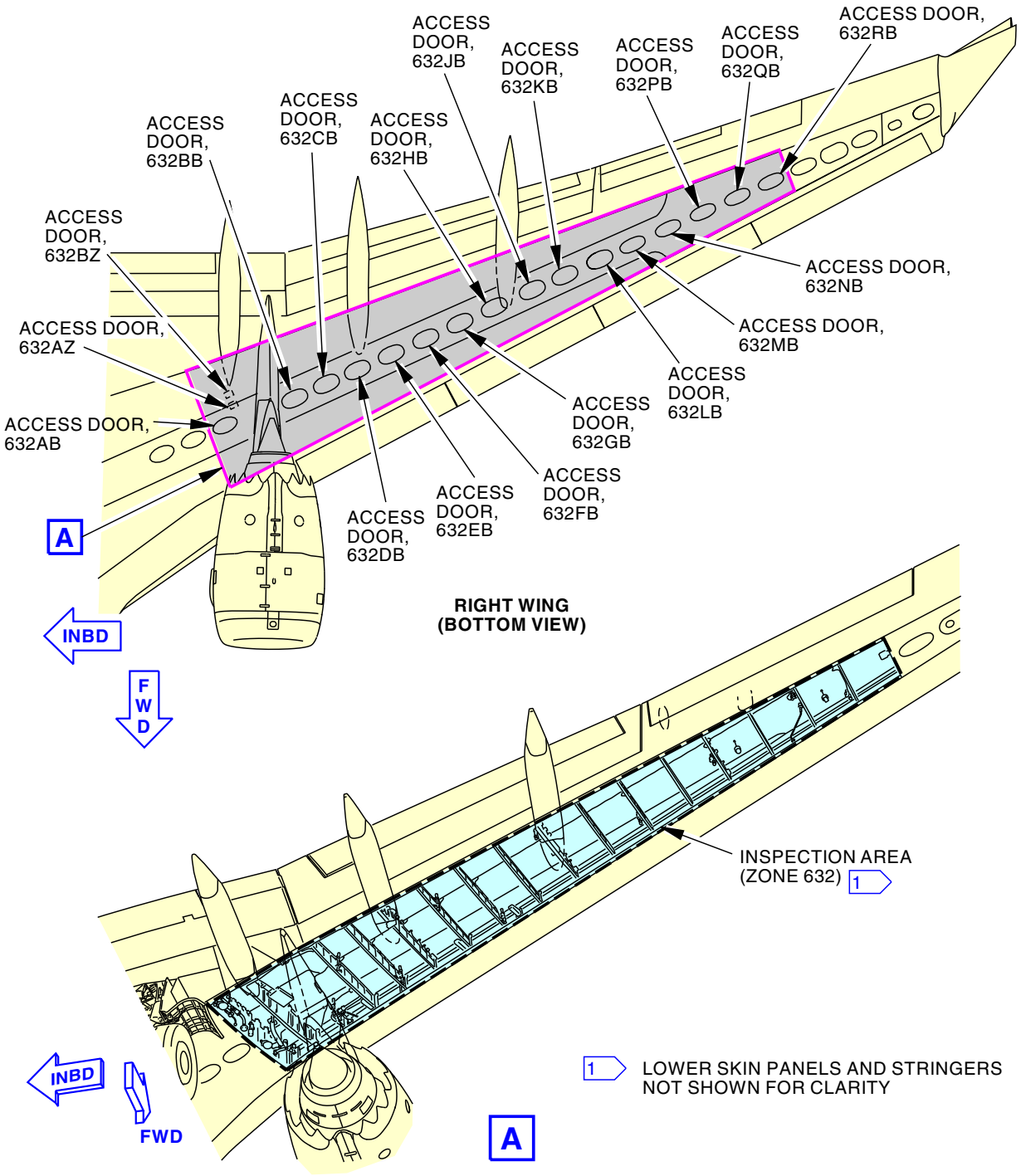
SUBTASK 05-42-06-410-005

(5) Close these access panels:

Number	Name/Location
632AB	Main Tank Access Door - Wing Station 216
632AZ	Main Tank Inner Access at Rib 6
632BB	Main Tank Access Door - Wing Station 265
632BZ	Main Tank Inner Access at Rib 6
632CB	Main Tank Access Door - Wing Station 290
632DB	Main Tank Access Door - Wing Station 313
632EB	Main Tank Access Door - Wing Station 337
632FB	Main Tank Access Door - Wing Station 367
632GB	Main Tank Access Door - Wing Station 390
632HB	Main Tank Access Door - Wing Station 417
632JB	Main Tank Access Door - Wing Station 443
632KB	Main Tank Access Door - Wing Station 470
632LB	Main Tank Access Door - Wing Station 496
632MB	Main Tank Access Door - Wing Station 523
632NB	Main Tank Access Door - Wing Station 549
632PB	Main Tank Access Door - Wing Station 576
632QB	Main Tank Access Door - Wing Station 602
632RB	Main Tank Access Door - Wing Station 629

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Exposed EWIS in the Main Tank - Right Wing (EZAP)
Figure 206/05-42-06-990-806

ECCN 9E991 BOEING PROPRIETARY - See title page for details

HARD LANDING OR HIGH DRAG/SIDE LOAD LANDING - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)

1. General

A. The Inspection

(1) This inspection is divided into two phases (Phase I and Phase II).

(2) The Phase I inspection is applicable when a Hard Landing or a High Drag/Side Load Landing occurs.

(a) If the inspection during Phase I does not show that damage has occurred, no more inspections are necessary.

(b) If the Phase I inspection shows that damage has occurred, the Phase II inspection must be done.

(3) The inspection must be done with sufficient lighting and from within touching distance.

B. Hard Landing

(1) The hard landing procedure is for hard landings at any landing weight.

(a) If the landing is also overweight, the Overweight Landing Conditional Inspection, plus the Hard Landing Conditional Inspection, must be done as defined in the respective procedures. If damage is found in the Phase I Conditional Inspection of either procedure, then both Hard Landing and Overweight landing Conditional Inspection Phase II inspections must be done.

NOTE: For a hard landing that is overweight, the peak recorded vertical acceleration can be significantly less than the G-level thresholds provided for landings at or below the design landing weight.

NOTE: When both the Hard landing Conditional Inspection, and the Overweight Landing Conditional Inspections, as defined above, must be done, it is not necessary to do duplicative tasks twice, such as: Landing gear, nacelle struts, fuselage, wing LE fairings, horizontal stab, cargo area, engine inspection, flight controls. etc.

(2) The pilot must make a decision if a structural examination is necessary.

(a) If all three of the following conditions are met, then the inspection of the nose landing gear is not required:

1) The flight crew reported that the landing was not a hard nose gear landing, or did not include a hard nose gear touchdown after derotation.

2) The landing was not a three-point landing.

3) The landing was not a nose gear first landing.

NOTE: All nose gear inspections are waived under these conditions, not just the NLG axle level check that requires jacking.

(b) If a structural examination is necessary, do the procedure "Phase I Inspection" in this section.

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(c) For landing at or below maximum design landing weight on airplanes with flight data recording systems capable of at least eight (8) samples per second, the following can be used: An indication of a hard landing on the main landing gear is a peak recorded vertical acceleration that exceeds 2.1 G (incremental 1.1 G). This vertical accelerometer data must be measured by the flight data recorder accelerometer at a data sampling rate of at least eight (8) samples per second. This vertical acceleration G-level threshold is valid for a conventional landing with impact with no more than two (2) degrees of airplane roll, main landing gear touchdown first and normal rotation onto the nose gear. For a hard landing that is a hard nose landing or is accompanied by more than two (2) degrees of roll at the time of main landing gear impact, the recorded peak acceleration can be significantly less than the 2.1 G, but a hard landing inspection may still be necessary.

(d) For a landing at or below maximum design landing weight on airplanes with flight data recording systems capable of at least sixteen (16) samples per second, the following can be used: An indication of a hard landing on the main landing gear is a peak recorded vertical acceleration that exceeds 2.2 G (incremental 1.2 G). This vertical accelerometer data must be measured by the flight data recorder accelerometer at a data sampling rate of at least sixteen (16) samples per second. This vertical acceleration G-level threshold is valid for a conventional landing with impact with no more than two (2) degrees of airplane roll, main landing gear touchdown first and normal rotation onto the nose gear. For a hard landing that is a hard nose landing or is accompanied by more than two (2) degrees of roll at the time of main landing gear impact, the recorded peak acceleration can be significantly less than the 2.1 G, but a hard landing inspection may still be necessary.

C. High Drag/Side Load Landing

(1) A high drag/side load landing occurs if the airplane makes a landing with one or more of the conditions that follow:

(a) The airplane skids or overruns from the prepared surface onto an unprepared surface.

(b) The airplane lands short of the prepared surface.

(c) The airplane makes a landing which involves the blowing of two or more tires.

1) If the only inspection trigger that occurred was the blowing of two or more tires, then the blown tires do not count as “damage” for the purposes of determining if a Phase II inspection is necessary. In this case, if the Phase I inspection reveals no other damage beyond blown tires and damaged wheels or brakes, then the aircraft can be returned to service without having to complete a Phase II inspection.

(d) The airplane skids on the runway such that damage of the airplane is suspected.

D. When the conditional inspection tells you to "examine" or “inspect” a component, look for these conditions (replace or repair components, if it is necessary).

(1) Cracks

(2) Pulled apart structure or unusual gaps

(3) Loose paint (paint flakes)

(4) Twisted, buckled, or wrinkled parts (distortion)

(5) Bent components

(6) Fasteners holes that become larger or longer

(7) Loose fasteners

(8) Fasteners that have pulled out, deformed, or are gone

(9) Delaminations

(10) Misalignment

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(11) Interference

(12) Fluid leakage

(13) Other signs of damage.

TASK 05-51-01-210-801

2. Phase I Inspection

A. References

Reference	Title
05-51-10-210-801	Dragged Engine Nacelle/Fan Blade Out/Engine Seizure/Engine and Strut Damage Conditional Inspection (P/B 201)
07-10-03-580-803	Lift the Nose Landing Gear Axle With Axle Jacks-Handling (P/B 201)
07-10-21-580-801	Lift the Airplane Nose with the Nose Jack at Jack Point D (P/B 201)
27-51-00-040-801	Trailing Edge Flap System Deactivation (P/B 201)
27-51-00-440-801	Trailing Edge Flap System Reactivation (P/B 201)
27-51-00-860-803	Extend the Trailing Edge Flaps (P/B 201)
27-51-00-860-804	Retract the Trailing Edge Flaps (P/B 201)
27-81-00-040-801	Leading Edge Flaps and Slats - Deactivation (P/B 201)
27-81-00-080-801	Leading Edge Flap and Slat Locks Removal (P/B 201)
27-81-00-440-801	Leading Edge Flaps and Slats - Activation (P/B 201)
27-81-00-480-801	Leading Edge Flap and Slat Locks Installation (P/B 201)
27-81-00-860-803	Leading Edge Flaps and Slats Extension (P/B 201)
27-81-00-860-804	Leading Edge Flaps and Slats Retraction (P/B 201)
SRM 51-10-03	SKIN WAVINESS INSPECTION FOR RVSM OPERATION

B. Location Zones

Zone	Area
100	Lower Half of Fuselage
500	Left Wing
600	Right Wing
700	Landing Gear and Landing Gear Doors

C. Main Landing Gear Areas

SUBTASK 05-51-01-210-001

(1) Examine the Main Landing Gear (MLG) areas as follows:

(a) The tires.

(b) The wheels.

(c) Place a level on the outboard wheel rims.

1) Make sure that both wheels are vertical.

(d) The shock strut of the MLG for damage, deformation, or fluid leakage.

(e) The doors and linkage of the MLG strut.

(f) The top end of the shock strut for cracks and bolt distortion.

(g) The landing gear beam.

(h) If the airplane departed the prepared surface, do the following:

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1) Examine the brakes and wheels.
   a) If there is dirt or debris in the spokes of the wheels or in the brake areas, remove the wheels and brakes.
   b) If it is necessary to remove the wheels and brakes, examine the axles.
2) If you think that water or mud has reached the level of the wheel bearings or the axles, remove the wheels, brakes, and wheel speed transducers.
   a) Examine the axles for damage.
   b) Clean and remove the water, dirt, mud, or debris.

D. Nose Landing Gear Area

SUBTASK 05-51-01-210-002

(1) Jack the Nose Landing Gear (NLG) (TASK 07-10-21-580-801 or TASK 07-10-03-580-803).

(2) Examine the NLG areas that follow:
   (a) The tires.
   (b) The wheels.
   (c) Place a level on the outboard wheel rims.
      1) Make sure that both wheels are vertical.
   (d) Examine the upper and lower ends of the shock strut of the NLG for damage, deformation, or fluid leakage.
   (e) Examine the outer cylinder of the NLG for damage, deformation, or fluid leakage.
   (f) Examine the doors, hinges, and upper and lower drag strut of the NLG.
   (g) Examine the wheel well of the NLG for buckling and other damage.
      1) Make sure that all of the fasteners are installed in the correct positions.
      2) Make sure that there are no loose fasteners in the web of the nose wheel well near the trunnion support fittings.
      3) Look for fluid leaks.
   (h) If the airplane departed the prepared surface, do the following:
      1) Remove and examine the wheels.
         a) Remove any dirt, debris or foreign objects.
      2) Do an operational check of the NLG steering system.

E. Fuselage Areas

SUBTASK 05-51-01-010-003

(1) Extend the trailing edge flaps, do this task: Extend the Trailing Edge Flaps, TASK 27-51-00-860-803.

SUBTASK 05-51-01-040-001

WARNING DO THE DEACTIVATION PROCEDURE FOR THE LEADING EDGE SLATS AND THE TRAILING EDGE FLAPS. THE SLATS AND FLAPS RETRACT QUICKLY. THIS CAN CAUSE INJURIES TO PERSONNEL OR DAMAGE TO EQUIPMENT.

(2) Do this task: Trailing Edge Flap System Deactivation, TASK 27-51-00-040-801.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 05-51-01-010-005

(3) Extend the leading edge flaps and slats, do this task: Leading Edge Flaps and Slats Extension, TASK 27-81-00-860-803.

SUBTASK 05-51-01-040-002

WARNING DO THE DEACTIVATION PROCEDURE FOR THE LEADING EDGE FLAPS AND SLATS. THE FLAPS AND SLATS MOVE QUICKLY. INJURIES TO PERSONNEL, AND DAMAGE TO EQUIPMENT CAN OCCUR.

(4) Do this task: Leading Edge Flaps and Slats - Deactivation, TASK 27-81-00-040-801.

SUBTASK 05-51-01-210-003

(5) Examine the fuselage areas that follow:

(a) Examine the upper and lower fuselage skin panels forward and aft of the wing.

NOTE: Permanent wrinkles frequently occur on the lower side of the fuselage skins aft of STA 727.

(b) If you found wrinkles on the skin panels and you did not know they were there before, perform an internal inspection in the area of the wrinkle for:

1) Bent or cracked stringers, frames or clips.

2) Buckled or wrinkled webs.

3) Loose or missing fasteners, or paint that has flaked.

NOTE: Refer to SRM 53-00-01 for allowable damage limits for fuselage skin wrinkles.

NOTE: If the wrinkles were there before, make a careful inspection of the wrinkles for cracks.

(c) Examine the keel beam chords, stiffeners, webs and splices at station 663 thru 727A.

SUBTASK 05-51-01-200-001

(6) Examine the external fuselage skin at BS 1016 and the aft side of the pressure bulkhead for signs of buckling, deformation or damage.

(a) Do a detailed visual inspection of the exterior fuselage skin 10.0 in. (25.4 cm) forward and aft of the BS 1016 skin butt joint between stringers S-10L and S-10R.

NOTE: Gain access to the exterior of the fuselage skin at BS 1016 under the vertical stabilizer fairing, 323AL and 323AR.

(b) Do a detailed visual inspection of the entire aft side of the BS 1016 aft pressure bulkhead. Give particular attention to the upper bulkhead structure between skin stringers S-10L and S-10R.

NOTE: Access to the interior unpressurized aft pressure bulkhead area is through the aft access hatch, 311BL.

SUBTASK 05-51-01-210-004

(7) Perform a general visual examination of the areas around the probes and static ports.

(a) If obvious visual damage is found, then perform a Reduced Vertical Separation Minimum (RVSM) check using this task: SRM SUBJECT 51-10-03

F. Wing Areas

SUBTASK 05-51-01-210-005

(1) Examine the wing areas that follow:

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WARNING DO NOT GO INTO THE WING LEADING EDGE AND TRAILING EDGE AREAS BEFORE YOU INSTALL SAFETY LOCKS. IF YOU DO NOT OBEY, INJURY TO PERSONNEL FROM ACCIDENTAL FLAP/SLAT OPERATION CAN OCCUR.

(a) Install the leading edge flaps and slat locks.

1) Do this task: Leading Edge Flap and Slat Locks Installation, TASK 27-81-00-480-801.

(b) The strut-to-wing fairing panels on the upper and lower nacelle.

(c) Examine the wing fixed leading edge fairing.

(d) If there was a dragged engine nacelle condition that occurred, do the following:

1) Dragged Engine Nacelle/Fan Blade Out/Engine Seizure/Engine and Strut Damage Conditional Inspection, TASK 05-51-10-210-801.

G. Put the Airplane Back to Its Usual Condition

SUBTASK 05-51-01-410-001

(1) Install the components you removed if they are serviceable, or install replacement parts.

SUBTASK 05-51-01-080-001

(2) Remove the leading edge flaps and slat locks.

(a) Do this task: Leading Edge Flap and Slat Locks Removal, TASK 27-81-00-080-801.

SUBTASK 05-51-01-440-001

(3) Do the activation procedure for the trailing edge flap system.

(a) Do this task: Trailing Edge Flap System Reactivation, TASK 27-51-00-440-801.

SUBTASK 05-51-01-440-002

(4) Do the activation procedure for the leading edge flap and slat system.

(a) Do this task: Leading Edge Flaps and Slats - Activation, TASK 27-81-00-440-801.

SUBTASK 05-51-01-410-007

(5) Retract the trailing edge flaps, do this task: Retract the Trailing Edge Flaps, TASK 27-51-00-860-804.

SUBTASK 05-51-01-410-008

(6) Retract the leading edge flaps and slats, do this task: Leading Edge Flaps and Slats Retraction, TASK 27-81-00-860-804.

H. Cabin Inspections

SUBTASK 05-51-01-210-006

(1) Do the following cabin inspections that follow to find possible damage:

(a) Do a visual inspection of all ceiling panels for dislodging and evidence due to impact damage.

(b) Do a visual inspection of all ceiling overhead bins for evidence of looseness and impact damage.

(c) Do a detailed visual inspection of all ceiling panels equipped with video monitors.

1) Inspect latches, stops, potting inserts and all fasteners.

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(d) Continue the Cabin Inspection in the Phase II inspection if any cabin damage was found in the above Cabin Inspections including the ceiling panels, central overhead bins, or the video monitors. If no damage was found, no further cabin inspection is required and it is not necessary to continue the cabin inspection in Phase II.

END OF TASK

TASK 05-51-01-210-802

3. Phase II Inspection

A. References

Reference	Title
05-51-10-210-801	Dragged Engine Nacelle/Fan Blade Out/Engine Seizure/Engine and Strut Damage Conditional Inspection (P/B 201)
07-10-01-580-801	Lift the Airplane on Jacks (P/B 201)
12-15-31-610-801	Main Landing Gear Shock Strut Fluid Check (P/B 301)
12-15-41-610-802	Nose Landing Gear Shock Strut Servicing, Airplane on the Ground (P/B 301)
27-51-00-040-801	Trailing Edge Flap System Deactivation (P/B 201)
27-51-00-440-801	Trailing Edge Flap System Reactivation (P/B 201)
27-81-00-040-801	Leading Edge Flaps and Slats - Deactivation (P/B 201)
27-81-00-080-801	Leading Edge Flap and Slat Locks Removal (P/B 201)
27-81-00-440-801	Leading Edge Flaps and Slats - Activation (P/B 201)
27-81-00-480-801	Leading Edge Flap and Slat Locks Installation (P/B 201)
32-00-10-211-801	Landing Gear Inner Cylinder Chrome Inspection (P/B 601)
32-11-21-960-801	Active Seals with the Spare Seals Replacement (P/B 801)
32-21-00-200-801	Nose Landing Gear - Inspection (P/B 601)
32-21-00-700-801	Nose Landing Gear Torsional Freeplay Inspection (P/B 601)
32-32-00-710-802	Main Landing Gear - Operational Test (P/B 501)
32-33-00-710-802	Nose Landing Gear Operational Test (P/B 501)
32-34-00-730-801	Main Gear Manual Extension System Test (Airplane on Jacks) (P/B 501)
32-35-00-730-801	Nose Gear Manual Extension System Test - Airplane on Jacks (P/B 501)
32-51-00-700-801	Nose Wheel Steering System Test (Airplane on Ground) (P/B 501)
71-00-00-200-813-G00	Engine After a Hard Landing Inspection (P/B 601)

B. Location Zones

Zone	Area
100	Lower Half of Fuselage
200	Upper Half of Fuselage
500	Left Wing
600	Right Wing
700	Landing Gear and Landing Gear Doors

C. Main Landing Gear Areas

SUBTASK 05-51-01-210-007

(1) Do the steps that follow to examine the Main Landing Gear (MLG):

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(a) Do these steps if you remove a wheel because of a blown tire:

1) Examine the brake assemblies for damage.

2) Examine the wheel bearings for roughness.

(b) Examine the trunnion fitting area of the outer cylinder.

(c) Examine the link assemblies of the side brace.

(d) Examine the outer and inner cylinder lugs where the torsion links are connected.

(e) Examine the MLG torsion links.

(f) Examine the walking beam fitting and the aft trunnion support fitting on the shock strut for cracks.

(g) Examine the forward trunnion attachment to the rear spar and fuse pins.

(h) Examine the shock strut of the MLG for the correct fluid level, do this task: Main Landing Gear Shock Strut Fluid Check, TASK 12-15-31-610-801.

1) If the fluid level is low; do these steps:

a) Do this task: Active Seals with the Spare Seals Replacement, TASK 32-11-21-960-801.

b) Remove the inner cylinder and examine it for distortion or cracks, do this task: Landing Gear Inner Cylinder Chrome Inspection, TASK 32-00-10-211-801.

c) Examine the orifice support tube for cracks.

NOTE: Do not remove the orifice support tube to examine it.

(i) Examine the wheel well of the MLG for fuel or other fluid leaks.

D. Nose Landing Gear Areas

SUBTASK 05-51-01-210-008

(1) Examine the Nose Landing Gear (NLG) areas that follow:

(a) Do this task: Nose Landing Gear - Inspection, TASK 32-21-00-200-801.

(b) Do this task: Nose Landing Gear Torsional Freeplay Inspection, TASK 32-21-00-700-801.

(c) Examine the shock strut of the NLG to make sure that the pressure is satisfactory.

1) Do this task: Nose Landing Gear Shock Strut Servicing, Airplane on the Ground, TASK 12-15-41-610-802.

(d) If there is damage to the NLG or if there was too much force on the NLG in a hard landing, do these steps:

1) Remove the inner cylinder and examine it for distortion or cracks, do this task: Landing Gear Inner Cylinder Chrome Inspection, TASK 32-00-10-211-801.

2) Examine the orifice support tube for distortion and cracks.

NOTE: Do not remove the orifice support tube to examine it.

(e) Do a check of the rigging of the steering mechanism.

1) Do this task: Nose Wheel Steering System Test (Airplane on Ground), TASK 32-51-00-700-801.

E. Landing gear

SUBTASK 05-51-01-580-001

(1) Do the landing gear checks that follow to make sure that the landing gear operates correctly.

(a) Do this task: Lift the Airplane on Jacks, TASK 07-10-01-580-801.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(b) Retract and then extend the MLG with the normal system to make sure that they operate correctly.

1) Do this task: Main Landing Gear - Operational Test, TASK 32-32-00-710-802.

(c) Retract and then extend the NLG with the normal system to make sure that it operates correctly.

1) Do this task: Nose Landing Gear Operational Test, TASK 32-33-00-710-802.

(d) Retract and then extend the MLG with the manual system to make sure that they operate correctly.

1) Do this task: Main Gear Manual Extension System Test (Airplane on Jacks), TASK 32-34-00-730-801.

(e) Retract and then extend the NLG with the manual system to make sure that it operates correctly.

1) Do this task: Nose Gear Manual Extension System Test - Airplane on Jacks, TASK 32-35-00-730-801.

F. Fuselage Areas

SUBTASK 05-51-01-040-003

WARNING DO THE DEACTIVATION PROCEDURE FOR THE TRAILING-EDGE FLAP-ACTUATION SYSTEMS. DO NOT OPERATE THE FLAP ACTUATION SYSTEMS DURING THIS INSPECTION. IF YOU DO NOT OBEY THIS WARNING, IT CAN CAUSE INJURY TO PERSONS AND DAMAGE TO EQUIPMENT.

(1) Do this task: Trailing Edge Flap System Deactivation, TASK 27-51-00-040-801.

SUBTASK 05-51-01-040-004

WARNING DO THE DEACTIVATION PROCEDURE FOR THE LEADING EDGE FLAPS AND SLAT ACTUATION SYSTEMS. DO NOT OPERATE FLAPS AND SLATS ACTUATION SYSTEMS DURING THIS INSPECTION. FAILURE TO OBEY THIS WARNING CAN CAUSE INJURY TO PERSONS AND DAMAGE TO EQUIPMENT.

(2) Do this task: Leading Edge Flaps and Slats - Deactivation, TASK 27-81-00-040-801.

SUBTASK 05-51-01-210-009

(3) Examine the fuselage areas that follow:

(a) Examine the lower fuselage structure.

NOTE: Make sure that you examine the area below the body crease and from station 727 to 100 in. (254 cm) aft.

(b) Examine the wing-to-fuselage joints at stations 540 and 664.

(c) Examine the upper fuselage structure at station 540, 664 and 727.

(d) Examine the bulkheads at body stations 294.5 and 360 and the fuselage structure immediately outboard of the nose wheel well.

NOTE: You can examine the forward side if you use the access holes in the sidewalls of the nose wheel well. You can examine the aft side of the bulkhead at station 294.5 from the electronics compartment.

(e) Examine the keel beam chords, stiffeners, webs and splices at station 540 thru 727A.

(f) Examine the external surface of the fuselage for fuel or other fluid leaks.

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(g) Remove wing to body fairings or access internally and examine the fuselage skin panels..

(h) Examine the trunnion support fitting at body station 706 for the MLG for cracks and bolt distortion.

(i) If you found wrinkles on the skin panels and you did not know they were there before, perform an internal inspection in the area of the wrinkle for:

1) Bent or cracked stringers, frames or clips.

2) Buckled or wrinkled webs.

3) Loose or missing fasteners, or paint that has flaked.

NOTE: Refer to SRM 53-00-01 for allowable damage limits for fuselage skin wrinkles.

NOTE: Permanent wrinkles frequently occur on the lower side of the fuselage skin aft of STA 727. If the wrinkles were there before, make a careful inspection of the wrinkles for cracks.

(j) Examine at BS 1016 the upper center web installation on the forward side of the pressure bulkhead for any damage.

NOTE: Gain access to inspect the upper center web installation by removing the galley and lavatories as necessary.

G. Wing Areas

SUBTASK 05-51-01-210-010

(1) Do an inspection of the wing areas that follow:

WARNING DO NOT GO INTO THE WING LEADING EDGE AND TRAILING EDGE AREAS BEFORE YOU INSTALL SAFETY LOCKS. IF YOU DO NOT OBEY, INJURY TO PERSONNEL FROM ACCIDENTAL FLAP/SLAT OPERATION CAN OCCUR.

(a) Install the leading edge flaps and slat locks.

1) Do this task: Leading Edge Flap and Slat Locks Installation, TASK 27-81-00-480-801.

(b) Examine the wings, nacelles, and upper and lower nacelle strut-to-wing fairing for fuel or other fluid leaks.

(c) Examine the wing ribs along the aft side of the rear spar, WBL 92.5 and 114.0 for cracks.

(d) Examine the upper and lower trailing edge panels.

NOTE: Make sure that you examine the area near the MLG beam carefully.

(e) Examine the flap areas that follow for sheared rivets and structure damage:

1) The inboard and outboard trailing edge flaps

2) The flap tracks

3) The drive screws

4) The linkages and fairings.

(f) Examine the inboard and outboard spoilers for sheared rivets and structure damage.

(g) Examine the flap track bolts on the outboard trailing edge flap for damage that can occur if the flaps touched the ground.

(h) Examine the flap track bolts on the inboard trailing edge flap for damage that can occur if the flaps touched the ground.

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(i) Make sure that the flight controls move freely and the cable tension is satisfactory.

H. Cabin Inspections

SUBTASK 05-51-01-210-011

(1) Continue the following inspection if any cabin damage was found in the above Cabin Inspection including the ceiling panels, central overhead bins, or the video monitors. If no damage was found, no further cabin inspection is required and it is not necessary to continue this Cabin Inspection.

(a) If ceiling panels without video monitors are found dislodged or damaged: Check for proper latching and installation. Repair as necessary.

(b) If central overhead stowage bins are found with impact damage or are loose, or if ceiling panels equipped with video monitors are found with broken latches: repair as necessary.

(c) Inspect all tie rods of affected zones for evidence of buckling or rupture. If any defect is found, replace as necessary.

(d) Examine lavatory tie rod attachments for damage consisting of breakage, cracks, and deformation. Inspect the tie rods for evidence of buckling or rupture.

(e) Examine the lavatory floor fittings for damage consisting of breakage, cracks, and deformation.

(f) Examine galley tie rod attachments for damage consisting of breakage, cracks, and deformation. Inspect the tie rods for evidence of buckling or rupture.

(g) Examine the galley floor fittings for damage consisting of breakage, cracks, and deformation.

(h) Examine, closet tie rod attachments for damage consisting of breakage, cracks, and deformation.

(i) Examine the closet floor fittings for damage consisting of breakage, cracks, and deformation.

I. Engine Areas

SUBTASK 05-51-01-210-012

(1) Do the steps that follow to examine the engine areas:

(a) Do an engine inspection after a hard landing (TASK 71-00-00-200-813-G00).

(b) If the engine nacelle touched the ground, do this task: Dragged Engine Nacelle/Fan Blade Out/Engine Seizure/Engine and Strut Damage Conditional Inspection, TASK 05-51-10-210-801.

J. Put the Airplane Back to Its Usual Condition

SUBTASK 05-51-01-410-002

(1) Install the components you removed if they are serviceable, or install replacement parts.

SUBTASK 05-51-01-080-002

(2) Remove the leading edge flaps and slat locks.

(a) Do this task: Leading Edge Flap and Slat Locks Removal, TASK 27-81-00-080-801.

SUBTASK 05-51-01-440-003

(3) Do the activation procedure for the trailing edge flap system.

(a) Do this task: Trailing Edge Flap System Reactivation, TASK 27-51-00-440-801.

SUBTASK 05-51-01-440-004

(4) Do the activation procedure for the leading edge flap and slat system.

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(a) Do this task: Leading Edge Flaps and Slats - Activation, TASK 27-81-00-440-801.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SEVERE OR UNUSUAL TURBULENCE, EXCESSIVE MANEUVER, BUFFET OR SPEEDS MORE THAN DESIGN LIMITS - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)

1. General

A. This procedure contains a task that is an inspection of the airplane after one of the following occurs:

(1) Severe turbulence or unusual turbulence

(2) Excessive maneuver

(3) Buffets

(4) Airspeed more than its design limits.

TASK 05-51-04-210-801

2. Severe or Unusual Turbulence, Excessive Maneuver, Buffet, or Speeds More than the Design Limits Conditional Inspection

A. General

(1) When the conditional inspection tells you to "examine" or inspect a component, look for these conditions (repair or replace components, if it is necessary):

(a) Cracks

(b) Pulled apart structure or unusual gaps

(c) Loose paint (paint flakes)

(d) Discoloration or scuffing

(e) Twisted parts (distortion)

(f) Wrinkles or buckles in the structure

(g) Bent components

(h) Loose fasteners

(i) Fasteners that have pulled out, deformed, or are gone

(j) Delaminations

(k) Fiber breakage

(l) Misalignment

(m) Interference

(n) Nicks or gouges

(o) Rotated (tilted) fastener heads

(p) Core damage

(q) Evidence of impact

(r) Other signs of damage.

B. Severe or Unusual Turbulence Condition

(1) Severe turbulence is identified as turbulence that causes large, abrupt changes in the altitude and/or attitude. The airplane could be out of control for short periods. It usually causes large variations in airspeed. Passengers and crew are moved violently against their seat belts and loose objects are moved around the airplane. Unusual turbulence could be vibration, flutter, or flight control related events that the flight crew might perceive as turbulence in a situation where it is not usually encountered.

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(2) An inspection is required when the aircraft has encountered severe or unusual turbulence. The pilot must report the suspected encounter of these events. If the pilot reports that the aircraft has encountered severe or unusual turbulence, refer to “Examine Airplane Structure and Wing Areas” and “Cabin Inspections” sections within this Task.

C. Excessive Maneuver Condition

(1) Excessive maneuvers are maneuvers that result in severe and abnormal aircraft response and/or attitude, and/or exceeding of the flight maneuvering vertical load factors, specified below. Excessive maneuvers could be due to rapid or large alternating control inputs i.e., control column, rudder pedals, and control wheel.

(a) The vertical acceleration load limits shown below are directly applicable to excessive maneuvers.

1) Flaps up . . . . . 2.5g to -1.0g

2) Flaps down

a) Flap detents 1, 5, 15, and 20 . . . . . 2.0g to 0.0g

b) Flap detents 25 and 30, positive limits vary linearly from +2.0g at maximum landing weight to +1.5g at maximum take off weight.

(2) An inspection is required when the aircraft has been involved in an excessive maneuver. The pilot must report the suspected encounter of this event. If the pilot reports that the airplane has been involved in an excessive maneuver, refer to "Examine Airplane Structure and Wing Areas" and "Cabin Inspections" in this section.

D. Maximum Operating Limit Speed

(1) The maximum design speed of the airplane for flight operations are as follows:

NOTE: The Maximum Operating Limit Speed is in Section 1, LIMITATIONS of the Airplane Flight Manual (AFM).

(a) The airplane Maximum Operating Speed (VMO) is 340 knots (630 km/h) when the airplane is at or below 25,968 ft (7915 m).

(b) Above 25,968 ft (7915 m), the airplane is limited to a Maximum Operating Mach (MMO) of 0.82.

(c) The overspeed clacker will activate when the airplane exceeds the VMO or MMO.

E. References

Reference	Title
05-51-10-210-801	Dragged Engine Nacelle/Fan Blade Out/Engine Seizure/Engine and Strut Damage Conditional Inspection (P/B 201)
27-31-00-710-801	Elevator and Elevator Trim Control System - Operational Test (P/B 501)
27-41-00-820-801	Stabilizer Control Cable and Chain - Adjustment (P/B 501)
27-51-00-040-801	Trailing Edge Flap System Deactivation (P/B 201)
27-51-00-440-801	Trailing Edge Flap System Reactivation (P/B 201)
27-51-00-860-803	Extend the Trailing Edge Flaps (P/B 201)
27-81-00-040-801	Leading Edge Flaps and Slats - Deactivation (P/B 201)
27-81-00-080-801	Leading Edge Flap and Slat Locks Removal (P/B 201)
27-81-00-440-801	Leading Edge Flaps and Slats - Activation (P/B 201)
27-81-00-480-801	Leading Edge Flap and Slat Locks Installation (P/B 201)

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F. Location Zones

Zone	Area
100	Lower Half of Fuselage
200	Upper Half of Fuselage
300	Empennage
400	Powerplant and Nacelle Struts
500	Left Wing
600	Right Wing
700	Landing Gear and Landing Gear Doors
800	Doors

G. Severe or Unusual Turbulence, Excessive Maneuver, Buffet, or Speeds More than the Design Limits Conditional Inspection

SUBTASK 05-51-04-210-003

(1) If an unusual vibration occurs in-flight, do the "Examine Airplane Structure and Wing Areas" steps in this task: Severe or Unusual Turbulence, Excessive Maneuver, Buffet, or Speeds More than the Design Limits Conditional Inspection, TASK 05-51-04-210-801.

SUBTASK 05-51-04-210-004

(2) If a stall occurs after the initial buffet or stick shaker condition, do the "Stall (After Initial Buffet or Stick Shaker) Structural Inspection" procedure.

SUBTASK 05-51-04-210-005

(3) If an unusual maneuver or a severe or unusual buffet condition occurs in flight, do the "Examine Airplane Structure and Wing Areas" procedure.

NOTE: Also do this examination if an unusual vibration occurs in flight.

SUBTASK 05-51-04-210-006

(4) Do the "Examine Airplane Structure and Wing Areas" procedure in the task if one or both conditions that follow occurs:

NOTE: When the overspeed event occurs at 25,968 ft (7915 m) or below, it should be viewed in knots. Overspeed events above 25,968 ft (7915 m) should be viewed in mach.

(a) The airplane speed exceeds the VMO by 20 knots (37 km/h) or more.

(b) The airplane speed exceeds the MMO by 0.02 Mach or more.

H. Examine Airplane Structure and Wing Areas

SUBTASK 05-51-04-860-001

(1) Extend the trailing edge flaps and the leading edge flaps and slats.

(a) Extend the trailing edge flaps to the 40-unit position (TASK 27-51-00-860-803).

SUBTASK 05-51-04-040-001

WARNING DO THE TRAILING EDGE FLAP DEACTIVATION PROCEDURE BEFORE YOU DO WORK ON THE FLAP SYSTEM. WITH THE FLAPS ACTIVATED, THE FLAPS CAN MOVE AND CAUSE INJURY TO PERSONS OR DAMAGE TO EQUIPMENT.

(2) Do the deactivation procedure for the trailing edge flap system (TASK 27-51-00-040-801).

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 05-51-04-040-002

WARNING DO THE DEACTIVATION PROCEDURE FOR THE LEADING EDGE FLAPS AND SLATS. THE FLAPS AND SLATS MOVE QUICKLY. INJURIES TO PERSONNEL, AND DAMAGE TO EQUIPMENT CAN OCCUR.

(3) Do the deactivation procedure for the leading edge flap and slat system with the flaps/slats in the fully extended position (TASK 27-81-00-040-801).

SUBTASK 05-51-04-480-001

(4) Install the lockset to prevent movement of the leading edge flaps/slats (TASK 27-81-00-480-801).

SUBTASK 05-51-04-210-008

(5) Do the inspections that follow:

(a) Examine the external surface of the fuselage.

1) Examine these areas carefully:

a) The keel beam between stations 540 and 727

b) The area above the wing aft of station 639

c) The bottom fuselage between stations 727 and 927

d) The fuselage between station 927 and 1088.

2) If you find external damage, examine all of the internal structure in the damaged area.

(b) Examine all of the external and internal structure of the fuselage, section 48 that you can get access to and/or is called out in this procedure for signs of buckling, deformation or damage.

NOTE: Look at the structure from the rear pressure bulkhead to the aft end of the airplane.

1) Examine these areas carefully:

a) Do a detailed visual inspection of the exterior fuselage skin 10 in. (25.4 cm) forward and aft of the BS 1016 skin butt joint between stringers S-10L and S-10R.

b) Do a detailed visual inspection of the entire aft side of the BS 1016 aft pressure bulkhead. Give particular attention to the upper bulkhead structure between skin stringers S-10L and S-10R.

NOTE: Access to the interior unpressurized aft pressure bulkhead area is through the aft access hatch, 311BL.

c) If you find damage in the previous inspection steps of the fuselage - section 48 - of the aft pressure bulkhead around BS 1016, and do a detailed visual inspection of the upper center web installation of the BS 1016 bulkhead for damage.

<1> Remove the galley and lavatories as necessary to gain access to the upper center web installation.

NOTE: The upper center web installation of the BS 1016 bulkhead on the forward side of the pressure bulkhead.

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d) Examine the exterior fuselage skin at BS 1016.

NOTE: Gain access to the exterior fuselage skin at BS 1016 behind the vertical stabilizer fairing (panels 323AL and 323AR).

2) Look at the jackscrew and hinges for signs of binding as follows:

a) Examine the stabilizer jackscrew-mechanism mount fittings and support structure.

(c) Examine the horizontal stabilizer external surfaces for signs of buckling as follows:

1) Make sure that you look at the skin splices.

2) If external damage to the horizontal stabilizer is found, do the steps that follow:

a) Examine the horizontal stabilizer rear spar.

b) Examine the horizontal stabilizer rear spar webs.

c) Examine the terminal fittings for the front and rear spar of the horizontal stabilizer.

d) Examine all the internal primary structure in the damaged area that has access.

(d) Examine the elevator external surfaces.

1) If you find external damage to the elevator, do these steps:

a) Examine the front spar web.

b) Examine the elevator actuator bearings for signs of binding.

c) Examine the horizontal stabilizer rear spar webs.

d) Move the elevator slowly by hand:

<1> Make sure that the elevator moves smoothly without binding.

<2> Make sure that there is no damage to the elevator hinge bearings.

NOTE: You can feel a slight vibration or racheting noise from the hinge bearings if there is damage.

(e) Examine the fin external surfaces for signs of buckling.

1) If you find external damage to the fin, do the steps that follow:

a) Examine the fin attach fittings.

b) Examine the fin rear spar web.

c) Examine all of the internal primary structure in the damaged area that has access.

(f) Examine the rudder for signs of buckling.

1) If you find external damage to the rudder, examine all of the internal primary structure in the damaged area that has access.

(g) Examine the external surfaces around the top and bottom wing-to-body attachment; this includes the wing-to-body fairing.

1) If you see external damage; do the steps that follow:

a) Examine the body-to-wing joints.

b) Examine landing gear beam-to-body joints.

c) Examine the upper-wing skin splice.

(h) Examine the external surfaces of the wing at the skin splices.

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1) Examine the external surface of the top of the wing trailing edge.
2) If there is external damage, do this step:
   a) Examine all of the internal primary structure in the damaged area that has access.

(i) Examine the winglets.

(j) Examine the wing control surfaces as follows:
1) If you find external damage, do these steps:
   a) Examine the spars.
   b) Examine all of the internal primary structure in the damaged area that has access.
   c) Examine the control surface attachments at the front and rear spars.

SUBTASK 05-51-04-720-001

(6) Make sure that the flight controls move freely as follows:
(a) If unusual conditions are found, do the steps that follow:
1) Do a check of all the flight control force specifications.
2) Do this task: Stabilizer Control Cable and Chain - Adjustment, TASK 27-41-00-820-801.
3) Do this task Elevator and Elevator Trim Control System - Operational Test, TASK 27-31-00-710-801.

NOTE: If necessary, refer to the applicable sections in AMM Chapter 27, Flight Controls.

SUBTASK 05-51-04-210-009

(7) Examine the engine strut panels, doors, and lower surface of the nacelle cowling as follows:
(a) If you find unusual conditions, do this task: Dragged Engine Nacelle/Fan Blade Out/Engine Seizure/Engine and Strut Damage Conditional Inspection, TASK 05-51-10-210-801.

SUBTASK 05-51-04-210-010

(8) Examine the areas that follow for signs of fuel leaks or other types of fluid leaks:
(a) The wing
(b) The engine nacelles
(c) The fuselage external surfaces
(d) All landing gear wheel wells.

SUBTASK 05-51-04-210-011

(9) If flight load accelerations are more than flight manual limits, and the airplane showed signs of much damage after the most recent severe turbulence event, check the airplane alignment.

NOTE: The alignment check procedure is in the Structural Repair Manual (SRM).

SUBTASK 05-51-04-210-012

(10) Examine the landing gear doors as follows:
(a) If the landing gear position lights were on during the turbulent part of the flight, do a check of the landing gear doors and uplocks.

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SUBTASK 05-51-04-210-013

(11) Examine the inspection and blowout doors on the bottom surface of the wing and engine nacelles.

SUBTASK 05-51-04-210-018

(12) Examine the inspection and access doors on the bottom of the fuselage.

I. Stall (After Initial Buffet or Stick Shaker) Structural Inspection

SUBTASK 05-51-04-210-014

(1) Do the inspections that follow to find possible damage.

(a) Examine all of the internal structure of the fuselage, section 48 that has access as follows:

1) Look at the structure from the rear pressure bulkhead to the aft end of the airplane.

2) Look carefully at the areas that follow:

a) The aft fuselage bulkheads

b) The horizontal stabilizer center sections

c) The attach fittings for the horizontal stabilizer (Station 1088 and 1156)

d) The terminal fittings for the front and rear spar of the horizontal stabilizer

e) The stabilizer hinge fittings

f) The stabilizer jackscrew-mechanism mount fittings and support structure.

3) Make sure that the stabilizer jackscrew and hinges do not bind.

SUBTASK 05-51-04-210-015

(2) Examine the horizontal stabilizer external surfaces as follows:

(a) Look for signs of buckling.

(b) Look at the skin splices for cracks.

(c) If you find external damage to the horizontal stabilizer, do these steps:

1) Examine the spars.

2) Examine all of the internal primary structure in the damaged area that has access.

SUBTASK 05-51-04-210-016

(3) Examine the elevator external surfaces.

(a) If you find external damage to the elevator, do these steps:

1) Examine the front spar web.

2) Examine the elevator actuator bearings for signs of binding.

3) Examine the elevator hinge bearing for signs of binding.

SUBTASK 05-51-04-720-002

(4) Make sure that the flight controls move freely.

(a) If you find unusual conditions, do these steps:

1) Do a check of all the flight control force specifications.

2) Do this task: Stabilizer Control Cable and Chain - Adjustment, TASK 27-41-00-820-801.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

3) Do this task Elevator and Elevator Trim Control System - Operational Test, TASK 27-31-00-710-801.

NOTE: If necessary, refer to the applicable sections in AMM Chapter 27, Flight Controls.

J. Cabin Inspection (After Severe or Unusual Turbulence)

SUBTASK 05-51-04-210-017

(1) Do the inspections that follow to find possible damage:

(a) Do a visual inspection of all ceiling panels for dislodging and evidence do to impact damage.

(b) Do a visual inspection of all ceiling overhead bins for evidence of looseness and impact damage.

(c) Do a detailed visual inspection of all ceiling panels equipped with video monitors.

1) Inspect latches, stops, potting inserts and all fasteners.

(d) Continue the following inspection if you find cabin damage in the above cabin inspection including the ceiling panels, central overhead bins, or the video monitors.

1) If you do not find damage, further inspection is not necessary.

2) If you find ceiling panels without video monitors dislodged or damaged, do these steps:

a) Do a check for proper latching and installation.

b) Repair as necessary.

3) If you find impact damage on the central overhead stowage bins or they are loose, or if ceiling panels equipped with video monitors are found with broken latches, repair as necessary.

4) Inspect all tie rods of affected zones for evidence of buckling or rupture, replace as necessary.

5) Examine lavatory tie rod attachments for damage consisting of breakage, cracks, and deformation.

6) Examine the lavatory tie rods for evidence of buckling or rupture.

7) Examine the lavatory floor fittings for damage consisting of breakage, cracks, and deformation.

8) Examine galley tie rod attachments for damage consisting of breakage, cracks, and deformation.

9) Examine the galley tie rods for evidence of buckling or rupture.

10) Examine the galley floor fittings for damage consisting of breakage, cracks, and deformation.

11) Examine, closet tie rod attachments for damage consisting of breakage, cracks, and deformation.

K. Put the Airplane Back to Its Usual Condition

SUBTASK 05-51-04-410-001

(1) Install the components you removed if they are serviceable, or install replacement parts.

SUBTASK 05-51-04-080-001

(2) Do this task: Leading Edge Flap and Slat Locks Removal, TASK 27-81-00-080-801.

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SUBTASK 05-51-04-440-001

(3) Do this task: Trailing Edge Flap System Reactivation, TASK 27-51-00-440-801.

SUBTASK 05-51-04-440-002

(4) Do this task: Leading Edge Flaps and Slats - Activation, TASK 27-81-00-440-801.

——— END OF TASK ———

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HIGH ENERGY STOP/HEAT DAMAGE CONDITION - MAINTENANCE PRACTICES

1. General

A. This procedure has these tasks:

(1) Inspect the landing gear wheels, brakes and axles after a high energy stop condition

(2) Heat Damage Inspection

(3) Tire Removal After Overspeed Landing.

TASK 05-51-07-210-801

2. High Energy Stop

A. General

(1) The level of the inspection depends on the level of absorbed kinetic energy.

(2) The heat absorbed by the airplane brake is slowly but not fully transmitted to the wheel, tire, axle, and the in-axle components.

(3) The wheels have fuse plugs which are designed to melt and release the tire pressure.

NOTE: The fuse plugs are design to melt at a specific temperature.

(a) This is to stop ruptures of the tires and wheels when the wheel temperature gets too high.

(4) If a brake fire occurs, refer to the section in this task titled, “High Energy Stop Condition Inspection - IN FUSE PLUG MELT range or Brake Fire.

(5) Use the brake energy chart to approximate energy absorbed by a brake unit (Figure 201 or Figure 202).

(a) This chart will give only the approximate energy absorbed during the stop.

1) The factors that follow will also affect the energy absorbed:

a) The residual energy from the previous stop.

b) The runway slope.

c) The wind conditions.

d) The thrust reverser use.

(b) Listed below are example values to show you how to use the Brake Energy Chart to obtain result values (Figure 201 or Figure 202):

NOTE: The brake temperature monitoring system (BTMS) indications are also shown in the bottom of the figure. If brake cooling is determined from the BTMS, use the hottest brake indication 10 to 15 minutes after the airplane has come to a complete stop or in flight with gear retracted to determine recommended cooling schedule.

NOTE: The data values given below are for example only and must not be used to determine a specific airplane absorbed energy by a brake unit. The airplane operators must use actual values generated by the specific airplane high energy stop/heat event.

1) Example input values:

a) Gross Weight - 135,000 lb (61,235 kg)

b) Brakes on Speed - 120 knots (no wind)

c) Pressure Altitude - 5000 ft (2 km)

d) Outside Air Temperature - 80°F (27°C)

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e) Landing stop using maximum manual braking

f) No thrust reversers.

2) Example result values:

a) Resultant Brake Energy - 26,000,000 ft-lb (35,251,268 N·m)

b) Resultant is in the COOLING RECOMMENDED range.

(6) A high energy condition can be a refused takeoff.

(7) A high energy condition can also be any stop or sequence of stops that collect energy in the CAUTION or FUSE PLUG MELT range (Figure 201 or Figure 202).

(8) An indication that a high energy stop, or equivalent, has occurred is the release of a wheel fuse plug.

NOTE: If fuse plug releases do occur, the condition is a high energy stop within the fuse plug melt range.

(a) Energy levels are different between brakes after stops in the COOLING RECOMMENDED range.

(b) One or more brakes could have absorbed energy in the CAUTION range, and one or more wheel fuse plugs released.

(9) All tires that have been subjected to unusual service events, such as high energy rejected takeoffs, high energy stops, or high energy overspeed landings where thermal fuse plugs have melted, should be removed and discarded.

(10) All tires on the airplane that remain inflated after unusual service events should be removed and sent to a wheel repair facility for an inspection.

(11) If no high energy condition was determined, put the airplane back to its usual condition.

B. References

Reference	Title
05-51-95-100-801	Cleaning After Dry Chemical Fire Extinguisher Used (P/B 201)
10-11-05-500-801	Chock Installation Winds/Gusts Maximum 40 mph (35 Knots) (P/B 201)
10-11-05-500-802	Chock Installation in Winds More Than 35 Knots - Handling (P/B 201)
32-41-41-000-801	Main Landing Gear Brake Removal (P/B 401)
32-41-41-700-802	Main Landing Gear Brake Fast Check (Wheel Installed on the Airplane) (P/B 601)
32-41-41-700-803	Main Landing Gear Brake Inspection (Wheel Removed from the Airplane) (P/B 601)
32-42-11-000-801	Antiskid Wheel Speed Transducer Removal (P/B 401)
32-45-00-700-801	Wheels Fast Check (Wheel Installed on the Airplane) (P/B 601)
32-45-00-700-803	Landing Gear Tire Inspection (P/B 601)
32-45-11-000-801	Main Landing Gear Wheel and Tire Assembly Removal (P/B 401)

C. Location Zones

Zone	Area
713	Nose Landing Gear
734	Left Main Landing Gear
744	Right Main Landing Gear

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D. High Energy Stop Conditional Inspection - In CAUTION range

SUBTASK 05-51-07-210-001

(1) Do the steps that follow for the In caution range inspection:

(a) Move the airplane from the runway.

1) Do not use the brakes very much when you move the airplane.

2) Do not set the parking brake.

WARNING DO NOT GO NEAR THE MAIN LANDING GEAR FOR 1 HOUR AFTER THE AIRPLANE MAKES A HIGH-ENERGY STOP. INJURIES TO PERSONNEL CAN OCCUR.

(b) Let the brakes, tires, and wheels cool so you can touch them.

(c) Examine the tires (TASK 32-45-00-700-803).

NOTE: Low tire pressure compared to the other tires can indicate a melted fuse plug.

1) If a fuse plug has melted, do the High Energy Stop Conditional Inspection - In FUSE PLUG MELT range or Brake Fire.

(d) Examine the wheels (TASK 32-45-00-700-801).

(e) Examine the brakes (TASK 32-41-41-700-802).

(f) If the high energy condition was a refused takeoff, do this step:

1) Examine the thrust reverser blocker door cover assembly for cracking.

E. High Energy Stop Conditional Inspection - In FUSE PLUG MELT range or Brake Fire

SUBTASK 05-51-07-210-002

(1) Do the steps that follow for the In FUSE PLUG MELT range inspection:

(a) Move the airplane from the runway immediately because the tires will possibly deflate.

(b) Leave the parking brake off.

NOTE: Do not set the parking brake.

(c) Do one of these steps:

NOTE: Do not let the airplane move.

1) Keep the tow tug connected to the airplane.

2) Put the chocks on the nose landing gear tires (TASK 10-11-05-500-801 or TASK 10-11-05-500-802).

WARNING DO NOT GO NEAR THE MAIN LANDING GEAR FOR 1 HOUR AFTER THE AIRPLANE MAKES A HIGH-ENERGY STOP. INJURIES TO PERSONNEL CAN OCCUR.

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(WARNING PRECEDES)

WARNING DO NOT APPLY EXTINGUISHER OR COOLANT DIRECTLY ON THE INFLATED TIRE OR THE WHEEL. AN EXPLOSION CAN BE CAUSED AND INJURY TO PERSONS CAN OCCUR.

(d) Do one of these steps to decrease the brake temperature:

NOTE: If a chemical agent is used to extinguish a brake-area fire, thoroughly rinse the extinguishing agent from the brakes and surrounding components once they have cooled. Use large amounts of low-pressure, clean water to rinse (Cleaning After Dry Chemical Fire Extinguisher Used, TASK 05-51-95-100-801).

NOTE: A different source of cooling can be an air conditioning cart or truck.

1) After 1 hour, use water mist or fog on the wheel or tire to decrease the temperature.
2) Wait 2 to 3 hours for the brakes, wheels and tires to cool so that they can be touched.

(e) Examine the tires on the axles where all tires are inflated (TASK 32-45-00-700-803).

(f) Examine the wheels on the axles where all tires are inflated (TASK 32-45-00-700-801).

(g) Examine the brakes on the axles where all tires are inflated (TASK 32-41-41-700-802).

(h) Remove all main gear tires and wheels on the axles where at least one tire was deflated (TASK 32-45-11-000-801):

NOTE: Do this step after the landing gear is cool and safe to go near.

(i) Discard the tires from the wheels with melted fuse plugs.

(j) Discard the tires from the wheels with good fuse plugs or send them to a wheel repair facility for inspection.

(k) On the axles where at least one tire was deflated, look for seized or damaged brakes, do this task: Main Landing Gear Brake Inspection (Wheel Removed from the Airplane), TASK 32-41-41-700-803.

(l) Remove the antiskid wheel speed transducer on the axles where at least one tire was deflated, do this task: Antiskid Wheel Speed Transducer Removal, TASK 32-42-11-000-801.

(m) Remove damaged brakes from the axles (TASK 32-41-41-000-801).

(n) If a dry chemical fire extinguisher was used to extinguish a landing gear brake fire, do these steps:

1) Visually check for chemical fire extinguisher residue.
2) Remove the carbon brake assemblies that have chemical fire extinguisher.
3) Follow the specified and approved instructions for the disposition of the carbon brake assemblies.

(o) Examine the main landing gear axle as follows:

1) Examine the Ti-Cad (titanium-cadmium) plating for heat damage.

NOTE: Heat damage can cause the steel substrate to become brittle. This condition is not always found by non-destructive inspection procedures.

NOTE: If you find an inorganic protective coating, the Ti-Cad plating could have been removed. The coating could have been applied during a previous inspection/repair.

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a) Look for a white oxide material and blistered or melted plating.

b) If the plating shows signs of heat damage, remove the components.

c) Do this task: Heat Damage Inspection (Ammonium Persulfate Solution), TASK 05-51-07-280-801.

2) Examine the hydraulic fluid-resistant paint on the axles and the lower end of the shock strut inner cylinder as follows:

a) Look for a brown shade color that was caused by an overheat condition.

3) If the above two steps show that the coating has blistered and the parts have been overheated, do these steps:

a) Remove the parts for a hardness test.

b) Send the parts to the shop for approved repairs.

4) If the inspection in the first step above shows that the coating has melted, do this step:

a) Use the fluorescent magnetic particle inspection techniques to examine for evidence of embrittlement or cracking.

NOTE: Additional hand polishing and visual inspection techniques can be used if it is necessary.

WARNING

MAKE SURE THAT THE POWER CABLE OF THE BORESCOPE IS IN GOOD CONDITION. IF THERE ARE CIRCUMFERENTIAL CUTS, FRAYED AREAS, OR RUPTURES TO THE EXTERNAL RUBBER COVER OF THE CABLE, INJURY TO PERSONS AND DAMAGE TO EQUIPMENT CAN OCCUR.

(p) Examine the paint (green primer or light gray enamel) on the inner surfaces (bore) of the axle with a borescope as follows:

NOTE: Use the borescope manufacturer instructions and look to a minimum depth of 16 inches (41 centimeters).

1) Look for discoloration or blistering.

NOTE: Green paint will change to a light brown or black color. Light gray paint will change to a yellow color.

2) If the plating shows signs of heat damage, do this task: Heat Damage Inspection (Ammonium Persulfate Solution), TASK 05-51-07-280-801.

3) If the paint shows only a minimum discoloration, you can wait for the Heat Damage Inspection (Ammonium Persulfate Solution).

a) When the airplane gets back to the primary base, do this task: Heat Damage Inspection (Ammonium Persulfate Solution), TASK 05-51-07-280-801.

NOTE: Do not land the airplane more than three times before you do this inspection.

(q) If the high energy condition was due to a refused takeoff do this step:

1) Examine the thrust reverser blocker door cover assembly for cracking.

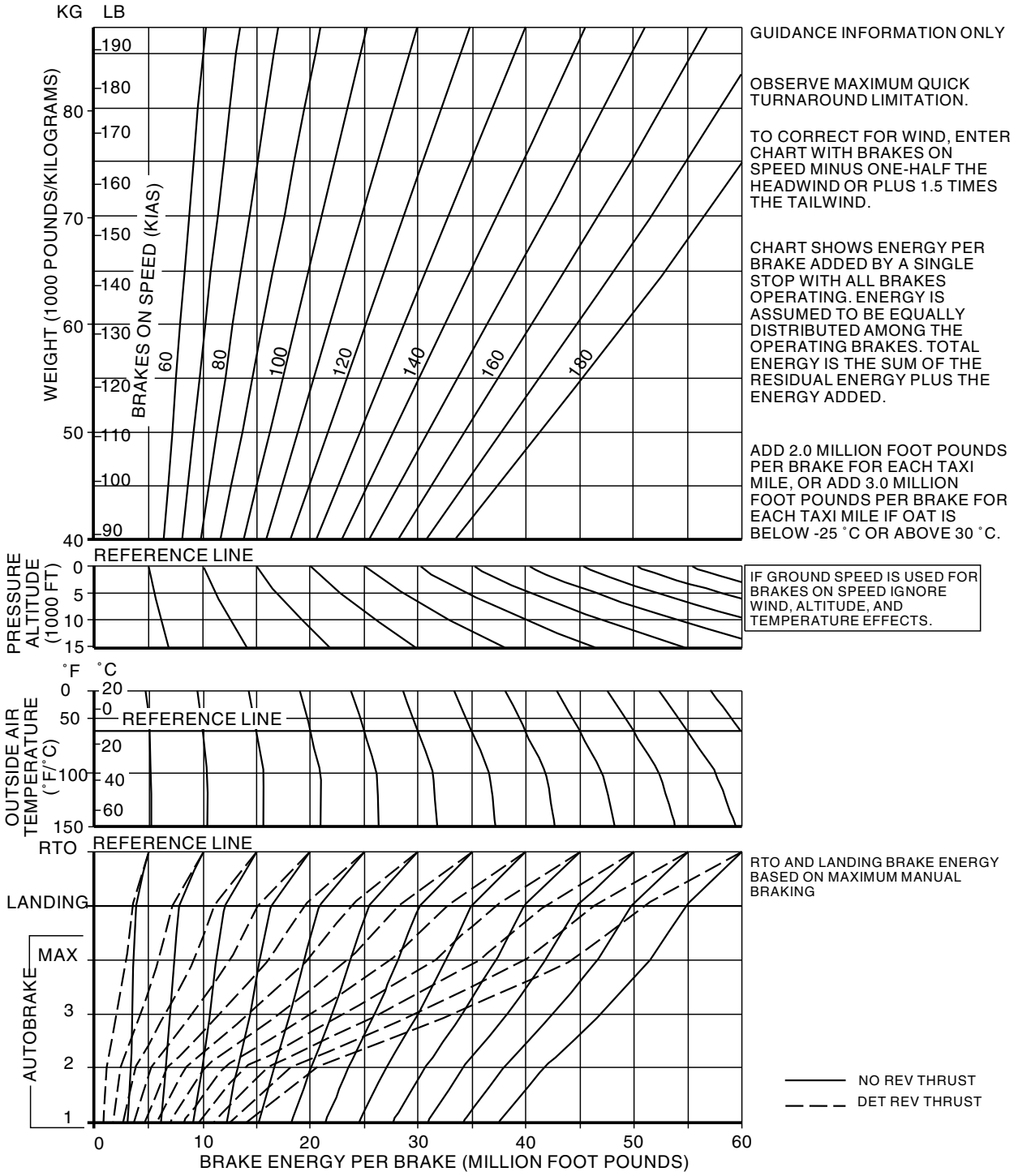
F. Put the Airplane Back to Its Usual Condition.

SUBTASK 05-51-07-420-001

(1) Install the components you removed if they are serviceable, or install replacement parts.

END OF TASK

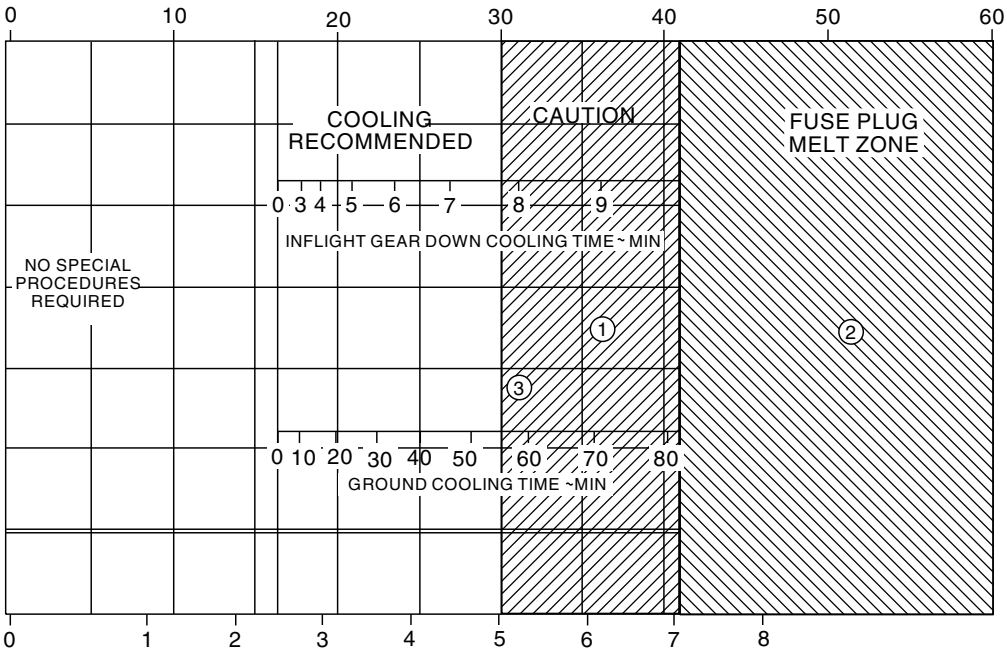
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Carbon Brake Cooling Schedule
Figure 201/05-51-07-990-805 (Sheet 1 of 2)

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OBSERVE MAXIMUM QUICK TURNAROUND LIMITATION

① WHEEL FUSE PLUGS MAY MELT. DELAY TAKEOFF AND INSPECT AFTER ONE HOUR. IF OVERHEAT OCCURS AFTER TAKEOFF, EXTEND GEAR SOON FOR AT LEAST 7 MINUTES.

② CLEAR RUNWAY IMMEDIATELY. UNLESS REQUIRED, DO NOT SET PARKING BRAKE. DO NOT APPROACH GEAR OR ATTEMPT TAXI FOR ONE HOUR. TIRE WHEEL AND BRAKE REPLACEMENT MAY BE REQUIRED. IF OVERHEAT OCCURS AFTER TAKEOFF, EXTEND GEAR SOON FOR AT LEAST 12 MINUTES.

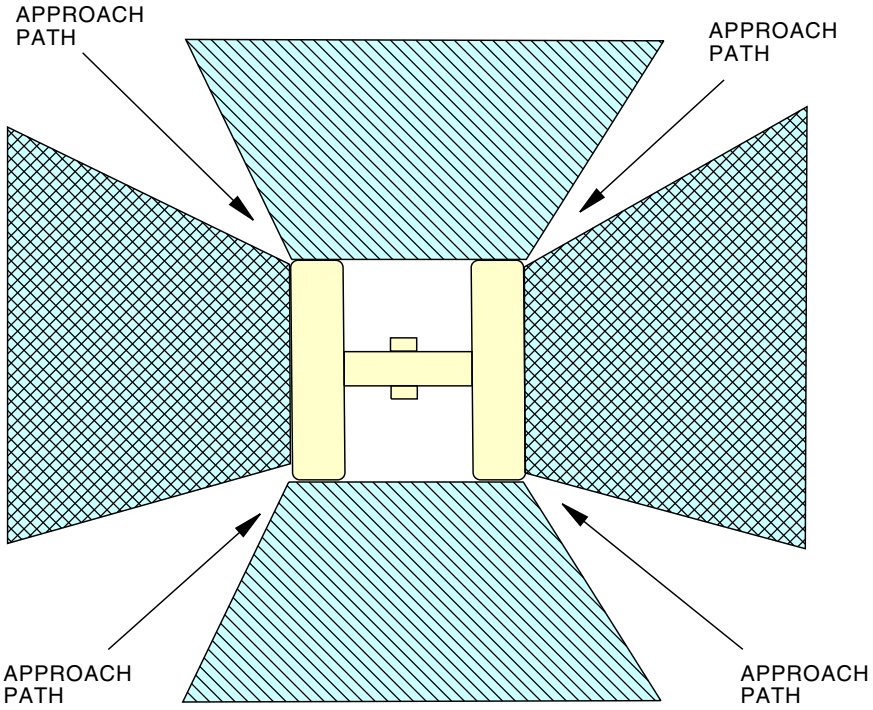
BRAKE TEMPERATURE MONITORING SYSTEM INDICATION MAY BE USED 10 TO 15 MINUTES AFTER AIRPLANE HAS COME TO A COMPLETE STOP OR INFLIGHT WITH GEAR RETRACTED TO DETERMINE RECOMMENDED COOLING SCHEDULE.

③ FOR AIRPLANES WITH TBMS (COMBINED TIRE PRESSURE AND BRAKE TEMPERATURE MONITORING SYSTEM), THE BEGINNING OF THE CAUTION RANGE CAN VARY FROM 5.0 TO 6.2 DEPENDING ON WHEEL TEMPERATURE.

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Carbon Brake Cooling Schedule
Figure 201/05-51-07-990-805 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



TIRE HAZARD AREA
RIM HAZARD AREA

NOTE:

DO NOT APPROACH MLG FOR INSPECTION OR
INSTALLATION OF GEAR PINS UNTIL CLEARED

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Hot Brake and Tire Danger Areas
Figure 202/05-51-07-990-806

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-51-07-280-801

3. Heat Damage Inspection (Ammonium Persulfate Solution)

A. General

(1) This inspection is used to find if the high strength steel that showed visible signs of heat damage, had changed.

(2) This inspection will examine for a change in the temper or heat treat properties.

(3) This inspection will usually occur on the components of the landing gear axles.

(4) The signs of discolored or blistered paint or plating shows that a general intense heat has changed the temper of the axle. When this happens, the ammonium persulfate procedure should be applied to the damaged part of the axle.

B. References

Reference	Title
32-11-85-000-801	Main Landing Gear Axle Removal (P/B 401)
32-11-85-420-801	Main Landing Gear Axle Installation (P/B 401)
32-41-41-400-801	Main Landing Gear Brake Installation (P/B 401)
32-42-21-400-801	Antiskid/Autobrake Control Unit Installation (P/B 401)
32-45-11-400-801	Main Landing Gear Wheel and Tire Assembly - Installation (P/B 401)
51-21-21-370-801	Prepare the Surface to be Painted (P/B 701)
SOPM 20-10-02	Repair of Plated Steel Parts Heat Treated 200 to 305 KPSI

C. Consumable Materials

Reference	Description	Specification
B00081	Solvent - Trichloroethylene	ASTM D4080
B00102	Abrasive - Aluminum Oxide Coated Cloth	
B50262	Alcohol - Isopropyl, grade A (water content 0.1 percent max.)	TT-I-735
G00034	Cotton Wiper - Process Cleaning Absorbent Wiper (Cheesecloth, Gauze)	AMS3819 Class 1 Grade A or B Form 1 (Supersede BMS15-5 CL A)
G02412	Compound - Ammonium Persulfate	

D. Location Zones

Zone	Area
713	Nose Landing Gear
734	Left Main Landing Gear
744	Right Main Landing Gear

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E. Heat Damage Inspection (Ammonium Persulfate Solution)

SUBTASK 05-51-07-120-001

WARNING

REFER TO THE APPLICABLE MANUFACTURER'S OR SUPPLIERS'S MSDS FOR:

- MORE PRECAUTIONARY DATA
- APPROVED SAFETY EQUIPMENT
- EMERGENCY MEDICAL AID.

TALK WITH THE LOCAL SAFETY DEPARTMENT OR AUTHORITIES FOR THE PROCEDURES TO DISCARD THESE HAZARDOUS AGENTS.

WARNING

THE ACTIVE INGREDIENTS OF ETCHANTS ARE POISONOUS AND CORROSIVE. MAKE SURE ALL PERSONS OBEY ALL OF THE PRECAUTIONS WHEN ETCHANTS ARE USED. - DO NOT USE IN AREAS WHERE THERE IS HIGH HEAT, SPARKS, OR FLAMES. - USE IN AN AREA OPEN TO THE AIR. - CLOSE THE CONTAINER WHEN NOT USED. - DO NOT GET ETCHANTS IN THE EYES, ON THE SKIN, OR ON YOUR CLOTHES. - DO NOT BREATHE THE GAS. - TALK WITH LOCAL SAFETY DEPARTMENT OR AUTHORITIES FOR: MORE PRECAUTIONARY DATA, APPROVED SAFETY EQUIPMENT, EMERGENCY MEDICAL AID, AND THE PROCEDURES TO DISCARD THESE HAZARDOUS AGENTS.

(1) Apply the solution, ammonium persulfate compound, G02412, as follows:

NOTE: 0.22 lb (100 g) of ammonium persulfate per 0.27 gal (1.02 l) of tap water will make the necessary solution.

(a) Remove the paint from the heat damage areas.

(b) Strip the cadmium surface with sandpaper, abrasive cloth, B00102, by hand.

(c) Strip a minimum area of 0.5 in. (12.7 mm) larger than the area that is to be tested.

(d) Clean the area to be etched, with an applicable solvent like solvent, B00081, or alcohol, B50262.

(e) Make sure that all the cadmium plating is removed by using the cadmium spot check solutions as follows:

1) Put a drop of Cadmium Spot Check Solution 1 (SOPM 20-10-02) on the test spot and let it stay for approximately 30 seconds.

2) Soak up the liquid drop onto a piece of filter paper.

3) Add a drop of Cadmium Spot Check Solution 2 (SOPM 20-10-02). If this becomes yellow, there is remaining cadmium on the surface of the part.

4) Repeat sanding plus solvent cleaning until the plating is completely removed.

(f) Apply the solution, ammonium persulfate compound, G02412, with a cheesecloth, cotton wiper, G00034, on the surface to be tested for 30 to 60 seconds.

(g) Rinse the surface with hot or cold water immediately or alcohol, B50262.

(h) Dry the surface with clean, dry compressed air, immediately.

SUBTASK 05-51-07-210-003

(2) Examine the etched areas as follows:

(a) Examine the parts with a bright light and without magnification for signs of heat damage.

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(b) If all of the etched area is the same shade of gray, there is no change to the temper of the steel.

(c) If the area has been too hot it will be a lighter or darker color than the normal color.

NOTE: Darker color shows over-tempered martensite.

NOTE: Darker color in a lighter circle shows untempered martensite surrounded by overtempered material.

(d) If the etched area is mottled (has spots or streaks of a different color), replace the axle (TASK 32-11-85-000-801 and TASK 32-11-85-420-801).

F. Put the Airplane Back to Its Usual Condition

SUBTASK 05-51-07-120-002

(1) Remove the etch with applicable abrasive paper, abrasive cloth, B00102.

NOTE: Do this step if the part is serviceable.

NOTE: If it is not serviceable, install replacement parts.

SUBTASK 05-51-07-120-003

(2) Stylus the cadmium plate areas where the plating was removed.

SUBTASK 05-51-07-370-001

(3) Refinish the surface with the correct primer and paint (TASK 51-21-21-370-801).

SUBTASK 05-51-07-400-001

(4) Install the axle if it is applicable (TASK 32-11-85-420-801).

SUBTASK 05-51-07-400-002

(5) Do this task: Main Landing Gear Brake Installation, TASK 32-41-41-400-801.

SUBTASK 05-51-07-400-003

(6) Do this task: Antiskid/Autobrake Control Unit Installation, TASK 32-42-21-400-801.

SUBTASK 05-51-07-400-004

(7) Do this task: Main Landing Gear Wheel and Tire Assembly - Installation, TASK 32-45-11-400-801.

——— END OF TASK ———

TASK 05-51-07-000-801

4. Tire Removal After Overspeed Landing

A. General

(1) If the tires have been subjected to an overspeed landing above the rated tire speed, all tires on the airplane should be removed and discarded.

B. References

Reference	Title
32-45-11-000-801	Main Landing Gear Wheel and Tire Assembly Removal (P/B 401)
32-45-21-000-801	Nose Landing Gear Wheel and Tire Assembly Removal (P/B 401)

C. Tire Removal After Overspeed Landing

SUBTASK 05-51-07-020-001

(1) If the tires have been subjected to an overspeed landing above the rated tire speed, do these steps:

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(a) Do this task: Main Landing Gear Wheel and Tire Assembly Removal, TASK 32-45-11-000-801.

(b) Do this task: Nose Landing Gear Wheel and Tire Assembly Removal, TASK 32-45-21-000-801.

(c) Discard all tires after removing them from the airplane.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details

FLAP/SLAT DOWN OVERSPEED CONDITION - MAINTENANCE PRACTICES

1. General

A. First you must determine if the trailing edge flaps need to be inspected using the following criteria.

(1) When the trailing edge flaps are lowered at speeds more than the placard speeds permit, the flap components and related structures must be examined for damage and conditions defined in this procedure.

B. Second you must determine if the leading edge slats need to be inspected using the following criteria.

(1) When the leading edge slats are lowered at speeds more than the flaps 1 placard speed for flap detents 1, 2, and 5, or more than the alternate flap extend speed placard (230 knots) for flap detents 10 and above, the slat components must be examined for damage and conditions defined in this procedure.

C. The conditional inspections are divided into two phases:

(1) Phase I Inspection.

(2) Phase II Inspection.

D. You must do the conditional inspection(s) as follows:

(1) If the overspeed was less than or equal to 5 knots, do the Phase I inspection within 100 flight hours of the overspeed indication or within 25 flight cycles of the discovery, whichever occurs later.

(a) If damage is found during the Phase I inspection, do the Phase II inspection before the next flight.

(2) If the overspeed was greater than 5 knots but no greater than 15 knots, do the Phase I inspection within 100 flight hours of the overspeed indication or within 5 flight cycles of the discovery, whichever occurs later.

(a) If damage is found during the Phase I inspection, do the Phase II inspection before the next flight.

(3) If the overspeed was greater than 15 knots, do the Phase I and Phase II inspections before the next flight.

E. When the conditional inspection tells you to "examine" a component, look for these conditions (repair or replace components, if it is necessary):

(1) Cracks

(2) Pulled apart structure or unusual gaps

(3) Loose paint (paint flakes)

(4) Twisted parts (distortion)

(5) Bent components

(6) Loose fasteners

(7) Fasteners holes that became larger or longer

(8) Fasteners that have pulled out, deformed, or are missing

(9) Delaminations

(10) Fiber breakage

(11) Misalignment

(12) Interference

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(13) Wrinkles or buckles in the structure

(14) Other signs of damage.

F. Before you do these inspections, you must extend the trailing edge flaps and the leading edge flaps and slats.

(1) You must also do the deactivation procedure for the trailing edge flaps.

(2) You must also do the deactivation procedure for the leading edge flaps.

G. When the trailing edge flaps are lowered at speeds more than the placard speeds permit or lowered above 20,000 ft. at speeds below the placard speeds, the flap components and related structures must be examined for damage and conditions defined in this procedure.

NOTE: If the trailing edge flaps were not extended when the overspeed condition occurred or if the trailing edge flaps were not extended above 20,000 ft. at speeds below the placard speeds permit, Phase I and Phase II inspections of the trailing edge flaps are not required.

TASK 05-51-08-210-801

2. Phase I Inspection

A. References

Reference	Title
27-51-00-040-801	Trailing Edge Flap System Deactivation (P/B 201)
27-51-00-440-801	Trailing Edge Flap System Reactivation (P/B 201)
27-51-00-860-803	Extend the Trailing Edge Flaps (P/B 201)
27-51-00-860-804	Retract the Trailing Edge Flaps (P/B 201)
27-81-00-040-801	Leading Edge Flaps and Slats - Deactivation (P/B 201)
27-81-00-440-801	Leading Edge Flaps and Slats - Activation (P/B 201)
27-81-00-860-803	Leading Edge Flaps and Slats Extension (P/B 201)
27-81-00-860-804	Leading Edge Flaps and Slats Retraction (P/B 201)

B. Location Zones

Zone	Area
500	Left Wing
600	Right Wing

C. Examine the Trailing Edge Flaps

SUBTASK 05-51-08-010-001

(1) Extend the trailing edge flaps, do this task: Extend the Trailing Edge Flaps, TASK 27-51-00-860-803.

SUBTASK 05-51-08-040-001

WARNING DO THE TRAILING EDGE FLAP DEACTIVATION PROCEDURE BEFORE YOU DO WORK ON THE FLAP SYSTEM. WITH THE FLAPS ACTIVATED, THE FLAPS CAN MOVE AND CAUSE INJURY TO PERSONS OR DAMAGE TO EQUIPMENT.

(2) Do the deactivation procedure for the trailing edge flap system, do this task: Trailing Edge Flap System Deactivation, TASK 27-51-00-040-801.

SUBTASK 05-51-08-210-001

(3) Examine the trailing edge flap components as follows:

(a) Examine the external skin of all flaps.

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(b) Examine the flaps adjacent to the support structure for openings, distortions, or split sealant.

NOTE: Corrosion of the internal structure can be caused by splits in the sealant beads.

D. Examine the Leading Edge Flaps and Slats, if applicable

SUBTASK 05-51-08-010-002

(1) Extend the leading edge flaps and slats, do this task: Leading Edge Flaps and Slats Extension, TASK 27-81-00-860-803.

SUBTASK 05-51-08-040-002

WARNING DO THE DEACTIVATION PROCEDURE FOR THE LEADING EDGE FLAPS AND SLATS. THE FLAPS AND SLATS MOVE QUICKLY. INJURIES TO PERSONNEL, AND DAMAGE TO EQUIPMENT CAN OCCUR.

(2) Do the deactivation procedure for the leading edge flap/slat system, do this task: Leading Edge Flaps and Slats - Deactivation, TASK 27-81-00-040-801.

SUBTASK 05-51-08-210-002

(3) Examine the leading edge flaps and slat components as follows:

(a) Examine all of the flaps and slat skins.

(b) Examine the slats adjacent to main track and auxiliary arm attachments for openings, distortion, or split sealant.

NOTE: Corrosion of the internal structure can be caused by splits in the sealant beads.

SUBTASK 05-51-08-211-001

WARNING DO NOT LET OBJECTS GET IN THE HOUSING ASSEMBLY OF THE SLAT TRACK. THIS WILL HELP PREVENT A PUNCTURE OF THE HOUSING ASSEMBLY THAT COULD CAUSE A FUEL LEAK. THE FUEL LEAK COULD CAUSE A FIRE AND POSSIBLE DEATH OR INJURY TO PERSONNEL.

(4) Visually examine the area to make sure that there are no objects in the slat track housing assembly.

E. Put the Airplane Back to its Usual Condition if you will not do the Phase II Inspection

SUBTASK 05-51-08-440-001

(1) Do the activation procedure for the trailing edge flap system, do this task: Trailing Edge Flap System Reactivation, TASK 27-51-00-440-801.

SUBTASK 05-51-08-440-002

(2) Do the activation procedure for the leading edge flap/slat system, do this task: Leading Edge Flaps and Slats - Activation, TASK 27-81-00-440-801.

SUBTASK 05-51-08-410-001

(3) Retract the trailing edge flaps, do this task: Retract the Trailing Edge Flaps, TASK 27-51-00-860-804.

SUBTASK 05-51-08-410-002

(4) Retract the leading edge flaps and slats, do this task: Leading Edge Flaps and Slats Retraction, TASK 27-81-00-860-804.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-51-08-210-802

3. Phase II Inspection

A. References

Reference	Title
27-51-00-040-801	Trailing Edge Flap System Deactivation (P/B 201)
27-51-00-440-801	Trailing Edge Flap System Reactivation (P/B 201)
27-51-00-860-803	Extend the Trailing Edge Flaps (P/B 201)
27-51-00-860-804	Retract the Trailing Edge Flaps (P/B 201)
27-51-11 P/B 401	INBOARD TRAILING EDGE FLAP - REMOVAL/INSTALLATION
27-51-15 P/B 401	INBOARD FLAP TRACKS - REMOVAL/INSTALLATION
27-51-25 P/B 401	OUTBOARD FLAP TRACKS - REMOVAL/INSTALLATION
27-81-00-040-801	Leading Edge Flaps and Slats - Deactivation (P/B 201)
27-81-00-440-801	Leading Edge Flaps and Slats - Activation (P/B 201)
27-81-00-860-803	Leading Edge Flaps and Slats Extension (P/B 201)
27-81-00-860-804	Leading Edge Flaps and Slats Retraction (P/B 201)
27-81-21 P/B 401	LEADING EDGE SLAT - REMOVAL/INSTALLATION

B. Location Zones

Zone	Area
500	Left Wing
600	Right Wing

C. Trailing Edge Flaps Inspection, if applicable

SUBTASK 05-51-08-010-003

(1) Extend the trailing edge flaps, do this task: Extend the Trailing Edge Flaps, TASK 27-51-00-860-803.

SUBTASK 05-51-08-040-003

WARNING DO THE TRAILING EDGE FLAP DEACTIVATION PROCEDURE BEFORE YOU DO WORK ON THE FLAP SYSTEM. WITH THE FLAPS ACTIVATED, THE FLAPS CAN MOVE AND CAUSE INJURY TO PERSONS OR DAMAGE TO EQUIPMENT.

(2) Do the deactivation procedure for the trailing edge flap system, do this task: Trailing Edge Flap System Deactivation, TASK 27-51-00-040-801.

SUBTASK 05-51-08-210-003

(3) Examine the trailing edge flap components as follows:

(a) The flap tracks

(b) The flap linkages

(c) The track attachment points

(d) The flap track support fittings

(e) The wing in-spar surfaces near flap support fittings

(f) The flap carriages for cracks

1) The forward and main roller bolt assemblies including the bearings and mounting bolts (Figure 201, Figure 202).

a) To avoid re-rigging, remove, examine, and re-install the bolts one at a time.

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b) If the cotter pin and nut cannot be removed, remove flaps to easier inspect the carriages and remove the main roller bolt assemblies (PAGEBLOCK 27-51-11/401).

(g) The actuator support structure

(h) The actuator and drive mechanism.

SUBTASK 05-51-08-010-005

(4) Remove all of the trailing edge flap support-track fuse pins and bolts as follows:

- INBOARD FLAP TRACKS - REMOVAL/INSTALLATION, PAGEBLOCK 27-51-15/401
- OUTBOARD FLAP TRACKS - REMOVAL/INSTALLATION, PAGEBLOCK 27-51-25/401.

(a) Remove the fuse pin or bolt one at a time.

1) Examine the fuse pins or bolts for cracks or distortion.

2) If it is necessary, replace removed fuse pins or bolts with new fuse pins or bolts.

(b) Make sure that all the fuse pins and bolts have been re-installed:

- INBOARD FLAP TRACKS - REMOVAL/INSTALLATION, PAGEBLOCK 27-51-15/401
- OUTBOARD FLAP TRACKS - REMOVAL/INSTALLATION, PAGEBLOCK 27-51-25/401.

D. Leading Edge Flaps and Slats Inspection, if applicable

SUBTASK 05-51-08-010-004

(1) Extend the leading edge flaps and slats, do this task: Leading Edge Flaps and Slats Extension, TASK 27-81-00-860-803.

SUBTASK 05-51-08-040-004

WARNING DO THE DEACTIVATION PROCEDURE FOR THE LEADING EDGE FLAPS AND SLATS. THE FLAPS AND SLATS MOVE QUICKLY. INJURIES TO PERSONNEL, AND DAMAGE TO EQUIPMENT CAN OCCUR.

(2) Do the deactivation procedure for the leading edge flap/slat system, do this task: Leading Edge Flaps and Slats - Deactivation, TASK 27-81-00-040-801.

SUBTASK 05-51-08-210-004

(3) Examine the leading edge flap and slat components as follows:

(a) External skins of flaps and slats

(b) Leading edge flap hinge rib and linkage attachments

(c) Slat auxiliary and main tracks

(d) Leading edge flap and slat support ribs and adjacent skin panels

(e) All drive mechanisms and related support structure.

(f) Remove slat main track and auxiliary track roller bolts one at a time (PAGEBLOCK 27-81-21/401).

NOTE: You can insert a retaining pin to hold the roller bearing or slat while the bolt is removed.

1) Make sure that the bolts are not cracked, bent, or show other signs of damage.

2) If it is necessary, replace removed bolts with new bolts.

(g) Make sure that all bolts have been re-installed (PAGEBLOCK 27-81-21/401).

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SUBTASK 05-51-08-211-002

WARNING DO NOT LET OBJECTS GET IN THE HOUSING ASSEMBLY OF THE SLAT TRACK. THIS WILL HELP PREVENT A PUNCTURE OF THE HOUSING ASSEMBLY THAT COULD CAUSE A FUEL LEAK. THE FUEL LEAK COULD CAUSE A FIRE AND POSSIBLE DEATH OR INJURY TO PERSONNEL.

(4) Examine the area to make sure that there are no objects in the slat track housing assembly.

E. Put the Airplane Back to Its Usual Condition

SUBTASK 05-51-08-420-001

(1) If it is necessary, install the removed components or install replacement parts.

SUBTASK 05-51-08-440-003

(2) Do the activation procedure for the trailing edge flap system, do this task: Trailing Edge Flap System Reactivation, TASK 27-51-00-440-801.

SUBTASK 05-51-08-440-004

(3) Do the activation procedure for the leading edge flap/slat system, do this task: Leading Edge Flaps and Slats - Activation, TASK 27-81-00-440-801.

SUBTASK 05-51-08-410-003

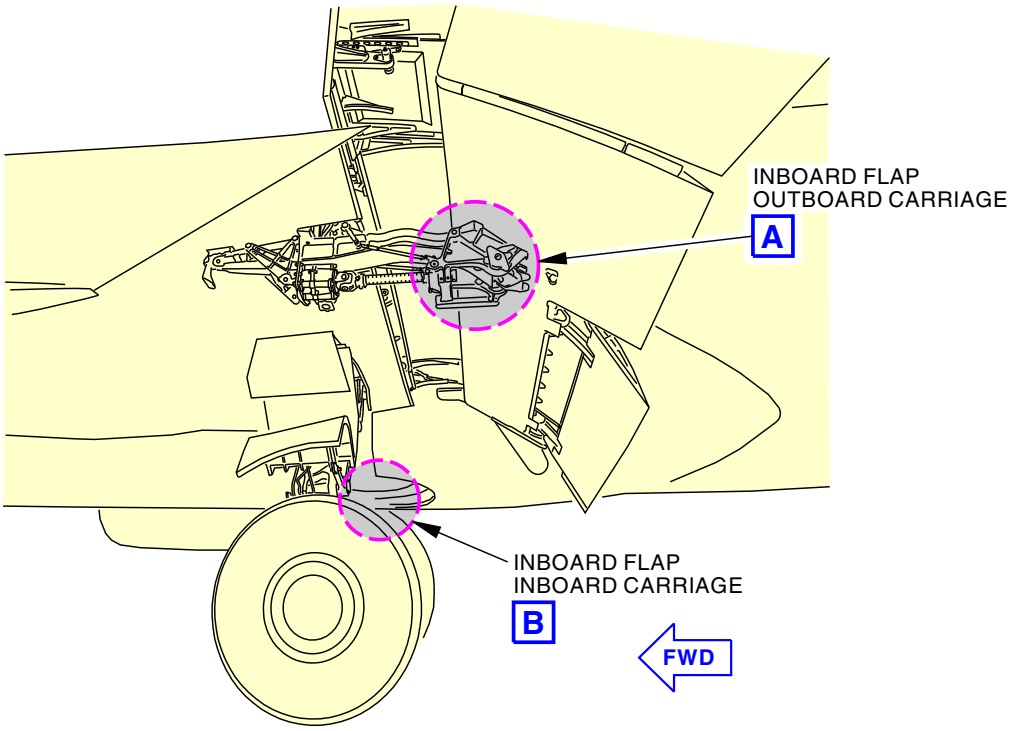
(4) Retract the trailing edge flaps, do this task: Retract the Trailing Edge Flaps, TASK 27-51-00-860-804.

SUBTASK 05-51-08-410-004

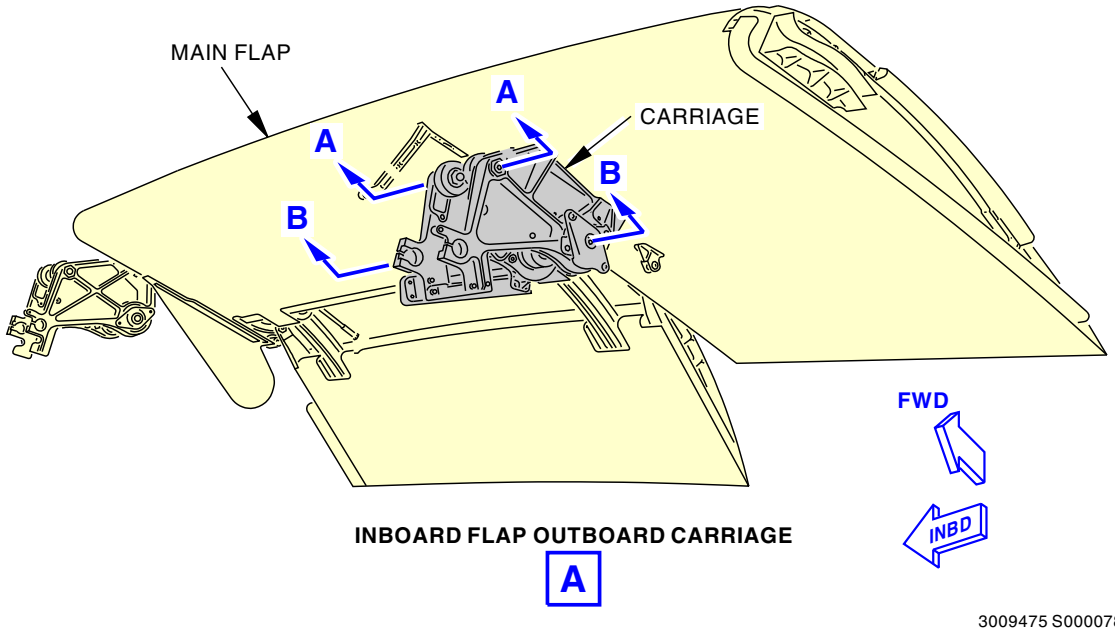
(5) Retract the leading edge flaps and slats, do this task: Leading Edge Flaps and Slats Retraction, TASK 27-81-00-860-804.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



LEFT WING
(RIGHT WING IS EQUIVALENT)

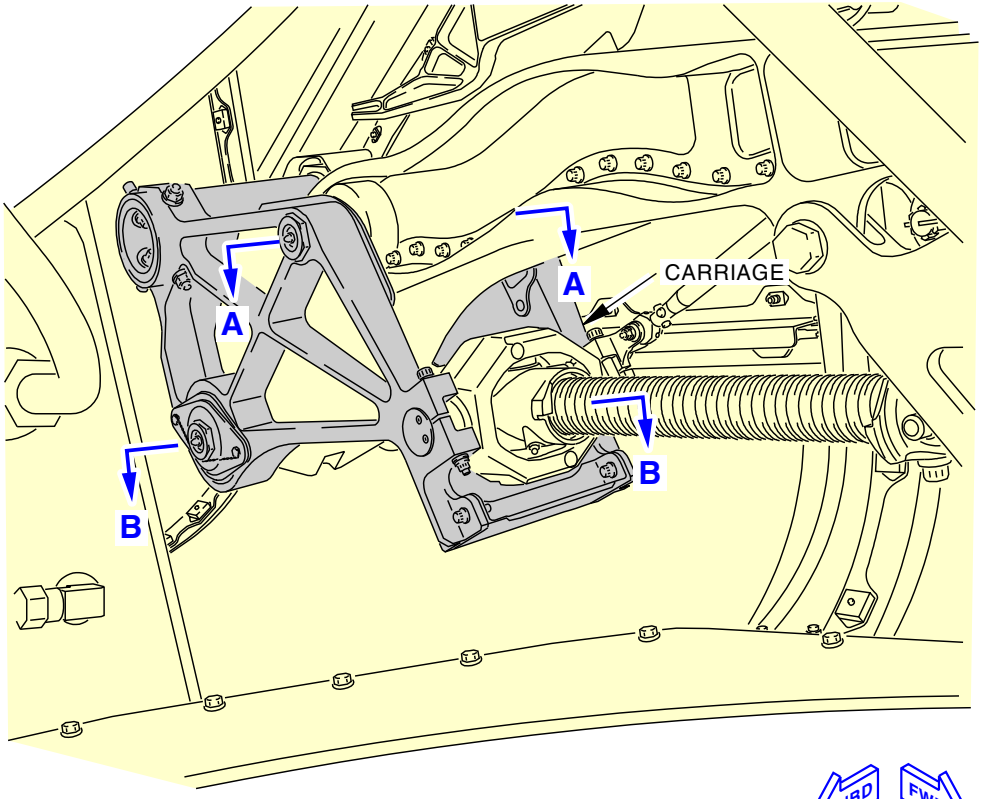


INBOARD FLAP OUTBOARD CARRIAGE
A

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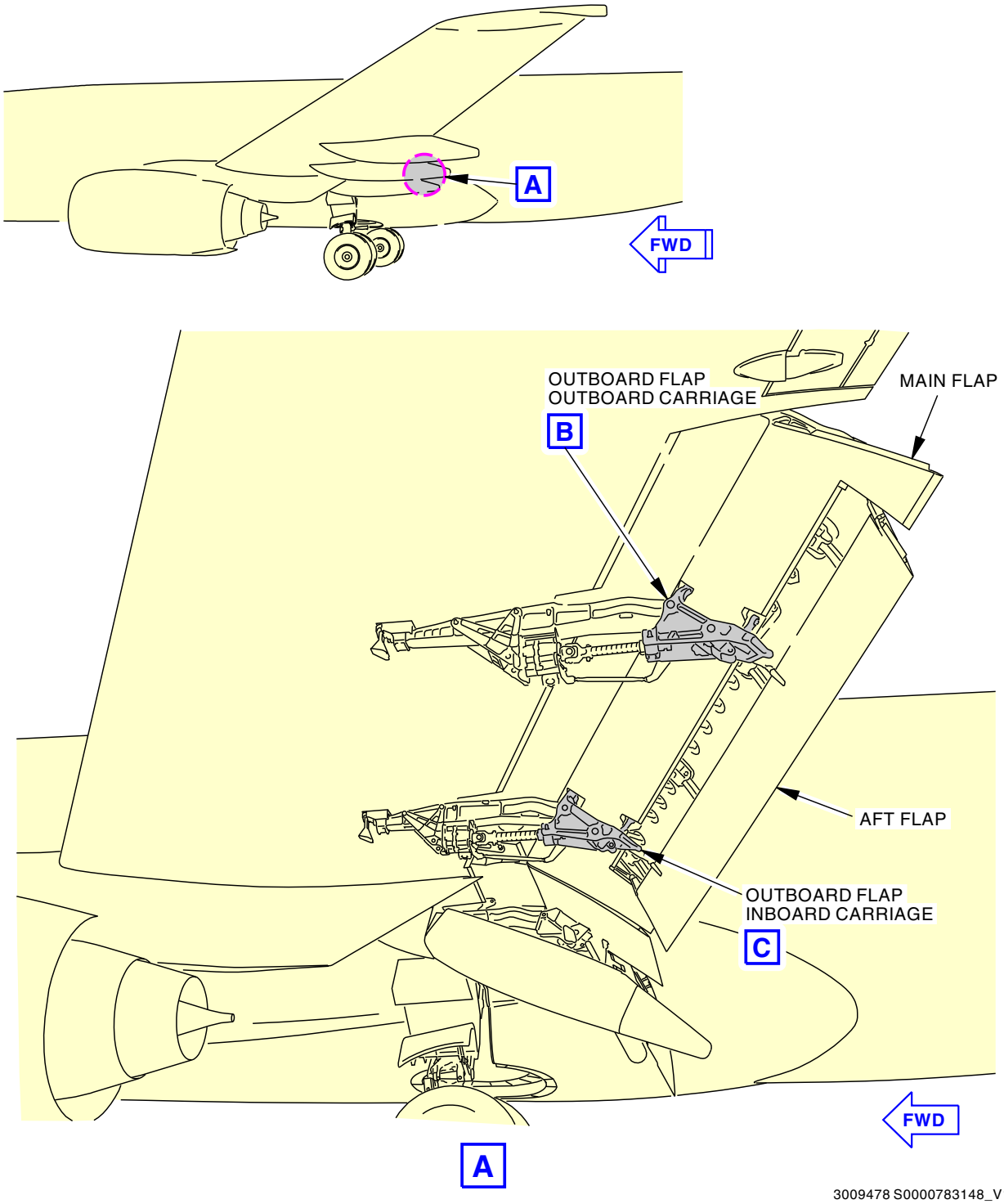
Inboard Flap Carriage Inspection
Figure 201/05-51-08-990-801 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



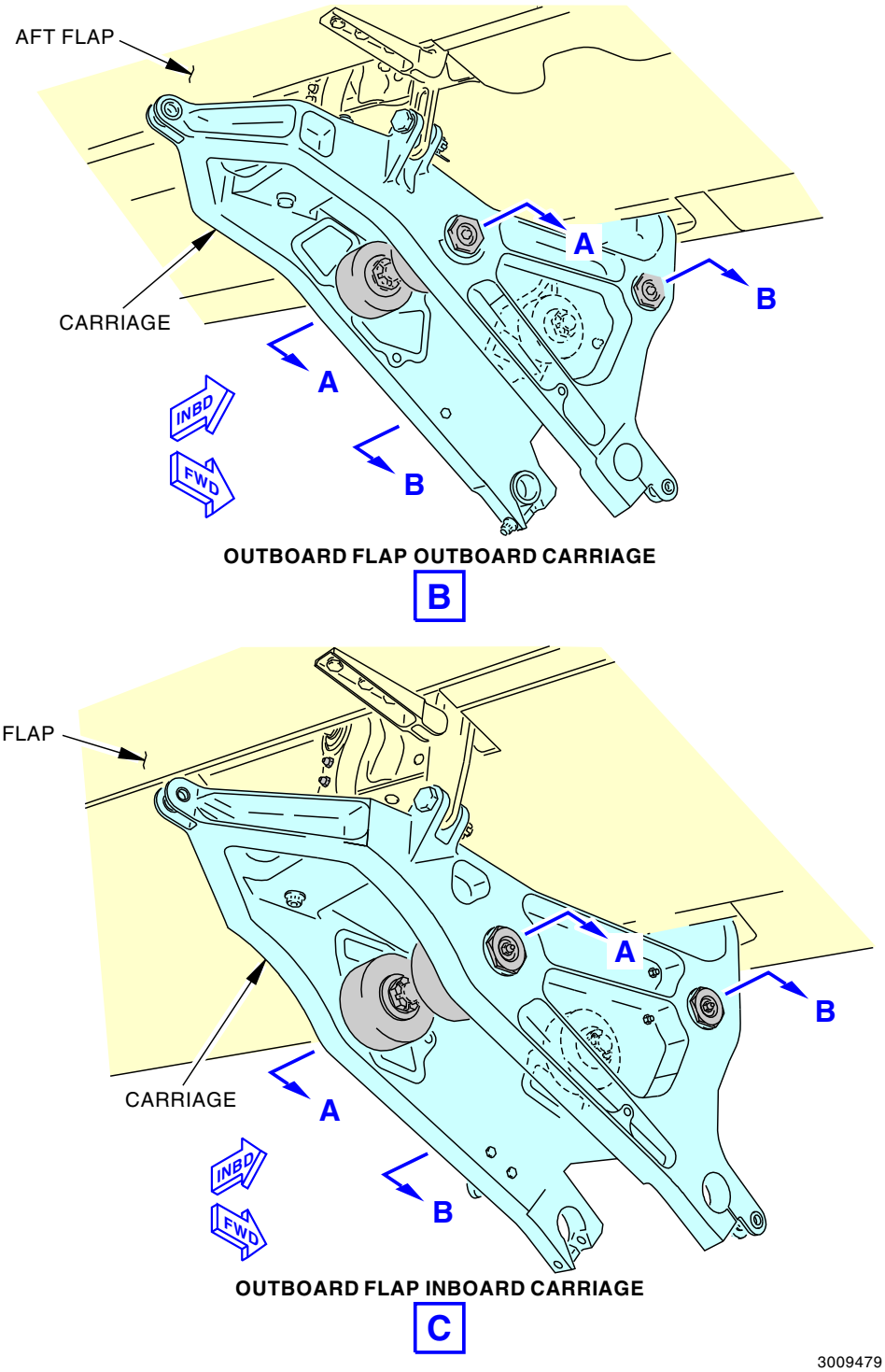
Inboard Flap Carriage Inspection
Figure 201/05-51-08-990-801 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



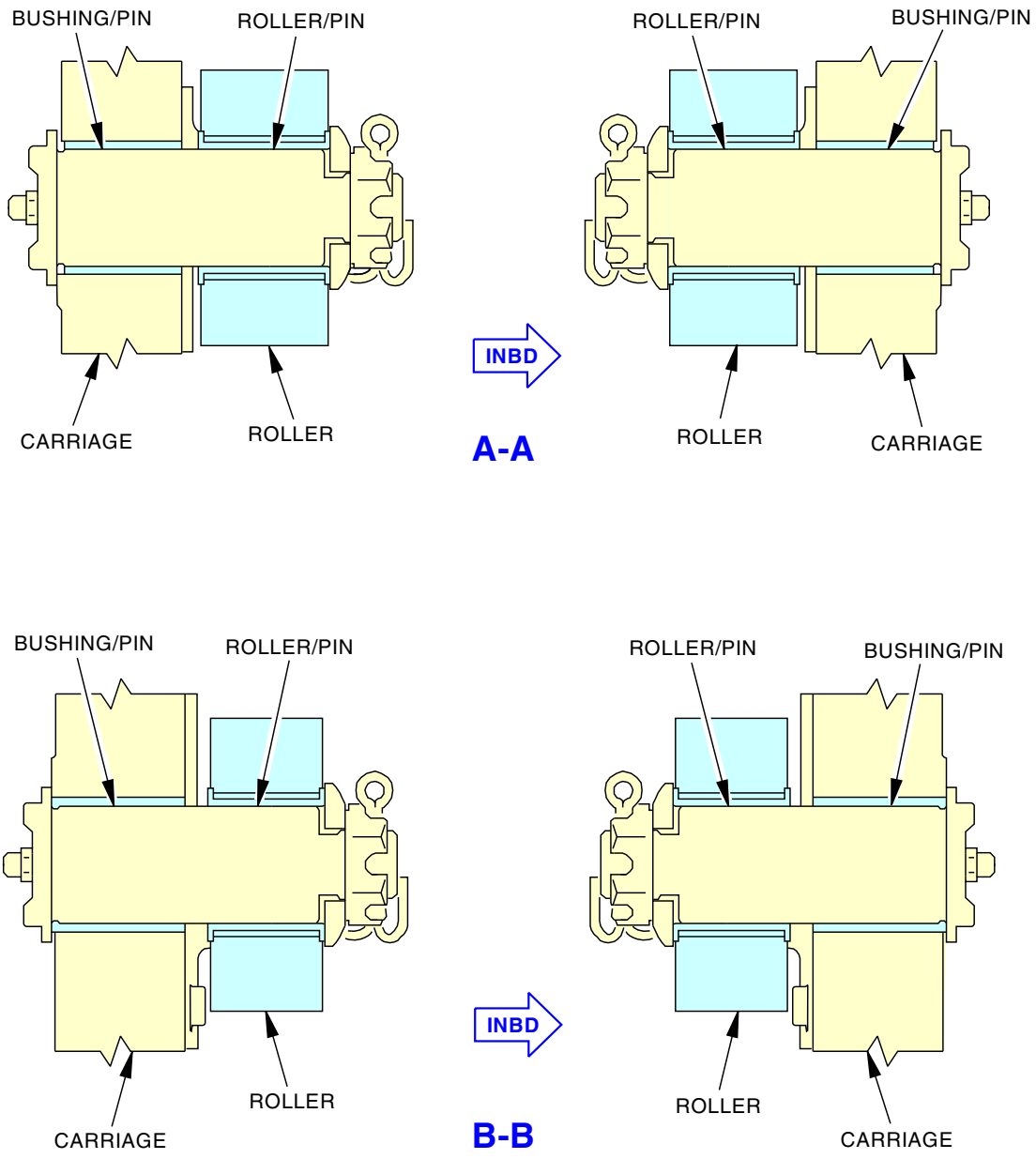
Outboard Flap Carriage Inspection
Figure 202/05-51-08-990-802 (Sheet 1 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Outboard Flap Carriage Inspection
Figure 202/05-51-08-990-802 (Sheet 2 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



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Outboard Flap Carriage Inspection
Figure 202/05-51-08-990-802 (Sheet 3 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

OVERWEIGHT TAXI - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)

1. General

A. Overweight Taxi is defined as taxiing at a weight that is more than the maximum-taxi weight (MTW) as specified in the Airplane Flight Manual (AFM).

(1) Before flight, you must decrease the airplane weight to that specified by the Airplane Flight Manual for takeoff.

B. Inspection Criteria; An immediate structural inspection is necessary if you:

(1) Taxi the airplane by more than 0.5% of the maximum-taxi-weight (MTW).

(2) Taxi the airplane overweight at any weight over the Maximum Design Taxi Weight (MTW) and have any of these conditions:

(a) High speed ground turn

(b) Sharp radius turn

(c) Heavy braking

(d) Taxi over rough pavement

(e) Pivoting (sharp radius turning with brakes on).

(3) If the criteria for the above paragraphs have not been met, no inspection is necessary.

(a) You must decrease the airplane weight to that specified by the Airplane Flight Manual before takeoff.

C. The Inspections

(1) The inspection is divided into Phase 1 and Phase 2.

(2) If the inspection for Phase 1 shows no signs of damage, the inspection is complete.

(3) If the Phase 1 inspection shows any sign of damage, the Phase 2 inspection must be done.

D. Inspections, Repairs, and Replacements

(1) When the conditional inspection tells you to "examine" or “inspect” a component, look for these conditions (repair or replace components, if it is necessary):

(a) Cracks

(b) Pulled apart structure or unusual gaps

(c) Loose paint (paint flakes)

(d) Twisted parts (distortion)

(e) Bent parts

(f) Wrinkles or buckles in structure

(g) Fastener holes that became larger or longer

(h) Loose fasteners

(i) Fasteners that have pulled out, deformed, or are gone

(j) Delaminations (a component with one or more layers pulled apart)

(k) Parts that are not aligned correctly

(l) Interference (clearance that is not sufficient between two parts)

(m) Discoloration (heat damage)

(n) Nicks or gouges

(o) Other signs of damage.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(2) Replace or repair the components that have one or more of the conditions given above.

TASK 05-51-09-212-801

2. Phase 1 Inspection

A. Airplane Inspection

SUBTASK 05-51-09-212-001

(1) Do the inspection of the main and nose landing gear.

(a) Examine all tires and wheels.

(b) Examine the support structure.

(c) Look for signs of fluid leakage at the top and bottom of the outer cylinder of the shock strut.

NOTE: A small quantity of hydraulic fluid on the surface of the inner cylinder of the shock strut is satisfactory.

SUBTASK 05-51-09-212-002

(2) Do the inspection of the landing gear, fuselage, and wing.

(a) Look for fuel leaks, and other fluid leaks, in the areas that follow:

1) All wheel well areas of the body, wing, and nose landing gear.

2) The lower external surface of the fuselage in the area of the wing-to-body fairing.

3) The wing.

——— END OF TASK ———

TASK 05-51-09-210-801

3. Phase 2 Inspection

A. References

Reference	Title
07-10-01-580-801	Lift the Airplane on Jacks (P/B 201)
07-10-01-580-802	Lower the Airplane off Jacks (P/B 201)
07-10-21-580-801	Lift the Airplane Nose with the Nose Jack at Jack Point D (P/B 201)
07-10-21-580-802	Lower the Airplane Nose, Jack Point D (P/B 201)
12-15-31 P/B 301	MAIN LANDING GEAR SHOCK STRUT - SERVICING
12-15-41 P/B 301	NOSE LANDING GEAR SHOCK STRUT - SERVICING
32-11-00 P/B 401	MAIN LANDING GEAR - REMOVAL/INSTALLATION
32-21-00 P/B 401	NOSE LANDING GEAR - REMOVAL/INSTALLATION
32-32-00 P/B 501	MAIN GEAR EXTENSION AND RETRACTION - ADJUSTMENT/TEST
32-33-00 P/B 501	NOSE GEAR EXTENSION AND RETRACTION - ADJUSTMENT/TEST
32-51-00 P/B 501	NOSE WHEEL STEERING SYSTEM - ADJUSTMENT/TEST

B. Airplane Inspection

SUBTASK 05-51-09-212-003

(1) Do the inspection of the main landing gear and support structure.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(a) Make sure the shock strut pressures are normal and the hydraulic fluids are at the correct levels (MAIN LANDING GEAR SHOCK STRUT - SERVICING, PAGEBLOCK 12-15-31/301).

(b) Lift the airplane with jacks, do this task: Lift the Airplane on Jacks, TASK 07-10-01-580-801.

(c) Examine the inner and outer cylinder lugs.

(d) Examine all structural components of the main landing gear and carefully examine the components that follow:

1) Shock strut
2) Drag strut
3) Torsion links
4) Side strut
5) Walking beam fitting of the shock strut
6) Walking beam for the main gear actuator
7) Linkage fittings of the walking beam and actuator
8) Strut doors and the mechanism that retracts and extends the doors

(e) Examine the support structure of the main landing gear and carefully examine the components that follow:

1) Landing gear beam
2) Support fittings for the landing gear beam:
   a) Inboard
   b) Outboard.
3) Trunnion support fittings and attachment:
   a) Forward
   b) Aft
4) Stabilizer link and fittings between the rear spar and landing gear beam
5) Body fitting for side strut and uplock attachment

(f) Examine all of the pin joints and fuse pin connections.

(g) If you found tire damage in Phase 1, do the steps that follow.

1) Remove and examine the wheel structure.
2) Remove and examine the brake assembly.
3) Examine the axles.

(h) If one or more of the conditions that follow occurred, remove, disassemble, and examine all parts of the shock strut (MAIN LANDING GEAR - REMOVAL/INSTALLATION, PAGEBLOCK 32-11-00/401).

1) The shock strut pressures were sufficiently low to cause damage.
2) The hydraulic fluid levels were sufficiently low to cause damage.
3) You found damage to one or more of the parts during your inspection of the landing gear.

   NOTE: Do not remove the orifice support tube to examine it.

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(i) Make sure the main landing gear retracts and extends correctly (MAIN GEAR EXTENSION AND RETRACTION - ADJUSTMENT/TEST, PAGEBLOCK 32-32-00/501).

(j) Lower the airplane from the jacks, do this task: Lower the Airplane off Jacks, TASK 07-10-01-580-802.

SUBTASK 05-51-09-212-004

(2) Do the inspection of the nose landing gear and support structure.

(a) Make sure the shock strut pressures are normal and the hydraulic fluids are at the correct levels (NOSE LANDING GEAR SHOCK STRUT - SERVICING, PAGEBLOCK 12-15-41/301).

(b) Lift the nose of the airplane with jacks, do this task: Lift the Airplane Nose with the Nose Jack at Jack Point D, TASK 07-10-21-580-801.

(c) If you found tire damage in Phase 1, do the steps that follow:

1) Remove and examine the wheel structure.

2) Examine the axle.

(d) Examine all structural components of the nose landing gear and carefully examine the components that follow:

1) Shock strut

2) Torsion links

3) Drag strut

4) Lock links

5) The attach nut of the orifice support tube (signs of fluid leakage).

(e) Examine the wheel well area and carefully examine the parts that follow:

1) Web (the left and right sidewalls)

2) Aft bulkhead

3) Trunnion attachments

4) Drag strut attachments.

(f) Examine the wheel well bulkheads and fuselage outboard of nose wheel well at (Body Stations 294.5 and 360).

NOTE: You can do this inspection on the forward side through the access holes in the sidewalls of the nose wheel well. Examine the aft side of the bulkhead at Body Station 294.5 from the electronics compartment.

(g) If one or more of the conditions that follow occurred, remove, disassemble, and examine all parts of the shock strut (NOSE LANDING GEAR - REMOVAL/INSTALLATION, PAGEBLOCK 32-21-00/401).

1) The shock strut pressures were sufficiently low to cause damage.

2) The hydraulic fluid levels were sufficiently low to cause damage.

3) You found damage to one or more of the parts during your inspection of the landing gear.

NOTE: Do not remove the orifice support tube to examine it.

(h) Make sure the nose landing gear steering system is adjusted and operates correctly (NOSE WHEEL STEERING SYSTEM - ADJUSTMENT/TEST, PAGEBLOCK 32-51-00/501).

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(i) Make sure the nose landing gear retracts and extends correctly (NOSE GEAR EXTENSION AND RETRACTION - ADJUSTMENT/TEST, PAGEBLOCK 32-33-00/501).

(j) Lower the nose of the airplane from the jacks, do this task: Lower the Airplane Nose, Jack Point D, TASK 07-10-21-580-802.

SUBTASK 05-51-09-212-005

(3) Do the inspection of the fuselage.

NOTE: If you find external damage to the fuselage, always examine the adjacent internal structure.

(a) Examine the lower fuselage structure.

NOTE: Examine carefully in the area below the body crease from Body Station 727 to 100 in. (254 cm) aft.

(b) Examine carefully these components (Body Stations 540 through 727A):

1) Keel beam chords
2) Stiffeners
3) Webs and splices

(c) Also examine carefully the top of the fuselage between S-6 left and S-6 right (Body Stations 540, 664, 727).

(d) Examine the upper and lower fuselage skin panels forward and aft of the wing.

NOTE: Permanent wrinkles frequently occur on the lower side of the fuselage skins aft of Body Station 727. An internal inspection is necessary if you found wrinkles that were not there before the landing. Examine the wrinkles carefully for cracks.

(e) Examine the wing-to-fuselage joints (Body Stations 540 and 664).

(f) Examine the fuselage skin joints above the landing gear beam.

C. Put the Airplane Back to its Usual Condition

SUBTASK 05-51-09-430-001

(1) Install the components you removed or install replacement components.

——— END OF TASK ———

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DRAGGED ENGINE NACELLE/FAN BLADE OUT/ENGINE SEIZURE/THRUST REVERSER AND ATTACH POINTS DAMAGE - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)

1. General

A. This procedure contains the following task:

(1) Dragged engine nacelle, fan blade out, engine seizure, engine, strut, and thrust reverser damaged conditional inspection.

B. This procedure gives an inspection for the conditions that follow:

(1) For the engine and strut after a dragged engine nacelle condition.

(2) After an engine seizure and other types of engine and strut damage.

(3) After an engine fan blade out and subsequent windmilling vibration.

(4) After a vibrational condition caused by loss of cowling or engine parts other than fan blades.

(5) After damage caused when hit by ground support equipment; except for minor, localized ground support equipment impact to the strut or cowling.

NOTE: These inspections are not necessary when the operator finds that small scratches/dents, etc, were not caused by the conditions in this procedure.

C. When the conditional inspection tells you to "examine" a component, look for these conditions (repair or replace components, if it is necessary):

(1) Cracks

(2) Pulled apart structure

(3) Excessive looseness or wear

(4) Twisted parts (distortion)

(5) Bent components

(6) Loose fasteners

(7) Fasteners holes that became larger or longer

(8) Fasteners that have pulled out or are missing

(9) Excessive loading

(10) Peening of pins and bushings

(11) Bushing/bearing damage

(12) Bushing bearing fusion

(13) Lug distortion or damage

(14) Bolt distortion

(15) Misalignment

(16) Interference

(17) Other obvious or unusual signs of damages.

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TASK 05-51-10-210-801

2. Dragged Engine Nacelle/Fan Blade Out/Engine Seizure/Engine and Strut Damage Conditional Inspection

A. References

Reference	Title
05-51-42-200-801	Engine Blade Out - EE Bay and Flight Deck Panels Inspection (P/B 201)
27-51-00-040-801	Trailing Edge Flap System Deactivation (P/B 201)
27-51-00-440-801	Trailing Edge Flap System Reactivation (P/B 201)
27-81-00-040-801	Leading Edge Flaps and Slats - Deactivation (P/B 201)
27-81-00-440-801	Leading Edge Flaps and Slats - Activation (P/B 201)
54-52-06-000-801	Aft Fairing Access Panel Removal (P/B 401)
71-00-00-800-802-G00	Engine Operation Limits (P/B 201)
71-00-02-000-801-G00	Power Plant - Removal (P/B 401)
78-31-00-040-801-G00	Thrust Reverser Deactivation For Ground Maintenance (P/B 201)
78-31-00-440-801-G00	Thrust Reverser Activation After Ground Maintenance (P/B 201)
78-31-06-200-801-G00	Blocker Door Visual Inspection (P/B 601)

B. Location Zones

Zone	Area
400	Powerplant and Nacelle Struts

C. Examine the Struts and Nacelles, and Adjacent Structure

SUBTASK 05-51-10-040-001

WARNING MAKE SURE THAT PERSONS AND EQUIPMENT ARE CLEAR OF THE LE AND TE FLAPS AND FLAP DRIVE MECHANISMS. THE FLAPS CAN CAUSE INJURIES TO PERSONS AND DAMAGE TO EQUIPMENT.

(1) Do the steps that follow to deactivate the flaps and slats:

(a) Do this task: Leading Edge Flaps and Slats - Deactivation, TASK 27-81-00-040-801.

(b) Do this task: Trailing Edge Flap System Deactivation, TASK 27-51-00-040-801.

SUBTASK 05-51-10-040-002

WARNING DO THE DEACTIVATION PROCEDURE TO PREVENT THE OPERATION OF THE THRUST REVERSER. THE ACCIDENTAL OPERATION OF THE THRUST REVERSER CAN CAUSE INJURIES TO PERSONS AND DAMAGE TO EQUIPMENT.

(2) Do this task: Thrust Reverser Deactivation For Ground Maintenance, TASK 78-31-00-040-801-G00.

SUBTASK 05-51-10-210-001

(3) Do the inspection of the struts and nacelles, and the adjacent structure.

(a) Visually examine the areas that follow:

1) The nacelle strut external surface.

2) The nacelle inlet, fan cowl, thrust reverser and exhaust (ground support equipment impacts).

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3) The lower surface of the nacelle cowlings (ground impact).

4) Engine fan blades (full or partial fan blade loss).

(b) If damage is found in the areas noted above (except for minor, localized ground support equipment impacts), do these steps:

1) Remove the nacelle strut access doors.

2) Remove the forward strut thrust reverser and overwing fairings.

3) Remove the forward strut fairing thumbnail fairing.

4) Remove the aft strut fairing panels, do this task: Aft Fairing Access Panel Removal, TASK 54-52-06-000-801.

5) Open the fan cowl and thrust reverser.

(c) Visually examine the following components for cracks, signs of offset deformation, or crank shafting of pins and/or bushings.

1) Strut fuse pin and link pin bores (perform examination in place - remove retention hardware).

2) Wing and strut fittings common to fuse and link pins.

3) Strut external upper spar and side skins.

4) Strut internal structure, including bulkheads and frames.

5) Forward engine mount assembly and aft mount assembly including thrust links.

SUBTASK 05-51-10-210-002

(4) Examine the thrust reverser, inlet and fan cowl areas that follow:

(a) Inspect the thrust reverser sleeves.

(b) Inspect the blocker door linkage for bent or broken links, do this task: Blocker Door Visual Inspection, TASK 78-31-06-200-801-G00.

(c) Inspect the inlet crushable spacers.

1) Look for loose attach bolts.

(d) Inspect the thrust reverser hinges and latches.

(e) Inspect the fan cowl hinges and latches.

SUBTASK 05-51-10-210-003

(5) If you think an engine seizure or internal engine damage has occurred, examine the engine.

(a) Do this task: Engine Operation Limits, TASK 71-00-00-800-802-G00.

(b) Remove the engine if it is necessary, do this task: Power Plant - Removal, TASK 71-00-02-000-801-G00.

SUBTASK 05-51-10-210-004

(6) Examine the EEBay and flight deck, do this task: Engine Blade Out - EE Bay and Flight Deck Panels Inspection, TASK 05-51-42-200-801.

D. Put the Airplane Back to It's Usual Condition

SUBTASK 05-51-10-410-001

(1) Install all the components you removed if they are serviceable, or install replacement parts.

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SUBTASK 05-51-10-440-001

WARNING DO THE DEACTIVATION PROCEDURE FOR THE THRUST REVERSER TO PREVENT THE OPERATION OF THE THRUST REVERSER. ACCIDENTAL OPERATION OF THE THRUST REVERSER CAN CAUSE INJURIES TO PERSONS OR DAMAGE TO EQUIPMENT.

(2) Do this task: Thrust Reverser Activation After Ground Maintenance, TASK 78-31-00-440-801-G00.

SUBTASK 05-51-10-440-002

WARNING MAKE SURE THAT PERSONS AND EQUIPMENT ARE CLEAR OF THE LE AND TE FLAPS AND FLAP DRIVE MECHANISMS. THE FLAPS CAN CAUSE INJURIES TO PERSONS AND DAMAGE TO EQUIPMENT.

(3) Do the steps that follow to activate the flaps and slats:

(a) Do this task: Leading Edge Flaps and Slats - Activation, TASK 27-81-00-440-801.

(b) Do this task: Trailing Edge Flap System Reactivation, TASK 27-51-00-440-801.

——— END OF TASK ———

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GALLEY SPILLAGE - MAINTENANCE PRACTICES

1. General

A. This procedure has this task:

(1) An inspection and the clean-up of the areas of contamination after a liquid is spilled in the galley.

B. If liquids are spilled inside the galley, you must remove all signs of liquid and fully dry the areas of contamination immediately.

C. If the floor area of the galley area is not sealed correctly, liquid contamination can result in corrosion of the floor structure.

NOTE: Moisture above the galley floor can go through small holes in the floor surface area and stay out of view. This could possibly cause unwanted damage to the airplane structure or to equipment in the area below the galley floor.

TASK 05-51-13-211-801

2. Galley Spill Conditional - Inspection

A. General

(1) This inspection procedure is to be done when liquid has been spilled in the galley area.

NOTE: When a small amount of liquid is spilled, an inspection is not usually necessary.

(2) In the galley areas, a water (liquid) barrier is installed to contain liquid when it is spilled. To protect the water barrier, vinyl mats cover the galley floor.

(3) In the adjacent entry and service door thresholds, waste water drains are installed to remove liquids (gray water) from the floor. These drain holes must be kept free from blockages.

(4) The integrity of the water barrier seal, in the forward galley areas, is most important because the location of the electronic equipment compartment is directly below the forward galley.

(5) A leak from the forward galley which has a damaged water barrier, into the compartment below, could possibly cause serious damage to the electronic equipment. The result could be a possible hazard to the flight safety of the airplane.

(6) In all areas where gray water contamination has to be removed and cleaned, you must use an approved disinfectant to kill all harmful micro-organisms.

(7) The flight safety of the airplane, together with the safety of health and the prevention of bad smells, must be your first consideration when you do this task.

B. References

Reference	Title
25-27-21 P/B 401	ENTRY AND SERVICE AREA FLOOR COVERING - REMOVAL/INSTALLATION
38-31-00 P/B 201	GRAY WATER/DRAIN SYSTEM - MAINTENANCE PRACTICES
53-21-00 P/B 401	PASSENGER CABIN FLOORS - REMOVAL/INSTALLATION
53-21-00 P/B 801	PASSENGER CABIN FLOORS - REPAIRS
53-21-11 P/B 801	WATER BARRIER - REPAIRS

C. Tools/Equipment

Reference	Description
STD-6812	Source - Dry Air, 30-35 inches of mercury (absolute)

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(Continued)

Reference	Description
STD-14360	Flashlight

D. Consumable Materials

Reference	Description	Specification
B01033	Cleaner - Disinfectant - Lysol	
G00034	Cotton Wiper - Process Cleaning Absorbent Wiper (Cheesecloth, Gauze)	AMS3819 Class 1 Grade A or B Form 1 (Supersede BMS15-5 CL A)

E. Location Zones

Zone	Area
100	Lower Half of Fuselage
200	Upper Half of Fuselage

F. Access Panels

Number	Name/Location
117A	Electronic Equipment Access Door
822	Aft Cargo Door

G. Procedure

SUBTASK 05-51-13-160-001

(1) In the galley where the liquid was spilled, use a clean cloth or a sponge to remove all liquid from the floor of the galley area.

SUBTASK 05-51-13-010-001

(2) In the galley area where the liquid was spilled, at the next maintenance opportunity, remove the floor area covering to do an inspection of the waterseal. Do this task: ENTRY AND SERVICE AREA FLOOR COVERING - REMOVAL/INSTALLATION, PAGEBLOCK 25-27-21/401.

NOTE: The waterseal of the galley area can be damaged if care is not taken when you remove the vinyl floor mats.

SUBTASK 05-51-13-160-002

(3) Use Lysol cleaner, B01033 or equivalent cleaners when you clean areas where blue water contamination has occurred.

SUBTASK 05-51-13-160-003

(4) Make sure the door threshold drain, adjacent to the galley area, is clear and free from blockages (GRAY WATER/DRAIN SYSTEM - MAINTENANCE PRACTICES, PAGEBLOCK 38-31-00/201).

SUBTASK 05-51-13-212-001

(5) Inspect the fillet seal at the base of the galley for signs of damage.

SUBTASK 05-51-13-212-002

(6) Inspect the floor waterseal for signs of damage to materials and sealants.

SUBTASK 05-51-13-910-001

(7) If you find signs of damage to seals and/or sealing, refer to the approved repairs (PASSENGER CABIN FLOORS - REPAIRS, PAGEBLOCK 53-21-00/801, WATER BARRIER - REPAIRS, PAGEBLOCK 53-21-11/801).

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SUBTASK 05-51-13-010-002

(8) If the inspection is applicable to the forward galley, do this step:

(a) Open this access panel:

Number	Name/Location
117A	Electronic Equipment Access Door

SUBTASK 05-51-13-010-003

(9) If the inspection is applicable to the aft galley, do this task:

(a) Open this access panel:

Number	Name/Location
822	Aft Cargo Door

SUBTASK 05-51-13-212-003

(10) Use a flashlight, STD-14360 and do a close visual examination of the area below the floor of the galley.

SUBTASK 05-51-13-360-001

(11) If you find signs of moisture below the galley area, in electronic-equipment compartment or the aft cargo-compartment equipment-bay, do the steps that follow:

(a) Use a cotton wiper, G00034 to absorb and remove all moisture from the area.

(b) Do an examination of all the waste-water drain tubes and related clamps for signs of a leak.

(c) Tighten all clamps and/or replace damaged drain tubes as necessary.

(d) Examine the floor beams, intercostals and structure for signs of moisture and/or corrosion.

(e) Do an inspection of installed equipments, in the applicable equipment compartment for signs of contamination.

1) If you find signs of moisture on equipment electrical cables, use a dry air source, STD-6812 to remove all moisture from the contaminated areas.

NOTE: Electrical cable looms can hold moisture between the separate wires. If possible, open the wires in a contaminated cable when you dry the cable.

2) Do a check of contaminated connectors for moisture ingress and dry as necessary.

a) If you think a connector is contaminated with moisture, you must disconnect and fully examine the connector and the related equipment connector.

3) If you find signs of moisture, use a cotton wiper, G00034 or a dry air source, STD-6812 to remove all moisture and fully dry the contaminated components.

SUBTASK 05-51-13-942-001

(12) If you do not find signs of moisture and the water barrier is in a serviceable condition, do the close out procedure.

NOTE: The removal of the galley and repairs to the floor water barrier are only necessary when signs of damage and leaks in the galley floor are found.

SUBTASK 05-51-13-010-004

(13) If your inspection shows damage to the water barrier of the galley floor area and/or shows the moisture travel to go below the galley floor, remove the applicable galley.

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SUBTASK 05-51-13-010-005

(14) If necessary, remove the galley floor. Do this task: PASSENGER CABIN FLOORS - REMOVAL/INSTALLATION, PAGEBLOCK 53-21-00/401.

SUBTASK 05-51-13-160-004

(15) Fully clean the area and the floor panels and make sure you remove all the remaining sealant.

SUBTASK 05-51-13-350-001

(16) If corrosion is found on the airframe, refer to the Structural Repair Manual (SRM).

SUBTASK 05-51-13-420-001

(17) Install the galley floor. Do these tasks: PASSENGER CABIN FLOORS - REMOVAL/INSTALLATION, PAGEBLOCK 53-21-00/401 and PASSENGER CABIN FLOORS - REPAIRS, PAGEBLOCK 53-21-00/801.

SUBTASK 05-51-13-410-001

(18) Install the water barrier in the galley. Do this task: WATER BARRIER - REPAIRS, PAGEBLOCK 53-21-11/801.

SUBTASK 05-51-13-420-002

(19) Install the galley (as applicable).

SUBTASK 05-51-13-710-001

(20) If an equipment is found to have been contaminated with moisture, you must do an operational test of the equipment after all the moisture has been removed.

SUBTASK 05-51-13-940-001

(21) Do the close out procedure as follows:

(a) Install the galley floor covering. Do this task: ENTRY AND SERVICE AREA FLOOR COVERING - REMOVAL/INSTALLATION, PAGEBLOCK 25-27-21/401.

(b) Make sure that these access panels are closed:

Number	Name/Location
117A	Electronic Equipment Access Door
822	Aft Cargo Door

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

MERCURY SPILLAGE CONDITION - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)

1. General

A. This section has a task to detect, isolate, examine, and clean the airplane after a mercury spill.

(1) Mercury spills that are not detected and cleaned immediately after a spill can spread and become very difficult to clean or cause extensive structural damage.

(2) Mercury spill containment and cleanup is recommended to be performed by personnel that have specialized training with mercury spills and hazardous material removal.

TASK 05-51-14-210-801

2. Mercury Spillage Conditional Inspection

(Figure 201)

A. References

Reference	Title
25-80-00-000-801	Insulation Blanket Removal (P/B 401)
25-80-00-400-801	Insulation Blanket Installation (P/B 401)

B. General

SUBTASK 05-51-14-160-001

(1) A mercury spill must be considered hazardous, and immediate action must be taken to isolate, inspect, and clean the aircraft.

(2) The corrosive action of mercury is very rapid in pitting and intergranular.

(3) Mercury amalgamates quickly with aluminum alloys at room temperature if the oxide film on the aluminum has been scratched or damaged.

(a) Once a small area of aluminum has been amalgamated, corrosion and liquid metal embrittlement occurs. This process is accelerated by moisture and particularly by salt water.

(4) The amalgamation of stressed aluminum structure may also result in rapid cracking similar to stress corrosion cracking.

(5) Mercury is not consumed in the amalgamation process. As the aluminum oxidizes, it separates from the amalgam and the mercury continues to attack fresh aluminum.

(6) The presence of organic finishes, greases or a thick continuous oxide layer retards the amalgamation process.

(7) When elemental mercury leaks on to an all-metallic structure, severe structural strength degradation can occur.

(a) The rate of the diffusion of the mercury into a metal is related to the type of metal touched by the mercury.

(b) The diffusion is also related to the type of finish protection on the metal.

(c) When the diffusion has started, it cannot be stopped.

(d) Structural degradation after a mercury spill is not always visually apparent until a load is applied to the structure.

(8) The inspection, removal, or repair must be made before the next flight.

(9) Structural repairs are necessary if there are signs of mercury contamination.

(10) Make sure there is no detectable mercury in the airplane.

(a) Use mercury sniffers and X-ray equipment (if available) to detect mercury.

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(b) The airplane is only clean when there is no detectable mercury.

C. Personal Protection

SUBTASK 05-51-14-160-002

(1) Throughout the decontamination process follow these steps:

(a) Monitor the mercury vapor levels near the spill area and protect personnel from exposure.

(b) Look for new free mercury deposits around the suspect spill area.

(c) Limit the number of persons around and on the airplane to the minimum required.

(d) Allow only persons trained in mercury spillage cleanup.

(2) Mercury vapor can cause effects in the central and peripheral nervous systems, lungs, kidneys, skin and eyes in humans. Acute exposure to high concentrations of mercury vapor causes severe respiratory damage, while chronic exposure to lower levels is primarily associated with central nervous system damage. Chronic exposure to mercury is also associated with behavioral changes and alterations in peripheral nervous system.

(a) Mercury Exposer Limits are based on local regulations. Refer to your local regulations for applicable exposure limits.

1) The following exposure levels are also available for your reference:

NOTE: Check the web sites for the latest information and exposure limits.

a) Per the US Environmental Protection Agency (EPA):

<1> For a 24 hours daily (continuous) exposer the safe limit for chronic inhalation of elementary mercury is 0.3 µg/m³ (microgram per cubic meter). This limit should be safe for 24 hour exposure of general population.

<2> The Lowest-Observed Adverse Effect Level (LOAEL) is 25 µg/m³ (converted to LOAEL [ADJ] of 9 µg/m³). The LOAEL is based on an 8-hour TWA occupational exposure. LOAEL [ADJ] limit is based on an 8-hour per day and 40 hours per week TWA occupational exposure. (Source http://www.epa.gov/iris/subst/0370.htm#refinhal).

b) Per the US Occupational Safety and Health Administration (OSHA):

<1> Permissible exposure limit (PEL) for mercury vapor is 100 µg/m³ of air as a ceiling limit. A worker's exposure to mercury vapor shall at no time exceed this ceiling level.

<2> OSHA recognizes the National Institute for Occupational Safety and Health (NIOSH) established recommended exposure limit (REL) for mercury vapor of 50 µg/m³ as a TWA for up to a 10-hour workday and a 40-hour workweek.

<3> OSHA also recognizes American Conference of Governmental Industrial Hygienists (ACGIH) assigned mercury vapor threshold limit value (TLV) of 25 µg/m³ as a TWA for a normal 8-hour workday and a 40-hour workweek. (Source http://www.osha.gov/SLTC/healthguidelines/mercuryvapor/recognition.html)

(3) Large amounts of mercury will vaporize at normal temperatures.

(a) Ventilate enclosed space because the air mass can become dangerous to personal health.

(4) Free mercury or amalgam must not be picked up by hand.

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(5) Clean tools with soap and hot water or steam bath.

(a) Discard drill bits after use on structure contaminated by mercury.

(6) Mercury can attach easily to clothing.

(a) Use protective mats or cardboard to prevent contamination of clothing and the spread of mercury to other areas.

(7) Mercury is highly toxic and spreads very easily from one surface to another by adhering to hands, shoes, clothes, tools, etc.

(a) The following precautions for mercury spills should be strictly followed:

1) Avoid contact with surfaces suspected of being contaminated. Use wood or fiber sheets to support body while working in the area.

2) Wear wing socks (shoe protectors) and protective (disposable) clothing in contaminated area to prevent scratching metal surfaces. Properly dispose of socks after use.

3) Do not wear clothing used in contaminated areas on jobs in uncontaminated areas. Dispose of wing socks and protective clothing into unused metal container outside of aircraft. Contact the Waste Management Service.

4) Wash shoes with soap and water. Clean all tools that have been used in contaminated area with steam or hot water and soap. Discard any drill bits used on mercury contaminated areas. Thoroughly clean vacuum cleaner, if used.

5) Always wash thoroughly with soap and water after contacting mercury. Keep hands away from mouth. Do not eat, smoke, or blow nose without first washing your hands thoroughly.

6) Appreciable amounts of mercury will vaporize at normal temperatures. A stagnant air will become dangerous to personal health.

7) Do not use cleaning aids such as solvents, solids, or polishes on contaminated areas. Such materials may promote corrosion.

8) If hands become contaminated with mercury while working with cleaning equipment, do not touch any exposed metal in surrounding area, as you may contaminate it.

D. Isolation of the Mercury

SUBTASK 05-51-14-160-003

(1) Isolate the mercury spill area to prevent contamination to other areas.

(2) Evaluate the spill for cleanup.

NOTE: Depending on the amount and extent of the spill, consider using a specialized cleanup company that has trained personnel for handling mercury spills and cleanup of hazardous materials.

(3) Make a record of the general quantity of the mercury spilled.

(4) Make a record of the location where the mercury was spilled.

(5) When mercury is found on floor, do not remove coverings, access/inspection plates, screws, rivets, bolts, etc., from floor until all free mercury is removed.

(6) Isolate the spilled mercury and avoid enlargement of the contaminated area. The following precautions are advised:

(a) If mercury is found on the floor, do not remove coverings, access/inspection plates, screws, rivets, bolts, etc., from the floor until all free mercury is removed.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

1) Any hole which is left open in the contaminated area of the floor may allow mercury to spread to structure underneath the floor.

(b) If hands become contaminated, do not touch any exposed metal in the surrounding area in case it becomes contaminated.

(c) Mercury spreads easily from one surface to another by adhering to hands, shoes, clothes, tools, etc. Keep traffic to a minimum in the contaminated area.

(d) Consider protecting uncontaminated areas by taping down protective material such as plastic sheets or toweling. Plastic sheeting or toweling can also be taped over a contaminated area to isolate it while equipment is being collected for the removal of mercury.

E. Detection and Cleanup

SUBTASK 05-51-14-160-004

(1) Because of the urgency involved in removing mercury from the airplane, most of these procedures utilize materials that are readily available locally. However, the use of some special equipment is beneficial in ensuring that all traces of mercury are removed, and the sources of supply for these items are as follows:

(a) Hg vacuum cleaner: Nilfisk of America Inc. (V57573).

(b) Sensing device (mercury sniffer): Beckman Industrial Corp. (V73138), or Sunshine Scientific Instruments Inc. (V06030).

(c) Nickel-plated carbon-fiber brushes: International Research and Development Co.

(d) Fine copper wire brush: Produced locally or commercially available.

(e) Mercury sponge: J.T. Baker Chemical Co. (V70829). Volume

(2) A grayish-white powder or fuzzy coating on aluminum surfaces indicates the presence of corrosion caused by spilled mercury.

(3) The presence of even small amounts of mercury can be detected by a sniffer.

NOTE: This is an electronic device that is sensitive to mercury vapor.

SUBTASK 05-51-14-160-005

(4) Inspect the metal floor, seat tracks, cargo rails, and adjacent structure for mercury and corrosion.

(a) Inspect skin and internal structure below point of spillage.

(b) Also inspect lowest point in fuselage below cargo compartment floor if mercury spill has occurred in cargo area.

NOTE: Mercury liquid will flow to lowest level.

(5) Inspect areas suspected of having mercury contamination using a 10X magnifying glass.

(a) If corrosion of aluminum has started there will be a light grayish “Christmas Tree” fuzz or gray powdery dust deposit, and severe structural damage may follow.

(6) If corrosion is evident and cleanup cannot be completed immediately, coat contaminated area with corrosion preventative compound or engine oil.

NOTE: This helps to slow down the corrosion rate and also helps to prevent spreading of mercury contamination.

(7) When mercury spills occur in lower cargo compartment, use a portable X-ray machine (if available) along the outside lower surface of the fuselage to check suspected hidden corrosion areas between the skin, stringers, and frames below the floor.

(a) Droplets of mercury will show on a radiograph as small white spots.

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(b) Corrosion and embrittlement will appear as tree-like forms completely penetrating a structural component.

(c) While the basic X-ray exposure and film density parameters are acceptable to Boeing, it is recommended to reverse the film and X-ray tube placement.

(d) X-Ray evaluation only needs to be performed in areas that are suspected to be contaminated.

1) Special attention must be given to the area along joints and crevices, e.g. skin/stringer joint, stringer clips.

WARNING DO NOT GET MERCURY IN YOUR MOUTH, EYES, OR ON YOUR SKIN. DO NOT BREATHE THE FUMES FROM THE MERCURY. WEAR PROTECTIVE SPLASH GOGGLES AND GLOVES WHEN YOU CLEAN A MERCURY SPILL. MERCURY IS POISONOUS AND CAN CAUSE INJURY TO PERSONS.

WARNING FULLY REMOVE ALL MERCURY FROM THE AIRPLANE. MERCURY CAN CAUSE INJURIES TO PERSONNEL, AND DAMAGE TO EQUIPMENT.

(8) Remove all free mercury without delay. The following methods of removal are suggested, the more primitive methods are less effective than those requiring special equipment, but any possible method should be attempted whereby speed is essential.

(a) Use paper or cardboard troughs to scoop up the mercury.

(b) Use a high-powered mercury vacuum cleaner with a trap, if available. For a suggested method of making a trap, see Figure 201.

1) Locate the vacuum outside the airplane in a well ventilated location to reduce the possibility of contamination to other areas.

2) The size of the pickup hose from the container should be about ¼ in. (6 mm) in diameter to increase the amount of suction applied to the mercury.

NOTE: Due to the weight of mercury, the container will catch the mercury before it can enter the vacuum cleaner hose.

(c) An all rubber storage battery water syringe, or a medicine dropper, may be used to remove mercury if the trap-type glass container and vacuum cleaner are not available.

(d) Cellulose tape may be used to pick up very tiny particles of mercury. General cleanup and inspection (using equipment available) should be made immediately after spillage occurs or is detected.

(e) A fine copper wire brush can also be used to pick up mercury. It is suggested that a suitable brush could be manufactured locally by using the fine wires used in domestic flexible electrical cable. The procedure for using the copper brush is as follows:

1) Use one of the special mercury pickup brushes that attract the mercury. Foam pads are also commercially available that will pick up mercury. Refer to par. 6 for details of a suitable brush.

2) Dip the brush in nitric acid (HN03) to clean the wires.

3) Dip the brush into water to remove the acid.

4) Dip the brush into alcohol to remove the water.

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5) Pick up the mercury with the brush. Mercury adheres to the copper wires by forming an amalgam. After the brush has collected a quantity of mercury it can be shaken off into a suitable container, and the picking up process continued.

(9) Remove the insulation blankets in the spill area and discard them, do this task: Insulation Blanket Removal, TASK 25-80-00-000-801.

(a) Also remove all of the insulation blankets that are downstream of the spill.

NOTE: Make sure you remove all blankets that go to the nearest lateral fluid dams.

(10) Where there is evidence of the presence of mercury in joints, between faying surfaces, or trapped in any way between structural members, they must be disassembled as necessary to permit complete removal of the mercury.

(11) Inspect bronze/brass control cable turnbuckle barrels for mercury discoloration. Replace if slightest discoloration is detected.

SUBTASK 05-51-14-750-001

(12) Heat Cycling and Ventilation (optional):

(a) Boeing is aware of the use of a heat cycle to vaporize mercury at the microscopic level.

1) This process has been used by the industry in an effort to completely eliminate mercury from the airplane.

2) This process includes monitoring vapor levels at the elevated temperatures, and venting the aircraft to remove the trace amounts

3) This process is for mercury removal process when visual indication is not entirely possible.

(b) The heat and vent process is accomplished multiple times, reaching temperatures as high as 138°F (59°C).

NOTE: External sources are exclusively used for heating. Aircraft air conditioning packs and equipment cooling are not used to heat aircraft to ensure systems are isolated and vapors are not cycled throughout clean areas. Upon reactivation of aircraft, the aircraft air conditioning and the ECS are cycled to ensure vents are cleared and cabin is clean.

1) Heating to such levels is more than 2.5 times the vaporization temperature (mercury readily vaporizes at 55°F (13°C).

2) Six remote thermometers are used to monitor internal temperatures for 12-hour periods to ensure aircraft structure reaches the elevated temperatures.

3) Following the heat, the aircraft is vented for 12 hours to clear the vapor overboard.

4) Each cycle of heat and ventilation can give significant drops in vapor levels at high and low temperatures.

F. Put the Airplane Back to It's Usual Condition

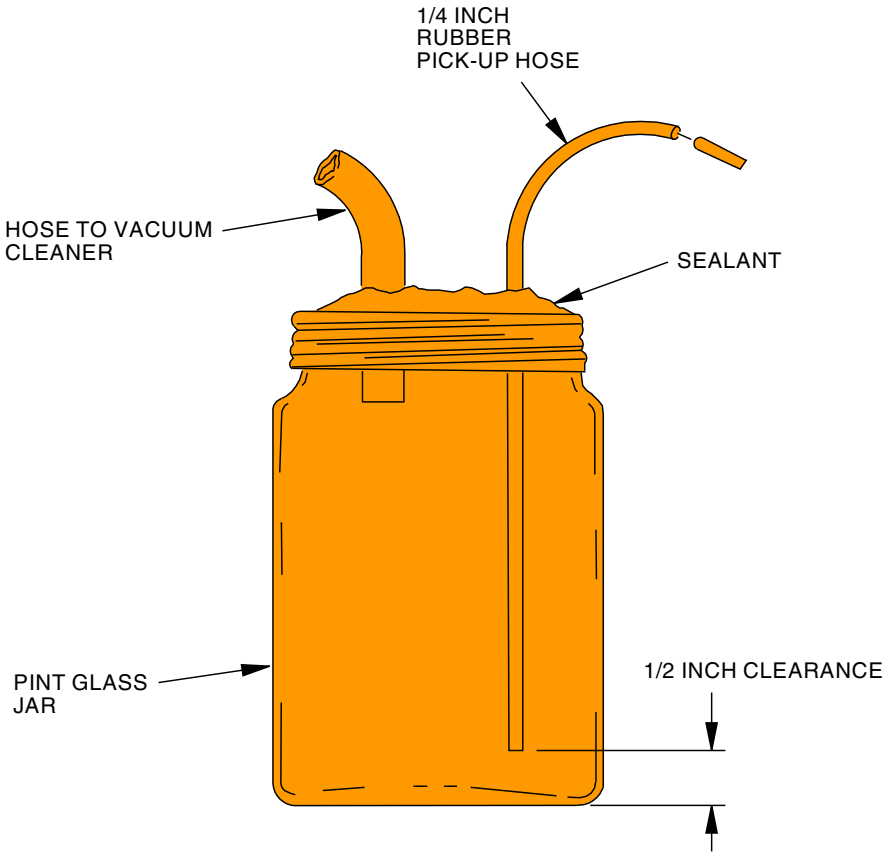
SUBTASK 05-51-14-410-001

(1) Install the components that you removed or install replaceable parts.

(a) Do this task: Insulation Blanket Installation, TASK 25-80-00-400-801.

——— END OF TASK ———

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NOTE:

MERCURY VAPOR MAY CONTAMINATE THE VACUUM CLEANER.
CLEAN THOROUGHLY AFTER USE.

2410412 S00061525504_V1

Vacuum Cleaner Mercury Trap
Figure 201/05-51-14-990-801

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BRAKE SEIZURE CONDITION - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)

1. General

A. This procedure contains the task to examine the wheel assemblies and brakes of the main landing gear after a brake seizure condition.

TASK 05-51-15-210-801

2. Brake Seizure Conditional Inspection

A. References

Reference	Title
05-51-07-210-801	High Energy Stop (P/B 201)
32-41-41-000-801	Main Landing Gear Brake Removal (P/B 401)
32-41-41-700-803	Main Landing Gear Brake Inspection (Wheel Removed from the Airplane) (P/B 601)
32-45-00-700-802	Wheels Inspection (Wheel Removed from the Airplane) (P/B 601)
32-45-00-700-803	Landing Gear Tire Inspection (P/B 601)
32-45-11-000-801	Main Landing Gear Wheel and Tire Assembly Removal (P/B 401)

B. Location Zones

Zone	Area
700	Landing Gear and Landing Gear Doors

C. Examine the Main Landing Gear Wheels and Brakes

SUBTASK 05-51-15-000-001

(1) Remove the wheel and tire assembly of the main landing gear, do this task: Main Landing Gear Wheel and Tire Assembly Removal, TASK 32-45-11-000-801.

SUBTASK 05-51-15-210-001

(2) Inspect the tires and wheels as follows:

(a) Do this task: Wheels Inspection (Wheel Removed from the Airplane), TASK 32-45-00-700-802.

(b) Do this task: Landing Gear Tire Inspection, TASK 32-45-00-700-803.

SUBTASK 05-51-15-000-002

(3) Remove the seized brake unit, do this task: Main Landing Gear Brake Removal, TASK 32-41-41-000-801.

(a) Examine the brake unit grease O-ring seal(s), installed on the inner diameter of the brake, and make sure they are not damaged by heat or wear, do this task: Main Landing Gear Brake Inspection (Wheel Removed from the Airplane), TASK 32-41-41-700-803.

(b) Examine the wheel bearing seal adjacent to the brake and replace the seal if it has been damaged by heat.

SUBTASK 05-51-15-210-003

(4) Examine the brake sleeve and axle.

(a) If you find signs of an overheat condition, do this task: High Energy Stop, TASK 05-51-07-210-801.

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SUBTASK 05-51-15-210-004

(5) Examine the paint on the axles (High Energy Stop, TASK 05-51-07-210-801).

NOTE: Also look on the adjacent areas of the inner cylinder.

(a) Look for a brown shade color that is caused by an overheat condition.

(b) If the paint is a brown shade color, repair the damage.

D. Put the Airplane Back to its Usual Condition

SUBTASK 05-51-15-840-001

(1) Install the components you removed if they are serviceable, or install replacement parts.

END OF TASK

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FLAT SPOTTED TIRES - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)

1. General

A. This procedure contains the task to inspect the wheels and brakes after the tires have become flat spotted.

(1) Flat spotted tires are from a locked wheel slide condition and not from a structural failure of the tire.

(2) You must do the inspections in the sequence given in this procedure to find the cause of the locked wheel condition.

B. The inspections are divided into two types.

(1) The first type of inspection is for conditions where only one tire is flat spotted.

(2) The second type of inspection is for conditions where multiple tires are flat spotted.

TASK 05-51-16-210-801

2. Flat Spotted Tires Conditional Inspection

A. References

Reference	Title
29-11-61-000-802	Return Filter Module Removal (P/B 401)
29-11-61-400-802	Return Filter Module Installation (P/B 401)
32-41-00-710-801	Normal and Alternate Brake Application Functional Test (P/B 501)
32-41-41-700-802	Main Landing Gear Brake Fast Check (Wheel Installed on the Airplane) (P/B 601)
32-42-00-710-803	Transducer Operational Test (P/B 501)
32-42-00-720-801	Antiskid/Autobrake Control Unit Operational Test (P/B 501)
32-42-31-000-801	Antiskid Valve Removal (P/B 401)
32-42-31-400-801	Antiskid Valve Installation (P/B 401)
32-44-00-710-801	Parking Brake System Operational Test (P/B 501)
32-45-00-700-801	Wheels Fast Check (Wheel Installed on the Airplane) (P/B 601)
32-45-00-700-803	Landing Gear Tire Inspection (P/B 601)

B. Location Zones

Zone	Area
700	Landing Gear and Landing Gear Doors

C. One Flat Spotted Tire Condition

SUBTASK 05-51-16-210-001

(1) Do the inspections that follow after a one flat spotted tire condition:

(a) Examine the tire. Do this task: Landing Gear Tire Inspection, TASK 32-45-00-700-803.

(b) Examine the wheel. Do this task: Wheels Fast Check (Wheel Installed on the Airplane), TASK 32-45-00-700-801.

(c) Examine the brake. Do this task: Main Landing Gear Brake Fast Check (Wheel Installed on the Airplane), TASK 32-41-41-700-802.

(d) Make sure the brake will operate correctly and is in a serviceable condition. Do this task: Normal and Alternate Brake Application Functional Test, TASK 32-41-00-710-801.

(e) Make sure the routing of the hydraulic lines and the wiring runs are correct.

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(f) Do a functional test for the antiskid/autobrake system. Do this task: Antiskid/Autobrake Control Unit Operational Test, TASK 32-42-00-720-801.

(g) Do the transducer spin test and make sure that the correct brake releases when the transducer motion stops. Do this task: Transducer Operational Test, TASK 32-42-00-710-803.

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(h) If the tests above show that the system works correctly and the inspections above do not show damage, replace the antiskid valve for the affected wheel.

1) Remove the antiskid valve. Do this task: Antiskid Valve Removal, TASK 32-42-31-000-801.

2) Install a new antiskid valve. Do this task: Antiskid Valve Installation, TASK 32-42-31-400-801.

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D. Multiple Flat Spotted Tire Condition

SUBTASK 05-51-16-200-001

(1) Do the inspections that follow after a multiple flat spotted tire condition:

(a) Examine the tires. Do this task: Landing Gear Tire Inspection, TASK 32-45-00-700-803.

(b) Examine the wheels. Do this task: Wheels Fast Check (Wheel Installed on the Airplane), TASK 32-45-00-700-801.

(c) Examine the brakes. Do this task: Main Landing Gear Brake Fast Check (Wheel Installed on the Airplane), TASK 32-41-41-700-802.

(d) Make sure the brakes will operate correctly and are in a serviceable condition. Do this task: Normal and Alternate Brake Application Functional Test, TASK 32-41-00-710-801.

(e) Make sure the routing of the hydraulic lines and the wiring runs are correct.

(f) Do the transducer spin test and make sure that the correct brakes release when the transducer motion stops. Do this task: Transducer Operational Test, TASK 32-42-00-710-803.

(g) Make sure the hydraulic return filter is not blocked.

1) Remove the hydraulic return filter module. Do this task: Return Filter Module Removal, TASK 29-11-61-000-802.

2) Install the hydraulic return filter module. Do this task: Return Filter Module Installation, TASK 29-11-61-400-802.

(h) Make sure the parking brake valve operates correctly. Do this task: Parking Brake System Operational Test, TASK 32-44-00-710-801.

1) Also make sure that the valve is fully open when the parking brake releases.

(i) Do a BITE test for the Antiskid/Autobrake system. Do this task: Antiskid/Autobrake Control Unit Operational Test, TASK 32-42-00-720-801.

1) Make sure the Antiskid/Autobrake system works correctly.

E. Put the Airplane Back to It's Usual Condition

SUBTASK 05-51-16-410-001

(1) Install all the components you removed if they are serviceable, or install replacement parts.

END OF TASK

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WHEEL BEARING FAILURE/DAMAGE CONDITION - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)

1. General

A. This inspection must be done before the next flight of the airplane.

B. This section has two tasks:

(1) Wheel Bearing Failure.

(2) Heat Damage Inspection of the Axle.

TASK 05-51-17-210-801

2. Wheel Bearing Failure

A. General

(1) This section gives an inspection procedure for landing gear wheels, brakes, axle sleeves, and axles after a wheel bearing failure.

(2) The degradation of wheel bearing components can occur as follows:

(a) Lubrication that is incorrect or not sufficient

(b) A decrease of the wheel bearing preload

(c) Contamination in the bearing

(d) Other damage that occurs.

(3) When you operate with damaged wheel bearings, it will cause heat in the adjacent parts:

(a) The axles

(b) The axle sleeves

(c) The spacers

(d) The wheel hubs.

(4) These parts can have scores if the bearing damage causes a seizure and then causes rotation that is relative to the adjacent parts.

(5) Do an inspection of the wheel bearings carefully during each tire change.

(6) The failure of a wheel bearing can be found by the symptoms or conditions that follow:

(a) Contamination of the wheel bearing grease with unwanted material.

(b) Metal particles or fragments in the area of the wheel and the brake

(c) The hubcap is damaged or is missing (main gear only)

(d) A wheel that is canted more than usual.

(e) The wheel and tire assembly are missing.

B. References

Reference	Title
32-41-41-000-801	Main Landing Gear Brake Removal (P/B 401)
32-41-41-400-801	Main Landing Gear Brake Installation (P/B 401)
32-41-41-700-803	Main Landing Gear Brake Inspection (Wheel Removed from the Airplane) (P/B 601)
32-42-11-000-801	Antiskid Wheel Speed Transducer Removal (P/B 401)
32-42-21-400-801	Antiskid/Autobrake Control Unit Installation (P/B 401)
32-45-00-700-801	Wheels Fast Check (Wheel Installed on the Airplane) (P/B 601)

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(Continued)

Reference	Title
32-45-11-000-801	Main Landing Gear Wheel and Tire Assembly Removal (P/B 401)
32-45-21-000-801	Nose Landing Gear Wheel and Tire Assembly Removal (P/B 401)

C. Location Zones

Zone	Area
700	Landing Gear and Landing Gear Doors

D. Wheel Inspection

SUBTASK 05-51-17-210-001

(1) Do the wheel inspection. Do this task: Wheels Fast Check (Wheel Installed on the Airplane), TASK 32-45-00-700-801.

(a) When a main wheel shows signs of a wheel bearing failure, or other signs of damage, do this task: Main Landing Gear Wheel and Tire Assembly Removal, TASK 32-45-11-000-801.

NOTE: The wheel and tire assembly, with the bearings, must be sent to the shop for disassembly and a detailed inspection.

(b) When a nose wheel shows signs of a wheel bearing failure or other signs of damage, do this task: Nose Landing Gear Wheel and Tire Assembly Removal, TASK 32-45-21-000-801.

NOTE: The wheel and tire assembly, and the bearings must be sent to the shop to be disassembled and inspected.

(c) Make sure the wheels that are removed have the correct wheel bearings installed.

E. Brake Inspection

SUBTASK 05-51-17-210-002

(1) Do an inspection of the brake assembly (main landing gear only). Do this task: Main Landing Gear Brake Inspection (Wheel Removed from the Airplane), TASK 32-41-41-700-803.

(a) Examine the parts that follow:

1) Rotors

2) Stators

3) Torque tube backing plate

4) Other parts of the brake assembly that can become damaged.

(b) When a brake assembly shows signs of damage or does not operate correctly, remove the brake assembly. Do this task: Main Landing Gear Brake Removal, TASK 32-41-41-000-801.

NOTE: The brake assembly must be sent to the shop to be disassembled and inspected.

F. Axle Inspection

SUBTASK 05-51-17-210-003

(1) Do an inspection of the main gear axle and axle sleeve.

(a) Remove the components that follow if they have not been removed:

NOTE: Make sure you do a check for damage.

1) Do this task: Main Landing Gear Brake Removal, TASK 32-41-41-000-801.

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2) Do this task: Antiskid Wheel Speed Transducer Removal, TASK 32-42-11-000-801.

(b) Remove the grease or corrosion inhibitive compound (CIC) from the axle if it is necessary.

(c) Visually examine the components that follow and look for paint or primer discoloration, blistering, and structural damage:

NOTE: Discoloration is green primer that has turned brown or black and/or enamel turned yellow, brown, or black.

NOTE: Damage is scoring, metal transfer, and/or displacement of material.

1) The outer diameter of the axle sleeve, check for scoring.

NOTE: Scoring will be caused when the wheel bearing turns on the axle sleeve.

a) Repair or replace the sleeve if necessary.

2) The brake sleeve, check for scoring on the end adjacent to the inner wheel bearing cone.

a) Repair or replace the sleeve if necessary.

(d) Visually examine the axle nut and washer for signs of scores or other damage.

1) Replace or repair the nut and washer if necessary.

(e) If there is no damage, discoloration, or blistering, you can leave the axle in service as it is.

NOTE: No more inspections to the axle are necessary.

(f) If the axle has signs of heat damage, do this task: Heat Damage Inspection of the Axle, TASK 05-51-17-210-802.

G. Put the Airplane Back to Its Usual Condition

SUBTASK 05-51-17-410-001

(1) Install all of the components you removed if they are serviceable, or install replacement parts.

(a) Do this task: Main Landing Gear Brake Installation, TASK 32-41-41-400-801.

(b) Do this task: Antiskid/Autobrake Control Unit Installation, TASK 32-42-21-400-801.

——— END OF TASK ———

TASK 05-51-17-210-802

3. Heat Damage Inspection of the Axle

A. References

Reference	Title
05-51-07-280-801	Heat Damage Inspection (Ammonium Persulfate Solution) (P/B 201)
32-11-85-000-801	Main Landing Gear Axle Removal (P/B 401)
51-21-98-300-801	Heat, Weather and Oil Resistant Inorganic Protective Coating Application (P/B 701)

B. Location Zones

Zone	Area
700	Landing Gear and Landing Gear Doors

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C. Main Landing Gear (MLG) Axle

SUBTASK 05-51-17-210-004

(1) Examine the MLG axle for heat damage as follows:

NOTE: This step is necessary only when the axle sleeve show signs of scoring, discoloration, or other damage, and the axle sleeve has been removed.

(a) If it is necessary to reapply the heat-resistant protective coating, do this task: Heat, Weather and Oil Resistant Inorganic Protective Coating Application, TASK 51-21-98-300-801.

(b) Examine the light-gray hydraulic-fluid resistant paint on the axle.

1) Look for a brown color caused when the paint becomes too hot.

(c) Do a check for discoloration of the chrome plating on the axle lands where the sleeve touches.

(d) Examine the green primer on the inner surfaces (bore) of the axle with a borescope.

1) Use the borescope to a minimum depth of 16 in. (406 mm) and look for discoloration or blistered paint.

2) The green primer will turn to a light brown or black color when it becomes too hot.

NOTE: If the paint shows only a small discoloration, you can do the heat damage inspection when the airplane goes back to the primary base.

NOTE: Do not make more than three landings before you do this inspection.

SUBTASK 05-51-17-210-005

(2) If signs of heat damage to the main landing gear axle is found, do this task: Heat Damage Inspection (Ammonium Persulfate Solution), TASK 05-51-07-280-801.

(a) Remove the axle if it is necessary, do this task: Main Landing Gear Axle Removal, TASK 32-11-85-000-801.

SUBTASK 05-51-17-350-001

(3) If you find signs of damage in the areas that follow, repair or replace the damaged components:

NOTE: Heat damage to the cadmium plate can cause cadmium embrittlement of the steel substrate.

(a) The cadmium plate on the axle bore shows signs of heat damage.

(b) The chrome plate on the outer part of the axle shows signs of heat damage.

D. Nose Landing Gear (NLG) Axle

SUBTASK 05-51-17-210-006

(1) Do an inspection of the nose landing gear axle.

(a) Visually examine the parts that follow for scores or other damage:

1) The wheel bearing washer

2) The axle nut

3) The inner wheel bearing spacer.

(b) Replace or repair the components if necessary.

(c) Examine the NLG axle for damage.

1) Look for scores or discoloration of the chrome plated bearing lands on the axle.

2) Examine the light-gray, hydraulic-fluid-resistant, paint on the axle.

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a) The paint will become a brown color when it becomes too hot.

3) Examine the green primer on the inner surfaces (bore) of the axle with a borescope.

a) Use the borescope to a minimum depth of 7 in. (178 mm) and look for discoloration or blistering

b) The green primer will turn to a light brown or black color when it becomes too hot.

NOTE: If the paint shows only a small discoloration, you can do the heat damage inspection when the airplane goes back to the primary base.

NOTE: Do not make more than three landings before you do this inspection.

SUBTASK 05-51-17-210-007

(2) If signs of heat damage to the nose gear axle are found, do this task: Heat Damage Inspection (Ammonium Persulfate Solution), TASK 05-51-07-280-801.

SUBTASK 05-51-17-350-002

(3) If you find signs of damage in the areas that follow, repair or replace the damaged components:

NOTE: Heat damage to the cadmium plate can cause cadmium embrittlement of the steel substrate.

(a) The cadmium plate on the axle bore shows signs of heat damage

(b) The chrome plate on the outer part of the axle shows signs of heat damage.

E. Put the airplane back to its usual condition.

SUBTASK 05-51-17-400-001

(1) Install all of the components you removed if they are serviceable, or install replacement parts.

END OF TASK

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BIRD/HAIL STRIKE CONDITION - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)

1. General

A. This procedure contains these tasks:

(1) Bird strike and in-flight hail strike conditional inspection.

(2) Hail strike on the ground conditional inspection.

TASK 05-51-18-210-801

2. Bird Strike and In-flight Hail Strike Conditional Inspection

A. General

(1) All of the inspections are visual unless shown differently in the procedure.

(2) Examine the external surfaces of the airplane structure in the general area of the bird/in-flight hail strike.

(a) If the initial inspection shows structural damage, then the internal structure must be inspected.

(b) If the bird/in-flight hail struck the nose radome, the inside of the radome must be inspected even if no damage is found on the exterior of the nose radome.

1) If the outer skin-to-core of the radome does not compress when you apply strong finger pressure to impact area, then do the internal inspection at or before 3 flight cycles.

(c) Also inspect the hydraulic, pneumatic, and other systems in the area of the bird/in-flight hail strike for damage.

(3) When the conditional inspection tells you to "examine" a component, look for these conditions (repair or replace components, if it is necessary):

(a) Cracks

(b) Pulled apart structure

(c) Loose paint (paint flakes)

(d) Twisted parts (distortion)

(e) Bent components

(f) Ruptures

(g) Loose fasteners

(h) Fasteners holes that became larger or longer

(i) Fasteners that have pulled out or are gone

(j) Delamination

(k) Fiber breakouts

(l) Misalignment

(m) Interference

(n) Other signs of damage.

(4) If damage is found during these inspections, go to the related maintenance manual section for the repair.

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B. References

Reference	Title
12-40-04-100-801	Bird Strike Cleaning (P/B 201)
27-51-00-040-801	Trailing Edge Flap System Deactivation (P/B 201)
27-51-00-440-801	Trailing Edge Flap System Reactivation (P/B 201)
27-51-00-710-801	Trailing Edge Flap System Operational Test (P/B 501)
27-81-00-040-801	Leading Edge Flaps and Slats - Deactivation (P/B 201)
27-81-00-440-801	Leading Edge Flaps and Slats - Activation (P/B 201)
27-81-00-700-801	Leading Edge Flap and Slat Operational Test in Primary Mode (P/B 501)
53-54-00-211-801	Broadband Radome Inspection (P/B 601)
71-00-00-200-802-G00	Engine Foreign Object Damage and Birdstrike Inspection (P/B 601)
SRM 51-10-02-0G-0	Inspection and Removal of Damage

C. Location Zones

Zone	Area
111	Radome
300	Empennage
400	Powerplant and Nacelle Struts
500	Left Wing
600	Right Wing
700	Landing Gear and Landing Gear Doors

D. Bird Strike and In-flight Hail Strike Conditional Inspection

SUBTASK 05-51-18-040-001

WARNING PUT ON EQUIPMENT FOR PROTECTION BEFORE YOU TOUCH THE BIRD CARCASS, BLOOD, GUTS, AND RESIDUE. THIS CAN CONTAIN BACTERIA AND VIRUSES THAT CAN CAUSE ILLNESSES, AND INJURIES TO PERSONNEL.

WARNING DO NOT LET THE BIRD CARCASS OR OTHER PIECES OF THE BIRD TOUCH YOUR SKIN. DISCARD THE BIRD PIECES IN A PLASTIC DISPOSAL BAG. THE BIRD PIECES CAN CONTAIN INFECTIOUS MATERIALS (BACTERIA AND VIRUSES). THEY CAN CAUSE ILLNESSES, AND INJURIES TO PERSONNEL.

(1) Before you touch any area of the airplane that may have been affected by the bird strike, do this task: Bird Strike Cleaning, TASK 12-40-04-100-801.

WARNING DO THE DEACTIVATION PROCEDURE FOR THE LEADING EDGE FLAPS AND SLATS. THE FLAPS AND SLATS MOVE QUICKLY. INJURIES TO PERSONNEL, AND DAMAGE TO EQUIPMENT CAN OCCUR.

WARNING DO THE TRAILING EDGE FLAP DEACTIVATION PROCEDURE BEFORE YOU DO WORK ON THE FLAP SYSTEM. WITH THE FLAPS ACTIVATED, THE FLAPS CAN MOVE AND CAUSE INJURY TO PERSONS OR DAMAGE TO EQUIPMENT.

(2) Extend the Leading edge flap and slat system and the trailing edge flap system in the full extend position.

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(a) Do the deactivation procedure for the leading edge flap and slat system. Do this task: Leading Edge Flaps and Slats - Deactivation, TASK 27-81-00-040-801.

(b) Do the deactivation procedure for the trailing edge flap system. Do this task: Trailing Edge Flap System Deactivation, TASK 27-51-00-040-801.

SUBTASK 05-51-18-210-001

(3) Examine the areas that follow. In particular, inspect the nearby components of these systems if evidence of bird remains or structural damage are found.

(a) The external and internal areas of the radome for:

1) Cracks
2) Delamination
3) Soft spots
4) Core damage.

(b) The pilots' windows for:

1) Delamination
2) Spalling
3) Cracks.

(c) The forward-body nose section "eyebrow" area above the windows and radome.

(d) The wing

(e) The nacelle strut

(f) The leading edge fairing of the horizontal stabilizer.

(g) The leading edge fairing of the vertical stabilizer.

(h) Examine the strut panels, doors, and structure.

(i) Examine the wing leading edge and the wing trailing edge structure, panels, and doors.

1) Also examine the two sides of the honeycomb panels for:

a) Cracks
b) Delamination
c) Soft spots
d) Core damage.

(j) Examine the leading edge slat mechanism and track fairing links.

(k) Examine the trailing edge flat mechanism and track fairing links.

(l) Examine the flight control surfaces.

(m) The passengers windows for:

1) Displacement of the outer panel
2) Crazing
3) Cracks
4) Other types of window damage.

(n) Examine the nose landing gear doors and linkage.

(o) Examine the main landing gear doors and linkage. .

I (p) If the landing gear was extended during the bird/in-flight hail strike, examine the landing gear.

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SUBTASK 05-51-18-210-002

(4) Perform a general visual inspection of each engine nose cowl and the engine intake for signs of bird strike or foreign object damage.

(a) If there is indication of a bird strike or foreign object damage, do this task: Engine Foreign Object Damage and Birdstrike Inspection, TASK 71-00-00-200-802-G00.

SUBTASK 05-51-18-210-003

(5) Examine the external fuselage structure.

(a) If you find external damage, get access to the internal areas and examine:

1) All of the frames
2) The fittings and the component mounts
3) All of the components in the area
4) The pipes
5) The pulleys
6) The mechanical linkage.
7) Refer to Inspection and Removal of Damage/SRM PROCEDURE 51-10-02-0G-0 for the analysis and continued service of airplanes with on-ground hail damage.

SIA 015-999

SUBTASK 05-51-18-211-001

(6) Inspect the broadband radome for damage (TASK 53-54-00-211-801).

SIA ALL

SUBTASK 05-51-18-210-004

I (7) Inspect the hydraulic, pneumatic, and other systems in the area of the bird/in-flight hail strike for damage.

SUBTASK 05-51-18-440-001

(8) Do the activation procedure for the leading edge flap and slat system. Do this task: Leading Edge Flaps and Slats - Activation, TASK 27-81-00-440-801.

SUBTASK 05-51-18-440-002

(9) Do the activation procedure for the trailing edge flap system. Do this task: Trailing Edge Flap System Reactivation, TASK 27-51-00-440-801.

SUBTASK 05-51-18-710-001

(10) Do the tests that follow if you worked on the system subsequent to the inspection for damage:

(a) Do this task: Leading Edge Flap and Slat Operational Test in Primary Mode, TASK 27-81-00-700-801.

(b) Do this task: Trailing Edge Flap System Operational Test, TASK 27-51-00-710-801.

E. Put the Airplane Back to It's Usual Condition

SUBTASK 05-51-18-400-001

(1) Install the components you removed or install replacement parts.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-51-18-212-801

3. Hail Strike on the Ground Conditional Inspection

A. General

(1) This inspection is required if hail reported as GR 0.25 in. (6.35 mm) or greater in size strikes the aircraft.

(a) If the GR hail struck the nose radome, the inside of the radome must be inspected even if no damage is found on the exterior of the nose radome.

1) If the outer skin-to-core of the radome does not compress when you apply strong finger pressure to impact area, then do the internal inspection at or before 3 flight cycles.

(b) For GR hail less than 0.25 in. (6.35 mm), no inspection is required.

(2) This inspection is not required if GS hail strikes the aircraft.

(a) GS hail is defined as white, opaque grains of ice. The pellets are round or sometimes conical and are less than 0.2 in. (5 mm) in diameter.

B. References

Reference	Title
27-51-00 P/B 201	TRAILING EDGE FLAP SYSTEM - MAINTENANCE PRACTICES
27-51-00-040-801	Trailing Edge Flap System Deactivation (P/B 201)
27-51-00-440-801	Trailing Edge Flap System Reactivation (P/B 201)
27-81-00 P/B 201	LEADING EDGE FLAP AND SLAT CONTROL SYSTEM - MAINTENANCE PRACTICES
27-81-00-040-801	Leading Edge Flaps and Slats - Deactivation (P/B 201)
27-81-00-440-801	Leading Edge Flaps and Slats - Activation (P/B 201)
SRM 51-10-01-0G-0	Aerodynamic Smoothness Requirements

C. Location Zones

Zone	Area
200	Upper Half of Fuselage
300	Empennage
400	Powerplant and Nacelle Struts
500	Left Wing
600	Right Wing
700	Landing Gear and Landing Gear Doors
800	Doors

D. Additional Information

NOTE: Additional information useful for this procedure may be found in these references:

- TRAILING EDGE FLAP SYSTEM - MAINTENANCE PRACTICES, PAGEBLOCK 27-51-00/201
- LEADING EDGE FLAP AND SLAT CONTROL SYSTEM - MAINTENANCE PRACTICES, PAGEBLOCK 27-81-00/201

ECCN 9E991 BOEING PROPRIETARY - See title page for details

E. Procedure

SUBTASK 05-51-18-040-002

WARNING DO THE DEACTIVATION PROCEDURE FOR THE LEADING EDGE FLAPS AND SLATS. THE FLAPS AND SLATS MOVE QUICKLY. INJURIES TO PERSONNEL, AND DAMAGE TO EQUIPMENT CAN OCCUR.

(1) Do the deactivation procedure for the leading edge flaps and slats system: Leading Edge Flaps and Slats - Deactivation, TASK 27-81-00-040-801.

SUBTASK 05-51-18-040-003

WARNING DO THE TRAILING EDGE FLAP DEACTIVATION PROCEDURE BEFORE YOU DO WORK ON THE FLAP SYSTEM. WITH THE FLAPS ACTIVATED, THE FLAPS CAN MOVE AND CAUSE INJURY TO PERSONS OR DAMAGE TO EQUIPMENT.

(2) Do the deactivation procedure for the trailing edge flap system: Trailing Edge Flap System Deactivation, TASK 27-51-00-040-801.

SUBTASK 05-51-18-212-001

(3) Do the visual examinations of the areas that follow:

NOTE: When you examine the honeycomb panels, look at the two sides for cracks, delamination, soft spots and core damage.

(a) The nose radome.

(b) The wings, for signs of hail damage to the areas that follow:

1) All horizontal surfaces
2) Leading edges
3) Trailing edges
4) Panels.

(c) The flight control surfaces.

(d) The leading edge fairings on the horizontal stabilizer.

(e) The leading edge fairings on the vertical stabilizer.

(f) The external fuselage structure.

1) If signs of hail damage to the external fuselage structure is found, refer to Aerodynamic Smoothness Requirements/SRM PROCEDURE 51-10-01-0G-0 for investigation and clean-up of damage.

(g) The flight compartment windows, for signs of hail damage as follows:

1) Cracks
2) Displacement of the outer window
3) Other types of window damage.

(h) The forward fuselage section above the flight compartment windows and the radome.

(i) The wing tip fairings and navigation lights.

(j) The passenger and cargo doors.

(k) The nacelle strut.

(l) The nose landing gear doors.

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(m) The main landing gear doors.

(n) The passenger compartment windows for signs of hail damage as follows:

1) Cracks

2) Displacement of the outer window

3) Crazing

4) Other types of window damage.

(o) Examine the nose cowl and the engine for signs of foreign object damage.

SIA 015-999

(p) The broadband radome.

SIA ALL

SUBTASK 05-51-18-212-002

(4) The allowable damage shown in the Structural Repair Manual is to be used to define the limits of damage within each component.

SUBTASK 05-51-18-440-003

(5) Do the reactivation procedure for the leading edge flap and slat system: Leading Edge Flaps and Slats - Activation, TASK 27-81-00-440-801.

SUBTASK 05-51-18-440-004

(6) Do the reactivation procedure for the trailing edge flap system: Trailing Edge Flap System Reactivation, TASK 27-51-00-440-801.

——— END OF TASK ———

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LIGHTNING STRIKE CONDITION - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)

1. General

A. After an airplane lightning strike report, an examination of the airplane is done to find possible damage.

B. The term “Examination” is intended to direct airline personnel to find lightning strike damage as described in these procedures and is not an indication of intensity, access or tools recommended.

C. This procedure has two tasks:

(1) Inspection for Lightning Strike Damage

NOTE: The Phase I Inspection is necessary to defer the Phase II Inspection for 50 flight cycles, if applicable. The Phase I Inspection is not necessary if the Phase II Inspection will be completed immediately.

(a) Phase I Inspection

(b) Phase II Inspection

(2) Inspection and Operational Check of Radio and Navigation Systems

D. Lightning Strike Inspection

(1) The lightning strike inspection is divided into two phases.

(a) Phase I - Inspection of metallic structures, non-metallic (composite) structures and system components.

(b) Phase II - General Visual Inspection of all areas.

(2) Phase II Inspection may be deferred up to 50 flight cycles for the following conditions:

(a) No damage was found during Phase I Inspection.

(b) Damage was found and assessed/resolved accordingly during Phase I Inspection.

E. The metal fuselage and wing supply the basic protection from lightning for the fuel system and critical electronic systems.

(1) Necessary protection is also supplied for the non-metal structure by aluminum mesh (the rudder has a picture frame configuration).

(2) The external structure prevents fuel ignition and electrical/electronic system damage.

(3) Critical electronic systems also rely on wire shields and proper shield terminations for indirect effects protection.

F. Typical lightning strike behavior

(1) There will be a minimum of two strike points at different areas of the airplane surface, an entrance and an exit.

(2) When lightning initially strikes on the forward fuselage or engine nacelles, it will move rearward over the fuselage surface or over the wing surface.

(3) On the wing surface, the lightning will move aft of the nacelle or aft of the extended ends of the leading edge slats.

(4) When lightning initially strikes the aft area of the empennage or wing surface, it will stay there until the lightning current stops.

(5) Lightning strike entrance and exit points are typically found in Zone 1, but also occur in Zone 2 and 3.

(6) Lightning strikes in Zone 1 typically exit a different location in Zone 1. The external components most likely to be hit are listed below (Figure 202):

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(a) wing leading edge
(b) wing trailing edge
(c) wingtips,
(d) engines
(e) vertical fin tip
(f) horizontal stabilizer tips
(g) elevators
(h) nose radome

SIA 015-999

(i) Broadband radome.

SIA ALL

(7) Areas where initial lightning strikes typically do not occur are as follows:
(a) drain masts
(b) pitot probes
(c) blade antennas
(d) extended ends of leading edge slats
(e) trailing edge flap track fairing tips
(f) landing gear

G. Direct Damage occurs when there is a visible effect that degrades the performance of a structure or components. Typical indications are as follows:
(1) Metallic surfaces appear burned, melted or show signs of metal distortion, and may have small circular melted marks of approximately 1/8 inch in diameter.
(2) Non-metallic surfaces (composite) appear burned, punctured or delaminated, and may have burns or black marks up to 4 inches in diameter.
(3) Marks appear along the larger area of a trailing edge surface.
(4) Holes appear in the skin, created from high intensity lightning.
(5) Skins and fasteners appear burned or discolored.
(6) Fluid leakage appears from damaged aluminum hydraulic tubing joints on the vertical stabilizer, or horizontal stabilizer, or empennage.

H. Indirect Damage can result from the large electrical transients caused by lightning. Typical indications are as follows:
(1) Failures in electrical/electronic systems equipment.
(2) Degraded or disturbed wire shielding and shield termination.
(3) Problems occur with components located external to the pressurized fuselage.

NOTE: While the electrical system is protected from a possibility of direct lightning strike to electrical/electronic wires and cables, damage can occur. A high intensity lightning strike can produce electromagnetic fields within the unpressurized areas that are large enough to cause possible damage to the electrical system components.

I. Static dischargers, located on the tips and trailing edges of airfoils, are frequently hit and damaged by lightning.

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(1) The primary function of a static discharger is to dissipate static charges to prevent interference on communication and navigation equipment.

(2) Some static dischargers are put in areas to prevent damage to lights or other system components from a lightning strike.

(3) These devices do not prevent the lightning strikes on the airplane.

J. System Verification

(1) If a system malfunction is reported by the flight crew then a system check is required.

(2) All installed systems required for flight must be operational.

TASK 05-51-19-210-802

2. Phase I Inspection

A. General

(1) Use of visual aids from the ground is acceptable to perform the following procedure.

(2) If a system malfunction is reported by the flight crew then a system check is required.

(3) Any requests for engineering analysis and repairs should contain the following information:

(a) Clearly defined damage:

1) Damage location defined with dimensioned on the production drawings and photos for reference.

2) Damage extent.

3) Cause of damage

(b) Proposed repair Plan.

(c) Any limitations - equipment, materials, etc.

(d) Status of the aircraft and airplane Return to Service date.

(e) Desired outcome (Permanent, Time Limited/Temporary, or Ferry Flight).

B. References

Reference	Title
23-61-00-210-801	Static Discharger Inspection (P/B 601)
27-11-00-710-801	Aileron Response (Operational) Test (P/B 501)
27-21-00-700-803	Rudder Centering Test (P/B 501)
27-21-00-700-804	Rudder Pedal Forces Test (P/B 501)
27-21-00-700-805	Rudder Travel Test (P/B 501)
27-21-00-700-807	Rudder Trim System Test (P/B 501)
27-31-00-700-802	Elevator Tab Control System - Operational Test (P/B 501)
27-31-00-710-801	Elevator and Elevator Trim Control System - Operational Test (P/B 501)
27-31-00-710-802	Elevator Control Column Override - Operational Test (P/B 501)
28-41-00-710-801	Fuel Quantity Indicating System - Operational Test (P/B 501)
28-41-00-720-801	Fuel Quantity Indicating System (FQIS) with the Fuel Measuring Sticks - Comparison Check (P/B 501)
33-44-00-710-801	Anti-Collision Lights - Operational Test (P/B 501)
33-51-00-710-801	Emergency Lights Operational Check (P/B 501)
34-11-01-200-801	Pitot Probe Detailed Inspection (P/B 601)
34-11-02-200-801	Static Port - Detailed Inspection (P/B 601)

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(Continued)

Reference	Title
34-21-04 P/B 401	AIR DATA MODULE - REMOVAL/INSTALLATION
34-21-05-200-801	Angle of Attack (AOA) Sensor - Inspection (P/B 601)
34-23-00-820-801	Standby Magnetic Compass Calibrator Procedure (P/B 201)
34-23-00-820-802	Standby Magnetic Compass Taxi/Tow Around Procedure (P/B 201)
34-23-00-820-803	Standby Magnetic Compass - Degaussing (P/B 201)
SRM 51-10-03-0G-0	Reduced Vertical Separation Minimum (RVSM) Requirements

C. Location Zones

Zone	Area
100	Lower Half of Fuselage
200	Upper Half of Fuselage
300	Empennage
400	Powerplant and Nacelle Struts
500	Left Wing
600	Right Wing
700	Landing Gear and Landing Gear Doors
800	Doors

D. Phase I - Metallic Surfaces and System Components

SUBTASK 05-51-19-210-013

(1) Perform a ground level inspection from the ground of Zones 1, 2, and 3 (Figure 202) visible external metallic surfaces including flight controls and externally mounted airplane components for signs of lightning strike damage.

NOTE: Use of stands or ladders are not required.

(a) Look for visible signs of discolored paint, burn marks, melted areas, or holes in skin.

(b) If any damage was found, the damage must be assessed and/or repaired immediately per the SRM or approved method.

1) The deferral of Phase II for up to 50 flight cycles applies if one of the following conditions occurs:

a) Lightning strike damage is not found during Phase I Inspection, or

b) Lightning strike damage found during Phase I Inspection is assessed and/or repaired per the SRM or approved method.

NOTE: Continued revenue operation up to 50 flight cycles after a lightning strike is acceptable for metallic structures 0.036 inch or thicker.

SUBTASK 05-51-19-210-014

(2) Perform a GVI around the fuel areas of the wing torque box.

(a) If any damage was found, assess and/or repair the damage per the SRM or approved method.

(3) Perform a ground level inspection of the Angle of Attack (AOA) sensors, the pitot probes, static ports, and the surrounding areas for damage.

(a) Look for damage to the AOA sensors.

1) If damage is found, do this task Angle of Attack (AOA) Sensor - Inspection, TASK 34-21-05-200-801.

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(b) Look for damage to the pitot probes.

1) If damage is found, do this task Pitot Probe Detailed Inspection, TASK 34-11-01-200-801.

a) If the removal of the pitot probes is necessary, do this task: AIR DATA MODULE - REMOVAL/INSTALLATION, PAGEBLOCK 34-21-04/401.

(c) Look for damage to the static ports.

1) If damage is found, do this task Static Port - Detailed Inspection, TASK 34-11-02-200-801.

a) If the removal of the static ports is necessary, do this task: AIR DATA MODULE - REMOVAL/INSTALLATION, PAGEBLOCK 34-21-04/401.

(d) If any damage is found around the AOA sensors, pitot probes and static ports.

1) The damage must be assessed and/or repaired per the SRM and Reduced Vertical Separation Minimum (RVSM) Requirements/SRM PROCEDURE 51-10-03-0G-0 or approved method.

a) Look for visible signs of discolored paint, burn marks, melted areas, or holes in skin.

b) The deferral of Phase II for up to 50 flight cycles applies if one of the following conditions occurs:

<1> Lightning strike damage is not found during Phase I GVI from the ground, or

<2> Lightning strike damage found during Phase I inspection is assessed and/or repaired per the SRM or approved method.

NOTE: Continued revenue operation up to 50 flight cycles after a lightning strike is acceptable for metallic structures 0.036 inch or thicker.

SUBTASK 05-51-19-210-015

(4) Perform a ground level inspection of all external lights for lightning strike damage.

(a) Look for broken light assemblies, broken or cracked lenses, or other visible damage.

(b) Repair or replace damaged parts as necessary until the light functions properly.

(c) If damage was found on the Anti-Collision or Emergency Lights, do a test of the lights that follow:

1) Do this task: Anti-Collision Lights - Operational Test, TASK 33-44-00-710-801.

2) Do this task: Emergency Lights Operational Check, TASK 33-51-00-710-801.

SUBTASK 05-51-19-700-001

(5) Perform a ground level inspection of the flight control metallic components for signs of lightning strike damage.

(a) If flight controls show signs of damage, examine the surface hinges, bearings and bondings for signs of damage.

(b) If no damage is found, do a basic operational check of the flight controls as follows:

NOTE: If the flight controls operate correctly after you do these steps, no more inspections are necessary.

1) Move the rudder, control wheel, and control column in both directions.

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2) Make sure that there is full travel and the flight controls move freely.

NOTE: Hold the nose wheel during the rudder check to prevent nose wheel movement. You can hold the nose wheel if you put in the steering lockout pin or remove the torsion link pin.

SUBTASK 05-51-19-720-001

(6) If the rudder system did not operate correctly during the operational check of the flight controls steps above, do a functional test of the rudder system.

(a) Do this task: Rudder Trim System Test, TASK 27-21-00-700-807.

(b) Do this task: Rudder Pedal Forces Test, TASK 27-21-00-700-804.

(c) Do this task: Rudder Travel Test, TASK 27-21-00-700-805.

(d) Do this task: Rudder Centering Test, TASK 27-21-00-700-803.

SUBTASK 05-51-19-720-002

(7) If the elevator system did not operate correctly during the operational check of the flight controls steps above, do a functional test of the elevator system.

(a) Do this task: Elevator Control Column Override - Operational Test, TASK 27-31-00-710-802.

(b) Do this task: Elevator Tab Control System - Operational Test, TASK 27-31-00-700-802.

(c) Do this task: Elevator and Elevator Trim Control System - Operational Test, TASK 27-31-00-710-801.

SUBTASK 05-51-19-720-003

(8) If the aileron system did not operate correctly during the operational check of the flight controls steps above, do a functional test of the ailerons.

(a) Do this task: Aileron Response (Operational) Test, TASK 27-11-00-710-801.

SUBTASK 05-51-19-210-016

(9) Perform a ground level inspection from the ground of the Wingtips or Winglets for lightning strike damage.

(a) Examine the fuel vent outlet and surge tanks for signs of damage.

(b) If any damage was found, address the damage per the SRM or approved method.

SUBTASK 05-51-19-210-017

(10) Perform a ground level inspection from the ground of the Static Dischargers for lightning strike damage.

(a) If any Static Dischargers are damaged or missing, assess with Static Discharger Inspection, TASK 23-61-00-210-801.

E. Non-Metallic Surfaces and System Components

SUBTASK 05-51-19-210-018

(1) Perform a ground level inspection of Zones 1, 2, and 3 (Figure 202) external composite surfaces for signs of lightning strike damage including all flight control surfaces.

NOTE: Use of stands or ladders are not required.

(a) Look for discolored paint, burns, punctures and delamination of composite honeycomb sandwich structure.

(b) If there is no visible external lightning strike damage, the Phase II Inspection of the external composite surfaces of the airplane can be deferred for up to 50 flight cycles after the accomplishment of Phase I.

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(c) Examine the external surfaces from the ground of the nose radome for burns, punctures, and pin holes in the composite honeycomb sandwich structure. If damage is found, examine the internal surfaces and components under the nose radome.

(d) If lightning strike damage is found, examine all composite structure in perimeter of damaged area for signs of delamination.

1) Use instrumental or non-instrumental NDI tap testing to find composite structure delamination you cannot see.

NOTE: For a tap test, use a solid metal disk and tap the area adjacent to the damaged area lightly. If there is delamination, you will hear a sound that is different than the sound of a solid bonded area. Refer to Nondestructive Test Manual.

2) If any damage was found, address the damage per the SRM or approved method.

SUBTASK 05-51-19-210-019

(2) Perform a ground level inspection of the flight control composite components for signs of lightning strike damage.

(a) If the flight control composite components show signs of lightning strike damage, perform a GVI of these items:

1) Surface hinges.

2) Bearings.

3) Bondings.

(b) If no damage is found, do a basic operational check of the flight controls as follows, unless already performed in Phase I Inspection:

NOTE: If the flight controls operate correctly after you do these steps, no more inspections are necessary.

1) Move the rudder, control wheel, and control column in both directions.

2) Make sure that there is full travel and the flight controls move freely.

NOTE: Hold the nose wheel during the rudder check to prevent nose wheel movement. You can hold the nose wheel if you put in the steering lockout pin or remove the torsion link pin.

SUBTASK 05-51-19-720-004

(3) If the rudder system did not operate correctly during the operational check of the flight controls steps above, do a functional test of the rudder system.

(a) Do this task: Rudder Trim System Test, TASK 27-21-00-700-807.

(b) Do this task: Rudder Pedal Forces Test, TASK 27-21-00-700-804.

(c) Do this task: Rudder Travel Test, TASK 27-21-00-700-805.

(d) Do this task: Rudder Centering Test, TASK 27-21-00-700-803.

SUBTASK 05-51-19-720-005

(4) If the elevator system did not operate correctly during the operational check of the flight controls steps above, do a functional test of the elevator system.

(a) Do this task: Elevator Control Column Override - Operational Test, TASK 27-31-00-710-802.

(b) Do this task: Elevator Tab Control System - Operational Test, TASK 27-31-00-700-802.

(c) Do this task: Elevator and Elevator Trim Control System - Operational Test, TASK 27-31-00-710-801.

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SUBTASK 05-51-19-720-006

(5) If the aileron system did not operate correctly during the operational check of the flight controls steps above, do a functional test of the ailerons.

(a) Do this task: Aileron Response (Operational) Test, TASK 27-11-00-710-801.

SUBTASK 05-51-19-210-020

(6) Perform a ground level inspection of the Wingtips or Winglets composite structure.

(a) If any damage was found, address the damage per the SRM or approved method.

SUBTASK 05-51-19-800-001

(7) The Phase II Inspection of the airplane can be deferred for up to 50 flight cycles after the accomplishment of Phase I Inspection.

F. External Wire Shields Inspection

SUBTASK 05-51-19-211-001

(1) Do the visual inspections that follow:

NOTE: If the lightning strike entrance and exit points can not be identified, then the external wire shield visual check is not required.

NOTE: If there are no wire shield termination(s) in the area of the lightning strike entrance or exit points, then the external wire shield visual check is not required.

(a) In the area of the lightning strike entrance and exit points, do a visual check for damage to the wire shield terminations.

(b) If the flight crew has reported a problem with any system after the lightning strike, do a visual check for damage to wire shield terminations for that systems wiring.

(c) If damage is found at wire shield termination(s), check the full length of the wire bundle.

(d) Repair any damage found and do an operational check of the system that had the damage.

G. System Internal Test

SUBTASK 05-51-19-700-002

(1) If a lightning strike caused a system malfunction, do a full test of the defective system.

SUBTASK 05-51-19-700-003

(2) Do a check of the standby magnetic compass system only if the flight crew found a deviation that is more than is permitted:

(a) Do this task: Standby Magnetic Compass - Degaussing, TASK 34-23-00-820-803.

(b) If necessary, do this task: Standby Magnetic Compass Taxi/Tow Around Procedure, TASK 34-23-00-820-802 or Standby Magnetic Compass Calibrator Procedure, TASK 34-23-00-820-801.

SUBTASK 05-51-19-710-022

(3) Make sure that the fuel quantity system is accurate.

(a) Do the operational test for the FQIS type on your airplane, do this task: Fuel Quantity Indicating System - Operational Test, TASK 28-41-00-710-801.

(b) If the FQIS test shows any problems, do this task: Fuel Quantity Indicating System (FQIS) with the Fuel Measuring Sticks - Comparison Check, TASK 28-41-00-720-801.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

H. Inspection and Operational Check of Radio and Navigation Systems

SUBTASK 05-51-19-210-021

(1) Perform an inspection of the radio and navigation systems.

NOTE: All installed systems required for flight must be operational.

(a) Refer to Figure 203 to determine if an operational check is necessary.

(b) If the radio and navigation systems do not operate correctly, do this task: Inspection and Operational Check of Radio and Navigation Systems, TASK 05-51-19-710-801

——— END OF TASK ———

TASK 05-51-19-210-803

3. Phase II Inspection

A. General

(1) Any requests for engineering analysis and repairs should contain the following information:

(a) Clearly defined damage:

NOTE: If a 50 flight cycle deferral is provided, perform these steps on or before the 50 flight cycle limit.

1) Damage location defined with dimensioned on the production drawings and photos for reference.

2) Damage extent.

3) Cause of damage

(b) Proposed repair Plan.

(c) Any limitations - equipment, materials, etc.

(d) Status of the aircraft and airplane Return to Service date.

(e) Desired outcome (Permanent, Time Limited/Temporary, or Ferry Flight).

B. References

Reference	Title
23-61-00-760-801	Static Discharger Resistance Measurement (P/B 601)
27-11-00-710-801	Aileron Response (Operational) Test (P/B 501)
27-21-00-700-803	Rudder Centering Test (P/B 501)
27-21-00-700-804	Rudder Pedal Forces Test (P/B 501)
27-21-00-700-805	Rudder Travel Test (P/B 501)
27-21-00-700-807	Rudder Trim System Test (P/B 501)
27-31-00-700-802	Elevator Tab Control System - Operational Test (P/B 501)
27-31-00-710-801	Elevator and Elevator Trim Control System - Operational Test (P/B 501)
27-31-00-710-802	Elevator Control Column Override - Operational Test (P/B 501)
28-41-00-710-801	Fuel Quantity Indicating System - Operational Test (P/B 501)
28-41-00-720-801	Fuel Quantity Indicating System (FQIS) with the Fuel Measuring Sticks - Comparison Check (P/B 501)
33-44-00-710-801	Anti-Collision Lights - Operational Test (P/B 501)
33-51-00-710-801	Emergency Lights Operational Check (P/B 501)
34-23-00-820-801	Standby Magnetic Compass Calibrator Procedure (P/B 201)

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(Continued)

Reference	Title
34-23-00-820-802	Standby Magnetic Compass Taxi/Tow Around Procedure (P/B 201)
34-23-00-820-803	Standby Magnetic Compass - Degaussing (P/B 201)
SRM 51-10-03-0G-0	Reduced Vertical Separation Minimum (RVSM) Requirements

C. Location Zones

Zone	Area
100	Lower Half of Fuselage
200	Upper Half of Fuselage
300	Empennage
400	Powerplant and Nacelle Struts
500	Left Wing
600	Right Wing
700	Landing Gear and Landing Gear Doors
800	Doors

D. Phase II - Inspection

SUBTASK 05-51-19-210-022

(1) Perform a General Visual Inspection (GVI) of Zone 1 (Figure 202) surface areas for signs of a lightning strike damage.

(a) Utilize any available equipment at the time to examine required areas of the aircraft.

(b) Zone 1 includes these areas:

1) Wing Leading Edge
2) Wing Trailing Edge
3) Wingtips
4) Engines
5) Vertical Fin Tip
6) Horizontal Stabilizer Tips
7) Elevators
8) Nose Radome

SIA 015-999

9) Broadband radome.

SIA ALL

(c) Do the examination that follows:

1) Examine all metallic external surfaces for any evidence of visible external lightning strike damage.
2) Examine all composite structures for discolored paint, burned, or punctured skin.

(d) Examine the external surfaces carefully to find the entrance and exit points of lightning strike.

(e) Make sure that you look in the areas where one surface stops and another surface starts (for example, butt joints and lap joints).

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(f) Examine the external surfaces of the nose radome for burns, punctures, and pin holes in the composite honeycomb sandwich structure. If damage is found, examine the internal surfaces and components under the nose radome.

(g) Examine the external metallic structure looking for signs of lightning strike damage such as: holes, pits, melting, burns or discoloration.

(h) Examine the external composite surfaces for discolored paint, burns or punctures.

1) If lightning strike damage is found, examine all composite structure in perimeter of damaged area for signs of delamination.

NOTE: Types of damage you cannot see, like delamination, can extend to the areas beyond the lightning strike damage. You can find delamination by instrumental Non-Destructive Inspection (NDI) methods or by a tap test.

2) Use instrumental or non-instrumental NDI tap testing to find composite structure delamination you cannot see.

NOTE: For a tap test, use a solid metal disk and tap the area adjacent to the damaged area lightly. If there is delamination, you will hear a sound that is different than the sound of a solid bonded area. Refer to Nondestructive Test Manual.

CAUTION

SEAL OR REPAIR ALL DAMAGE. IF YOU DO NOT SEAL OR REPAIR ALL DAMAGE, MOISTURE CAN GET IN. MOISTURE CAN CAUSE MORE INTERNAL DAMAGE.

(i) Repair or seal the damaged areas per the Structural Repair Manual (SRM).

SUBTASK 05-51-19-210-023

(2) Perform a GVI of Zone 2 (Figure 202) surface areas for signs of lightning strike damage.

(a) Make sure that you look in the areas where one surface stops and the other surface starts (for example, butt joints and lap joints).

(b) Examine the Angle of Attack (AOA) sensors.

1) Do a movement check of the AOA sensors.

NOTE: The movement should be smooth and should not have any rough spots in the travel range during the movement check.

2) Examine for melted seals or if the AOA sensors are damaged.

(c) Examine the pitot probes, static ports, and the areas around them for damage. Look for burns, punctures, discolored paint, and general skin distortion.

1) If damage is found, the damage must be assessed and/or repaired per the SRM and Reduced Vertical Separation Minimum (RVSM) Requirements/SRM PROCEDURE 51-10-03-0G-0 or approved method.

(d) Examine the metallic structure looking for signs of lightning strike damage such as: holes, pits, melting, burns or discoloration.

(e) Examine the external composite surfaces for discolored paint, burns or punctures.

1) If lightning strike damage is found, examine all composite structure in perimeter of damaged area for signs of delamination.

NOTE: Types of damage you cannot see, like delamination, can extend to the areas beyond the lightning strike damage. You can find delamination by instrumental NDI methods or by a tap test.

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2) Use instrumental or non-instrumental NDI tap testing to find composite structure delamination you cannot see.

a) For a tap test, use a solid metal disk and tap area adjacent to the damaged area lightly. If there is delamination, you will hear a sound that is different than the sound of a solid bonded area. Refer to Nondestructive Test Manual.

CAUTION SEAL OR REPAIR ALL DAMAGE. IF YOU DO NOT SEAL OR REPAIR ALL DAMAGE, MOISTURE CAN GET IN. MOISTURE CAN CAUSE MORE INTERNAL DAMAGE.

(f) Repair or seal the damaged areas per the SRM.

(g) If the entrance and exit points are not found during the examination of Zones 1 and 2 areas, examine Zone 3 (Figure 202) surface areas for signs of lightning strike damage.

SUBTASK 05-51-19-210-024

(3) If the entrance and exit points are not found during the examination of Zones 1 and 2 areas, examine Zone 3 (Figure 202) surface areas for signs of lightning strike.

(a) Do the examination that follows:

1) Examine all the external surfaces carefully to find the entrance and exit points of lightning strike.

2) Make sure to look in the areas where one surface stops and another surface starts (for example, butt joints and lap joints).

3) Examine the metallic structure looking for signs of lightning strike damage such as: holes, pits, melting, burns or discoloration.

4) Examine the external composite surfaces for discolored paint, burns or punctures.

a) If lightning strike damage is found, examine all composite structure in perimeter of damaged area for signs of delamination.

NOTE: Types of damage you cannot see, like delamination, can extend to the areas beyond the lightning strike damage. You can find delamination by instrumental NDI methods or by a tap test.

b) Use instrumental or non-instrumental NDI tap testing to find composite structure delamination you cannot see.

<1> For a tap test, use a solid metal disk and tap the area adjacent to the damaged area lightly. If there is delamination, you will hear a sound that is different than the sound of a solid bonded area. Refer to Nondestructive Test Manual.

CAUTION SEAL OR REPAIR ALL DAMAGE. IF YOU DO NOT SEAL OR REPAIR ALL DAMAGE, MOISTURE CAN GET IN. MOISTURE CAN CAUSE MORE INTERNAL DAMAGE.

(b) Repair or seal the damaged areas per the SRM.

SUBTASK 05-51-19-210-025

(4) Examine all of the external lights carefully.

(a) Look for these items:

1) Broken light assemblies.

2) Broken or cracked lenses.

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3) Other visible damage.

(b) If you find damaged lights, do these steps:

1) Examine these items:

a) The internal wires of the light fixture for damage.

b) The first 3 ft (1 m) of wiring from the damaged light in the direction of the circuit breaker.

c) The circuit breaker terminals and the first 1 inch of wires from the terminals.

2) Repair or replace damaged parts as necessary until the light functions properly.

3) If the circuit breaker did not trip, then no further inspections for the wiring of the damaged light are required.

4) If the circuit breaker did trip, then locate the source of the anomaly and repair as necessary.

(c) Do a test of the lights that follow:

1) Do this task: Anti-Collision Lights - Operational Test, TASK 33-44-00-710-801.

2) Do this task: Emergency Lights Operational Check, TASK 33-51-00-710-801.

SUBTASK 05-51-19-210-026

(5) If the flight control components show signs of lightning strike damage, perform a GVI of these items:

(a) Surface hinges.

(b) Bearings.

(c) Bondings.

SUBTASK 05-51-19-210-027

(6) If no damage is found, do a basic operational check of the flight controls as follows:

NOTE: If the flight controls operate correctly after you do these steps, no more inspections are necessary.

(a) Move the rudder, control wheel and control column in both directions.

(b) Make sure that there is full travel and the flight controls move freely.

NOTE: Hold the nose wheel during the rudder check to prevent nose wheel movement. You can hold the nose wheel if you put in the steering lockout pin or remove the torsion link pin.

SUBTASK 05-51-19-720-007

(7) If the rudder system did not operate correctly during the operational check of the flight controls steps above, do a functional test of the rudder system.

(a) Do this task: Rudder Trim System Test, TASK 27-21-00-700-807.

(b) Do this task: Rudder Pedal Forces Test, TASK 27-21-00-700-804.

(c) Do this task: Rudder Travel Test, TASK 27-21-00-700-805.

(d) Do this task: Rudder Centering Test, TASK 27-21-00-700-803.

SUBTASK 05-51-19-720-008

(8) If the elevator system did not operate correctly during the operational check of the flight controls steps above, do a functional test of the elevator system.

(a) Do this task: Elevator Control Column Override - Operational Test, TASK 27-31-00-710-802.

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(b) Do this task: Elevator Tab Control System - Operational Test, TASK 27-31-00-700-802.

(c) Do this task: Elevator and Elevator Trim Control System - Operational Test, TASK 27-31-00-710-801.

SUBTASK 05-51-19-720-009

(9) If the aileron system did not operate correctly during the operational check of the flight controls steps above, do a functional test of the ailerons.

(a) Do this task: Aileron Response (Operational) Test, TASK 27-11-00-710-801.

SUBTASK 05-51-19-210-028

(10) Perform a GVI of the Wingtips or Winglets composite structure.

(a) If the composite structure show signs of a lightning strike damage, address the damage per the SRM or approved method.

SUBTASK 05-51-19-710-023

(11) Inspection and Operational Check of Radio and Navigation Systems

(a) Perform an inspection of the radio and navigation systems.

NOTE: All installed systems required for flight must be operational.

1) Refer to Figure 203 to determine if an operational check is necessary.

2) If the radio and navigational systems do not operate correctly, do this Task: Inspection and Operational Check of Radio and Navigation Systems, TASK 05-51-19-710-801.

E. Static Dischargers Inspection

SUBTASK 05-51-19-210-029

(1) Do the inspections that follow:

(a) Make sure that the static dischargers are attached, installed correctly, and not broken.

(b) Examine the dischargers for the following:

1) Burns.

2) Rough coating.

3) Pitted metal discharger retainers.

(c) Examine the dischargers for the following:

NOTE: Bent pins must be made straight.

1) Broken pins.

2) Bent pins.

3) Blunted tungsten pins.

(d) Look at the discharger for the following:

1) Erosion of the discharger coating.

NOTE: The leading edge erosion must not extend more than the 1/3 the total length of the discharger.

2) Peeling of the tip cup.

SUBTASK 05-51-19-700-004

(2) Do a resistance test if there is a damaged static discharger, do this task: Static Discharger Resistance Measurement, TASK 23-61-00-760-801.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

F. External Wire Shields Inspection

SUBTASK 05-51-19-211-002

(1) Do the visual inspections that follow:

NOTE: If the lightning strike entrance and exit points can not be identified, then the external wire shield visual check is not required.

NOTE: If there are no wire shield termination(s) in the area of the lightning strike entrance or exit points, then the external wire shield visual check is not required.

(a) In the area of the lightning strike entrance and exit points, do a visual check for damage to the wire shield terminations.

(b) If the flight crew has reported a problem with any system after the lightning strike, do a visual check for damage to wire shield terminations for that systems wiring.

(c) If damage is found at wire shield termination(s), check the full length of the wire bundle.

(d) Repair any damage found and do an operational check of the system that had the damage.

G. System Internal Test

SUBTASK 05-51-19-700-005

(1) If a lightning strike caused a system malfunction, do a full test of the defective system.

SUBTASK 05-51-19-700-006

(2) Do a check of the standby magnetic compass system only if the flight crew found a deviation that is more than is permitted:

(a) Do this task: Standby Magnetic Compass - Degaussing, TASK 34-23-00-820-803.

(b) If necessary, do this task: Standby Magnetic Compass Taxi/Tow Around Procedure, TASK 34-23-00-820-802 or Standby Magnetic Compass Calibrator Procedure, TASK 34-23-00-820-801.

SUBTASK 05-51-19-710-024

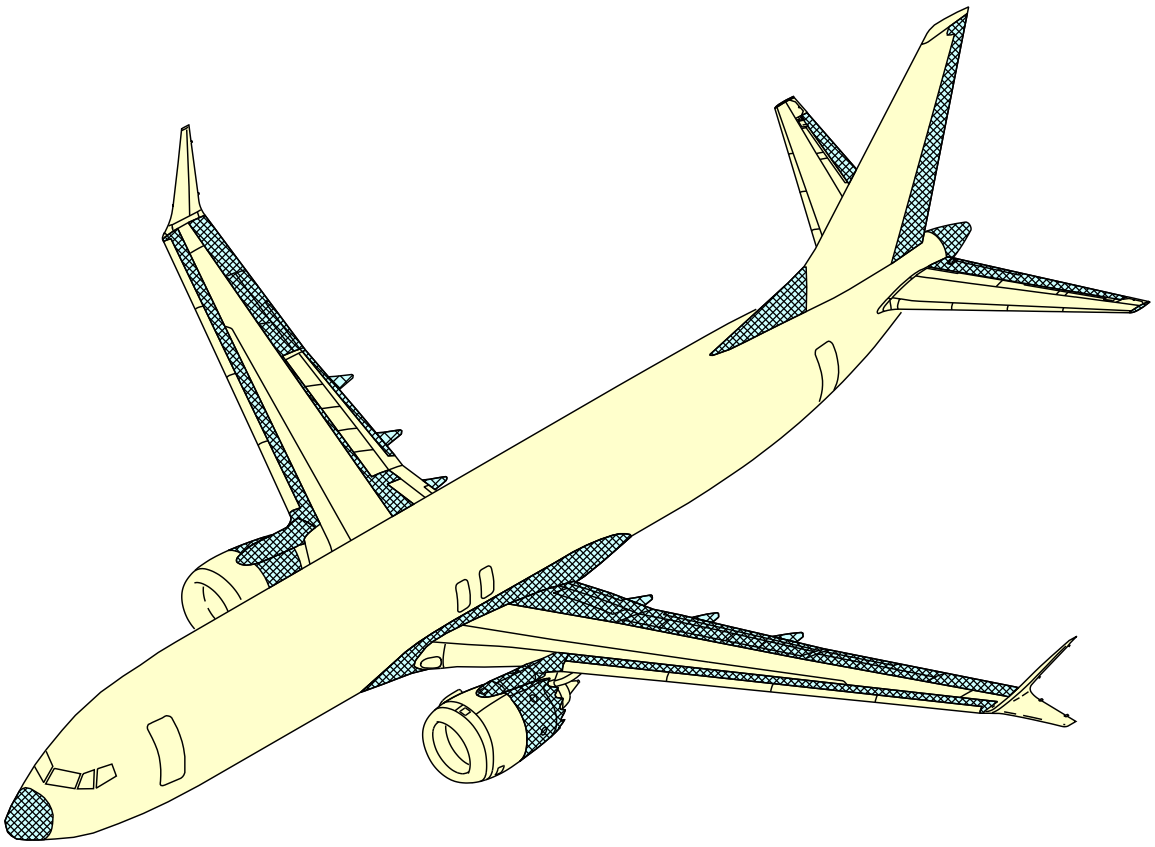
(3) Make sure that the fuel quantity system is accurate.

(a) Do the operational test for the Fuel Quantity Indicating System (FQIS) type on your airplane, do this task: Fuel Quantity Indicating System - Operational Test, TASK 28-41-00-710-801.

(b) If the FQIS test shows any problems, do this task: Fuel Quantity Indicating System (FQIS) with the Fuel Measuring Sticks - Comparison Check, TASK 28-41-00-720-801.

——— END OF TASK ———

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COMPOSITE APPLICATION
(SHADED AREAS CONTAIN COMPOSITE STRUCTURE, UNSHADED AREAS ARE METAL STRUCTURE)

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Composite Application
Figure 201/05-51-19-990-802

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TASK 05-51-19-710-801

4. Inspection and Operational Check of Radio and Navigation Systems

A. General

(1) The level of the checks after a lightning strike to the airplane is determined by flight crew information and the airplane condition after the incident.

NOTE: For example, if all the NAV/COM systems are exercised by the flight crew in flight after the lightning strike and no anomalies are found, then checks to the exercised systems would not normally be required. For systems not exercised by the flight crew in flight or systems where anomalies were found, additional checks to that system may be required. In addition, even if a system was exercised in flight after the lightning strike and no anomalies were found, but subsequent inspections showed lightning damage near that system antenna, additional checks of that system will be required.

(2) The level of the inspections and operation tests will come from flight crew information and the airplane conditions during, and after the incident.

(a) It is not necessary to examine the coaxial cables and connectors, for the next conditions:

1) Radio system had no problems during and after the incident, and the system antenna was not damaged.

2) Operational checks were done and no problems were found.

B. References

Reference	Title
20-10-72-210-801	Coaxial Cable Inspection with a Time Domain Reflectometer (P/B 201)
22-11-00-740-801	Digital Flight Control System (DFCS) - Operational Test (P/B 501)
23-12-00-730-801	VHF Communication System - System Test (P/B 501)
23-24-00-730-803	Emergency Locator Transmitter System Test (P/B 501)
23-28-00-700-801	SELCAL System - Operational Test (P/B 501)
31-65-00-710-801	MAX Display System - Operational Test (P/B 501)
34-31-00-710-801	Instrument Landing System - Operational Test (P/B 501)
34-32-00-710-801	Marker Beacon System - Operational Test (P/B 501)
34-33-00-710-801	Low Range Radio Altimeter (LRRA) System - Operational Test (P/B 501)
34-41-00-710-801	Weather Radar (WXR) Operational Test (P/B 501)
34-45-00-710-801	TCAS - Operational Test (P/B 501)
34-51-00-710-801	VOR System - Operational Test (P/B 501)
34-53-00-710-801	ATC System - Operational Test (P/B 501)
34-55-00-710-801	DME System - Operational Test (P/B 501)
34-57-00-730-801	Automatic Direction Finder System - System Test (P/B 501)
34-58-00-710-801	Global Positioning System - Operational Test (P/B 501)
53-52-00-200-801	Nose Radome - Inspection (P/B 601)

C. Location Zones

Zone	Area
100	Lower Half of Fuselage
200	Upper Half of Fuselage

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D. Radio and Navigations Systems Inspection

SUBTASK 05-51-19-210-010

(1) Examine the following systems for damage:

(a) High Frequency (HF)

(b) Very High Frequency (VHF)

(c) VHF Omnidirectional Range (VOR)

(d) Distance Measuring Equipment (DME)

(e) Air Traffic Control (ATC)

(f) Instrument Landing System (ILS)

(g) Automatic Direction Finder (ADF)

(h) Radio Altimeter (RA)

(i) Marker Beacon (MB)

(j) Global Positioning System (GPS)

(k) Traffic Alert and Collision Avoidance System (TCAS)

(l) Emergency Locator Transmitter (ELT).

SUBTASK 05-51-19-210-030

(2) Examine the antennas for damage.

(a) If it is necessary, replace the damaged antennas.

SUBTASK 05-51-19-210-031

(3) If it is necessary, examine the coaxial cables and connectors for damage.

(a) If one or more of the previous systems have problems with their operational checks, do these steps:

1) Examine the coaxial cables and connectors.

2) Do a test of the coaxial cables and connectors.

3) If it is necessary, replace the damaged coaxial cables.

SUBTASK 05-51-19-210-011

(4) Examine the nose radome as follows:

(a) Look for pin holes, punctures, and paint that has chipped.

1) If pinholes or punctures are found, check the radome for trapped moisture (TASK 53-52-00-200-801).

(b) Make sure that the radome bonding straps are attached correctly to the airframe.

(c) Repair or replace the lightning diverter strips if they are damaged.

(d) If the radome is damaged, examine the antenna and the waveguide for damage.

E. Radio and Navigation System Operational Checks

SUBTASK 05-51-19-710-007

(1) HF Systems, if it is installed

(a) Do an operational check on some frequencies of each HF System.

(b) Do a ground check of each system with a station that is a minimum of 100 miles away.

(c) Monitor some frequencies on each HF System.

1) Make sure that the HF receiver operates.

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SUBTASK 05-51-19-710-008

(2) VHF System

(a) Do this task: VHF Communication System - System Test, TASK 23-12-00-730-801.

(b) Do a ground check of each VHF System with the local control tower facility.

1) Make sure that the VHF System works.

(c) Monitor some frequencies on each VHF System.

1) Make sure that the VHF receiver works.

SUBTASK 05-51-19-710-009

(3) VOR System

(a) Do this task: VOR System - Operational Test, TASK 34-51-00-710-801.

SUBTASK 05-51-19-710-021

(4) ADF System

(a) Do this task: Automatic Direction Finder System - System Test, TASK 34-57-00-730-801.

(b) Select a local AM broadcast or non direction beacon (NDB) station.

(c) Make sure that you hear a loud and clear ADF audio signal at all audio select locations.

(d) Make sure that the ADF pointers point to the selected bearing.

SUBTASK 05-51-19-710-010

(5) Radar System

(a) Do this task: Weather Radar (WXR) Operational Test, TASK 34-41-00-710-801.

(b) Make sure that the system reads targets at applicable ranges.

SUBTASK 05-51-19-710-011

(6) RA System

(a) Do this task: Low Range Radio Altimeter (LRRA) System - Operational Test, TASK 34-33-00-710-801.

SUBTASK 05-51-19-710-012

(7) DME System

(a) Do this task: DME System - Operational Test, TASK 34-55-00-710-801.

SUBTASK 05-51-19-710-013

(8) ATC System

(a) Do this task: ATC System - Operational Test, TASK 34-53-00-710-801.

SUBTASK 05-51-19-710-014

(9) MB System

(a) Do this task: Marker Beacon System - Operational Test, TASK 34-32-00-710-801.

SUBTASK 05-51-19-710-015

(10) ILS

(a) Do this task: Instrument Landing System - Operational Test, TASK 34-31-00-710-801.

SUBTASK 05-51-19-210-012

(11) If it is necessary, examine and do a test of the coaxial cables and connectors.

(a) Do this task: Coaxial Cable Inspection with a Time Domain Reflectometer, TASK 20-10-72-210-801.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 05-51-19-710-016

(12) MAX Display System (MDS)

(a) Do this task: MAX Display System - Operational Test, TASK 31-65-00-710-801.

SUBTASK 05-51-19-710-017

(13) GPS

(a) Do this task: Global Positioning System - Operational Test, TASK 34-58-00-710-801.

SUBTASK 05-51-19-710-018

(14) TCAS

(a) Do this task: TCAS - Operational Test, TASK 34-45-00-710-801.

SUBTASK 05-51-19-710-019

(15) ELT

(a) Do this task: Emergency Locator Transmitter System Test, TASK 23-24-00-730-803.

SUBTASK 05-51-19-710-020

(16) Digital Flight Control System (DFCS)

(a) Do this task: Digital Flight Control System (DFCS) - Operational Test, TASK 22-11-00-740-801.

SUBTASK 05-51-19-710-025

(17) Selective Call System (SELCAL)

(a) Do this task: SELCAL System - Operational Test, TASK 23-28-00-700-801.

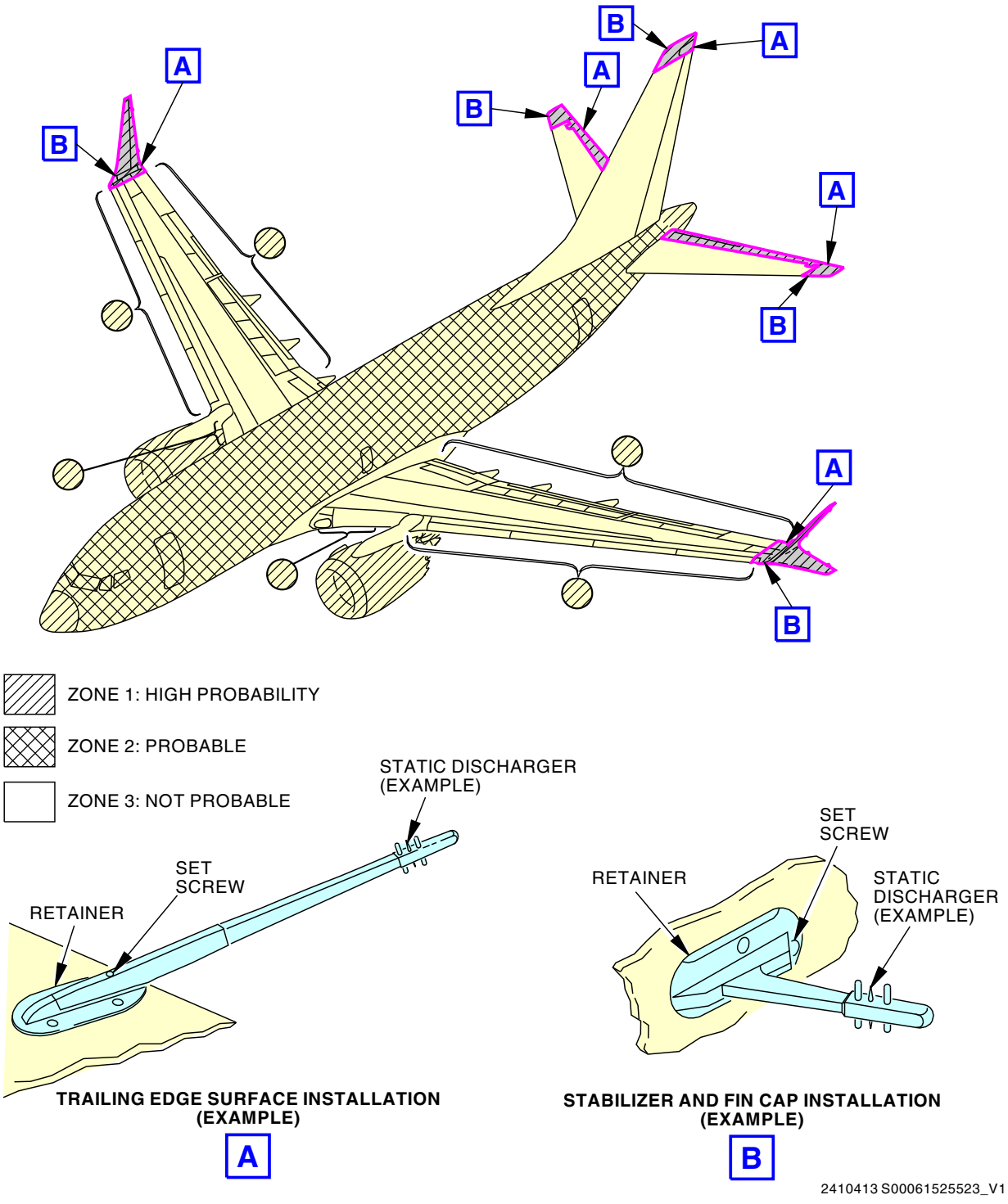
F. Put the Airplane Back to Its Usual Condition

SUBTASK 05-51-19-410-001

(1) Install the removed components if they are serviceable, or replacement parts.

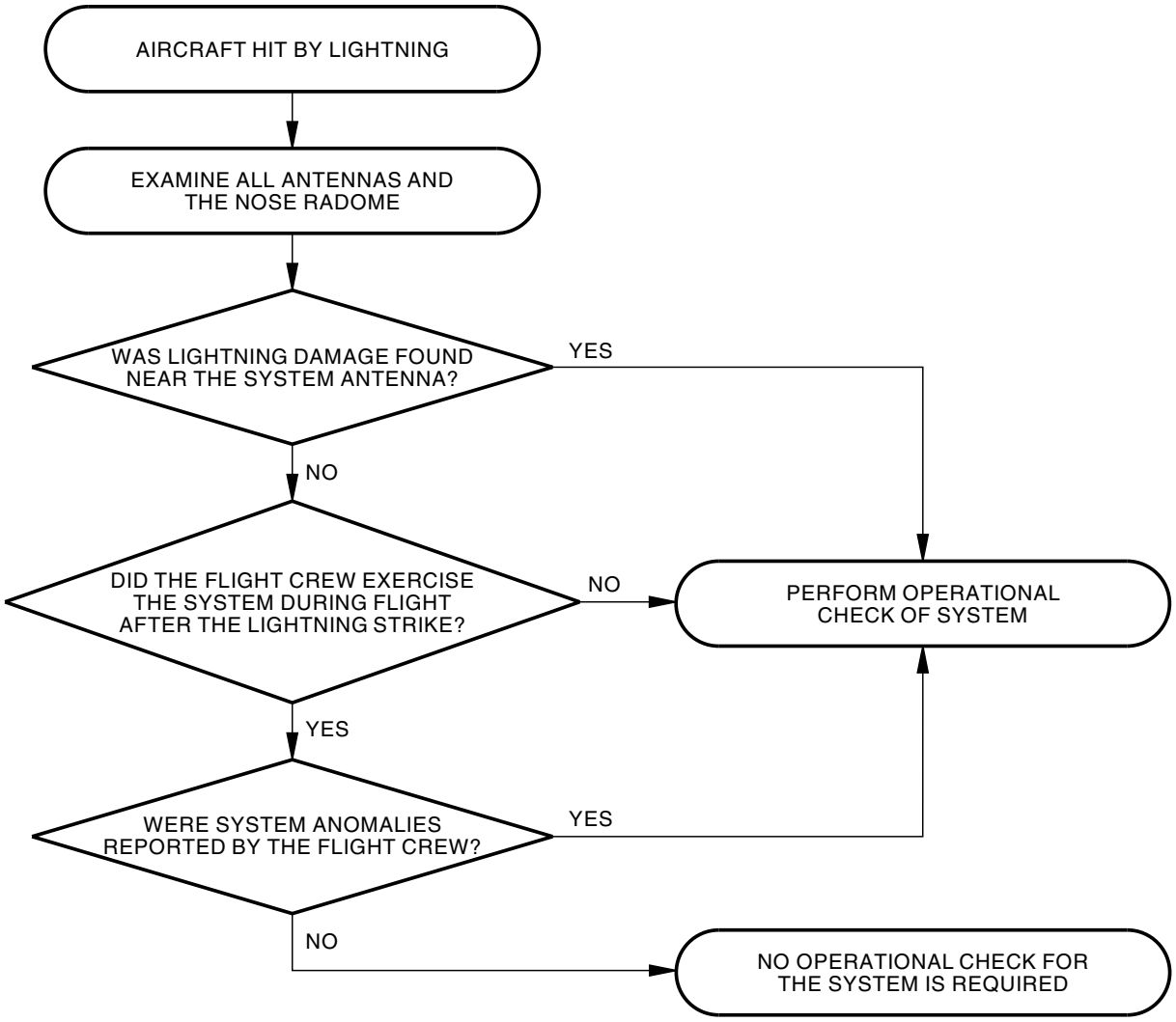
——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



External Lightning Strike Areas
Figure 202/05-51-19-990-801

ECCN 9E991 BOEING PROPRIETARY - See title page for details



2834773 S0000659583_V3

Lightning Strike Inspections Flow Diagram
Figure 203/05-51-19-990-803

ECCN 9E991 BOEING PROPRIETARY - See title page for details

FILIFORM CONDITION ON EXTERIOR DECORATIVE SURFACES (CONDITIONAL INSPECTION)

1. General

A. Filiform corrosion (FC) is a type of corrosion that may occur between the clad aluminum surface of the fuselage and the exterior decorative paint. FC appears as worm-like strands underneath the paint. Refer to CORROSION IDENTIFICATION - TYPES AND CAUSES, SUBJECT 51-00-50 for definition of FC.

B. There are two common initiation locations for FC on the fuselage. The first is common to the edges of parts and the second is common to fasteners. Moisture can ingress under the paint at these locations. FC usually does not penetrate through the clad layer of the aluminum.

TASK 05-51-21-210-801

2. Filiform Corrosion - (Conditional Inspection)

A. General

(1) The standard for the inspection is a General Visual Inspection.

NOTE: The Limited Return to Service Plan (LRTS) is only applicable to filiform corrosion.

(2) If FC is found, do a Limited Inspection in 30 days.

(a) The Limited Inspection is specified to areas prone to FC (Figure 201). These areas include:

- Butt joints
- Lap splices
- Cutouts
- Areas on and around fasteners common to the skin panels and lap splices
- Access doors

(b) All inspection areas are below the lower lap splice of the window belt at stringer S-14.

(3) Mild to moderate filiform corrosion (FC) that does not advance to severe must be removed within 3 years.

(4) The LRTS plan can be used if mild to moderate FC is found. All severe FC must be removed within 30 days with glass-bead blasting per Inspection and Removal of Damage/SRM PROCEDURE 51-10-02-0G-0 or CORROSION REMOVAL, SUBJECT 51-00-53.

(a) The LRTS plan has repeated inspections and surveys.

1) The repeat inspections are mandatory every 120 days after the discovery of the FC.

2) The LRTS plan is not applicable if all known areas of FC are removed from the aircraft. Subject aircraft can return to service.

B. References

Reference	Title
51-00-53	CORROSION REMOVAL
SRM 51-10-02-0G-0	Inspection and Removal of Damage

C. Tools/Equipment

Reference	Description
STD-4055	6 Inch Minimum Length Stainless Steel Pocket Ruler, 1/32" And 1/64" Increments, or Mm And Cm Increments
STD-6732	Camera - 35mm, Single Lens Reflex Type

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(Continued)

Reference	Description
STD-14360	Flashlight

D. Location Zones

Zone	Area
100	Lower Half of Fuselage

E. Limited Inspection Procedure

SUBTASK 05-51-21-210-001

(1) Put the aircraft in an area that is free from rain and other conditions that can affect a visual inspection.

NOTE: Rain and moisture can prevent correct identification of FC. The inspection location must be dry.

SUBTASK 05-51-21-210-002

(2) Document each location of FC with a minimum of three pictures with a camera, STD-6732.

(a) A wide view picture to show the general location on the aircraft.

1) Include a monument in the picture. This will help to find the general area of the FC.

(b) A nearer picture, in the limits of the first picture, to show the location of the FC.

(c) A close-up picture of the FC.

1) Use a pocket ruler, STD-4055 to show the initial area dimension of the FC.

2) Identify the stations and stringer locations surrounding the FC.

3) A flashlight, STD-14360 can be used to help identify FC.

a) The flashlight angle can be varied to help maximize the contrast of the FC. Use a direction which shows the FC clearly.

NOTE: A recommended angle is 15 degrees or less.

(3) Compare the FC found with the images in Figure 202 and Figure 203.

(a) For mild to moderate FC, use one of the two options:

1) Option 1:

a) Utilize the LRTS plan, reference Figure 204.

2) Option 2:

a) Remove all found instances of FC with glass-bead blasting. Refer to Inspection and Removal of Damage/SRM PROCEDURE 51-10-02-0G-0 or CORROSION REMOVAL, SUBJECT 51-00-53. LRTS plan is not applicable and the aircraft can return to service

(b) For severe FC:

1) Severe FC must be removed from the aircraft within 30 days of initial discovery with glass-bead blasting. Refer to Inspection and Removal of Damage/SRM PROCEDURE 51-10-02-0G-0 or CORROSION REMOVAL, SUBJECT 51-00-53.

NOTE: The LRTS plan is not applicable to severe FC.

(c) If mild to moderate and severe FC is found, do one of the two options:

1) Option 1:

a) Utilize the LRTS plan for the mild to moderate FC.

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b) Severe FC must be removed from the aircraft within 30 days of initial discovery with glass-bead blasting. Refer to Inspection and Removal of Damage/SRM PROCEDURE 51-10-02-0G-0 or CORROSION REMOVAL, SUBJECT 51-00-53.

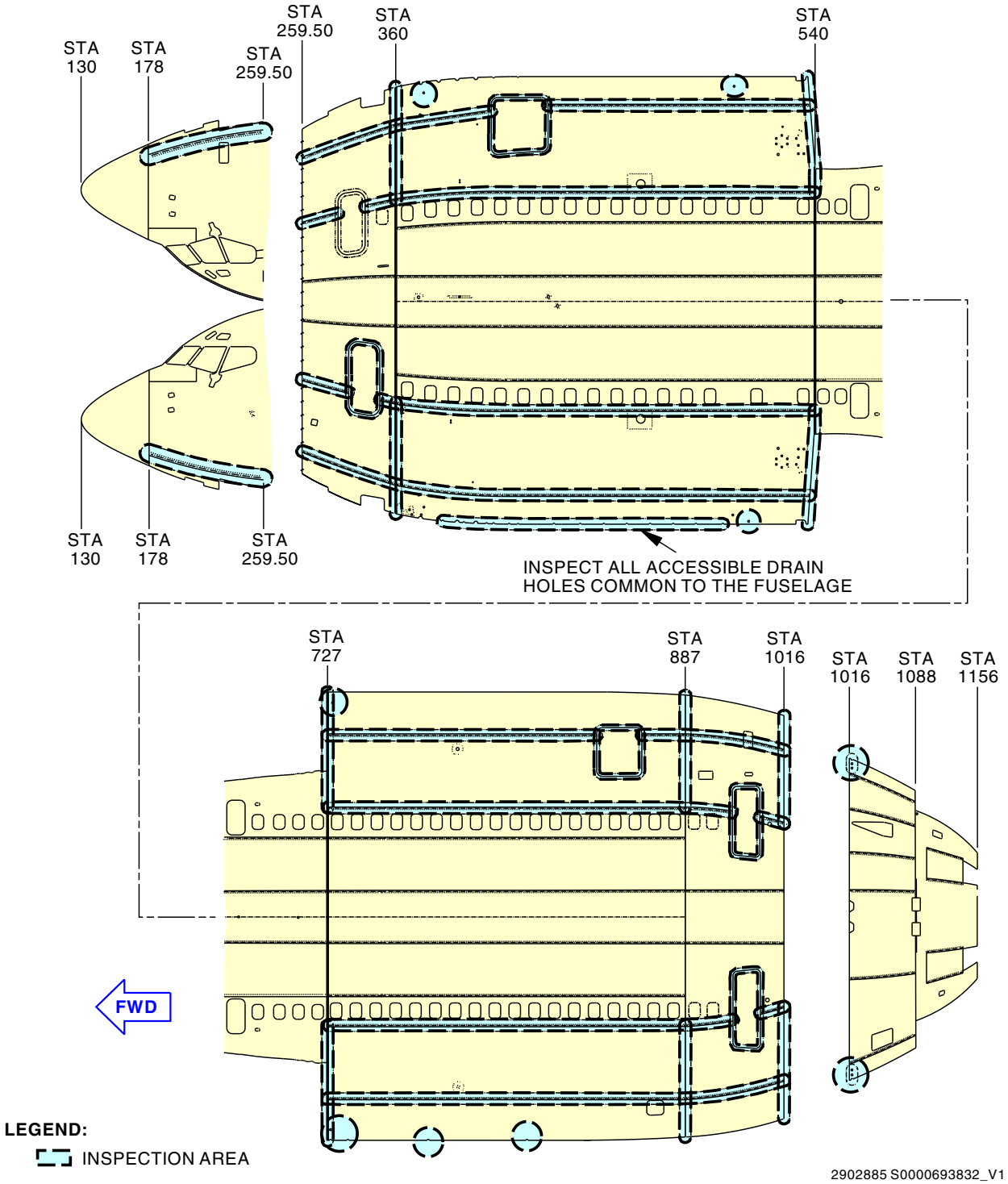
NOTE: The LRTS plan is not applicable to severe FC.

2) Option 2:

a) Remove all instances of FC from the aircraft with glass-bead blasting. Refer to Inspection and Removal of Damage/SRM PROCEDURE 51-10-02-0G-0 or CORROSION REMOVAL, SUBJECT 51-00-53. The LRTS plan is not applicable and the aircraft can return to service.

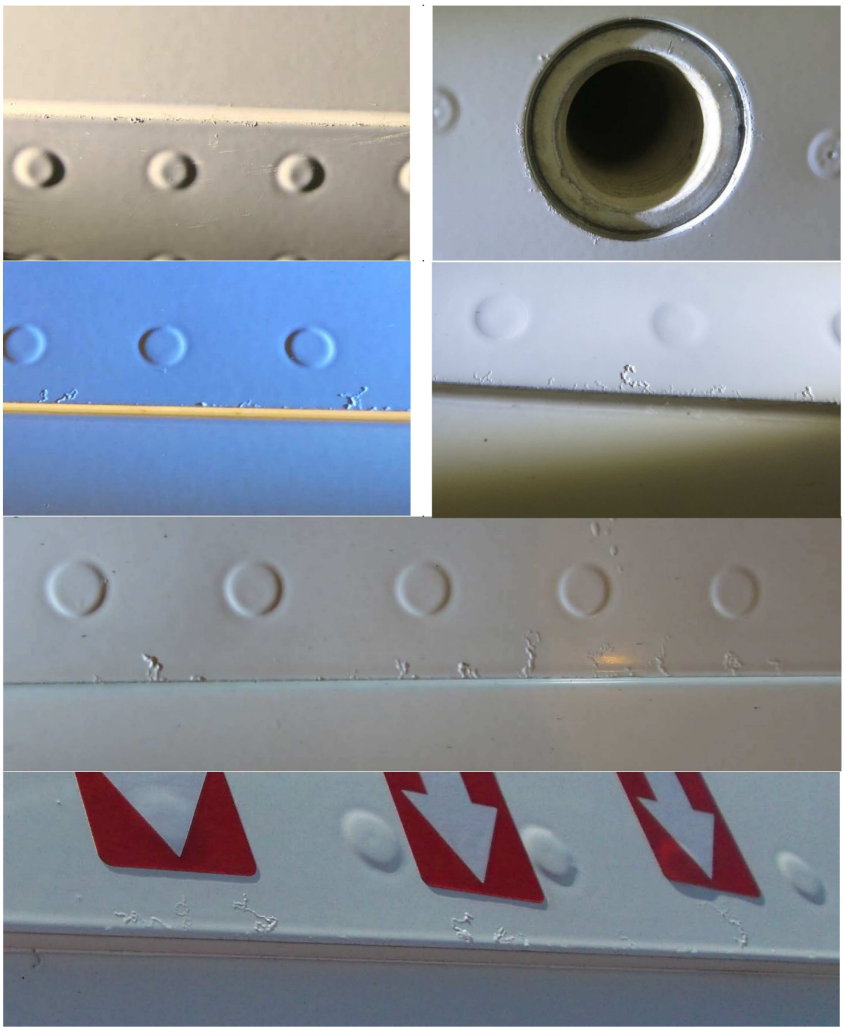
——— END OF TASK ———

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Filiform Corrosion Inspection
Figure 201/05-51-21-990-801

ECCN 9E991 BOEING PROPRIETARY - See title page for details



MILD FILIFORM CORROSION

NOTE:

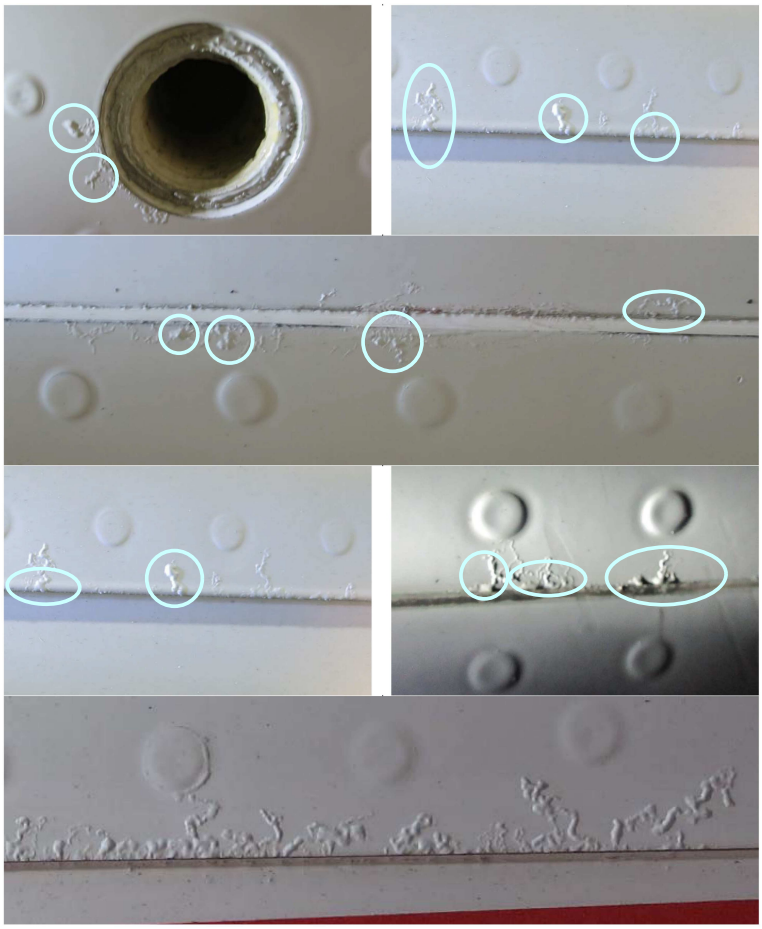
MILD FILIFORM CORROSION IS IDENTIFIED AS HAVING ANY OF THE FOLLOWING CONDITIONS:

- FILIFORM INITIATION POINTS VISIBLE ALONG EDGE.
- SHORT TO LONG SINGLE FILAMENTS.
- THE DESCRIPTION AND IMAGES ARE GENERALIZED AND SHOULD NOT BE CONSIDERED TO BE ALL INCLUSIVE.

2902886 S0000693833_V1

Filiform Corrosion - Edge Ratings
Figure 202/05-51-21-990-802 (Sheet 1 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



MODERATE FILIFORM CORROSION

NOTE:

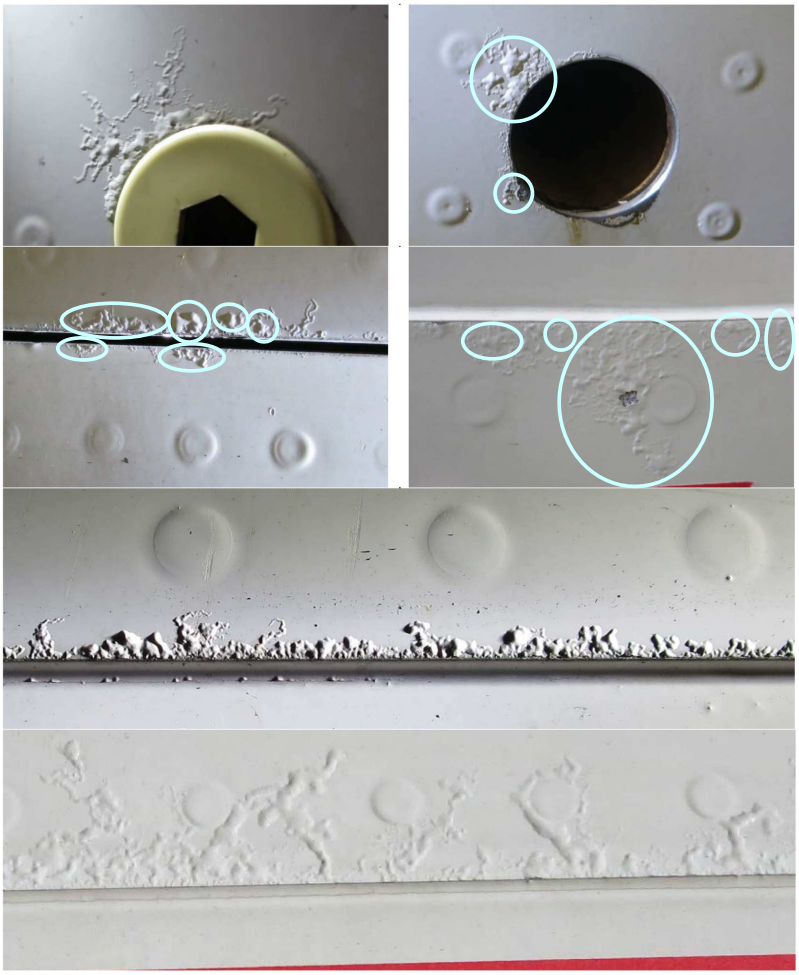
MODERATE FILIFORM CORROSION IS IDENTIFIED AS HAVING ANY OF THE FOLLOWING CONDITIONS:

- MULTIPLE SHORT AND LONG FILAMENTS, THICKER AND GREATER DENSITY COMPARED TO MILD FILIFORM.
- FILAMENTS BRANCHING OR MERGING.
- BLISTERS FORMING.
- THE DESCRIPTION AND IMAGES ARE GENERALIZED AND SHOULD NOT BE CONSIDERED TO BE ALL INCLUSIVE.
- IF AN OPERATOR OR MRO HAS DIFFICULTY DETERMINING IF THE RATING OF A SPECIFIC FILFORM CORROSION FINDING IS "MODERATE" OR "SEVERE". THEN THE FINDING SHOULD BE CONSIDER "SEVERE" AND ADDRESSED PER SECTION 2. ALTERNATIVELY, OPERATORS AND MROS MAY CONTACT BOEING WITH DETAILS OF THE FINDING(S) IN QUESTION IN ORDER TO OBTAIN SUPPORT WITH PROPERLY IDENTIFYING THE RATING.

2902888 S0000693834_V1

Filiform Corrosion - Edge Ratings
Figure 202/05-51-21-990-802 (Sheet 2 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



SEVERE FILIFORM CORROSION

NOTE:

SEVERE FILIFORM CORROSION IS IDENTIFIED AS HAVING ANY OF THE FOLLOWING CONDITIONS:

- MULTIPLE BLISTERED FILAMENTS.
- FILAMENTS AND BLISTERS ARE INDISTINGUISHABLE.
- BLISTERS AND/OR FILIFORM PRESENT LENGTHWISE AND CONTINUOUS ALONG EDGE.
- THE DESCRIPTION AND IMAGES ARE GENERALIZED AND SHOULD NOT BE CONSIDERED TO BE ALL INCLUSIVE.
- IF AN OPERATOR OR MRO HAS DIFFICULTY DETERMINING IF THE RATING OF A SPECIFIC FILFORM CORROSION FINDING IS "MODERATE" OR "SEVERE". THEN THE FINDING SHOULD BE CONSIDER "SEVERE" AND ADDRESSED PER SECTION 2. ALTERNATIVELY, OPERATORS AND MROS MAY CONTACT BOEING WITH DETAILS OF THE FINDING(S) IN QUESTION IN ORDER TO OBTAIN SUPPORT WITH PROPERLY IDENTIFYING THE RATING.

2902889 S0000693836_V1

Filiform Corrosion - Edge Ratings
Figure 202/05-51-21-990-802 (Sheet 3 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



MILD FILIFORM CORROSION

NOTE:

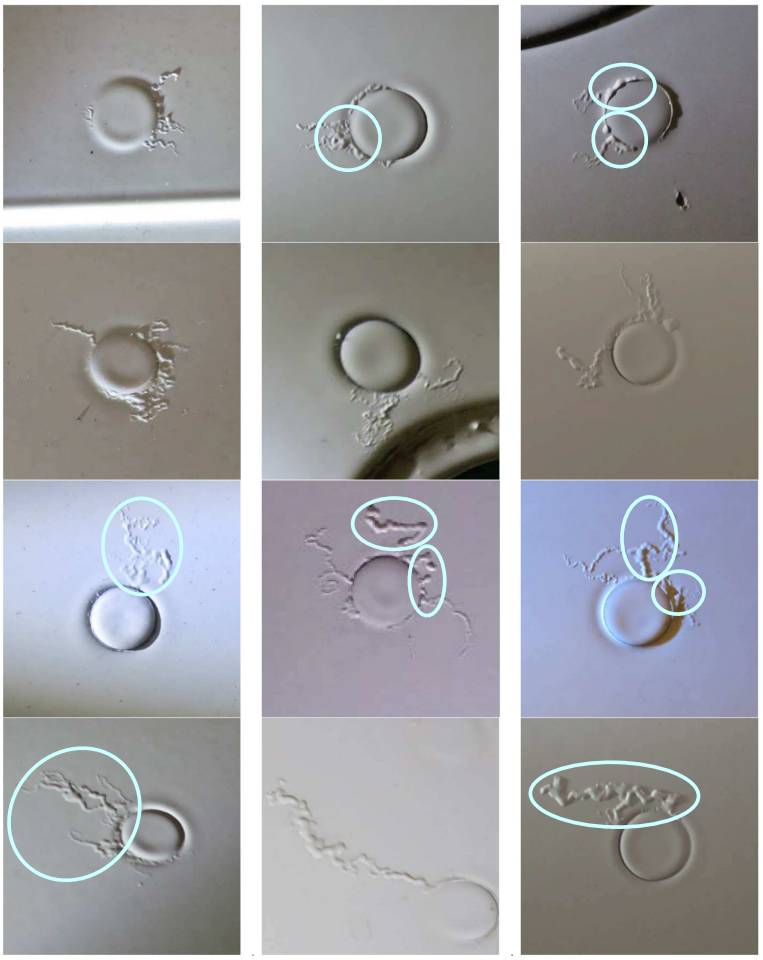
MILD FILIFORM CORROSION IS IDENTIFIED AS HAVING ANY OF THE FOLLOWING CONDITIONS:

- FILIFORM INITIATION POINTS VISIBLE ON OR AROUND FASTENER.
- SINGLE OR MULTIPLE THIN FILAMENTS.
- THE DESCRIPTION AND IMAGES ARE GENERALIZED AND SHOULD NOT BE CONSIDERED TO BE ALL INCLUSIVE.

2902892 S0000693837_V1

Filiform Corrosion - Fastener Ratings
Figure 203/05-51-21-990-803 (Sheet 1 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



MODERATE FILIFORM CORROSION

NOTE:

MODERATE FILIFORM CORROSION IS IDENTIFIED AS HAVING ANY OF THE FOLLOWING CONDITIONS:

- MULTIPLE SHORT AND LONG FILAMENTS, THICKER AND GREATER DENSITY COMPARED TO MILD FILIFORM.
- FILAMENTS BRANCHING OR MERGING.
- BLISTERS FORMING.
- THE DESCRIPTION AND IMAGES ARE GENERALIZED AND SHOULD NOT BE CONSIDERED TO BE ALL INCLUSIVE.
- IF AN OPERATOR OR MRO HAS DIFFICULTY DETERMINING IF THE RATING OF A SPECIFIC FILFORM CORROSION FINDING IS "MODERATE" OR "SEVERE". THEN THE FINDING SHOULD BE CONSIDER "SEVERE" AND ADDRESSED PER SECTION 2. ALTERNATIVELY, OPERATORS AND MROS MAY CONTACT BOEING WITH DETAILS OF THE FINDING(S) IN QUESTION IN ORDER TO OBTAIN SUPPORT WITH PROPERLY IDENTIFYING THE RATING.

2902893 S0000693838_V1

Filiform Corrosion - Fastener Ratings
Figure 203/05-51-21-990-803 (Sheet 2 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



SEVERE FILIFORM CORROSION

NOTE:

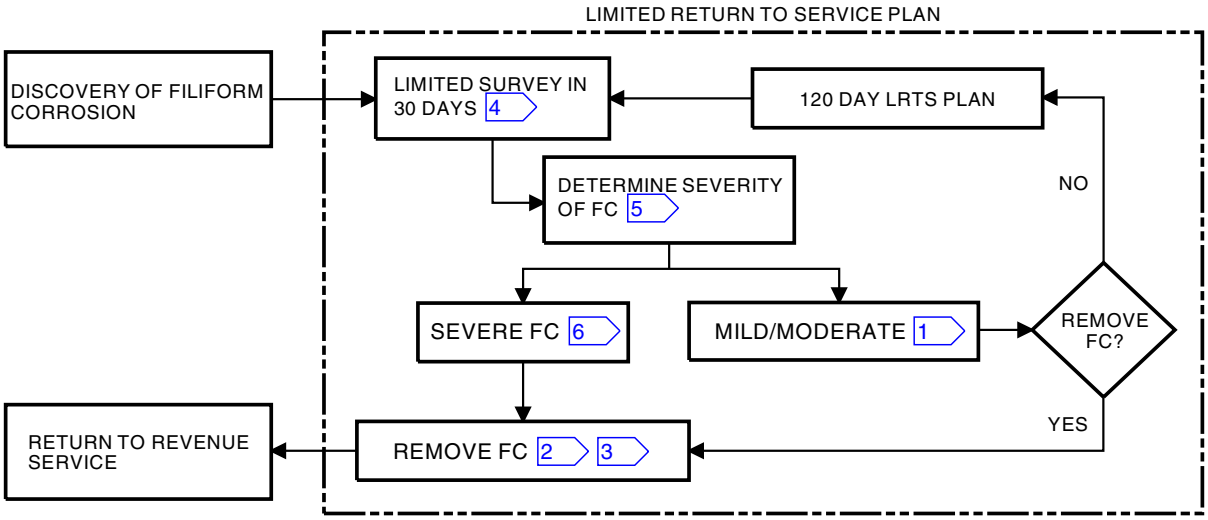
SEVERE FILIFORM CORROSION IS IDENTIFIED AS HAVING ANY OF THE FOLLOWING CONDITIONS:

- MULTIPLE BLISTERED FILAMENTS.
- FILAMENTS AND BLISTERS ARE INDISTINGUISHABLE.
- BLISTERS AND/OR FILIFORM CONTINUOUS AROUND THE FASTENER.
- THE DESCRIPTION AND IMAGES ARE GENERALIZED AND SHOULD NOT BE CONSIDERED TO BE ALL INCLUSIVE.
- IF AN OPERATOR OR MRO HAS DIFFICULTY DETERMINING IF THE RATING OF A SPECIFIC FILFORM CORROSION FINDING IS "MODERATE" OR "SEVERE". THEN THE FINDING SHOULD BE CONSIDER "SEVERE" AND ADDRESSED PER SECTION 2. ALTERNATIVELY, OPERATORS AND MROS MAY CONTACT BOEING WITH DETAILS OF THE FINDING(S) IN QUESTION IN ORDER TO OBTAIN SUPPORT WITH PROPERLY IDENTIFYING THE RATING.

2902894 S0000693840_V1

Filiform Corrosion - Fastener Ratings
Figure 203/05-51-21-990-803 (Sheet 3 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



1 MILD/MODERATE FILIFORFM CORROSION (FC) THAT DOES NOT ADVANCE TO SEVERE MUST BE REMOVED WITHIN 3 YEARS OF INITIAL DISCOVERY.

2 REMOVE FC WITH GLASS-BEAD BLASTING PER SRM 51-10-02 OR AMM 51-00-53.

3 ONCE ALL THE FC HAS BEEN REMOVED FROM THE SUBJECT AIRCRAFT, IT IS NO LONGER REQUIRED TO ABIDE BY THE INSPECTION CYCLES OF THE LRTS PLAN.

4 DOCUMENT FC AREAS AND PERFORM REPEAT INSPECTION AT DOCUMENTED FC AREAS IF THE AIRCRAFT IS UNDER THE LRTS PLAN.

5 IF SEVERE FC IS DISCOVERED, REMOVAL OF THE SEVERE FC IS REQUIRED WITHIN 30 DAYS TO ALLOW AIRCRAFT TO OPERATE UNDER THE LRTS PLAN.

6 SEVERE FC THAT IS DISCOVERED MUST BE REMOVED WITHIN 30 DAYS.

2902895 S0000693841_V2

Limited Return to Service Plan
Figure 204/05-51-21-990-804

ECCN 9E991 BOEING PROPRIETARY - See title page for details

HYDRAULIC FLUID REACTION WITH TITANIUM - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)

1. General

A. This procedure has this task:

(1) An inspection of the titanium parts contaminated with fire-resistant hydraulic fluid.

TASK 05-51-22-210-801

2. Titanium Parts Contaminated With Fire-Resistant Hydraulic Fluid Inspection

A. General

(1) This task gives instructions to examine bare, painted, or gold/green coated titanium parts.

(a) The inspection is necessary when the titanium touches fire resistant hydraulic fluid.

(b) If the temperature of the hydraulic fluid is less than 270°F (132°C), then the hydraulic fluid is considered low temperature for the purpose of this inspection.

(c) If the temperature of the hydraulic fluid is greater than 270°F (132°C), or if the hydraulic fluid leaks onto a high temperature duct, then the hydraulic fluid is considered high temperature for the purpose of this inspection. Additional cleaning steps are required in these cases.

NOTE: Hydraulic fluid above 270°F (132°C) will cause embrittlement of the titanium.

(d) Signs of hydraulic fluid contamination are a light glossy brown film, or dull black carbonaceous residue.

1) Also, look for a bare surface on painted titanium ducts.

B. Tools/Equipment

Reference	Description
STD-1064	Scraper - Phenolic, Hard Resin

C. Consumable Materials

Reference	Description	Specification
B00005	Cleaner - Alkaline - Cee Bee 280	
B00008	Cleaner - Alkaline - Oakite 204	
B00015	Cleaner - Heavy Duty, Multipurpose - Calla 301A	BAC5744, AMS 1526-A, AMS 1550-A
B00062	Solvent - Acetone (99.5% Grade)	ASTM D 329 (Supersedes O-A-51)
B00094	Solvent - Toluene	A-A-59107
B00130	Alcohol - Isopropyl	TT-I-735
B00230	Cleaner - Metal - Altrex B	
B00402	Cleaner - Aerospace Equipment	MIL-PRF-87937
B00638	Cleaner - Acidic Liquid - Honey Bee 60 (McGean-Rohco)	
B50085	Solvent - Skykleen 1000	BAC5750
C00018	Paint - High Temperature For Titanium - B2000	
C00314	Coating - Low Emissivity Gold Coating	BMS10-82 Type I

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(Continued)

Reference	Description	Specification
G00034	Cotton Wiper - Process Cleaning Absorbent Wiper (Cheesecloth, Gauze)	AMS3819 Class 1 Grade A or B Form 1 (Supersede BMS15-5 CL A)

D. Inspection of the Titanium Parts

SUBTASK 05-51-22-860-001

(1) Make sure that the black inorganic finish is not hydraulic fluid.

NOTE: Titanium parts found in hydraulic fluid areas have a flat, black inorganic finish, or gold coat for protection. The torque box interior structure has a green color finish.

SUBTASK 05-51-22-210-001

(2) Examine all of the titanium parts for contamination, metal deterioration, or paint deterioration in these areas:

NOTE: Look for contamination, metal deterioration, or paint deterioration.

(a) High temperature ducts:

1) The ducts in the wheel well areas
2) The engine fan case
3) The engine fire walls
4) The ducts in the aft fuselage between the pressure bulkhead and APU firewall
5) The pneumatic ducting along the leading edge of the wing.

(b) Other titanium parts:

1) Some strut attach fittings and spar webs
2) The torque box interior structure
3) The landing gear beam
4) The APU support structure
5) The stabilizer links.

E. Cleaning of the Contaminated Titanium Parts

SUBTASK 05-51-22-110-001

(1) To clean the titanium parts that were contaminated with low-temperature hydraulic fluid, do these steps:

NOTE: When hydraulic fluid leaks onto a high temperature duct, the hydraulic fluid should be considered high temperature.

(a) Clean the titanium with one of the manual cleaner:

1) solvent, B00094
2) Altrex B cleaner, B00230
3) Honey Bee 60 cleaner, B00638
4) solvent, B50085.

(b) Remove the hydraulic fluid residue with solvent, B50085, or solvent, B00062, and a hard resin phenolic scraper, STD-1064.

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SUBTASK 05-51-22-100-001

(2) To clean and treat titanium parts that were contaminated with high-temperature hydraulic fluid, do these steps:

CAUTION DO NOT USE METHYL ALCOHOL, OR CHLORINATED SOLVENTS ON TITANIUM OR TITANIUM ALLOY PARTS. THESE MATERIALS CAUSE DAMAGE TO TITANIUM PARTS.

(a) Clean the titanium to remove the oil and other foreign material with solvent, B00094.

(b) Remove the soft hydraulic fluid and remaining hard hydraulic fluid contamination (shows as a light glossy, brown film) with cleaner, B00402.

NOTE: Cee Bee 280 cleaner, B00005, Oakite 204 cleaner, B00008, and Calla 301A cleaner, B00015 are optional.

1) To remove the thick layers of the remaining hard hydraulic fluid contamination, let the cleaner set for approximately to 20 - 40 minutes.

2) After the contamination is soft, remove it with a hard resin phenolic scraper, STD-1064.

NOTE: Do not use a power brush or abrasive blast to remove the contamination.

a) Use a light abrasive to remove the remaining dried fluid.

(c) Replace all parts that show paint deterioration and/or metal that is etched.

(d) For gold-plated titanium ducts, do these steps:

1) Clean the gold coated titanium ducts with cotton wiper, G00034, and alcohol, B00130.

2) If the duct is clean, apply coating, C00314, or B2000 paint, C00018, to provide a protective coating for the duct.

NOTE: B2000 paint, C00018, may be applied over worn or scarred coating, C00314, or to bare titanium duct.

F. Put the Airplane Back to Its Usual Condition

SUBTASK 05-51-22-400-001

(1) If the components are serviceable, install the removed parts.

(a) If the components are not serviceable, install replacement parts.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

CABIN OVERPRESSURE CONDITION - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)

1. General

A. This task examines components which can be damaged because of overpressurization.

TASK 05-51-24-200-801

2. Cabin Overpressurization Conditional Inspection

A. General

(1) Equipment connected to pitot static systems will not be damaged by internal cabin pressure.

(2) Equipment temporarily disconnected from pitot static systems, or carried as spares, may be damaged by cabin pressure greater than 16 psi (110 kPa).

B. Precautions

(1) If personnel are in the airplane during a test, they must be in good physical condition. If any person experiences pain during pressure change, you must lower the rate of change of pressure or make the absolute pressure stable immediately until the person can either make the pressure equal in their ears, or be removed from the airplane.

NOTE: The ability to adjust to increasing or decreasing pressure is an individual characteristic, and one which varies from day to day depending upon a person's health. People with sinus or ear problems should not be exposed to pressure changes. Similarly a person experiencing headache, toothache, head cold, hay fever, etc., should be excluded from airplane during test. Individuals subjected to pressure changes should be trained in techniques for venting the ears.

C. References

Reference	Title
35-12-00-800-801	Bleed the Crew Oxygen System Prior to System Maintenance or Repair (P/B 201)

D. Procedure

SUBTASK 05-51-24-720-001

(1) If a cabin overpressurization occurs that is more than 16 psi (110 kPa), but less than 21 psi (145 kPa), do the step that follows:

(a) Do a check of all components with pitot static connections that were disconnected, or carried as spares when the overpressurization occurred.

SUBTASK 05-51-24-720-002

(2) If a cabin overpressurization occurs that is more than 21 psi (145 kPa), do the steps that follow:

(a) Do the above step for pressurization between 16 psi (110 kPa) and 21 psi (145 kPa).

(b) Do a check of the oxygen mask regulators from the oxygen system in the crew cabin, do this task: Bleed the Crew Oxygen System Prior to System Maintenance or Repair, TASK 35-12-00-800-801.

E. Put the Airplane Back to Its Usual Condition

SUBTASK 05-51-24-410-001

(1) Install the components you removed if they are serviceable, or install replacement parts.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EXTREME DUST OR SAND CONDITION - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)

1. General

A. This section gives procedures to examine the dust and sand sensitive areas on the airplane when there are extreme dust or sand conditions.

B. This procedure is for extreme dust and sand conditions during the two conditions that follow:

(1) The airplane's flight path went through a cloud of extreme dust or sand.

(2) If the airplane was parked or taxiing during the extreme dust or sand condition.

TASK 05-51-27-210-801

2. Extreme Dust or Sand Conditional Inspection

A. References

Reference	Title
12-11-00-680-801	Fuel Tank Sumps - Fuel Sampling (P/B 301)
12-14-00-600-801	Potable Water System - Drain (P/B 301)
12-40-00-100-801	Clean (Wet Wash) the External Surfaces of the Airplane (P/B 201)
12-40-00-100-802	Clean (Waterless Wash) the External Surfaces of the Airplane (P/B 201)
21-31-03-000-801	Aft Outflow Valve Assembly Removal (P/B 401)
21-32-01-000-801	Positive Pressure Relief Valve Removal (P/B 401)
21-32-02-000-801	Positive Pressure Relief Valve Filter Removal (P/B 401)
21-32-03-000-801	Negative Pressure Relief Valve Removal (P/B 201)
21-51-01-000-801	Left Flow Control and Shutoff Valve Removal (P/B 401)
21-51-01-000-802	Right Flow Control and Shutoff Valve Removal (P/B 401)
21-51-04-000-801	Air Cycle Machine Removal (P/B 401)
21-51-08-000-801	High Pressure Water Separator Removal (P/B 401)
21-51-12-000-801	Condenser Removal (P/B 401)
21-51-21-000-801	Ram Air Inlet Actuator Removal (P/B 401)
21-51-22-000-801	Ram Air Inlet Deflector Door Removal (P/B 401)
21-51-22-000-802	Ram Air Inlet Deflector Door Shaft Assembly Removal (P/B 401)
21-51-23-000-801	Ram Air Inlet Modulation Panels Removal (P/B 401)
21-61-10-100-801	Cabin Temperature Sensor Cleaning (P/B 201)
28-11-11-000-802	Surge Tank Access Door Removal (P/B 401)
29-11-00-200-801	Hydraulic Fluid Check (P/B 601)
30-21-11-000-801	Engine Anti-Ice Valve Removal (P/B 401)
35-12-00-700-801	Crew Oxygen Stowage Box Test (Mask Stowed in Stowage Box) (P/B 501)
35-12-00-700-802	Crew Oxygen Mask-Regulator Test (P/B 501)
35-22-00-700-801	Passenger Oxygen System Automatic Actuation Functional Test (P/B 501)
36-11-02-000-801	Intermediate Pressure Check Valve (IPCV) Removal (P/B 401)
36-11-04-000-801	PRSOV Removal (P/B 401)
36-11-05-000-801	Intermediate Manifold Pressure (PI) Sensor Removal (P/B 401)
36-11-06-000-801	Duct Vent Valve Removal (P/B 401)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(Continued)

Reference	Title
36-12-01-000-801	Bleed Air Precooler Removal with Engine Removed (P/B 401)
36-12-03-000-801	Fan Air Modulating Valve Removal (P/B 401)
36-13-03-000-801	Ground Pneumatic Connector Check Valve Removal (P/B 401)
36-13-04-000-801	Bleed Air Isolation Valve Removal (P/B 401)
36-14-02-000-801	APU Check Valve Removal (P/B 401)
36-21-01-000-801	Duct Pressure Transducer Removal (P/B 401)
38-11-03-000-801	Fill/Overflow Valve Removal (P/B 401)
38-14-01-000-801	Water Quantity Transmitter Removal (P/B 401)
38-42-10-960-801	Bleed Air Filter Element Replacement (P/B 401)
47-32-04-000-802	NGS Filter Element - Removal (P/B 401)
49-15-11-200-801	Air Inlet Seal Inspection (P/B 601)
49-15-15-200-801	APU Air Inlet Diffuser Ducts Inspection (P/B 601)
49-52-13-000-801	Bleed Air Duct Removal (P/B 401)
49-81-11-200-802	Exhaust Duct Muffler Inspection (P/B 601)
49-91-41-200-801	Oil Cooler Inspection (P/B 601)
71-00-00-200-806-G00	Heavy Sand/Dust Ingestion and Volcanic Ash Ingestion Inspection (P/B 601)
80-11-02-000-801-G00	Starter Air Valve Removal (P/B 401)

B. Location Zones

Zone	Area
100	Lower Half of Fuselage
200	Upper Half of Fuselage
300	Empennage
400	Powerplant and Nacelle Struts
500	Left Wing
600	Right Wing
700	Landing Gear and Landing Gear Doors

C. Extreme Dust or Sand Conditional Inspection

SUBTASK 05-51-27-200-001

(1) Examine the windshield.

CAUTION DO NOT OPERATE THE WINDSHIELD WIPERS ON DRY GLASS. ALWAYS SUPPLY WATER TO THE WINDSHIELDS BEFORE YOU OPERATE THE WIPER. THE WIPER WILL CAUSE DAMAGE TO A DRY WINDSHIELD.

(a) Make sure that the windshield is free from dust and sand.

SUBTASK 05-51-27-200-002

(2) Examine the surfaces that follow to make sure that they are free from sand and dust.

(a) Fuselage.

(b) Upper surfaces of the wings and other control surfaces.

SUBTASK 05-51-27-200-003

(3) Examine the areas that follow to make sure that they are free from sand and dust.

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(a) Probes.

(b) Sensors.

(c) Ports.

1) Including static ports and pitot tubes.

(d) Vents.

(e) Drains.

(f) Left and right ram air inlets.

(g) Cabin pressure outflow valve.

(h) Positive pressure relief valves.

SUBTASK 05-51-27-200-004

(4) Examine the leading edge flaps.

(a) Make sure that they are not damaged.

SUBTASK 05-51-27-200-005

(5) Examine the power plant areas to make sure that they are free from sand and dust.

(a) Engine inlet and cowling.

(b) Indicator probes.

(c) Fan and blades.

1) Make sure that the fan blades are free to turn and are not damaged.

(d) Do the inspection that follows before the next flight if there is dust or sand in the power plant areas (TASK 71-00-00-200-806-G00).

SUBTASK 05-51-27-200-006

(6) Examine the fuel tank vents.

(a) Make sure that they are free from sand and dust.

SUBTASK 05-51-27-200-007

(7) Examine the landing gear areas that follow to make sure that they are free from sand and dust.

(a) Landing gear shock struts.

(b) Landing gear actuator pushrods.

(c) Landing gear uplock actuator pushrods.

(d) Landing gear doors.

SUBTASK 05-51-27-200-008

(8) Examine the control surfaces that follow to make sure that they are free from sand and dust.

(a) Vertical stabilizer.

(b) Horizontal stabilizer.

(c) Stabilizer trim mechanisms.

(d) Flap screw mechanisms.

(e) Leading edges.

1) Make sure that all leading edges are not damaged.

SUBTASK 05-51-27-211-001

(9) Visually examine all the exposed portions of the flight control cable.

(a) Make sure that they are free from sand and dust.

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SUBTASK 05-51-27-200-009

(10) Examine the Auxiliary Power Unit (APU) areas that follow to make sure that they are free from dust or sand.

(a) Do the next check to be sure that there is no damage to the APU:

1) Operate the APU on the ground and monitor the pneumatic performance in the modes that follow:

a) The Main Engine Start (MES) operating mode.

b) The Environmental Control System (ECS) operating mode.

NOTE: Use the applicable APU manufacturer recommendations for engine inspection for flights through areas of low level dust or sand concentrations.

(b) Examine the inlet and exhaust ducts for dust or sand contamination.

NOTE: Do not perform a borescope inspection on the APU.

1) If there is dust or sand in the APU inlet or exhaust ducts, look for dust or sand in the components that follow:

a) Do this task: Oil Cooler Inspection, TASK 49-91-41-200-801.

b) Do this task: Air Inlet Seal Inspection, TASK 49-15-11-200-801.

c) Do this task: APU Air Inlet Diffuser Ducts Inspection, TASK 49-15-15-200-801.

d) Do this task: Exhaust Duct Muffler Inspection, TASK 49-81-11-200-802.

e) Do this task: Bleed Air Duct Removal, TASK 49-52-13-000-801.

SUBTASK 05-51-27-200-010

(11) Examine the air conditioning areas to make sure that they are free from dust and sand.

(a) Do the steps that follow to examine the air conditioning system:

1) Examine the aft outflow valve, do this task:Aft Outflow Valve Assembly Removal, TASK 21-31-03-000-801.

a) If you find dust or sand in the valve, clean or replace the valve.

2) Remove and examine the negative pressure relief doors, do this task: Negative Pressure Relief Valve Removal, TASK 21-32-03-000-801.

a) If you find dust or sand in the door area, clean or replace the door and linkage.

3) Remove and examine the positive pressure relief valves, do this task: Positive Pressure Relief Valve Removal, TASK 21-32-01-000-801.

a) If you find dust or sand in the valves, clean or replace the valves.

4) Remove and examine the positive pressure relief valve filters, do this task: Positive Pressure Relief Valve Filter Removal, TASK 21-32-02-000-801.

a) If you find dust or sand in the filters, clean or replace the filters.

5) Examine the ram air inlet deflector door, do this task: Ram Air Inlet Deflector Door Removal, TASK 21-51-22-000-801.

a) If you find dust or sand in the deflectors, clean the deflectors and movable joints.

6) Examine the ram air inlet deflector door shaft assemblies, do this task: Ram Air Inlet Deflector Door Shaft Assembly Removal, TASK 21-51-22-000-802.

a) If you find dust or sand in the shaft assemblies, clean the shaft assemblies.

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7) Examine the ram air inlet modulation panels, do this task: Ram Air Inlet Modulation Panels Removal, TASK 21-51-23-000-801.
   a) If you find dust or sand in the modulation panels, clean the panels and movable joints.
8) Examine the ram air inlet modulation panel shaft assemblies.
   a) If you find dust or sand in the shaft assemblies, clean the shaft assemblies.
9) Examine the ram air exhaust modulation louver assemblies.
   a) If you find dust or sand in the louver assemblies, clean the louvers, bearings and movable joints.
10) Examine the ram air inlet actuators, do this task: Ram Air Inlet Actuator Removal, TASK 21-51-21-000-801.
   a) If you find dust or sand in the actuators, clean or replace the actuators.
11) Remove and examine the Air Cycle Machine (ACM), do this task: Air Cycle Machine Removal, TASK 21-51-04-000-801.
   a) Check for dust or sand in the ACM valves.
      <1> If you find dust or sand in the ACM valves, clean or replace the ACM.
   b) Remove the high pressure water separator, do this task: High Pressure Water Separator Removal, TASK 21-51-08-000-801.
   c) Examine the water for contamination.
   d) If there is contamination in the water of the high pressure water separator, do the steps that follow:
      <1> Remove the ACM, do this task: Air Cycle Machine Removal, TASK 21-51-04-000-801.
      <2> Inspect the ACM for torus erosion.
         NOTE: Torus erosion is caused because atmospheric contamination in the bleed air is trapped in the ACM torus and moves around the torus, which erodes the inner surface of the torus.
12) Remove and examine the air cycle cooling pack primary and secondary heat exchangers.
   a) If you find dust or sand in the heat exchangers, clean or replace the heat exchangers.
13) Make sure that the heat exchanger passes the Pressure Flow Tests to verify that the unit is fully cleaned and not clogged.
   a) Do this every 2000-3000 hours.
14) Examine the water extract nozzles and drain lines.
   a) Clean the water extract nozzles and drain lines if dust or sand is found.
15) Remove and examine the condensers, do this task: Condenser Removal, TASK 21-51-12-000-801.
   a) If you find dust or sand in the condensers, clean or replace the condensers.
16) Remove and examine the flow control pack valves, do these tasks: Left Flow Control and Shutoff Valve Removal, TASK 21-51-01-000-801, Right Flow Control and Shutoff Valve Removal, TASK 21-51-01-000-802.
   a) If you find dust or sand in the pack valves, clean or replace the pack valves.

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17) Remove and examine the recirculating air fans.
    a) If you find dust or sand in the fans, clean or replace the fans.
18) Remove and examine one of the trim air nozzles.
    a) If you find dust or sand in one of the trim nozzles, remove and clean all of the trim nozzles.
19) Remove and examine the recirculation air filters.
    a) If you find dust or sand in the filters, clean or replace the filters.
20) Remove and examine the recirculation air check valves.
    a) If you find dust or sand in the valves, clean or replace the valves.
21) Remove and examine the equipment cooling automatic flow control valve.
    a) If you find dust or sand in the valve, remove or replace the valve.
22) Remove and examine the exhaust fans and check valves.
    a) If you find dust or sand in the fans or valves, clean or replace the fans and valves.
23) Remove and examine the pack temperature control valve.
    a) If you find dust or sand in the control valves, clean or replace the valves.
24) Do a visual examination of the temperature sensors and connectors in both air conditioning pack bays.
    a) Make sure that the temperature sensors and connectors are not damaged and are installed correctly.
25) Make sure that the flight compartment and cabin temperature sensors are not clogged.
    a) If you find dust or sand in the flight compartment or cabin temperature sensors, clean or replace the sensors, do this task: Cabin Temperature Sensor Cleaning, TASK 21-61-10-100-801.
26) Remove and examine the trim air valve.
    a) If you find dust or sand in the valves, clean or replace the valves.

SUBTASK 05-51-27-200-012

(12) Examine the Nitrogen Generation System (NGS).
    (a) Examine the NGS Filter (NGS Filter Element - Removal, TASK 47-32-04-000-802).
        1) If you find dust or sand in the NGS filter, clean or replace the filter, if necessary.

SUBTASK 05-51-27-200-013

(13) Examine the Pneumatic System.
    (a) Do this task: Bleed Air Precooler Removal with Engine Removed, TASK 36-12-01-000-801.
    (b) If you find dust or sand in the bleed air precooler, remove the components that follow and look for dust or sand.
        1) Do this task: Duct Vent Valve Removal, TASK 36-11-06-000-801.
        2) Do this task: PRSOV Removal, TASK 36-11-04-000-801.
        3) Do this task: Intermediate Pressure Check Valve (IPCV) Removal, TASK 36-11-02-000-801.
        4) Do this task: Starter Air Valve Removal, TASK 80-11-02-000-801-G00.

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5) Do this task: Bleed Air Isolation Valve Removal, TASK 36-13-04-000-801.

6) Do this task: APU Check Valve Removal, TASK 36-14-02-000-801.

7) Do this task: Ground Pneumatic Connector Check Valve Removal, TASK 36-13-03-000-801.

8) Do this task: Engine Anti-Ice Valve Removal, TASK 30-21-11-000-801.

9) Do this task: Duct Pressure Transducer Removal, TASK 36-21-01-000-801.

10) Do this task: Intermediate Manifold Pressure (PI) Sensor Removal, TASK 36-11-05-000-801.

11) Do this task: Fan Air Modulating Valve Removal, TASK 36-12-03-000-801.

SUBTASK 05-51-27-200-014

(14) Examine the Fuel System.

(a) Look for dust or sand in a fuel sample from each fuel tank sump, do this task: (Fuel Tank Sumps - Fuel Sampling, TASK 12-11-00-680-801).

(b) Look for dust or sand in a fuel sample from each surge tank sump (if there is fuel in the surge tanks).

(c) Visually inspect for dust or sand in each surge tank, do this task: Surge Tank Access Door Removal, TASK 28-11-11-000-802.

SUBTASK 05-51-27-200-015

(15) Examine the Oxygen System.

(a) If you find dust or sand in the passenger and control cabin, examine the oxygen system.

1) Remove the stowage boxes for the mask and regulator and look for dust or sand, do this task: Crew Oxygen Stowage Box Test (Mask Stowed in Stowage Box), TASK 35-12-00-700-801.

2) Examine portable oxygen masks for dust or sand, do this task: Crew Oxygen Mask-Regulator Test, TASK 35-12-00-700-802.

3) Examine the passenger oxygen masks for dust or sand, do this task: Passenger Oxygen System Automatic Actuation Functional Test, TASK 35-22-00-700-801.

SUBTASK 05-51-27-200-016

(16) Examine the Potable Water System.

(a) Remove the bleed air filter and look for dust or sand contamination, do this task: Bleed Air Filter Element Replacement, TASK 38-42-10-960-801.

(b) If there is dust or sand in the air filter, do these steps:

1) Visually inspect for dust or sand in a sample from the potable water tanks, do this task: Potable Water System - Drain, TASK 12-14-00-600-801.

2) Remove the fill/overflow valves and look for dust or sand contamination, do this task: Fill/Overflow Valve Removal, TASK 38-11-03-000-801.

3) Remove the water quantity transmitters and look for dust or sand contamination, do this task: Water Quantity Transmitter Removal, TASK 38-14-01-000-801.

SUBTASK 05-51-27-200-017

(17) Examine the Hydraulic System.

(a) Visually inspect for dust or sand in a sample of the hydraulic fluid, do this task: Hydraulic Fluid Check, TASK 29-11-00-200-801.

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D. Clean the Dust or Sand Contamination

SUBTASK 05-51-27-100-001

(1) If you find dust in the areas you examined, remove the dust.

(a) Do this task: Clean (Wet Wash) the External Surfaces of the Airplane, TASK 12-40-00-100-801 or Clean (Waterless Wash) the External Surfaces of the Airplane, TASK 12-40-00-100-802.

E. Put the Airplane Back to Its Usual Condition

SUBTASK 05-51-27-400-001

(1) Install the components you removed if they are serviceable, or install replacement parts.

SUBTASK 05-51-27-200-011

(2) Operate the air conditioning packs and check for the conditions that follow.

(a) Unusual noise or vibration.

NOTE: If you find unusual noise or vibration, use the Honeywell CMM 21-50-78 for ACM maintenance.

(b) Leaking on all ducting in the two air conditioning pack bays.

——— END OF TASK ———

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ICE OR SNOW CONDITION - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)

1. General

A. This section gives the task to examine the airplane surface when there are ice or snow or slush conditions.

(1) When there is ice, snow, frost, and/or slush conditions before a flight, examine the surfaces of the airplane.

TASK 05-51-28-210-801

2. Ice or Snow Condition Maintenance Practices

A. References

Reference	Title
12-33-01-600-801	Cold Weather Maintenance Procedure (P/B 301)

B. Location Zones

Zone	Area
100	Lower Half of Fuselage
200	Upper Half of Fuselage
300	Empennage
500	Left Wing
600	Right Wing

C. Procedure

SUBTASK 05-51-28-210-001

(1) When there are ice or snow conditions, examine the airplane.

(a) Look at the areas that follow for ice or snow:

1) Fuselage.
2) Wings.
3) TE flaps.
4) LE flaps.
5) LE slats.
6) Ailerons.
7) Stabilizers.
8) Elevators.
9) Rudder.
10) Accessible areas of the balance panels.
11) Accessible areas of control surface hinge points and hinges.
12) Gaps between wing structure and aileron nose.
13) Gaps between fin and rudder nose.
14) Gaps between horizontal stabilizer and elevator nose.
15) Engine fan blades.

SIA 015-999

16) Broadband radome.

SIA ALL

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(b) The areas that follow must not have any snow or ice on them before takeoff:

1) The total area of wing upper surface.
2) The wing leading edge.
3) All control surfaces.
4) All tab surfaces.
5) Balance panel cavities.
6) The engine fan blades.

(c) Look in the engine inlet cowl for ice and snow.

1) Make sure the fan turns freely.
2) If there is ice on the engine fan blades, do this task: Cold Weather Maintenance Procedure, TASK 12-33-01-600-801.

SUBTASK 05-51-28-610-001

(2) If there is ice, snow, slush, and/or frost, do this task: Cold Weather Maintenance Procedure, TASK 12-33-01-600-801.

——— END OF TASK ———

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EXCEEDING MAXIMUM NOSE LANDING GEAR TOWING ANGLE OR MAXIMUM TOWING LOAD (CONDITIONAL INSPECTION) - MAINTENANCE PRACTICES

1. General

A. The following procedure is required for inadvertent turning greater than the maximum steering angle or towing more than the maximum towing loads.

B. This inspection procedure is divided into two phases (Phase I and Phase II).

(1) If the inspection during Phase I does not show that damage has occurred, no more inspections are necessary.

(2) If the Phase I inspection shows that damage has occurred, the Phase II inspection must be done.

(3) The Phase I inspection should be completed prior to the Phase II inspection.

C. When the conditional inspection tells you to "examine" a component, look for these conditions (replace or repair components, if it is necessary).

(1) Cracks

(2) Pulled apart structure

(3) Loose paint (paint flakes)

(4) Twisted parts (distortion)

(5) Leakage

(6) Bent components

(7) Fasteners holes that become larger or longer

(8) Loose fasteners

(9) Fasteners that have pulled out or are gone

(10) Delamination

(11) Misalignment

(12) Interference

(13) Other signs of damage.

TASK 05-51-29-200-801

2. Phase I Inspection

A. References

Reference	Title
09-10-00-990-803	Figure: Airplane Towing Loads and Turning Radius (P/B 201)
32-45-00-700-801	Wheels Fast Check (Wheel Installed on the Airplane) (P/B 601)
32-45-00-700-802	Wheels Inspection (Wheel Removed from the Airplane) (P/B 601)
32-45-00-700-803	Landing Gear Tire Inspection (P/B 601)
32-51-31-220-801	Nose Gear Steering System Cables Inspection (P/B 601)

B. Location Zones

Zone	Area
700	Landing Gear and Landing Gear Doors

C. Nose Landing Gear Area, Exceeding Maximum Steering Angle, Maximum Towing Load.

(Figure 09-10-00-990-803)

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SUBTASK 05-51-29-200-001

(1) Examine the nose landing gear areas that follow:

(a) The tires, do this task: Landing Gear Tire Inspection, TASK 32-45-00-700-803.

(b) The wheels, do this task: Wheels Fast Check (Wheel Installed on the Airplane), TASK 32-45-00-700-801.

1) If the examination finds any wheels damaged, do this task: Wheels Inspection (Wheel Removed from the Airplane), TASK 32-45-00-700-802.

(c) If damage occurred during towbarless towing, do these steps:

1) Verify the axle is not bent or deformed.

2) Examine the axle threads for excessive damage.

(d) Make sure all of the fasteners are installed in the correct positions.

(e) Make sure there are no loose fasteners in the web of the nose wheel well near the trunnion support.

(f) Examine the steering cable control system for signs of cable overload, do this task: Nose Gear Steering System Cables Inspection, TASK 32-51-31-220-801.

1) Verify the pulley brackets are not deformed.

2) Verify the proper cable rigging.

(g) Examine the nose gear steering actuator rods for signs of necking or contact with the steering collar.

1) Verify the actuator rods are not bent.

(h) Examine the actuator rod end attachments to the steering collar for signs of deformation and excessive freeplay.

(i) If damage occurred during towbarless towing examine the following pins for signs of crank shafting, cracks or any other gross defects.

1) Torsion Link Pin, upper

2) Torsion Link Pin, lower

3) Torsion Link Pin, apex

4) Steering Collar Pins

(j) Examine the actuator trunnion attachments to the steering plates for signs of deformation and excessive freeplay.

(k) Examine the nose gear torque links for signs of deformation and excessive freeplay.

(l) Operationally check the steering system by commanding slow tiller inputs in both directions.

1) Verify no system binding occurs and there is no leakage from steering actuator trunnions and rod seals and steering metering valve.

(m) Examine the upper and lower ends of the shock strut of the nose gear for fluid leakage.

(n) Examine the outer cylinder of the nose landing gear.

(o) Examine the nose landing gear inner cylinder at tow fittings.

(p) Examine the nose landing gear inner cylinder torsion links attach lugs.

(q) Examine the nose landing gear trunnions for signs of damage.

(r) Examine the nose landing gear trunnion attachment areas.

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1) Examine bolted connections (attaching upper end of outer cylinder and upper end of upper drag brace).

(s) Examine both upper and lower drag brace segments, attach lugs, and pins.

(t) Examine the doors, hinges and retraction mechanism of the nose landing gear and the nose landing gear taxi light bracket for signs of damage.

END OF TASK

TASK 05-51-29-200-802

3. Phase II Inspection

A. References

Reference	Title
12-15-41-610-802	Nose Landing Gear Shock Strut Servicing, Airplane on the Ground (P/B 301)
32-21-00-200-801	Nose Landing Gear - Inspection (P/B 601)
32-21-00-700-801	Nose Landing Gear Torsional Freeplay Inspection (P/B 601)
32-33-00-710-802	Nose Landing Gear Operational Test (P/B 501)
32-35-00-730-801	Nose Gear Manual Extension System Test - Airplane on Jacks (P/B 501)
32-51-00-700-801	Nose Wheel Steering System Test (Airplane on Ground) (P/B 501)

B. Location Zones

Zone	Area
700	Landing Gear and Landing Gear Doors

C. Nose Landing Gear Operational Check

SUBTASK 05-51-29-200-002

(1) Retract and then extend the nose landing gear to make sure it operates correctly. Do one of the steps that follow:

(a) Do this task: Nose Landing Gear Operational Test, TASK 32-33-00-710-802.

(b) Do this task: Nose Gear Manual Extension System Test - Airplane on Jacks, TASK 32-35-00-730-801.

D. Nose Landing Gear Inspections

SUBTASK 05-51-29-200-003

(1) Examine the nose landing gear areas that follow:

(a) Do this task: Nose Landing Gear - Inspection, TASK 32-21-00-200-801.

(b) Do this task: Nose Landing Gear Torsional Freeplay Inspection, TASK 32-21-00-700-801.

(c) Examine the shock strut of the nose landing gear for fluid leakage.

(d) Examine the shock strut of the nose landing gear to make sure the pressure is satisfactory.

1) Do this task: Nose Landing Gear Shock Strut Servicing, Airplane on the Ground, TASK 12-15-41-610-802.

(e) Remove the inner cylinder if:

1) There is visible damage to any of the following structural components:

a) Nose landing gear inner cylinder.

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b) Nose landing gear outer cylinder.

c) Drag strut.

2) There are signs of a shock strut fluid leakage.

3) It is known the maximum towing load has been exceeded.

(f) If you remove the inner cylinder, examine it as follows:

1) Perform a visual examination looking for distortion and cracks.

2) Do a dimensional inspection.

3) Do a NDT inspection, if appropriate.

(g) Do a check of the rigging of the steering mechanism.

1) Do this task: Nose Wheel Steering System Test (Airplane on Ground), TASK 32-51-00-700-801.

END OF TASK

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VOLCANIC ASH CONDITION - MAINTENANCE PRACTICES

1. General

A. This procedure has two tasks:

(1) Volcanic ash operational encounter conditional inspection

(2) Volcanic ash ground fallout conditional inspection.

TASK 05-51-31-210-801

2. Volcanic Ash Operational Encounter Conditional Inspection

A. General

(1) This inspection is divided into three phases (Phase I, Phase II and Phase III).

(a) Phase I (IA and IB) is a general visual inspection for one or more of the following:

1) The flight crew reported the airplane flight path was through a cloud of visual volcanic ash.

2) The airplane lands or takes off in volcanic ash fallout conditions.

NOTE: Fallout is identified as ash drifting down from the air, or is blown about by the wind. Fallout is also caused by the ash being blown or moved about because of the movement of airplanes and ramp vehicles.

3) An airplane encounters volcanic ash while operating on the ground during volcanic ash fallout conditions.

(b) Phase II is applicable when any of the Phase IB inspections show positive results.

(c) Phase III is applicable when any of the Phase II inspections show positive results.

(2) Volcanic ash has the qualities that follow:

(a) It is hard and highly abrasive.

(b) It usually contains trace chemicals which can be acidic (pH between 2 and neutral).

(c) It can cause erosion/abrasion, etching or shot peening on exposed surfaces and remove protective finishes.

(d) The dimensions of most ash particles are less than 5 microns with trace amounts that are more than 50 microns.

(e) It resembles talcum powder.

(f) It stays on exposed lubricated surfaces.

(g) Able to enter small orifices and pass by seals.

(h) Can cause unusual wear and contamination of many airplane systems and filter elements.

WARNING

DO NOT GET VOLCANIC ASH IN YOUR MOUTH, EYES, OR ON YOUR SKIN. PUT ON A RESPIRATOR MASK THAT REMOVES VOLCANIC ASH PARTICLES SUFFICIENTLY. PUT ON CLOTHES AND GOGGLES (OR OTHER APPROVED EYE PROTECTION) THAT KEEP VOLCANIC ASH OFF YOU. VOLCANIC ASH CAN CAUSE INJURIES TO PERSONNEL AND DAMAGE TO EQUIPMENT.

(3) Volcanic ash can cause discomfort and injury to persons during fallout conditions, and during inspection and cleaning.

(a) Precautions must be followed when you work in a volcanic ash environment. This will prevent the entry of volcanic ash into your eyes and your respiratory (breathing) system.

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(4) Guidance for flight through areas of low level volcanic ash concentrations.

(a) Boeing guidance is to always avoid operation in visible ash.

(b) For operations in low volcanic ash concentrations (not visible), the Airframe and Systems can handle these operations without requiring unique or special inspections outside the normal operating and maintenance experience of individual airlines.

(c) Airframe and systems degradation can occur at different rates within many operating environments. As this normal degradation occurs and varies between operating environments, airlines typically adjust their maintenance practices to ensure airplane degradation (e.g. plugged heat exchangers, filters, abrasions, etc.) doesn't cause unscheduled airplane downtime. This same maintenance philosophy applies to operations in low levels of ash concentrations. A continuous operation in areas of low level volcanic ash concentrations is of interest to Boeing in collecting operator observations and experiences. If significant observations are discovered beyond normal variations currently known, Boeing will share these observations and any improved recommendations for maintenance practices. The diagram in Figure 201 illustrates general areas where Boeing recommends increased observation during normal hanger visits, and potential temporary adjustments for maintenance programs based on the observations, to prevent unscheduled maintenance. Observations should include signs of unusual or accelerated abrasions and / or ash accumulation.

(5) Volcanic ash encounters can show these properties inside the engine:

(a) As the ash goes through the combustor, it can change from ash to a glass material in a plastic flow or a molten condition.

(b) In the molten condition, the ash will have very high adhesive qualities.

1) The ash will bond to the nozzle guide vanes of the high pressure turbine.

2) The ash will also bond to the rotor blades of the high pressure turbine.

a) When the ash bonds to these components, it causes a decrease in the turbine flow area.

b) The ash also causes a decrease of nozzle guide vane and turbine blade cooling air.

(c) It may obstruct fuel injectors and cause engine shutdown.

(d) Ash usually accumulates in the turbine section and can continue to cause damage unless fully cleaned.

(e) Ash can cause erosion of the High Pressure Compressor (HPC) airfoils.

(6) Indicators for the flight crew that an airplane has encountered volcanic ash in flight are related to odor, visibility, haze, changing engine conditions, airspeed, pressurization, and static discharges.

(a) Odor - When encountering a volcanic ash cloud, flight crews usually notice a smoky or acrid odor that can smell like electrical smoke, burned dust, or sulfur.

1) Smoke or dust appearing in the flight deck which may cause the flight crew to don oxygen masks.

(b) Visibility - Flight deck windshields become opaque with limited or no view.

(c) Haze - Flight crews, as well as cabin crews and passengers, can see a haze develop within the airplane. Dust can settle on surfaces.

1) Sharp distinct shadows cast by landing lights as compared to the diffused shadows observed in clouds.

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(d) Changing engine conditions - Surging, torching from the tailpipe, and flameouts can occur. Engine temperatures can change unexpectedly and a white or orange glow can appear at the engine inlets.

1) Multiple engine malfunctions, such as stalls, increasing Exhaust Gas Temperature (EGT), torching, flameout, and loss of thrust causing immediate departure from assigned altitude.

2) On engine restart attempts, engines may accelerate to idle very slowly, especially at high altitudes.

(e) Airspeed - If volcanic ash fouls the pitot tube, the indicated airspeed can decrease or fluctuate erratically.

(f) Pressurization - Cabin pressure can change, including possible loss of cabin pressurization.

(g) Static discharges - An electrostatic discharge/St. Elmo's Fire or glow can occur. In these instances, blue-colored sparks can appear to flow up the outside of the windshield or a white glow can appear at the leading edges of the wings or at the front of the engine inlets.

1) An electrostatic discharge/St. Elmo's Fire around the windshields.

NOTE: This electrical discharge is often referred as St. Elmo's Fire, which is an electrical weather phenomenon where luminous plasma is created by a coronal discharge originating from a grounded object in an atmospheric electric field (such as those generated by thunderstorms or thunderstorms created by a volcanic explosion).

2) A bright glow in the engine inlets along with subsequent engine shutdown.

(7) The following is a guide to help identify positive volcanic ash results versus false positive results. Minimum experience inspecting for volcanic ash may induce a number of probable results which have not been recognized previously, but are well known results caused by normal operation.

(a) Results caused by in-flight volcanic ash encounters are usually symmetrically on both sides of the airplane.

NOTE: Positive results on one side of the airplane can be from single engine taxi ground operations or operation through ash that is not uniform thickness.

(b) If there are signs of volcanic ash on one engine, the other engine(s) should show the same signs.

1) For example, results in one pack system should be similar on all packs.

2) For example, an engine spinner or inlet lip skin shows abrasion, the other engine(s) should show similar abrasion.

(c) Volcanic ash typically has a light grey color and looks like talcum powder.

(d) Black or dark debris on the aircraft skin, engine and fan blades are normal debris usually caused by industrial dust.

(e) Yellow or green debris inside of pitot tubes and/or similar sensors are typical of plant pollen.

(f) White debris on acoustic panels of the engine inlet, fan blades, outlet guide vanes etc. can be residuals of water.

(g) White signs on the fuselage and wings can be caused by aircraft dry cleaning.

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(h) A check of the maintenance history in the area of your results may indicate residual material from recent maintenance.

1) For example, a relubrication of the fan blades may also cause unusual debris on spinner, blades and engine inlet.

B. References

Reference	Title
12-11-00-680-801	Fuel Tank Sumps - Fuel Sampling (P/B 301)
12-14-00-600-801	Potable Water System - Drain (P/B 301)
21-31-03-000-801	Aft Outflow Valve Assembly Removal (P/B 401)
21-32-01-000-801	Positive Pressure Relief Valve Removal (P/B 401)
21-32-02-000-801	Positive Pressure Relief Valve Filter Removal (P/B 401)
21-32-03-000-801	Negative Pressure Relief Valve Removal (P/B 201)
21-51-01-000-801	Left Flow Control and Shutoff Valve Removal (P/B 401)
21-51-01-000-802	Right Flow Control and Shutoff Valve Removal (P/B 401)
21-51-04-000-801	Air Cycle Machine Removal (P/B 401)
21-51-08-000-801	High Pressure Water Separator Removal (P/B 401)
21-51-12-000-801	Condenser Removal (P/B 401)
21-51-21-000-801	Ram Air Inlet Actuator Removal (P/B 401)
21-51-22-000-801	Ram Air Inlet Deflector Door Removal (P/B 401)
21-51-22-000-802	Ram Air Inlet Deflector Door Shaft Assembly Removal (P/B 401)
21-51-23-000-801	Ram Air Inlet Modulation Panels Removal (P/B 401)
21-61-10-100-801	Cabin Temperature Sensor Cleaning (P/B 201)
24-11-13 P/B 401	INTEGRATED DRIVE GENERATOR AIR/OIL HEAT EXCHANGER - REMOVAL/INSTALLATION
27-51-00-440-801	Trailing Edge Flap System Reactivation (P/B 201)
27-81-00-080-801	Leading Edge Flap and Slat Locks Removal (P/B 201)
27-81-00-440-801	Leading Edge Flaps and Slats - Activation (P/B 201)
27-81-00-480-801	Leading Edge Flap and Slat Locks Installation (P/B 201)
28-11-11-000-802	Surge Tank Access Door Removal (P/B 401)
29-11-00-200-801	Hydraulic Fluid Check (P/B 601)
30-11-11-000-801	Wing Thermal Anti-Ice Valve Removal (P/B 401)
30-21-11-000-801	Engine Anti-Ice Valve Removal (P/B 401)
32-11-00-200-801	Main Landing Gear Inspection (P/B 601)
32-21-00-200-801	Nose Landing Gear - Inspection (P/B 601)
32-31-51-200-801	Landing Gear Selector Valve - Inspection (P/B 601)
32-41-31-000-802	Brake Metering Valve Detailed Inspection (P/B 401)
32-41-41-700-802	Main Landing Gear Brake Fast Check (Wheel Installed on the Airplane) (P/B 601)
33-41-00-960-803	Wing Illumination Light - Light Assembly Replacement (P/B 201)
33-42-21-960-801	Fixed Landing Light - Main Array Assembly Replacement (P/B 201)
33-42-21-960-803	Runway Turnoff Light - Light Assembly Replacement (P/B 201)
33-43-11-000-801	Forward Position Light Removal (P/B 401)
33-43-11-400-801	Forward Position Light Installation (P/B 401)
33-43-12-000-801	Aft Marker Light Removal (P/B 401)

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(Continued)

Reference	Title
33-43-12-400-801	Aft Marker Light Installation (P/B 401)
33-43-13-960-801	Tailcone Position Lights Replacement (P/B 201)
33-44-01-960-801	Upper Anti-Collision Light - Light Assembly Replacement (P/B 201)
33-44-02-960-802	Lower Anti-Collision Light - Light Assembly Replacement (P/B 201)
33-44-13-000-801	Winglet Anti-Collision Light Removal (P/B 201)
33-44-13-400-801	Winglet Anti-Collision Light Installation (P/B 201)
33-49-00-960-802	Logo Light - Light Assembly Replacement (P/B 201)
35-12-00-700-801	Crew Oxygen Stowage Box Test (Mask Stowed in Stowage Box) (P/B 501)
35-12-00-700-802	Crew Oxygen Mask-Regulator Test (P/B 501)
35-22-00-700-801	Passenger Oxygen System Automatic Actuation Functional Test (P/B 501)
36-11-02-000-801	Intermediate Pressure Check Valve (IPCV) Removal (P/B 401)
36-11-04-000-801	PRSOV Removal (P/B 401)
36-11-05-000-801	Intermediate Manifold Pressure (PI) Sensor Removal (P/B 401)
36-11-06-000-801	Duct Vent Valve Removal (P/B 401)
36-12-01-000-801	Bleed Air Precooler Removal with Engine Removed (P/B 401)
36-12-03-000-801	Fan Air Modulating Valve Removal (P/B 401)
36-13-03-000-801	Ground Pneumatic Connector Check Valve Removal (P/B 401)
36-13-04-000-801	Bleed Air Isolation Valve Removal (P/B 401)
36-14-02-000-801	APU Check Valve Removal (P/B 401)
36-21-01-000-801	Duct Pressure Transducer Removal (P/B 401)
38-11-03-000-801	Fill/Overflow Valve Removal (P/B 401)
38-14-01-000-801	Water Quantity Transmitter Removal (P/B 401)
38-42-10-960-801	Bleed Air Filter Element Replacement (P/B 401)
47-32-04-000-802	NGS Filter Element - Removal (P/B 401)
49-15-11-200-801	Air Inlet Seal Inspection (P/B 601)
49-15-15-200-801	APU Air Inlet Diffuser Ducts Inspection (P/B 601)
49-52-13-000-801	Bleed Air Duct Removal (P/B 401)
49-81-11-200-802	Exhaust Duct Muffler Inspection (P/B 601)
49-91-41-200-801	Oil Cooler Inspection (P/B 601)
71-00-00-200-806-G00	Heavy Sand/Dust Ingestion and Volcanic Ash Ingestion Inspection (P/B 601)
80-11-02-000-801-G00	Starter Air Valve Removal (P/B 401)

C. Location Zones

Zone	Area
100	Lower Half of Fuselage
200	Upper Half of Fuselage
300	Empennage
400	Powerplant and Nacelle Struts
500	Left Wing

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(Continued)

Zone	Area
600	Right Wing
700	Landing Gear and Landing Gear Doors
800	Doors

D. Phase IA General Visual Inspection

SUBTASK 05-51-31-210-001

(1) Do a visual inspection of the airframe for abrasion damage:

(a) Radome for unusual abrasion

(b) Wing leading edges, landing lights and navlight glazings for unusual abrasion or crazing.

(c) Cockpit windows for unusual abrasion, cracking, crazing, discoloration or decreased visibility.

(d) Landing gear painted surfaces for abrasion.

(e) Pack ram air inlets for unusual abrasion.

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(f) Broadband radome for unusual abrasion.

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SUBTASK 05-51-31-210-002

(2) Do a visual inspection of the sensors and probes for abrasion damage:

(a) Angle of Attack (AOA) sensors for unusual abrasion and free movement

(b) TAT probes for unusual abrasion

(c) Pitot tubes for unusual abrasion

(d) Static ports for unusual abrasion.

SUBTASK 05-51-31-210-003

(3) Do a visual inspection of the following areas for ash contamination:

(a) Engine inlet lip skins, fan blades, and spinners

(b) Pitot probes and static ports

(c) Drain holes (bilge drains and engine drains)

(d) Lubricated surfaces (actuator rams, landing gear inner cylinders)

(e) Pack ram air inlets.

SUBTASK 05-51-31-210-004

(4) Do a visual inspection of the Auxiliary Power Unit (APU) for damage:

NOTE: Inspection can be performed from ground level.

NOTE: Use the applicable APU manufacturer recommendations for engine inspection for flights through areas of low level volcanic ash concentrations.

(a) APU inlet for unusual abrasion

(b) APU exhaust for unusual abrasion

(c) APU drains for abnormal conditions such as excessive or unexpected fuel or oil drainage.

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SUBTASK 05-51-31-210-005

(5) Do a visual inspection of each engine for damage:

NOTE: Use the applicable engine manufacturer recommendations for engine inspection and sampling for flights through areas of low level volcanic ash concentrations.

(a) Engine nose cowl inlet lips for unusual abrasion

(b) Engine spinner for unusual abrasion

(c) Fan Outlet Guide Vane (OGV)s leading edge for unusual abrasion (through fan blades).

SUBTASK 05-51-31-210-006

(6) If any of the Phase IA inspections show positive results, then the Phase IB inspection must be completed before the next flight.

NOTE: Typically, damage from volcanic ash encounters occur symmetrically on both sides of the aircraft. You may also extend the visual inspections to leading edges of stabilizers, antennae etc., as far as visible from ground, to confirm the inspection results.

E. Phase IB General Visual Inspection

SUBTASK 05-51-31-290-001

(1) Borescope first stages of HPC and High Pressure Turbine (HPT) blades for unusual abrasion or ash deposit on one engine.

(a) If the one engine does not show signs of unusual abrasion or grey dust accumulation, the other engine(s) do not need to be inspected.

SUBTASK 05-51-31-210-007

(2) If any of the Phase IB inspections show positive results, then the Phase II inspection must be completed before the next flight.

F. Phase II Inspection

SUBTASK 05-51-31-210-008

(1) Examine the engines.

(a) Do the steps that follow to examine each engine.

1) Examine each engine for damage, do this task: Heavy Sand/Dust Ingestion and Volcanic Ash Ingestion Inspection, TASK 71-00-00-200-806-G00.

2) Examine the engine control mechanisms and linkages for volcanic ash.

(b) If any of the Phase II inspections show positive results, then the Phase III inspection must be completed before the next flight.

G. Phase III

SUBTASK 05-51-31-210-009

(1) Air Conditioning System

(a) Do the steps that follow to examine the air conditioning system:

1) Examine the aft outflow valve, do this task: Aft Outflow Valve Assembly Removal, TASK 21-31-03-000-801.

a) If you find volcanic ash in the valve, clean or replace the valve.

2) Remove and examine the negative pressure relief doors, do this task: Negative Pressure Relief Valve Removal, TASK 21-32-03-000-801.

a) If you find volcanic ash in the door area, clean or replace the door and linkage.

3) Remove and examine the positive pressure relief valves, do this task: Positive Pressure Relief Valve Removal, TASK 21-32-01-000-801.

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a) If you find volcanic ash in the valves, clean or replace the valves.

4) Remove and examine the positive pressure relief valve filters, do this task: Positive Pressure Relief Valve Filter Removal, TASK 21-32-02-000-801.

a) If you find volcanic ash in the filters, clean or replace the filters.

5) Examine the ram air inlet deflector door, do this task: Ram Air Inlet Deflector Door Removal, TASK 21-51-22-000-801.

a) If you find volcanic ash in the deflectors, clean the deflectors and movable joints.

6) Examine the ram air inlet deflector door shaft assemblies, do this task: Ram Air Inlet Deflector Door Shaft Assembly Removal, TASK 21-51-22-000-802.

a) If you find volcanic ash in the shaft assemblies, clean the shaft assemblies.

7) Examine the ram air inlet modulation panels, do this task: Ram Air Inlet Modulation Panels Removal, TASK 21-51-23-000-801.

a) If you find volcanic ash in the modulation panels, clean the panels and movable joints.

8) Examine the ram air inlet modulation panel shaft assemblies.

a) If you find volcanic ash in the shaft assemblies, clean the shaft assemblies.

9) Examine the ram air exhaust modulation louver assemblies.

a) If you find volcanic ash in the louver assemblies, clean the louvers, bearings and movable joints.

10) Examine the ram air inlet actuators, do this task: Ram Air Inlet Actuator Removal, TASK 21-51-21-000-801.

a) If you find volcanic ash in the actuators, clean or replace the actuators.

11) Remove and examine the Air Cycle Machine (ACM), do this task: Air Cycle Machine Removal, TASK 21-51-04-000-801.

a) Check for volcanic ash in the ACM valves.

<1> If you find volcanic ash in the ACM valves, clean or replace the ACM.

b) Remove the high pressure water separator, do this task: High Pressure Water Separator Removal, TASK 21-51-08-000-801.

c) Examine the water for contamination.

d) If there is contamination in the water of the high pressure water separator, do the steps that follow:

<1> Remove the ACM, do this task: Air Cycle Machine Removal, TASK 21-51-04-000-801.

<2> Inspect the ACM for torus erosion.

NOTE: Torus erosion is caused because atmospheric contamination in the bleed air is trapped in the ACM torus and moves around the torus, which erodes the inner surface of the torus.

12) Remove and examine the air cycle cooling pack primary and secondary heat exchangers.

a) If you find volcanic ash in the heat exchangers, clean or replace the heat exchangers.

NOTE: For more information, refer to the Honeywell CMM 21-50-14.

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13) Make sure that the heat exchanger passes the Pressure Flow Tests to verify that the unit is fully cleaned and not clogged.
    a) Do this every 2000-3000 hours.
14) Examine the water extract nozzles and drain lines.
    a) Clean the water extract nozzles and drain lines if volcanic ash is found.
15) Remove and examine the condensers, do this task: Condenser Removal, TASK 21-51-12-000-801.
    a) If you find volcanic ash in the condensers, clean or replace the condensers.
16) Remove and examine the flow control pack valves, do these tasks: Left Flow Control and Shutoff Valve Removal, TASK 21-51-01-000-801, Right Flow Control and Shutoff Valve Removal, TASK 21-51-01-000-802.
    a) If you find volcanic ash in the pack valves, clean or replace the pack valves.
17) Remove and examine the recirculating air fans.
    a) If you find volcanic ash in the fans, clean or replace the fans.
18) Remove and examine one of the trim air nozzles.
    a) If you find volcanic ash in one of the trim nozzles, remove and clean all of the trim nozzles.
19) Remove and examine the recirculation air filters.
    a) If you find volcanic ash in the filters, clean or replace the filters.
20) Remove and examine the recirculation air check valves.
    a) If you find volcanic ash in the valves, clean or replace the valves.
21) Remove and examine the equipment cooling automatic flow control valve.
    a) If you find volcanic ash in the valve, remove or replace the valve.
22) Remove and examine the exhaust fans and check valves.
    a) If you find volcanic ash in the fans or valves, clean or replace the fans and valves.
23) Remove and examine the pack temperature control valve.
    a) If you find volcanic ash in the control valves, clean or replace the valves.
24) Do a visual examination of the temperature sensors and connectors in both air conditioning pack bays.
    a) Make sure that the temperature sensors and connectors are not damaged and are installed correctly.
25) Make sure that the flight compartment and cabin temperature sensors are not clogged.
    a) If you find volcanic ash in the flight compartment or cabin temperature sensors, clean or replace the sensors, do this task: Cabin Temperature Sensor Cleaning, TASK 21-61-10-100-801.
26) Remove and examine the trim air valve.
    a) If you find volcanic ash in the valves, clean or replace the valves.

SUBTASK 05-51-31-210-010

(2) Nitrogen Generation System (NGS)

(a) Examine the NGS Filter (NGS Filter Element - Removal, TASK 47-32-04-000-802).

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1) If you find volcanic ash in the NGS filter, clean or replace the filter, if necessary.

SUBTASK 05-51-31-210-011

(3) Pneumatic System

(a) Examine the Pneumatic System.

1) Do this task: Bleed Air Precooler Removal with Engine Removed, TASK 36-12-01-000-801.

2) If you find ash in the bleed air precooler, remove the components that follow and look for volcanic ash.

a) Do this task: Duct Vent Valve Removal, TASK 36-11-06-000-801.

b) Do this task: PRSOV Removal, TASK 36-11-04-000-801.

c) Do this task: Intermediate Pressure Check Valve (IPCV) Removal, TASK 36-11-02-000-801.

d) Do this task: Starter Air Valve Removal, TASK 80-11-02-000-801-G00.

e) Do this task: Bleed Air Isolation Valve Removal, TASK 36-13-04-000-801.

f) Do this task: APU Check Valve Removal, TASK 36-14-02-000-801.

g) Do this task: Ground Pneumatic Connector Check Valve Removal, TASK 36-13-03-000-801.

h) Do this task: Engine Anti-Ice Valve Removal, TASK 30-21-11-000-801.

i) Do this task: Duct Pressure Transducer Removal, TASK 36-21-01-000-801.

j) Do this task: Intermediate Manifold Pressure (PI) Sensor Removal, TASK 36-11-05-000-801.

k) Do this task: Fan Air Modulating Valve Removal, TASK 36-12-03-000-801.

SUBTASK 05-51-31-210-012

(4) External Light Lens

(a) Examine all of the external lights lenses for abrasions and damage.

NOTE: If the lights or lenses are frosted or damaged, replace then when it is possible.

1) Do this task: Wing Illumination Light - Light Assembly Replacement, TASK 33-41-00-960-803.

2) Do this task: Fixed Landing Light - Main Array Assembly Replacement, TASK 33-42-21-960-801.

3) Do this task: Runway Turnoff Light - Light Assembly Replacement, TASK 33-42-21-960-803.

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4) Do this task: Upper Anti-Collision Light - Light Assembly Replacement, TASK 33-44-01-960-801.

5) Do this task: Lower Anti-Collision Light - Light Assembly Replacement, TASK 33-44-02-960-802.

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6) Do this task: Logo Light - Light Assembly Replacement, TASK 33-49-00-960-802.

7) Do this task: Tailcone Position Lights Replacement, TASK 33-43-13-960-801.

8) Do these tasks: Forward Position Light Removal, TASK 33-43-11-000-801, Forward Position Light Installation, TASK 33-43-11-400-801.

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9) Do these tasks: Aft Marker Light Removal, TASK 33-43-12-000-801, Aft Marker Light Installation, TASK 33-43-12-400-801.

10) Do these tasks: Winglet Anti-Collision Light Removal, TASK 33-44-13-000-801, Winglet Anti-Collision Light Installation, TASK 33-44-13-400-801.

SUBTASK 05-51-31-210-013

(5) Fuel System

(a) Look for ash in a fuel sample from each fuel tank sump, do this task: (Fuel Tank Sumps - Fuel Sampling, TASK 12-11-00-680-801).

(b) Look for ash in a fuel sample from each surge tank sump (if there is fuel in the surge tanks).

(c) Visually inspect for ash in each surge tank, do this task: Surge Tank Access Door Removal, TASK 28-11-11-000-802.

SUBTASK 05-51-31-210-014

(6) Oxygen System

(a) If you find volcanic ash in the passenger and control cabin, examine the oxygen system.

1) Remove the stowage boxes for the mask and regulator and look for ash, do this task: Crew Oxygen Stowage Box Test (Mask Stowed in Stowage Box), TASK 35-12-00-700-801.

2) Examine portable oxygen masks for ash, do this task: Crew Oxygen Mask-Regulator Test, TASK 35-12-00-700-802.

3) Examine the passenger oxygen masks for ash, do this task: Passenger Oxygen System Automatic Actuation Functional Test, TASK 35-22-00-700-801.

SUBTASK 05-51-31-211-001

(7) APU

(a) Operate the APU on the ground and monitor APU pneumatic performance and operability in both Main Engine Start (MES) and Environmental Control System (ECS) operating modes to confirm no significant damage has occurred to the APU.

NOTE: Use the applicable APU manufacturer recommendations for engine inspection for flights through areas of low level volcanic ash concentrations.

(b) Examine the APU for volcanic ash contamination.

NOTE: Do not perform a borescope inspection of the APU.

1) Examine the inlet and exhaust ducts for ash contamination.

2) If there is ash in the APU inlet or exhaust ducts, look for volcanic ash in the components that follow:

a) Do this task: Oil Cooler Inspection, TASK 49-91-41-200-801.

b) Do this task: Air Inlet Seal Inspection, TASK 49-15-11-200-801.

c) Do this task: APU Air Inlet Diffuser Ducts Inspection, TASK 49-15-15-200-801.

d) Do this task: Exhaust Duct Muffler Inspection, TASK 49-81-11-200-802.

e) Do this task: Bleed Air Duct Removal, TASK 49-52-13-000-801.

SUBTASK 05-51-31-210-015

(8) Potable Water System

(a) Examine the potable water system for volcanic ash contamination.

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1) Remove the bleed air filter and look for ash contamination, do this task: Bleed Air Filter Element Replacement, TASK 38-42-10-960-801.

2) If there is ash in the air filter, do these steps:

a) Visually inspect for ash in a sample from the potable water tanks, do this task: Potable Water System - Drain, TASK 12-14-00-600-801.

b) Remove the fill/overflow valves and look for ash contamination, do this task: Fill/Overflow Valve Removal, TASK 38-11-03-000-801.

c) Remove the water quantity transmitters and look for ash contamination, do this task: Water Quantity Transmitter Removal, TASK 38-14-01-000-801.

SUBTASK 05-51-31-210-016

(9) Smoke Detectors

(a) Examine all of the cargo compartment smoke detectors for volcanic ash contamination.

SUBTASK 05-51-31-210-017

(10) Fire Extinguisher Bottle Nozzles

(a) Examine the nozzles of the fire extinguisher bottles that follow for volcanic ash contamination:

1) The engine fire extinguisher bottles

2) The APU fire extinguisher bottle.

SUBTASK 05-51-31-210-018

(11) Engine Accessories

(a) Examine the engine accessories that follow for volcanic ash contamination:

1) Examine the integrated drive generator air and oil cooler for ash, do this task: INTEGRATED DRIVE GENERATOR AIR/OIL HEAT EXCHANGER - REMOVAL/INSTALLATION, PAGEBLOCK 24-11-13/401.

SUBTASK 05-51-31-210-026

(12) Nacelle

(a) Examine for abrasion damage.

1) Examine all streamwise transverse interfaces between nacelle component to include:

a) Inlet lip skin to inlet barrel skin

b) Inlet to fan cowl interfaces

c) Fan cowl to thrust reverser interfaces

d) Thrust reverser to Core Cowl for those installations with a separate core cowl.

2) Make sure that you inspected all the external surfaces and the internal duct surfaces of the nacelle components.

(b) Examine for abrasion damage on all streamwise transverse edges of access panels and latch access doors.

(c) Examine all latch mechanisms for debris contamination.

(d) Examine all hinge mechanisms for debris contamination.

(e) Examine the drag links for abrasion damage and drag link attach ends for debris contamination.

(f) Examine the TR blocker door hinges for debris contamination and streamwise transverse edges for erosion damage.

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(g) Examine the nacelle seals for debris contamination.

1) If contamination is present, clean the seals and lands of the particulate contamination.

(h) Examine the Thrust Reverser Actuation System (TRAS) for particulate contamination.

SUBTASK 05-51-31-210-019

(13) Landing Gear

(a) Examine the landing gear components that follow for volcanic ash contamination:

NOTE: If you find volcanic ash, remove the ash.

1) The bare inner cylinders of the nose and main landing gear shocks struts.

2) All bare piston rods on all hydraulic actuators.

3) All attachment points for the landing gear components.

4) All landing gear:

a) door hinges

b) lock mechanisms

c) Do this task: Main Landing Gear Inspection, TASK 32-11-00-200-801.

d) Do this task: Nose Landing Gear - Inspection, TASK 32-21-00-200-801.

e) all proximity switches.

5) Landing gear brakes, do this task: Main Landing Gear Brake Fast Check (Wheel Installed on the Airplane), TASK 32-41-41-700-802.

a) The selector valves, do this task: Landing Gear Selector Valve - Inspection, TASK 32-31-51-200-801.

b) The brake metering valves, do this task: Brake Metering Valve Detailed Inspection, TASK 32-41-31-000-802.

SUBTASK 05-51-31-210-020

(14) Hydraulic Systems

(a) Examine the hydraulic system for signs of volcanic ash contamination.

1) Visually inspect for ash in a sample of the hydraulic fluid, do this task: Hydraulic Fluid Check, TASK 29-11-00-200-801.

SUBTASK 05-51-31-210-021

(15) Flight Controls

(a) Examine the flight controls for signs of volcanic ash contamination:

NOTE: The flight control include the ailerons, elevator, rudder, leading edge flaps and slats, and spoilers.

WARNING DO NOT GO INTO THE WING LEADING EDGE AND TRAILING EDGE AREAS BEFORE YOU INSTALL SAFETY LOCKS. IF YOU DO NOT OBEY, INJURY TO PERSONNEL FROM ACCIDENTAL FLAP/SLAT OPERATION CAN OCCUR.

1) Do this task: Leading Edge Flap and Slat Locks Installation, TASK 27-81-00-480-801.

2) Examine the bare actuator piston rods of the components that follow:

a) the ailerons

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b) the elevator
c) the rudder
d) the leading edge flaps and slats
e) the spoilers.

3) the control cables in unpressurized areas
4) the stabilizer jackscrew
5) the flight control surface hinges
6) the trailing edge flap tracks
7) the flap ball screw surfaces
8) the flap mechanisms
9) the trailing edge flap track fairings and linkages
10) the leading edge flap and slat mechanisms
11) the aileron and elevator balance panels.

SUBTASK 05-51-31-210-022

(16) Wing and Nacelle Anti-Ice System

(a) Examine the anti-ice system for signs of volcanic ash contamination.

1) Remove the anti-ice valves for the wing and look for volcanic ash contamination, do this task: Wing Thermal Anti-Ice Valve Removal, TASK 30-11-11-000-801.

2) Remove the anti-ice valves for the inlet cowl from the engine and look for volcanic ash contamination, do this task: Engine Anti-Ice Valve Removal, TASK 30-21-11-000-801.

SUBTASK 05-51-31-210-023

(17) Internal Areas of the Airplane

(a) Examine the internal areas of the airplane that follow for signs of volcanic ash contamination.

1) Visually inspect ash on these components in the upper and main compartments:
a) the flight compartment
b) the powered crew seats
c) the flight instruments
d) the electrical/electronic control panels
e) the passenger compartment
f) the closets
g) the passenger seats
h) the lavatories
i) the lavatory components
j) the galleys
k) the galley components
l) the floor coverings
m) refrigeration/chiller units (if installed)

2) baggage and cargo systems

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3) electrical and electronic compartments
4) Electronic Equipment Racks
5) control cables and mechanisms.

SIA 015-999

SUBTASK 05-51-31-211-002

(18) Examine the broadband radome for volcanic ash.

SIA ALL

H. Put the Airplane Back to Its Usual Condition

SUBTASK 05-51-31-420-001

(1) Install the components you removed if they are serviceable, or install replacement parts.

SUBTASK 05-51-31-860-001

(2) Do this task: Leading Edge Flap and Slat Locks Removal, TASK 27-81-00-080-801.

SUBTASK 05-51-31-860-002

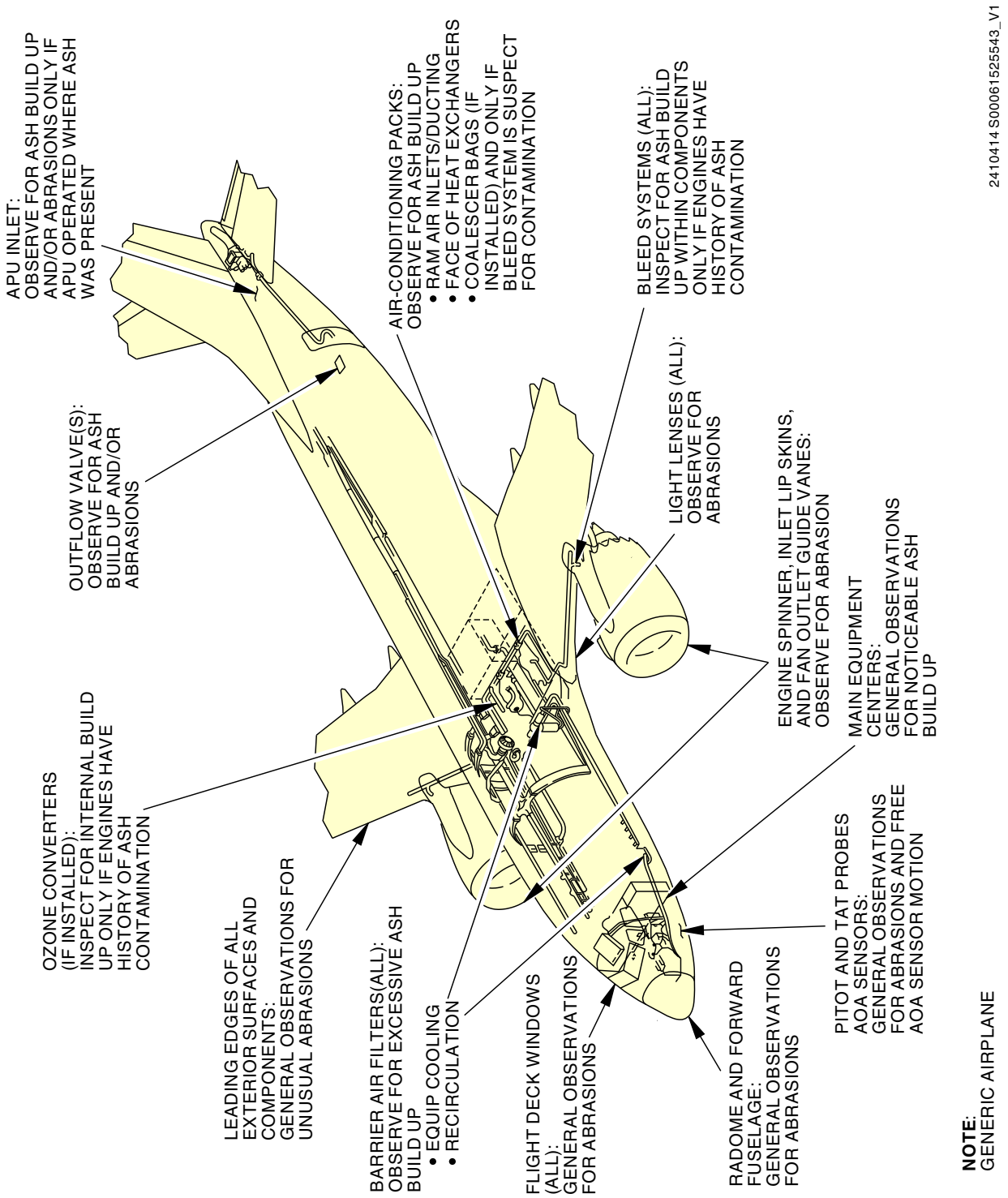
(3) Do this task: Trailing Edge Flap System Reactivation, TASK 27-51-00-440-801.

SUBTASK 05-51-31-860-003

(4) Do this task: Leading Edge Flaps and Slats - Activation, TASK 27-81-00-440-801.

——— END OF TASK ———

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Airframe and Systems Observation Areas
Figure 201/05-51-31-990-801

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TASK 05-51-31-200-801

3. Volcanic Ash Ground Fallout Conditional Inspection

A. General

(1) This task has information to examine a parked airplane for contamination in volcanic ash fallout conditions.

(2) Fallout is identified as ash drifting down from the air, or is blown about by the wind. Fallout is also caused by the ash being blown or moved about because of the movement of airplanes and ramp vehicles.

(3) For airplanes parked in fallout conditions, protect all inlets of systems, probes, static ports, engines, gaps, etc. with suitable covers.

(a) Any covered areas should have appropriate streamers or markings, to be removed before operation.

(4) Volcanic ash has the qualities that follow:

(a) It is hard and highly abrasive.

(b) It usually contains trace chemicals which can be acidic (pH between 2 and neutral).

(c) It can cause erosion/abrasion, etching or shot peening on exposed surfaces and remove protective finishes.

(d) The dimensions of most ash particles are less than 5 microns with trace amounts that are more than 50 microns.

(e) It resembles talcum powder.

(f) It stays on exposed lubricated surfaces.

(g) Able to enter small orifices and pass by seals.

(h) Can cause unusual wear and contamination of many airplane systems and filter elements.

WARNING

DO NOT GET VOLCANIC ASH IN YOUR MOUTH, EYES, OR ON YOUR SKIN. PUT ON A RESPIRATOR MASK THAT REMOVES VOLCANIC ASH PARTICLES SUFFICIENTLY. PUT ON CLOTHES AND GOGGLES (OR OTHER APPROVED EYE PROTECTION) THAT KEEP VOLCANIC ASH OFF YOU. VOLCANIC ASH CAN CAUSE INJURIES TO PERSONNEL AND DAMAGE TO EQUIPMENT.

(5) Volcanic ash can cause discomfort and injury to persons during fallout conditions, and during inspection and cleaning.

(a) Precautions must be followed when you work in a volcanic ash environment. This will prevent the entry of volcanic ash into your eyes and your respiratory (breathing) system.

(6) The following is a guide to help identify positive volcanic ash findings versus false positive findings. Minimum experience inspecting for volcanic ash may induce a number of probable findings which have not been recognized previously, but are well known findings caused by normal operation.

(a) Black or dark debris on the aircraft skin, engine and fan blades are normal debris usually caused by industrial dust.

(b) Yellow or green debris inside of pitot tubes and/or similar sensors are typical of plant pollen.

(c) White debris on acoustic panels of the engine inlet, fan blades, outlet guide vanes etc. can be residuals of water.

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(d) White signs on the fuselage and wings can be caused by aircraft dry cleaning.

(e) A check of the maintenance history in the area of your findings may indicate residual material from recent maintenance.

1) For example, a relubrication of the fan blades may also cause unusual debris on spinner, blades and engine inlet.

B. References

Reference	Title
12-40-00-100-804	Clean the Exterior Surface of Volcanic and Fire Ash (P/B 201)

C. Procedure

SUBTASK 05-51-31-210-024

(1) Examine the airplane exterior surfaces and the area (ground, service equipment, buildings) around the airplane for any indication of ash.

(a) If no ash is found, no more inspection or cleaning is necessary.

SUBTASK 05-51-31-160-001

(2) If any ash is found, remove all traces of the ash, including areas such as the fuselage crown, horizontal surfaces, inlets, wheel wells, and exposed chrome common to landing gear.

(a) do this task:, Clean the Exterior Surface of Volcanic and Fire Ash, TASK 12-40-00-100-804.

SUBTASK 05-51-31-210-025

(3) Make sure the area around the airplane is free from ash.

NOTE: Coordinate with the local airport authority to make sure the ramps, taxiways, and runways are clear from ash contamination.

——— END OF TASK ———

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TAIL STRIKE/SKID CONDITION - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)

1. General

A. This inspection procedure must be done if an airplane tail strike (tail dragged or touched the runway) occurred when the airplane landed or during a takeoff.

(1) If the green part of the warning decal on the aft side of the tail skid cartridge is not visible, a tail strike may have occurred.

B. The tail skid assembly located on the keel line consists of a drag lever, with a drag shoe.

(1) The tail skid assembly is designed to drag the drag shoe along the ground and also to compress the crushable cartridge in the shock absorber.

C. Damage can occur to the fuselage when the tail touches the runway.

(1) If you find damage, refer to the applicable Structural Repair Manual (SRM) procedures.

D. This procedure has the following task(s):

(1) Tail Strike Inspection.

(2) Tail Skid Inspection.

TASK 05-51-32-210-801

2. Tail Strike Inspection

A. References

Reference	Title
27-41-00-700-801	Stabilizer Manual Trim and Trim Indicator - Test (P/B 501)
27-41-11-000-801	Horizontal Stabilizer Removal (P/B 401)
27-41-11-400-801	Horizontal Stabilizer Installation (P/B 401)
27-41-41-210-801	Stabilizer Control Mechanism Detail Visual Inspection (P/B 601)
51-21-99 P/B 701	DECORATIVE EXTERIOR PAINT SYSTEM - CLEANING/PAINTING

B. Location Zones

Zone	Area
100	Lower Half of Fuselage
144	Area Below Aft Cargo Compartment - Right
145	Aft Cargo Compartment Equipment Bay - Left
310	Fuselage - Body Station 1016.00 to Body Station 1260.00

C. Tail Strike Inspection Procedure

SUBTASK 05-51-32-210-001

(1) Examine the tail skid assembly drag shoe for tail strike damage as follows:

NOTE: The cartridge assembly warning placard must be examined immediately after a tail strike. The skirt fairing can continue to extend from gravity. This will cause an error when reading the warning placard/decal.

(a) Do this task: Tail Skid Inspection, TASK 05-51-32-210-802.

SUBTASK 05-51-32-210-002

(2) Inspect the external skin surfaces of the lower aft fuselage.

(a) Look from station 847 to the APU compartment.

1) Look for signs of:

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a) scrapes
b) holes
c) cracked skin
d) burns
e) buckled belly skin
f) loose fasteners
g) missing fasteners.

(b) Look at the following areas for broken, bent (distorted), missing parts or other damage:
1) The APU firewall
2) The APU drain
3) The doors of the APU compartment
4) The drain mast.

(c) Inspect the upper fuselage structure aft of the wing rear spar for buckled structure, cracks and paint that has flaked.

SUBTASK 05-51-32-200-001

(3) Examine all of the external and internal structure of the fuselage, section 48, Body Station (BSTA) 1016, that you can get access to and/or is called out in this procedure for signs of buckling, deformation or damage.

NOTE: Look at the structure from the rear pressure bulkhead to the aft end of the airplane.

(a) Do a detailed visual inspection of the exterior fuselage skin 10 in. (25.4 cm) forward and aft of the BSTA 1016 skin butt joint between stringers S-10L and S-10R.

NOTE: Gain access to the exterior of the fuselage skin at BS 1016 under the vertical stabilizer fairing, 323AL and 323AR.

(b) Do a detailed visual inspection of the entire aft side of the BSTA 1016 aft pressure bulkhead.

1) Give particular attention to the upper bulkhead structure between skin stringers S-10L and S-10R.

NOTE: Access to the interior unpressurized aft pressure bulkhead area is through the aft access hatch, 311BL.

SUBTASK 05-51-32-210-003

(4) When you find external damage, inspect the fuselage internally as follows:

(a) In the area of the tail strike:
1) Inspect for bent or cracked stringers, frames, or clips.
2) Inspect for buckled or wrinkled webs.
3) Inspect for loose or missing fasteners and paint that has flaked.
4) Inspect the lower area of the aft pressure bulkhead for damage.
5) Inspect for pulled apart structure or unusual gaps.

(b) Aft pressure bulkhead at BSTA 1016:
1) Examine at BSTA 1016 the upper center web installation on the forward side of the pressure bulkhead for any damage.

NOTE: Gain access to inspect the upper center web installation by removing the galley and lavatories as necessary.

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SUBTASK 05-51-32-800-001

(5) If damage is found in the above paragraphs, use the applicable BSTA and do the repairs.

D. Stabilizer Position Indicator System Procedure

SUBTASK 05-51-32-210-004

(1) Inspect the stabilizer position indication system components, do this task: Stabilizer Manual Trim and Trim Indicator - Test, TASK 27-41-00-700-801.

(a) Inspect for broken cables.

(b) Inspect for cables that are out of the pulley groove.

(c) When there is no internal damage to the fuselage structure, do the operational test for the stabilizer position indication system.

1) Do this task: Stabilizer Control Mechanism Detail Visual Inspection, TASK 27-41-41-210-801.

2) Do this task: Stabilizer Manual Trim and Trim Indicator - Test, TASK 27-41-00-700-801.

(d) When there is internal damage to the fuselage structure, do the system test for the stabilizer position indicating system.

SUBTASK 05-51-32-210-005

(2) If the stabilizer position indicating system components are damaged:

(a) Do this task: Horizontal Stabilizer Removal, TASK 27-41-11-000-801

(b) Do this task: Horizontal Stabilizer Installation, TASK 27-41-11-400-801.

E. Put the Airplane Back to Its Usual Condition

SUBTASK 05-51-32-410-001

(1) Install all of the components you removed if the components are serviceable, or install replacement parts.

SUBTASK 05-51-32-370-001

(2) If the tail skid drag shoe is within tolerance and the paint finish on the lower surface of the tail skid drag shoe has been gouged or scratched by contact with the runway, paint the skid drag shoe in accordance with the Decorative Exterior Finishes procedure (DECORATIVE EXTERIOR PAINT SYSTEM - CLEANING/PAINTING, PAGEBLOCK 51-21-99/701).

NOTE: If the tail skid drag shoe scratch or gouge damage is not painted over, a person may interpret the damage as new and request an unnecessary inspection. The addition of paint can help to determine when new tail strikes have occurred.

SUBTASK 05-51-32-200-003

(3) Make sure that pressurization mode selector is in the AUTO position.

——— END OF TASK ———

TASK 05-51-32-210-802

3. Tail Skid Inspection

A. References

Reference	Title
32-71-00-210-801	Tailskid Cartridge Assembly Inspection (P/B 601)
32-71-00-211-801	Tailskid Shoe Inspection (P/B 601)

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B. Location Zones

Zone	Area
100	Lower Half of Fuselage
144	Area Below Aft Cargo Compartment - Right
145	Aft Cargo Compartment Equipment Bay - Left
310	Fuselage - Body Station 1016.00 to Body Station 1260.00

C. Tail Skid Inspection

SUBTASK 05-51-32-210-006

(1) Inspect the external tail drag surfaces.

(a) Visually inspect the tail skid and skin surfaces of the lower aft fuselage (TASK 32-71-00-211-801).

1) Make sure that the tail drag shoe is serviceable and within tolerance limits.

(b) Inspect the tail skid cartridge assembly (TASK 32-71-00-210-801).

NOTE: The cartridge assembly warning placard must be examined immediately after a tail strike. The skirt fairing can continue to extend from gravity. This will cause an error when reading the warning placard/decal.

1) Inspect the tail skid fuse pin for signs of shearing.

a) Replace the fuse pin if damaged.

(c) Inspect the tail skid drag assembly for cracks or fractures.

(d) Inspect from station 847 to the Auxiliary Power Unit (APU) compartment.

NOTE: This inspection is the lower area of Section 47 and 48.

1) Look for signs of:

a) scrapes

b) holes

c) cracked skin

d) burns

e) buckled belly skin

f) loose fasteners

g) missing fasteners.

SUBTASK 05-51-32-210-007

(2) Inspect the internal tail drag surfaces.

(a) When you find external damage, examine the fuselage internally in the area of the tail drag.

(b) Look for bent, cracked, pulled apart structure or unusual gaps:

1) stringers

2) frames

3) clips

4) wrinkled webs

5) look for loose or missing fasteners.

(c) Examine the lower area of the aft pressure bulkhead for damage.

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SUBTASK 05-51-32-800-002

(3) If you find internal or external damage, use the applicable Structural Repair Manual (SRM) for the repairs.

SUBTASK 05-51-32-200-002

(4) If you found damage to the bottom of the fuselage, or you have to replace the crushable cartridge, do this task: Tail Strike Inspection, TASK 05-51-32-210-801.

NOTE: It is not necessary to repeat inspection steps that have already been performed as part of the tail skid inspection procedure.

D. Put the Airplane Back to Its Usual Condition

SUBTASK 05-51-32-410-002

(1) Install all of the components you removed if they are serviceable, or install replacement parts.

SUBTASK 05-51-32-200-004

(2) Make sure that pressurization mode selector is in the AUTO position.

——— END OF TASK ———

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HOT AIR DUCT RUPTURE CONDITION - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)

1. General

A. This section has two tasks to examine the airplane after a hot air duct rupture.

B. The first task examines the airplane structure for possible heat damage caused by a ruptured duct.

C. The second task examines the airplane nacelle structure for possible structural damage caused by a ruptured duct that has occurred below the strut for which there was a subsequent deployment of the affected thrust reverser.

TASK 05-51-34-210-801

2. Airplane Structure Hot Air Duct Rupture Conditional Inspection

A. References

Reference	Title
SRM 51-00-00-0G-0	Structures

B. Location Zones

Zone	Area
100	Lower Half of Fuselage
400	Powerplant and Nacelle Struts
500	Left Wing
600	Right Wing

C. Procedure

SUBTASK 05-51-34-210-001

(1) Examine the area of the airplane structure which has had a high heat condition caused by a ruptured pneumatic duct.

(a) If you find damage, refer to Structures/SRM PROCEDURE 51-00-00-0G-0 for the repairs.

D. Put the Airplane Back to It's Usual Condition

SUBTASK 05-51-34-410-001

(1) Install the components you removed if they are serviceable, or install replacement parts.

——— END OF TASK ———

TASK 05-51-34-200-801

3. Nacelle Structure Hot Air Duct Rupture Conditional Inspection

A. Location Zones

Zone	Area
400	Powerplant and Nacelle Struts

B. Procedure

SUBTASK 05-51-34-210-002

(1) Contact Boeing for specifics of information related to the inspection of the inner wall for both location and the method of inspection.

C. Put the Airplane Back to It's Usual Condition

SUBTASK 05-51-34-410-002

(1) Install the components you removed if they are serviceable, or install replacement parts.

——— END OF TASK ———

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OVERWEIGHT LANDING - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)

1. General

A. Overweight Landing

(1) When the airplane lands at a weight that is above the maximum-design-landing weight (MLW), it is an overweight landing.

(a) When an overweight landing occurs, an airplane inspection is necessary as defined in this procedure.

(b) If the landing was also a hard landing, the Hard Landing Conditional Maintenance Practices Inspection, plus the Overweight Landing Conditional Inspection, must be done as defined in the respective procedures. If damage is found in the Phase I Conditional Inspection of either procedure, as defined above, then both the Overweight and Hard Landing Phase II inspections must be done.

NOTE: The pilot must make the decision if the airplane landing was a hard landing.

B. The Inspection

(1) The inspection is divided into two phases (Phase I and Phase II).

NOTE: The pilot must make the decision if the airplane landing was a hard landing. An Overweight Landing that was not accompanied by a Hard Landing does not require a hard landing inspection.

(a) Phase I, option A inspection is applicable when the airplane landing was overweight, but was not a hard landing.

(b) Phase I, option B inspection is applicable when airplane landing was overweight and also a hard landing.

(2) If the inspection per Phase I does not show that damage has occurred, no more inspections are necessary.

(3) If the Phase I, option A inspection shows that damage has occurred, you must do the Phase I, option B inspection.

(4) If the Phase I, option B inspection shows that damage has occurred, you must do the Phase II inspection.

C. When the conditional inspection tells you to "examine" or “inspect” a component, look for these conditions (repair or replace components, if it is necessary):

(1) Cracks

(2) Pulled apart structure or unusual gaps

(3) Loose paint (paint flakes)

(4) Discoloration or scuffing

(5) Twisted parts (distortion)

(6) Wrinkles or buckles in the structure

(7) Bent components

(8) Loose fasteners

(9) Fasteners that have pulled out, deformed, or are gone

(10) Rotated (tilted) fastener heads

(11) Delaminations

(12) Fiber breakage

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(13) Misalignment

(14) Interference

(15) Nicks or gouges

(16) Other signs of damage.

TASK 05-51-35-210-801

2. Phase I Inspection

A. General

(1) If the pilot believes the Overweight Landing was also accompanied by a Hard Landing as described in PAGEBLOCK 05-51-01/201, do the Phase I, option B, Overweight Landing inspection in this task and then do the Hard Landing Conditional Phase I Inspection as defined in PAGEBLOCK 05-51-01/201. If damage is found in the Phase I Conditional Inspection of either procedure, then both Hard Landing and Overweight landing Conditional Inspection Phase II inspections must be done.

B. References

Reference	Title
05-51-01	HARD LANDING OR HIGH DRAG/SIDE LOAD LANDING
05-51-01 P/B 201	HARD LANDING OR HIGH DRAG/SIDE LOAD LANDING - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)
27-51-00-040-801	Trailing Edge Flap System Deactivation (P/B 201)
27-51-00-440-801	Trailing Edge Flap System Reactivation (P/B 201)
27-81-00-040-801	Leading Edge Flaps and Slats - Deactivation (P/B 201)
27-81-00-080-801	Leading Edge Flap and Slat Locks Removal (P/B 201)
27-81-00-440-801	Leading Edge Flaps and Slats - Activation (P/B 201)
32-11-00-200-801	Main Landing Gear Inspection (P/B 601)
32-45-00-700-801	Wheels Fast Check (Wheel Installed on the Airplane) (P/B 601)
32-45-00-700-803	Landing Gear Tire Inspection (P/B 601)

C. Location Zones

Zone	Area
100	Lower Half of Fuselage
300	Empennage
500	Left Wing
600	Right Wing
700	Landing Gear and Landing Gear Doors

D. Phase I, option A, Examine the airplane structure for an overweight landing that was also not a hard landing.

SUBTASK 05-51-35-210-001

(1) Examine the areas of the airplane landing gear that follow:

(a) Examine the main landing gear tires and wheels for signs of damage.

(b) Examine the main landing gear shock strut for signs of hydraulic fluid leakage (TASK 32-11-00-200-801).

NOTE: A small quantity of hydraulic fluid on the inner cylinder is satisfactory.

(c) Examine the tires and wheels of the nose landing gear for signs of damage.

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(d) Examine the upper and lower ends of the shock strut of the nose landing gear for signs of hydraulic fluid leakage.

NOTE: A small quantity of hydraulic fluid on the inner cylinder is satisfactory.

E. Phase I, option B, Examine the airplane structure for an overweight landing that was also a hard landing.

SUBTASK 05-51-35-210-002

WARNING DO THE DEACTIVATION PROCEDURE FOR THE LEADING EDGE FLAPS AND SLATS. THE FLAPS AND SLATS MOVE QUICKLY. INJURIES TO PERSONNEL, AND DAMAGE TO EQUIPMENT CAN OCCUR.

(1) Do this task: Leading Edge Flaps and Slats - Deactivation, TASK 27-81-00-040-801.

SUBTASK 05-51-35-210-003

WARNING DO THE DEACTIVATION PROCEDURE FOR THE TRAILING EDGE FLAP BEFORE YOU DO WORK ON THE FLAP SYSTEM. THE FLAPS MOVE QUICKLY. THEY CAN CAUSE INJURIES TO PERSONNEL, AND DAMAGE TO EQUIPMENT.

(2) Do this task: Trailing Edge Flap System Deactivation, TASK 27-51-00-040-801.

SUBTASK 05-51-35-210-004

(3) Examine the areas of the main landing gear that follow:

(a) Do this task: Landing Gear Tire Inspection, TASK 32-45-00-700-803.

(b) Do this task: Wheels Fast Check (Wheel Installed on the Airplane), TASK 32-45-00-700-801.

(c) The upper and lower ends of the main landing gear shock strut for signs of hydraulic fluid leakage.

NOTE: A small quantity of hydraulic fluid on the inner cylinder is satisfactory.

(d) The doors and linkage of the main landing gear strut doors.

(e) The upper end of the shock strut.

(f) The landing gear beam and attachment fittings.

SUBTASK 05-51-35-210-005

(4) Examine the areas of the nose landing gear that follow:

(a) The nose wheel well.

NOTE: Look carefully in the area near the trunnion and the support fittings of the drag strut.

(b) Do this task: Landing Gear Tire Inspection, TASK 32-45-00-700-803.

(c) Do this task: Wheels Fast Check (Wheel Installed on the Airplane), TASK 32-45-00-700-801.

(d) The upper and lower ends of the shock strut for signs of hydraulic fluid leakage.

NOTE: A small quantity of hydraulic fluid on the inner cylinder is satisfactory.

(e) The outer cylinder.

(f) The attach nut for the orifice support tube for fluid leakage.

(g) The doors, the hinges, and the retraction mechanism.

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SUBTASK 05-51-35-210-006

(5) Examine the Fuselage and Wing areas that follow:

(a) The engine strut:

1) panels

2) doors

3) structure.

(b) The leading edge wing-to-body fairing for movement from its usual position.

(c) The inboard trailing edge flaps.

(d) The top and lower fuselage skin panels forward and aft of the wing.

NOTE: Permanent wrinkles often occur on the lower side fuselage skins aft of STA 727. An internal inspection is necessary if you find these wrinkles and they did not exist before the landing. If they did exist, examine the wrinkles carefully for cracks.

(e) The keel beam chords, stiffeners, webs, and splices at STA 663 through 727A.

(f) The strut-to-wing fairing panels for the top and lower nacelle.

(g) The wing leading edge-fairing.

SUBTASK 05-51-35-200-001

(6) Examine external fuselage skin at BS 1016 and the aft side of the pressure bulkhead for signs of buckling, deformation or damage.

(a) Do a detailed visual inspection of the exterior fuselage skin 10 in. (25.4 cm) forward and aft of the BS 1016 skin butt joint between stringers S-10L and S-10R.

NOTE: Gain access to the exterior of the fuselage skin at BS 1016 under the vertical stabilizer fairing, 323AL and 323AR.

(b) Do a detailed visual inspection of interior of the entire aft side of the BS 1016 aft pressure bulkhead. Give particular attention to the upper bulkhead structure between skin stringers S-10L and S-10R.

NOTE: Access to the interior unpressurized aft pressure bulkhead area is through the aft access hatch, 311BL.

(c) Do a detailed visual inspection of interior of the entire aft side of the BS 1042 aft pressure bulkhead. Give particular attention to the upper bulkhead structure between skin stringers S-10L and S-10R.

NOTE: Access to the interior unpressurized aft pressure bulkhead area is through the aft access hatch, 311BL.

SUBTASK 05-51-35-200-002

(7) Do the Hard Landing Conditional Inspection examination, do this task: HARD LANDING OR HIGH DRAG/SIDE LOAD LANDING, SUBJECT 05-51-01 as defined in the procedure. If damage is found in the Phase I Conditional Inspection of either procedure, then both Hard Landing and Overweight landing Conditional Inspection Phase II inspections must be done.

NOTE: When both the Hard landing Conditional Inspection, and the Overweight Landing Conditional Inspections, as defined above, must be done, it is not necessary to do duplicative tasks twice, such as: Landing gear, nacelle struts, fuselage, wing LE fairings, horizontal stab, cargo area, engine inspection, flight controls. etc.

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F. Put the Airplane Back to Its Usual Condition

SUBTASK 05-51-35-410-001

(1) Install the components you removed if they are serviceable, or install replacement parts.

SUBTASK 05-51-35-020-001

(2) Remove the safety locks.

(a) Do this task: Leading Edge Flap and Slat Locks Removal, TASK 27-81-00-080-801.

SUBTASK 05-51-35-440-001

(3) Do this task: Leading Edge Flaps and Slats - Activation, TASK 27-81-00-440-801.

SUBTASK 05-51-35-440-002

(4) Do this task: Trailing Edge Flap System Reactivation, TASK 27-51-00-440-801.

——— END OF TASK ———

TASK 05-51-35-200-801

3. Phase II Inspection

A. References

Reference	Title
05-51-01-210-801	Phase I Inspection (P/B 201)
05-51-10-210-801	Dragged Engine Nacelle/Fan Blade Out/Engine Seizure/Engine and Strut Damage Conditional Inspection (P/B 201)
07-10-01-580-801	Lift the Airplane on Jacks (P/B 201)
07-10-01-580-802	Lower the Airplane off Jacks (P/B 201)
12-15-31-610-801	Main Landing Gear Shock Strut Fluid Check (P/B 301)
12-15-41-610-801	Nose Landing Gear Shock Strut Fluid Check (P/B 301)
12-15-41-610-802	Nose Landing Gear Shock Strut Servicing, Airplane on the Ground (P/B 301)
27-09-14-820-801	Control Cables - Rigging (P/B 201)
27-51-00-040-801	Trailing Edge Flap System Deactivation (P/B 201)
27-51-00-440-801	Trailing Edge Flap System Reactivation (P/B 201)
27-81-00-040-801	Leading Edge Flaps and Slats - Deactivation (P/B 201)
27-81-00-080-801	Leading Edge Flap and Slat Locks Removal (P/B 201)
27-81-00-440-801	Leading Edge Flaps and Slats - Activation (P/B 201)
27-81-00-480-801	Leading Edge Flap and Slat Locks Installation (P/B 201)
32-00-10-211-801	Landing Gear Inner Cylinder Chrome Inspection (P/B 601)
32-11-00-200-801	Main Landing Gear Inspection (P/B 601)
32-11-21-960-801	Active Seals with the Spare Seals Replacement (P/B 801)
32-32-00-710-802	Main Landing Gear - Operational Test (P/B 501)
32-33-00-710-802	Nose Landing Gear Operational Test (P/B 501)
32-34-00-730-801	Main Gear Manual Extension System Test (Airplane on Jacks) (P/B 501)
32-35-00-730-801	Nose Gear Manual Extension System Test - Airplane on Jacks (P/B 501)
32-41-41-700-803	Main Landing Gear Brake Inspection (Wheel Removed from the Airplane) (P/B 601)
32-45-00-700-802	Wheels Inspection (Wheel Removed from the Airplane) (P/B 601)

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(Continued)

Reference	Title
32-45-00-700-803	Landing Gear Tire Inspection (P/B 601)
32-51-00-820-805	Nose Wheel Steering System Adjustment (P/B 501)

B. Location Zones

Zone	Area
100	Lower Half of Fuselage
300	Empennage
500	Left Wing
600	Right Wing
700	Landing Gear and Landing Gear Doors

C. Prepare for the Inspection

SUBTASK 05-51-35-040-001

WARNING DO THE DEACTIVATION PROCEDURE FOR THE LEADING EDGE FLAPS AND SLATS. THE FLAPS AND SLATS MOVE QUICKLY. INJURIES TO PERSONNEL, AND DAMAGE TO EQUIPMENT CAN OCCUR.

(1) Do this task: Leading Edge Flaps and Slats - Deactivation, TASK 27-81-00-040-801.

SUBTASK 05-51-35-040-002

WARNING DO THE DEACTIVATION PROCEDURE FOR THE TRAILING EDGE FLAP BEFORE YOU DO WORK ON THE FLAP SYSTEM. THE FLAPS MOVE QUICKLY. THEY CAN CAUSE INJURIES TO PERSONNEL, AND DAMAGE TO EQUIPMENT.

(2) Do this task: Trailing Edge Flap System Deactivation, TASK 27-51-00-040-801.

D. Main Landing Gear

SUBTASK 05-51-35-210-007

(1) Examine the main landing gear areas that follow, do this task: Main Landing Gear Inspection, TASK 32-11-00-200-801.

(a) If it is necessary to remove a main landing gear wheel (or wheels) because of a flat tire, do the steps that follow:

1) Do this task: Wheels Inspection (Wheel Removed from the Airplane), TASK 32-45-00-700-802.

2) Do this task: Main Landing Gear Brake Inspection (Wheel Removed from the Airplane), TASK 32-41-41-700-803.

3) Make sure that the wheel bearings are smooth.

(b) Examine the outer and inner cylinder lugs.

(c) Examine the torsion links.

(d) Examine the side strut, side strut linkage, and attachments.

(e) Examine the shock strut of the main landing gear for the correct fluid level, do this task: Main Landing Gear Shock Strut Fluid Check, TASK 12-15-31-610-801.

1) If the fluid level is low; do these steps:

a) Do this task: Active Seals with the Spare Seals Replacement, TASK 32-11-21-960-801.

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b) Remove the inner cylinder and examine it for distortion or cracks, do this task: Landing Gear Inner Cylinder Chrome Inspection, TASK 32-00-10-211-801.

c) Examine the orifice support tube for cracks.

NOTE: Do not remove the orifice support tube to examine it.

(f) Examine the walking beam fitting and the aft trunnion support fitting on the shock strut for cracks.

(g) The walking beam for the main gear actuator

1) The linkage fittings of the walking beam and actuator.

(h) Examine the drag strut.

(i) Examine the wheel well of the landing gear for signs of fuel or other fluid leaks near the landing gear.

E. Nose Landing Gear

SUBTASK 05-51-35-210-008

(1) Examine the areas of the nose landing gear that follow:

(a) If it is necessary to remove a nose landing gear wheel (or wheels) because of a flat tire, do these tasks:

1) Do this task: Landing Gear Tire Inspection, TASK 32-45-00-700-803.

2) Do this task: Wheels Inspection (Wheel Removed from the Airplane), TASK 32-45-00-700-802.

(b) Examine the trunnion fitting area of the outer cylinder.

(c) Examine the torsion links.

(d) Examine the drag assemblies.

(e) Make sure that the shock strut pressure is correct and hydraulic fluid is at the correct level.

1) Do this task: Nose Landing Gear Shock Strut Fluid Check, TASK 12-15-41-610-801.

2) Do this task: Nose Landing Gear Shock Strut Servicing, Airplane on the Ground, TASK 12-15-41-610-802.

(f) If you find damage in the trunnion fitting area or torsion links, or if there was a hard landing and a high impact on the nose gear:

1) Remove the inner cylinder and examine it for distortion or cracks, do this task: Landing Gear Inner Cylinder Chrome Inspection, TASK 32-00-10-211-801.

2) Do this task: Phase I Inspection, TASK 05-51-01-210-801.

(g) Examine the wheel well area for signs of fluid leaks near the landing gear.

(h) Do a check of the adjustment of the steering mechanism of the nose landing gear, do this task: Nose Wheel Steering System Adjustment, TASK 32-51-00-820-805.

F. Examine the Landing Gear

SUBTASK 05-51-35-580-001

(1) Lift the airplane on jacks, do this task: Lift the Airplane on Jacks, TASK 07-10-01-580-801.

SUBTASK 05-51-35-710-001

(2) Do a test of the main and nose landing gear for signs of interference, misalignment, or distortion.

(a) Do this task: Main Landing Gear - Operational Test, TASK 32-32-00-710-802.

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(b) Do this task: Nose Landing Gear Operational Test, TASK 32-33-00-710-802.

(c) Do this task: Main Gear Manual Extension System Test (Airplane on Jacks), TASK 32-34-00-730-801.

(d) Do this task: Nose Gear Manual Extension System Test - Airplane on Jacks, TASK 32-35-00-730-801.

SUBTASK 05-51-35-580-002

(3) Lower the airplane off of the jacks, do this task: Lower the Airplane off Jacks, TASK 07-10-01-580-802.

G. Fuselage and Wing Areas

SUBTASK 05-51-35-860-001

WARNING DO NOT GO INTO THE WING LEADING EDGE AND TRAILING EDGE AREAS BEFORE YOU INSTALL SAFETY LOCKS. IF YOU DO NOT OBEY, INJURY TO PERSONNEL FROM ACCIDENTAL FLAP/SLAT OPERATION CAN OCCUR.

(1) Install the safety locks.

(a) Do this task: Leading Edge Flap and Slat Locks Installation, TASK 27-81-00-480-801.

SUBTASK 05-51-35-210-009

(2) Examine the fuselage and wing areas that follow:

(a) The bulkheads at body STA 294.5 and 360, fuselage structure immediately outboard of the nose wheel well

NOTE: You can do this inspection on the forward side through the access holes in the sidewalls of the nose wheel well. Examine the aft side of the bulkhead at STA 294.5 from the electronics compartment.

(b) The wheel well of the nose landing gear and web of the nose wheel well

NOTE: Examine closely in the area of the trunnion support fittings.

(c) Remove the upper wing-to-body fairing immediately forward of the aft fairing (Refer to the operator's standard procedure).

(d) Examine the lower fuselage structure.

NOTE: Examine closely in the area below the body crease from STA 727 to 100 in. (254 cm) aft.

(e) Examine these components at STA 540 through STA 727A:

1) The keel beam chords

2) The stiffeners

3) The webs and the splices.

(f) Examine at BS 1016 the upper center web installation on the forward side of the pressure bulkhead for any damage.

NOTE: Gain access to inspect the upper center web installation by removing the galley and lavatories as necessary.

(g) Examine the wing to fuselage joints at STA 540 and 664.

(h) Examine the upper fuselage structure between S-6 Left and S-6 Right at STA's 540, 664, and 727.

(i) The body STA 706 trunnion support fitting for the main landing gear.

(j) Look for signs of fuel leaks, or other fluid leaks in the areas that follow:

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1) The wings
2) The nacelles
3) The engine struts
4) The external surface of the fuselage
5) The wheel well of the nose landing gear
6) The wheel wells of the main landing gear.

(k) Examine the top and lower fuselage skin panels forward and aft of the wing for buckles, wrinkles, or tears.

NOTE: Permanent wrinkles often occur on the lower side fuselage skins aft of STA 727. An interior inspection is necessary if you find these wrinkles and they did not exist before the landing. If they did exist, examine the wrinkles carefully for cracks.

(l) Examine the wing ribs along the aft side of the rear spar at WBL 92.5 and 114.0 for cracks.

(m) Examine the upper and lower trailing edge panels and structure.

NOTE: Examine closely the area of the main landing gear beam.

(n) Examine the flight control components that follow for sheared rivets and structure damage:

1) The inboard and outboard trailing edge flaps.
2) The flap tracks.
3) The drive screws for the flaps.
4) The linkages and the fairings for the flaps.
5) The inboard and outboard spoilers.

(o) Examine the flap components that follow for crankshafting when it is possible the flaps touched the ground:

1) The flap track bolts of the outboard trailing edge flaps.
2) The flap track bolts of the inboard trailing edge flaps.

(p) Install the upper wing-to-body fairing immediately forward of the aft fairing (Refer to the operator's standard procedure).

H. Engine Nacelles

SUBTASK 05-51-35-210-010

(1) If it is necessary, examine the engine after an overweight landing.

SUBTASK 05-51-35-210-011

(2) If it is necessary, do an inspection of a dragged engine nacelle, do this task: Dragged Engine Nacelle/Fan Blade Out/Engine Seizure/Engine and Strut Damage Conditional Inspection, TASK 05-51-10-210-801.

I. Flight Controls

SUBTASK 05-51-35-710-002

(1) Do a check of the flight controls for smooth movement and correct cable tension, do this task: Control Cables - Rigging, TASK 27-09-14-820-801.

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J. Put the Airplane Back to Its Usual Condition

SUBTASK 05-51-35-410-002

(1) Install the components you removed if they are serviceable, or install replacement parts.

SUBTASK 05-51-35-020-002

(2) Remove the safety locks.

(a) Do this task: Leading Edge Flap and Slat Locks Removal, TASK 27-81-00-080-801.

SUBTASK 05-51-35-440-003

(3) Do this task: Leading Edge Flaps and Slats - Activation, TASK 27-81-00-440-801.

SUBTASK 05-51-35-440-004

(4) Do this task: Trailing Edge Flap System Reactivation, TASK 27-51-00-440-801.

——— END OF TASK ———

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WINGLET STRIKE CONDITION - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)

1. General

A. This inspection procedure must be done if an airplane winglet strike occurred when the airplane was parked, taxiing, or towing.

B. The winglet is located on the tip of the wing and is attached to the wing closure rib.

C. If a winglet is damaged, there can also be damage to the wing.

(1) If you find damage to the wing, refer to the Structural Repair Manual (SRM) procedures.

D. This procedure has the following tasks:

(1) Winglet Strike Inspection Phase I

(2) Winglet Strike Inspection Phase II.

TASK 05-51-36-210-801

2. Winglet Strike Inspection Phase I

A. General

(1) This task has the steps to inspect the winglet if there is a winglet lower blade strike condition.

(2) If there is a winglet upper blade strike condition, do this task: Winglet Strike Inspection Phase II, TASK 05-51-36-210-802.

B. References

Reference	Title
57-31-21-000-802	Winglet Lower Blade Removal (P/B 401)
57-31-21-400-802	Winglet Lower Blade Installation (P/B 401)
57-31-21-480-801	Winglet Cover Plate Installation (P/B 201)

C. Location Zones

Zone	Area
500	Left Wing
527	Left Winglet
534	Left Wing - Dry Bay
600	Right Wing
627	Right Winglet
634	Right Wing - Dry Bay

D. Winglet Strike Inspection

SUBTASK 05-51-36-211-001

(1) Remove the applicable damaged winglet lower blade (TASK 57-31-21-000-802).

SUBTASK 05-51-36-211-005

(2) If the lower winglet blade was damaged, do these steps:

(a) Do a detailed visual inspection of the winglet lower blade to winglet upper blade attachment.

(b) Do a detailed visual inspection of the exposed attach fittings of the winglet blade ribs for evidence of cracks, buckling, elongated holes, or other damage.

(c) Do a detailed visual inspection of the winglet upper blade to wing surface.

1) Inspect the aero-sealed and unsealed portions for evidence of binding, interference, or other damage.

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(d) If no damage was found on the winglet upper blade, do one of the steps that follow:

1) Install the serviceable winglet lower blade (TASK 57-31-21-400-802).

2) Install the winglet cover plate (TASK 57-31-21-480-801).

(e) If any damage is found, do this task: Winglet Strike Inspection Phase II, TASK 05-51-36-210-802.

E. Put the Airplane Back to Its Usual Condition

SUBTASK 05-51-36-410-001

(1) If there is damage to structure (attached to winglet), use the applicable Structural Repair Manual and do repairs.

NOTE: This structure (attached to winglet) includes the closure rib, front spar, rear spar, upper, and lower inspar skins.

——— END OF TASK ———

TASK 05-51-36-210-802

3. Winglet Strike Inspection Phase II

A. General

(1) This task is used when one of these conditions occurred:

- Winglet upper blade strike condition, or
- Damage is found during the Wing Strike Inspection Phase I.

B. References

Reference	Title
57-31-21-000-801	Winglet Removal (P/B 401)
57-31-21-400-801	Winglet Installation (P/B 401)
737 NDT Part 6, 51-00-00, Procedure 16	Aluminum Part Fastener Hole Inspection (Rotary Scanner)
737 NDT Part 6, 51-00-00, Procedure 23	Aluminum Part Surface Inspection (Impedance Plane Display)

C. Location Zones

Zone	Area
500	Left Wing
527	Left Winglet
534	Left Wing - Dry Bay
600	Right Wing
627	Right Winglet
634	Right Wing - Dry Bay

D. Phase II

SUBTASK 05-51-36-020-001

(1) Do this task: Winglet Removal, TASK 57-31-21-000-801.

SUBTASK 05-51-36-211-006

(2) Do a detailed visual inspection of the closure rib for evidence of cracks, buckling, elongated holes or other damage.

NOTE: Use 10x magnification around the winglet attach fastener holes.

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SUBTASK 05-51-36-211-007

(3) Do a detailed visual inspection to these areas, for evidence of cracking, buckling or other damage:

(a) Closure rib forward and aft attach fitting.

(b) Adjacent areas of the front and rear spar including chords and web from both the forward and aft sides.

SUBTASK 05-51-36-211-008

(4) Do a detailed visual inspection of the upper and lower inspar skins adjacent to the closure rib for evidence of cracking or buckling.

SUBTASK 05-51-36-250-007

(5) Do a high frequency eddy current inspection of each winglet attach bolt hole in the closure rib and the bolts common to the forward and aft rib attach fittings (737 NDT Part 6, 51-00-00, Procedure 16).

(a) Make sure that no cracks exist.

SUBTASK 05-51-36-250-008

(6) Do a high frequency eddy current inspection to the locations that follow (737 NDT Part 6, 51-00-00, Procedure 23):

- aft surface of the forward closure rib attach fitting around each of the fasteners that attach the fitting to the front spar
- forward surface of the aft closure rib attach fitting around each of the fasteners that attach the fitting to the rear spar
- upper and lower inspar skins around each of the fasteners that attach the closure rib to the skin
- upper and lower inspar skins around each of the fasteners that attach the front spar to the skin within 8 in. (203 mm) of the end rib
- upper and lower inspar skins around each of the fasteners that attach the rear spar to the skin within 8 in. (203 mm) of the end rib.

(a) Make sure that no cracks exist.

SUBTASK 05-51-36-210-002

(7) Do a general visual inspection of the upper and lower wing surfaces for any additional damage.

E. Put the Airplane Back to Its Usual Condition

SUBTASK 05-51-36-350-001

(1) If there is damage to the structure (attached to winglet), use the applicable Structural Repair Manual and do the repairs.

NOTE: This structure (attached to the winglet) includes the closure rib, front spar, rear spar, and upper and lower inspar skins.

SUBTASK 05-51-36-420-001

(2) Do this task: Winglet Installation, TASK 57-31-21-400-801.

END OF TASK

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ENGINE BLADE OUT - EE BAY AND FLIGHT DECK PANELS- MAINTENANCE PRACTICES

1. General

A. This subject will address the maintenance practices as appropriate following a significant blade loss event and prior to returning the airplane to revenue service. Significant blade loss events will be considered those which result in excess of 0.75 blade equivalent unbalance and/or have reports of abnormally high vibration levels reported during flight.

B. The following are the minimum maintenance inspection checks:

(1) General Visual Check

(2) Electrical Equipment Rack (E1, E2, E3, E4, E5, and E8) Inspection.

TASK 05-51-42-210-801

2. Engine Blade Out - General Visual Check

A. General Visual Check

SUBTASK 05-51-42-211-001

(1) When you do the general visual check, look for the conditions that follow.

NOTE: Repair all damage found per the standard SRM procedure.

(a) Cracks
(b) Pulled apart structure
(c) Loose paint (paint flakes)
(d) Twisted parts (distortion)
(e) Bent components
(f) Fastener holes that become larger or longer
(g) Loose fasteners
(h) Fasteners that have pulled out or are gone
(i) Delaminations
(j) Misalignment
(k) Interference
(l) Excessive looseness or wear
(m) Excessive loading
(n) Peening of pins and bushings
(o) Bushing/bearing damage
(p) Bushing bearing fusion
(q) Bolt distortion
(r) Lug distortion or damage
(s) Other signs of damage

END OF TASK

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TASK 05-51-42-200-801

3. Engine Blade Out - EE Bay and Flight Deck Panels Inspection

A. References

Reference	Title
20-10-07-000-801	E/E Box Removal (P/B 401)
20-10-07-400-801	E/E Box Installation (P/B 401)

B. Electrical Equipment Rack Inspection

SUBTASK 05-51-42-200-001

(1) Inspect for damage in the areas that follow:

NOTE: Repair all damage found per the standard SRM procedure.

(a) E1 electrical equipment rack stanchions and its attachments to structure, shelves, and trays, do this task: E/E Box Removal, TASK 20-10-07-000-801.

(b) E2 electrical equipment rack stanchions and its attachments to structure, shelves, and trays, do this task: E/E Box Removal, TASK 20-10-07-000-801.

(c) E3 electrical equipment rack stanchions and its attachments to structure, shelves, and trays, do this task: E/E Box Removal, TASK 20-10-07-000-801.

(d) E4 electrical equipment rack stanchions and its attachments to structure, shelves, and trays, do this task: E/E Box Removal, TASK 20-10-07-000-801.

(e) E5 electrical equipment rack stanchions and its attachments to structure, shelves, and trays, do this task: E/E Box Removal, TASK 20-10-07-000-801.

(f) E8 electrical equipment rack stanchions and its attachments to structure, shelves, and trays, if installed, do this task: E/E Box Removal, TASK 20-10-07-000-801.

C. Flight Deck Panel Inspection

SUBTASK 05-51-42-210-001

(1) Inspect for damage in the flight deck panels that follow:

NOTE: Repair all damage found per the standard SRM procedure.

(a) P1 Captain instrument Panel

(b) P2 Center Instrument Panel

(c) P3 First Officer Instrument Panel

(d) P5 Forward and Aft Overhead Panels

(e) P7 Glareshield Panel

(f) P8 Aft Electronic Panel

(g) P9 Forward Electronic Panel

(h) P18 Component Circuit Breaker Panel

D. Put the Airplane Back to Its Usual Condition

SUBTASK 05-51-42-410-001

(1) Re-install the E/E boxes removed for inspection access, do this task: E/E Box Installation, TASK 20-10-07-400-801.

(2) Re-install all flight deck panels removed for inspection access.

END OF TASK

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NACELLE/STRUT PRESSURE RELIEF DOORS OPEN CONDITION - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)

1. General

A. This procedure contains two tasks:

(1) Examine the Nacelle/Strut Structure

(2) Examine the Pneumatic Ducts

B. The pressure relief doors are made to open to prevent too much pressure in the nacelle/strut structure.

(1) There can be too much pressure in the nacelle/strut when a pneumatic duct breaks.

(2) Also, the pressure relief doors can open if a condition occurs which can cause temporary or permanent distortion.

(a) Example conditions are as follows, but others can also occur:

1) hard Landings

2) severe turbulence

3) engine Vibration

TASK 05-51-44-200-801

2. Examine the Nacelle/Strut Structure

A. Location Zones

Zone	Area
400	Powerplant and Nacelle Struts

B. Procedure

SUBTASK 05-51-44-210-001

(1) Examine the nacelle/strut inner and outer surfaces for:

NOTE: Carefully examine the surfaces for discoloration and/or paint that is flaked. This could be a sign of a broken pneumatic duct.

(a) distortion

(b) cracks

(c) pulled fasteners

(d) fasteners which are missing

(e) discolored paint

(f) paint that is flaked

END OF TASK

TASK 05-51-44-210-801

3. Examine the Pneumatic Ducts

A. Location Zones

Zone	Area
400	Powerplant and Nacelle Struts

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B. Procedure

SUBTASK 05-51-44-210-002

(1) Examine the components that follow:

(a) hard ducts

(b) flexible sense lines for cracks and tears

(c) clamps for tightness

(d) nuts for tightness

(e) fasteners for tightness

C. Put the Airplane Back to It's Initial Condition

SUBTASK 05-51-44-410-001

(1) Install the components you removed if they are serviceable.

(a) If the components are not serviceable, install replacement parts.

——— END OF TASK ———

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LANDING GEAR OPERATION ABOVE DESIGN SPEED CONDITION - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)

1. General

A. This procedure contains the task to inspect the airplane when the landing gear has been operated in flight at speeds more than the permitted placard speed.

TASK 05-51-47-210-801

2. Landing Gear Operation Above Design Speed Condition, Conditional Inspection

A. Location Zones

Zone	Area
700	Landing Gear and Landing Gear Doors

B. Examine the Main Gear Door Areas

SUBTASK 05-51-47-210-001

(1) Examine main landing gear areas that follow:

(a) The doors.

(b) The hinges.

(c) The linkage and linkage support structure.

(d) The fairing panels.

1) Look for:

a) distortion

b) cracks

c) misalignment

d) displacement

e) fastener holes that are elongated or torn

f) fasteners that have pulled out

g) fastener locations where fasteners are not there

h) other signs of damage.

SUBTASK 05-51-47-210-002

(2) Examine the systems that are installed in the wheel wells of the main landing gear for damage or possible malfunction.

C. Examine the Nose Gear Door Area

SUBTASK 05-51-47-210-003

(1) Examine the nose landing gear areas that follow:

(a) The doors.

(b) The hinges.

(c) The linkage and linkage support structure.

(d) The fairing panels.

1) Look for:

a) distortion

b) cracks

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c) misalignment

d) displacement

e) fastener holes that are elongated or torn

f) fasteners that have pulled out

g) fastener locations where fasteners are not there

h) other signs of damage.

SUBTASK 05-51-47-210-004

(2) Examine the systems that are installed in the nose wheel well for damage or possible malfunction.

D. Put the Airplane Back to Its Usual Condition

SUBTASK 05-51-47-410-001

(1) Install the components that were removed, or install replacement parts.

——— END OF TASK ———

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FUEL IMBALANCE EXCEEDANCE CONDITIONAL INSPECTION - MAINTENANCE PRACTICE

1. General

A. This procedure contains the task for maintenance actions or structural inspections related to exceeding the Airplane Flight Manual (AFM) fuel imbalance limits.

TASK 05-51-48-211-801

2. Fuel Imbalance Exceedance - Conditional Inspection

A. General

(1) The Airplane Flight Manual (AFM) for the 737 models identifies that the lateral fuel imbalance between main wing tanks must be scheduled to be zero. Random fuel imbalance between main wing tanks for towing, taxi, takeoff, flight, or landing is limited to 1000 lb (454 kg).

Operators experiencing fuel imbalances greater than 1000 lb (454 kg) should review the below criteria for evaluation of what maintenance actions or structural inspections are required.

B. References

Reference	Title
05-51-01 P/B 201	HARD LANDING OR HIGH DRAG/SIDE LOAD LANDING - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)
05-51-01-210-801	Phase I Inspection (P/B 201)
05-51-04-210-801	Severe or Unusual Turbulence, Excessive Maneuver, Buffet, or Speeds More than the Design Limits Conditional Inspection (P/B 201)

C. Location Zones

Zone	Area
131	Center Section Wing Box, Body Station 540.00 to Body Station 663.75 - Left
132	Center Section Wing Box, Body Station 540.00 to Body Station 663.75 - Right
531	Left Wing - Center Fuel Tank, Rib 1 to Rib 5
532	Left Wing - Main Tank, Rib 5 to Rib 22, Wing Station 204.25 to Wing BL 643.50
631	Right Wing - Center Fuel Tank, Rib 1 to Rib 5
632	Right Wing - Main Tank, Rib 5 to Rib 22, Wing Station 204.25 to Wing Station 643.50

D. Evaluation

NOTE: Boeing developed the following questions that operators can use to do an evaluation for wing tank lateral fuel imbalances exceeding 1000 lb (454 kg).

SUBTASK 05-51-48-210-001

(1) If the imbalance exceedance occurred during flight (climb/cruise/descent), then the following questions apply:

(a) Was the amount of imbalance greater than or equal to 3000 lb (1361 kg)?

1) If yes, do this task: Severe or Unusual Turbulence, Excessive Maneuver, Buffet, or Speeds More than the Design Limits Conditional Inspection, TASK 05-51-04-210-801.

(b) Was the amount of imbalance greater than 1000 lb (454 kg) but less than 3000 lb (1361 kg)?

1) If yes, the following questions apply:

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a) Did the airplane encounter any moderate turbulence (gusts) during the imbalance?

<1> If yes, do this task: Severe or Unusual Turbulence, Excessive Maneuver, Buffet, or Speeds More than the Design Limits Conditional Inspection, TASK 05-51-04-210-801.

b) Did the airplane experience significant load factors or perform rapid or large alternating control inputs during the imbalance?

<1> If yes, do this task: Severe or Unusual Turbulence, Excessive Maneuver, Buffet, or Speeds More than the Design Limits Conditional Inspection, TASK 05-51-04-210-801.

SUBTASK 05-51-48-210-002

(2) If the imbalance exceedance occurred during landing, then the following questions apply:

(a) Was the amount of imbalance greater than or equal to 3000 lb (1361 kg)?

1) If yes, do the visual inspection portion of Phase I Inspection, TASK 05-51-01-210-801.

(b) Was the amount of imbalance greater than 1000 lb (454 kg) but less than 3000 lb (1361 kg)?

1) If yes, the following questions apply:

a) Was there a large roll angle during landing?

<1> If yes, do the visual inspection portion of Phase I Inspection, TASK 05-51-01-210-801.

SUBTASK 05-51-48-210-003

(3) If the imbalance exceedance occurred during takeoff, taxi, or towing, then the following questions apply:

(a) Was the amount of imbalance greater than or equal to 3000 lb (1361 kg)?

1) If yes, do the high drag/side load inspection (HARD LANDING OR HIGH DRAG/SIDE LOAD LANDING - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION), PAGEBLOCK 05-51-01/201).

(b) Was the amount of imbalance greater than 1000 lb (454 kg) but less than 3000 lb (1361 kg)?

1) If yes, the following questions apply:

a) Was noticeable runway roughness encountered during takeoff, taxi, or towing?

<1> If yes, do the high drag/side load inspection (HARD LANDING OR HIGH DRAG/SIDE LOAD LANDING - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION), PAGEBLOCK 05-51-01/201).

b) Did the airplane experience a hard ground turn or a significant side load event during taxi or towing?

<1> If yes, do the high drag/side load inspection (HARD LANDING OR HIGH DRAG/SIDE LOAD LANDING - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION), PAGEBLOCK 05-51-01/201).

c) Was hard braking applied during taxi or towing?

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<1> If yes, do the high drag/side load inspection (HARD LANDING OR HIGH DRAG/SIDE LOAD LANDING - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION), PAGEBLOCK 05-51-01/201).

NOTE: If a lateral imbalance exceedance has persisted for an unknown number of flights for a particular airplane, Boeing requires that all the inspections noted above be performed. This is due to the increased probability that the aircraft would have experienced loads above those typically encountered in normal operation.

NOTE: If none of the inspections above are applicable to the particular event, the airplane may return to revenue service. If inspections are determined necessary based on the operator's answers to the questions above, all inspections must be performed before the airplane may return to revenue service.

——— END OF TASK ———

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Extreme High Wind Event - Conditional Inspection

TASK 05-51-51-200-801

1. Extreme High Wind Event - Conditional Inspection

A. General

(1) This procedure has information for an aircraft that has had an extreme high wind event while parked or moored.

(a) Extreme high wind events are tornadoes and microbursts.

(b) Evidence of an extreme high wind event are if the airplane moved over the chocks or if there are tire skid marks on the ground where the airplane was parked. This may indicate that the airplane has moved from the position in which it was originally parked.

1) If the airplane has moved over wheel chocks, it can cause damage to the tires, wheels, and landing gear.

(2) Extreme high wind events are variable and unpredictable.

(3) Extreme high winds from the side and aft direction while parked can cause damage to the aircraft flight control surfaces and flight control mechanisms internal to the wings, horizontal stabilizer, and vertical stabilizer. It is possible that this damage will not be seen during a walk-around or during pre-flight checks. The integrity of the flight controls is very important to the safe flight of the airplane.

(4) When the conditional inspection tells you to “examine” a component, look for these damage conditions:

- Cracks
- Twisted parts (distortion)
- Misalignment
- Wrinkles
- Buckles
- Pulled apart structure
- Loose paint (paint flakes)
- Loose fasteners
- Fasteners that have pulled out or are missing
- Fastener holes that become larger or longer
- Delaminations
- Interference
- Other signs of damage

(5) When the conditional inspection tells you to do a “detailed visual inspection” of a component, look for these damage conditions:

- Cracks
- Deformation
- Loose components
- Sheared components
- Bent components
- Missing attachments

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- Distortion

(6) Boeing recommends that operators give Boeing the results of this procedure (if you find damage or if you do not find damage).

NOTE: Boeing recommends that when the operator gives Boeing their results they title the message “Extreme High Wind Event Inspection Results.”

(a) Boeing recommends that the operator give the data that follows when contacting Boeing.

1) The results of the inspections listed below for the flight controls, doors, and landing gear.
2) The results of cycling the flight controls.
3) If the airplane has moved from the location where it was parked.
   a) If the airplane moved over the chocks.
      <1> If the main landing gear tires or nose landing gear tires have been replaced.
   b) If there are tire skid marks on the ground.
4) Wind characteristics:
   a) Wind direction and airplane parking direction (angle between the two directions)
   b) Average wind speed
   c) Maximum wind gust speed
   d) Type of wind event
5) Gross Weight
6) Center of Gravity (CG)
7) Airplane Restraints
   a) chocks
   b) mooring configuration
   c) brakes
8) Surface Conditions
   a) icy
   b) wet
   c) dry
   d) clean
   e) dirty/sandy
   f) ground friction test
9) Ambient Air Temperature (C°) at time of event

B. References

Reference	Title
07-10-01-580-801	Lift the Airplane on Jacks (P/B 201)
07-10-03-580-801	Lift the Airplane on Axle Jacks-Handling (P/B 201)
07-10-03-580-803	Lift the Nose Landing Gear Axle With Axle Jacks-Handling (P/B 201)

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(Continued)

Reference	Title
07-10-21-580-801	Lift the Airplane Nose with the Nose Jack at Jack Point D (P/B 201)
27-51-00-860-803	Extend the Trailing Edge Flaps (P/B 201)
27-81-00-860-803	Leading Edge Flaps and Slats Extension (P/B 201)
32-13-11 P/B 401	MAIN LANDING GEAR SHOCK STRUT DOORS - REMOVAL/INSTALLATION
32-45-11 P/B 401	MAIN LANDING GEAR WHEEL AND TIRE ASSEMBLY - REMOVAL/INSTALLATION
32-45-21 P/B 401	NOSE LANDING GEAR WHEEL AND TIRE ASSEMBLY - REMOVAL/INSTALLATION

C. Procedure

SUBTASK 05-51-51-200-001

(1) Flight Controls

(a) Examine the external surfaces of the flight control surfaces that follow for damage.

1) Flaps
2) Slats
3) Ailerons
4) Spoilers
5) Elevators
6) Rudder
7) If there is damage, do a detailed visual inspection of the surface(s) that have damage.
   a) Do a detailed visual inspection of the surface(s) that have damage.
   b) Inspect the surface hinge line for surface over-travel.
8) If there is structural damage to the control surface, refer to the applicable Structural Repair Manual (SRM) procedure.

(b) Examine the actuator attach points and support structure.

(c) Examine the hinge attach structure of the flaps, the flaps at the rear spar, slats, ailerons, spoilers, elevators, and rudder for damaged and loose parts.

1) Make sure that the flaps are in the fully extended position (Extend the Trailing Edge Flaps, TASK 27-51-00-860-803, Leading Edge Flaps and Slats Extension, TASK 27-81-00-860-803).
2) If there is damage or any loose parts, do the steps that follow.
   a) Do a detailed visual inspection of the applicable actuator, control surface, attach fittings, and support structure.
   b) If there is structural damage to the component, refer to the applicable Structural Repair Manual (SRM) procedures.

(d) Move the flaps, slats, spoilers, ailerons, elevators, and rudder through their usual range of movement.

1) Make sure that the surfaces move freely and that there is no interference with the structure or components around them.

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a) If the surface does not move freely or if there is interference with the structure or components around it, refer to the applicable Structural Repair Manual (SRM) procedures.

2) Make sure that there is a ground observer during the flight control surface movement.

a) Make sure that there is communication set up between the ground observer and the personnel in the flight deck.

b) Make sure that the ground observer can see all flight control surfaces.

c) Operate each flight control system through its full range of movement.

d) Make sure that the flight control positions are correct as monitored by the ground observer.

SUBTASK 05-51-51-200-002

(2) Doors

WARNING DO NOT OPERATE A DOOR THAT WAS OPEN DURING A VERY HIGH WIND EVENT UNTIL IT IS INSPECTED FOR DAMAGE. LOSS OF LIFT POWER, ENERGIZING OF EMERGENCY EQUIPMENT, OR FAILURE OF HOLD-OPEN SYSTEMS CAN CAUSE INJURIES TO PERSONS AND DAMAGE TO EQUIPMENT.

(a) Examine each external door of the airplane that was open at the time of the high wind event.

NOTE: For example: doors for stairs, fuselage doors, maintenance access panels, engine cowling, and landing gear doors (excluding main gear shock strut doors).

NOTE: If a door was closed and latched during the extreme high wind event, no inspection of that door is necessary.

1) Examine the door hinge and door open/close mechanism for evidence of damage.

NOTE: Examples of damage evidence are: looseness, cracking, chipped or cracked coatings, and distortion.

a) If evidence of damage is found, do the steps that follow.

<1> Do a detailed visual inspection of the structure around the door, the door structure, the mechanical parts of the door, and the mechanical parts attached to the surrounding structure.

<a> If there is damage to the door or surrounding structure, refer to the applicable Structural Repair Manual (SRM) procedures.

NOTE: Structural damage may be hidden behind attached components. If visible damage is identified, additional inspections may be necessary.

<b> If there is damage to the mechanical parts, repair or replace the damaged components, as necessary.

2) Examine the exterior skin surface of the door for evidence of damage.

NOTE: Examples of damage evidence are: cracks, buckles, chipped or cracked coatings, and loose or missing attach parts.

a) If evidence of damage is found, do the steps that follow.

<1> Do a detailed visual inspection of the exterior skin surface of the door.

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<a> If there is damage to the exterior skin surface, refer to the applicable Structural Repair Manual (SRM) procedures.

3) Operate the door through the normal range of motion (from open to close).

a) Make sure that there is no interference or binding due to deformation of the door or fuselage structure, or fuselage supports.

NOTE: Damage may be hidden behind attached components. If visible or operational damage is identified, additional inspections may be necessary.

<1> If there is interference or binding, do the steps that follow.

<a> Do a detailed visual inspection of the fuselage supports.

<b> If there is damage to the fuselage supports, repair or replace the components, as necessary.

4) Operate the door latching and locking mechanism, if installed.

a) Make sure that there is no interference or binding due to deformation of the mechanism.

NOTE: Damage may be hidden behind attached components. If visible or operational damage is identified, additional inspections may be necessary.

<1> If there is interference or binding, do the steps that follow.

<a> Do a detailed visual inspection of the fuselage mechanisms.

<b> If there is damage to the mechanism, repair or replace the components, as necessary.

SUBTASK 05-51-51-200-003

(3) Landing Gear

(a) Jack the main landing gear (Lift the Airplane on Jacks, TASK 07-10-01-580-801 or Lift the Airplane on Axle Jacks-Handling, TASK 07-10-03-580-801).

(b) Examine the main landing gear areas as follows:

1) The tires

a) If the airplane has moved over the main landing gear wheel chocks, replace the tire(s) that moved over the chock(s), do this task: MAIN LANDING GEAR WHEEL AND TIRE ASSEMBLY - REMOVAL/INSTALLATION, PAGEBLOCK 32-45-11/401.

2) The wheels

3) The shock strut of the main gear for fluid leakage

4) The top end of the shock strut for cracks and bolt distortion

5) The landing gear beam

6) If moored, inspect for damage at and near the mooring equipment interface locations.

7) If the airplane departed the prepared surface, do the steps that follow:

a) Remove the wheels and examine the wheel/brake interface.

<1> Remove any dirt, debris, or foreign objects.

b) Remove and examine the brake units.

<1> Remove any dirt, debris, or foreign objects.

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c) Remove the brake sleeves and examine the axles.

<1> Remove any dirt, debris, or foreign objects.

8) The main landing gear axles

9) The main landing gear tow fittings

10) The skins, attach points, and linkages of the main gear shock strut doors

a) If evidence of damage is found, do the steps that follow:

<1> Do a detailed visual inspection of the structure around the door, the door structure, the mechanical parts of the door, and the mechanical parts attached to the surrounding structure.

<2> If there is damage to the surrounding structure, refer to the applicable Structural Repair Manual (SRM) procedures.

NOTE: Structural damage may be hidden behind attached components. If visible damage is identified, additional inspections may be necessary.

<3> If there is damage to the door structure, mechanical parts, repair or replace the damaged components, as necessary. Do the applicable task: MAIN LANDING GEAR SHOCK STRUT DOORS - REMOVAL/INSTALLATION, PAGEBLOCK 32-13-11/401.

(c) Jack the nose landing gear (Lift the Airplane Nose with the Nose Jack at Jack Point D, TASK 07-10-21-580-801 or Lift the Nose Landing Gear Axle With Axle Jacks-Handling, TASK 07-10-03-580-803).

(d) Examine the nose landing gear areas as follows:

1) The tires

a) If the airplane has moved over the nose landing gear wheel chocks, replace the nose landing gear tires, do this task: NOSE LANDING GEAR WHEEL AND TIRE ASSEMBLY - REMOVAL/INSTALLATION, PAGEBLOCK 32-45-21/401.

2) The wheels

3) The nose wheel well.

a) Make sure that all of the fasteners are installed in the correct positions.

b) Make sure that there are no loose fasteners in the web of the nose wheel well near the trunnion support.

c) Examine the upper and lower ends of the shock strut of the nose gear for fluid leakage.

d) Examine the outer cylinder of the nose landing gear.

e) Examine the doors, hinges, and retraction mechanism of the nose landing gear.

4) If moored, inspect for damage at and near the mooring equipment interface locations.

5) If the airplane departed the prepared surface, do the following:

a) Remove and examine the wheels.

<1> Remove any dirt, debris, or foreign objects.

b) Do an operational check of the nose landing gear steering system.

6) The nose landing gear axle

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7) The nose landing gear tow fitting

D. Put the Airplane Back to Its Usual Condition

SUBTASK 05-51-51-400-001

(1) Install the components that were opened for checks.

SUBTASK 05-51-51-080-001

(2) Remove all tools and equipment from the work area.

END OF TASK

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Heavy Water Spray from Tires During Takeoff and Landing - Conditional Inspection

TASK 05-51-52-200-801

1. Heavy Water Spray from Tires During Takeoff and Landing - Inspection/Check

A. General

(1) This procedure has one task:

(a) This task is to inspect the aircraft exterior when there is possible water damage.

B. Procedure

SUBTASK 05-51-52-211-001

(1) Make sure that the exterior components are attached correctly and are not damaged.

(a) Examine the areas that follow.

1) Wing leading edge structure between the fuselage and the engine.
2) Lower surfaces of the fuselage.
3) Antenna and water drain masts.
4) Landing gear doors.
5) Inboard trailing edge flap panels.
6) Landing gear hydraulic plumbing.
   a) Make sure that the plumbing is attached correctly.
   b) Look closely at the lower surface of the track.
7) Electrical conduits.
8) Switches, switch targets, and mounting brackets.
9) Temperature sensors and electrical connectors.

(b) If damage to any of the exterior components is found, see the SRM for repairs.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details

INTERIOR ICE CONDITION - MAINTENANCE PRACTICES

1. General

A. In the usual operation of the airplane, air comes through the airplane structure. During flight, the water vapor in the air can condense and freeze in the airplane. When you continuously operate the airplane in cold weather, ground temperatures below the freezing point will not let the ice melt. Too much ice will lower the performance of the airplane below the permitted values.

TASK 05-51-53-210-801

2. Interior Ice Removal

(Figure 201)

A. General

(1) This task is for the removal of interior ice for these conditions:

NOTE: This procedure will remove the ice build-up on the inside of the airplane structure.

(a) Airplanes that have continuous operation in cold weather

(b) Ice is found on interior equipment, furnishings, electrical components, wiring, control cables, pulleys, door mechanisms, or structure.

(2) In the usual operation of the airplane, air comes through the airplane structure. During flight, the water vapor in the air can condense and freeze in the airplane. When you continuously operate the airplane in cold weather, ground temperatures below the freezing point will not let the ice melt. Too much ice will lower the performance of the airplane below the permitted values.

B. References

Reference	Title
53-31-01-200-801	External Drainage Inspection/Check (P/B 601)

C. Location Zones

Zone	Area
100	Lower Half of Fuselage
200	Upper Half of Fuselage

D. Upper Lobe Ice Inspection

SUBTASK 05-51-53-010-001

(1) Get access to the main deck overhead above WL 270 in the front, middle and aft stations.

(a) To get access on passenger airplanes, you must also remove some of the main deck ceiling panels.

SUBTASK 05-51-53-010-002

(2) Remove or lift the insulation blankets to do a check for ice.

(a) Look for ice collection in the main deck ceiling areas.

1) If you do not find ice, do the Lower Lobe Ice Inspection.

2) If you do find ice, do the Overall Airplane Ice Removal.

E. Lower Lobe Ice Inspection

NOTE: Do this procedure to find if ice has collected in the lower lobes (below WL 210).

SUBTASK 05-51-53-010-003

(1) Remove the floor panels over the aisle in the main deck at approximately STA 660.

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SUBTASK 05-51-53-210-001

(2) Look for ice collection between the longitudinal floor beams over the wing box and wheel well.

SUBTASK 05-51-53-010-004

(3) Remove the sidewall liners in the aft lower cargo compartment at approximately STA 747.

SUBTASK 05-51-53-210-002

(4) Look for ice collection in the bilge area.

(a) If you do find ice, do the Overall Airplane Ice Removal.

(b) If you do not find ice, no further action is necessary.

F. Overall Airplane Ice Removal

NOTE: Do this procedure to remove all ice that has collected throughout the airplane structure.

SUBTASK 05-51-53-580-001

(1) Move the airplane to a hangar where the air temperature is above 32°F (0°C).

SUBTASK 05-51-53-010-005

(2) Open the doors on the main deck to let the air flow freely.

SUBTASK 05-51-53-010-006

(3) Remove all the main deck seats and floor panels to get access to the ice.

SUBTASK 05-51-53-010-007

(4) Remove the insulation blankets from the sidewall and below the floor in the forward and aft lower lobe cargo compartment where it is possible.

NOTE: This will let the water flow freely to the structural drains and will make sure the blankets do not get wet.

SUBTASK 05-51-53-010-008

(5) Remove the insulation blankets in the nose wheel well area (forward of the EE bay).

SUBTASK 05-51-53-660-001

WARNING

DO NOT PUT HOT AIR DIRECTLY ON HALON OR OXYGEN BOTTLES. IF YOU PUT HOT AIR ON THE BOTTLES, YOU CAN CAUSE AN EXPLOSION.

CAUTION

THE TEMPERATURE OF THE HOT AIR MUST NOT BE ABOVE 150 DEGREE F (70 DEGREE C). HOT AIR CAN CAUSE DAMAGE TO AIRPLANE SYSTEMS.

(6) Use a conditioned ground cart to blow hot air on the open airplane structure in the lower lobes and main deck (if it is applicable) to melt the ice that has collected.

SUBTASK 05-51-53-610-001

(7) Make sure the airplanes structural drains in the bilge are open to let the water drain.

(a) Do this task: External Drainage Inspection/Check, TASK 53-31-01-200-801.

SUBTASK 05-51-53-660-002

(8) Use Figure 201 to find the time needed to melt the ice.

NOTE: You can use a conditioned ground cart to heat the inside of the airplane. This will shorten the time needed to melt the ice.

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SUBTASK 05-51-53-020-001

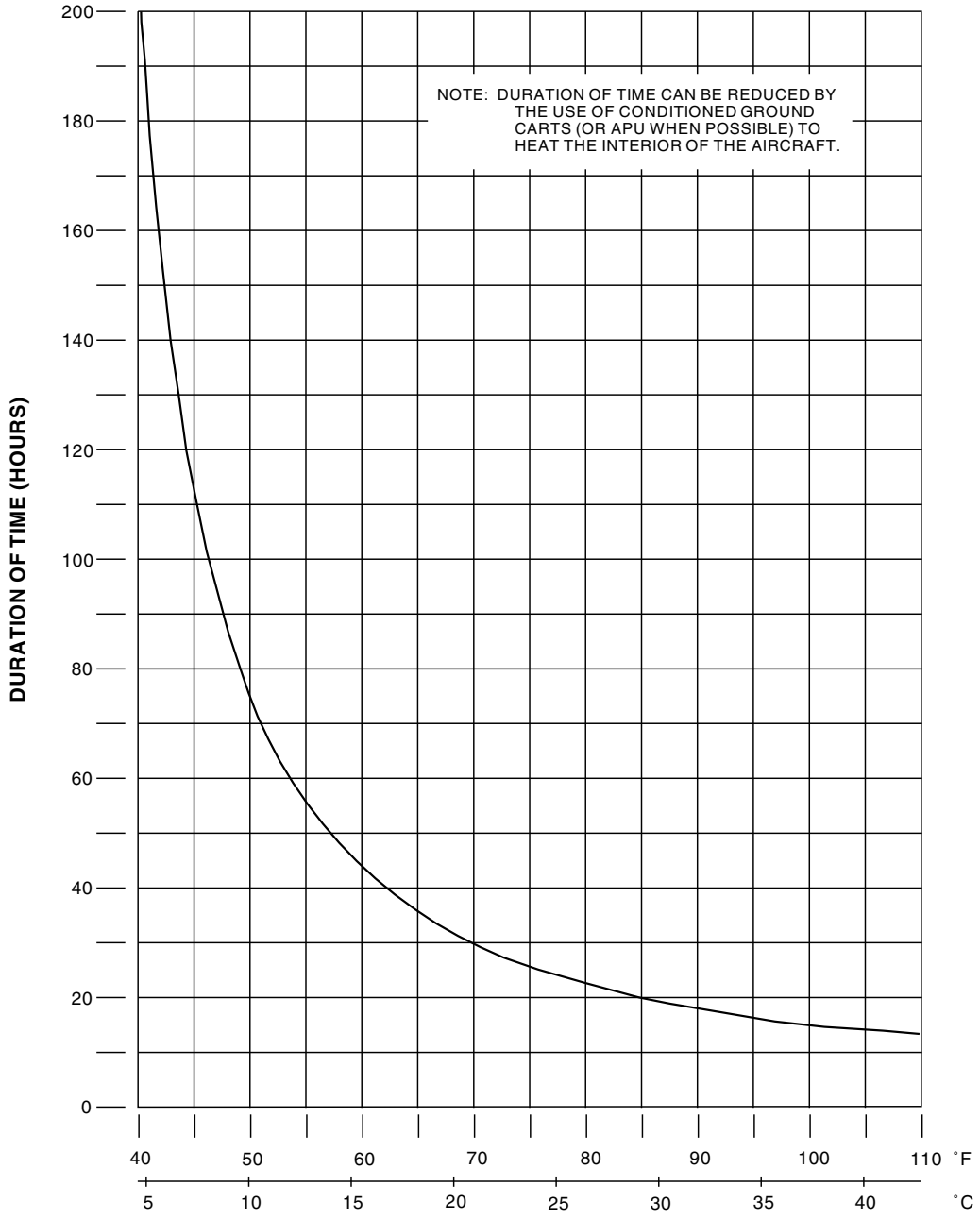
(9) You must remove or dry all wet insulation blankets before you install them again.

SUBTASK 05-51-53-840-001

(10) After the water drains, put the airplane back to its usual condition.

END OF TASK

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Air Temperature Outside Airplane Time Required to Melt Interior Ice
Figure 201/05-51-53-990-801

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TIRE TREAD LOSS OR TIRE BURST - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)

1. General

A. This procedure contains the task to inspect the airplane after a tire has lost it's tread, or has burst.

B. When a landing gear tire loses it's tread or a tire bursts, a careful inspection of some areas is necessary.

(1) These inspections look for damage and/or blockage caused by pieces of the tire.

C. Damage caused by the tire pieces can be seen as pieces of rubber and/or bitumen marks on the surface of the structure.

TASK 05-51-54-210-801

2. Tire Tread Loss or Tire Burst Conditional Inspection

A. References

Reference	Title
05-51-16-210-801	Flat Spotted Tires Conditional Inspection (P/B 201)
27-11-00-700-803	Manual Reversion Control Friction Test (P/B 501)
27-11-00-700-804	Control Wheel Centering Check (P/B 501)
27-11-00-700-805	Aileron Control Wheel Force Test (P/B 501)
27-11-00-700-807	Control Wheel Travel Stop Test (P/B 501)
27-11-00-700-810	Aileron Travel Test (P/B 501)
27-11-00-720-801	Aileron Power Control Unit (PCU) Pogos - Functional Test (P/B 501)
27-11-00-730-801	Aileron Trim Response Test (P/B 501)
27-11-00-820-805	Aileron Feel and Centering Unit Adjustment (P/B 501)
27-51-00-210-801	Trailing Edge Flap Drive System Inspection (P/B 601)
27-51-00-720-803	Alternate Flap Control System Functional Test (P/B 501)
27-51-00-730-801	Trailing Edge Flap System Test (P/B 501)
27-59-00-730-801	Flap Skew Detection System Functional Test (P/B 501)
27-61-00-710-801	Spoiler Control System Operational Test (P/B 501)
27-62-00-710-801	Speed Brake Control System Operational Test (P/B 501)
27-62-00-800-803	Speed Brake Lever Friction Test (P/B 501)
27-81-00-860-801	Leading Edge Flap and Slat System Operation With Primary Control (P/B 201)
27-81-00-860-802	Leading Edge Flap and Slat System Operation With Alternate Control (P/B 201)
32-45-00-700-803	Landing Gear Tire Inspection (P/B 601)
71-00-00-200-802-G00	Engine Foreign Object Damage and Birdstrike Inspection (P/B 601)

B. Location Zones

Zone	Area
100	Lower Half of Fuselage
300	Empennage
500	Left Wing
600	Right Wing
700	Landing Gear and Landing Gear Doors

ECCN 9E991 BOEING PROPRIETARY - See title page for details

C. Procedure

SUBTASK 05-51-54-210-001

(1) Do the steps that follow to inspect for damage after a tire tread loss or tire burst:

(a) Examine the areas that follow for damage, delamination, or local separation, and soft spots because of core crush:

NOTE: To find delamination or local separation areas, tap the surface with a coin. To find areas of core crush, push on the surface.

1) The wing upper inboard fixed trailing edge panel
2) The wing lower inboard fixed trailing edge panel
3) The inboard trailing edge flaps
4) The inboard trailing edge fairings
5) The Very High Frequency (VHF) No. 2 antenna
6) The lower fuselage wing-to-body fuselage panels.

(b) Examine the inboard trailing edge flaps for tire fragments lodged in linkages or in flap carriages (main and foreflap sequence carriages).

(c) Examine the components that follow for damage and blockage because of pieces of the tire.

1) The trailing edge flap jackscrews
2) The actuating linkages
3) The actuating rods.

(d) Examine the landing gear wheel well areas as follows for damage, distortion, and blockage from pieces of the tire:

1) The wheel well doors
2) The wheel well door actuating rods
3) The hydraulic plumbing
4) The flap drive torque tubes
5) The control cables and mechanisms
6) The frangible hydraulic fittings located in the wheel well fairing.

(e) Examine the other tires for possible damage. Do this task: Landing Gear Tire Inspection, TASK 32-45-00-700-803.

NOTE: Carefully inspect the other tires for slash and/or wire penetration damage of the tread or the sidewall.

1) If the damaged tire is deflated, or is more than 20% below the specified pressure, replace the wheel and tire assembly that is on the same axle.

(f) If the tire burst was because of a tire skid, do this task: Flat Spotted Tires Conditional Inspection, TASK 05-51-16-210-801.

SUBTASK 05-51-54-210-002

(2) Examine the engine nacelles and inlets for damage when the nose landing gear or left/right main landing gear tire/tires tread is lost or the tire/tires have burst, do this task: Engine Foreign Object Damage and Birdstrike Inspection, TASK 71-00-00-200-802-G00.

SUBTASK 05-51-54-210-003

(3) If it is determined that the tire burst occurred when the landing gear was retracted, you must look for damage in the wheel well areas.

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(a) If the damage is visible on the forward bulkhead, do these tasks:

- Aileron Feel and Centering Unit Adjustment, TASK 27-11-00-820-805
- Manual Reversion Control Friction Test, TASK 27-11-00-700-803
- Control Wheel Centering Check, TASK 27-11-00-700-804
- Aileron Control Wheel Force Test, TASK 27-11-00-700-805
- Control Wheel Travel Stop Test, TASK 27-11-00-700-807
- Aileron Travel Test, TASK 27-11-00-700-810
- Aileron Power Control Unit (PCU) Pogos - Functional Test, TASK 27-11-00-720-801
- Aileron Trim Response Test, TASK 27-11-00-730-801
- Spoiler Control System Operational Test, TASK 27-61-00-710-801
- Speed Brake Control System Operational Test, TASK 27-62-00-710-801
- Speed Brake Lever Friction Test, TASK 27-62-00-800-803.

(b) If the damage is visible on the aft bulkhead, do these tasks:

- Trailing Edge Flap System Test, TASK 27-51-00-730-801
- Alternate Flap Control System Functional Test, TASK 27-51-00-720-803
- Trailing Edge Flap Drive System Inspection, TASK 27-51-00-210-801
- Flap Skew Detection System Functional Test, TASK 27-59-00-730-801
- Leading Edge Flap and Slat System Operation With Primary Control, TASK 27-81-00-860-801
- Leading Edge Flap and Slat System Operation With Alternate Control, TASK 27-81-00-860-802

(c) If there is no visible damage on either bulkhead, do the tasks assigned above for both damage on the forward and aft bulkheads.

D. Put the Airplane Back to Its Usual Condition

SUBTASK 05-51-54-410-001

(1) Install all the components you removed if they are serviceable, or install replacement parts.

——— END OF TASK ———

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SMOKE OR FUMES IN CABIN - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)

1. General

A. This procedure contains the information to perform an inspection to determine the cause of smoke or fumes entering the cabin during operation.

TASK 05-51-56-200-801

2. Smoke or Fumes in Cabin (Conditional Inspection)

A. References

Reference	Title
IFIM and do the applicable procedure(s)	Interactive Fault Isolation Manual

B. Examine the Cabin

SUBTASK 05-51-56-280-001

(1) If smoke or fumes are detected in the cabin during airplane operation, refer to: IFIM and do the applicable procedure(s).

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details

ACID SPILLAGE CONDITION - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)

1. General

A. This procedure has one task:

(1) A conditional inspection for acid spillage.

B. This task has an inspection and clean up procedures for areas where acid has touched the airplane.

C. The primary source of acid spillage is in the battery compartments where acid electrolytes may overflow during charging or spill during battery servicing.

D. Acid based corrosion removal compounds and airplane cleaners are used quite extensively during routine maintenance repair. Spills do occur at times and thorough neutralizing and/or rinsing is necessary to preclude corrosion damage.

E. Containers of acid concentrates or acid based chemicals may be part of a cargo and may be broken during loading or unloading. Spillage from such sources are usually larger in scale than spills previously mentioned. It is, therefore, advisable that the acid spillage be neutralized as soon as possible.

F. Operators should also be cognizant of the fact that acids may deteriorate nonmetallic materials such as fabrics, wood, leather, etc.

TASK 05-51-57-000-802

2. Corrosion Removal After Acid Spills

A. References

Reference	Title
51-00-58	STANDARD TREATMENT METHODS
51-00-59	STANDARD PREVENTIVE MAINTENANCE PROCEDURES

B. Tools/Equipment

Reference	Description
STD-122	Brush
STD-419	Gloves - Rubber, Elbow Length
STD-421	Goggles - Eye Protection
STD-774	Respirator - Full-Face, Air Purifying (with filters/cartridges)
STD-815	Sponge
STD-1392	Shield - Facial Protection
STD-1393	Aprons
STD-1394	Boots
STD-1395	Head Gear
STD-3904	Goggles - Safety
STD-6391	Mop - long handle (4 - 5 foot), or long wooden stick with shop cloth attached to one end
STD-8874	Brush - Soft

C. Consumable Materials

Reference	Description	Specification
B00095	Compound - Sodium Bicarbonate	ASTM D928
B00334	Cleaner - Sodium Bicarbonate	ASTM D928, or commercially available product

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(Continued)

Reference	Description	Specification
G00009	Compound - Organic Corrosion Inhibiting	BMS3-23
G50071	Compound - Corrosion Inhibiting, Heavy Duty	BMS3-35
G50412	Paper - Litmus (Used to find the acidity or alkalinity of a liquid solution)	
G51294	Cloth - 100% Synthetic or Blended Synthetic, Cotton or Cellulose Material	AMS3819 Class 2 Grade A

D. Corrosion Removal After Acid Spills

SUBTASK 05-51-57-910-001

WARNING DO NOT LET THE ACIDS TOUCH YOU. YOU MUST WEAR CLOTHING THAT SUPPLIES PROTECTION. YOU MUST WEAR GLOVES AND A FACE SHIELD. THE ACIDS ARE POISONOUS AND CAN CAUSE INJURIES TO PERSONS. IF THE ACID GETS INTO YOUR EYES, FLUSH YOUR EYES WITH COOL WATER. GET MEDICAL AID IMMEDIATELY.

(1) Take these precautions when you work with an acid spill or vacuum waste system spills/leaks condition:

(a) Adequate protective clothing (rubber or plastic gloves, goggles, face shields, aprons, boots, head gear, etc.) should be worn when handling or working in acid contaminated areas.

1) elbow length rubber gloves, STD-419
2) safety goggles, STD-3904 or eye protection goggles, STD-421
3) face shield, STD-1392 or full-face respirator, STD-774
4) aprons, STD-1393
5) boots, STD-1394
6) head gear, STD-1395.

(b) Wash hands after using acid neutralizing treatment solution and/or materials before eating or smoking.

(c) Waste materials, solvents, chemical solutions, wiping rags, masking materials, etc., shall be collected and disposed of safely.

SUBTASK 05-51-57-940-001

(2) Do these steps to isolate the contaminated area:

(a) Do not allow acid spills to spread from areas of contamination.

(b) Using plastic sheets is advised for protection of equipment beneath battery areas. If equipment is operating, venting requirements should be maintained.

(c) Consider protecting uncontaminated areas by taping down protective material such as plastic sheets.

SUBTASK 05-51-57-110-001

(3) Do these steps to clean the area of an acid spillage:

(a) If equipment is adjacent to the treatment area use plastic sheets to cover the equipment to prevent inadvertent splashing of acids or treatment fluids.

(b) Wipe up excess fluids with cloth and discard cloth into plastic container for disposition.

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(c) Mix sodium bicarbonate cleaner, B00334 or compound, B00095 with water to create a solution that will neutralize the acid.

(d) Apply the solution with a cloth, G51294, mop, STD-6391, brush, STD-122, or sponge, STD-815.

1) Make sure that the solution goes into the contaminated faying surface joints.

NOTE: A pressure application of the solution can be necessary to flush the faying surface joints and some access areas fully.

(e) Apply the solution until bubbles cease in the acid/solution.

NOTE: When the bubbles ease, the acid has become neutral.

(f) Let the solution stay on the surface for 5 minutes after the bubbles stop.

(g) Remove the solution with mop, STD-6391 or sponge, STD-815.

(h) Flush the area with large quantities of clean water. Pressure application may be required to flush the joint thoroughly.

1) Rub the surface with a soft brush, STD-8874.

(i) Do a test of the cleaned area with litmus paper, G50412.

NOTE: The litmus paper should read between 7 and 8 when the area is fully cleaned.

(j) Wipe dry with clean cloth, G51294.

SUBTASK 05-51-57-410-001

(4) Do these steps to put the airplane back to its usual condition:

(a) After thoroughly dry, repair or replace damaged finishes if it is necessary. Refer to SUBJECT 51-00-58 and SUBJECT 51-00-59 for protective finish systems.

(b) Apply water displacing, corrosion inhibiting compound, G50071 or corrosion inhibiting compound, G00009 over entire area.

NOTE: For details of how to apply the corrosion inhibiting compound, refer to SUBJECT 51-00-59.

NOTE: If insulation blankets have become contaminated with vacuum waste, they must be replaced to prevent reintroduction of the acidic substance on the structure.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

GROUND HANDLING EQUIPMENT HITS AIRPLANE OR PART DEPARTS AIRPLANE (CONDITIONAL INSPECTION) - MAINTENANCE PRACTICES

1. General

A. This procedure has steps to do an inspection after ground handling equipment hits the airplane or parts depart the airplane.

B. An impact incident can be more than allowable damage limits.

C. Visually examine the external surfaces of the airplane in the general area of the impact which includes the nearest support structure.

(1) If you find damage at the support structure, internal NDI inspections and disassembly is possible.

D. When the conditional inspection tells you to examine a component, look for these conditions:

(1) Cracks
(2) Gaps
(3) Damaged paint
(4) Discoloration
(5) Scuffing
(6) Twisted or distorted parts
(7) Dents, gouges, scratches
(8) Elongated or distorted fastener holes
(9) Loose or missing fasteners
(10) Delamination
(11) Fiber damage
(12) Soft spots
(13) Core damage
(14) Misalignment
(15) Interference
(16) Other signs of damage.

E. Description of Low Velocity, High Energy Impact Events

(1) You can think of an impact incident as a Low Velocity, High Energy Blunt Impact when the type, force, or cause is more than the structure was first designed for without the result of damage you can see. Examples of events which can be considered Low Velocity, High Energy Blunt Impacts are (but are not limited to):

(a) An airport jetway that hits the fuselage at more than normal operational speeds or angles.
(b) Ground Support Equipment that hits the structure.
(c) Ground Support Equipment that does not have the correct protection that hits the airplane structure.
(d) Impact by a blunt, high-mass object at low speed.
(e) Impact by parts that depart the airplane in flight.

(2) If any damage is found that is within the applicable allowable damage limits in the Structural Repair Manual (SRM) for that structure, this inspection is not required.

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TASK 05-51-59-200-801

2. Ground Handling Equipment Hits the Airplane or Part Departs the Airplane Inspection

A. Examine the Airplane Structure

SUBTASK 05-51-59-210-001

(1) Visually examine the external structure adjacent to the 12 in. (305 mm) of the impact location.

(a) If you find signs of damage, refer to the applicable SRM procedure for repair.

(2) Visually examine the internal support structure behind or adjacent to the 12 in. (305 mm) external area around the impact location.

(a) If you find signs of damage, refer to the applicable SRM procedure for repair.

SUBTASK 05-51-59-960-001

(3) If a part has departed the airplane, do the steps that follow.

(a) Replace the departed part.

(b) Visually examine the airplane structure aft of the location of the departed part.

NOTE: Look for multiple impact locations along the structure.

1) If you find signs of damage, refer to the applicable SRM procedure for repair.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details

AIRFRAME VIBRATION CONDITION - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)

1. General

A. This procedure has this task:

(1) A conditional inspection of the airframe vibration.

TASK 05-51-67-280-801

2. Airframe Vibration - Conditional Inspection

A. General

(1) This task includes the steps to check the cause of in-flight airframe vibration and eliminate or reduce this vibration.

(2) You can possibly feel a vibration similar to Mach buffet in the forward cabin when these conditions occur:

(a) At high speed, the trailing edge flaps can cause the vibration.

(b) At low speeds on climb and in cruise, these parts can cause the vibration:

1) ground spoiler float

2) too much play in the outboard aileron and tab

3) loose doors and fairings.

B. References

Reference	Title
20-50-11-910-801	Standard Torque Values (P/B 201)
21-51-23-400-801	Ram Air Inlet Modulation Panels Installation (P/B 401)
27-09-91-200-804	Horizontal Stabilizer - Inspection (P/B 601)
27-31-00-820-801	Elevator Control Cables EA and EB and Pitch Force Transducers - Adjustment (P/B 501)
27-31-32 P/B 601	ELEVATOR AND ELEVATOR TAB FREEPLAY - INSPECTION/CHECK
27-31-34 P/B 601	ELEVATOR TAB CONTROL MECHANISM - INSPECTION/CHECK
27-51-11-820-801	Inboard Trailing Edge Flap Adjustment (P/B 501)
27-51-12-200-801	Inboard Aft Flap Inspection (P/B 601)
27-51-13-200-803	Inboard Flap Inboard Carriage Inspection (P/B 601)
27-51-21-820-801	Outboard Trailing Edge Flap Adjustment (P/B 501)
27-51-28-820-801	Outboard Flap Outboard Support Fairing Adjustment (P/B 501)
27-81-11 P/B 401	LEADING EDGE FLAPS - REMOVAL/INSTALLATION
32-13-11 P/B 501	MAIN LANDING GEAR SHOCK STRUT DOOR - ADJUSTMENT/TEST
32-13-21 P/B 501	MAIN LANDING GEAR WING DOOR - ADJUSTMENT/TEST
32-13-21-000-802	Main Landing Gear Wing Door Adjustment (P/B 501)
32-22-11-000-802	Nose Landing Gear Wheel Well Doors Adjustment (P/B 501)
49-11-00-200-801	APU Power Plant Inspection (P/B 601)
49-15-00-710-801	APU Air Inlet Door Test (P/B 501)
49-15-11-200-801	Air Inlet Seal Inspection (P/B 601)
53-51-21 P/B 401	WING-TO-BODY FAIRING PANELS - REMOVAL/INSTALLATION

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(Continued)

Reference	Title
71-00-00-720-805-G00	Test No. 11 - Low Pressure System (Fan) Trim Balance (With ONS) (P/B 501)
71-00-00-800-802-G00	Engine Operation Limits (P/B 201)
72-22-01-200-801-G00	Front Spinner Cone Inspection (P/B 601)
SRM 51-40-06-0G-0	Fastener Edge Margins and Spacing (BDM-1460) - General Data

C. Airframe Vibration Conditional Inspection

SUBTASK 05-51-67-210-001

(1) For vibration symptoms and maintenance actions, see Table 201.

SUBTASK 05-51-67-280-001

(2) If you feel vibration mostly in the forward and aft fuselage, with the trailing edge flaps in the up position, do these steps:

(a) Examine the elevator.

1) Make sure that there is not too much play in these parts for the elevator trim tab:

a) the tab pushrod

b) the tab lockout mechanism

c) the tab hinges.

2) Make sure that the hinge fitting bolts on the elevator are not loose.

3) Do a check for the hinge bolts on the elevator balance panel .

4) Make sure that these parts on the elevator output torque tubes are not loose or worn:

a) the bolts that attach the inner or outer torque tubes

b) the crank

c) the control

d) the pushrod

e) the elevator mast fitting.

5) Make sure that the elevator hinge seals and nose seals are installed correctly without damage.

(b) Examine the doors, panels, and fairings.

1) Make sure that all the doors, panels, and fairings are correctly aligned and attached.

2) Examine all wing-to-body fairing panels with particular attention to the 149A7654 and 149A7555 fairing panels for loose attach fasteners.

a) Do a visual check of the panels from inside the wheel well for signs of failure or wear grooves.

b) Apply axial pressure to the fastener heads from outside in an upward direction to check for loose fasteners.

<1> If you find loose fasteners, retighten and check the self locking feature of nutplates (TASK 20-50-11-910-801).

(c) Examine the landing gear doors.

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1) Make sure that the nose and main gear doors are aligned and all the seals are installed without damage.

2) Make sure that the nose gear doors are adjusted correctly.

(d) Examine the horizontal stabilizer.

1) Make sure that the hinge bearing for the horizontal stabilizer does not have too much freeplay, Horizontal Stabilizer - Inspection, TASK 27-09-91-200-804

(e) Check the elevator control cable tension, do this task: Elevator Control Cables EA and EB and Pitch Force Transducers - Adjustment, TASK 27-31-00-820-801.

(f) Examine the Auxiliary Power Unit (APU).

1) Inspect the APU, do this task: APU Power Plant Inspection, TASK 49-11-00-200-801.

2) Make sure that the compartments for the APU inlet door are not loose or worn, do this task: Air Inlet Seal Inspection, TASK 49-15-11-200-801.

3) Make sure that the APU inlet door is in the closed position, do this task: APU Air Inlet Door Test, TASK 49-15-00-710-801.

SUBTASK 05-51-67-280-002

(3) If you feel vibration mostly in the wing root area, with the trailing edge flaps in the up position, do these steps:

(a) Examine the trailing edge flaps.

1) Make sure that the trailing edge panels on the top of the wings are adjusted correctly, do this task: Outboard Trailing Edge Flap Adjustment, TASK 27-51-21-820-801.

2) Make sure that the flap track fairing on the outboard trailing edge is not loose and does not have damage, do this task: Outboard Flap Outboard Support Fairing Adjustment, TASK 27-51-28-820-801.

3) Make sure that the aft flap on the trailing edge is not delaminated and is in good condition (SRM PROCEDURE 51-40-06-0G-0).

(b) Examine the ram air system.

1) Make sure that the seals on the ram air inlet modulation panel are attached, do this task: Ram Air Inlet Modulation Panels Installation, TASK 21-51-23-400-801.

(c) Examine the main landing gear door.

1) Make sure that the wing door for the main landing gear is adjusted correctly, do this task: Main Landing Gear Wing Door Adjustment, TASK 32-13-21-000-802.

SUBTASK 05-51-67-280-003

(4) If you feel vibration in the wing root area, with the trailing flaps extended between 2 and 5 units, do these steps:

(a) Examine the flaps.

1) Do a check for vertical play in the flap assembly on the trailing edge, do this task: Inboard Trailing Edge Flap Adjustment, TASK 27-51-11-820-801.

2) Make sure that the sequence carriage bearing for the inboard flap is not worn, do this task: Inboard Flap Inboard Carriage Inspection, TASK 27-51-13-200-803.

3) Do a check for play in the aft segment of the inboard flap on the trailing edge.

a) Make sure that the cam roller bearing of the actuating mechanism on the aft segment is not worn and is in good condition.

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4) Make sure that the panels on the trailing edge on the top of the wing are adjusted correctly, do this task: Outboard Trailing Edge Flap Adjustment, TASK 27-51-21-820-801.

5) Do a check for the interface blade seals.

6) Make sure that the access panel to the slat actuator for the leading edge is not loose.

7) Make sure that the trailing edge aft flaps are in good condition.

8) Make sure that the inboard mid flap seal plate is in good condition, do this task: Inboard Aft Flap Inspection, TASK 27-51-12-200-801.

NOTE: A seal plate that is not adjusted correctly can cause a humming noise that can be heard at the seats just aft of the wing.

SUBTASK 05-51-67-280-004

(5) If you feel vibration with noise, do these steps:

(a) Make sure that there is sealant at the wing-to-body fairing.

(b) Do a check of the ground service check swing valve.

(c) Make sure that the air distribution ducts are not loose and do not vibrate.

(d) Make sure that the nose landing gear door is adjusted correctly, do this task: Nose Landing Gear Wheel Well Doors Adjustment, TASK 32-22-11-000-802.

SUBTASK 05-51-67-280-005

(6) If you feel vibration and possibly noise mostly over the wing, do these steps:

(a) Make sure that the seal door for the krueger flap on the wing leading edge is adjusted correctly.

(b) Do a check for low frequency engine vibrations.

(c) Make sure that the fan rotor is balanced, do this task: Front Spinner Cone Inspection, TASK 72-22-01-200-801-G00.

D. Vibration Symptom and Maintenance Action

SUBTASK 05-51-67-970-001

(1) The table below shows the vibration symptoms and maintenance actions in-flight airframe vibration.

Table 201/05-51-67-993-801 Vibration Symptom and Maintenance Action

CHECK NUMBER	CHECKS AND SYMPTOMS	INSPECTIONS/TEST/MAINTENANCE
1	N2 Tone (HPC Mode) • Clear, audible harmonic tone/ vibration during descent above 15,000 ft. at idle power, or on ground at idle power. The tone can be detected by flight crew or passengers (highest nose in mid cabin). • Tactile vibration and/or AVM gauge movement from a normal position of approximately 0.20 scalar units (no tone) to approximately 1.0 units (with tone).	Do the following: • Other than an optional slight throttle increase by the flight crew to minimize the noise tone level, no crew or maintenance action is required. • AVM download can confirm HPC and/or HPT peak vibration levels, near 68% N2. Otherwise refer to Engine Operation Limits, TASK 71-00-00-800-802-G00.

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Table 201/05-51-67-993-801 Vibration Symptom and Maintenance Action (Continued)

CHECK NUMBER	CHECKS AND SYMPTOMS	INSPECTIONS/TEST/MAINTENANCE
2	Buzzsaw Noise (Fan Blade) • Audible response during takeoff and low altitude climb described as a buzzsaw noise. No increase in vibration levels. Most perceptible in the forward cabin.	Do the following: • No action required. This is a characteristic of the engine.
3	N1 Related Vibration (Fan Unbalance) • Typically characterized as an audible "rumble" or "growl". • Increased noise level at cruise, top of climb and/on hold power. • Flight deck and cabin noise are roughly similar. • Tactile vibration may exist.	Do the following: • Download AVM data to determine if trim balance is required. • Note: Some operators have adopted the practice of performing an engine trim balance per Test No. 11 - Low Pressure System (Fan) Trim Balance (With ONS), TASK 71-00-00-720-805-G00, when engine vibration is between 1.5 and 2.0 units. These operators have found this to be an effective means for managing engine vibration.
4	Start Rumble • Very loud growl that occurs at low power such as during starts and near minimum idle. • No observable change in engine vibration level. Ground phenomena only.	Do the following: • No action required. This is a characteristic of the engine.
5	• High frequency vibration usually manifested as a sound but in some cases might be felt. • The vibration can be constant during all phases of flight and may vary with increased airspeed. • Vibration might be heard/felt in a specified location or may be transmitted to a broad area of the airframe.	Do the following: • Adjust nose landing gear doors (TASK 32-22-11-000-802). Check all fasteners for security of attachment. • Adjust main landing gear shock strut and wing doors (PAGEBLOCK 32-13-11/501 and PAGEBLOCK 32-13-21/501). Check all fasteners for security of attachment. • Check for missing sealant at the wing-to-body fairing (PAGEBLOCK 53-51-21/401). • Check lower fuselage doors, access panels and hatches located in the vicinity of the crew compartment. • Examine all wing-to-body fairing panels for loose attach fasteners (PAGEBLOCK 53-51-21/401). • Check seals common to leading edge flap (PAGEBLOCK 27-81-11/401).

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Table 201/05-51-67-993-801 Vibration Symptom and Maintenance Action (Continued)

CHECK NUMBER	CHECKS AND SYMPTOMS	INSPECTIONS/TEST/MAINTENANCE
6	• Vibration in rudder pedals • Vibration may be felt or heard in aft galley. • Vibration may disappear with rudder or rudder trim input.	Do the following: • Confirm vibration is unrelated to an engine or engines. • Check nose landing gear (TASK 32-22-11-000-802), main landing gear (PAGEBLOCK 32-13-11/501 and PAGEBLOCK 32-13-21/501), door rigging, and seal installation.
7	Elevator/Elevator Tab Related Vibration • Vibration felt in the flight deck with higher levels felt in the aft cabin that can occur during any phase of flight. • Vibration levels diminish with reduction in airspeed. • Vibration may be triggered by deployment of speedbrakes.	Do the following: • Do the elevator control tab mechanism inspection (PAGEBLOCK 27-31-34/601). • Do the elevator inspections (PAGEBLOCK 27-31-32/601).

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

MAIN LANDING GEAR SHIMMY/VIBRATION - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)

1. General

A. This inspection applies to airplanes during landing and takeoff that have experienced a main landing gear (MLG) shimmy or vibration.

NOTE: Shimmy is defined as a rapid and violent torsional oscillation/vibration of the MLG caused by asymmetric wheel spin on one main landing gear.

B. The Inspection

(1) This inspection is divided into two phases (Phase I and Phase II).

(2) The Phase I inspection is applicable when a MLG shimmy/vibration occurs during landing and takeoff.

(a) If the inspection during Phase I does not show that damage has occurred, no more inspections are necessary.

(b) If the Phase I inspection shows that damage has occurred, the Phase II inspection must be done.

(3) The pilot must make the decision if this structural examination is necessary.

(a) If a structural examination is necessary, do the procedure "Phase I Inspection" in this section.

C. When the conditional inspection tells you to "examine" a component, look for these conditions (replace or repair components, if it is necessary).

(1) Cracks

(2) Pulled apart structure

(3) Loose paint (paint flakes)

(4) Twisted parts (distortion)

(5) Bent components

(6) Fasteners holes that become larger or longer

(7) Loose fasteners

(8) Fasteners that have pulled out or are gone

(9) Delaminations

(10) Misalignment

(11) Interference

(12) Other signs of damage.

TASK 05-51-68-210-801

2. Phase I Inspection

A. References

Reference	Title
05-41-05-210-802	EXTERNAL - ZONAL (GV): WINGLET - LEFT WING (P/B 201)
05-41-06-210-802	EXTERNAL - ZONAL (GV): WINGLET - RIGHT WING (P/B 201)
27-11-00-710-801	Aileron Response (Operational) Test (P/B 501)
27-51-00-040-801	Trailing Edge Flap System Deactivation (P/B 201)
27-51-00-210-801	Trailing Edge Flap Drive System Inspection (P/B 601)
27-51-00-440-801	Trailing Edge Flap System Reactivation (P/B 201)

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(Continued)

Reference	Title
27-51-00-710-801	Trailing Edge Flap System Operational Test (P/B 501)
27-61-00-710-801	Spoiler Control System Operational Test (P/B 501)
27-81-00-040-801	Leading Edge Flaps and Slats - Deactivation (P/B 201)
27-81-00-440-801	Leading Edge Flaps and Slats - Activation (P/B 201)
32-11-00-200-801	Main Landing Gear Inspection (P/B 601)
32-11-51-000-801	Main Landing Gear Upper Torsion Link Removal (P/B 401)
32-11-51-020-801	Main Landing Gear Torsion Link Disconnection (P/B 401)
32-11-51-200-801	Main Landing Gear Torsion Links Inspection (P/B 601)
32-11-51-400-801	Main Landing Gear Upper Torsion Link Installation (P/B 401)
32-11-51-400-803	Main Landing Gear Torsion Link Connection (P/B 401)
49-13-00-200-802	APU Mounts Inspection (APU Installed) (P/B 601)

B. Location Zones

Zone	Area
100	Lower Half of Fuselage
500	Left Wing
600	Right Wing
700	Landing Gear and Landing Gear Doors

C. Main Landing Gear Areas

SUBTASK 05-51-68-210-001

(1) Examine the Main Landing Gear (MLG) areas as follows:

(a) The tires

(b) The wheels

(c) The shock strut of the main gear for fluid leakage

(d) The doors and linkage of the main gear strut

(e) The wiring

(f) The brackets, sensors, and hydraulic tubing (TASK 32-11-00-200-801)

(g) The actuators

(h) The top end of the shock strut for cracks and bolt distortion

(i) The landing gear beam

(j) The trunnion

(k) The stabilizer beams

(l) The inboard attachment of main landing gear beam

(m) Outboard attachment of main landing gear beam

(n) Examine the MLG torsion links and attachments, do this task: Main Landing Gear Torsion Links Inspection, TASK 32-11-51-200-801.

NOTE: Look for damage and deformation.

1) Remove the upper torsion link pin, do this task: Main Landing Gear Upper Torsion Link Removal, TASK 32-11-51-000-801.

a) Examine the pin for damage, cracks, missing chrome, or a bent shaft.

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b) Examine the bushings in the outer cylinder lugs and the upper torsion link lugs for damage, cracks, and deformation.

c) If damage, cracks, or deformation is found on the bushings or the pin, further inspection of the MLG must be performed per the Phase II inspection.

d) If no damage is found, install the upper torsion link pin, do this task: Main Landing Gear Upper Torsion Link Installation, TASK 32-11-51-400-801.

2) Disconnect the apex joint of the torsion links, do this task: Main Landing Gear Torsion Link Disconnection, TASK 32-11-51-020-801.

a) Examine damper shaft and attachment hardware for damage, wear, and deformation.

b) Verify that straight and tapered sleeves are installed in the correct positions.

c) If damage, cracks, or deformation is found on the damper shaft, further inspection of the MLG must be performed per the Phase II inspection.

d) If no damage is found, connect the apex joint of the torsion links, do this task: Main Landing Gear Torsion Link Connection, TASK 32-11-51-400-803.

D. Fuselage Areas

SUBTASK 05-51-68-210-002

(1) Examine the fuselage areas that follow:

(a) Examine the upper and lower fuselage skin panels forward and aft of the wing.

NOTE: Permanent wrinkles frequently occur on the lower side of the fuselage skins aft of STA 727.

(b) If you found wrinkles on the skin panels and you did not know they were there before, make an internal inspection.

NOTE: If the wrinkles were there before, make a careful inspection of the wrinkles for cracks.

(c) Examine the keel beam chords, stiffeners, webs, and splices at station 663 thru 727A.

SUBTASK 05-51-68-200-001

(2) Examine the external fuselage skin at BS 1016 and the aft side of the pressure bulkhead for signs of buckling, deformation or damage.

(a) Do a detailed visual inspection of the exterior fuselage skin 10 in. (25.4 cm) forward and aft of the BS 1016 skin butt joint between stringers S-10L and S-10R.

NOTE: Gain access to the exterior of the fuselage skin at BS 1016 under the vertical stabilizer fairing, 323AL and 323AR.

(b) Do a detailed visual inspection of the entire aft side of the BS 1016 aft pressure bulkhead. Give particular attention to the upper bulkhead structure between skin stringers S-10L and S-10R.

NOTE: Access to the interior unpressurized aft pressure bulkhead area is through the aft access hatch, 311BL.

E. Electrical Equipment Rack Inspection

SUBTASK 05-51-68-210-010

(1) Do the visual inspection of the electrical equipment racks for damage:

(a) Visually inspect the electrical equipment racks attachments to structure, shelves, and trays.

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(b) If damage is found do the detailed electrical equipment rack inspection (TASK 05-51-68-210-802).

F. APU Structure Inspection

SUBTASK 05-51-68-200-003

(1) Inspect the Auxiliary Power Unit (APU) Mounts (APU Installed), do this task: APU Mounts Inspection (APU Installed), TASK 49-13-00-200-802.

G. Wing Areas

SUBTASK 05-51-68-210-003

(1) Examine the wing areas that follow:

WARNING DO THE DEACTIVATION PROCEDURE FOR THE LEADING EDGE FLAPS AND SLATS. THE FLAPS AND SLATS MOVE QUICKLY. INJURIES TO PERSONNEL, AND DAMAGE TO EQUIPMENT CAN OCCUR.

(a) Deactivate the leading edge flaps and slats.

1) Do this task: Leading Edge Flaps and Slats - Deactivation, TASK 27-81-00-040-801.

WARNING DO THE TRAILING EDGE FLAP DEACTIVATION PROCEDURE BEFORE YOU DO WORK ON THE FLAP SYSTEM. WITH THE FLAPS ACTIVATED, THE FLAPS CAN MOVE AND CAUSE INJURY TO PERSONS OR DAMAGE TO EQUIPMENT.

(b) Deactivate the trailing edge flaps.

1) Do this task: Trailing Edge Flap System Deactivation, TASK 27-51-00-040-801.

(c) The strut-to-wing fairing panels on the upper and lower nacelle.

1) Make sure that the fasteners are installed in the correct position.

(d) Examine the wing leading edge fairing for displacement and other signs of damage.

(e) Do the following inspections with attention to find possible damage to:

1) Carriage number 2, both inboard and outboard side of the carriage.

2) Track number 1 and track number 2 of the inboard and outboard lower flanges of the track.

3) Carriage number 1 and number 2 forward and aft roller bolts.

4) Bellcrank number 1 and number 2.

5) Aft flap program tracks, Outboard flap.

6) Trailing edge flaps.

a) Examine the trailing edge flaps, do this task: Trailing Edge Flap Drive System Inspection, TASK 27-51-00-210-801.

<1> If damage is found, refer to the Phase II for more detailed examinations of the flaps (TASK 05-51-68-210-802).

7) Perform the following operational checks:

a) Do this task: Trailing Edge Flap System Operational Test, TASK 27-51-00-710-801.

b) Do this task: Spoiler Control System Operational Test, TASK 27-61-00-710-801.

c) Do this task: Aileron Response (Operational) Test, TASK 27-11-00-710-801.

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(f) Examine winglets for damage, cracks, and deformation (TASK 05-41-05-210-802, TASK 05-41-06-210-802)

H. Put the Airplane Back to Its Usual Condition

SUBTASK 05-51-68-410-001

(1) Install the components you removed if they are serviceable, or install replacement parts.

SUBTASK 05-51-68-440-001

(2) Do the activation procedure for the trailing edge flap system.

(a) Do this task: Trailing Edge Flap System Reactivation, TASK 27-51-00-440-801.

SUBTASK 05-51-68-440-002

(3) Do the activation procedure for the leading edge flap and slat system.

(a) Do this task: Leading Edge Flaps and Slats - Activation, TASK 27-81-00-440-801.

I. Cabin Inspections

SUBTASK 05-51-68-210-004

(1) Do the following cabin inspections that follow to find possible damage:

(a) Do a visual inspection of all ceiling panels for dislodging.

(b) Do a visual inspection of all ceiling overhead bins for evidence of looseness.

(c) Do a detailed visual inspection of all ceiling panels equipped with video monitors.

1) Inspect latches, stops, potting inserts, and all fasteners.

(d) Continue the Cabin Inspection in the Phase II inspection if any cabin damage was found in the above Cabin Inspections including the ceiling panels, central overhead bins, or the video monitors. If no damage was found, no further cabin inspection is required and it is not necessary to continue the cabin inspection in Phase II.

END OF TASK

TASK 05-51-68-210-802

3. Phase II Inspection

A. References

Reference	Title
05-51-01 P/B 201	HARD LANDING OR HIGH DRAG/SIDE LOAD LANDING - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)
05-51-10 P/B 201	DRAGGED ENGINE NACELLE/FAN BLADE OUT/ENGINE SEIZURE/THRUST REVERSER AND ATTACH POINTS DAMAGE - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)
07-10-01-580-801	Lift the Airplane on Jacks (P/B 201)
12-15-31-610-802	Main Landing Gear Shock Strut Servicing, Airplane on the Ground (P/B 301)
20-10-07-000-801	E/E Box Removal (P/B 401)
25-23-61-000-801	Passenger Service Unit - Removal (P/B 401)
27-51-00-040-801	Trailing Edge Flap System Deactivation (P/B 201)
27-51-00-440-801	Trailing Edge Flap System Reactivation (P/B 201)
27-51-12-200-801	Inboard Aft Flap Inspection (P/B 601)
27-51-22-200-801	Outboard Aft Flap Inspection (P/B 601)
27-51-23-200-802	Outboard Flap Outboard Carriage Inspection (P/B 601)

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(Continued)

Reference	Title
27-81-00-040-801	Leading Edge Flaps and Slats - Deactivation (P/B 201)
27-81-00-440-801	Leading Edge Flaps and Slats - Activation (P/B 201)
32-11-00-200-801	Main Landing Gear Inspection (P/B 601)
32-32-00-710-802	Main Landing Gear - Operational Test (P/B 501)
32-33-00-710-802	Nose Landing Gear Operational Test (P/B 501)
32-34-00-730-801	Main Gear Manual Extension System Test (Airplane on Jacks) (P/B 501)
57-16-06-000-801	Main Landing Gear Support Beam Removal (P/B 401)
57-16-06-200-801	Landing Gear Support Beam Inspection (P/B 601)

B. Location Zones

Zone	Area
100	Lower Half of Fuselage
200	Upper Half of Fuselage
500	Left Wing
600	Right Wing
700	Landing Gear and Landing Gear Doors

C. Landing gear

SUBTASK 05-51-68-710-001

(1) Do the landing gear checks that follow to make sure that the landing gear operates correctly.

NOTE: Continue the following inspection if any landing gear damage was found in the above Phase I inspection.

(a) Do this task: Lift the Airplane on Jacks, TASK 07-10-01-580-801.

(b) Retract and then extend the Main Landing Gear (MLG) with the normal system to make sure that they operate correctly.

1) Do this task: Main Landing Gear - Operational Test, TASK 32-32-00-710-802.

(c) Retract and then extend the Nose Landing Gear (NLG) with the normal system to make sure that it operates correctly.

1) Do this task: Nose Landing Gear Operational Test, TASK 32-33-00-710-802.

(d) Retract and then extend the MLG with the manual system to make sure that they operate correctly.

1) Do this task: Main Gear Manual Extension System Test (Airplane on Jacks), TASK 32-34-00-730-801.

(e) Retract and then extend the NLG with the manual system to make sure that it operates correctly.

1) Do this task: Nose Landing Gear Operational Test, TASK 32-33-00-710-802.

D. Main Landing Gear Areas

SUBTASK 05-51-68-210-005

(1) Do the steps that follow to examine the MLG:

NOTE: Continue the following inspection if any landing gear area damage was found in the above Phase I inspection.

(a) Do these steps if you remove a wheel because of a blown tire:

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1) Examine the brake assemblies for damage.
2) Examine the wheel bearings for roughness.
3) Examine the axle for damage.

(b) Examine the forward and aft trunnion area of the outer cylinder.

(c) Examine the sliding surface of the inner cylinder.

(d) Remove the upper and lower torsion links and examine the following:

1) Visually inspect the bushings and lugs.
2) Examine and inspect the dimensions of the attachment lugs and pins.

NOTE: If deformation is found, remove the bushings and check the dimensions of the lug bores and faces.

(e) Examine the axle.

(f) Examine and check the dimensions of the outer and inner cylinder torsion link lugs.

NOTE: If deformation is found, remove the bushings and check the dimensions of the lug bores and faces.

(g) Examine the side strut linkage.

(h) Examine the actuator walking beam and linkage fittings.

(i) Examine the fuse pins at the inboard attachment and outboard attachment of the main landing gear beam.

(j) Examine the shock strut of the main landing gear for damage or signs of excessive leakage, do this task: Main Landing Gear Inspection, TASK 32-11-00-200-801.

1) If excessive leakage is found, do this task: Main Landing Gear Shock Strut Servicing, Airplane on the Ground, TASK 12-15-31-610-802.

If the shock strut servicing was not correct, do the following steps:

a) Remove the inner cylinder and examine it for distortion or cracks.
b) Check the dimensions of the barrel of the inner cylinder and axles for distortion, bending and cracking.
c) Examine the interior components of the shock strut for damage.

(k) Examine the wheel well of the main landing gear for fuel or other fluid leaks.

(l) If the results of any of the above checks and inspections requires removal of the MLG, inspect the fuse pins at the inboard attachment and outboard attachment of the MLG beam.

1) Remove the inboard fuse pin of the landing gear support beam: do this task: Main Landing Gear Support Beam Removal, TASK 57-16-06-000-801.

NOTE: Complete removal of the landing gear support beam is not required.

NOTE: External support of the landing gear support beam may be necessary to remove load on the beam.

2) Inspect the fuse pin, bolts, and bushings: do this task: Landing Gear Support Beam Inspection, TASK 57-16-06-200-801.

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3) Remove the outboard fuse pin of the landing gear support beam: do this task: Main Landing Gear Support Beam Removal, TASK 57-16-06-000-801.

NOTE: Complete removal of the landing gear support beam is not required.

NOTE: External support of the landing gear support beam may be necessary to remove load on the beam.

4) Inspect the fuse pin, bolts, and bushings: do this task: Landing Gear Support Beam Inspection, TASK 57-16-06-200-801.

E. Fuselage Areas

SUBTASK 05-51-68-040-001

WARNING DO THE TRAILING EDGE FLAP DEACTIVATION PROCEDURE BEFORE YOU DO WORK ON THE FLAP SYSTEM. WITH THE FLAPS ACTIVATED, THE FLAPS CAN MOVE AND CAUSE INJURY TO PERSONS OR DAMAGE TO EQUIPMENT.

(1) Do this task: Trailing Edge Flap System Deactivation, TASK 27-51-00-040-801.

SUBTASK 05-51-68-040-002

WARNING DO THE DEACTIVATION PROCEDURE FOR THE LEADING EDGE FLAPS AND SLATS. THE FLAPS AND SLATS MOVE QUICKLY. INJURIES TO PERSONNEL, AND DAMAGE TO EQUIPMENT CAN OCCUR.

(2) Do this task: Leading Edge Flaps and Slats - Deactivation, TASK 27-81-00-040-801.

SUBTASK 05-51-68-210-006

(3) Examine the fuselage areas that follow:

NOTE: Continue the following inspection if any fuselage damage was found in the above Phase I inspection.

(a) Examine the lower fuselage structure.

NOTE: Make sure that you examine the area below the body crease and from station 727 to 100 in. (254 cm) aft.

(b) Examine the wing-to-fuselage joints at stations 540 and 664.

(c) Examine the upper fuselage structure at station 540, 664, and 727.

(d) Examine the bulkheads at body stations 294.5 and 360 and the fuselage structure immediately outboard of the nose wheel well.

NOTE: You can examine the forward side if you use the access holes in the sidewalls of the nose wheel well. You can examine the aft side of the bulkhead at station 294.5 from the electronics compartment.

(e) Examine the keel beam chords, stiffeners, webs and splices at station 540 thru 727A.

(f) Examine the external surface of the fuselage for fuel or other fluid leaks.

(g) Remove the upper wing-to-body fairing forward of the aft fairing.

(h) Examine the trunnion support fitting at body station 706 for the main landing gear for cracks and bolt distortion.

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(i) If you found wrinkles on the skin panels and you did not know they were there before, do an internal inspection.

NOTE: Permanent wrinkles frequently occur on the lowerside of the fuselage skin aft of STA 727. If the wrinkles were there before, do a careful inspection of the wrinkles for cracks.

(j) Examine at BS 1016 the upper center web installation on the forward side of the pressure bulkhead for any damage.

NOTE: Gain access to inspect the upper center web installation by removing the galley and lavatories as necessary.

F. Electrical Equipment Rack Inspection

SUBTASK 05-51-68-200-004

(1) Inspect for damage in the following areas (TASK 20-10-07-000-801):

NOTE: Repair all damage found per the standard Structural Repair Manual (SRM) procedure.

(a) E1 electrical equipment rack stanchions and its attachments to structure, shelves, and trays.

(b) E2 electrical equipment rack stanchions and its attachments to structure, shelves, and trays.

(c) E3 electrical equipment rack stanchions and its attachments to structure, shelves, and trays.

(d) E4 electrical equipment rack stanchions and its attachments to structure, shelves, and trays.

(e) E5 electrical equipment rack stanchions and its attachments to structure, shelves, and trays.

(f) E8 electrical equipment rack stanchions and its attachments to structure, shelves, and trays, if installed.

G. Wing Areas

SUBTASK 05-51-68-040-003



WARNING DO THE TRAILING EDGE FLAP DEACTIVATION PROCEDURE BEFORE YOU DO WORK ON THE FLAP SYSTEM. WITH THE FLAPS ACTIVATED, THE FLAPS CAN MOVE AND CAUSE INJURY TO PERSONS OR DAMAGE TO EQUIPMENT.

(1) Make sure that the trailing edge flap system has been deactivated. Do this task: Trailing Edge Flap System Deactivation, TASK 27-51-00-040-801.

SUBTASK 05-51-68-040-004



WARNING DO THE DEACTIVATION PROCEDURE FOR THE LEADING EDGE FLAPS AND SLATS. THE FLAPS AND SLATS MOVE QUICKLY. INJURIES TO PERSONNEL, AND DAMAGE TO EQUIPMENT CAN OCCUR.

(2) Make sure that the leading edge flap and slat system has been deactivated. Do this task: Leading Edge Flaps and Slats - Deactivation, TASK 27-81-00-040-801.

SUBTASK 05-51-68-210-007

(3) Do an inspection of the wing areas that follow:

NOTE: Continue the following inspection if any wing or flap damage was found in the above Phase I inspection.

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(a) Examine the wings, nacelles, and upper and lower nacelle strut-to-wing fairing for fuel or other fluid leaks.

(b) Examine the wing ribs along the aft side of the rear spar, WBL 92.5 and 114.0 for cracks.

(c) Examine the upper and lower trailing edge panels and the airplane structure for damage.

NOTE: Make sure that you examine the area near the main landing gear beam carefully.

(d) Examine the flap areas that follow for sheared rivets and structure damage:

1) The inboard and outboard trailing edge flaps, do these tasks:

a) Inboard Aft Flap Inspection, TASK 27-51-12-200-801

b) Outboard Aft Flap Inspection, TASK 27-51-22-200-801

c) Outboard Flap Outboard Carriage Inspection, TASK 27-51-23-200-802.

2) The flap tracks

3) The drive screws

4) The linkages and fairings.

(e) Examine the inboard and outboard spoilers for sheared rivets and structure damage.

(f) Examine the flap track bolts on the outboard trailing edge flap for damage that can occur if the flaps touched the ground.

(g) Examine the flap track bolts on the inboard trailing edge flap for damage that can occur if the flaps touched the ground.

(h) Make sure that the flight controls move freely and the cable tension is satisfactory.

H. Cabin Inspections

SUBTASK 05-51-68-210-008

(1) Continue the following inspection if any cabin damage was found in the above Cabin Inspection including the ceiling panels, central overhead bins, or the video monitors. If no damage was found, no further cabin inspection is required and it is not necessary to continue this Cabin Inspection.

(a) If ceiling panels without video monitors are found dislodged or damaged, do a check for proper latching and installation. Repair as necessary.

(b) If central overhead stowage bins are found with impact damage or are loose, or if ceiling panels equipped with video monitors are found with broken latches; repair as necessary.

(c) Do an inspection of all the tie rods of affected zones for evidence of buckling or rupture. If any defect is found, replace as necessary.

(d) Examine lavatory tie rod attachments for damage consisting of breakage, cracks, and deformation. Do an inspection of the tie rods for evidence of buckling or rupture.

(e) Examine the lavatory floor fittings for damage consisting of breakage, cracks, and deformation.

(f) Examine galley tie rod attachments for damage consisting of breakage, cracks, and deformation. Inspect the tie rods for evidence of buckling or rupture.

(g) Examine the galley floor fittings for damage consisting of breakage, cracks, and deformation.

(h) Examine, closet tie rod attachments for damage consisting of breakage, cracks, and deformation.

(i) Examine the Passenger Service Unit (PSU), do this task: Passenger Service Unit - Removal, TASK 25-23-61-000-801.

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(j) Examine the closet floor fittings for damage consisting of breakage, cracks, and deformation.

I. Engine Areas

SUBTASK 05-51-68-210-009

(1) Do the steps that follow to examine the engine areas:

(a) Do an engine inspection after a hard landing.

1) Do this task: HARD LANDING OR HIGH DRAG/SIDE LOAD LANDING - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION), PAGEBLOCK 05-51-01/201.

(b) Examine the engine nacelle if it touched the ground.

1) Do this task: DRAGGED ENGINE NACELLE/FAN BLADE OUT/ENGINE SEIZURE/THRUST REVERSER AND ATTACH POINTS DAMAGE - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION), PAGEBLOCK 05-51-10/201.

J. Put the Airplane Back to Its Usual Condition

SUBTASK 05-51-68-410-002

(1) Install the components you removed if they are serviceable, or install replacement parts.

SUBTASK 05-51-68-440-003

(2) Do the activation procedure for the trailing edge flap system.

(a) Do this task: Trailing Edge Flap System Reactivation, TASK 27-51-00-440-801.

SUBTASK 05-51-68-440-004

(3) Do the activation procedure for the leading edge flap and slat system.

(a) Do this task: Leading Edge Flaps and Slats - Activation, TASK 27-81-00-440-801.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details

CONDITIONED AIR PACK OUTLET DUCT SYSTEM FAILURE - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)

1. General

A. This procedure contains the task to examine the applicable air check valves after an upstream duct failure.

(1) The conditioned air check valves can be damaged when there is an upstream duct failure of the pack outlet.

(a) When there is a duct failure, the applicable conditioned air check valve must be removed and inspected.

(b) There is one conditioned air check valve found downstream of each air cooling pack, near the forward bulkhead of the ECS bay.

(2) The trim air check valves can be damaged when there is an upstream duct failure of the pack outlet.

(a) When there is a duct failure, the applicable trim air check valve must be removed and inspected.

(b) There is one trim air check valve found in each of the air conditioning bays.

TASK 05-51-80-210-801

2. Conditioned Air Pack Outlet Conditional Inspection

A. References

Reference	Title
21-51-07-000-801	Conditioned Air Check Valve Removal (P/B 401)
21-51-07-400-801	Conditioned Air Check Valve Installation (P/B 401)
21-61-09-200-801	Trim Air Check Valve Inspection (P/B 601)

B. Location Zones

Zone	Area
120	Subzone - Body Station 396 to Body Station 540

C. Procedure

SUBTASK 05-51-80-000-001

(1) Examine the conditioned air check valve.

(a) Remove the applicable conditioned air check valve for inspection, do this task: Conditioned Air Check Valve Removal, TASK 21-51-07-000-801.

(b) Do a visual examination of the conditioned air check valve for the following conditions:

1) missing parts

2) cracks

3) corrosion

4) flapper deformation

5) restricted flapper movement.

(c) Install the conditioned air check valve, do this task: Conditioned Air Check Valve Installation, TASK 21-51-07-400-801.

SUBTASK 05-51-80-210-001

(2) Examine the trim air check valve.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(a) Do this task: Trim Air Check Valve Inspection, TASK 21-61-09-200-801.

D. Put the Airplane Back to It's Usual Condition

SUBTASK 05-51-80-410-001

(1) Install the components you removed if they are serviceable, or install replacement parts.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details

CABIN DEPRESSURIZATION CONDITION - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)

1. General

A. This procedure contains the task to inspect the airplane after cabin depressurization condition.

TASK 05-51-81-210-801

2. Cabin Depressurization Conditional - Inspection

A. References

Reference	Title
05-51-08-210-801	Phase I Inspection (P/B 201)
05-51-08-210-802	Phase II Inspection (P/B 201)
21-31-03-000-801	Aft Outflow Valve Assembly Removal (P/B 401)
21-32-05-000-801	Ceiling Blowout Panel Removal (P/B 401)
21-32-05-400-801	Ceiling Blowout Panel Installation (P/B 401)
50-10-00-200-801	Forward Cargo Compartment Liner Inspection (P/B 601)

B. Location Zones

Zone	Area
100	Lower Half of Fuselage
121	Forward Cargo Compartment - Left
122	Forward Cargo Compartment - Right
141	Aft Cargo Compartment - Left
142	Aft Cargo Compartment - Right
190	Subzone - Wing-to-Body Fairing

C. Cabin Depressurization Conditional Inspection

SUBTASK 05-51-81-210-001

(1) If cabin depressurization condition occurs, do these steps:

(a) Before opening the forward cargo door, examine the door seals to see if they have flipped outward.

(b) Examine the decompression panels for movement.

1) Do this task: Ceiling Blowout Panel Removal, TASK 21-32-05-000-801.

2) Do this task: Ceiling Blowout Panel Installation, TASK 21-32-05-400-801.

(c) Examine the cargo compartment for the conditions that follow (TASK 50-10-00-200-801):

- sidewall panels that have moved
- insulation that has moved
- lining that has moved.

(d) Examine the aft outflow valve, do this task: Aft Outflow Valve Assembly Removal, TASK 21-31-03-000-801.

1) Examine the area around the aft outflow valve for damage.

(e) Examine the left and right wing trailing edge.

1) Do this task: Phase I Inspection, TASK 05-51-08-210-801.

2) Do this task: Phase II Inspection, TASK 05-51-08-210-802.

SUBTASK 05-51-81-210-002

(2) Examine the equipments that follow for damage.

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(a) All emergency equipment:

1) All lifevests (passenger, crew, infant, etc)
2) Survival packs
3) Halon extinguishers
4) Water extinguishers
5) First aid kits
6) Eyewash kit
7) Megaphone Transmitter with battery
8) Defibrillators.

CAUTION

DO NOT PUT THE OXYGEN MASK HOSE NEAR THE ADJACENT STRUCTURE TO PREVENT RUBS OR KINKS. RUBS OR KINKS CAN CAUSE DAMAGE.

(b) All pressure sensitive equipment for Oxygen System:

1) Crew Oxygen Cylinders
2) Crew Oxygen Regulator
3) Flight Deck Oxygen Masks
4) Disposable oxygen masks with pouch (leave connected to oxygen bottles)
5) Smoke Hoods (Protective Breathing Equipment)
6) All Portable Oxygen Bottles
7) All Chemical Oxygen Generators (located in PSUs throughout main cabin; including crew rests, attendant stations, and galleys).

(c) ADM Systems:

1) All pitot and static lines.

D. Put the Airplane Back to Its Usual Condition

SUBTASK 05-51-81-410-001

(1) Install the components you removed if they are serviceable or install replacement parts.

——— END OF TASK ———

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EXCESSIVE CABIN PRESSURE LEAKAGE - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)

1. General

A. This procedure gives steps to do a leakage test to the airplane fuselage.

NOTE: Any pressure over 4.5 psid (31.0 kPa) differential needs to be coordinated with Boeing before the test is conducted.

TASK 05-51-91-790-801

2. Cabin Pressure Leak Test

(Figure 201, Figure 202)

A. General

(1) This test uses the airplane equipment to pressurize the airplane and monitor the procedure.

(2) This leakage test is used to make sure the fuselage pressurized areas are tight.

(3) Many small leakage areas can add to create an excessive fuselage leakage rate.

(a) It is recommended that all sources of leakage be repaired.

(4) If leakage is found during this inspection, go to the related maintenance manual section for the repair.

WARNING

MAKE SURE YOU OBEY THE PROPER PROCEDURES FOR COMPRESSION AND DECOMPRESSION WHEN YOU USE PERSONS IN A PRESSURIZED AREA. PRESSURE CHANGES THAT CAUSE PAIN MUST NOT BE DONE. IF YOU DO NOT OBEY THE PRECAUTIONS, INJURY TO PERSONS CAN OCCUR.

(5) When persons are in the airplane during this test, they must be in a good physical condition. When a person feels pain during a pressure change, you must lower the rate of change of pressure, or make the absolute pressure stable immediately. Do this to make sure the person can make the pressure equal in their ears. Also, do this to remove the person from the airplane.

(6) Pressurize the airplane with one of the steps that follow:

NOTE: A method to calculate absolute pressure is as follows:

Determine the field atmospheric pressure (in inches of mercury). Divide field atmospheric pressure by 2.036 and add the result to the gauge pressure or differential pressure inside the cabin to give the absolute pressure (PSIA). For example: If the field atmospheric pressure is 29.86 in/Hg (101.12 kPa) and the cabin differential pressure is 4.0 psid (27.6 kPa), divide 29.86 in/Hg (101.12 kPa) by 2.036 which equals 14.67 psi (101.15 kPa). Add the cabin differential pressure (in psi) to the field pressure (4.0 psid (27.6 kPa) + 14.67 psi (101.15 kPa) = 18.67 psia (128.73 kPa)) to obtain an absolute pressure of 18.67 psi (128.73 kPa).

(a) The primary air pressure source is the APU.

(b) You can use the engine bleed air for the pressure source.

(c) You can use an external ground source.

NOTE: The external ground source must supply 2000 cfm (56.6 M^3/minute) of air at 10 psig (69 kPa).

(d) The cabin differential pressure and the rates of pressurization and bleed-down are monitored in the control cabin.

1) They are monitored on the differential pressure indicator.

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(e) Figure 201 shows how to get a correction factor used in connection with some test data.

(f) Figure 202 shows the straight line curves for the permitted airplane leakage rates.

(7) Boeing has determined that all of the following listed equipment may be susceptible to damage anytime the cabin pressure exceeds 20 psia (138 kPa). This list is not meant to be all inclusive since there may be additional equipment sensitive to 20 psia (138 kPa).

(a) All emergency equipment:

1) All lifevests (passenger, crew, infant, etc)
2) Survival packs
3) Halon extinguishers
4) Water extinguishers
5) First aid kits
6) Eyewash kit
7) Megaphone Transmitter with battery
8) Defibrillators.

(b) All pressure sensitive equipment for Oxygen System:

1) Crew Oxygen Cylinders
2) Crew Oxygen Regulator
3) Flight Deck Oxygen Masks
4) Disposable oxygen masks with pouch (leave connected to oxygen bottles)
5) Smoke Hoods (Protective Breathing Equipment)
6) All Portable Oxygen Bottles
7) All Chemical Oxygen Generators (located in PSUs throughout main cabin; including crew rests, attendant stations, and galleys).

(c) ADM Systems:

1) All pitot and static lines.

B. References

Reference	Title
21-00-00-800-802	Remove Conditioned Air from the Airplane (P/B 201)
21-00-00-800-803	Supply Conditioned Air with a Cooling Pack (P/B 201)
35-12-85-000-802	Oxygen Mask/Regulator Removal (P/B 401)
35-12-85-400-802	Oxygen Mask/Regulator Installation (P/B 401)
49-11-00-860-801	APU Starting and Operation (P/B 201)
49-11-00-860-802	APU Usual Shutdown (P/B 201)

C. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-7626	Cup - Air Flow, Lo/Hi Blow Test Part #: G21007-1 Supplier: 81205
STD-836	Stopwatch

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D. Prepare for the Cabin Pressure Leakage Test

SUBTASK 05-51-91-780-001

(1) Do the steps that follow to prepare the airplane for the leakage test:

(a) Put the L and R RECIRC FAN switches on the Air Conditioning Panel, P5 to the AUTO position.

NOTE: Equipment cooling fans work harder at cabin pressures more than 15.7 psia (108.2 kPa). Limit the operation of fans at high cabin pressure to less than 30 minutes.

(b) Remove the oxygen mask regulators from the oxygen system in the crew cabin, do this task: Oxygen Mask/Regulator Removal, TASK 35-12-85-000-802.

NOTE: The removal of the oxygen equipment is not necessary if the absolute pressure is not more than 20 psi (138 kPa) or if the differential pressure is not more than 7 psi (48 kPa).

NOTE: A method to calculate absolute pressure is as follows:

Determine the field atmospheric pressure (in inches of mercury). Divide field atmospheric pressure by 2.036 and add the result to the gauge pressure or differential pressure inside the cabin to give the absolute pressure (PSIA). For example: If the field atmospheric pressure is 29.86 in/Hg (101.12 kPa) and the cabin differential pressure is 4.0 psid (27.6 kPa), divide 29.86 in/Hg (101.12 kPa) by 2.036 which equals 14.67 psi (101.15 kPa). Add the cabin differential pressure (in psi) to the field pressure (4.0 psid (27.6 kPa) + 14.67 psi (101.15 kPa) = 18.67 psia (128.73 kPa)) to obtain an absolute pressure of 18.67 psi (128.73 kPa).

(c) Make sure the pitot-static system is fully installed and operational.

(d) Start the APU and use it as a pressure source, do this task: APU Starting and Operation, TASK 49-11-00-860-801.

1) As an alternative, you can use a ground pneumatic cart as an air source.

NOTE: If you use a ground cart to supply pneumatic power, it must supply 2000 cfm (56.6 M^3/minute) of air at 10 psig (69 kPa).

(e) Operate an air cycle cooling pack, do this task: Supply Conditioned Air with a Cooling Pack, TASK 21-00-00-800-803.

NOTE: You can use the left or the right air cycle cooling pack.

1) Make sure the pressurization mode selector on the P5 forward overhead panel is in AUTO position.

2) Operate the pack in AUTO at approximately 70°F (21°C).

3) Make sure the aft outflow valve position indicator show the valve is fully open.

E. Cabin Pressure Leakage Test

SUBTASK 05-51-91-790-001

(1) Do the cabin pressure leakage test:

(a) Make sure all of the airplane doors are properly closed and sealed.

(b) Put the pressurization mode selector on the P5 forward overhead panel to MAN position to turn off the auto control for the valve.

(c) Record the cabin temperature, external ambient pressure, and external ambient temperature.

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(d) Start to close the aft outflow valve when the air condition system has become stable.

WARNING DO NOT ALLOW THE INDICATION ON THE CABIN CLIMB GAUGE TO SHOW MORE THAN 1000 FEET PER MINUTE. WHEN YOU ALLOW A RATE OF CABIN CLIMB OF MORE THAN 1000 FEET PER MINUTE, DAMAGE TO THE AIRPLANE STRUCTURE OR INJURY TO PERSONNEL CAN OCCUR.

(e) Slowly increase the cabin pressure with the manual control toggle, at a rate of approximately 300 ft (91 m) a minute.

NOTE: The rate of pressure can be more than 300 ft (91 m) a minute but not more than 1000 ft (305 m) a minute.

1) Adjust the outflow valve position to allow for a comfortable rate of change in cabin pressure.

NOTE: The increase in pressure can cause the lavatory or galley smoke detectors to sound an alarm when there is no smoke.

WARNING DO NOT LET THE CABIN DIFFERENTIAL INDICATOR INCREASE TO MORE THAN 4.0 PSI DURING A USUAL TEST. IF YOU LET THE PRESSURE INCREASE TO MORE THAN 4.0 PSI, DAMAGE TO THE AIRPLANE STRUCTURE OR INJURY TO PERSONNEL CAN OCCUR.

(f) Increase the cabin pressure until the cabin differential indicator shows a differential pressure of 4.0 psid (27.6 kPa).

NOTE: Equipment cooling fans work harder at cabin pressures more than 15.7 psia (108.2 kPa). Limit the operation of fans at high cabin pressure to less than 30 minutes.

NOTE: If a fan overheats and stops during high cabin pressure operation, the equipment cooling OFF lights will illuminate. If this occurs, select ALTERNATE to restore the equipment cooling air flow. After a cool-down period, the internal thermostats in the overheat fan will automatically reset. The fan will become operational again.

(g) When you have a differential pressure of 4.0 psid (27.6 kPa), fully close the outflow valve, and turn the air conditioning packs to OFF, do this task: Remove Conditioned Air from the Airplane, TASK 21-00-00-800-802.

1) Make sure the valve position indicator shows that the valve is fully closed.

(h) Shutdown the APU (or other pressurization source) if it is necessary, do this task: APU Usual Shutdown, TASK 49-11-00-860-802.

(i) In less than five minutes after you turn off the air conditioning packs, make a record of the data.

NOTE: If the aft outflow valve did not stay fully closed during the leakage test, the pressure/time data is not correct.

(j) Make a record of the pressure differential and the time during the cabin bleed down.

1) Start the test at 4.0 psid (27.6 kPa) (time zero).

2) Stop the test at 2.5 psid (17.2 kPa).

(k) Make five to ten data sets of each of the items that follow:

1) The time on the stopwatch, STD-836.

2) The cabin differential pressure.

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3) The cabin temperature

4) The external ambient pressure.

(l) If you will do the test again, make sure you do a cool down time of not less than 20 minutes.

1) Do the cool down time with the equipment cooling fans operating at zero differential pressure.

NOTE: This will make sure the fans will not overheat.

F. Leakage Rate Analysis

SUBTASK 05-51-91-720-001

(1) Do the leakage rate analysis.

(a) Get the correction factor from Figure 201 to correct the time data for each data point.

NOTE: You want to use the correction factors with the bleed down time data when the ambient pressure does not equal 14.7 psia (101.4 kPa) and/or the cabin temperature does not equal 70°F (21°C).

(b) Make a graph from the points that follow:

1) The differential pressure data on the vertical axis of Figure 202.

2) The time on the horizontal axis of Figure 202.

(c) Plot each time and pressure data point onto the chart shown in Figure 202.

(d) Make a straight line through the two axis points Figure 202.

1) If the plotted line is in the upper zone in Figure 202, the pressure leakage rate is satisfactory.

G. Areas of Possible Leakage

SUBTASK 05-51-91-790-002

(1) Do a check of the areas that follow for excessive leakage:

NOTE: Do this while the airplane is pressurized between 3 psid (21 kPa) and 4 psid (28 kPa) and the test shows possible leaks.

NOTE: You can use an air flow blow cup, SPL-7626, or an equivalent substitute, to check for leakage.

NOTE: Listen for air leaks through the fuselage, especially from the pressure bulkheads and structure hidden by fairings.

(a) Make sure the electronic cooling system automatic flow control valve is closed correctly.

NOTE: The valve should be fully closed at a differential pressure of 1.1 psid (8 kPa).

(b) Make sure the bilge drains which are found along the bottom center line of the airplane are correctly closed.

NOTE: The bilge drain valves close at approximately 2.0 psid (14 kPa).

(c) Make a check of all door and hatch seals for leakage.

(d) Make a check of all flight deck windows for leakage.

(e) Make a check of the aft outflow valve for leakage.

(f) Make a check of the aft outflow valve seal for leakage.

(g) Make a check of the cabin pressure safety relief valves for leakage.

(h) Make a check of the cabin pressure negative relief valve seal for leakage.

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(i) Make a check of the water service panel seals for leakage.

(j) Make a check of all air conditioning and APU duct seals at the pressure bulkhead penetrations for leakage.

NOTE: These are found in the A/C bay, aft pressure dome, right wheel well, and forward pack bays.

(k) Make a check of the control cable seals in the pressure bulkhead penetrations for excessive leakage.

(l) Do a check of the areas which are difficult to access because they can also have leaks.

1) Structure hidden by the wing-to-body fairing and the APU bulkhead area should be checked for potential structure and seal leaks.

(m) Make a check of the ball valve drain located in the main landing gear wheel well.

(n) Make a check of the forward and aft nose wheel well access panels for leakage.

1) Check the side and top access panels for leakage.

H. Put the Airplane Back to its Usual Condition

SUBTASK 05-51-91-410-001

(1) Install the components that were removed if they are serviceable, or install replacement parts.

SUBTASK 05-51-91-860-001

(2) If the equipment cooling supply exhaust fans were selected from NORMAL to ALTERNATE, the switches must be returned to the NORMAL position.

SUBTASK 05-51-91-860-002

(3) Make sure the L and R RECIRC FAN switches on the Air Conditioning Panel, P5 is in the AUTO position.

SUBTASK 05-51-91-360-001

(4) If you found leaks during the test, repair the leaks.

SUBTASK 05-51-91-860-003

(5) Move the pressurization mode selector on the P5 forward overhead panel to AUTO.

SUBTASK 05-51-91-420-001

(6) If the crew oxygen mask regulator was removed, then install and test the mask demand regulator. Do this task: Oxygen Mask/Regulator Installation, TASK 35-12-85-400-802.

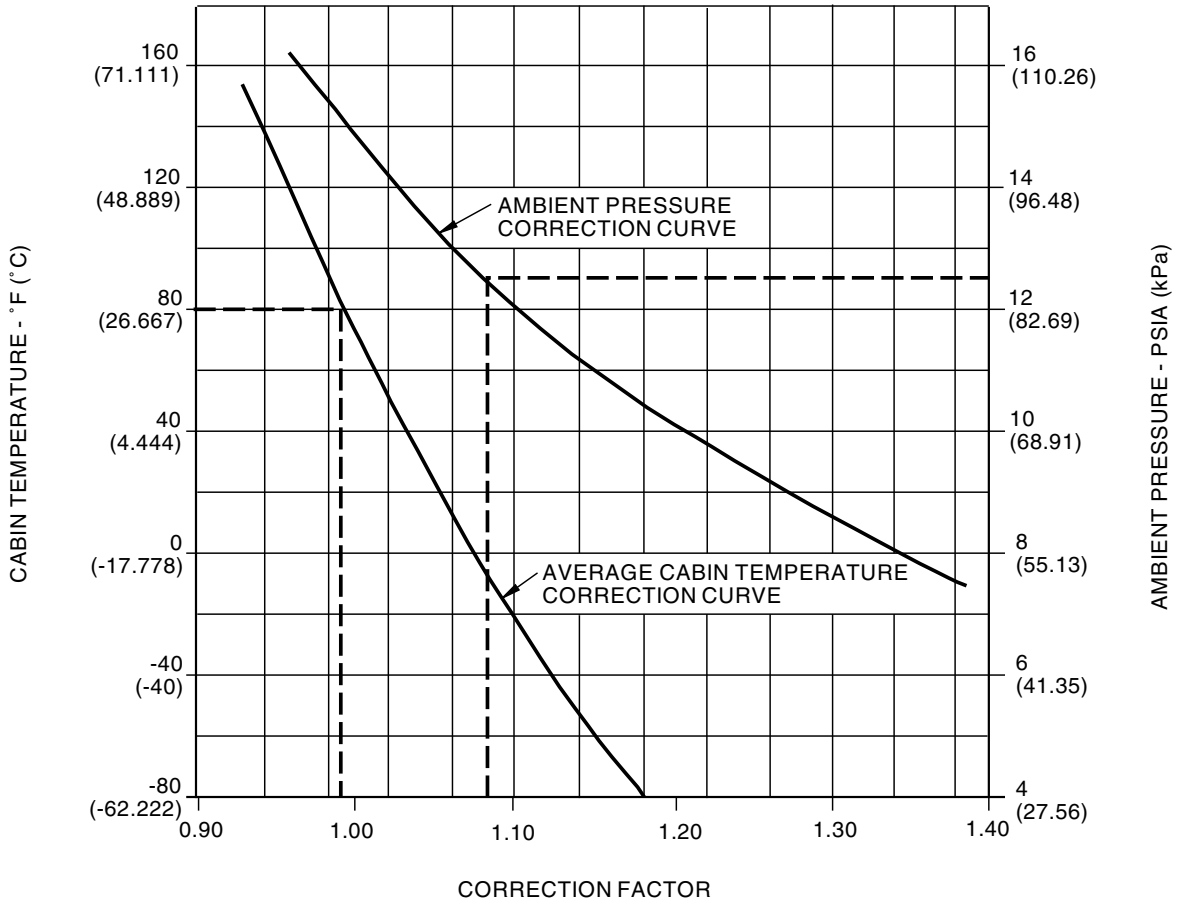
——— END OF TASK ———

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HOW TO USE CURVE:

EXAMPLE: ASSUME A DIFFERENTIAL PRESSURE OF 3.3 PSIG (22.75 kPa) IS MEASURED AFTER 50 SECONDS THE CABIN TEMPERATURE IS 80˚F (26.669˚C) AND THE AMBIENT PRESSURE IS 12.50 PSIA (86.18 kPa).

THE CORRECTED TIME, TO BE PLOTTED ON THE FIGURE 202 CURVE, IS EQUAL TO THE MEASURED TIME DIVIDED BY BOTH THE TEMPERATURE AND PRESSURE CORRECTION FACTORS. FROM CURVES BELOW: TEMPERATURE CORRECTION FACTOR IS 0.99 AND PRESSURE CORRECTION FACTOR IS 1.08. THE PRODUCT OF THE TWO FACTORS IS 1.07. THUS, TIME CORRECTED TO AN AMBIENT PRESSURE OF 14.7 PSIA (101.35 kPa) AND CABIN TEMPERATURE OF 70˚F (21.111˚C) IS EQUAL TO 50 DIVIDED BY 1.07=47 SECONDS.



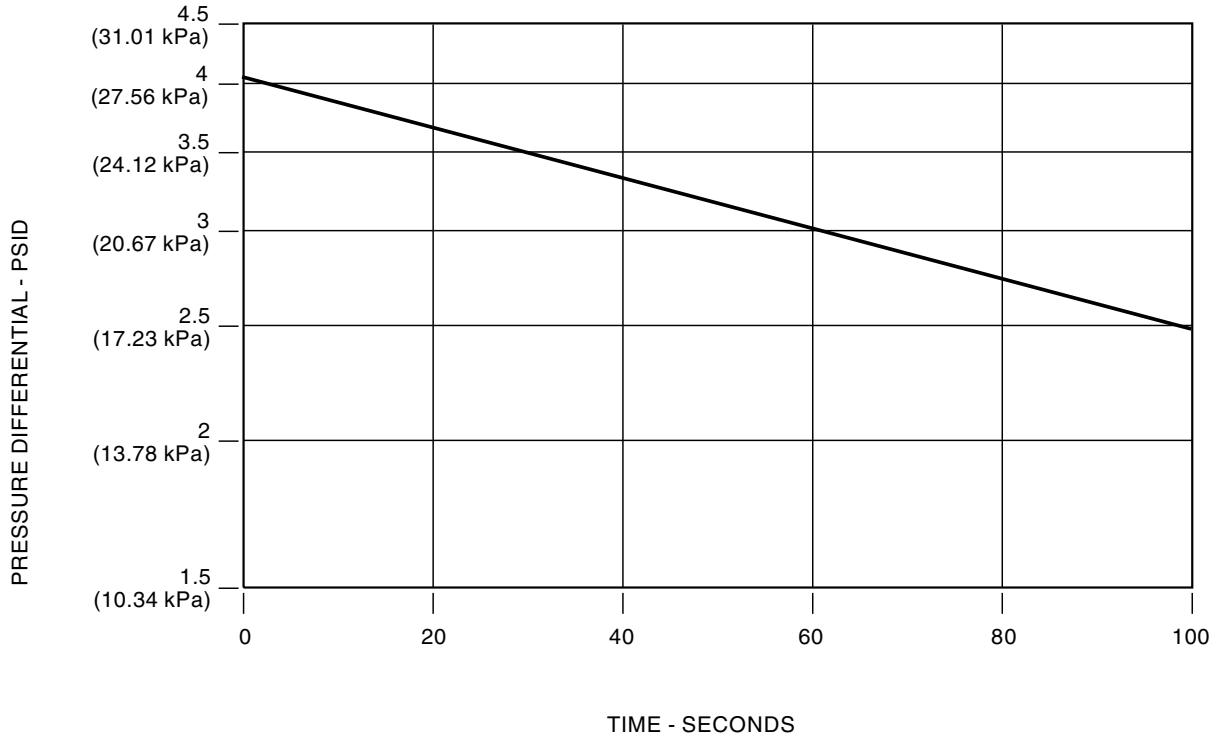
NOTE:

CORRECTION FACTOR TO BE APPLIED TO BLEED DOWN TIME WHEN AMBIENT PRESSURE DOES NOT EQUAL 14.7 PSIA (101.35 kPa) AND/OR CABIN TEMPERATURE DOES NOT EQUAL 70˚F (21.111˚C).

2410419 S00061525615_V1

Pressure Leakage Test Correction Factor
Figure 201/05-51-91-990-801

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NOTE:

2.5 PSIG (17.23 kPa) IS THE RECOMMENDED MINIMUM TEST POINT.

2410420 S00061525616_V1

Pressure Leakage Rate Check Chart
Figure 202/05-51-91-990-802

ECCN 9E991 BOEING PROPRIETARY - See title page for details

COLD-SOAKED FUEL FROST - MAINTENANCE PRACTICES

1. General

A. This procedure has this task:

(1) Cold-soaked fuel frost maintenance:

NOTE: For non FAA operators, Boeing advises operators to contact their respective regulatory authority to obtain approval to use the Cold-Soaked Fuel Frost (CSFF) procedure.

(a) Conditional inspection for cold-soaked fuel frost on the upper wing surfaces when the fuel temperature as given on the flight deck is below 32°F (0°C).

1) If the fuel temperature indicator or probe does not work, begin the inspection for cold-soaked fuel frost.

(b) Removal of ice or frost from the upper wing surfaces if certain conditions are not met.

NOTE: Light coatings of frost due to cold-soaked fuel are allowed on the lower wing surfaces per Cold Weather Maintenance Procedure, TASK 12-33-01-600-801. Cold-soaked fuel frost is also allowed on the upper surface if it is identified by meeting the conditions given in this procedure.

TASK 05-51-92-660-801

2. Cold-Soaked Fuel Frost Maintenance

(Figure 201 or Figure 202)

A. References

Reference	Title
12-33-01-600-801	Cold Weather Maintenance Procedure (P/B 301)

B. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
COM-2480	Platform - Mobile Elevating Work Platform SJ III Series Part #: SJIII 4726 Supplier: 3AF08 Part #: SJIII 4732 Supplier: 3AF08 Opt Part #: SJIII 4620 Supplier: 3AF08 Opt Part #: SJIII 4626 Supplier: 3AF08 Opt Part #: SJIII 4632 Supplier: 3AF08

C. Location Zones

Zone	Area
500	Left Wing
600	Right Wing

D. Inspection for Cold-Soaked Fuel Frost

SUBTASK 05-51-92-210-001

(1) If the temperature of the fuel in the main fuel tanks is greater than 32°F (0°C), then no additional inspection for cold-soaked fuel frost is necessary.

(a) If the fuel temperature indicator or probe does not work, begin the inspection for cold-soaked fuel frost.

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SUBTASK 05-51-92-210-002

(2) If the temperature of the fuel in the main fuel tanks is less than or equal to 32°F (0°C), then do these steps:

(a) Inspect the wing lower surfaces for ice or frost. If ice or frost is present but is only inboard of the fuel measuring stick No. 4, no additional inspection of the upper surfaces is required (see warning below).

(b) If ice or frost is present on the wing lower surface outboard of fuel measuring stick No. 4, use a work platform, COM-2480, or equivalent hoist to inspect the upper wing surfaces for the presence of ice or frost.

NOTE: The distance that the frost extends outboard of fuel measuring stick No. 4 can be used as an indication of the extent of the frost on the upper wing surface.

(c) If no ice or frost is present on the wing upper surfaces, no additional inspection is required.

E. Procedure

SUBTASK 05-51-92-660-001

(1) When ice or frost is present on the top wing surface, do these steps:

(a) Determine if these conditions are met. If all of these conditions are met, the frost can be identified as permissible cold-soaked fuel frost and no further action is necessary. The airplane may be released for flight.

1) The outside air temperature is at or above 39.2°F (4°C).

2) The temperature of the fuel in the main fuel tanks is at or above 3°F (-16°C).

3) There is no precipitation or visible moisture (rain, snow, drizzle, fog with less than 1 mile visibility, etc.).

4) The frost is on or between the main black lines marking the wing fuel tanks.

5) There is no ice or frost anywhere on the upper surface of the wing, including the leading edges and the control surfaces, beyond the outer edge of the black lines defining the cold soaked fuel frost area.

(b) If any of the above conditions is not met, do this step:

1) Apply deicing/anti-icing fluids to the wings with the appropriate deicing/anti-icing equipment to remove all of the ice or frost present (TASK 12-33-01-600-801).

SUBTASK 05-51-92-660-002

WARNING REMOVE ALL ICE FROM ALL LEADING EDGE DEVICES, ALL CONTROL SURFACES, TAB SURFACES, AND BALANCE PANEL CAVITIES BEFORE TAKEOFF. ICE CAN CAUSE AN IN-FLIGHT SAFETY PROBLEM.

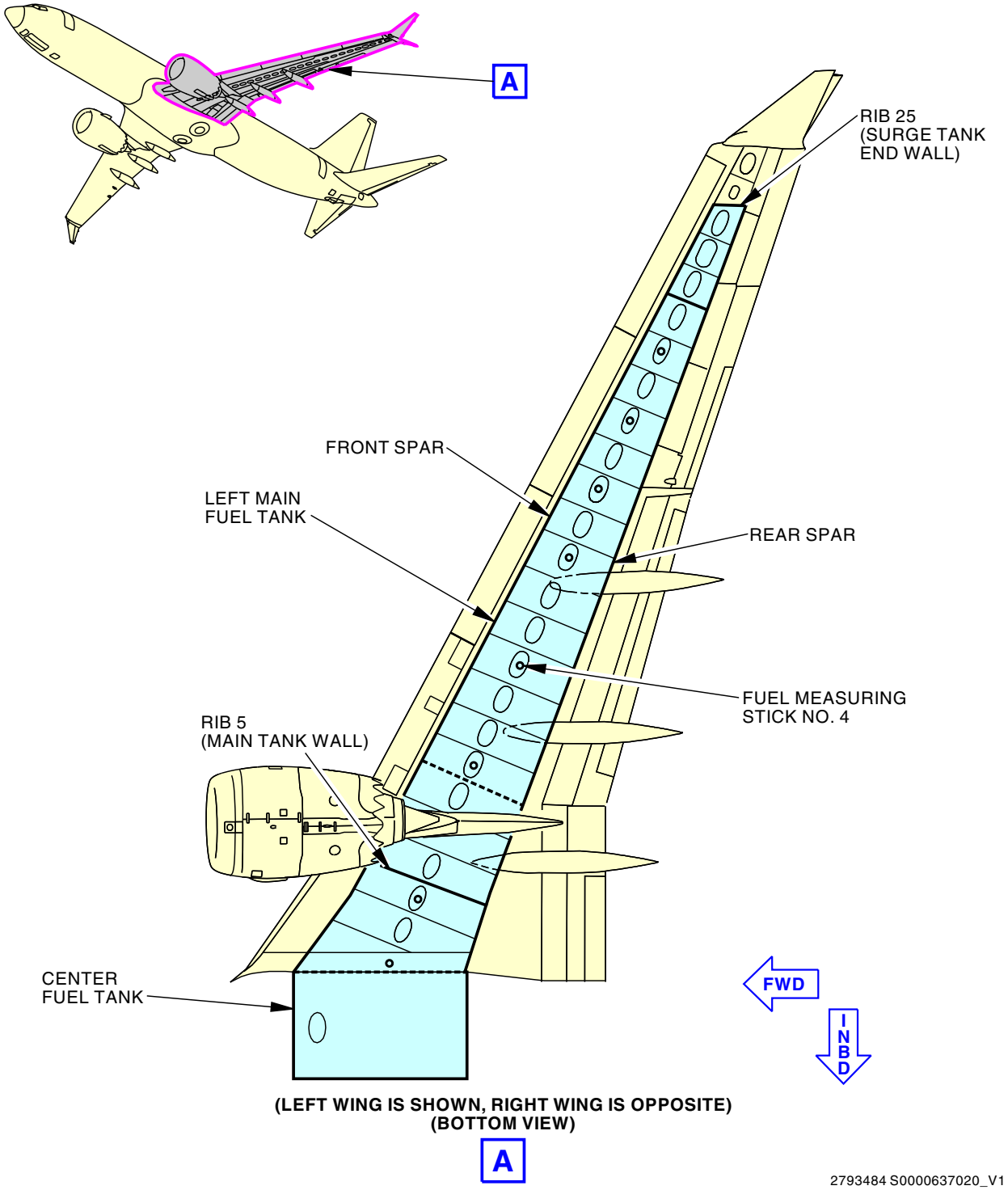
(2) Make sure that all ice and frost is removed from leading edge devices, control surfaces, tab surfaces, winglets (if installed), and balance panel cavities prior to takeoff.

SUBTASK 05-51-92-660-003

(3) If ice or frost re-forms on the wings prior to takeoff, do the step (1) of the above procedure to determine if the frost is acceptable for flight or to remove ice and frost from the wings.

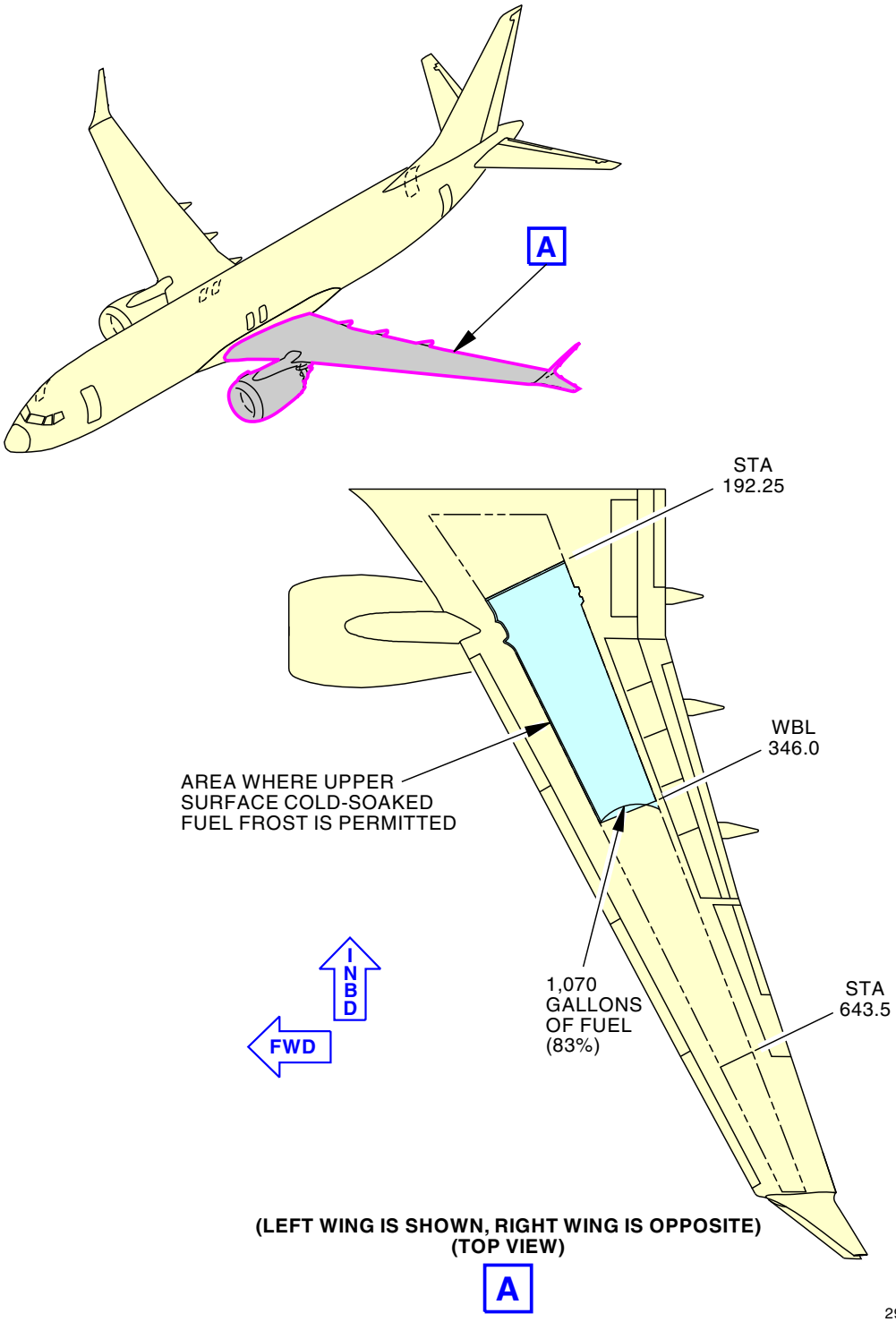
END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Ice/Frost Examination Areas
Figure 201/05-51-92-990-801

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Allowable Cold-Soaked Fuel Frost - Upper Wing Surface
Figure 202/05-51-92-990-802

ECCN 9E991 BOEING PROPRIETARY - See title page for details

DRY CHEMICAL FIRE EXTINGUISHER USED - MAINTENANCE PRACTICES

1. General

A. This procedure contains one task to clean and inspect the aircraft after a dry chemical fire extinguisher has been used. This task is necessary any time a dry chemical fire extinguisher is discharged.

(1) If a dry chemical fire extinguisher was used to extinguish a landing gear brake fire, refer to High Energy Stop, TASK 05-51-07-210-801, to inspect the landing gear.

B. Dry chemical extinguishers can cause extensive corrosion damage to airplane structure, electrical systems, carbon brakes, and electronic equipment. Dry chemical extinguisher residue is difficult to clean up. Dry chemical fire extinguishers should only be used for airplane fire-fighting if there are no other extinguishers available and there is imminent danger to property or personnel.

C. Disassembly of aluminum airplane structure may be necessary for cleanup and corrosion prevention after use of a dry chemical fire extinguisher. Electrical and electronic equipment may need to be scrapped after being contaminated with dry chemical extinguishing agent.

TASK 05-51-95-100-801

2. Cleaning After Dry Chemical Fire Extinguisher Used

A. General

(1) This task includes the steps to clean and inspect the airplane after a dry chemical fire extinguisher has been used.

(2) If a dry chemical fire extinguisher was used to extinguish a landing gear brake fire, refer to AMM 05-51 High Energy Stop to inspect the landing gear. All carbon brake assemblies that have visible dry chemical fire extinguisher residue need to be removed from the airplane, and dispositioned per the applicable instructions in the carbon brake supplier’s Component Maintenance Manual (CMM).

(3) If a dry chemical fire extinguisher was used to extinguish an engine fire, refer to AMM 71-00 Power Plant for the cleaning of external areas of the engine (engine cowls open or closed). All engine parts that cannot be cleaned when attached will need to be removed and cleaned per the applicable instructions in the engine supplier’s Component Maintenance Manual (CMM).

(4) If necessary, review the manufacturer's Material Safety Data Sheets (MSDS) for the particular fire extinguishing agents that were used for additional recommendations.

(5) If a dry chemical fire extinguisher was used to extinguish the engines fire, refer to AMM 71-00 or AMM 72-00 Inspection After an Engine Fire.

(6) If a dry chemical fire extinguisher was used to extinguish the APU fire, refer to AMM 49-11-00-6 Inspection After an APU Fire.

B. References

Reference	Title
SWPM 20-60-01	Cleaning of Electrical Connectors

C. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

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Reference	Description
COM-2618	Cleaner - Vacuum Part #: 106542 Supplier: 3LFF2 Part #: 98606 Supplier: 08531 Part #: AVQ250-2 Supplier: U1761 Part #: RSV150 Supplier: $1291 Opt Part #: 02146A Supplier: 0A5X2 Opt Part #: 44SPEC Supplier: 0Y8U0 Opt Part #: 655406-7M Supplier: 0Y8U0 Opt Part #: BP80 Supplier: $0373 Opt Part #: C-39485-41 Supplier: 16893 Opt Part #: C-39485-42 Supplier: 16893 Opt Part #: R80 Supplier: $0373 Opt Part #: RSV130 Supplier: $1291 Opt Part #: WD80 Supplier: $0373
STD-739	Respirator - Half-Mask, Air Purifying (with filters/cartridges)
STD-6087	Brush - Acid Resistant
STD-6935	Air Source - Regulated, Dry Filtered, Compressed 30 PSIG Maximum Pressure

D. Consumable Materials

Reference	Description	Specification
B00095	Compound - Sodium Bicarbonate	ASTM D928
G50138	Cloth - Soft Cotton	
G50305	Sheeting - Plastic, Polyethylene	
G50412	Paper - Litmus (Used to find the acidity or alkalinity of a liquid solution)	
G50933	Cloth - Cleaning, Low-Lint Cloth (General Use)	A-A-59323 Type II (Supersedes MIL-C-85043)

E. Prepare to Clean

CAUTION

DO NOT USE WATER ON DRY CHEMICAL FIRE EXTINGUISHING AGENTS. THESE AGENTS CAN MIX WITH WATER AND MAKE A FLUID COMPOUND THAT CAUSES CORROSION. THIS CAN CAUSE DAMAGE TO THE EQUIPMENT.

SUBTASK 05-51-95-110-001

(1) Use a half-mask respirator, STD-739, or equivalent respiratory protection.

SUBTASK 05-51-95-110-002

(2) Install plastic sheeting, G50305 or an equivalent barrier as necessary to prevent the airborne dry chemical agent from further contaminating the surrounding area.

SUBTASK 05-51-95-010-001

(3) Get access to all areas where smoke and the fire extinguishing agent could have possibly contaminated to facilitate the cleaning process.

(a) Joints that cannot be cleaned in the assembled state must be disassembled for cleaning.

SUBTASK 05-51-95-110-009

(4) Prepare the neutralizing solution according to the type of fire extinguishing agent.

(a) Use a 2% vinegar and 98% hot water solution to clean a potassium bicarbonate (purple in color) or sodium bicarbonate (light blue in color) dry chemical extinguishing agent.

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(b) Use a solution with compound, B00095 (baking soda) and hot water to clean monoammonium phosphate (yellow in color) dry chemical extinguishing agent.

NOTE: The extinguishing agents are potentially acidic when exposed to moisture.

F. Procedure

SUBTASK 05-51-95-140-001

(1) Do these steps to remove as much of the dry, loose agent as possible:

(a) Use a vacuum cleaner, COM-2618 with a HEPA filter to remove the unmelted, dry chemical from all accessible surfaces, including structure, tubing, wiring, and systems.

(b) Wipe down all surfaces with a soft cotton cloth, G50138 and continue to use the vacuum to clean the surfaces after they are wiped down.

(c) Any high strength steel parts exposed to the dry chemical agent must be cleaned first.

(d) It is acceptable to use a regulated air source, STD-6935 at 30 psi (207 kPa) or less to loosen the material.

SUBTASK 05-51-95-110-004

(2) Apply the solution and clean with an acid resistant brush, STD-6087, low-lint cleaning cloth, G50933 or sprayer nozzle.

(a) Make sure that the solution penetrates the unsealed faying surface joints.

(b) If there are unsealed faying surfaces, it is recommended to disassemble them and clean the individual components.

SUBTASK 05-51-95-110-005

(3) Apply the solution until the bubbles stop.

NOTE: When the bubbles stop, the acid has become neutral.

SUBTASK 05-51-95-110-006

(4) Allow the solution to remain for an additional 5 minutes after the bubbles stop.

SUBTASK 05-51-95-170-001

(5) Do these steps to remove the neutralized solution:

(a) Rinse the area with fresh water.

(b) Wipe up residual material with a low-lint cleaning cloth, G50933, or equivalent.

(c) Air dry the area immediately using a regulated air source, STD-6935.

SUBTASK 05-51-95-110-007

(6) Repeat the wash and rinse steps as many times as is necessary to pass litmus paper pH test below.

SUBTASK 05-51-95-110-008

(7) Do a test of the area with litmus paper, G50412. The pH factor must be between about 7 and 9.

(a) If the pH is less than 7 (acidic), repeat the cleaning procedure.

SUBTASK 05-51-95-420-001

(8) Replace the parts in areas where the fire has caused the dry chemical extinguishing agent to melt.

NOTE: Melted dry chemical extinguishing agent will deeply penetrate joints and cause corrosion issues. It can also compromise the heat treatment of parts.

(a) If you suspect that the structure has heat damage, review SRM 51-20–03 for the appropriate actions.

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SUBTASK 05-51-95-020-001

(9) If there is evidence of dry chemical agent on electrical equipment, remove the equipment to clean, inspect, and test it.

(a) After you reinstall the equipment, perform the appropriate functional test.

SUBTASK 05-51-95-020-002

(10) Remove any equipment that has fire damage.

SUBTASK 05-51-95-140-002

(11) If control cables are affected, clean using only a dry cloth.

(a) Lubricate the cable as necessary.

SUBTASK 05-51-95-140-003

(12) Do these steps to clean affected electrical wire bundles and external connector surfaces:

WARNING OBEY THE MANUFACTURER'S PROCEDURES WHEN YOU DO EZAP MAINTENANCE, OR MAINTENANCE THAT HAS AN EFFECT ON EWIS. IF YOU DO NOT OBEY THE PROCEDURES, IT CAN INCREASE THE RISK OF AN IGNITION SOURCE FOR FIRES. INJURIES TO PERSONS, AND DAMAGE TO EQUIPMENT CAN OCCUR.

(a) Follow the instructions in AMM 20-60 for EWIS Protection and Cleaning.

(b) Clean external surfaces prior to disconnecting connectors.

(c) Place protective covers over the ends of connectors immediately after disconnecting them.

(d) If necessary, remove bundle ties to vacuum up agent that may have entered in between the wiring.

SUBTASK 05-51-95-140-004

(13) Do these steps to clean open connectors:

(a) Use a vacuum to remove dry chemical agent from the area.

(b) Wipe down all surfaces.

(c) Follow the steps in SWPM 20-60-01.

SUBTASK 05-51-95-140-005

(14) Do these steps to clean aluminum hydraulic tubing:

(a) Remove the tubing clamps.

(b) Use the vacuuming and wiping method to remove the extinguishing agent from the tubing.

(c) Use the cleaning steps above to neutralize any remaining surface residue and perform the pH check.

(d) Remove the tubing clamp block components and apply same cleaning process as above.

(e) Replace any contaminated cushioned-type loop or saddle clamps with new clamps.

G. Put the Airplane Back to Its Usual Condition

SUBTASK 05-51-95-210-001

(1) It is recommended to review AMM 05-51 Volcanic Ash Conditional Inspection as a guide for inspection, if any other areas of the datum airplane such as landing gear or air conditioning equipment were exposed.

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SUBTASK 05-51-95-620-001

(2) Reapply any corrosion prevention material that was removed during the cleaning process.

SUBTASK 05-51-95-210-002

(3) It is recommended to perform a one-time general visual inspection at 7 to 10 days for signs of corrosion or evidence of dry chemical extinguishing agent.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

MAIN WHEEL WELL CORROSION PROTECTION OF ELECTRICAL CONNECTORS

1. General

A. This procedure contains a task to inspect the electrical connectors from corrosion in the Main Wheel Well.

B. Corrosion is an indicator that the electrical connectors may have been exposed to potassium formate and/or potassium acetate. Electrical shorting of the electrical connectors in the wheel well can cause incorrect function of critical systems necessary for safe flight.

24-CMR-01

TASK 05-51-96-211-801

2. Electrical Connectors in the Main Wheel Well Detail Inspection

(Figure 601)

NOTE: This procedure is a scheduled maintenance task.

A. References

Reference	Title
24-22-00-860-802	Remove Electrical Power (P/B 201)
27-51-00-740-803	Trailing Edge Flap Load Relief System BITE Test (P/B 501)
27-51-02-720-801	Trailing Edge Flap Bypass Valve Functional Test (P/B 501)
27-61-12-400-803	Spoiler Shutoff Valve Test (P/B 501)
27-81-91-720-801	Leading Edge Standby Shutoff Valve Test (P/B 201)
29-11-81-710-802	EDP Supply Shutoff Valve Operational Test (P/B 501)
29-33-21-400-801	Standby Reservoir Low Quantity Switch Installation (P/B 401)
32-09-01-710-801	Main Landing Gear Air/Ground Sensor Operational Test (P/B 501)
32-42-00-710-803	Transducer Operational Test (P/B 501)
32-42-00-720-803	Antiskid Valve Operational Test (P/B 501)
32-61-21-710-801	Main Landing Gear Up-and-Locked Sensor Operational Test (P/B 501)
32-61-31-710-801	Main Landing Gear Down-and-Locked Sensor Operational Test (P/B 501)
78-31-00-700-802-G00	Thrust Reverser System Normal Operational Test (P/B 501)
SWPM 20-20-00	ELECTRICAL BONDING PROCESSES
SWPM 20-25-00	SHIELDED CABLES
SWPM 20-60-02	Replacement of Contacts
SWPM 20-60-03	Special Protection of Electrical Connectors
SWPM 20-60-09	Standard Wiring Practices Manual
SWPM 20-61-11	MIL-C-26500 Front Release Connectors

B. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

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Reference	Description
COM-614	Bonding Meters - Non-Intrinsically Safe (For use in outside Class I, Divisions I & II non-hazardous locations. For hazardous locations, use COM-1550). Part #: 247000 Supplier: 00426 Part #: 620LK Supplier: 1CRL2 Part #: BLR-0003-XX Supplier: KC432 Part #: BT51 Supplier: 00426 Part #: M1 Supplier: 3AD17 Part #: M1B Supplier: 3AD17 Part #: T477W (C15292) Supplier: 06659 Opt Part #: 247001 Supplier: 00426
COM-1550	Bonding Meter - Approved, Intrinsically Safe (Approved for use in Class I, Divisions I & II hazardous (classified) locations. Outside these hazardous locations, COM-614 can be used in lieu of COM-1550). Part #: 620LK Supplier: 1CRL2 Part #: M1 Supplier: 3AD17 Part #: M1B Supplier: 3AD17 Part #: T477W (C15292) Supplier: 06659
STD-6402	Swab - Cotton

C. Consumable Materials

Reference	Description	Specification
B00130	Alcohol - Isopropyl	TT-I-735
G50170	Compound - Corrosion Inhibiting Compound, Soft Film, Exterior Use - Ardrox AV25	
G50171	Compound - Corrosion Inhibiting Compound, Interior Application - D5026NS or ZC-026	

D. Location Zones

Zone	Area
133	Main Landing Gear Wheel Well, Body Station 663.75 to Body Station 727.00 - Left
134	Main Landing Gear Wheel Well, Body Station 663.75 to Body Station 727.00 - Right

E. Procedure

SUBTASK 05-51-96-860-002

(1) Do this task: Remove Electrical Power, TASK 24-22-00-860-802.

SUBTASK 05-51-96-010-001

(2) Get access to the wheel well of the main landing gear.

SUBTASK 05-51-96-211-001

(3) Measure the resistance of the D4850J/P connectors [11] as follows:

(a) Visually check the connectors [11].

1) Make sure that the connectors [11] are not loose or damaged.

2) Make sure that the plug backshells [4] are not loose or damaged.

3) Make sure that the strain relief is not loose.

(b) Measure the DC resistance between the connector receptacle backshell [1] and the airplane structure [3] or bracket disconnect (SWPM 20-20-00).

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1) Use intrinsically safe approved bonding meter, COM-1550.

NOTE: The non-intrinsically safe bonding meter, COM-614, can be alternative to the intrinsically safe approved bonding meter, COM-1550.

2) Make sure that the maximum resistance is less than 10.0 milliohms.

3) If the resistance measurements are greater than the specified milliohms, refer to SWPM 20-20-00, SWPM 20-25-00, SWPM 20-60-09 and SWPM 20-61-11 for repair instructions.

(c) Measure the DC resistance between the connector plug backshell [4] and the connector receptacle [2] (SWPM 20-20-00).

1) Use intrinsically safe approved bonding meter, COM-1550.

NOTE: The non-intrinsically safe bonding meter, COM-614, can be alternative to the intrinsically safe approved bonding meter, COM-1550.

2) Make sure that the maximum resistance is less than 15.0 milliohms.

3) If the resistance measurements are greater than the specified milliohms, refer to SWPM 20-20-00, SWPM 20-25-00, SWPM 20-60-09 and SWPM 20-61-11 for repair instructions.

(d) Measure the DC resistance between the connector plug backshell [4] and the connector plug [5] (SWPM 20-20-00).

1) Use intrinsically safe approved bonding meter, COM-1550.

NOTE: The non-intrinsically safe bonding meter, COM-614, can be alternative to the intrinsically safe approved bonding meter, COM-1550.

2) Make sure that the maximum resistance is less than 5.0 milliohms.

3) If the resistance measurements are greater than the specified milliohms, refer to SWPM 20-20-00, SWPM 20-25-00, SWPM 20-60-09 and SWPM 20-61-11 for repair instructions.

SUBTASK 05-51-96-211-002

(4) Examine the connectors [11] (D762, D4850J/P, D46038J/P, D764, D1582, D1014, and D46020J/P) and plug backshells [4] for exterior corrosion as follows:

(a) Examine the outer surface of the connectors [11] and plug backshells [4] for corrosion material deposits.

1) If corrosion is visible, refer to SWPM 20-20-00, SWPM 20-25-00, SWPM 20-60-09 and SWPM 20-61-11 for repair instructions.

(b) Examine the connectors [11] for signs of corrosion.

1) Look for the presence of moisture, corrosion pits and white-colored material buildup.

NOTE: Accumulation of white-colored material is an indication of corrosion.

(c) Examine the backshell for signs of corrosion.

1) Look for the presence of corrosion pits and white-colored material buildup.

NOTE: Accumulation of white-colored material is an indication of corrosion.

2) If there are signs of corrosion on the backshell, estimate the area of corrosion.

a) If the cumulative area of corrosion is less than 10% of the total backshell surface area, clean the backshell with a cotton swab, STD-6402, moistened with alcohol, B00130

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b) If the cumulative area of corrosion is greater than 10% of the total backshell surface area, replace the connector and backshell per SWPM 20-60-03 and SWPM 20-60-09.

SUBTASK 05-51-96-211-003

(5) Examine the connectors [11] (D762, D4850J/P, D46038J/P, D764, D1582, D1014, and D46020J/P), backshells and contacts for interior corrosion or fluid contamination as follows:

(a) Disconnect the connectors [11] from the LRU connectors [9].

(b) Examine the LRU connectors [9] for signs of corrosion.

1) Look for the presence of moisture, corrosion pits, white-colored material buildup.

NOTE: Accumulation of white-colored material is an indication of corrosion.

(c) Examine the LRU connector contacts [8] for signs of corrosion.

1) Look for exposure of the copper base metal or blue-green deposits that indicate the presence of copper corrosion.

2) Look for a black or reddish discoloration of the gold-plated contacts.

(d) If there are no signs of corrosion, clean the LRU connectors [9] and LRU connector contacts [8] with a cotton swab, STD-6402, moistened with alcohol, B00130.

(e) If there are signs of corrosion, replace the Line Replaceable Unit (LRU).

(f) Apply D5026NS or ZC-026 compound, G50171, to the pin contacts of the receptacle of LRU connector [9].

1) Spray with a 2-4 second burst 4 in. (102 mm) - 8 in. (203 mm) away from the LRU connector [9] (SWPM 20-60-03).

(g) Examine the connector contacts [10] for signs of corrosion.

1) Look for exposure of the copper base metal or blue-green deposits that indicate the presence of copper corrosion.

2) If there are no signs of corrosion, clean the connector contacts [10] with a cotton swab, STD-6402, moistened with alcohol, B00130.

3) If there are signs of corrosion, replace all connector contacts [10] in the connector [11] per SWPM 20-60-02.

(h) Apply D5026NS or ZC-026 compound, G50171, to the connectors [11] (SWPM 20-60-03).

1) Spray with a 2-4 second burst 4 in. (102 mm) - 8 in. (203 mm) away from the connector [11].

(i) Re-connect the connectors [11] to the LRU connectors [9].

(j) Measure the DC resistance between the D4850J/P connector receptacle backshell [1] and the airplane structure [3] or bracket disconnect (SWPM 20-20-00).

1) Use intrinsically safe approved bonding meter, COM-1550.

NOTE: The non-intrinsically safe bonding meter, COM-614, can be alternative to the intrinsically safe approved bonding meter, COM-1550.

2) Make sure that the maximum resistance is less than 10.0 milliohms.

3) If the resistance measurements are greater than the specified milliohms, refer to SWPM 20-20-00, SWPM 20-25-00, SWPM 20-60-09 and SWPM 20-61-11 for repair instructions.

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(k) Measure the DC resistance between the D4850J/P connector plug backshell [4] and the connector receptacle [2] (SWPM 20-20-00).

1) Use intrinsically safe approved bonding meter, COM-1550.

NOTE: The non-intrinsically safe bonding meter, COM-614, can be alternative to the intrinsically safe approved bonding meter, COM-1550.

2) Make sure that the maximum resistance is less than less than 15.0 milliohms.

3) If the resistance measurements are greater than the specified milliohms, refer to SWPM 20-20-00, SWPM 20-25-00, SWPM 20-60-09 and SWPM 20-61-11 for repair instructions.

(l) Measure the DC resistance between the D4850J/P connector plug backshell [4] and the connector plug [5] (SWPM 20-20-00).

1) Use intrinsically safe approved bonding meter, COM-1550.

NOTE: The non-intrinsically safe bonding meter, COM-614, can be alternative to the intrinsically safe approved bonding meter, COM-1550.

2) Make sure that the maximum resistance is less than 5.0 milliohms.

3) If the resistance measurements are greater than the specified milliohms, refer to SWPM 20-20-00, SWPM 20-25-00, SWPM 20-60-09 and SWPM 20-61-11 for repair instructions.

(m) Do the following applicable operational tests:

1) For connector D762, do this task: EDP Supply Shutoff Valve Operational Test, TASK 29-11-81-710-802.

2) For connector D4850J/P, do this task: Spoiler Shutoff Valve Test, TASK 27-61-12-400-803.

3) For connector D46038J/P, do the following tasks:

a) Main Landing Gear Air/Ground Sensor Operational Test, TASK 32-09-01-710-801.

b) Main Landing Gear Up-and-Locked Sensor Operational Test, TASK 32-61-21-710-801.

c) Main Landing Gear Down-and-Locked Sensor Operational Test, TASK 32-61-31-710-801.

d) Antiskid Valve Operational Test, TASK 32-42-00-720-803.

e) Transducer Operational Test, TASK 32-42-00-710-803.

f) Thrust Reverser System Normal Operational Test, TASK 78-31-00-700-802-G00.

4) For connector D764, do this task: EDP Supply Shutoff Valve Operational Test, TASK 29-11-81-710-802.

5) For connector D1582, do this task: Trailing Edge Flap Load Relief System BITE Test, TASK 27-51-00-740-803.

6) For connector D1014, do this task: Trailing Edge Flap Bypass Valve Functional Test, TASK 27-51-02-720-801.

7) For connector D46020J/P do the following tasks:

a) Leading Edge Standby Shutoff Valve Test, TASK 27-81-91-720-801.

b) Installation Test in Standby Reservoir Low Quantity Switch Installation, TASK 29-33-21-400-801.

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<1> As an alternative, do these steps:

NOTE: This alternate test method eliminate the requirement to drain and refill the standby hydraulic system reservoir.

<a> Remove the plug D678 from the S49 Standby Hydraulic System Low Quantity Indication Switch.

<b> Apply a ground to pin 2 of the D678 plug.

<c> Make sure that the Standby Hydraulic System Low Oil Quantity light on the flight control panel (P5-3) comes on.

<d> Remove the ground from pin 2 of the D678 plug.

<e> Reconnect the plug to the S49 Standby Hydraulic System Low Quantity Indication Switch.

<f> Make sure that the Low Quantity light on the flight control panel (P5-3) goes out.

(n) Apply the Ardrox AV25 compound, G50170, to the mated connector assembly including the grommets and backshells.

1) Spray the connector assembly completely until the Ardrox AV25 compound, G50170, drips from it.

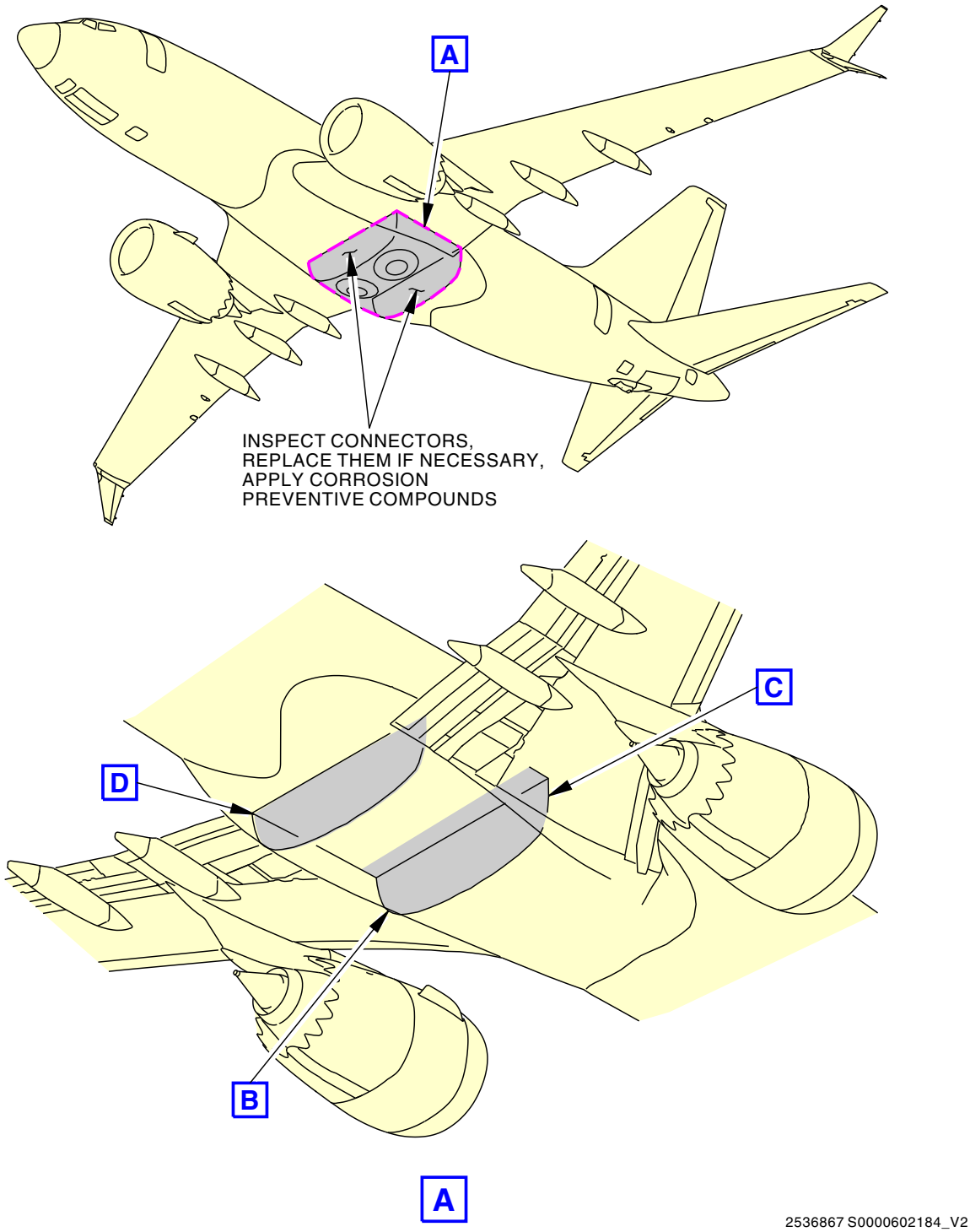
NOTE: Excess Ardrox AV25 compound, G50170, should not be removed.

SUBTASK 05-51-96-860-001

(6) Put the airplane back to its serviceable condition.

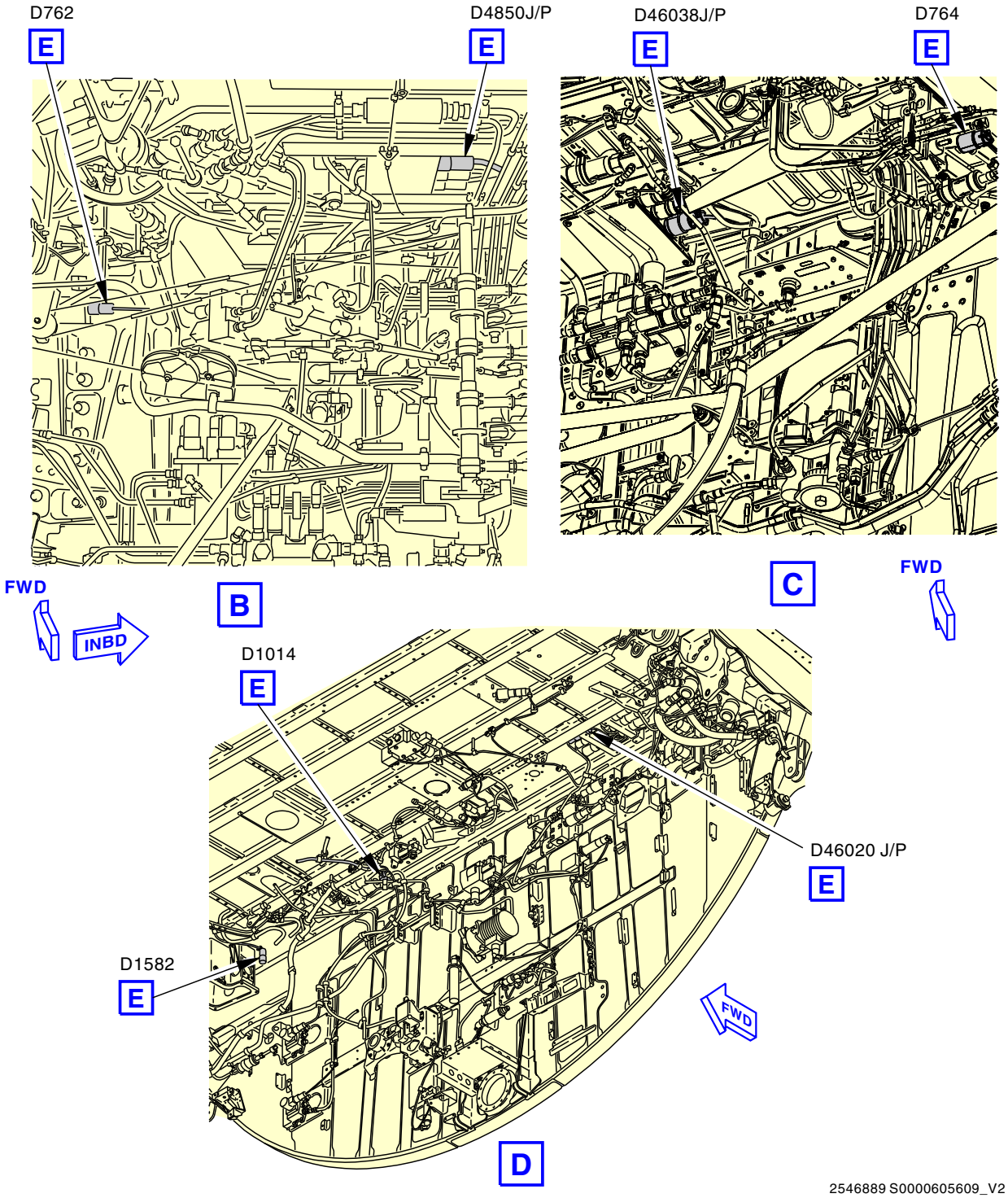
——— END OF TASK ———

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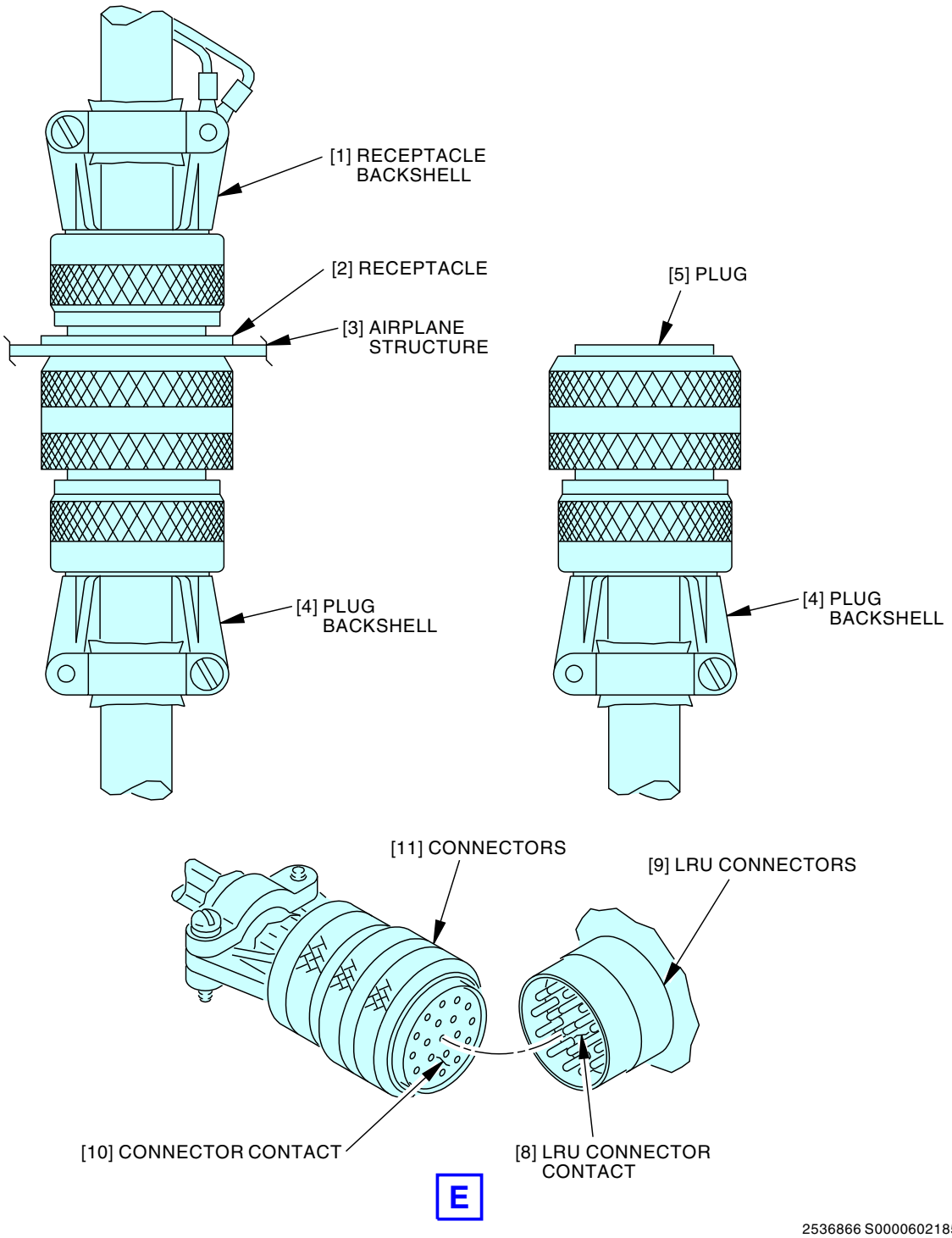
Electrical Connectors in the Main Wheel Well - Detail Inspection
Figure 601/05-51-96-990-801 (Sheet 1 of 3)

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Electrical Connectors in the Main Wheel Well - Detail Inspection
Figure 601/05-51-96-990-801 (Sheet 2 of 3)

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Electrical Connectors in the Main Wheel Well - Detail Inspection
Figure 601/05-51-96-990-801 (Sheet 3 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

External Doors Bonding Jumper

1. General

A. This procedure provides guidance information for an aircraft with missing or degraded bonding jumpers.

TASK 05-51-97-200-801

2. Bonding Jumper - Inspection/Check

A. References

Reference	Title
SWPM 20-20-10	Replacement of Ground Studs and Bonding Jumper Installation

B. Tools/Equipment

Reference	Description
STD-1231	Multimeter - Standard

C. Access Panels

Number	Name/Location
114AR	External Power Receptacle Door
145AL	Waste Service Door
146AR	Water Service Door
621GB	Refuel Valve Door - Slat Station 125
711AL	Forward Nose Wheel Door
712AR	Forward Nose Wheel Door

D. Degraded Bond Jumpers Damage Limits

SUBTASK 05-51-97-210-001

(1) The following instructions pertain to these exterior doors.

External Doors

Number	Name/Location
114AR	External Power Receptacle Door
145AL	Waste Service Door
146AR	Water Service Door
621GB	Refuel Valve Door - Slat Station 125
711AL	Forward Nose Wheel Door
712AR	Forward Nose Wheel Door

SUBTASK 05-51-97-210-002

(2) Do this check when the P-Static bonding jumpers are found to be broken, missing, or damaged:

(a) Inspect the door for multiple P-Static bonding jumpers.

1) When one or more bonding jumpers are found to be in good condition, it is acceptable to defer the repair of the broken, missing, or damaged bonding jumpers to the next maintenance interval.

(b) When there are no bonding jumpers in good condition, measure the resistance of the doors in the closed position using a multimeter, STD-1231.

NOTE: The Nose Landing Gear Doors measurements will be made in the open position (measure resistance from moveable hinge to primary structure).

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1) If the door to structure resistance is less than 1 Mega Ohm, then it is acceptable to defer the repair or replacement of the bonding jumpers to the next maintenance interval.

2) If the door to structure resistance is more than 1 Mega Ohm, repair or replace the broken, missing, or damaged bonding jumpers (Refer to SWPM 20-20-10 for repair).

——— END OF TASK ———

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NITROGEN GENERATION SYSTEM (NGS) OXYGEN ENRICHED AIR (OEA) EXHAUST PORT FUEL LEAK CONDITION - MAINTENANCE PRACTICES (CONDITIONAL INSPECTION)

1. General

A. This procedure has this task:

(1) A fuel leak conditional inspection of the nitrogen generation system.

TASK 05-51-98-210-801

2. Nitrogen Generation System (NGS) Fuel Leak Conditional Inspection

(Figure 201, Figure 202, and Figure 203)

A. General

(1) This task includes the steps to inspect the airplane after fuel is found leaking from the Nitrogen Generation System (NGS) Air Separation Module (ASM) Oxygen Enriched Air (OEA) exhaust port.

B. References

Reference	Title
28-11-31-400-801	Center Tank Access Door - Installation (P/B 401)
47-00-00-790-801	Leak Check of the Nitrogen Generation System (P/B 601)
47-00-00-800-801	Nitrogen Generation System Ground Operation (P/B 201)
47-11-01-000-801	Air Separation Module (ASM) - Removal (P/B 401)
47-11-01-420-801	Air Separation Module (ASM) Installation (P/B 401)
47-11-02-000-801	High Flow Valve Removal (P/B 401)
47-11-02-420-801	High Flow Valve Installation (P/B 401)
47-11-04-000-801	Overtemperature Shutoff Valve Removal (P/B 401)
47-11-04-400-801	Overtemperature Shutoff Valve Installation (P/B 401)
47-21-04-000-801	Primary Backflow Prevention Check Valve Removal (P/B 401)
47-21-04-000-802	Secondary Backflow Prevention Check Valve Removal (P/B 401)
47-21-04-400-801	Primary Backflow Prevention Check Valve Installation (P/B 401)
47-21-04-400-802	Secondary Backflow Prevention Check Valve Installation (P/B 401)
47-32-01-000-801	NGS Shutoff Valve Removal (P/B 401)
47-32-01-400-801	NGS Shutoff Valve Installation (P/B 401)
47-32-02-000-801	Ozone Converter Removal (P/B 401)
47-32-02-400-801	Ozone Converter Installation (P/B 401)
47-32-03-000-801	Heat Exchanger Removal (P/B 401)
47-32-03-400-801	Heat Exchanger Installation (P/B 401)
47-32-04-000-801	NGS Filter Assembly - Removal (P/B 401)
47-32-04-000-802	NGS Filter Element - Removal (P/B 401)
47-32-04-400-801	NGS Filter Assembly - Installation (P/B 401)
47-32-04-400-802	NGS Filter Element - Installation (P/B 401)
47-42-02-020-801	High Flow Valve Differential Pressure Sensor Removal (P/B 401)
47-42-02-400-801	High Flow Valve Differential Pressure Sensor Installation (P/B 401)

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(Continued)

Reference	Title
47-42-03-020-801	NGS Oxygen Sensor - Removal (P/B 401)
47-42-03-420-801	NGS Oxygen Sensor - Installation (P/B 401)
47-43-01-000-801	Filter Differential Pressure Switch Removal (P/B 401)
47-43-01-400-801	Filter Differential Pressure Switch Installation (P/B 401)
47-43-02-000-801	Thermal Switch Removal (P/B 401)
47-43-02-400-801	Thermal Switch Installation (P/B 401)
47-43-03-000-801	Temperature Sensor Removal (P/B 401)
47-43-03-400-801	Temperature Sensor Installation (P/B 401)
47-43-04-000-801	NGS Pressure Sensor Removal (P/B 401)
47-43-04-400-801	NGS Pressure Sensor Installation (P/B 401)
SOPM 20-30-03	General Cleaning Procedures

C. Location Zones

Zone	Area
131	Center Section Wing Box, Body Station 540.00 to Body Station 663.75 - Left
133	Main Landing Gear Wheel Well, Body Station 663.75 to Body Station 727.00 - Left
212	Flight Compartment - Right

D. Access Panels

Number	Name/Location
192BL	ECS Ram Air Inlet Mixing Duct Panel - Forward
192CL	ECS Access Door
192CR	ECS Access Door
531AB	Center Tank Access Door - Wing Station 168

E. Nitrogen Generation System (NGS) Fuel Leak Conditional Inspection

SUBTASK 05-51-98-860-002

(1) Open these circuit breakers and install safety tags:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
D	17	C01657	NITROGEN GENERATION CONTROL
E	15	C01680	NGS ALT PWR

SUBTASK 05-51-98-210-001

(2) If there is fuel leakage at the NGS ASM OEA exhaust port, do these steps:

NOTE: It is not necessary to do the installation/operational test after each component installation, as this will be done at the end of this task.

(a) Examine all NGS ducting and tubing downstream of the ASM [1] for fuel contamination (smell or visual).

1) Clean and dry all contaminated ducting and tubing downstream of the ASM [1] (with insulation blankets removed) per SOPM 20-30-03, Immersion Cleaning.

(b) Remove and install a new primary backflow prevention primmary check valve [11] (TASK 47-21-04-000-801 and TASK 47-21-04-400-801).

(c) Remove and install a new secondary backflow prevention secondary check valve [10] (TASK 47-21-04-000-802 and TASK 47-21-04-400-802).

(d) Examine these Line Replaceable Unit (LRU)s for fuel contamination (smell or visual).

ECCN 9E991 BOEING PROPRIETARY - See title page for details

1) If there is contamination, do these steps:

a) Remove and install a new high flow valve differential pressure sensor [2] (TASK 47-42-02-020-801 and TASK 47-42-02-400-801).

b) Remove and install a new NGS oxygen sensor [3] (TASK 47-42-03-020-801 and TASK 47-42-03-420-801).

NOTE: It is not necessary to do drain cap fuel leak check, when you install the new NGS oxygen sensor.

(e) Remove and install a new ASM [1] (TASK 47-11-01-000-801 and TASK 47-11-01-420-801).

(f) Remove and install a new high flow valve (TASK 47-11-02-000-801 and TASK 47-11-02-420-801).

SUBTASK 05-51-98-210-002

(3) If ducting/tubing/LRUs upstream of the ASM [1] are contaminated, do these steps:

(a) Clean and dry all contaminated ducting and tubing between the heat exchanger and ASM [1] (with insulation blankets removed) per SOPM 20-30-03, Immersion Cleaning.

(b) Examine these LRUs for fuel contamination (smell or visual).

1) If there is contamination, do these steps:

NOTE: It is not necessary to do the installation/operational test after each component installation, as this will be done at the end of this task.

a) Remove and install a new overtemperature shutoff valve [4] (TASK 47-11-04-000-801 and TASK 47-11-04-400-801).

b) Remove and install a new thermal switch [5] (TASK 47-43-02-000-801 and TASK 47-43-02-400-801).

c) Remove and install a new temperature sensor [6] (TASK 47-43-03-000-801 and TASK 47-43-03-400-801).

d) Remove and install a new filter differenial pressure switch [7] (TASK 47-43-01-000-801 and TASK 47-43-01-400-801).

e) Do the following steps for the NGS filter assembly [8]:

<1> Do this task: NGS Filter Assembly - Removal, TASK 47-32-04-000-801.

<2> Do this task: NGS Filter Element - Removal, TASK 47-32-04-000-802.

<3> Clean and dry the filter housing: SOPM 20-30-03, Immersion Cleaning.

<4> Install a new NGS filter element (TASK 47-32-04-400-802).

<5> Do this task: NGS Filter Assembly - Installation, TASK 47-32-04-400-801.

f) Do the following steps for the heat exchanger [9]:

<1> Do this task: Heat Exchanger Removal, TASK 47-32-03-000-801.

<2> Clean the heat exchanger [9]: SOPM 20-30-03, Immersion Cleaning.

<3> Examine the upstream of the heat exchanger [9] for fuel contamination (smell or visual).

<a> If there is contamination in the upstream of the heat exchanger [9], do this task: Heat Exchanger Installation, TASK 47-32-03-400-801 and continue to the steps below related to contamination upstream of the heat exchanger [9].

ECCN 9E991 BOEING PROPRIETARY - See title page for details

<b> If there is no contamination in the upstream of the heat exchanger [9], do this task: Heat Exchanger Installation, TASK 47-32-03-400-801 and continue to the step below that closes the Circuit Breakers.

SUBTASK 05-51-98-210-003

(4) If ducting/tubing/LRUs upstream of the heat exchanger [9] are contaminated, do these steps:

(a) Clean and dry all contaminated ducting and tubing upstream of the heat exchanger [9] (with insulation blankets removed): SOPM 20-30-03, Immersion Cleaning.

(b) Examine these LRUs for fuel contamination (smell or visual).

1) If there is contamination, do these steps:

NOTE: It is not necessary to do the installation/operational test after each component installation, as this will be done at the end of this task.

a) Remove and install a new ozone converter [12] (TASK 47-32-02-000-801 and TASK 47-32-02-400-801).

b) Remove and install a new NGS shutoff valve [13] (TASK 47-32-01-000-801 and TASK 47-32-01-400-801).

c) Remove and install a new NGS pressure sensor [14] (TASK 47-43-04-000-801 and TASK 47-43-04-400-801).

SUBTASK 05-51-98-860-001

(5) Remove the safety tags and close these circuit breakers:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
D	17	C01657	NITROGEN GENERATION CONTROL
E	15	C01680	NGS ALT PWR

SUBTASK 05-51-98-790-001

(6) Do this task: Leak Check of the Nitrogen Generation System, TASK 47-00-00-790-801.

(a) Repair the leaks that you find.

(b) Make sure that there are no BITE messages.

SUBTASK 05-51-98-710-001

(7) Do this task: Nitrogen Generation System Ground Operation, TASK 47-00-00-800-801.

(a) Make sure that the electrical test is good.

(b) Make sure that the oxygen sensor operates correctly.

F. Put the Airplane Back to Its Usual Condition

SUBTASK 05-51-98-410-001

(1) Close these access panels, if applicable:

Number	Name/Location
192BL	ECS Ram Air Inlet Mixing Duct Panel - Forward
192CL	ECS Access Door
192CR	ECS Access Door

SUBTASK 05-51-98-410-002

(2) Close the center tank access door, if applicable (TASK 28-11-31-400-801).

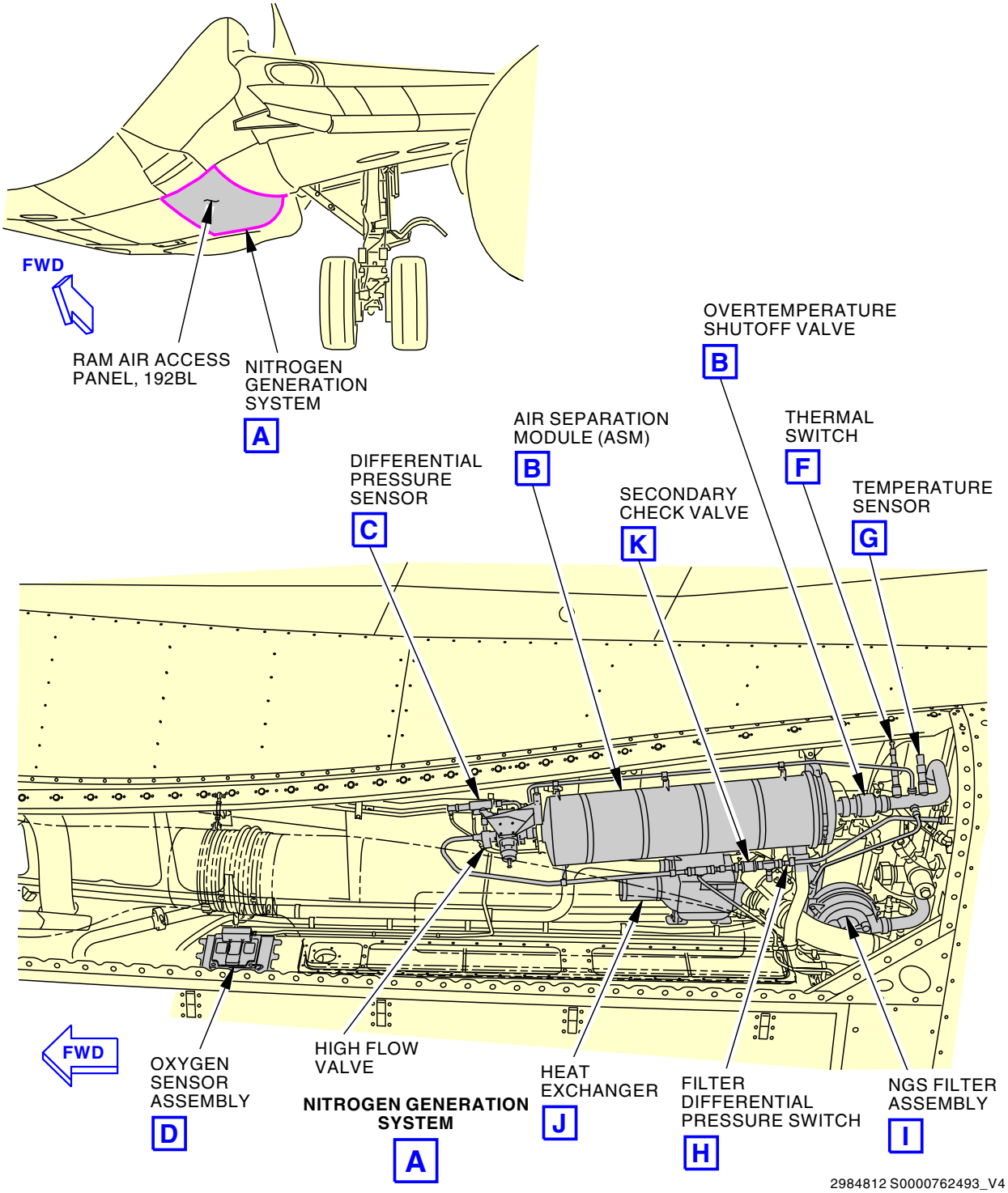
ECCN 9E991 BOEING PROPRIETARY - See title page for details

(a) Close this access panel:

Number	Name/Location
531AB	Center Tank Access Door - Wing Station 168

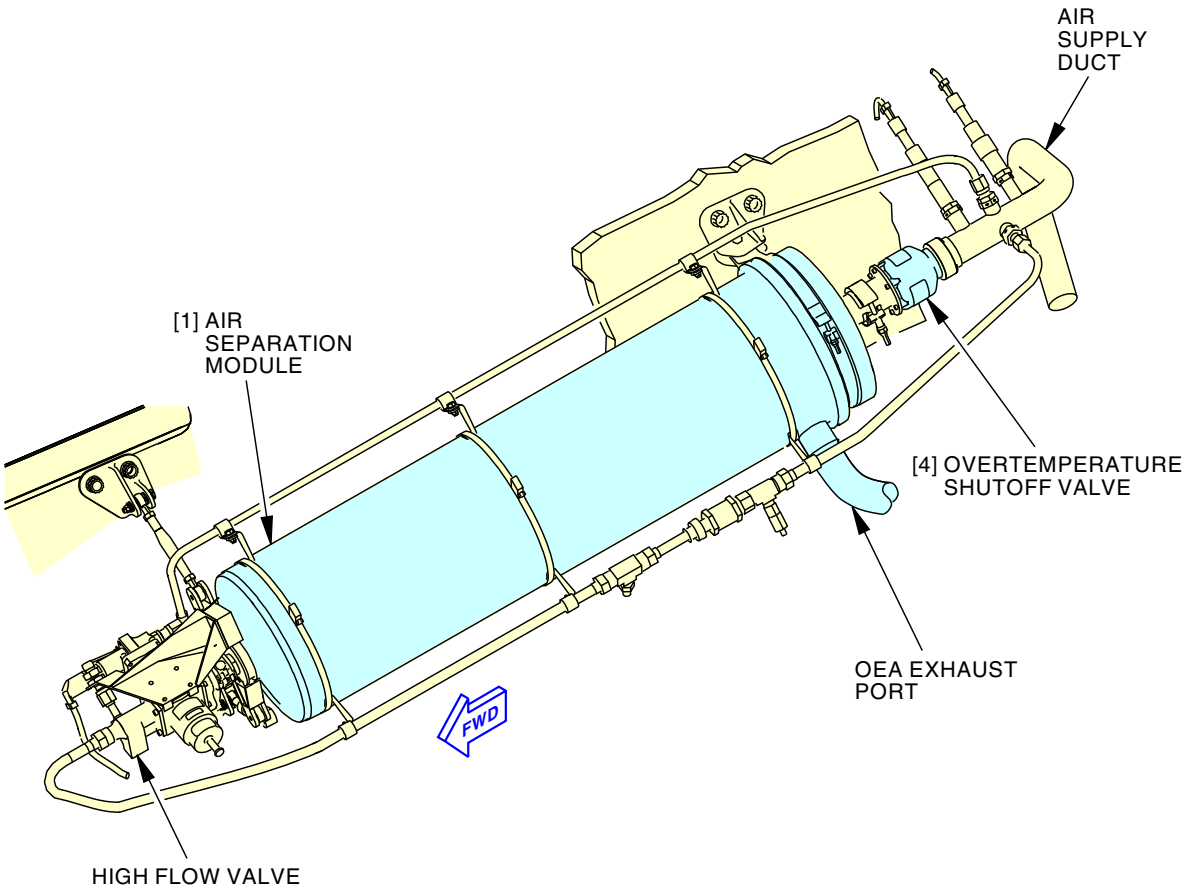
END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Nitrogen Generation System Fuel Leak Conditional Inspection
Figure 201/05-51-98-990-801 (Sheet 1 of 10)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



ASM AND OVERTEMPERATURE SHUTOFF VALVE (EXAMPLE)

B

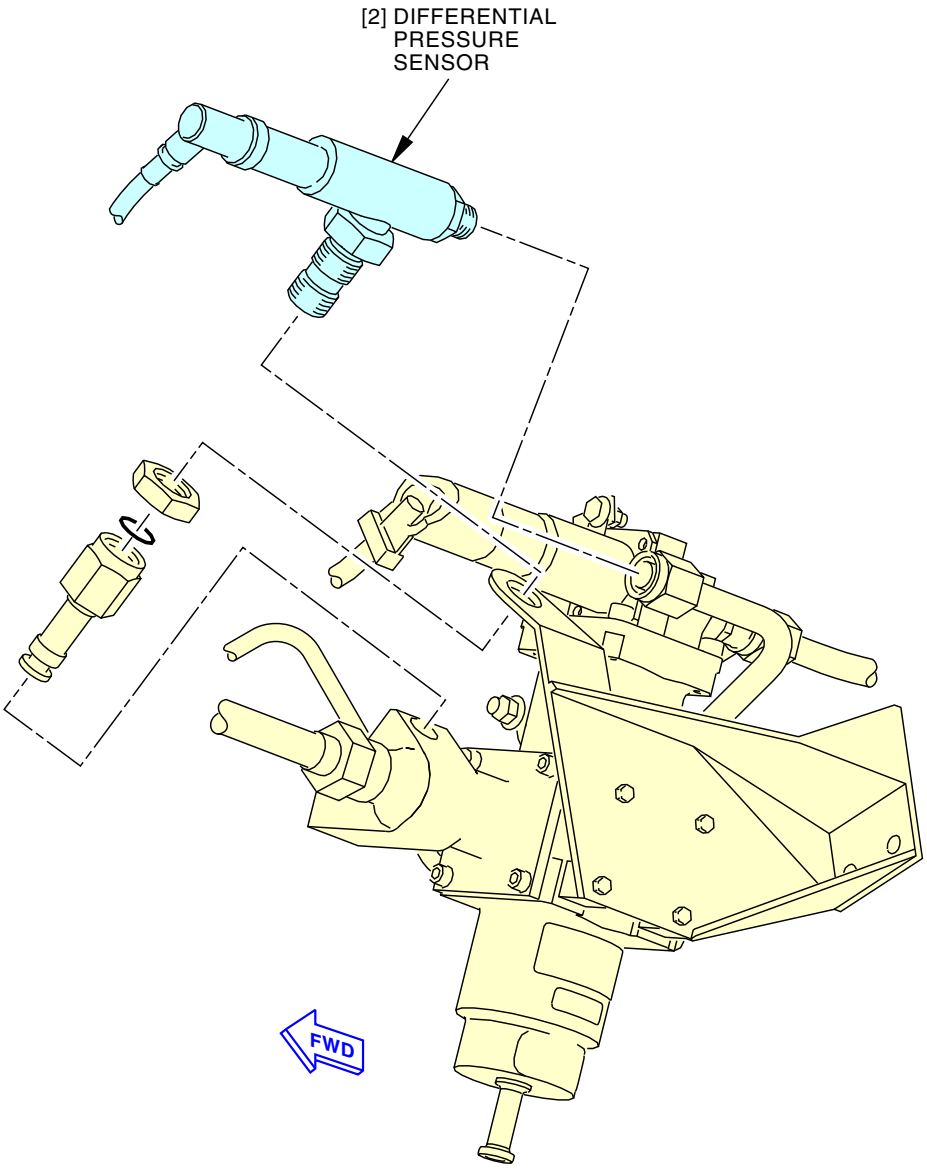
NOTE:

THE AIR SEPARATION MODULE IS SHOWN WITHOUT THE INSULATION.

2984816 S0000762799_V4

Nitrogen Generation System Fuel Leak Conditional Inspection
Figure 201/05-51-98-990-801 (Sheet 2 of 10)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



DIFFERENTIAL PRESSURE SENSOR (EXAMPLE)

C

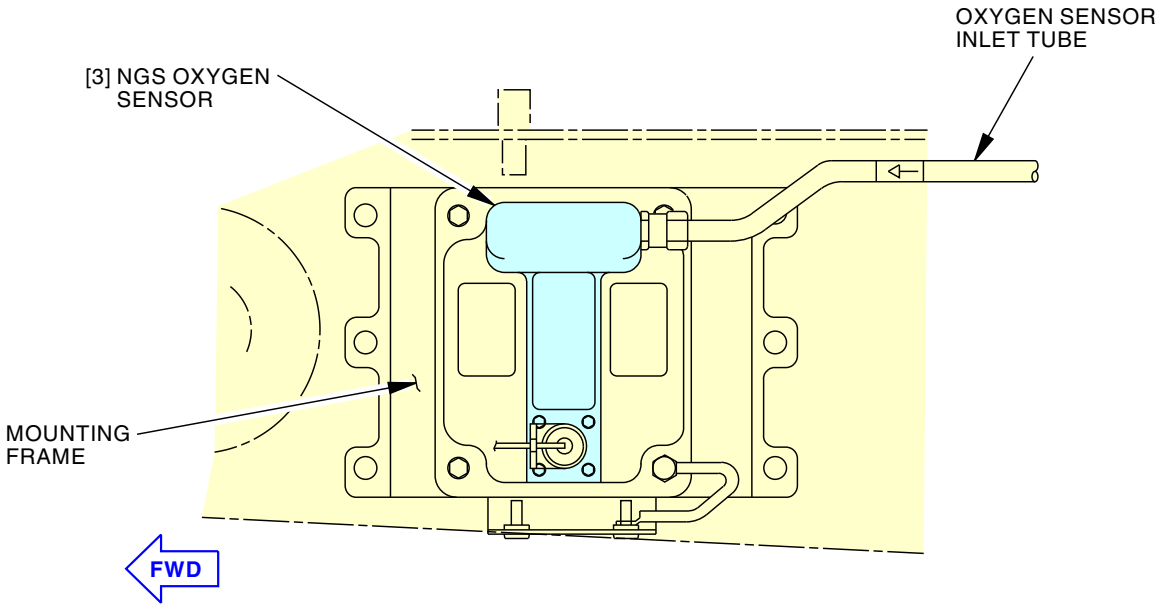
NOTE:

INSULATION NOT SHOWN FOR CLARITY

3001516 S0000777466_V1

Nitrogen Generation System Fuel Leak Conditional Inspection
Figure 201/05-51-98-990-801 (Sheet 3 of 10)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



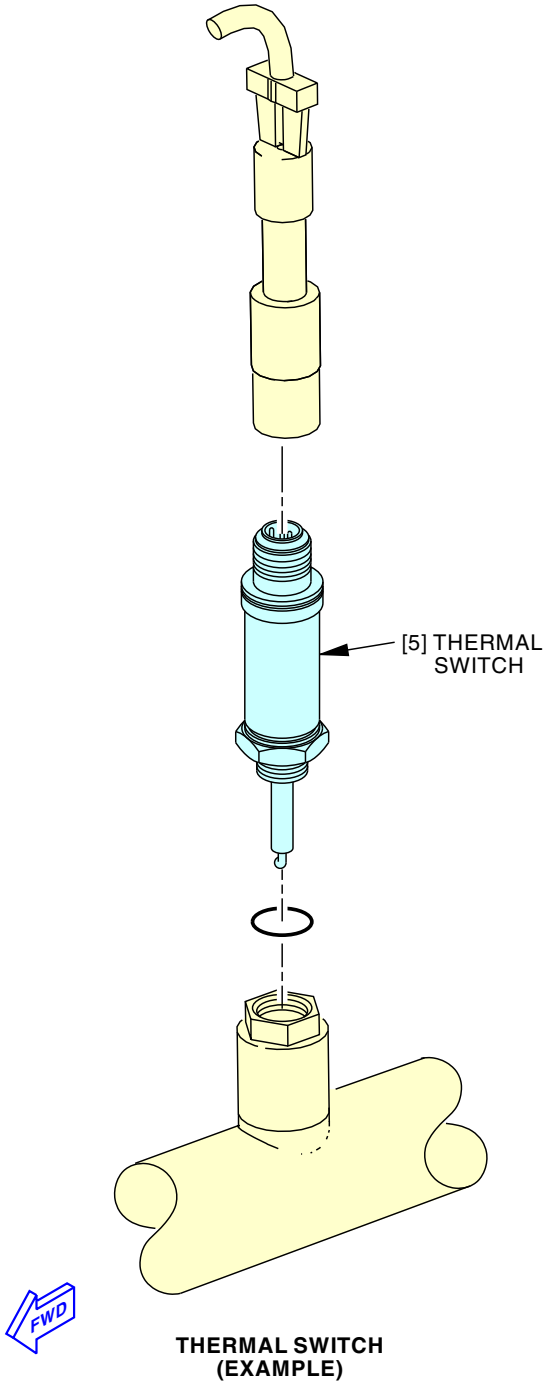
**OXYGEN SENSOR ASSEMBLY
(EXAMPLE)
(VIEW IN THE INBOARD DIRECTION)**

D

3001517 S0000777468_V1

**Nitrogen Generation System Fuel Leak Conditional Inspection
Figure 201/05-51-98-990-801 (Sheet 4 of 10)**

ECCN 9E991 BOEING PROPRIETARY - See title page for details



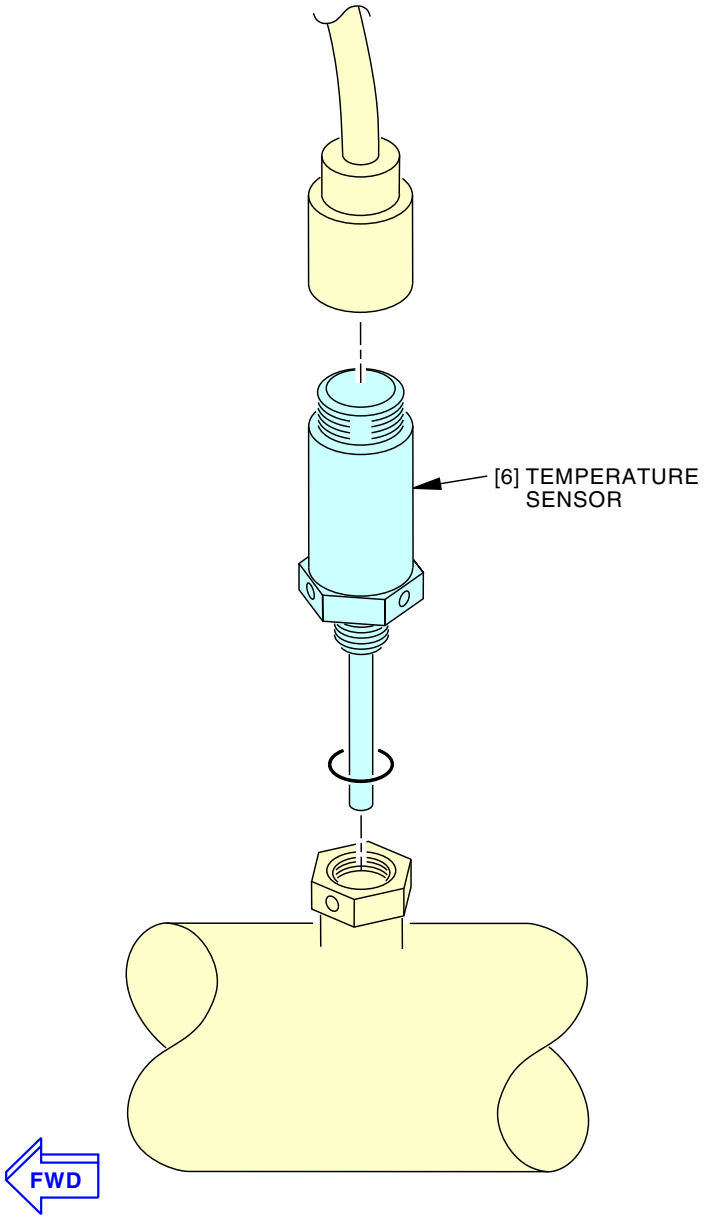
THERMAL SWITCH (EXAMPLE)

F

3001520 S0000777469_V1

Nitrogen Generation System Fuel Leak Conditional Inspection
Figure 201/05-51-98-990-801 (Sheet 5 of 10)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



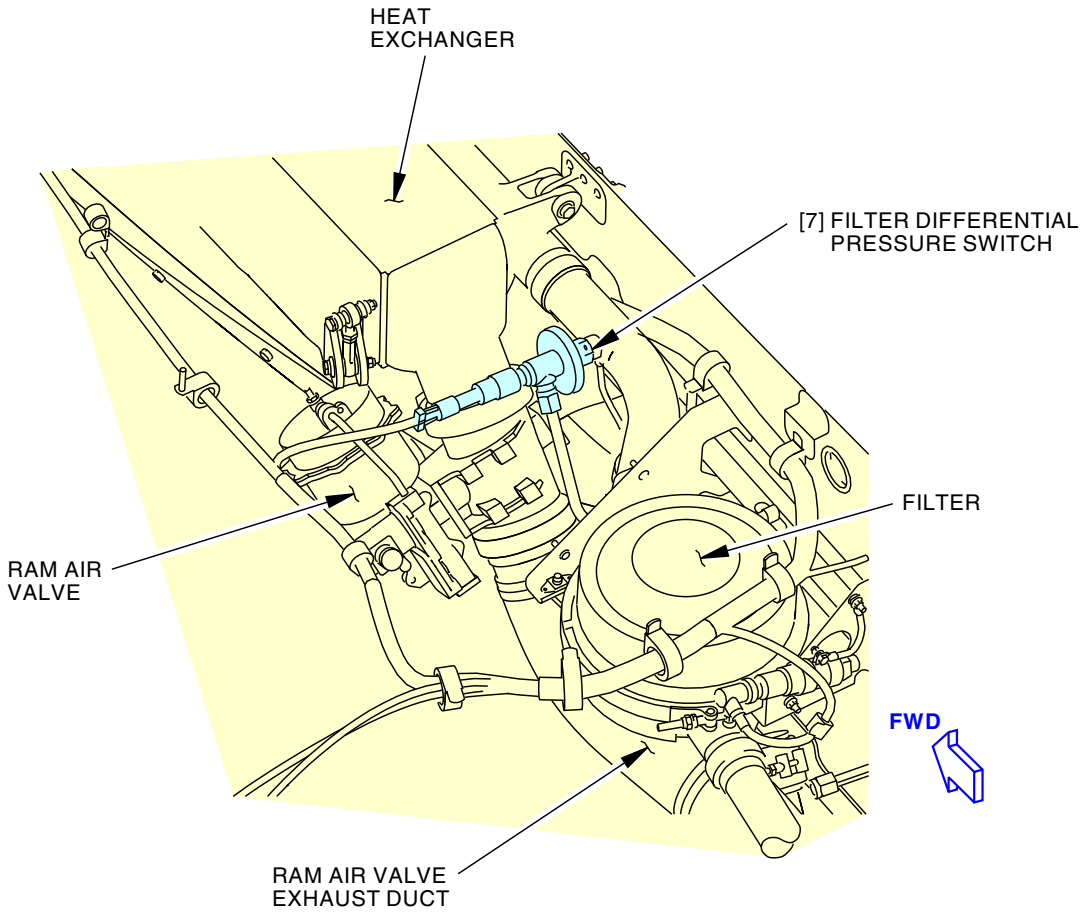
TEMPERATURE SENSOR (EXAMPLE)

G

3001521 S0000777470_V1

Nitrogen Generation System Fuel Leak Conditional Inspection
Figure 201/05-51-98-990-801 (Sheet 6 of 10)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



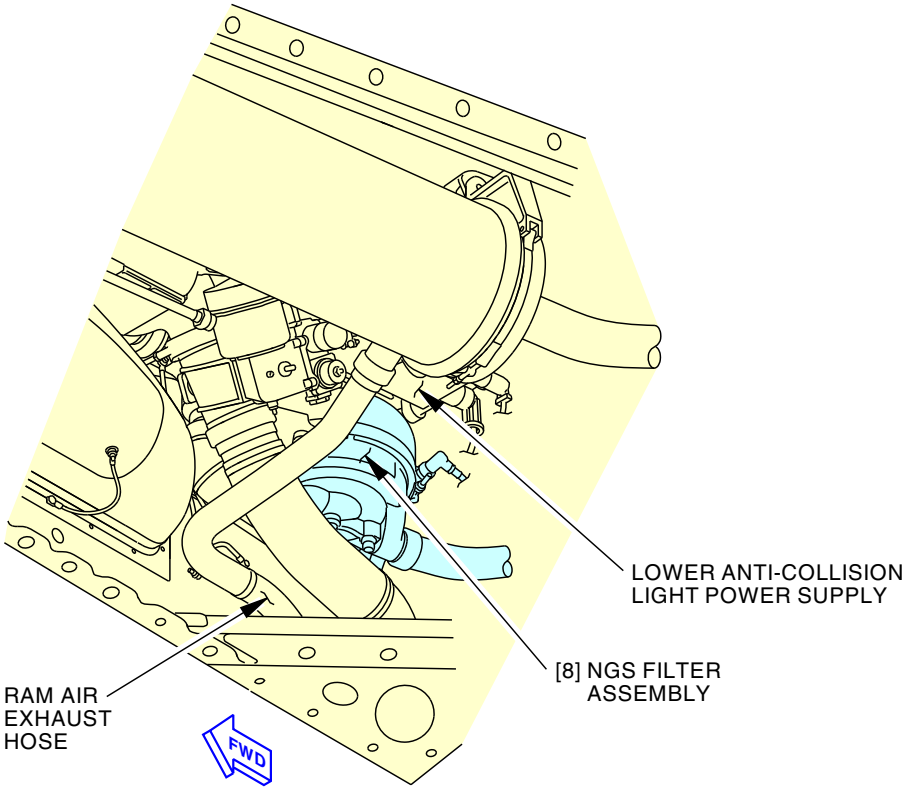
FILTER DIFFERENTIAL PRESSURE SWITCH
(EXAMPLE)

H

3001522 S0000777471_V1

Nitrogen Generation System Fuel Leak Conditional Inspection
Figure 201/05-51-98-990-801 (Sheet 7 of 10)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



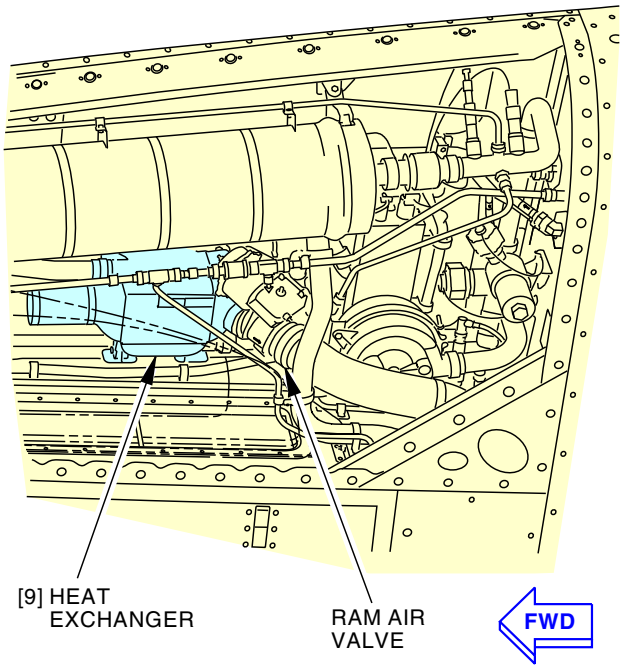
**NGS FILTER ASSEMBLY
(EXAMPLE)**

I

3001523 S0000777472_V1

**Nitrogen Generation System Fuel Leak Conditional Inspection
Figure 201/05-51-98-990-801 (Sheet 8 of 10)**

ECCN 9E991 BOEING PROPRIETARY - See title page for details



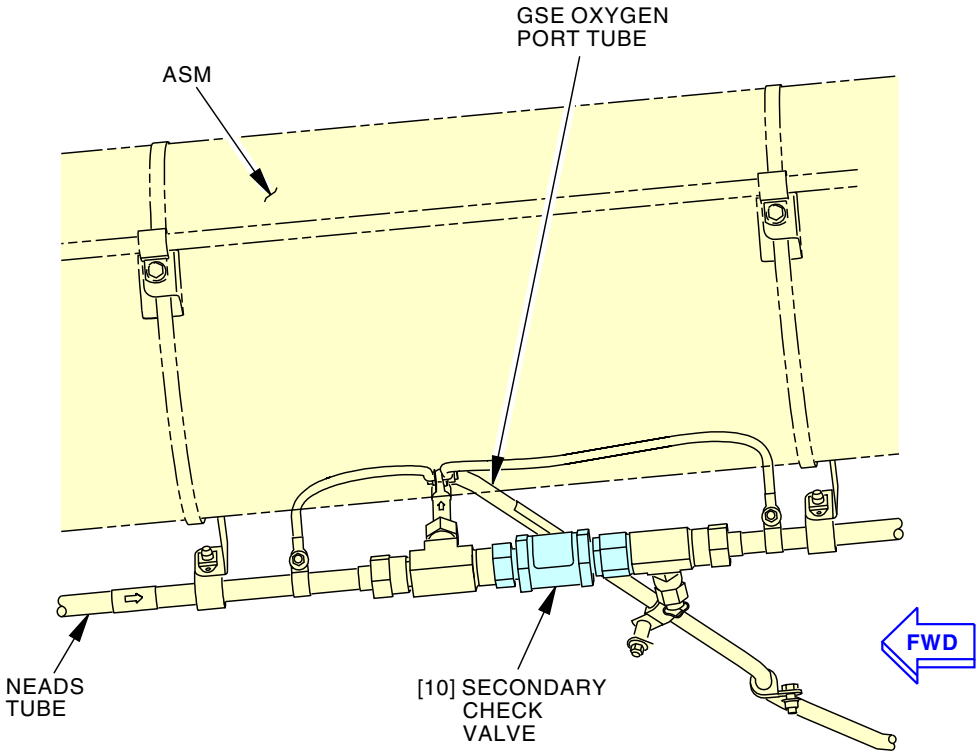
HEAT EXCHANGER
(EXAMPLE)
(VIEW IN THE INBOARD DIRECTION)

J

3001524 S0000777473_V1

Nitrogen Generation System Fuel Leak Conditional Inspection
Figure 201/05-51-98-990-801 (Sheet 9 of 10)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



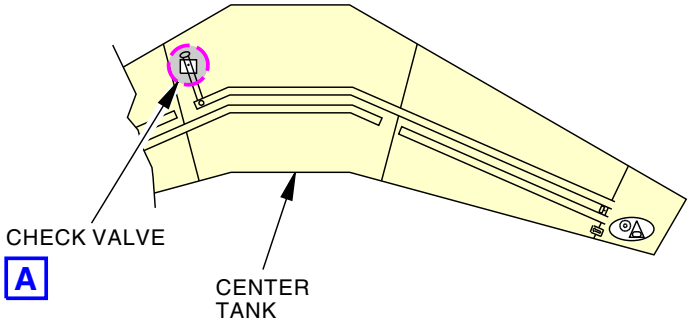
SECONDARY CHECK VALVE

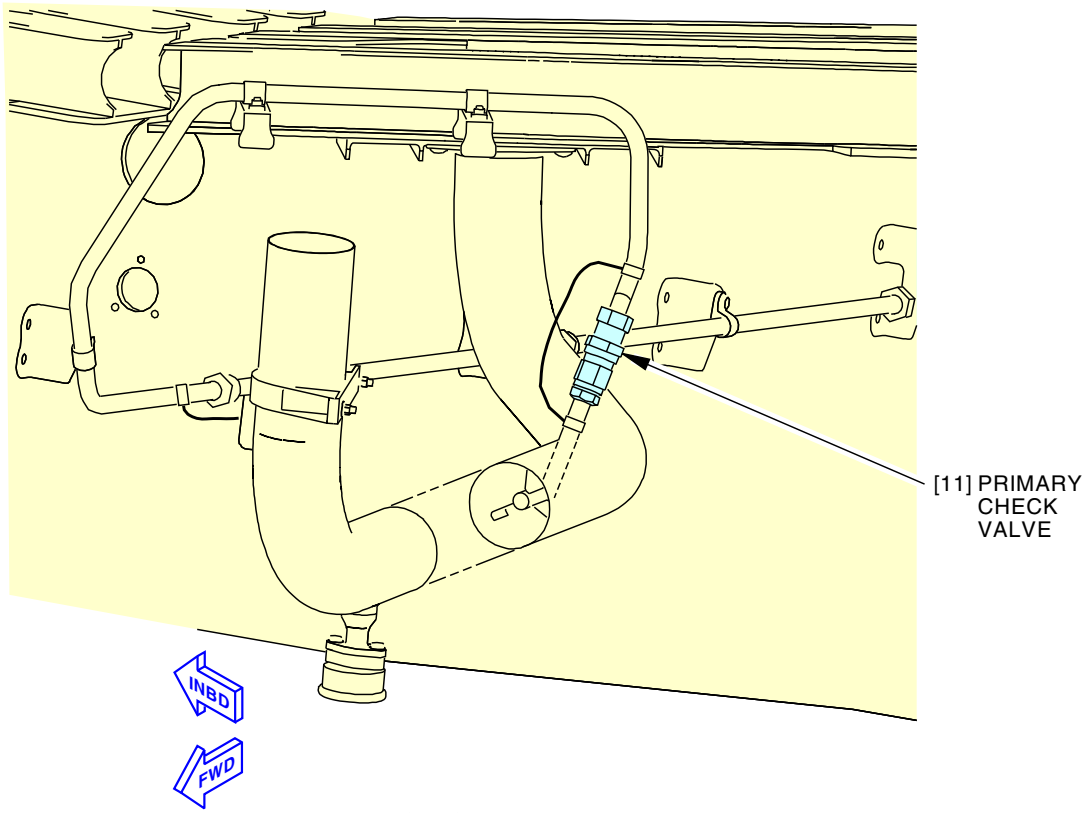
K

3001526 S0000777474_V1

Nitrogen Generation System Fuel Leak Conditional Inspection
Figure 201/05-51-98-990-801 (Sheet 10 of 10)

ECCN 9E991 BOEING PROPRIETARY - See title page for details





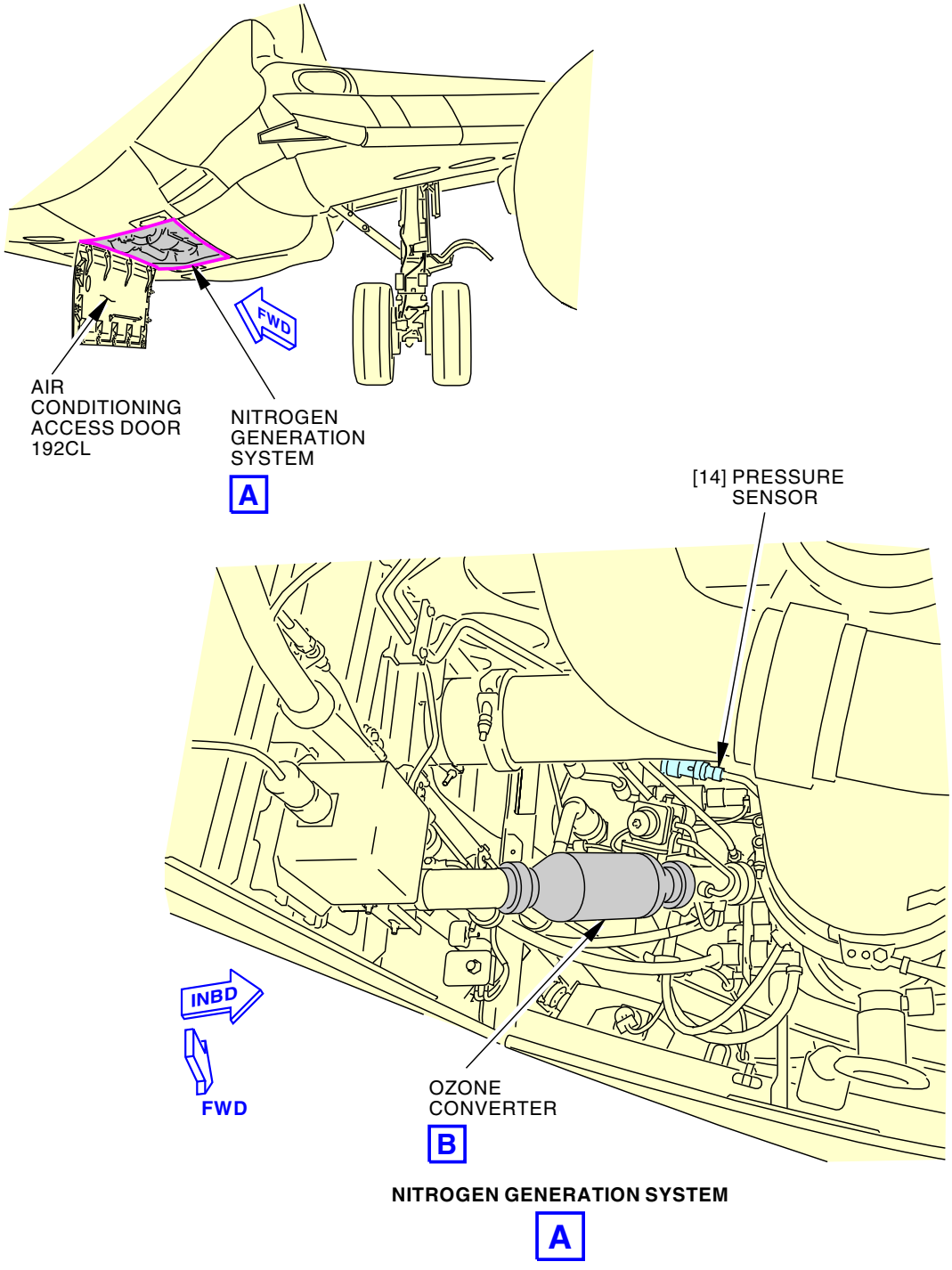
**CHECK VALVE
(EXAMPLE)**

A

3001531 S0000777475_V1

**Nitrogen Generation System Fuel Leak Conditional Inspection - Primary Check Valve
Figure 202/05-51-98-990-802**

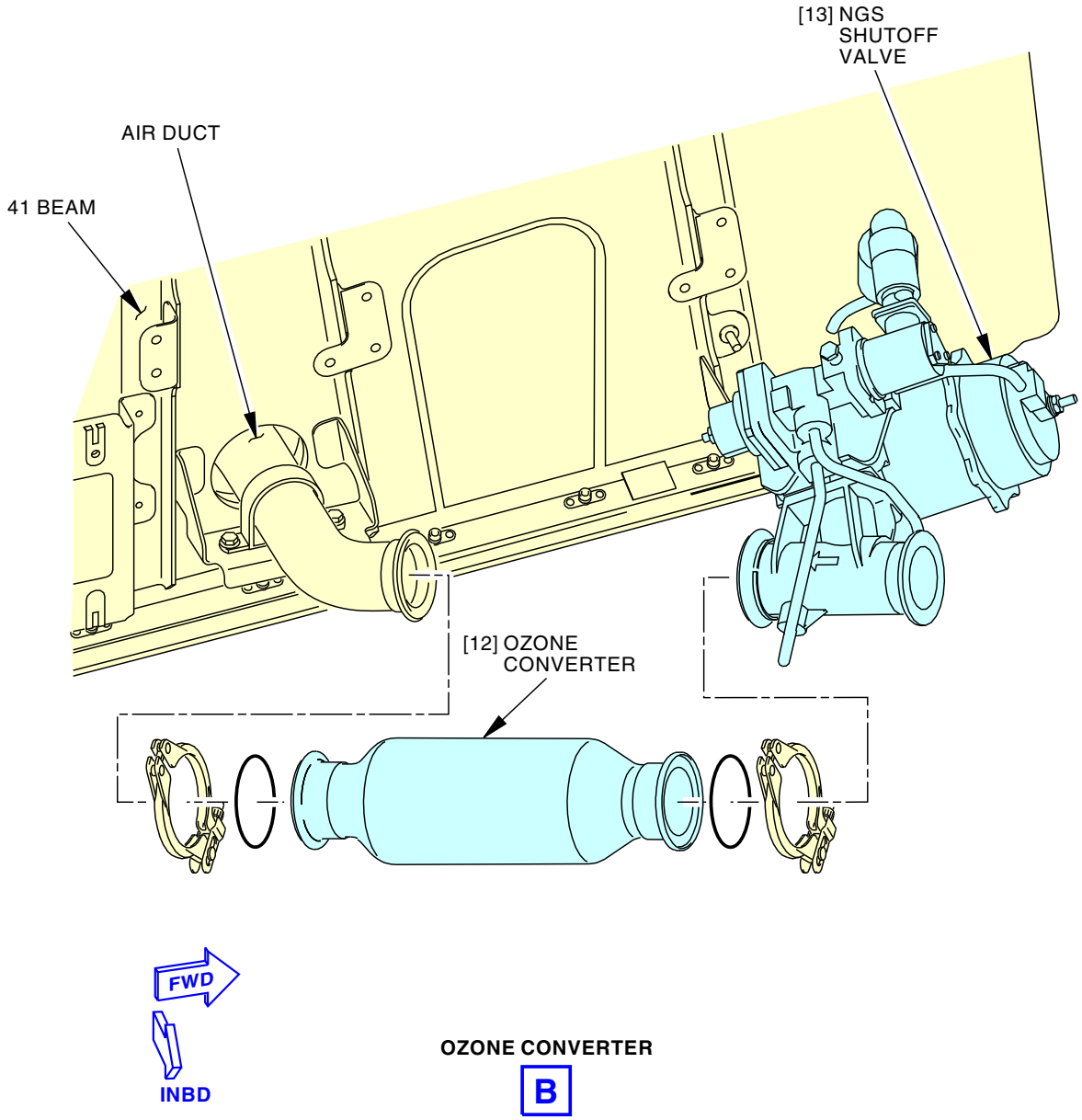
ECCN 9E991 BOEING PROPRIETARY - See title page for details



3001533 S0000777476_V1

Nitrogen Generation System Fuel Leak Conditional Inspection - Ozone Converter and Pressure Sensor
Figure 203/05-51-98-990-803 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



3001535 S0000777477_V1

Nitrogen Generation System Fuel Leak Conditional Inspection - Ozone Converter and Pressure Sensor
Figure 203/05-51-98-990-803 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

IN-FLIGHT WINDMILLING - MAINTENANCE PRACTICES

1. General

A. This procedure has this task:

(1) Inspection of the engine after in-flight windmilling.

TASK 05-51-99-200-801

2. Inspection of the Engine After In-Flight Windmilling

A. General

(1) This task gives the inspection of the engine after an in-flight windmilling condition.

B. References

Reference	Title
71-00-00-200-807-G00	In-Flight Windmilling Inspection (P/B 601)

C. Location Zones

Zone	Area
411	Engine 1 - Engine
421	Engine 2 - Engine

D. Inspection of the Engine After In-Flight Windmilling

SUBTASK 05-51-99-200-001

(1) Do this task: In-Flight Windmilling Inspection, TASK 71-00-00-200-807-G00.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details

FOIL-LINED PANELS ON LEFT SIDE OF THE AIRPLANE - INSPECTION/CHECK

1. General

A. This procedure contains tasks that perform inspections of foil-lined panels on the left side of the airplane.

(1) Aluminum Adhesive Foil Laminate or Aluminum Foil Tape is applied on the inner most layer (IML) of composite panels and used to protect underlying systems from the indirect effects of lightning.

TASK 05-55-21-210-801

2. General Visual Inspection - Left Wing Leading Edge (MRB 20-155-00)

(Figure 601)

NOTE: This procedure is a scheduled maintenance task.

A. References

Reference	Title
SRM 51-70-14-0G-0	Structures With Aluminum Coatings and Foils

B. Location Zones

Zone	Area
521	Left Wing - Leading Edge to Front Spar

C. Access Panels

Number	Name/Location
521EB	Lower Leading Edge Access Panel - Slat Station 91
521FB	Lower Leading Edge Access Panel - Slat Station 107
521GB	Lower Leading Edge Access Panel - Slat Station 125
521HB	Lower Leading Edge Access Panel - Slat Station 144
521JB	Lower Leading Edge Access Panel - Slat Station 161
521KB	Lower Leading Edge Access Panel - Slat Station 179
521LB	Lower Leading Edge Access Panel - Slat Station 208
521MB	Lower Leading Edge Access Panel - Slat Station 226
521NB	Lower Leading Edge Access Panel - Slat Station 244
521PB	Lower Leading Edge Access Panel - Slat Station 261
521QB	Lower Leading Edge Access Panel - Slat Station 280
521RB	Lower Leading Edge Access Panel - Slat Station 298
521SB	Lower Leading Edge Access Panel - Slat Station 328
521TB	Lower Leading Edge Access Panel - Slat Station 347
521UB	Lower Leading Edge Access Panel - Slat Station 365
521VB	Lower Leading Edge Access Panel - Slat Station 385
521WB	Lower Leading Edge Access Panel - Slat Station 406
521XB	Lower Leading Edge Access Panel - Slat Station 425
521YB	Lower Leading Edge Access Panel - Slat Station 470
521ZB	Lower Leading Edge Access Panel - Slat Station 479

ECCN 9E991 BOEING PROPRIETARY - See title page for details

D. Prepare for the procedure

SUBTASK 05-55-21-010-001

(1) Open these access panels:

Number	Name/Location
521EB	Lower Leading Edge Access Panel - Slat Station 91
521FB	Lower Leading Edge Access Panel - Slat Station 107
521GB	Lower Leading Edge Access Panel - Slat Station 125
521HB	Lower Leading Edge Access Panel - Slat Station 144
521JB	Lower Leading Edge Access Panel - Slat Station 161
521KB	Lower Leading Edge Access Panel - Slat Station 179
521LB	Lower Leading Edge Access Panel - Slat Station 208
521MB	Lower Leading Edge Access Panel - Slat Station 226
521NB	Lower Leading Edge Access Panel - Slat Station 244
521PB	Lower Leading Edge Access Panel - Slat Station 261
521QB	Lower Leading Edge Access Panel - Slat Station 280
521RB	Lower Leading Edge Access Panel - Slat Station 298
521SB	Lower Leading Edge Access Panel - Slat Station 328
521TB	Lower Leading Edge Access Panel - Slat Station 347
521UB	Lower Leading Edge Access Panel - Slat Station 365
521VB	Lower Leading Edge Access Panel - Slat Station 385
521WB	Lower Leading Edge Access Panel - Slat Station 406
521XB	Lower Leading Edge Access Panel - Slat Station 425
521YB	Lower Leading Edge Access Panel - Slat Station 470
521ZB	Lower Leading Edge Access Panel - Slat Station 479

E. Procedure

SUBTASK 05-55-21-210-001

(1) Perform a general visual inspection of the foil-lined panels shown in Figure 601.

SUBTASK 05-55-21-300-001

(2) If damage is found, refer to Structures With Aluminum Coatings and Foils/SRM PROCEDURE 51-70-14-0G-0.

F. Put the Airplane Back to Its Usual Condition

SUBTASK 05-55-21-410-001

(1) Close these access panels:

Number	Name/Location
521EB	Lower Leading Edge Access Panel - Slat Station 91
521FB	Lower Leading Edge Access Panel - Slat Station 107
521GB	Lower Leading Edge Access Panel - Slat Station 125
521HB	Lower Leading Edge Access Panel - Slat Station 144
521JB	Lower Leading Edge Access Panel - Slat Station 161
521KB	Lower Leading Edge Access Panel - Slat Station 179
521LB	Lower Leading Edge Access Panel - Slat Station 208
521MB	Lower Leading Edge Access Panel - Slat Station 226
521NB	Lower Leading Edge Access Panel - Slat Station 244
521PB	Lower Leading Edge Access Panel - Slat Station 261
521QB	Lower Leading Edge Access Panel - Slat Station 280
521RB	Lower Leading Edge Access Panel - Slat Station 298

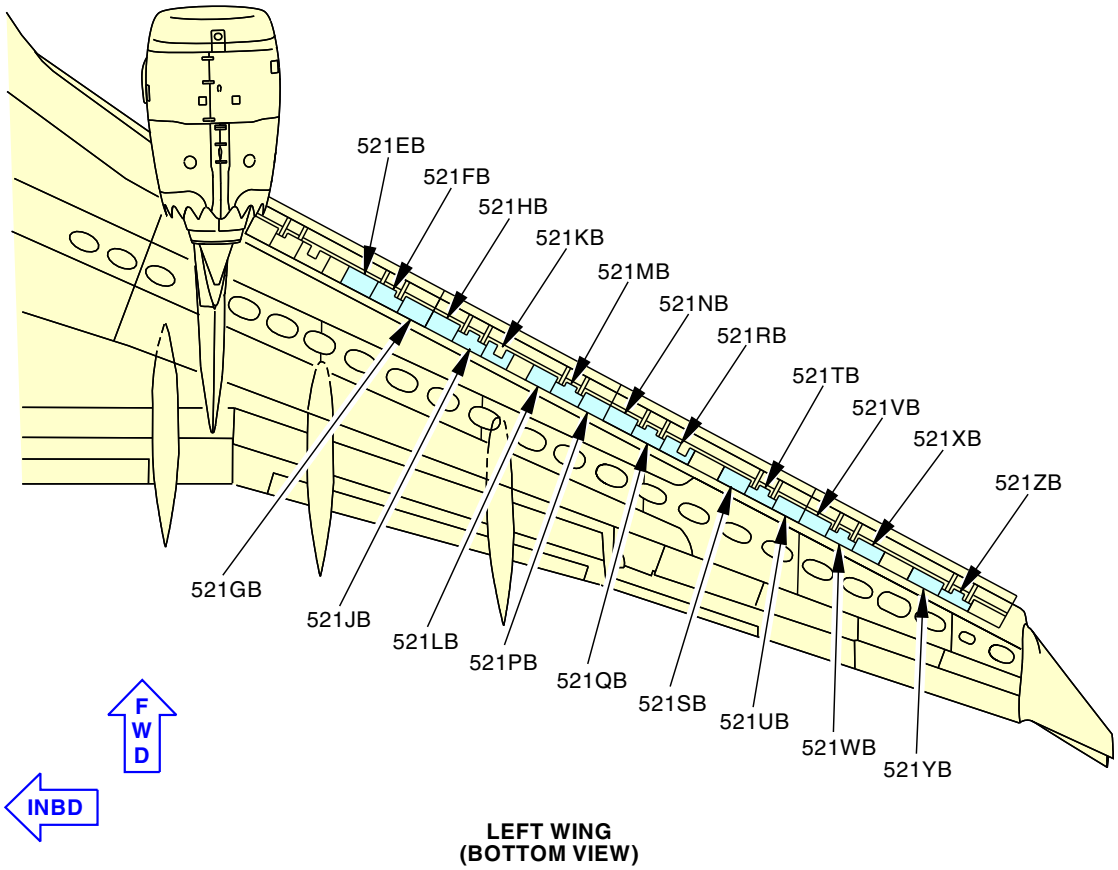
ECCN 9E991 BOEING PROPRIETARY - See title page for details

(Continued)

Number	Name/Location
521SB	Lower Leading Edge Access Panel - Slat Station 328
521TB	Lower Leading Edge Access Panel - Slat Station 347
521UB	Lower Leading Edge Access Panel - Slat Station 365
521VB	Lower Leading Edge Access Panel - Slat Station 385
521WB	Lower Leading Edge Access Panel - Slat Station 406
521XB	Lower Leading Edge Access Panel - Slat Station 425
521YB	Lower Leading Edge Access Panel - Slat Station 470
521ZB	Lower Leading Edge Access Panel - Slat Station 479

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details



LEFT WING
(BOTTOM VIEW)

2532132 S0000598980_V2

LH Wing Lower Surface (Foil-Lined Panels)
Figure 601/05-55-21-990-801

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-55-21-211-802

3. Detailed Inspection - Left Wing Leading Edge (MRB 20-169-00)

(Figure 602, Figure 603)

NOTE: This procedure is a scheduled maintenance task.

A. References

Reference	Title
SRM 51-70-14-0G-0	Structures With Aluminum Coatings and Foils

B. Location Zones

Zone	Area
511	Left Wing - Leading Edge To Front Spar
521	Left Wing - Leading Edge to Front Spar

C. Access Panels

Number	Name/Location
511AB	Inboard Leading Edge, Lower Removable Panel
511AT	Inboard Leading Edge, Strakelet Upper Panel
521AAB	Lower Leading Edge Access Panel - Slat Station 497
521BB	Engine Fuel Valve Shutoff Access Panel - Slat Station 27
521CB	Lower Leading Edge Access Panel - Slat Station 50
521DB	Lower Leading Edge Access Panel - Slat Station 70

D. Prepare for the procedure

SUBTASK 05-55-21-010-002

(1) Open these access panels:

Number	Name/Location
511AB	Inboard Leading Edge, Lower Removable Panel
511AT	Inboard Leading Edge, Strakelet Upper Panel
521AAB	Lower Leading Edge Access Panel - Slat Station 497
521BB	Engine Fuel Valve Shutoff Access Panel - Slat Station 27
521CB	Lower Leading Edge Access Panel - Slat Station 50
521DB	Lower Leading Edge Access Panel - Slat Station 70

E. Procedure

SUBTASK 05-55-21-211-001

(1) Perform a detailed inspection of the foil-lined panels shown in Figure 602 and Figure 603.

SUBTASK 05-55-21-300-002

(2) If damage is found, refer to Structures With Aluminum Coatings and Foils/SRM PROCEDURE 51-70-14-0G-0.

F. Put the Airplane Back to Its Usual Condition

SUBTASK 05-55-21-410-002

(1) Close these access panels:

Number	Name/Location
511AB	Inboard Leading Edge, Lower Removable Panel
511AT	Inboard Leading Edge, Strakelet Upper Panel
521AAB	Lower Leading Edge Access Panel - Slat Station 497
521BB	Engine Fuel Valve Shutoff Access Panel - Slat Station 27

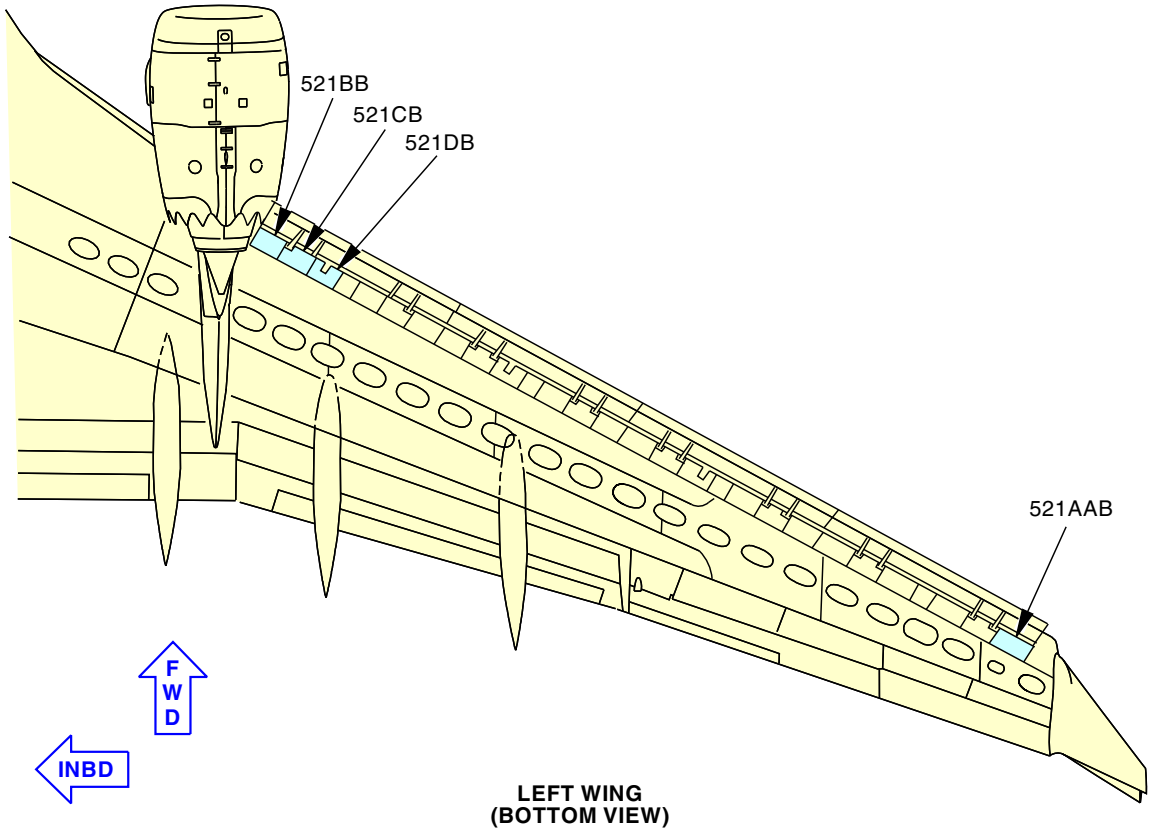
ECCN 9E991 BOEING PROPRIETARY - See title page for details

(Continued)

Number	Name/Location
521CB	Lower Leading Edge Access Panel - Slat Station 50
521DB	Lower Leading Edge Access Panel - Slat Station 70

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details

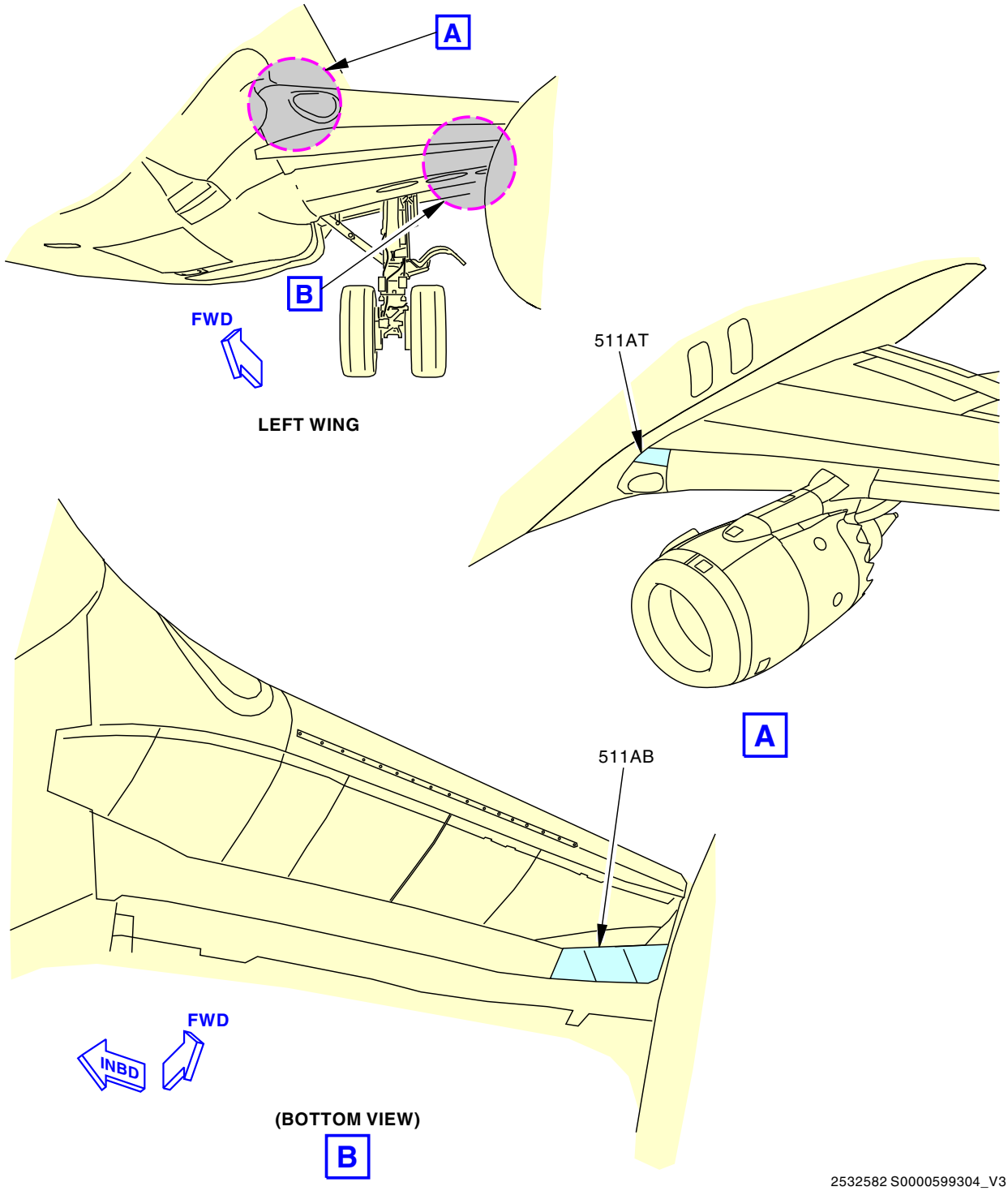


**LEFT WING
(BOTTOM VIEW)**

2532163 S0000599299_V3

**LH Wing Lower Surface (Foil-Lined Panels)
Figure 602/05-55-21-990-802**

ECCN 9E991 BOEING PROPRIETARY - See title page for details



LH Wing Fixed Leading Edge Removable Panels
Figure 603/05-55-21-990-803

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-55-21-211-804

4. Detailed Inspection - Left Strut Fairings (MRB 20-171-00)

(Figure 604)

NOTE: This procedure is a scheduled maintenance task.

A. References

Reference	Title
SRM 51-70-14-0G-0	Structures With Aluminum Coatings and Foils

B. Location Zones

Zone	Area
431	Engine 1 - Forward Strut Fairing

C. Access Panels

Number	Name/Location
431AT	Forward Strut Fairing, Thumbnail Fairing, Strut 1
431BL	Forward Strut Fairing, Left Mid Strut Fairing, Strut 1
431BR	Forward Strut Fairing, Right Mid Strut Fairing, Strut 1
431BT	Forward Strut Fairing, Pressure Relief Door, Strut 1
431CL	Forward Strut Fairing, Left Overwing Fairing, Strut 1
431CR	Forward Strut Fairing, Right Overwing Fairing, Strut 1
431CT	Forward Strut Fairing, Right Mid-Strut Fairing Pressure Relief Door, Strut 1

D. Prepare for the procedure

SUBTASK 05-55-21-010-004

(1) Open these access panels:

Number	Name/Location
431AT	Forward Strut Fairing, Thumbnail Fairing, Strut 1
431BL	Forward Strut Fairing, Left Mid Strut Fairing, Strut 1
431BR	Forward Strut Fairing, Right Mid Strut Fairing, Strut 1
431BT	Forward Strut Fairing, Pressure Relief Door, Strut 1
431CL	Forward Strut Fairing, Left Overwing Fairing, Strut 1
431CR	Forward Strut Fairing, Right Overwing Fairing, Strut 1
431CT	Forward Strut Fairing, Right Mid-Strut Fairing Pressure Relief Door, Strut 1

E. Procedure

SUBTASK 05-55-21-211-003

(1) Perform a detailed inspection of the foil-lined panels shown in Figure 604.

SUBTASK 05-55-21-211-006

(2) Perform a detailed inspection of the foil-lined structure under 431BL, 431BR, and 431AT.

SUBTASK 05-55-21-300-004

(3) If damage is found, refer to Structures With Aluminum Coatings and Foils/SRM PROCEDURE 51-70-14-0G-0.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

F. Put the Airplane Back to Its Usual Condition

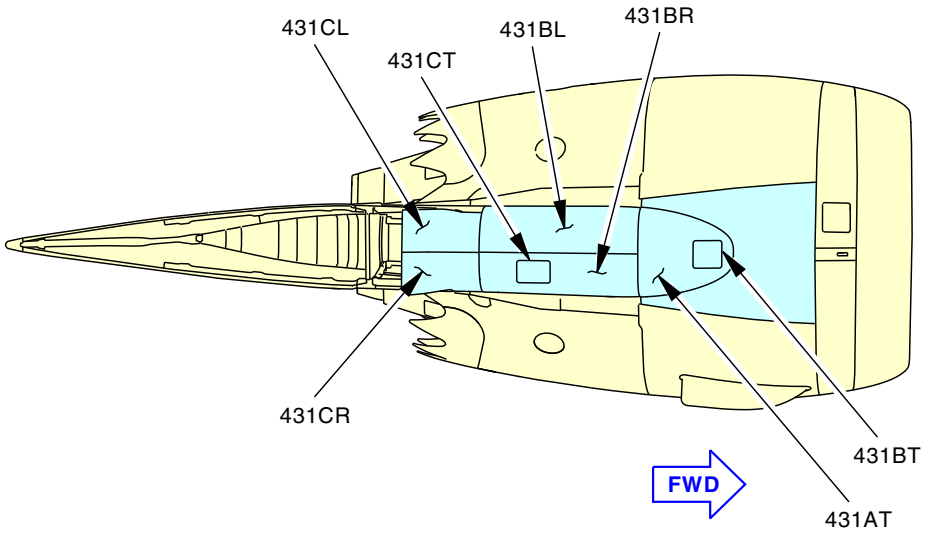
SUBTASK 05-55-21-410-004

(1) Close these access panels:

Number	Name/Location
431AT	Forward Strut Fairing, Thumbnail Fairing, Strut 1
431BL	Forward Strut Fairing, Left Mid Strut Fairing, Strut 1
431BR	Forward Strut Fairing, Right Mid Strut Fairing, Strut 1
431BT	Forward Strut Fairing, Pressure Relief Door, Strut 1
431CL	Forward Strut Fairing, Left Overwing Fairing, Strut 1
431CR	Forward Strut Fairing, Right Overwing Fairing, Strut 1
431CT	Forward Strut Fairing, Right Mid-Strut Fairing Pressure Relief Door, Strut 1

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



**LEFT ENGINE
(TOP VIEW)**

2532584 S0000599376_V2

**Left Mid Strut Fairing, Strut 1
Figure 604/05-55-21-990-805**

ECCN 9E991 BOEING PROPRIETARY - See title page for details

FOIL-LINED PANELS ON RIGHT SIDE OF THE AIRPLANE - INSPECTION/CHECK

1. General

A. This procedure contains tasks that perform inspections of foil-lined panels on the right side of the airplane.

(1) Aluminum Adhesive Foil Laminate or Aluminum Foil Tape is applied on the inner most layer (IML) of composite panels and used to protect underlying systems from the indirect effects of lightning.

TASK 05-55-22-210-801

2. General Visual Inspection - Right Wing Leading Edge (MRB 20-155-00)

(Figure 601)

NOTE: This procedure is a scheduled maintenance task.

A. References

Reference	Title
SRM 51-70-14-0G-0	Structures With Aluminum Coatings and Foils

B. Location Zones

Zone	Area
621	Right Wing - Leading Edge to Front Spar

C. Access Panels

Number	Name/Location
621FB	Lower Leading Edge Access Panel - Slat Station 107
621JB	Lower Leading Edge Access Panel - Slat Station 161
621KB	Lower Leading Edge Access Panel - Slat Station 179
621LB	Lower Leading Edge Access Panel - Slat Station 208
621MB	Lower Leading Edge Access Panel - Slat Station 226
621NB	Lower Leading Edge Access Panel - Slat Station 244
621PB	Lower Leading Edge Access Panel - Slat Station 261
621QB	Lower Leading Edge Access Panel - Slat Station 280
621RB	Lower Leading Edge Access Panel - Slat Station 298
621SB	Lower Leading Edge Access Panel - Slat Station 328
621TB	Lower Leading Edge Access Panel - Slat Station 347
621UB	Lower Leading Edge Access Panel - Slat Station 365
621VB	Lower Leading Edge Access Panel - Slat Station 385
621WB	Lower Leading Edge Access Panel - Slat Station 406
621XB	Lower Leading Edge Access Panel - Slat Station 425
621YB	Lower Leading Edge Access Panel - Slat Station 470
621ZB	Lower Leading Edge Access Panel - Slat Station 479

D. Prepare for the procedure

SUBTASK 05-55-22-010-001

(1) Open these access panels:

Number	Name/Location
621FB	Lower Leading Edge Access Panel - Slat Station 107
621JB	Lower Leading Edge Access Panel - Slat Station 161

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(Continued)

Number	Name/Location
621KB	Lower Leading Edge Access Panel - Slat Station 179
621LB	Lower Leading Edge Access Panel - Slat Station 208
621MB	Lower Leading Edge Access Panel - Slat Station 226
621NB	Lower Leading Edge Access Panel - Slat Station 244
621PB	Lower Leading Edge Access Panel - Slat Station 261
621QB	Lower Leading Edge Access Panel - Slat Station 280
621RB	Lower Leading Edge Access Panel - Slat Station 298
621SB	Lower Leading Edge Access Panel - Slat Station 328
621TB	Lower Leading Edge Access Panel - Slat Station 347
621UB	Lower Leading Edge Access Panel - Slat Station 365
621VB	Lower Leading Edge Access Panel - Slat Station 385
621WB	Lower Leading Edge Access Panel - Slat Station 406
621XB	Lower Leading Edge Access Panel - Slat Station 425
621YB	Lower Leading Edge Access Panel - Slat Station 470
621ZB	Lower Leading Edge Access Panel - Slat Station 479

E. Procedure

SUBTASK 05-55-22-210-001

(1) Perform a general visual inspection of the foil-lined panels (Figure 601).

SUBTASK 05-55-22-300-001

(2) If damage is found, refer to Structures With Aluminum Coatings and Foils/SRM PROCEDURE 51-70-14-0G-0.

F. Put the Airplane Back to Its Usual Condition

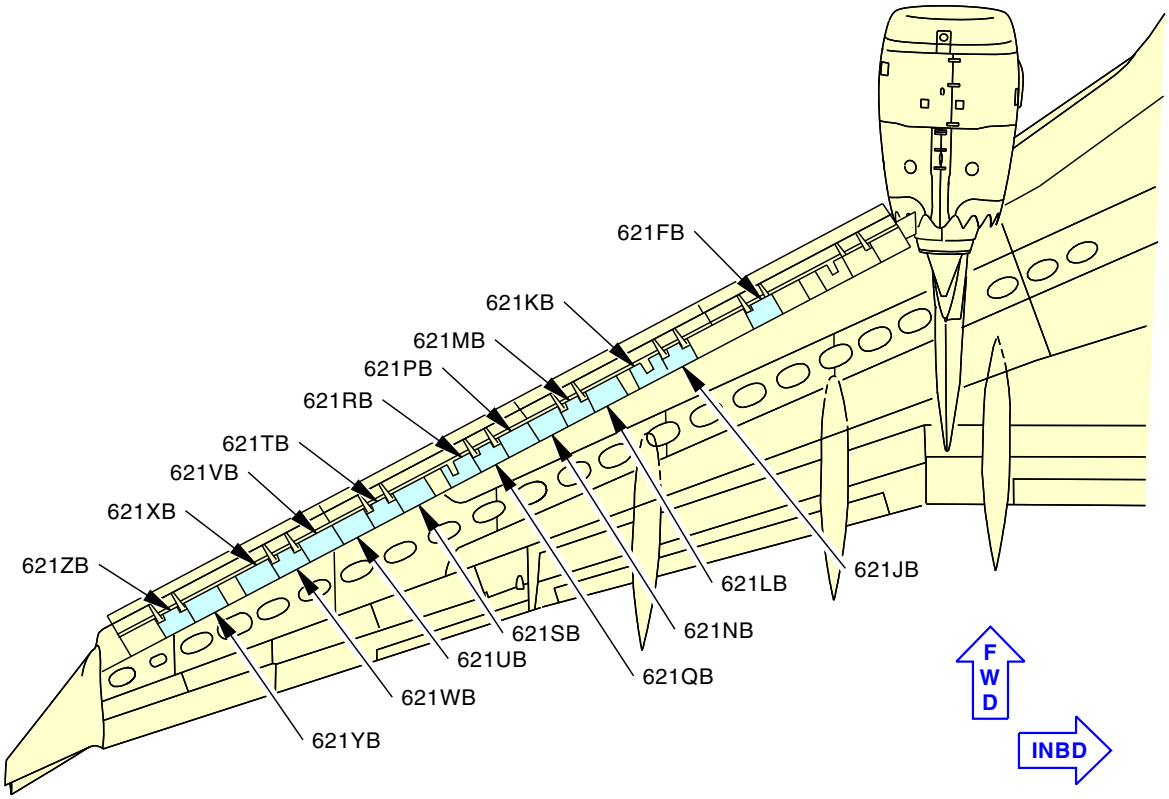
SUBTASK 05-55-22-410-001

(1) Close these access panels:

Number	Name/Location
621FB	Lower Leading Edge Access Panel - Slat Station 107
621JB	Lower Leading Edge Access Panel - Slat Station 161
621KB	Lower Leading Edge Access Panel - Slat Station 179
621LB	Lower Leading Edge Access Panel - Slat Station 208
621MB	Lower Leading Edge Access Panel - Slat Station 226
621NB	Lower Leading Edge Access Panel - Slat Station 244
621PB	Lower Leading Edge Access Panel - Slat Station 261
621QB	Lower Leading Edge Access Panel - Slat Station 280
621RB	Lower Leading Edge Access Panel - Slat Station 298
621SB	Lower Leading Edge Access Panel - Slat Station 328
621TB	Lower Leading Edge Access Panel - Slat Station 347
621UB	Lower Leading Edge Access Panel - Slat Station 365
621VB	Lower Leading Edge Access Panel - Slat Station 385
621WB	Lower Leading Edge Access Panel - Slat Station 406
621XB	Lower Leading Edge Access Panel - Slat Station 425
621YB	Lower Leading Edge Access Panel - Slat Station 470
621ZB	Lower Leading Edge Access Panel - Slat Station 479

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details



**RIGHT WING
(BOTTOM VIEW)**

2533069 S0000599117_V3

**RH Wing Lower Surface (Foil-Lined Panels)
Figure 601/05-55-22-990-801**

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-55-22-211-801

3. Detailed Inspection - Right Wing Leading Edge (MRB 20-168-00)

(Figure 602)

NOTE: This procedure is a scheduled maintenance task.

A. References

Reference	Title
SRM 51-70-14-0G-0	Structures With Aluminum Coatings and Foils

B. Location Zones

Zone	Area
621	Right Wing - Leading Edge to Front Spar

C. Access Panels

Number	Name/Location
621EB	Lower Leading Edge Access Panel - Slat Station 91
621GB	Refuel Valve Door - Slat Station 125

D. Prepare for the procedure

SUBTASK 05-55-22-010-002

(1) Open these access panels:

Number	Name/Location
621EB	Lower Leading Edge Access Panel - Slat Station 91
621GB	Refuel Valve Door - Slat Station 125

E. Procedure

SUBTASK 05-55-22-211-001

(1) Perform a detailed inspection of the foil-lined panels shown in Figure 602.

SUBTASK 05-55-22-300-002

(2) If damage is found, refer to Structures With Aluminum Coatings and Foils/SRM PROCEDURE 51-70-14-0G-0.

F. Put the Airplane Back to Its Usual Condition

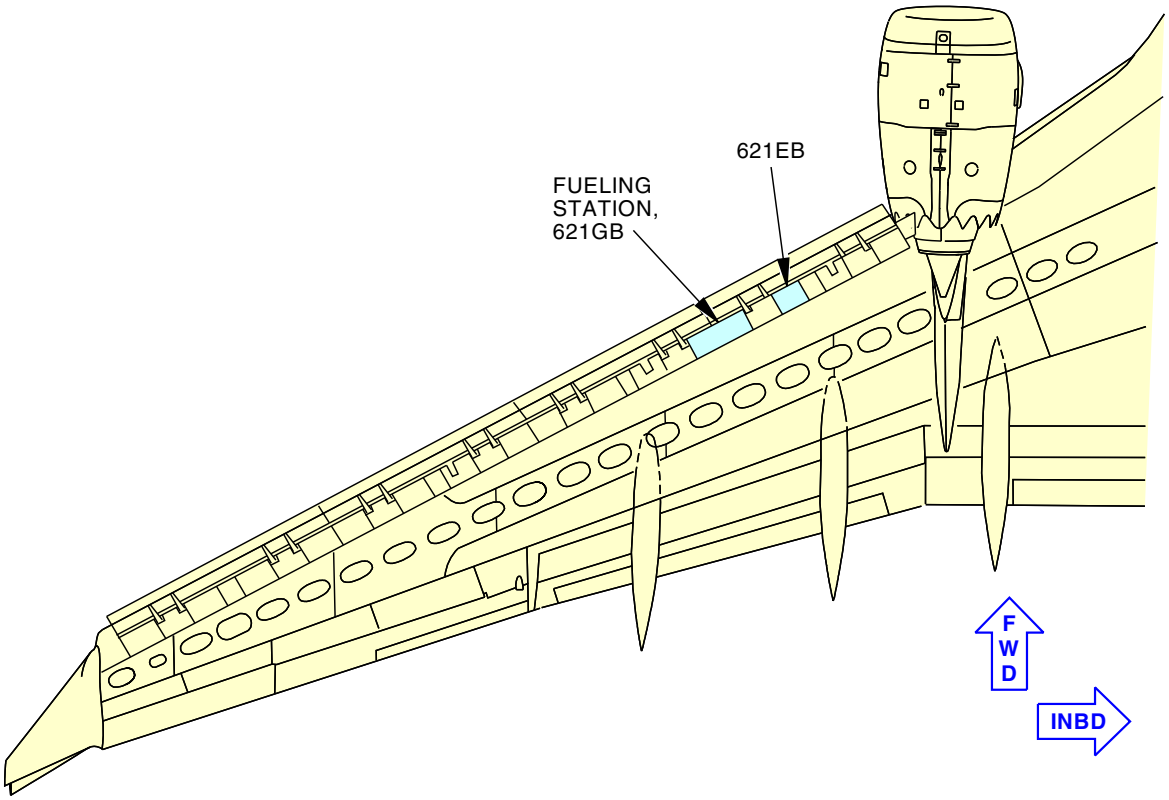
SUBTASK 05-55-22-410-002

(1) Close these access panels:

Number	Name/Location
621EB	Lower Leading Edge Access Panel - Slat Station 91
621GB	Refuel Valve Door - Slat Station 125

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



**RIGHT WING
(BOTTOM VIEW)**

2533070 S0000599298_V2

**RH Wing Lower Surface (Foil-Lined Panels at Defuel/Refuel Stations)
Figure 602/05-55-22-990-802**

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-55-22-211-802

4. Detailed Inspection - Right Wing Leading Edge (MRB 20-169-00)

(Figure 603, Figure 604)

NOTE: This procedure is a scheduled maintenance task.

A. References

Reference	Title
SRM 51-70-14-0G-0	Structures With Aluminum Coatings and Foils

B. Location Zones

Zone	Area
611	Right Wing - Leading Edge to Front Spar
621	Right Wing - Leading Edge to Front Spar

C. Access Panels

Number	Name/Location
611AB	Inboard Leading Edge, Lower Removable Access Panel
611AT	Inboard Leading Edge, Strakelet Upper Access Panel
621AAB	Lower Leading Edge Access Panel - Slat Station 524.31
621BB	Engine Fuel Valve Shutoff Access Panel - Slat Station 27
621CB	Lower Leading Edge Access Panel - Slat Station 50
621DB	Lower Leading Edge Access Panel - Slat Station 70

D. Prepare for the procedure

SUBTASK 05-55-22-010-003

(1) Open these access panels:

Number	Name/Location
611AB	Inboard Leading Edge, Lower Removable Access Panel
611AT	Inboard Leading Edge, Strakelet Upper Access Panel
621AAB	Lower Leading Edge Access Panel - Slat Station 524.31
621BB	Engine Fuel Valve Shutoff Access Panel - Slat Station 27
621CB	Lower Leading Edge Access Panel - Slat Station 50
621DB	Lower Leading Edge Access Panel - Slat Station 70

E. Procedure

SUBTASK 05-55-22-211-002

(1) Perform a detailed inspection of the foil-lined panels (Figure 603 and Figure 604).

SUBTASK 05-55-22-300-003

(2) If damage is found, refer to Structures With Aluminum Coatings and Foils/SRM PROCEDURE 51-70-14-0G-0.

F. Put the Airplane Back to Its Usual Condition

SUBTASK 05-55-22-410-003

(1) Close these access panels:

Number	Name/Location
611AB	Inboard Leading Edge, Lower Removable Access Panel
611AT	Inboard Leading Edge, Strakelet Upper Access Panel
621AAB	Lower Leading Edge Access Panel - Slat Station 524.31
621BB	Engine Fuel Valve Shutoff Access Panel - Slat Station 27

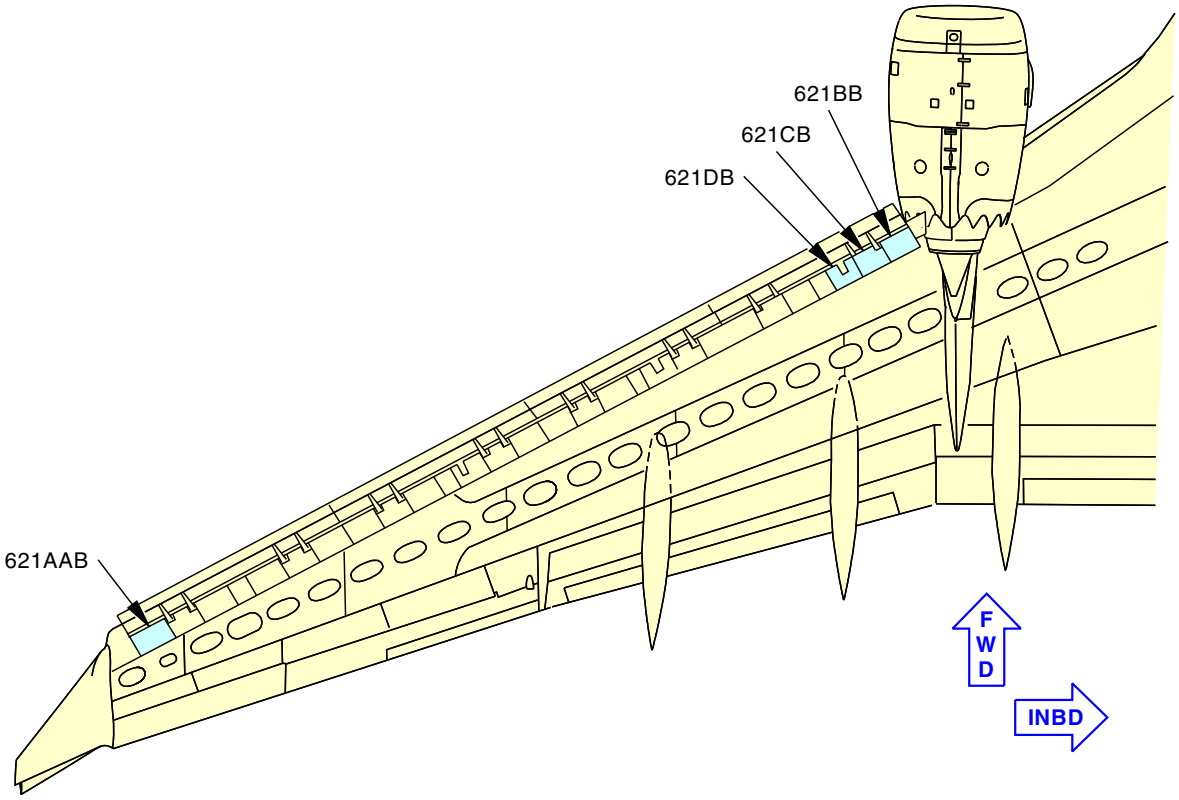
ECCN 9E991 BOEING PROPRIETARY - See title page for details

(Continued)

Number	Name/Location
621CB	Lower Leading Edge Access Panel - Slat Station 50
621DB	Lower Leading Edge Access Panel - Slat Station 70

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

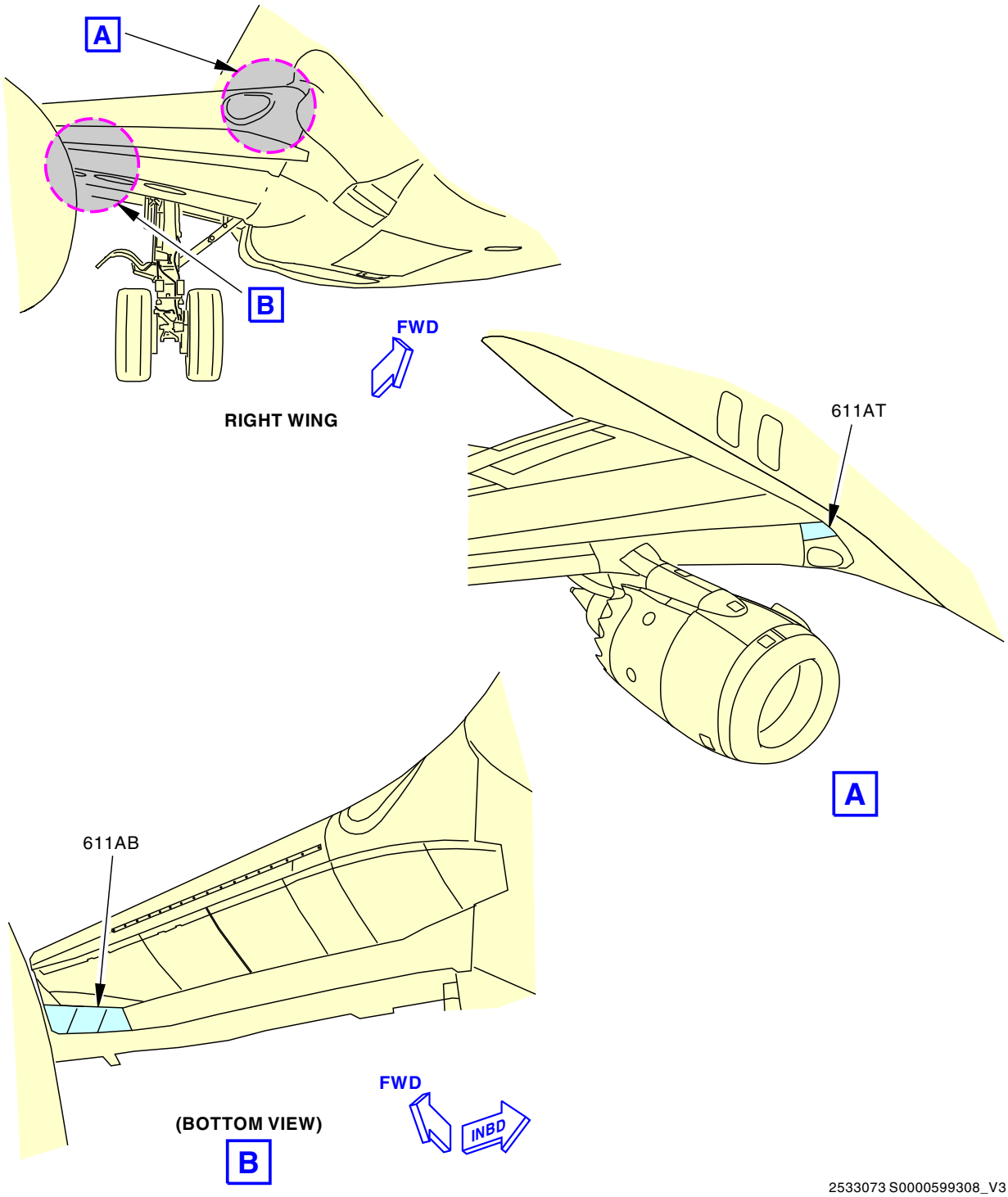


**RIGHT WING
(BOTTOM VIEW)**

2533071 S0000599300_V4

**RH Wing Lower Surface (Foil-Lined Panels)
Figure 603/05-55-22-990-803**

ECCN 9E991 BOEING PROPRIETARY - See title page for details



RH Wing Fixed Leading Edge Removable Panels
Figure 604/05-55-22-990-804

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-55-22-211-804

5. Detailed Inspection - Right Strut Fairings (MRB 20-171-00)

(Figure 605)

NOTE: This procedure is a scheduled maintenance task.

A. References

Reference	Title
SRM 51-70-14-0G-0	Structures With Aluminum Coatings and Foils

B. Location Zones

Zone	Area
441	Engine 2 - Forward Strut Fairing

C. Access Panels

Number	Name/Location
441AT	Forward Strut Fairing, Thumbnail Fairing, Strut 2
441BL	Forward Strut Fairing, Left Mid Strut Fairing, Strut 2
441BR	Forward Strut Fairing, Right Mid Strut Fairing, Strut 2
441BT	Forward Strut Fairing, Pressure Relief Door, Strut 2
441CL	Forward Strut Fairing, Left Overwing Fairing, Strut 2
441CR	Forward Strut Fairing, Right Overwing Fairing, Strut 2
441CT	Forward Strut Fairing, Forward Fuel/Hydraulic Tube Shroud Access, Strut 2

D. Prepare for the procedure

SUBTASK 05-55-22-010-005

(1) Open these access panels:

Number	Name/Location
441AT	Forward Strut Fairing, Thumbnail Fairing, Strut 2
441BL	Forward Strut Fairing, Left Mid Strut Fairing, Strut 2
441BR	Forward Strut Fairing, Right Mid Strut Fairing, Strut 2
441BT	Forward Strut Fairing, Pressure Relief Door, Strut 2
441CL	Forward Strut Fairing, Left Overwing Fairing, Strut 2
441CR	Forward Strut Fairing, Right Overwing Fairing, Strut 2
441CT	Forward Strut Fairing, Forward Fuel/Hydraulic Tube Shroud Access, Strut 2

E. Procedure

SUBTASK 05-55-22-211-004

(1) Perform a detailed inspection of the foil-lined panel shown in Figure 605.

SUBTASK 05-55-22-211-007

(2) Perform a detailed inspection of the foil-lined structure under panels 441BL, 441BR, and 441AT.

SUBTASK 05-55-22-300-005

(3) If damage is found, refer to Structures With Aluminum Coatings and Foils/SRM PROCEDURE 51-70-14-0G-0.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

F. Put the Airplane Back to Its Usual Condition

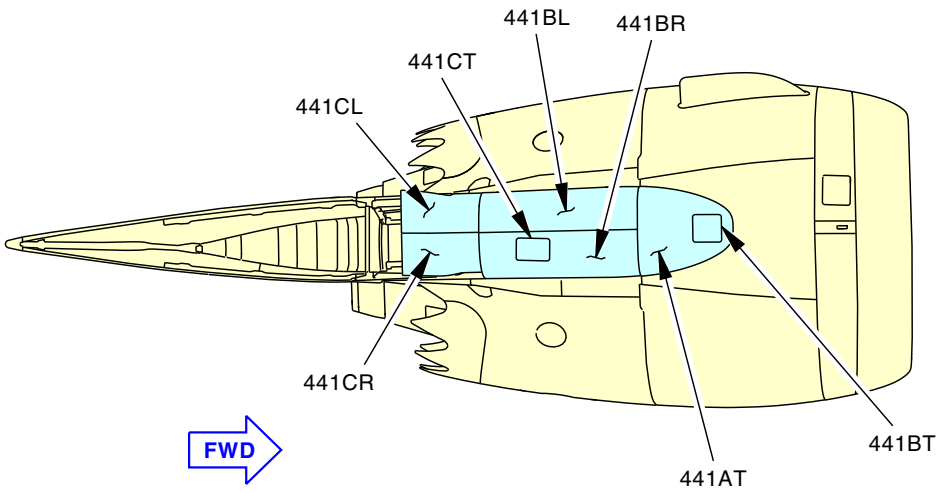
SUBTASK 05-55-22-410-005

(1) Close these access panels:

Number	Name/Location
441AT	Forward Strut Fairing, Thumbnail Fairing, Strut 2
441BL	Forward Strut Fairing, Left Mid Strut Fairing, Strut 2
441BR	Forward Strut Fairing, Right Mid Strut Fairing, Strut 2
441BT	Forward Strut Fairing, Pressure Relief Door, Strut 2
441CL	Forward Strut Fairing, Left Overwing Fairing, Strut 2
441CR	Forward Strut Fairing, Right Overwing Fairing, Strut 2
441CT	Forward Strut Fairing, Forward Fuel/Hydraulic Tube Shroud Access, Strut 2

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



**RIGHT ENGINE
(TOP VIEW)**

2533076 S0000599383_V3

**Right Mid Strut Faring, Strut 2
Figure 605/05-55-22-990-806**

ECCN 9E991 BOEING PROPRIETARY - See title page for details

WIRE BUNDLES ON LEFT SIDE OF THE AIRPLANE - INSPECTION/CHECK

1. General

A. This procedure contains tasks that perform a loop resistance test of wire bundles on left side of the airplane.

TASK 05-55-25-280-801

2. Loop Resistance Test of Wire Bundle - Left MLG Wheel Well (MRB 20-150-00)

(Figure 601)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) The loop resistance tester, SPL-1636, or MK loop resistance tester, SPL-18565, is required for this task.

B. References

Reference	Title
05-56-02-200-801	LRT Lid Standard Measurement (P/B 201)
05-56-02-200-802	ExLRT Standard Measurement (P/B 201)
05-56-03-200-801	Loop Resistance Measurement (P/B 201)
05-56-04-200-801	Joint Resistance Measurement (P/B 201)
05-56-05-200-801	Loop Resistance and Joint Resistance Measurement (P/B 201)
32-00-01-480-801	Landing Gear Downlock Pins Installation (P/B 201)
SWPM 20	Standard Wiring Practices Manual

C. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-1636	Tester - Loop Resistance (LRT "-1" for checks up to & including 4 years ONLY, LRT "-2 & -3" applicable for all HIRF/FQIS check/inspection intervals) Part #: 906-10246-3 Supplier: 3X2T2 Opt Part #: 906-10246-1 Supplier: 3X2T2 Opt Part #: 906-10246-2 Supplier: 3X2T2
SPL-18565	Tester - Loop Resistance, MK Part #: XLR-9703-01 Supplier: KC432 Part #: XLR-9703-02 Supplier: KC432

D. Location Zones

Zone	Area
133	Main Landing Gear Wheel Well, Body Station 663.75 to Body Station 727.00 - Left

E. Prepare for the Loop Resistance Test

SUBTASK 05-55-25-970-003

(1) Boeing requests that all data recorded while doing this procedure be submitted to The Boeing Company for engineering analysis.

(a) Send the data to one of the following addresses:

1) Electronically: MTCProgLHIRFTaskCardData@boeing.com

ECCN 9E991 BOEING PROPRIETARY - See title page for details

2) By Mail : "The Boeing Company, Attention: Manager, Lightning / HIRF, Mail Code: MC 110-SC15, BLDG 80, 2201 Seal Beach Blvd., Seal Beach, CA USA 90740, USA".

3) By Fax: 206-655-4991.

NOTE: Data sent will help Boeing understand the reliability of the components and will be used to improve the maintenance program.

SUBTASK 05-55-25-860-002

(2) Make sure that the landing gear downlock pins are installed (TASK 32-00-01-480-801).

F. Loop Resistance Test of Wire Bundle

SUBTASK 05-55-25-720-015

(1) Do the functional check of the wire bundle shielding.

NOTE: This step checks the wire bundle shielding for the scheduled maintenance check. This step also checks the wire bundle shielding after any repair is done with the wire bundle or connector.

(a) Do this task: Loop Resistance Measurement, TASK 05-56-03-200-801 or Loop Resistance and Joint Resistance Measurement, TASK 05-56-05-200-801 for each wire bundle listed in the Table 601.

NOTE: In the case of multiple wire bundles going to/from a connector, make sure the coupler is only around the desired bundle. This may require removing (and replacing) wire ties to separate the bundles enough for coupler connection.

1) Record the measured value to the data sheet (Table 601).

Table 601/05-55-25-993-842 Wire Bundle Loop Resistance Values - Left MLG Wheel Well (MRB 20-150-00)

Plane:					
Date:					
Technician:					
Bundle Number	Connector Number	Measured Loop Resistance Value (mΩ)	Min/Max Value (mΩ)	Pass Fail	Retest Measured Value/ Comments
W1022	D42102P		52/123		
W7230	D46028P		15/36		
W7522	D46030P		13/30		

2) Make sure that the measured value is within the MIN/MAX value range listed in the data sheet (Table 601).

3) If the measured value is not within the MIN/MAX value range, do the troubleshooting step below for the wire bundle shielding failure.

4) This step is complete when all wire bundles listed in the Table 601 were tested and passed.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 05-55-25-810-008

(2) Do the troubleshooting step for the wire bundle shielding.

NOTE: Perform this step only if the measured value of the Functional Check of the wire bundle shielding is not within the MIN/MAX value range.

NOTE: Record all the measurement data to the data sheet. This should include both initial and final values. Also record the troubleshooting steps taken to the RETEST MEASURED VALUE/COMMENTS column.

(a) If the wire bundle shield resistance is less than the MIN value, do these steps:

1) Check the test setup.

a) Make sure that the couplers are only around the desired wire bundle and closed properly.

2) If the test setup is OK, check the LRT operation, do this task: LRT Lid Standard Measurement, TASK 05-56-02-200-801 or ExLRT Standard Measurement, TASK 05-56-02-200-802.

3) If no problem is found, check the entire length of the wire bundle.

a) Look for signs of chafing or damage to the wire bundle that can cause the shield to short to structure.

NOTE: An example might be an area where bundle insulation has degraded and a portion of the shield is exposed and making contact with structure at an intermediate point in the bundle length. Another might be some metallic object penetrating the insulation and making contact between the shield and structure.

b) If a problem is found, repair or replace in accordance with the SWPM 20.

4) If no defects are found with the wire bundle and the loop resistance value is still less than the MIN value, record this value and contact Boeing for further support.

(b) If the wire bundle shield loop resistance is greater than the MAX value, do this step:

1) Measure the joint resistance across the connector from the ground terminal to primary structure Joint Resistance Measurement, TASK 05-56-04-200-801 or Loop Resistance and Joint Resistance Measurement, TASK 05-56-05-200-801 for each wire bundle listed in the table below for applicable connectors.

a) If joint value measured is greater than maximum joint resistance value in data table listed in the Joint Resistance Measurement, TASK 05-56-04-200-801 or Loop Resistance and Joint Resistance Measurement, TASK 05-56-05-200-801, repair in accordance with the SWPM 20.

b) If joint value measured is not greater than maximum joint resistance value in data table, record this value and contact Boeing for further support.

(c) After the wire bundle or connector is repaired, do the Functional Check of the wire bundle shielding again on this wire bundle.

SUBTASK 05-55-25-800-001

(3) The connectors listed in Table 602 are used for the steps above.

Table 602/05-55-25-993-814 Left MLG Wheel Well Connectors (MRB 20–150–00)

Wire Bundle	Connector	WDM	Mate With Equipment
W1022	D42102P	22–11–11, 22–12–31	AL0720A

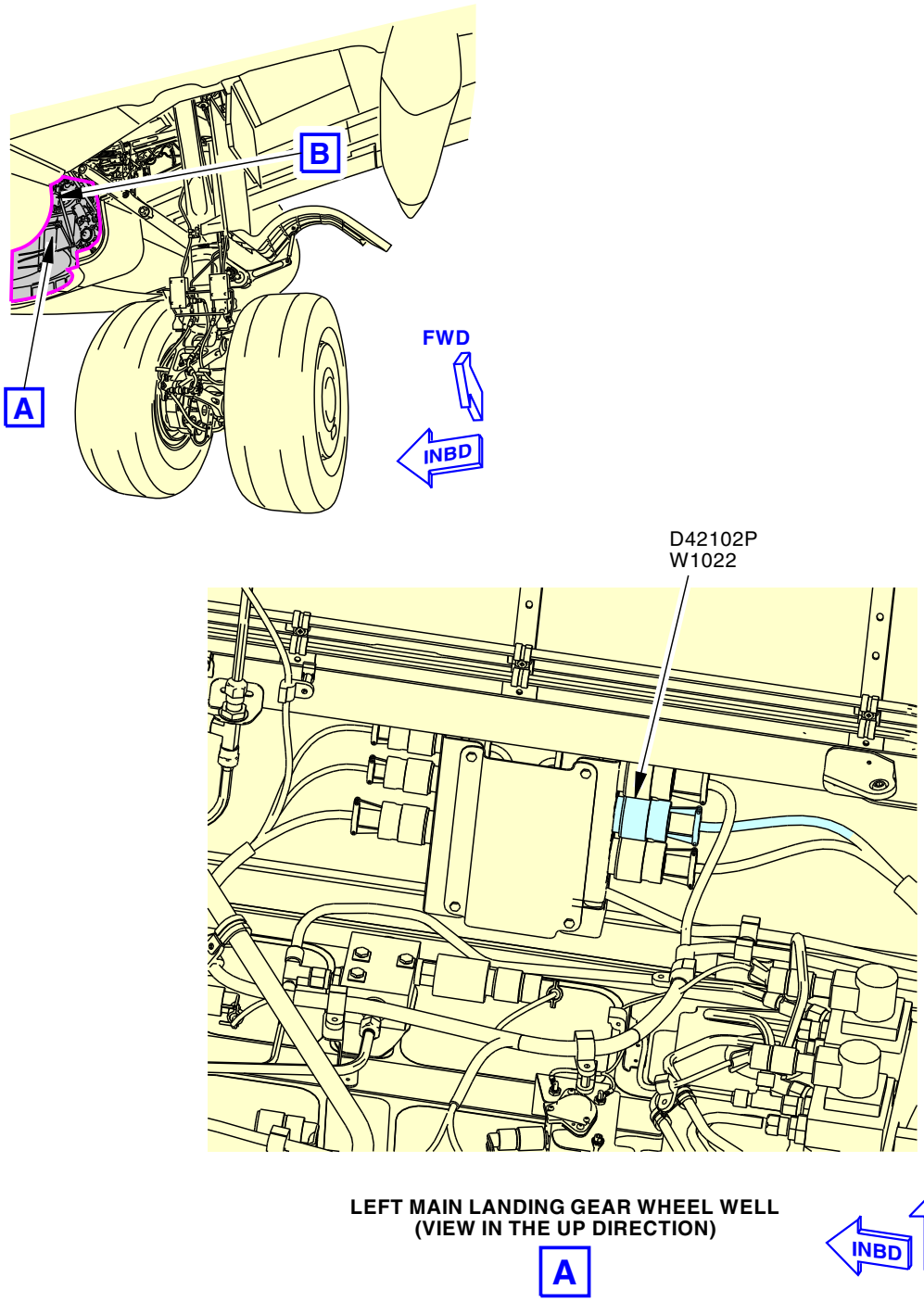
ECCN 9E991 BOEING PROPRIETARY - See title page for details

Table 602/05-55-25-993-814 Left MLG Wheel Well Connectors (MRB 20–150–00) (Continued)

Wire Bundle	Connector	WDM	Mate With Equipment
W7230	D46028P	27–61–49, 28-42-11, 29–32–11, 32–31–11, 32–41–11, 32–64–11	AL0675B
W7522	D46030P	29–11–11, 31–65–14, 78–34–11	AL0675B

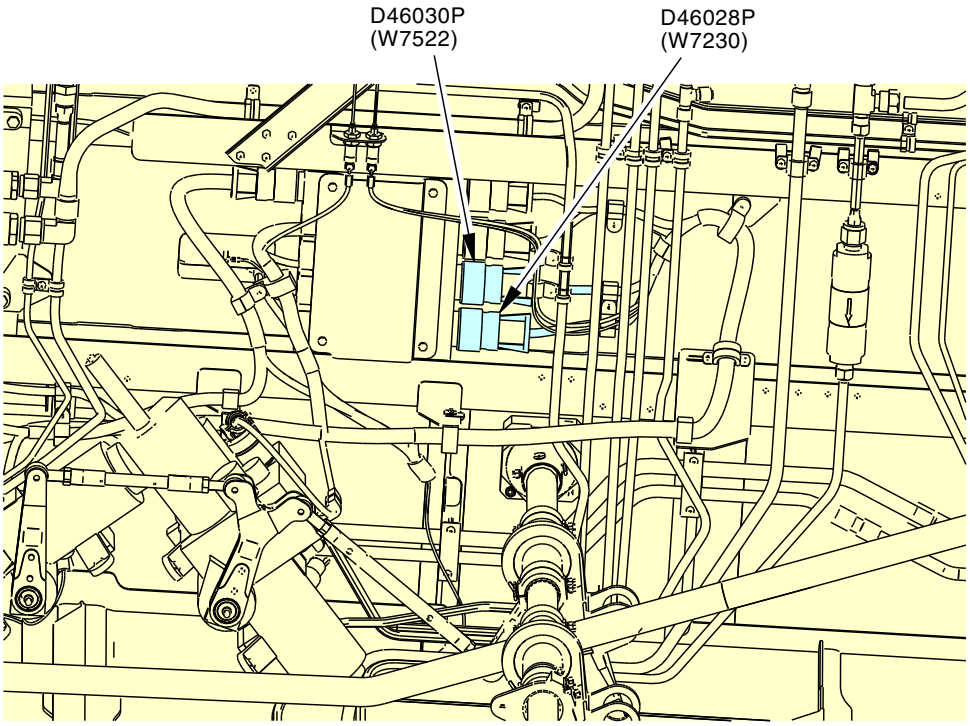
——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Loop Resistance Test of Wire Bundle - Left MLG Wheel Well (MRB 20-150-00) - Connector Location
Figure 601/05-55-25-990-819 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



2545884 S0000605049_V1

Loop Resistance Test of Wire Bundle - Left MLG Wheel Well (MRB 20-150-00) - Connector Location
Figure 601/05-55-25-990-819 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-55-25-280-803

3. Loop Resistance Test of Wire Bundle - Left MLG Wheel Well (MRB 20-152-00)

(Figure 602)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) The loop resistance tester, SPL-1636, or MK loop resistance tester, SPL-18565, is required for this task.

B. References

Reference	Title
05-56-02-200-801	LRT Lid Standard Measurement (P/B 201)
05-56-02-200-802	ExLRT Standard Measurement (P/B 201)
05-56-03-200-801	Loop Resistance Measurement (P/B 201)
05-56-04-200-801	Joint Resistance Measurement (P/B 201)
05-56-05-200-801	Loop Resistance and Joint Resistance Measurement (P/B 201)
32-00-01-480-801	Landing Gear Downlock Pins Installation (P/B 201)
SWPM 20	Standard Wiring Practices Manual

C. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-1636	Tester - Loop Resistance (LRT "-1" for checks up to & including 4 years ONLY, LRT "-2 & -3" applicable for all HIRF/FQIS check/inspection intervals) Part #: 906-10246-3 Supplier: 3X2T2 Opt Part #: 906-10246-1 Supplier: 3X2T2 Opt Part #: 906-10246-2 Supplier: 3X2T2
SPL-18565	Tester - Loop Resistance, MK Part #: XLR-9703-01 Supplier: KC432 Part #: XLR-9703-02 Supplier: KC432

D. Location Zones

Zone	Area
133	Main Landing Gear Wheel Well, Body Station 663.75 to Body Station 727.00 - Left

E. Prepare for the Loop Resistance Test

SUBTASK 05-55-25-970-005

(1) Boeing requests that all data recorded while doing this procedure be submitted to The Boeing Company for engineering analysis.

(a) Send the data to one of the following addresses:

1) Electronically: MTCProgLHIRFTaskCardData@boeing.com

2) By Mail : "The Boeing Company, Attention: Manager, Lightning / HIRF, Mail Code: MC 110-SC15, BLDG 80, 2201 Seal Beach Blvd., Seal Beach, CA USA 90740, USA".

ECCN 9E991 BOEING PROPRIETARY - See title page for details

3) By Fax: 206-655-4991.

NOTE: Data sent will help Boeing understand the reliability of the components and will be used to improve the maintenance program.

SUBTASK 05-55-25-860-003

(2) Make sure that the landing gear downlock pins are installed (TASK 32-00-01-480-801).

F. Loop Resistance Test of Wire Bundle

SUBTASK 05-55-25-720-016

(1) Do the functional check of the wire bundle shielding.

NOTE: This step checks the wire bundle shielding for the scheduled maintenance check. This step also checks the wire bundle shielding after any repair is done with the wire bundle or connector.

(a) Do this task: Loop Resistance Measurement, TASK 05-56-03-200-801 or Loop Resistance and Joint Resistance Measurement, TASK 05-56-05-200-801 for each wire bundle listed in the Table 603.

NOTE: In the case of multiple wire bundles going to/from a connector, make sure the coupler is only around the desired bundle. This may require removing (and replacing) wire ties to separate the bundles enough for coupler connection.

1) Record the measured value to the data sheet (Table 603).

Table 603/05-55-25-993-843 Wire Bundle Loop Resistance Values - Left MLG Wheel Well (MRB 20-152-00)

Plane:					
Date:					
Technician:					
Bundle Number	Connector Number	Measured Loop Resistance Value (mΩ)	Min/Max Value (mΩ)	Pass Fail	Retest Measured Value/ Comments
W1136	GD03908		30/70		
W5375	GD01505		3.5/10		

2) Make sure that the measured value is within the MIN/MAX value range listed in the data sheet (Table 603).

3) If the measured value is not within the MIN/MAX value range, do the troubleshooting step below for the wire bundle shielding failure.

4) This step is complete when all wire bundles listed in the Table 603 were tested and passed.

SUBTASK 05-55-25-810-009

(2) Do the troubleshooting step for the wire bundle shielding.

NOTE: Perform this step only if the measured value of the Functional Check of the wire bundle shielding is not within the MIN/MAX value range.

NOTE: Record all the measurement data to the data sheet. This should include both initial and final values. Also record the troubleshooting steps taken to the RETEST MEASURED VALUE/COMMENTS column.

(a) If the wire bundle shield resistance is less than the MIN value, do these steps:

1) Check the test setup.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

a) Make sure that the couplers are only around the desired wire bundle and closed properly.

2) If the test setup is OK, check the LRT operation, do this task: LRT Lid Standard Measurement, TASK 05-56-02-200-801 or ExLRT Standard Measurement, TASK 05-56-02-200-802.

3) If no problem is found, check the entire length of the wire bundle.

a) Look for signs of chafing or damage to the wire bundle that can cause the shield to short to structure.

NOTE: An example might be an area where bundle insulation has degraded and a portion of the shield is exposed and making contact with structure at an intermediate point in the bundle length. Another might be some metallic object penetrating the insulation and making contact between the shield and structure.

b) If a problem is found, repair or replace in accordance with the SWPM 20.

4) If no defects are found with the wire bundle and the loop resistance value is still less than the MIN value, record this value and contact Boeing for further support.

(b) If the wire bundle shield loop resistance is greater than the MAX value, do this step:

1) Measure the joint resistance across the connector from the ground terminal to primary structure Joint Resistance Measurement, TASK 05-56-04-200-801 or Loop Resistance and Joint Resistance Measurement, TASK 05-56-05-200-801 for each wire bundle listed in the table below for applicable connectors.

a) If joint value measured is greater than maximum joint resistance value in data table listed in the Joint Resistance Measurement, TASK 05-56-04-200-801 or Loop Resistance and Joint Resistance Measurement, TASK 05-56-05-200-801, repair in accordance with the SWPM 20.

b) If joint value measured is not greater than maximum joint resistance value in data table, record this value and contact Boeing for further support.

(c) After the wire bundle or connector is repaired, do the Functional Check of the wire bundle shielding again on this wire bundle.

SUBTASK 05-55-25-800-002

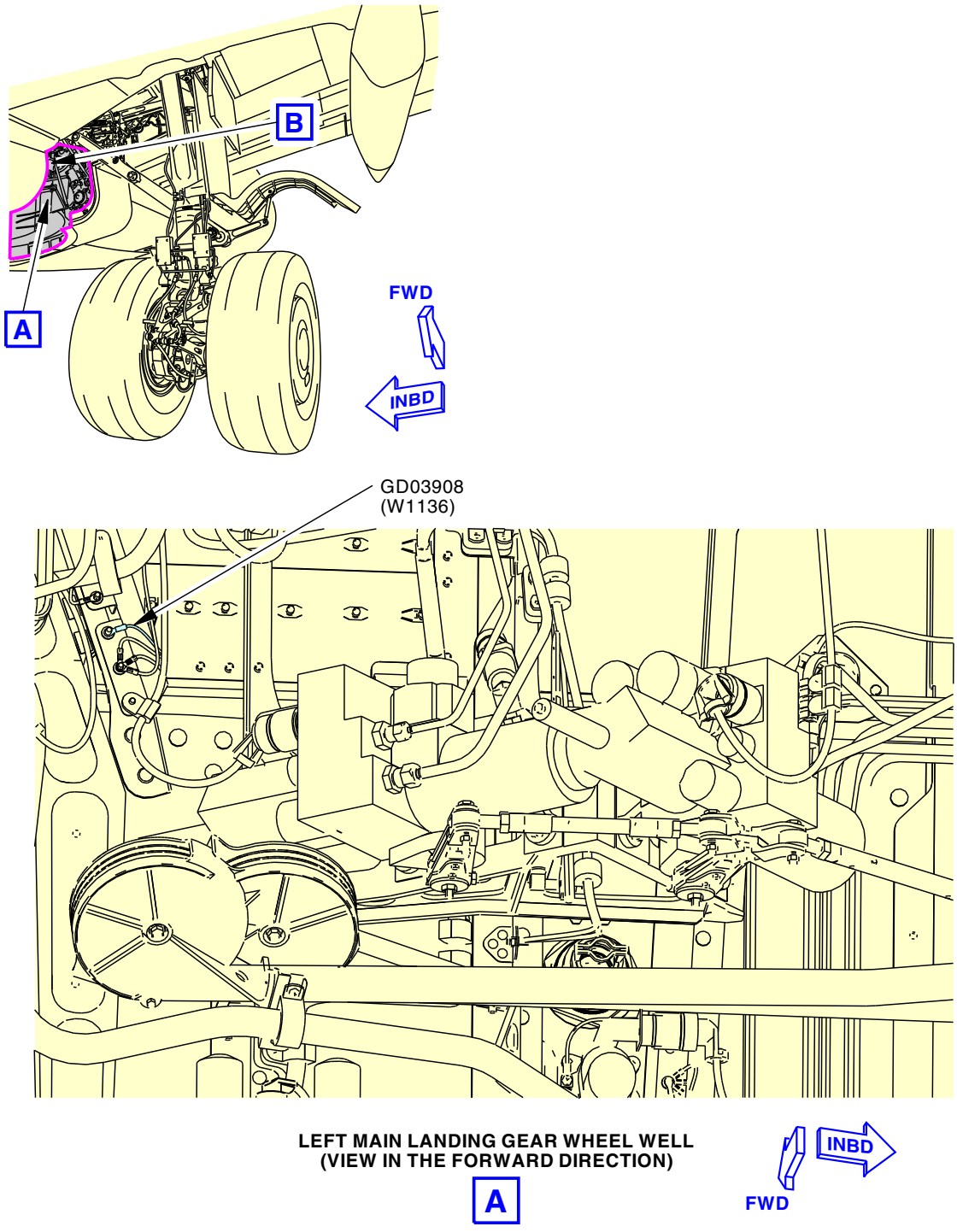
(3) The connectors/grounds listed in Table 604 is used for the steps above.

Table 604/05-55-25-993-815 Left MLG Wheel Well Connectors (MRB 20–152–00)

Wire Bundle	Connector	WDM	Mate With Equipment
W1136	GD03908	28-23-11	AB0500DR
W5375	GD01505	22-11-31	N/A

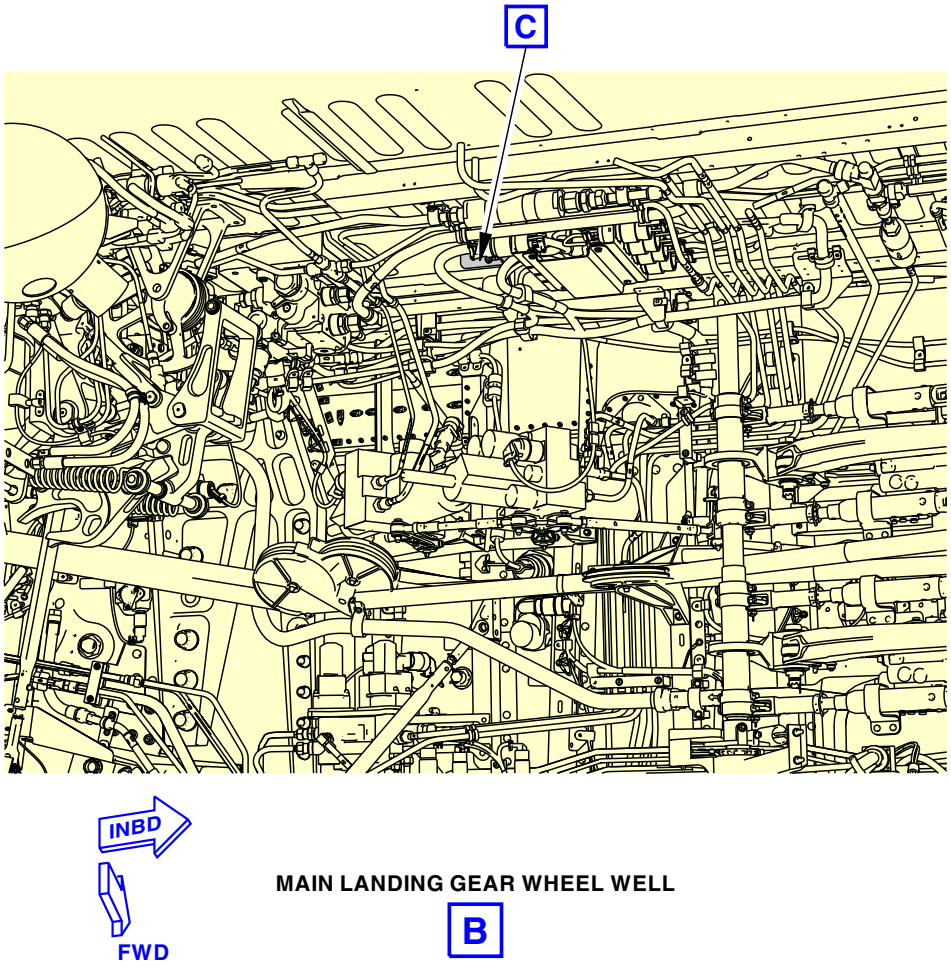
END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Loop Resistance Test of Wire Bundles - Left MLG Wheel Well (MRB 20-152-00) - Connector Locations
Figure 602/05-55-25-990-848 (Sheet 1 of 3)

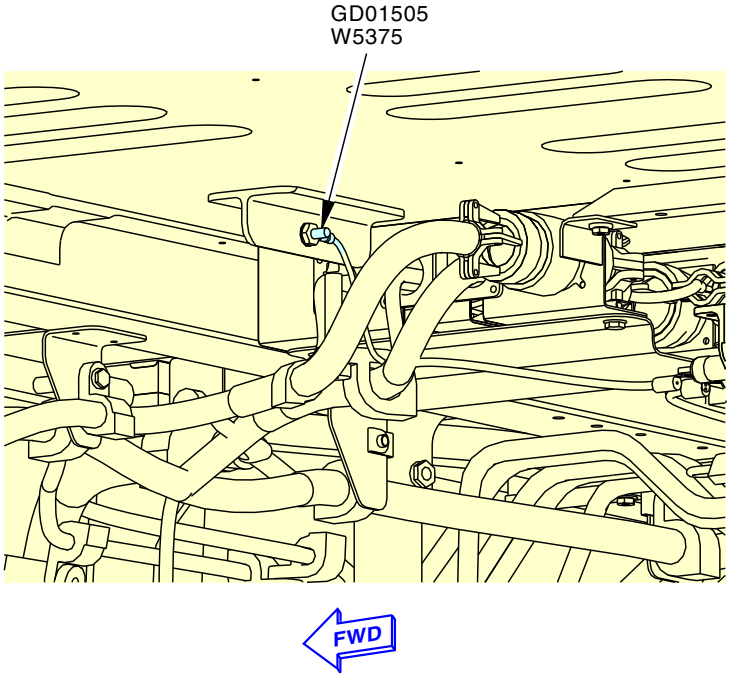
ECCN 9E991 BOEING PROPRIETARY - See title page for details



2973960 S0000752417_V1

Loop Resistance Test of Wire Bundles - Left MLG Wheel Well (MRB 20-152-00) - Connector Locations
Figure 602/05-55-25-990-848 (Sheet 2 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



2973968 S0000752418_V1

Loop Resistance Test of Wire Bundles - Left MLG Wheel Well (MRB 20-152-00) - Connector Locations
Figure 602/05-55-25-990-848 (Sheet 3 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-55-25-280-804

4. Loop Resistance Test of Wire Bundle - Left MLG Wheel Well (MRB 20-176-00)

(Figure 603)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) The loop resistance tester, SPL-1636, or MK loop resistance tester, SPL-18565, is required for this task.

B. References

Reference	Title
05-56-02-200-801	LRT Lid Standard Measurement (P/B 201)
05-56-02-200-802	ExLRT Standard Measurement (P/B 201)
05-56-03-200-801	Loop Resistance Measurement (P/B 201)
05-56-04-200-801	Joint Resistance Measurement (P/B 201)
05-56-05-200-801	Loop Resistance and Joint Resistance Measurement (P/B 201)
32-00-01-480-801	Landing Gear Downlock Pins Installation (P/B 201)
SWPM 20	Standard Wiring Practices Manual

C. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-1636	Tester - Loop Resistance (LRT "-1" for checks up to & including 4 years ONLY, LRT "-2 & -3" applicable for all HIRF/FQIS check/inspection intervals) Part #: 906-10246-3 Supplier: 3X2T2 Opt Part #: 906-10246-1 Supplier: 3X2T2 Opt Part #: 906-10246-2 Supplier: 3X2T2
SPL-18565	Tester - Loop Resistance, MK Part #: XLR-9703-01 Supplier: KC432 Part #: XLR-9703-02 Supplier: KC432

D. Location Zones

Zone	Area
133	Main Landing Gear Wheel Well, Body Station 663.75 to Body Station 727.00 - Left

E. Prepare for the Loop Resistance Test

SUBTASK 05-55-25-970-007

(1) Boeing requests that all data recorded while doing this procedure be submitted to The Boeing Company for engineering analysis.

(a) Send the data to one of the following addresses:

1) Electronically: MTCProgLHIRFTaskCardData@boeing.com

2) By Mail : "The Boeing Company, Attention: Manager, Lightning / HIRF, Mail Code: MC 110-SC15, BLDG 80, 2201 Seal Beach Blvd., Seal Beach, CA USA 90740, USA".

ECCN 9E991 BOEING PROPRIETARY - See title page for details

3) By Fax: 206-655-4991.

NOTE: Data sent will help Boeing understand the reliability of the components and will be used to improve the maintenance program.

SUBTASK 05-55-25-860-004

(2) Make sure that the landing gear downlock pins are installed (TASK 32-00-01-480-801).

F. Loop Resistance Test of Wire Bundle

SUBTASK 05-55-25-720-017

(1) Do the functional check of the wire bundle shielding.

NOTE: This step checks the wire bundle shielding for the scheduled maintenance check. This step also checks the wire bundle shielding after any repair is done with the wire bundle or connector.

(a) Do this task: Loop Resistance Measurement, TASK 05-56-03-200-801 or Loop Resistance and Joint Resistance Measurement, TASK 05-56-05-200-801 for each wire bundle listed in the Table 605.

NOTE: In the case of multiple wire bundles going to/from a connector, make sure the coupler is only around the desired bundle. This may require removing (and replacing) wire ties to separate the bundles enough for coupler connection.

1) Record the measured value to the data sheet (Table 605).

Table 605/05-55-25-993-844 Wire Bundle Loop Resistance Values - Left MLG Wheel Well (MRB 20-176-00)

Plane:					
Date:					
Technician:					
Bundle Number	Connector Number	Measured Loop Resistance Value (mΩ)	Min/Max Value (mΩ)	Pass Fail	Retest Measured Value/ Comments
W7580	D46202		8/19		

2) Make sure that the measured value is within the MIN/MAX value range listed in the data sheet (Table 605).

3) If the measured value is not within the MIN/MAX value range, do the troubleshooting step below for the wire bundle shielding failure.

4) This step is complete when all wire bundles listed in the Table 605 were tested and passed.

SUBTASK 05-55-25-810-010

(2) Do the troubleshooting step for the wire bundle shielding.

NOTE: Perform this step only if the measured value of the Functional Check of the wire bundle shielding is not within the MIN/MAX value range.

NOTE: Record all the measurement data to the data sheet. This should include both initial and final values. Also record the troubleshooting steps taken to the RETEST MEASURED VALUE/COMMENTS column.

(a) If the wire bundle shield resistance is less than the MIN value, do these steps:

1) Check the test setup.

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a) Make sure that the couplers are only around the desired wire bundle and closed properly.

2) If the test setup is OK, check the LRT operation, do this task: LRT Lid Standard Measurement, TASK 05-56-02-200-801 or ExLRT Standard Measurement, TASK 05-56-02-200-802.

3) If no problem is found, check the entire length of the wire bundle.

a) Look for signs of chafing or damage to the wire bundle that can cause the shield to short to structure.

NOTE: An example might be an area where bundle insulation has degraded and a portion of the shield is exposed and making contact with structure at an intermediate point in the bundle length. Another might be some metallic object penetrating the insulation and making contact between the shield and structure.

b) If a problem is found, repair or replace in accordance with the SWPM 20.

4) If no defects are found with the wire bundle and the loop resistance value is still less than the MIN value, record this value and contact Boeing for further support.

(b) If the wire bundle shield loop resistance is greater than the MAX value, do this step:

1) Measure the joint resistance across the connector from the ground terminal to primary structure Joint Resistance Measurement, TASK 05-56-04-200-801 or Loop Resistance and Joint Resistance Measurement, TASK 05-56-05-200-801 for each wire bundle listed in the table below for applicable connectors.

a) If joint value measured is greater than maximum joint resistance value in data table listed in the Joint Resistance Measurement, TASK 05-56-04-200-801 or Loop Resistance and Joint Resistance Measurement, TASK 05-56-05-200-801, repair in accordance with the SWPM 20.

b) If joint value measured is not greater than maximum joint resistance value in data table, record this value and contact Boeing for further support.

(c) After the wire bundle or connector is repaired, do the Functional Check of the wire bundle shielding again on this wire bundle.

SUBTASK 05-55-25-800-003

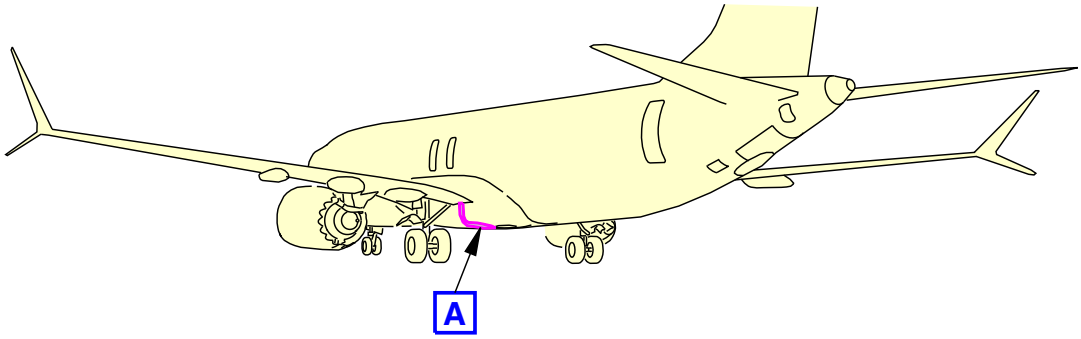
(3) The connector listed in Table 606 is used for the steps above.

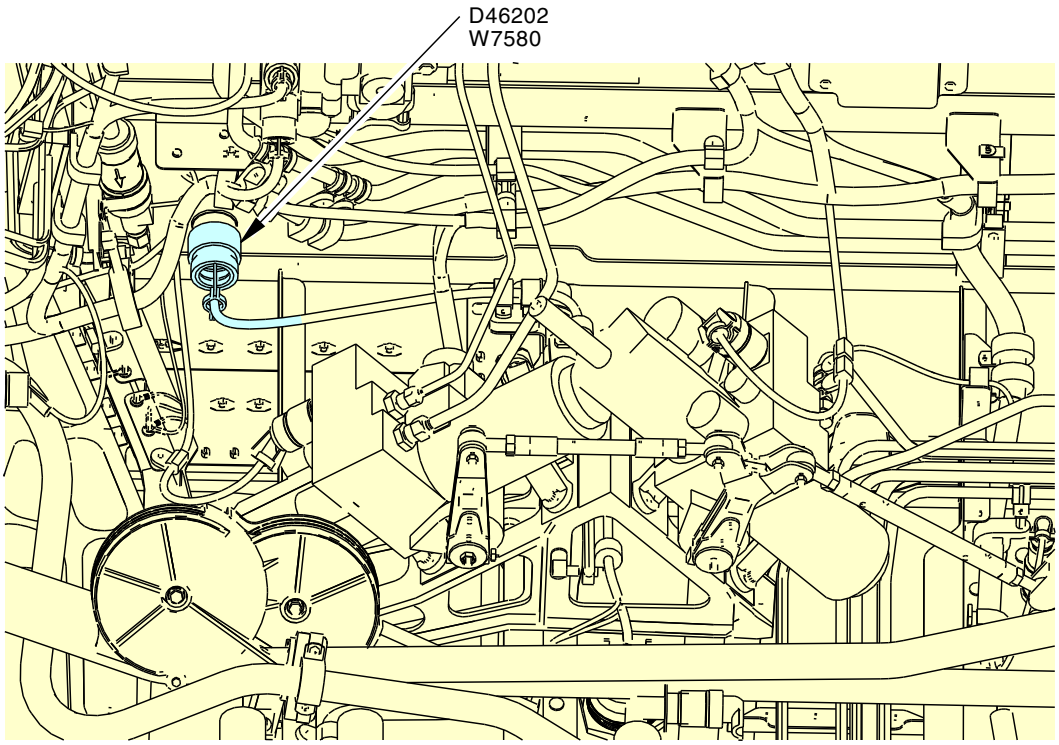
Table 606/05-55-25-993-816 Left MLG Wheel Well Connectors (MRB 20–176–00)

Wire Bundle	Connector	WDM	Mate With Equipment
W7580	D46202	28–41–11	DM0210

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details





Loop Resistance Test of Wire Bundle - Left MLG Wheel Well (MRB 20-176-00) - Connector Location
Figure 603/05-55-25-990-823

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-55-25-280-805

5. Loop Resistance Test of Wire Bundle - Left Wing to Body Fairing (MRB 20-160-00)

(Figure 604)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) The loop resistance tester, SPL-1636, or MK loop resistance tester, SPL-18565, is required for this task.

B. References

Reference	Title
05-56-02-200-801	LRT Lid Standard Measurement (P/B 201)
05-56-02-200-802	ExLRT Standard Measurement (P/B 201)
05-56-03-200-801	Loop Resistance Measurement (P/B 201)
05-56-04-200-801	Joint Resistance Measurement (P/B 201)
05-56-05-200-801	Loop Resistance and Joint Resistance Measurement (P/B 201)
27-81-00-040-801	Leading Edge Flaps and Slats - Deactivation (P/B 201)
27-81-00-440-801	Leading Edge Flaps and Slats - Activation (P/B 201)
SWPM 20	Standard Wiring Practices Manual

C. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-1636	Tester - Loop Resistance (LRT "-1" for checks up to & including 4 years ONLY, LRT "-2 & -3" applicable for all HIRF/FQIS check/inspection intervals) Part #: 906-10246-3 Supplier: 3X2T2 Opt Part #: 906-10246-1 Supplier: 3X2T2 Opt Part #: 906-10246-2 Supplier: 3X2T2
SPL-18565	Tester - Loop Resistance, MK Part #: XLR-9703-01 Supplier: KC432 Part #: XLR-9703-02 Supplier: KC432

D. Location Zones

Zone	Area
191	Lower Wing-To-Body Fairing - Forward of Wing Box

E. Access Panels

Number	Name/Location
191FL	Forward Wing-To-Body Fairing Panel - Mid Fairing, Above Ram Air Inlet

F. Prepare for the Loop Resistance Test

SUBTASK 05-55-25-970-009

(1) Boeing requests that all data recorded while doing this procedure be submitted to The Boeing Company for engineering analysis.

(a) Send the data to one of the following addresses:

1) Electronically: MTCProgLHIRFTaskCardData@boeing.com

ECCN 9E991 BOEING PROPRIETARY - See title page for details

2) By Mail : "The Boeing Company, Attention: Manager, Lightning / HIRF, Mail Code: MC 110-SC15, BLDG 80, 2201 Seal Beach Blvd., Seal Beach, CA USA 90740, USA".

3) By Fax: 206-655-4991.

NOTE: Data sent will help Boeing understand the reliability of the components and will be used to improve the maintenance program.

SUBTASK 05-55-25-040-011

(2) Do this task: Leading Edge Flaps and Slats - Deactivation, TASK 27-81-00-040-801.

SUBTASK 05-55-25-010-012

(3) Open this access panel:

Number	Name/Location
191FL	Forward Wing-To-Body Fairing Panel - Mid Fairing, Above Ram Air Inlet

G. Loop Resistance Test of Wire Bundle

SUBTASK 05-55-25-720-018

(1) Do the functional check of the wire bundle shielding.

NOTE: This step checks the wire bundle shielding for the scheduled maintenance check. This step also checks the wire bundle shielding after any repair is done with the wire bundle or connector.

(a) Do this task: Loop Resistance Measurement, TASK 05-56-03-200-801 or Loop Resistance and Joint Resistance Measurement, TASK 05-56-05-200-801 for each wire bundle listed in the Table 607.

NOTE: In the case of multiple wire bundles going to/from a connector, make sure the coupler is only around the desired bundle. This may require removing (and replacing) wire ties to separate the bundles enough for coupler connection.

1) Record the measured value to the data sheet (Table 607).

Table 607/05-55-25-993-845 Wire Bundle Loop Resistance Values - Left Wing to Body Fairing (MRB 20-160-00)

Plane:					
Date:					
Technician:					
Bundle Number	Connector Number	Measured Loop Resistance Value (mΩ)	Min/Max Value (mΩ)	Pass Fail	Retest Measured Value/ Comments
W1178	D39927		6/15		
W1182	D39931		6/15		
W1184	D39935		11/26		
W1190	D39973		7/17		
W1188	D39903		16/38		
W1662	D39957		6/14		
W1140	D39965		12/29		

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Table 607/05-55-25-993-845 Wire Bundle Loop Resistance Values - Left Wing to Body Fairing (MRB 20-160-00) (Continued)

W1192	D39985		4/10		

2) Make sure that the measured value is within the MIN/MAX value range listed in the data sheet (Table 607).

3) If the measured value is not within the MIN/MAX value range, do the troubleshooting step below for the wire bundle shielding failure.

4) This step is complete when all wire bundles listed in the Table 607 were tested and passed.

SUBTASK 05-55-25-810-011

(2) Do the troubleshooting step for the wire bundle shielding.

NOTE: Perform this step only if the measured value of the Functional Check of the wire bundle shielding is not within the MIN/MAX value range.

NOTE: Record all the measurement data to the data sheet. This should include both initial and final values. Also record the troubleshooting steps taken to the RETEST MEASURED VALUE/COMMENTS column.

(a) If the wire bundle shield resistance is less than the MIN value, do these steps:

1) Check the test setup.

a) Make sure that the couplers are only around the desired wire bundle and closed properly.

2) If the test setup is OK, check the LRT operation, do this task: LRT Lid Standard Measurement, TASK 05-56-02-200-801 or ExLRT Standard Measurement, TASK 05-56-02-200-802.

3) If no problem is found, check the entire length of the wire bundle.

a) Look for signs of chafing or damage to the wire bundle that can cause the shield to short to structure.

NOTE: An example might be an area where bundle insulation has degraded and a portion of the shield is exposed and making contact with structure at an intermediate point in the bundle length. Another might be some metallic object penetrating the insulation and making contact between the shield and structure.

b) If a problem is found, repair or replace in accordance with the SWPM 20.

4) If no defects are found with the wire bundle and the loop resistance value is still less than the MIN value, record this value and contact Boeing for further support.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(b) If the wire bundle shield loop resistance is greater than the MAX value, do this step:

1) Measure the joint resistance across the connector from the ground terminal to primary structure Joint Resistance Measurement, TASK 05-56-04-200-801 or Loop Resistance and Joint Resistance Measurement, TASK 05-56-05-200-801 for each wire bundle listed in the table below for applicable connectors.

a) If joint value measured is greater than maximum joint resistance value in data table listed in the Joint Resistance Measurement, TASK 05-56-04-200-801 or Loop Resistance and Joint Resistance Measurement, TASK 05-56-05-200-801, repair in accordance with the SWPM 20.

b) If joint value measured is not greater than maximum joint resistance value in data table, record this value and contact Boeing for further support.

(c) After the wire bundle or connector is repaired, do the Functional Check of the wire bundle shielding again on this wire bundle.

SUBTASK 05-55-25-800-004

(3) The connectors listed in Table 608 are used for the steps above.

Table 608/05-55-25-993-817 Left Wing to Body Fairing Connectors (MRB 20-160-00)

Wire Bundle	Connector	WDM	Mate With Equipment
W1178	D39927	26–11–11, 28–21–11, 36–11–12, 36–11–13, 73–21–12, 73–22–11, 74–11–11, 77–12–11, 78–34–11, 78–35–11, 79–31–11	DM0013
W1178	D39927	26–11–11, 28–21–11, 36–11–12, 36–11–13, 73–21–12, 73–22–11, 74–11–11, 77–12–11, 78–34–11, 78–35–11, 79–31–11	DM0055
W1182	D39931	26–11–11, 26–12–11, 30–21–31, 36–11–13, 73–21–12, 73–22–11, 73–22–41, 74–11–11, 76–21–11, 77–12–21	DM0015
W1184	D39935	24–11–11, 24–21–11, 24–24–11, 29–11–11	DM0017
W1190	D39973	46–13–11, 73–21–11, 73–21–21, 73–24–11, 73–24–12, 78–32–51	DM0011
W1188	D39903	26–12–11, 27–81–12, 30–11–11	DM0001
W1662	D39957	28–44–11, 30–11–11, 33–42–21, 33–43–11, 33–44–12	DM0052
W1140	D39965	28–41–11	DM0053
W1192	D39985	46–13–11, 73–21–11, 73–21–12, 73–21–21, 73–24–11, 73–24–12, 78–32–51	DM0055

ECCN 9E991 BOEING PROPRIETARY - See title page for details

H. Put the Airplane Back to Its Usual Condition

SUBTASK 05-55-25-410-008

(1) Close this access panel:

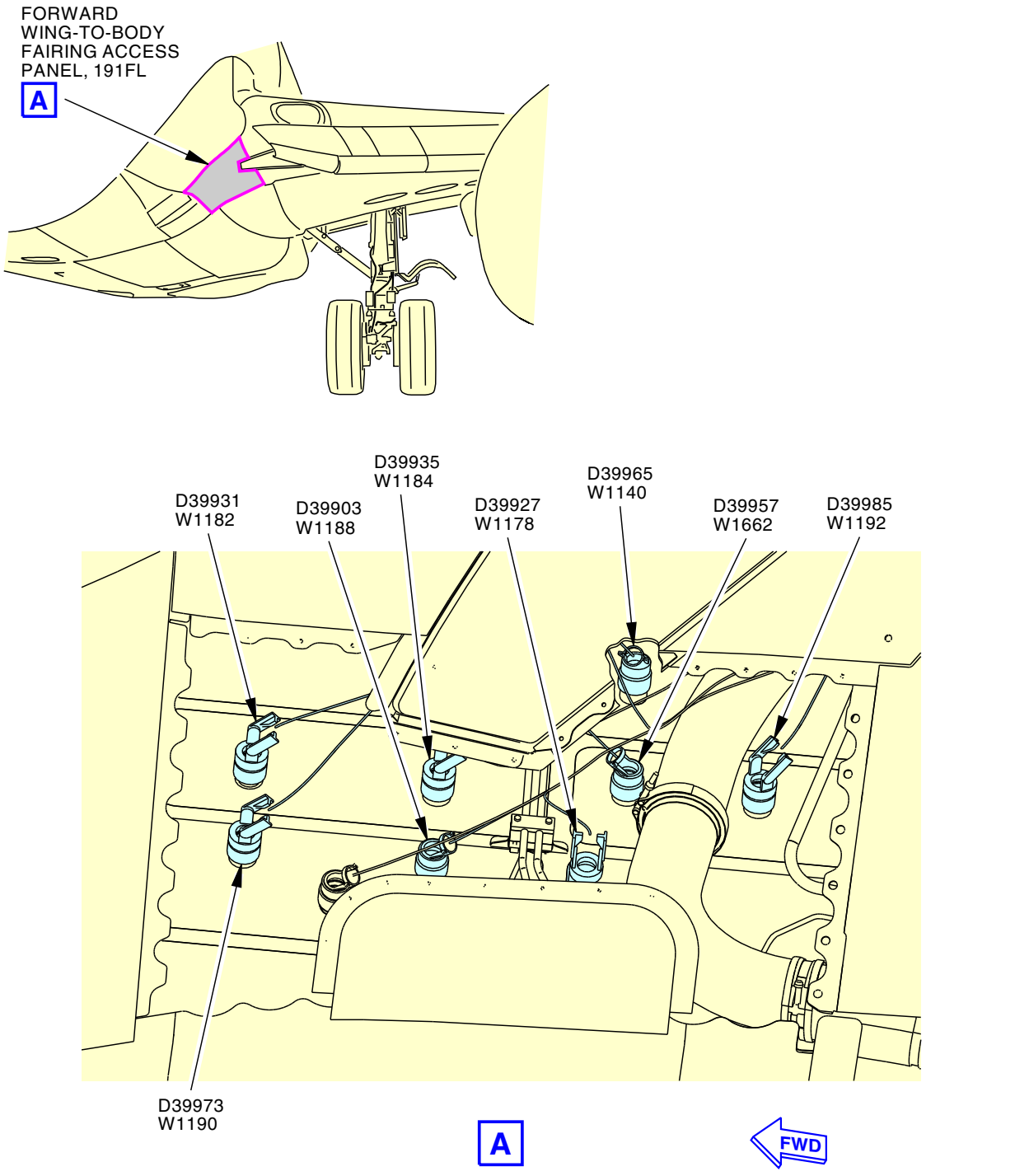
Number	Name/Location
191FL	Forward Wing-To-Body Fairing Panel - Mid Fairing, Above Ram Air Inlet

SUBTASK 05-55-25-440-010

(2) Do this task: Leading Edge Flaps and Slats - Activation, TASK 27-81-00-440-801.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Loop Resistance Test of Wire Bundle - Left Wing to Body Fairing (MRB 20-160-00)- Connector Location
Figure 604/05-55-25-990-825

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-55-25-280-806

6. Loop Resistance Test of Wire Bundle - Left Wing to Body Fairing (MRB 20-161-00)

(Figure 605)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) The loop resistance tester, SPL-1636, or MK loop resistance tester, SPL-18565, is required for this task.

B. References

Reference	Title
05-56-02-200-801	LRT Lid Standard Measurement (P/B 201)
05-56-02-200-802	ExLRT Standard Measurement (P/B 201)
05-56-03-200-801	Loop Resistance Measurement (P/B 201)
05-56-04-200-801	Joint Resistance Measurement (P/B 201)
05-56-05-200-801	Loop Resistance and Joint Resistance Measurement (P/B 201)
21-51-00-800-801	Air Cycle Air Conditioning and Temperature Control System - Deactivation (P/B 201)
21-51-00-800-802	Air Cycle Air Conditioning and Temperature Control System - Activation (P/B 201)
SWPM 20	Standard Wiring Practices Manual

C. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-1636	Tester - Loop Resistance (LRT "-1" for checks up to & including 4 years ONLY, LRT "-2 & -3" applicable for all HIRF/FQIS check/inspection intervals) Part #: 906-10246-3 Supplier: 3X2T2 Opt Part #: 906-10246-1 Supplier: 3X2T2 Opt Part #: 906-10246-2 Supplier: 3X2T2
SPL-18565	Tester - Loop Resistance, MK Part #: XLR-9703-01 Supplier: KC432 Part #: XLR-9703-02 Supplier: KC432

D. Location Zones

Zone	Area
192	Lower Wing-To-Body Fairing - Under Wing Box

E. Access Panels

Number	Name/Location
192CL	ECS Access Door

F. Prepare for the Loop Resistance Test

SUBTASK 05-55-25-970-011

(1) Boeing requests that all data recorded while doing this procedure be submitted to The Boeing Company for engineering analysis.

(a) Send the data to one of the following addresses:

ECCN 9E991 BOEING PROPRIETARY - See title page for details

1) Electronically: MTCProgLHIRFTaskCardData@boeing.com

2) By Mail : "The Boeing Company, Attention: Manager, Lightning / HIRF, Mail Code: MC 110-SC15, BLDG 80, 2201 Seal Beach Blvd., Seal Beach, CA USA 90740, USA".

3) By Fax: 206-655-4991.

NOTE: Data sent will help Boeing understand the reliability of the components and will be used to improve the maintenance program.

SUBTASK 05-55-25-840-002

(2) Do this task: Air Cycle Air Conditioning and Temperature Control System - Deactivation, TASK 21-51-00-800-801.

SUBTASK 05-55-25-010-013

(3) Open this access panel:

Number	Name/Location
192CL	ECS Access Door

G. Loop Resistance Test of Wire Bundle

SUBTASK 05-55-25-720-019

(1) Do the functional check of the wire bundle shielding.

NOTE: This step checks the wire bundle shielding for the scheduled maintenance check. This step also checks the wire bundle shielding after any repair is done with the wire bundle or connector.

(a) Do this task: Loop Resistance Measurement, TASK 05-56-03-200-801 or Loop Resistance and Joint Resistance Measurement, TASK 05-56-05-200-801 for each wire bundle listed in the Table 609.

NOTE: In the case of multiple wire bundles going to/from a connector, make sure the coupler is only around the desired bundle. This may require removing (and replacing) wire ties to separate the bundles enough for coupler connection.

1) Record the measured value to the data sheet (Table 609).

Table 609/05-55-25-993-846 Wire Bundle Loop Resistance Values - Left Wing to Body Fairing (MRB 20-161-00)

Plane:					
Date:					
Technician:					
Bundle Number	Connector Number	Measured Loop Resistance Value (mΩ)	Min/Max Value (mΩ)	Pass Fail	Retest Measured Value/ Comments
W5526	D04580P		500/750		

2) Make sure that the measured value is within the MIN/MAX value range listed in the data sheet (Table 609).

3) If the measured value is not within the MIN/MAX value range, do the troubleshooting step below for the wire bundle shielding failure.

4) This step is complete when all wire bundles listed in the Table 609 were tested and passed.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 05-55-25-810-012

(2) Do the troubleshooting step for the wire bundle shielding.

NOTE: Perform this step only if the measured value of the Functional Check of the wire bundle shielding is not within the MIN/MAX value range.

NOTE: Record all the measurement data to the data sheet. This should include both initial and final values. Also record the troubleshooting steps taken to the RETEST MEASURED VALUE/COMMENTS column.

(a) If the wire bundle shield resistance is less than the MIN value, do these steps:

1) Check the test setup.

a) Make sure that the couplers are only around the desired wire bundle and closed properly.

2) If the test setup is OK, check the LRT operation, do this task: LRT Lid Standard Measurement, TASK 05-56-02-200-801 or ExLRT Standard Measurement, TASK 05-56-02-200-802.

3) If no problem is found, check the entire length of the wire bundle.

a) Look for signs of chafing or damage to the wire bundle that can cause the shield to short to structure.

NOTE: An example might be an area where bundle insulation has degraded and a portion of the shield is exposed and making contact with structure at an intermediate point in the bundle length. Another might be some metallic object penetrating the insulation and making contact between the shield and structure.

b) If a problem is found, repair or replace in accordance with the SWPM 20.

4) If no defects are found with the wire bundle and the loop resistance value is still less than the MIN value, record this value and contact Boeing for further support.

(b) If the wire bundle shield loop resistance is greater than the MAX value, do this step:

1) Measure the joint resistance across the connector from the ground terminal to primary structure Joint Resistance Measurement, TASK 05-56-04-200-801 or Loop Resistance and Joint Resistance Measurement, TASK 05-56-05-200-801 for each wire bundle listed in the table below for applicable connectors.

a) If joint value measured is greater than maximum joint resistance value in data table listed in the Joint Resistance Measurement, TASK 05-56-04-200-801 or Loop Resistance and Joint Resistance Measurement, TASK 05-56-05-200-801, repair in accordance with the SWPM 20.

b) If joint value measured is not greater than maximum joint resistance value in data table, record this value and contact Boeing for further support.

(c) After the wire bundle or connector is repaired, do the Functional Check of the wire bundle shielding again on this wire bundle.

SUBTASK 05-55-25-800-005

(3) The connector listed in Table 610 is used for the steps above.

Table 610/05-55-25-993-818 Left Wing to Body Fairing Connectors (MRB 20-161-00)

Wire Bundle	Connector	WDM	Mate With Equipment
W5526	D04580P	21-51-14, 36–21–11	AB0536L

ECCN 9E991 BOEING PROPRIETARY - See title page for details

H. Put the Airplane Back to Its Usual Condition

SUBTASK 05-55-25-410-009

(1) Close this access panel:

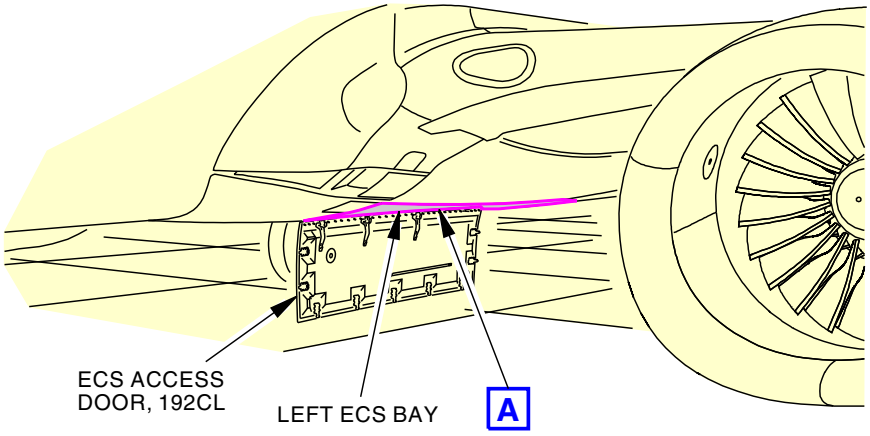
Number	Name/Location
192CL	ECS Access Door

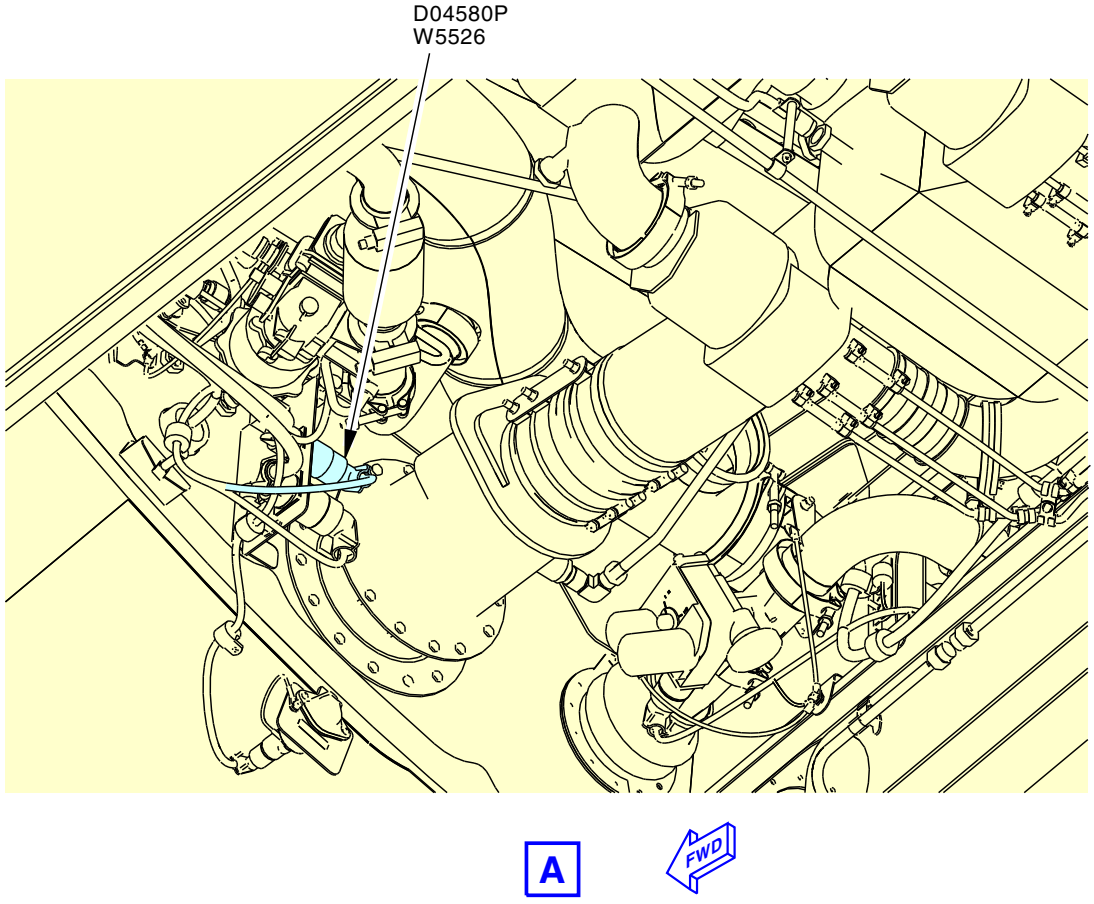
SUBTASK 05-55-25-840-003

(2) Do this task: Air Cycle Air Conditioning and Temperature Control System - Activation, TASK 21-51-00-800-802.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details





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Loop Resistance Test of Wire Bundle - Left Wing to Body Fairing (MRB 20-161-00) - Connector Location
Figure 605/05-55-25-990-827

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-55-25-280-809

7. Loop Resistance Test of Wire Bundle - Left Wing to Body Fairing (MRB 20-164-00)

(Figure 606)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) The loop resistance tester, SPL-1636, or MK loop resistance tester, SPL-18565, is required for this task.

B. References

Reference	Title
05-56-02-200-801	LRT Lid Standard Measurement (P/B 201)
05-56-02-200-802	ExLRT Standard Measurement (P/B 201)
05-56-03-200-801	Loop Resistance Measurement (P/B 201)
05-56-04-200-801	Joint Resistance Measurement (P/B 201)
05-56-05-200-801	Loop Resistance and Joint Resistance Measurement (P/B 201)
21-51-00-800-801	Air Cycle Air Conditioning and Temperature Control System - Deactivation (P/B 201)
21-51-00-800-802	Air Cycle Air Conditioning and Temperature Control System - Activation (P/B 201)
SWPM 20	Standard Wiring Practices Manual

C. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-1636	Tester - Loop Resistance (LRT "-1" for checks up to & including 4 years ONLY, LRT "-2 & -3" applicable for all HIRF/FQIS check/inspection intervals) Part #: 906-10246-3 Supplier: 3X2T2 Opt Part #: 906-10246-1 Supplier: 3X2T2 Opt Part #: 906-10246-2 Supplier: 3X2T2
SPL-18565	Tester - Loop Resistance, MK Part #: XLR-9703-01 Supplier: KC432 Part #: XLR-9703-02 Supplier: KC432

D. Location Zones

Zone	Area
192	Lower Wing-To-Body Fairing - Under Wing Box

E. Access Panels

Number	Name/Location
192CL	ECS Access Door

F. Prepare for the Loop Resistance Test

SUBTASK 05-55-25-970-001

(1) Boeing requests that all data recorded while doing this procedure be submitted to The Boeing Company for engineering analysis.

(a) Send the data to one of the following addresses:

ECCN 9E991 BOEING PROPRIETARY - See title page for details

1) Electronically: MTCProgLHIRFTaskCardData@boeing.com

2) By Mail : "The Boeing Company, Attention: Manager, Lightning / HIRF, Mail Code: MC 110-SC15, BLDG 80, 2201 Seal Beach Blvd., Seal Beach, CA USA 90740, USA".

3) By Fax: 206-655-4991.

NOTE: Data sent will help Boeing understand the reliability of the components and will be used to improve the maintenance program.

SUBTASK 05-55-25-840-001

(2) Do this task: Air Cycle Air Conditioning and Temperature Control System - Deactivation, TASK 21-51-00-800-801.

SUBTASK 05-55-25-010-011

(3) Open this access panel:

Number	Name/Location
192CL	ECS Access Door

G. Loop Resistance Test of Wire Bundle

SUBTASK 05-55-25-720-020

(1) Do the functional check of the wire bundle shielding.

NOTE: This step checks the wire bundle shielding for the scheduled maintenance check. This step also checks the wire bundle shielding after any repair is done with the wire bundle or connector.

(a) Do this task: Loop Resistance Measurement, TASK 05-56-03-200-801 or Loop Resistance and Joint Resistance Measurement, TASK 05-56-05-200-801 for each wire bundle listed in the Table 611.

NOTE: In the case of multiple wire bundles going to/from a connector, make sure the coupler is only around the desired bundle. This may require removing (and replacing) wire ties to separate the bundles enough for coupler connection.

1) Record the measured value to the data sheet (Table 611).

Table 611/05-55-25-993-847 Wire Bundle Loop Resistance Values - Left Wing to Body Fairing (MRB 20-164-00)

Plane:					
Date:					
Technician:					
Bundle Number	Connector Number	Measured Loop Resistance Value (mΩ)	Min/Max Value (mΩ)	Pass Fail	Retest Measured Value/ Comments
W5502	D40844P		16/38		

2) Make sure that the measured value is within the MIN/MAX value range listed in the data sheet (Table 611).

3) If the measured value is not within the MIN/MAX value range, do the troubleshooting step below for the wire bundle shielding failure.

4) This step is complete when all wire bundles listed in the Table 611 were tested and passed.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 05-55-25-810-007

(2) Do the troubleshooting step for the wire bundle shielding.

NOTE: Perform this step only if the measured value of the Functional Check of the wire bundle shielding is not within the MIN/MAX value range.

NOTE: Record all the measurement data to the data sheet. This should include both initial and final values. Also record the troubleshooting steps taken to the RETEST MEASURED VALUE/COMMENTS column.

(a) If the wire bundle shield resistance is less than the MIN value, do these steps:

1) Check the test setup.

a) Make sure that the couplers are only around the desired wire bundle and closed properly.

2) If the test setup is OK, check the LRT operation, do this task: LRT Lid Standard Measurement, TASK 05-56-02-200-801 or ExLRT Standard Measurement, TASK 05-56-02-200-802.

3) If no problem is found, check the entire length of the wire bundle.

a) Look for signs of chafing or damage to the wire bundle that can cause the shield to short to structure.

NOTE: An example might be an area where bundle insulation has degraded and a portion of the shield is exposed and making contact with structure at an intermediate point in the bundle length. Another might be some metallic object penetrating the insulation and making contact between the shield and structure.

b) If a problem is found, repair or replace in accordance with the SWPM 20.

4) If no defects are found with the wire bundle and the loop resistance value is still less than the MIN value, record this value and contact Boeing for further support.

(b) If the wire bundle shield loop resistance is greater than the MAX value, do this step:

1) Measure the joint resistance across the connector from the ground terminal to primary structure Joint Resistance Measurement, TASK 05-56-04-200-801 or Loop Resistance and Joint Resistance Measurement, TASK 05-56-05-200-801 for each wire bundle listed in the table below for applicable connectors.

a) If joint value measured is greater than maximum joint resistance value in data table listed in the Joint Resistance Measurement, TASK 05-56-04-200-801 or Loop Resistance and Joint Resistance Measurement, TASK 05-56-05-200-801, repair in accordance with the SWPM 20.

b) If joint value measured is not greater than maximum joint resistance value in data table, record this value and contact Boeing for further support.

(c) After the wire bundle or connector is repaired, do the Functional Check of the wire bundle shielding again on this wire bundle.

SUBTASK 05-55-25-800-007

(3) The connector listed in Table 612 is used for the steps above.

Table 612/05-55-25-993-820 Left Wing to Body Fairing Connectors (MRB 20-164-00)

Wire Bundle	Connector	WDM	Mate With Equipment
W5502	D40844P	21-42-11, 21–51–11	D40844J

ECCN 9E991 BOEING PROPRIETARY - See title page for details

H. Put the Airplane Back to Its Usual Condition

SUBTASK 05-55-25-410-011

(1) Close this access panel:

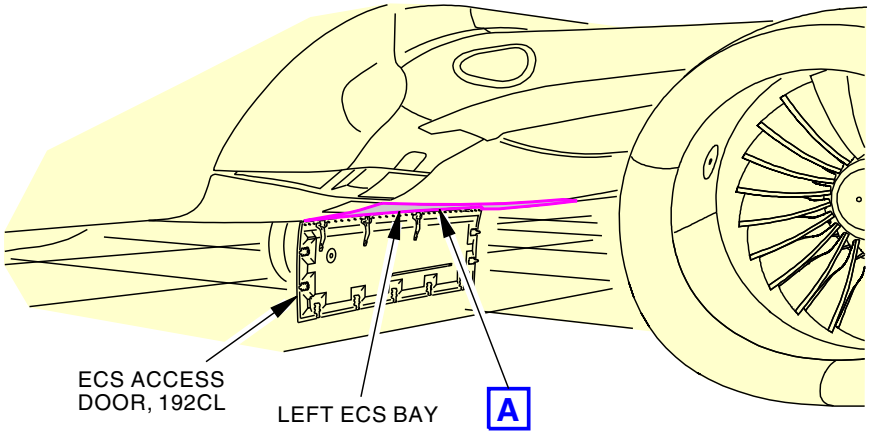
Number	Name/Location
192CL	ECS Access Door

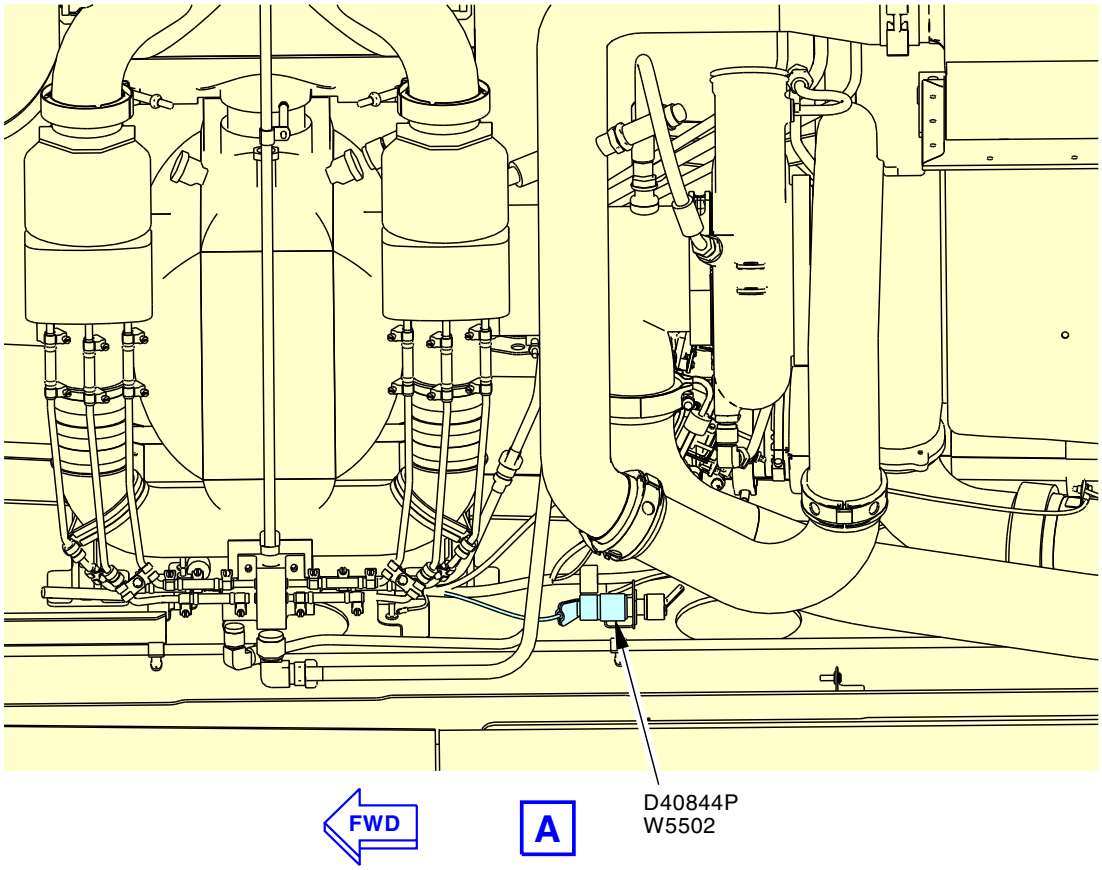
SUBTASK 05-55-25-840-004

(2) Do this task: Air Cycle Air Conditioning and Temperature Control System - Activation, TASK 21-51-00-800-802.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details





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Loop Resistance Test of Wire Bundle - Left Wing to Body Fairing (MRB 20-164-00) - Connector Location
Figure 606/05-55-25-990-831

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-55-25-280-810

8. Loop Resistance Test of Wire Bundle - Left Wing to Body Fairing (MRB 20-178-00)

(Figure 607)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) The loop resistance tester, SPL-1636, or MK loop resistance tester, SPL-18565, is required for this task.

B. References

Reference	Title
05-56-02-200-801	LRT Lid Standard Measurement (P/B 201)
05-56-02-200-802	ExLRT Standard Measurement (P/B 201)
05-56-03-200-801	Loop Resistance Measurement (P/B 201)
05-56-04-200-801	Joint Resistance Measurement (P/B 201)
05-56-05-200-801	Loop Resistance and Joint Resistance Measurement (P/B 201)
21-51-00-800-801	Air Cycle Air Conditioning and Temperature Control System - Deactivation (P/B 201)
21-51-00-800-802	Air Cycle Air Conditioning and Temperature Control System - Activation (P/B 201)
SWPM 20	Standard Wiring Practices Manual

C. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-1636	Tester - Loop Resistance (LRT "-1" for checks up to & including 4 years ONLY, LRT "-2 & -3" applicable for all HIRF/FQIS check/inspection intervals) Part #: 906-10246-3 Supplier: 3X2T2 Opt Part #: 906-10246-1 Supplier: 3X2T2 Opt Part #: 906-10246-2 Supplier: 3X2T2
SPL-18565	Tester - Loop Resistance, MK Part #: XLR-9703-01 Supplier: KC432 Part #: XLR-9703-02 Supplier: KC432

D. Location Zones

Zone	Area
192	Lower Wing-To-Body Fairing - Under Wing Box

E. Access Panels

Number	Name/Location
192CL	ECS Access Door

F. Prepare for the Loop Resistance Test

SUBTASK 05-55-25-970-016

(1) Boeing requests that all data recorded while doing this procedure be submitted to The Boeing Company for engineering analysis.

(a) Send the data to one of the following addresses:

ECCN 9E991 BOEING PROPRIETARY - See title page for details

1) Electronically: MTCProgLHIRFTaskCardData@boeing.com

2) By Mail : "The Boeing Company, Attention: Manager, Lightning / HIRF, Mail Code: MC 110-SC15, BLDG 80, 2201 Seal Beach Blvd., Seal Beach, CA USA 90740, USA".

3) By Fax: 206-655-4991.

NOTE: Data sent will help Boeing understand the reliability of the components and will be used to improve the maintenance program.

SUBTASK 05-55-25-840-005

(2) Do this task: Air Cycle Air Conditioning and Temperature Control System - Deactivation, TASK 21-51-00-800-801.

SUBTASK 05-55-25-010-015

(3) Open this access panel:

Number	Name/Location
192CL	ECS Access Door

G. Loop Resistance Test of Wire Bundle

SUBTASK 05-55-25-720-021

(1) Do the functional check of the wire bundle shielding.

NOTE: This step checks the wire bundle shielding for the scheduled maintenance check. This step also checks the wire bundle shielding after any repair is done with the wire bundle or connector.

(a) Do this task: Loop Resistance Measurement, TASK 05-56-03-200-801 or Loop Resistance and Joint Resistance Measurement, TASK 05-56-05-200-801 for each wire bundle listed in the Table 613.

NOTE: In the case of multiple wire bundles going to/from a connector, make sure the coupler is only around the desired bundle. This may require removing (and replacing) wire ties to separate the bundles enough for coupler connection.

1) Record the measured value to the data sheet (Table 613).

Table 613/05-55-25-993-848 Wire Bundle Loop Resistance Values - Left Wing to Body Fairing (MRB 20-178-00)

Plane:					
Date:					
Technician:					
Bundle Number	Connector Number	Measured Loop Resistance Value (mΩ)	Min/Max Value (mΩ)	Pass Fail	Retest Measured Value/ Comments
W5502	D41500		3/8		

2) Make sure that the measured value is within the MIN/MAX value range listed in the data sheet (Table 613).

3) If the measured value is not within the MIN/MAX value range, do the troubleshooting step below for the wire bundle shielding failure.

4) This step is complete when all wire bundles listed in the Table 613 were tested and passed.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 05-55-25-810-014

(2) Do the troubleshooting step for the wire bundle shielding.

NOTE: Perform this step only if the measured value of the Functional Check of the wire bundle shielding is not within the MIN/MAX value range.

NOTE: Record all the measurement data to the data sheet. This should include both initial and final values. Also record the troubleshooting steps taken to the RETEST MEASURED VALUE/COMMENTS column.

(a) If the wire bundle shield resistance is less than the MIN value, do these steps:

1) Check the test setup.

a) Make sure that the couplers are only around the desired wire bundle and closed properly.

2) If the test setup is OK, check the LRT operation, do this task: LRT Lid Standard Measurement, TASK 05-56-02-200-801 or ExLRT Standard Measurement, TASK 05-56-02-200-802.

3) If no problem is found, check the entire length of the wire bundle.

a) Look for signs of chafing or damage to the wire bundle that can cause the shield to short to structure.

NOTE: An example might be an area where bundle insulation has degraded and a portion of the shield is exposed and making contact with structure at an intermediate point in the bundle length. Another might be some metallic object penetrating the insulation and making contact between the shield and structure.

b) If a problem is found, repair or replace in accordance with the SWPM 20.

4) If no defects are found with the wire bundle and the loop resistance value is still less than the MIN value, record this value and contact Boeing for further support.

(b) If the wire bundle shield loop resistance is greater than the MAX value, do this step:

1) Measure the joint resistance across the connector from the ground terminal to primary structure Joint Resistance Measurement, TASK 05-56-04-200-801 or Loop Resistance and Joint Resistance Measurement, TASK 05-56-05-200-801 for each wire bundle listed in the table below for applicable connectors.

a) If joint value measured is greater than maximum joint resistance value in data table listed in the Joint Resistance Measurement, TASK 05-56-04-200-801 or Loop Resistance and Joint Resistance Measurement, TASK 05-56-05-200-801, repair in accordance with the SWPM 20.

b) If joint value measured is not greater than maximum joint resistance value in data table, record this value and contact Boeing for further support.

(c) After the wire bundle or connector is repaired, do the Functional Check of the wire bundle shielding again on this wire bundle.

SUBTASK 05-55-25-800-008

(3) The connector listed in Table 614 is used for the steps above.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Table 614/05-55-25-993-821 Left Wing to Body Fairing Connectors (MRB 20-178-00)

Wire Bundle	Connector	WDM	Mate With Equipment
W5502	D41500	21–42–11, 21–51–11, 21–51–12, 21–61–11, 26–12–11, 33–33–11, 36–11–31	DM0050

H. Put the Airplane Back to Its Usual Condition

SUBTASK 05-55-25-410-012

(1) Close this access panel:

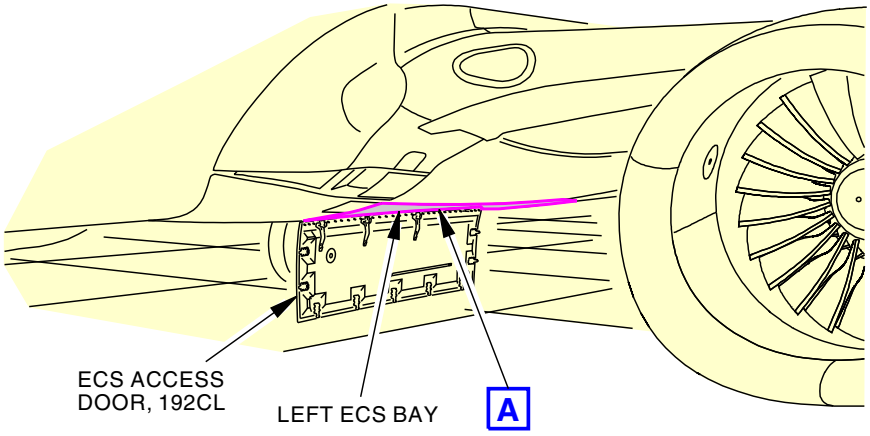
Number	Name/Location
192CL	ECS Access Door

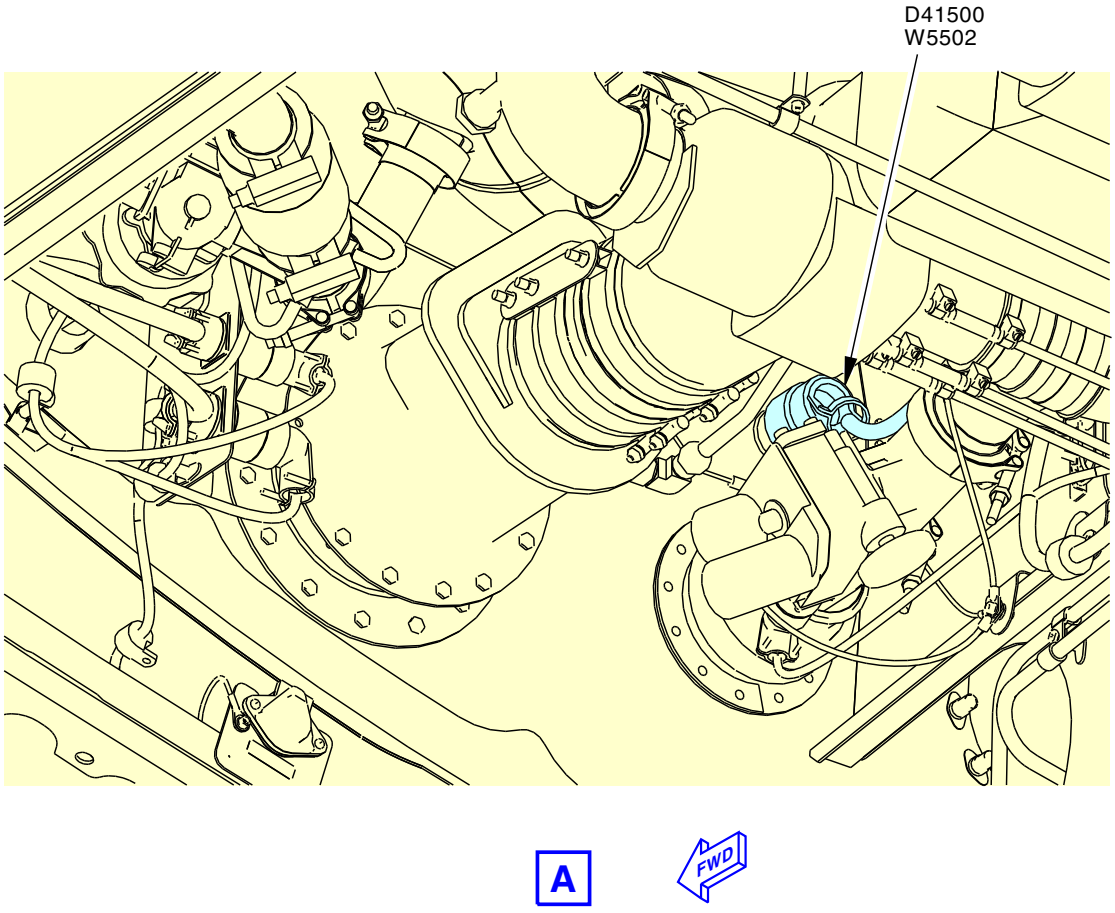
SUBTASK 05-55-25-840-006

(2) Do this task: Air Cycle Air Conditioning and Temperature Control System - Activation, TASK 21-51-00-800-802.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details





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Loop Resistance Test of Wire Bundle - Left Wing to Body Fairing (MRB 20-178-00) - Connector Location
Figure 607/05-55-25-990-833

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-55-25-280-811

9. Loop Resistance Test of Wire Bundle - Left Wing Trailing Edge (MRB 20-156-00)

(Figure 608)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) The loop resistance tester, SPL-1636, or MK loop resistance tester, SPL-18565, is required for this task.

B. References

Reference	Title
05-56-02-200-801	LRT Lid Standard Measurement (P/B 201)
05-56-02-200-802	ExLRT Standard Measurement (P/B 201)
05-56-03-200-801	Loop Resistance Measurement (P/B 201)
05-56-04-200-801	Joint Resistance Measurement (P/B 201)
05-56-05-200-801	Loop Resistance and Joint Resistance Measurement (P/B 201)
27-51-00-040-801	Trailing Edge Flap System Deactivation (P/B 201)
27-51-00-440-801	Trailing Edge Flap System Reactivation (P/B 201)
SWPM 20	Standard Wiring Practices Manual

C. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-1636	Tester - Loop Resistance (LRT "-1" for checks up to & including 4 years ONLY, LRT "-2 & -3" applicable for all HIRF/FQIS check/inspection intervals) Part #: 906-10246-3 Supplier: 3X2T2 Opt Part #: 906-10246-1 Supplier: 3X2T2 Opt Part #: 906-10246-2 Supplier: 3X2T2
SPL-18565	Tester - Loop Resistance, MK Part #: XLR-9703-01 Supplier: KC432 Part #: XLR-9703-02 Supplier: KC432

D. Location Zones

Zone	Area
551	Left Wing - Rear Spar To Landing Gear Support Beam

E. Access Panels

Number	Name/Location
551GB	Lower inboard fixed trailing edge

F. Prepare for the Loop Resistance Test

SUBTASK 05-55-25-970-018

(1) Boeing requests that all data recorded while doing this procedure be submitted to The Boeing Company for engineering analysis.

(a) Send the data to one of the following addresses:

1) Electronically: MTCProgLHIRFTaskCardData@boeing.com

ECCN 9E991 BOEING PROPRIETARY - See title page for details

2) By Mail : "The Boeing Company, Attention: Manager, Lightning / HIRF, Mail Code: MC 110-SC15, BLDG 80, 2201 Seal Beach Blvd., Seal Beach, CA USA 90740, USA".

3) By Fax: 206-655-4991.

NOTE: Data sent will help Boeing understand the reliability of the components and will be used to improve the maintenance program.

SUBTASK 05-55-25-040-013

(2) Do this task: Trailing Edge Flap System Deactivation, TASK 27-51-00-040-801.

SUBTASK 05-55-25-010-016

(3) Open this access panel:

Number	Name/Location
551GB	Lower inboard fixed trailing edge

G. Loop Resistance Test of Wire Bundle

SUBTASK 05-55-25-720-022

(1) Do the functional check of the wire bundle shielding.

NOTE: This step checks the wire bundle shielding for the scheduled maintenance check. This step also checks the wire bundle shielding after any repair is done with the wire bundle or connector.

(a) Do this task: Loop Resistance Measurement, TASK 05-56-03-200-801 or Loop Resistance and Joint Resistance Measurement, TASK 05-56-05-200-801 for each wire bundle listed in the Table 615.

NOTE: In the case of multiple wire bundles going to/from a connector, make sure the coupler is only around the desired bundle. This may require removing (and replacing) wire ties to separate the bundles enough for coupler connection.

1) Record the measured value to the data sheet (Table 615).

Table 615/05-55-25-993-854 Wire Bundle Loop Resistance Values - Left Wing Trailing Edge (MRB 20-156-00)

Plane:					
Date:					
Technician:					
Bundle Number	Connector Number	Measured Loop Resistance Value (mΩ)	Min/Max Value (mΩ)	Pass Fail	Retest Measured Value/ Comments
W1024	D40024J		12/28		
W1022	D40024P		8/20		

2) Make sure that the measured value is within the MIN/MAX value range listed in the data sheet (Table 615).

3) If the measured value is not within the MIN/MAX value range, do the troubleshooting step below for the wire bundle shielding failure.

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4) This step is complete when all wire bundles listed in the Table 615 were tested and passed.

SUBTASK 05-55-25-810-015

(2) Do the troubleshooting step for the wire bundle shielding.

NOTE: Perform this step only if the measured value of the Functional Check of the wire bundle shielding is not within the MIN/MAX value range.

NOTE: Record all the measurement data to the data sheet. This should include both initial and final values. Also record the troubleshooting steps taken to the RETEST MEASURED VALUE/COMMENTS column.

(a) If the wire bundle shield resistance is less than the MIN value, do these steps:

1) Check the test setup.

a) Make sure that the couplers are only around the desired wire bundle and closed properly.

2) If the test setup is OK, check the LRT operation, do this task: LRT Lid Standard Measurement, TASK 05-56-02-200-801 or ExLRT Standard Measurement, TASK 05-56-02-200-802.

3) If no problem is found, check the entire length of the wire bundle.

a) Look for signs of chafing or damage to the wire bundle that can cause the shield to short to structure.

NOTE: An example might be an area where bundle insulation has degraded and a portion of the shield is exposed and making contact with structure at an intermediate point in the bundle length. Another might be some metallic object penetrating the insulation and making contact between the shield and structure.

b) If a problem is found, repair or replace in accordance with the SWPM 20.

4) If no defects are found with the wire bundle and the loop resistance value is still less than the MIN value, record this value and contact Boeing for further support.

(b) If the wire bundle shield loop resistance is greater than the MAX value, do this step:

1) Measure the joint resistance across the connector from the ground terminal to primary structure Joint Resistance Measurement, TASK 05-56-04-200-801 or Loop Resistance and Joint Resistance Measurement, TASK 05-56-05-200-801 for each wire bundle listed in the table below for applicable connectors.

a) If joint value measured is greater than maximum joint resistance value in data table listed in the Joint Resistance Measurement, TASK 05-56-04-200-801 or Loop Resistance and Joint Resistance Measurement, TASK 05-56-05-200-801, repair in accordance with the SWPM 20.

b) If joint value measured is not greater than maximum joint resistance value in data table, record this value and contact Boeing for further support.

(c) After the wire bundle or connector is repaired, do the Functional Check of the wire bundle shielding again on this wire bundle.

SUBTASK 05-55-25-800-009

(3) The connectors listed in Table 616 are used for the steps above.

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Table 616/05-55-25-993-822 Left Wing Trailing Edge Connectors (MRB 20-156-00)

Wire Bundle	Connector	WDM	Mate With Equipment
W1024	D40024J	22–11–11, 22–12–31, 27–18–11, 27–32–21, 27–52–11, 27–53–21, 28–21–11	AW0254L
W1022	D40024P	22–11–11, 22–12–31, 27–18–11, 27–32–21, 27–52–11, 27–53–21, 28–21–11	AW0254L

H. Put the Airplane Back to Its Usual Condition

SUBTASK 05-55-25-410-013

(1) Close this access panel:

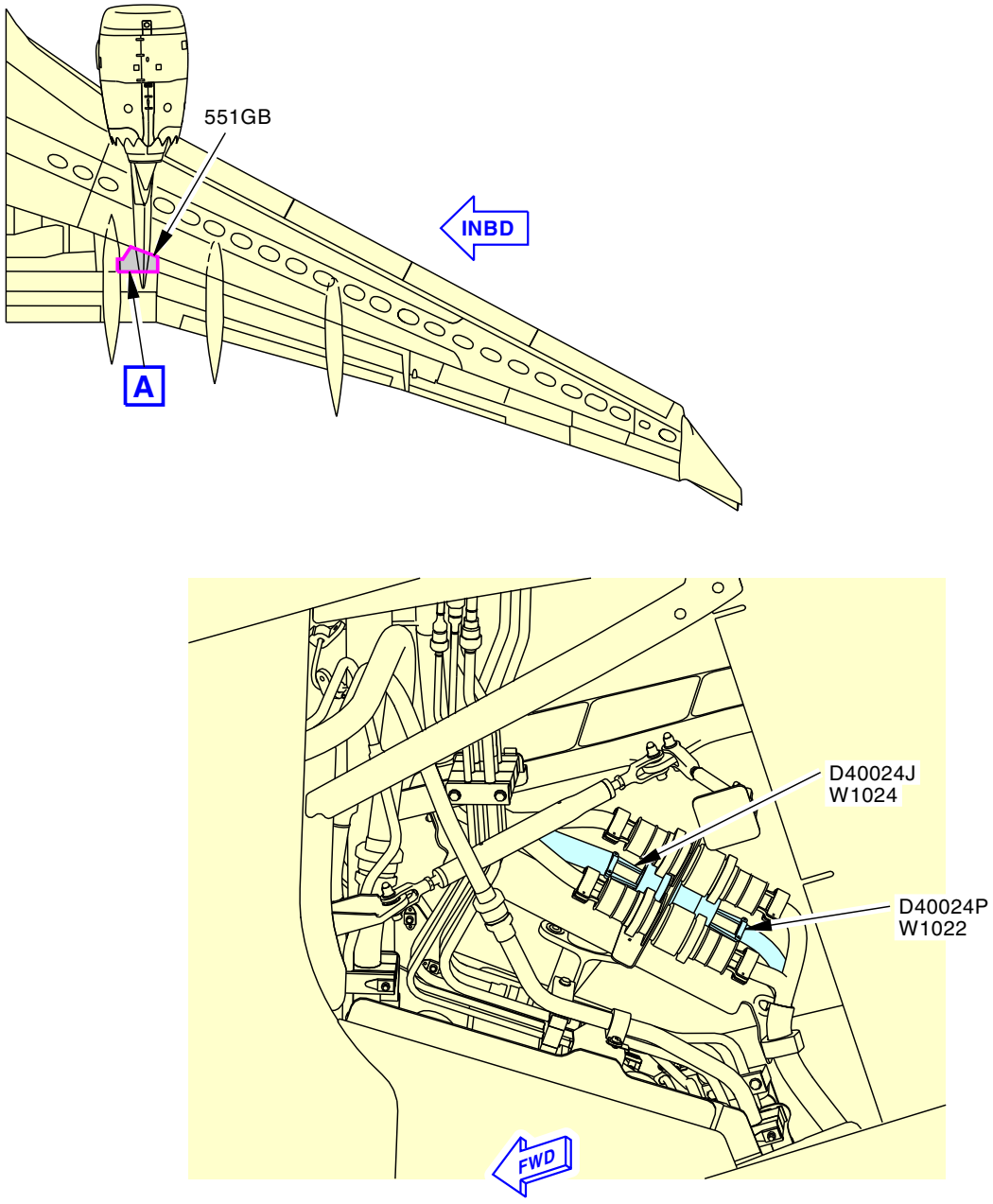
Number	Name/Location
551GB	Lower inboard fixed trailing edge

SUBTASK 05-55-25-440-012

(2) Do this task: Trailing Edge Flap System Reactivation, TASK 27-51-00-440-801.

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details



2546330 S0000605066_V2

Loop Resistance Test of Wire Bundle - Left Wing Trailing Edge (MRB 20-156-00) - Connector Location
Figure 608/05-55-25-990-843

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-55-25-280-812

10. Loop Resistance Test of Wire Bundle - Left Wing Trailing Edge (MRB 20-159-00)

(Figure 609)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) The loop resistance tester, SPL-1636, or MK loop resistance tester, SPL-18565, is required for this task.

B. References

Reference	Title
05-56-02-200-801	LRT Lid Standard Measurement (P/B 201)
05-56-02-200-802	ExLRT Standard Measurement (P/B 201)
05-56-03-200-801	Loop Resistance Measurement (P/B 201)
05-56-04-200-801	Joint Resistance Measurement (P/B 201)
05-56-05-200-801	Loop Resistance and Joint Resistance Measurement (P/B 201)
27-51-00-040-801	Trailing Edge Flap System Deactivation (P/B 201)
27-51-00-440-801	Trailing Edge Flap System Reactivation (P/B 201)
SWPM 20	Standard Wiring Practices Manual

C. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-1636	Tester - Loop Resistance (LRT "-1" for checks up to & including 4 years ONLY, LRT "-2 & -3" applicable for all HIRF/FQIS check/inspection intervals) Part #: 906-10246-3 Supplier: 3X2T2 Opt Part #: 906-10246-1 Supplier: 3X2T2 Opt Part #: 906-10246-2 Supplier: 3X2T2
SPL-18565	Tester - Loop Resistance, MK Part #: XLR-9703-01 Supplier: KC432 Part #: XLR-9703-02 Supplier: KC432

D. Location Zones

Zone	Area
551	Left Wing - Rear Spar To Landing Gear Support Beam

E. Access Panels

Number	Name/Location
551BB	Lower Inboard Fixed Trailing Edge, Gear Adjustment Door

F. Prepare for the Loop Resistance Test

SUBTASK 05-55-25-970-020

(1) Boeing requests that all data recorded while doing this procedure be submitted to The Boeing Company for engineering analysis.

(a) Send the data to one of the following addresses:

1) Electronically: MTCProgLHIRFTaskCardData@boeing.com

ECCN 9E991 BOEING PROPRIETARY - See title page for details

2) By Mail : "The Boeing Company, Attention: Manager, Lightning / HIRF, Mail Code: MC 110-SC15, BLDG 80, 2201 Seal Beach Blvd., Seal Beach, CA USA 90740, USA".

3) By Fax: 206-655-4991.

NOTE: Data sent will help Boeing understand the reliability of the components and will be used to improve the maintenance program.

SUBTASK 05-55-25-040-014

(2) Do this task: Trailing Edge Flap System Deactivation, TASK 27-51-00-040-801.

SUBTASK 05-55-25-010-017

(3) Open this access panel:

Number	Name/Location
551BB	Lower Inboard Fixed Trailing Edge, Gear Adjustment Door

G. Loop Resistance Test of Wire Bundle

SUBTASK 05-55-25-720-023

(1) Do the functional check of the wire bundle shielding.

NOTE: This step checks the wire bundle shielding for the scheduled maintenance check. This step also checks the wire bundle shielding after any repair is done with the wire bundle or connector.

(a) Do this task: Loop Resistance Measurement, TASK 05-56-03-200-801 or Loop Resistance and Joint Resistance Measurement, TASK 05-56-05-200-801 for each wire bundle listed in the Table 617.

NOTE: In the case of multiple wire bundles going to/from a connector, make sure the coupler is only around the desired bundle. This may require removing (and replacing) wire ties to separate the bundles enough for coupler connection.

1) Record the measured value to the data sheet (Table 617).

Table 617/05-55-25-993-849 Wire Bundle Loop Resistance Values - Left Wing Trailing Edge (MRB 20-159-00)

Plane:					
Date:					
Technician:					
Bundle Number	Connector Number	Measured Loop Resistance Value (mΩ)	Min/Max Value (mΩ)	Pass Fail	Retest Measured Value/ Comments
W1136	GD04428		30/70		

2) Make sure that the measured value is within the MIN/MAX value range listed in the data sheet (Table 617).

3) If the measured value is not within the MIN/MAX value range, do the troubleshooting step below for the wire bundle shielding failure.

4) This step is complete when all wire bundles listed in the Table 617 were tested and passed.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 05-55-25-810-016

(2) Do the troubleshooting step for the wire bundle shielding.

NOTE: Perform this step only if the measured value of the Functional Check of the wire bundle shielding is not within the MIN/MAX value range.

NOTE: Record all the measurement data to the data sheet. This should include both initial and final values. Also record the troubleshooting steps taken to the RETEST MEASURED VALUE/COMMENTS column.

(a) If the wire bundle shield resistance is less than the MIN value, do these steps:

1) Check the test setup.

a) Make sure that the couplers are only around the desired wire bundle and closed properly.

2) If the test setup is OK, check the LRT operation, do this task: LRT Lid Standard Measurement, TASK 05-56-02-200-801 or ExLRT Standard Measurement, TASK 05-56-02-200-802.

3) If no problem is found, check the entire length of the wire bundle.

a) Look for signs of chafing or damage to the wire bundle that can cause the shield to short to structure.

NOTE: An example might be an area where bundle insulation has degraded and a portion of the shield is exposed and making contact with structure at an intermediate point in the bundle length. Another might be some metallic object penetrating the insulation and making contact between the shield and structure.

b) If a problem is found, repair or replace in accordance with the SWPM 20.

4) If no defects are found with the wire bundle and the loop resistance value is still less than the MIN value, record this value and contact Boeing for further support.

(b) If the wire bundle shield loop resistance is greater than the MAX value, do this step:

1) Measure the joint resistance across the connector from the ground terminal to primary structure Joint Resistance Measurement, TASK 05-56-04-200-801 or Loop Resistance and Joint Resistance Measurement, TASK 05-56-05-200-801 for each wire bundle listed in the table below for applicable connectors.

a) If joint value measured is greater than maximum joint resistance value in data table listed in the Joint Resistance Measurement, TASK 05-56-04-200-801 or Loop Resistance and Joint Resistance Measurement, TASK 05-56-05-200-801, repair in accordance with the SWPM 20.

b) If joint value measured is not greater than maximum joint resistance value in data table, record this value and contact Boeing for further support.

(c) After the wire bundle or connector is repaired, do the Functional Check of the wire bundle shielding again on this wire bundle.

SUBTASK 05-55-25-800-010

(3) The connector listed in Table 618 is used for the steps above.

Table 618/05-55-25-993-823 Left Wing Trailing Edge Connectors (MRB 20-159-00)

Wire Bundle	Connector	WDM	Mate With Equipment
W1136	GD04428	28–23–11	M03046

ECCN 9E991 BOEING PROPRIETARY - See title page for details

H. Put the Airplane Back to Its Usual Condition

SUBTASK 05-55-25-410-014

(1) Close this access panel:

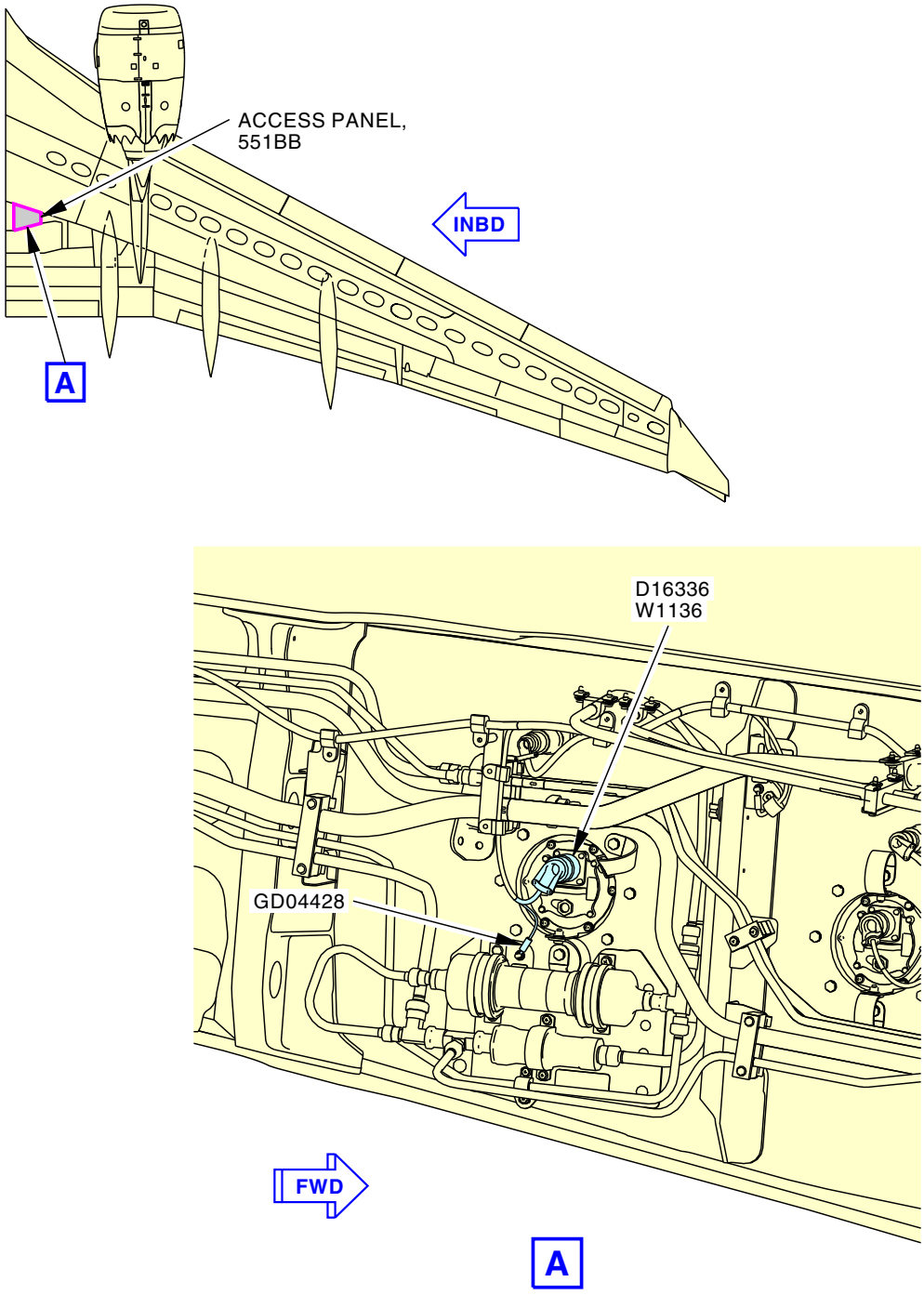
Number	Name/Location
551BB	Lower Inboard Fixed Trailing Edge, Gear Adjustment Door

SUBTASK 05-55-25-440-013

(2) Do this task: Trailing Edge Flap System Reactivation, TASK 27-51-00-440-801.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



2546312 S0000605069_V1

Loop Resistance Test of Wire Bundle - Left Wing Trailing Edge (MRB 20-159-00) - Connector Location
Figure 609/05-55-25-990-835

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-55-25-280-813

11. Loop Resistance Test of Wire Bundle - Left Wing Leading Edge (MRB 20-154-00)

(Figure 610)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) The loop resistance tester, SPL-1636, or MK loop resistance tester, SPL-18565, is required for this task.

B. References

Reference	Title
05-56-02-200-801	LRT Lid Standard Measurement (P/B 201)
05-56-02-200-802	ExLRT Standard Measurement (P/B 201)
05-56-03-200-801	Loop Resistance Measurement (P/B 201)
05-56-04-200-801	Joint Resistance Measurement (P/B 201)
05-56-05-200-801	Loop Resistance and Joint Resistance Measurement (P/B 201)
27-81-00-040-801	Leading Edge Flaps and Slats - Deactivation (P/B 201)
27-81-00-440-801	Leading Edge Flaps and Slats - Activation (P/B 201)
SWPM 20	Standard Wiring Practices Manual

C. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-1636	Tester - Loop Resistance (LRT "-1" for checks up to & including 4 years ONLY, LRT "-2 & -3" applicable for all HIRF/FQIS check/inspection intervals) Part #: 906-10246-3 Supplier: 3X2T2 Opt Part #: 906-10246-1 Supplier: 3X2T2 Opt Part #: 906-10246-2 Supplier: 3X2T2
SPL-18565	Tester - Loop Resistance, MK Part #: XLR-9703-01 Supplier: KC432 Part #: XLR-9703-02 Supplier: KC432

D. Location Zones

Zone	Area
521	Left Wing - Leading Edge to Front Spar

E. Access Panels

Number	Name/Location
521BB	Engine Fuel Valve Shutoff Access Panel - Slat Station 27

F. Prepare for the Loop Resistance Test

SUBTASK 05-55-25-970-022

(1) Boeing requests that all data recorded while doing this procedure be submitted to The Boeing Company for engineering analysis.

(a) Send the data to one of the following addresses:

1) Electronically: MTCProgLHIRFTaskCardData@boeing.com

ECCN 9E991 BOEING PROPRIETARY - See title page for details

2) By Mail : "The Boeing Company, Attention: Manager, Lightning / HIRF, Mail Code: MC 110-SC15, BLDG 80, 2201 Seal Beach Blvd., Seal Beach, CA USA 90740, USA".

3) By Fax: 206-655-4991.

NOTE: Data sent will help Boeing understand the reliability of the components and will be used to improve the maintenance program.

SUBTASK 05-55-25-040-015

(2) Do this task: Leading Edge Flaps and Slats - Deactivation, TASK 27-81-00-040-801.

SUBTASK 05-55-25-010-018

(3) Open this access panel:

Number	Name/Location
521BB	Engine Fuel Valve Shutoff Access Panel - Slat Station 27

G. Loop Resistance Test of Wire Bundle

SUBTASK 05-55-25-720-024

(1) Do the functional check of the wire bundle shielding.

NOTE: This step checks the wire bundle shielding for the scheduled maintenance check. This step also checks the wire bundle shielding after any repair is done with the wire bundle or connector.

(a) Do this task: Loop Resistance Measurement, TASK 05-56-03-200-801 or Loop Resistance and Joint Resistance Measurement, TASK 05-56-05-200-801 for each wire bundle listed in the Table 619.

NOTE: In the case of multiple wire bundles going to/from a connector, make sure the coupler is only around the desired bundle. This may require removing (and replacing) wire ties to separate the bundles enough for coupler connection.

1) Record the measured value to the data sheet (Table 619).

Table 619/05-55-25-993-850 Wire Bundle Loop Resistance Values - Left Wing Leading Edge (MRB 20-154-00)

Plane:					
Date:					
Technician:					
Bundle Number	Connector Number	Measured Loop Resistance Value (mΩ)	Min/Max Value (mΩ)	Pass Fail	Retest Measured Value/ Comments
W1188	D00738		78/184		

2) Make sure that the measured value is within the MIN/MAX value range listed in the data sheet (Table 619).

3) If the measured value is not within the MIN/MAX value range, do the troubleshooting step below for the wire bundle shielding failure.

4) This step is complete when all wire bundles listed in the Table 619 were tested and passed.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 05-55-25-810-017

(2) Do the troubleshooting step for the wire bundle shielding.

NOTE: Perform this step only if the measured value of the Functional Check of the wire bundle shielding is not within the MIN/MAX value range.

NOTE: Record all the measurement data to the data sheet. This should include both initial and final values. Also record the troubleshooting steps taken to the RETEST MEASURED VALUE/COMMENTS column.

(a) If the wire bundle shield resistance is less than the MIN value, do these steps:

1) Check the test setup.

a) Make sure that the couplers are only around the desired wire bundle and closed properly.

2) If the test setup is OK, check the LRT operation, do this task: LRT Lid Standard Measurement, TASK 05-56-02-200-801 or ExLRT Standard Measurement, TASK 05-56-02-200-802.

3) If no problem is found, check the entire length of the wire bundle.

a) Look for signs of chafing or damage to the wire bundle that can cause the shield to short to structure.

NOTE: An example might be an area where bundle insulation has degraded and a portion of the shield is exposed and making contact with structure at an intermediate point in the bundle length. Another might be some metallic object penetrating the insulation and making contact between the shield and structure.

b) If a problem is found, repair or replace in accordance with the SWPM 20.

4) If no defects are found with the wire bundle and the loop resistance value is still less than the MIN value, record this value and contact Boeing for further support.

(b) If the wire bundle shield loop resistance is greater than the MAX value, do this step:

1) Measure the joint resistance across the connector from the ground terminal to primary structure Joint Resistance Measurement, TASK 05-56-04-200-801 or Loop Resistance and Joint Resistance Measurement, TASK 05-56-05-200-801 for each wire bundle listed in the table below for applicable connectors.

a) If joint value measured is greater than maximum joint resistance value in data table listed in the Joint Resistance Measurement, TASK 05-56-04-200-801 or Loop Resistance and Joint Resistance Measurement, TASK 05-56-05-200-801, repair in accordance with the SWPM 20.

b) If joint value measured is not greater than maximum joint resistance value in data table, record this value and contact Boeing for further support.

(c) After the wire bundle or connector is repaired, do the Functional Check of the wire bundle shielding again on this wire bundle.

SUBTASK 05-55-25-800-011

(3) The connector listed in Table 620 is used for the steps above.

Table 620/05-55-25-993-824 Left Wing Leading Edge Connectors (MRB 20-154-00)

Wire Bundle	Connector	WDM	Mate With Equipment
W1188	D00738	30–11–11	S00118

ECCN 9E991 BOEING PROPRIETARY - See title page for details

H. Put the Airplane Back to Its Usual Condition

SUBTASK 05-55-25-410-015

(1) Close this access panel:

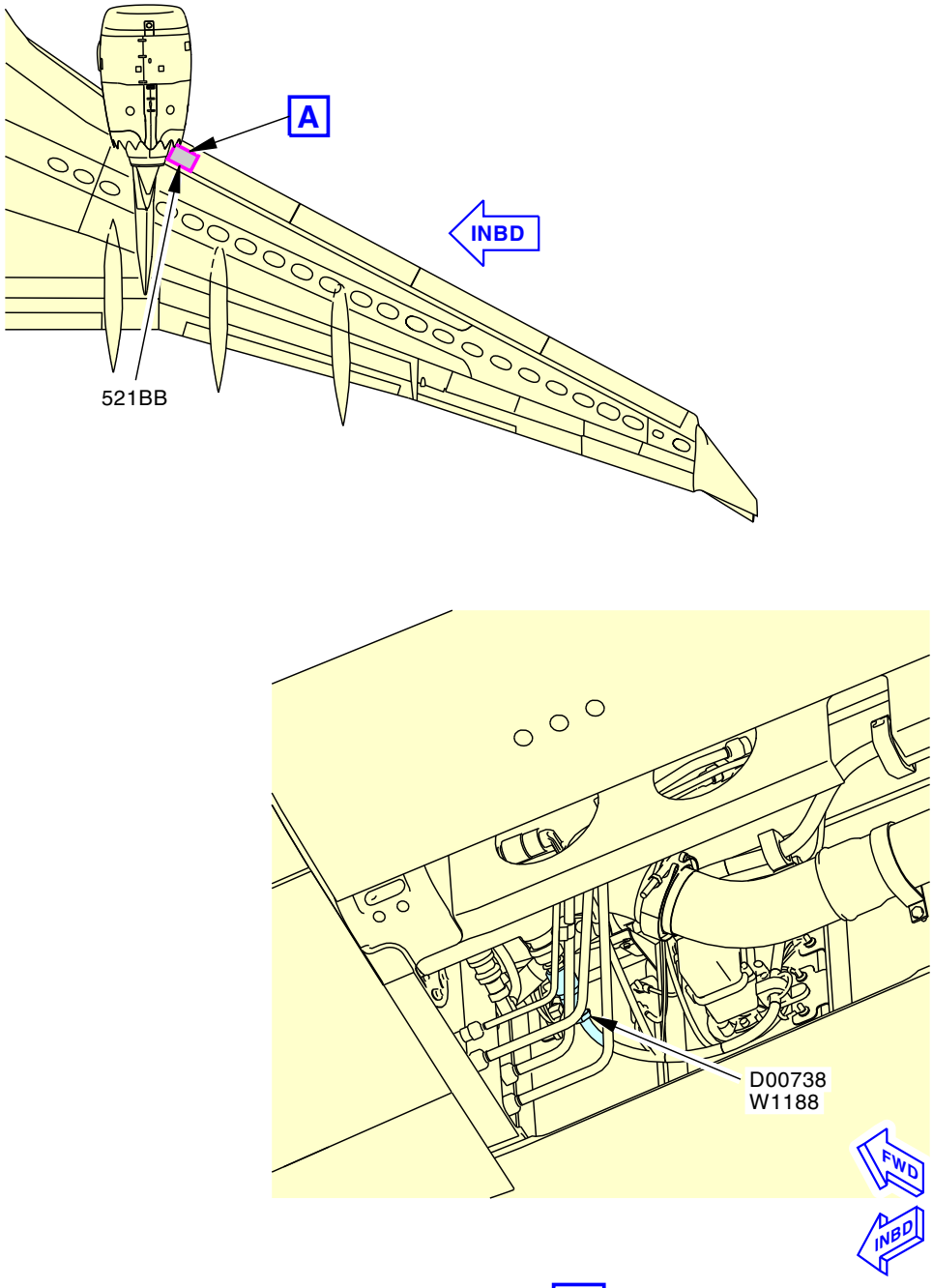
Number	Name/Location
521BB	Engine Fuel Valve Shutoff Access Panel - Slat Station 27

SUBTASK 05-55-25-440-014

(2) Do this task: Leading Edge Flaps and Slats - Activation, TASK 27-81-00-440-801.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



2546201 S0000605072_V2

Loop Resistance Test of Wire Bundle - Left Wing Leading Edge (MRB 20-154-00) - Connector Location
Figure 610/05-55-25-990-837

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-55-25-280-815

12. Loop Resistance Test of Wire Bundle - Left Wing Leading Edge (MRB 20-158-00)

(Figure 611)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) The loop resistance tester, SPL-1636, or MK loop resistance tester, SPL-18565, is required for this task.

B. References

Reference	Title
05-56-02-200-801	LRT Lid Standard Measurement (P/B 201)
05-56-02-200-802	ExLRT Standard Measurement (P/B 201)
05-56-03-200-801	Loop Resistance Measurement (P/B 201)
05-56-04-200-801	Joint Resistance Measurement (P/B 201)
05-56-05-200-801	Loop Resistance and Joint Resistance Measurement (P/B 201)
27-81-00-040-801	Leading Edge Flaps and Slats - Deactivation (P/B 201)
27-81-00-440-801	Leading Edge Flaps and Slats - Activation (P/B 201)
SWPM 20	Standard Wiring Practices Manual

C. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-1636	Tester - Loop Resistance (LRT "-1" for checks up to & including 4 years ONLY, LRT "-2 & -3" applicable for all HIRF/FQIS check/inspection intervals) Part #: 906-10246-3 Supplier: 3X2T2 Opt Part #: 906-10246-1 Supplier: 3X2T2 Opt Part #: 906-10246-2 Supplier: 3X2T2
SPL-18565	Tester - Loop Resistance, MK Part #: XLR-9703-01 Supplier: KC432 Part #: XLR-9703-02 Supplier: KC432

D. Location Zones

Zone	Area
431	Engine 1 - Forward Strut Fairing
511	Left Wing - Leading Edge To Front Spar

E. Access Panels

Number	Name/Location
431CR	Forward Strut Fairing, Right Overwing Fairing, Strut 1
511AB	Inboard Leading Edge, Lower Removable Panel

F. Prepare for the procedure

SUBTASK 05-55-25-970-024

(1) Boeing requests that all data recorded while doing this procedure be submitted to The Boeing Company for engineering analysis.

(a) Send the data to one of the following addresses:

ECCN 9E991 BOEING PROPRIETARY - See title page for details

1) Electronically: MTCProgLHIRFTaskCardData@boeing.com

2) By Mail : "The Boeing Company, Attention: Manager, Lightning / HIRF, Mail Code: MC 110-SC15, BLDG 80, 2201 Seal Beach Blvd., Seal Beach, CA USA 90740, USA".

3) By Fax: 206-655-4991.

NOTE: Data sent will help Boeing understand the reliability of the components and will be used to improve the maintenance program.

SUBTASK 05-55-25-040-016

(2) Do this task: Leading Edge Flaps and Slats - Deactivation, TASK 27-81-00-040-801.

SUBTASK 05-55-25-010-019

(3) Open these access panels:

Number	Name/Location
431CR	Forward Strut Fairing, Right Overwing Fairing, Strut 1
511AB	Inboard Leading Edge, Lower Removable Panel

G. Loop Resistance Test of Wire Bundle

SUBTASK 05-55-25-720-025

(1) Do the functional check of the wire bundle shielding.

NOTE: This step checks the wire bundle shielding for the scheduled maintenance check. This step also checks the wire bundle shielding after any repair is done with the wire bundle or connector.

(a) Do this task: Loop Resistance Measurement, TASK 05-56-03-200-801 or Loop Resistance and Joint Resistance Measurement, TASK 05-56-05-200-801 for each wire bundle listed in the Table 621.

NOTE: In the case of multiple wire bundles going to/from a connector, make sure the coupler is only around the desired bundle. This may require removing (and replacing) wire ties to separate the bundles enough for coupler connection.

1) Record the measured value to the data sheet (Table 621).

Table 621/05-55-25-993-851 Wire Bundle Loop Resistance Values - Left Wing Leading Edge (MRB 20-158-00)

Plane:					
Date:					
Technician:					
Bundle Number	Connector Number	Measured Loop Resistance Value (mΩ)	Min/Max Value (mΩ)	Pass Fail	Retest Measured Value/ Comments
W1184	D30014		10/23		
W1164	D30016		10/24		
W1172	D30042		8/19		
W1178	D30048		6/13		
W1170	D30052		5/12		
W1182	D30062		6/15		

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Table 621/05-55-25-993-851 Wire Bundle Loop Resistance Values - Left Wing Leading Edge (MRB 20-158-00) (Continued)

W1166	D30064		5/12		
W1192	D30068		7/15		
W1168	D30084		6/15		
W1190	D30092		7/17		

2) Make sure that the measured value is within the MIN/MAX value range listed in the data sheet (Table 621).

3) If the measured value is not within the MIN/MAX value range, do the troubleshooting step below for the wire bundle shielding failure.

4) This step is complete when all wire bundles listed in the Table 621 were tested and passed.

SUBTASK 05-55-25-810-018

(2) Do the troubleshooting step for the wire bundle shielding.

NOTE: Perform this step only if the measured value of the Functional Check of the wire bundle shielding is not within the MIN/MAX value range.

NOTE: Record all the measurement data to the data sheet. This should include both initial and final values. Also record the troubleshooting steps taken to the RETEST MEASURED VALUE/COMMENTS column.

(a) If the wire bundle shield resistance is less than the MIN value, do these steps:

1) Check the test setup.

a) Make sure that the couplers are only around the desired wire bundle and closed properly.

2) If the test setup is OK, check the LRT operation, do this task: LRT Lid Standard Measurement, TASK 05-56-02-200-801 or ExLRT Standard Measurement, TASK 05-56-02-200-802.

3) If no problem is found, check the entire length of the wire bundle.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

a) Look for signs of chafing or damage to the wire bundle that can cause the shield to short to structure.

NOTE: An example might be an area where bundle insulation has degraded and a portion of the shield is exposed and making contact with structure at an intermediate point in the bundle length. Another might be some metallic object penetrating the insulation and making contact between the shield and structure.

b) If a problem is found, repair or replace in accordance with the SWPM 20.

4) If no defects are found with the wire bundle and the loop resistance value is still less than the MIN value, record this value and contact Boeing for further support.

(b) If the wire bundle shield loop resistance is greater than the MAX value, do this step:

1) Measure the joint resistance across the connector from the ground terminal to primary structure Joint Resistance Measurement, TASK 05-56-04-200-801 or Loop Resistance and Joint Resistance Measurement, TASK 05-56-05-200-801 for each wire bundle listed in the table below for applicable connectors.

a) If joint value measured is greater than maximum joint resistance value in data table listed in the Joint Resistance Measurement, TASK 05-56-04-200-801 or Loop Resistance and Joint Resistance Measurement, TASK 05-56-05-200-801, repair in accordance with the SWPM 20.

b) If joint value measured is not greater than maximum joint resistance value in data table, record this value and contact Boeing for further support.

(c) After the wire bundle or connector is repaired, do the Functional Check of the wire bundle shielding again on this wire bundle.

SUBTASK 05-55-25-800-012

(3) The connectors listed in Table 622 are used for the steps above.

Table 622/05-55-25-993-825 Left Wing Leading Edge Connectors (MRB 20-158-00)

Wire Bundle	Connector	WDM	Mate With Equipment
W1184	D30014	24–11–11, 24–21–11, 24–24–11, 29–11–11	DM0023
W1164	D30016	24–11–11, 24–21–11, 24–24–11, 29–11–11	DM0023
W1172	D30042	46–13–11, 73–21–11, 73–21–12, 73–21–21, 73–24–11, 73–24–12, 78–32–51	DM0025
W1178	D30048	26–11–11, 36–11–12, 36–11–13, 73–21–12, 73–22–11, 74–11–11, 77–12–11, 78–34–11, 78–35–11, 79–31–11	DM0037
W1170	D30052	26–11–11, 36–11–12, 36–11–13, 73–21–12, 73–22–11, 74–11–11, 77–12–11, 78–34–11, 78–35–11, 79–31–11	DM0037

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Table 622/05-55-25-993-825 Left Wing Leading Edge Connectors (MRB 20-158-00) (Continued)

Wire Bundle	Connector	WDM	Mate With Equipment
W1182	D30062	26–11–11, 26–12–11, 30–21–31, 36–11–13, 73–21–12, 73–22–11, 73–22–41, 74–11–11, 76–21–11, 77–12–21	DM0019
W1166	D30064	26–11–11, 26–12–11, 30–21–31, 36–11–13, 73–21–12, 73–22–11, 73–22–41, 74–11–11, 76–21–11, 77–12–21	DM0019
W1192	D30068	46–13–11, 73–21–11, 73–21–12, 73–21–21, 73–24–11, 73–24–12, 78–32–51	DM0025
W1168	D30084	46–13–11, 73–21–11, 73–21–21, 73–24–11, 73–24–12, 78–32–51	DM0027
W1190	D30092	46–13–11, 73–21–11, 73–21–21, 73–24–11, 73–24–12, 78–32–51	DM0027

H. Put the Airplane Back to Its Usual Condition

SUBTASK 05-55-25-410-016

(1) Close these access panels:

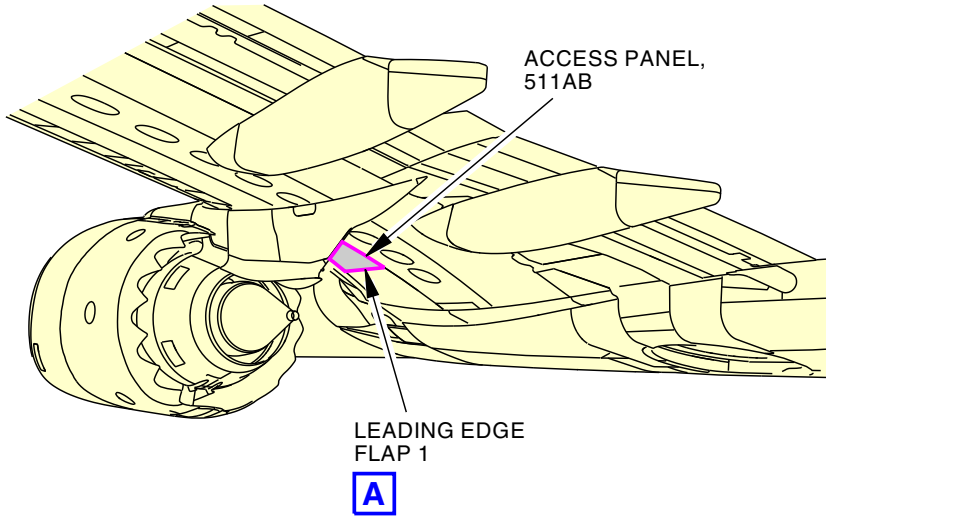
Number	Name/Location
431CR	Forward Strut Fairing, Right Overwing Fairing, Strut 1
511AB	Inboard Leading Edge, Lower Removable Panel

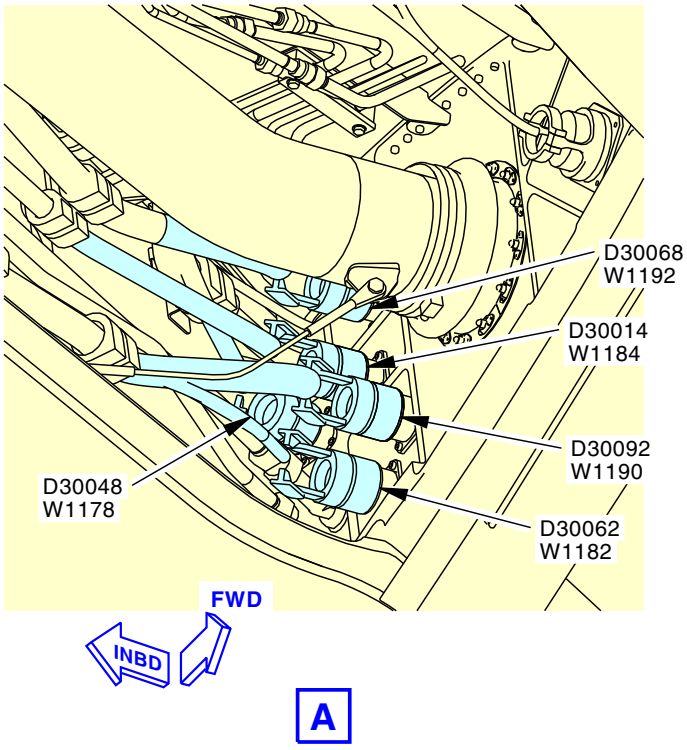
SUBTASK 05-55-25-440-015

(2) Do this task: Leading Edge Flaps and Slats - Activation, TASK 27-81-00-440-801.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details

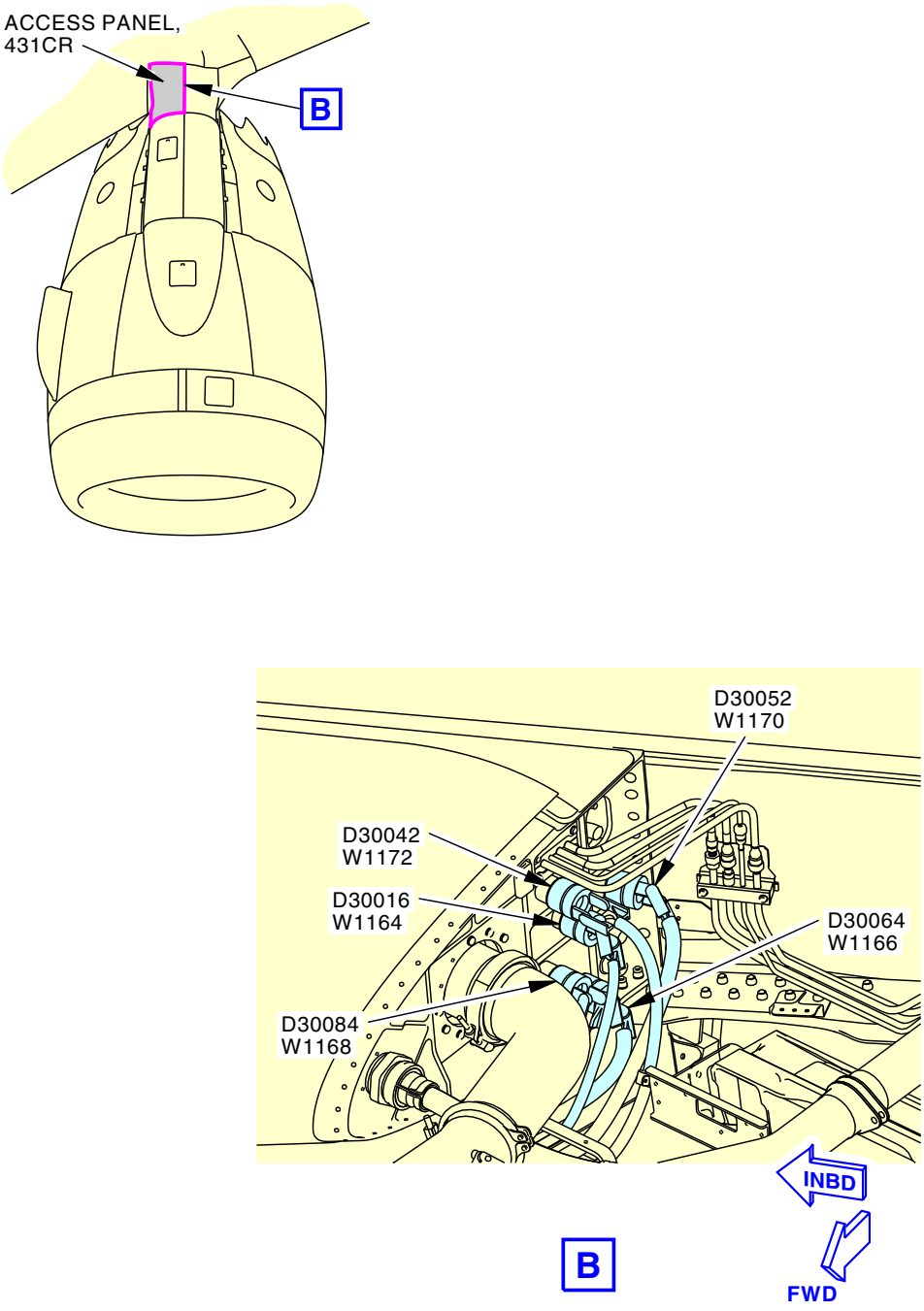




2545994 S0000605225_V1

Loop Resistance Test of Wire Bundle - Left Wing Leading Edge (MRB 20-158-00) - Connector Location
Figure 611/05-55-25-990-839 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



2546002 S0000605226_V1

Loop Resistance Test of Wire Bundle - Left Wing Leading Edge (MRB 20-158-00) - Connector Location
Figure 611/05-55-25-990-839 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-55-25-280-816

13. Loop Resistance Test of Wire Bundle - Left Wing Leading Edge (MRB 20-177-00)

(Figure 612)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) The loop resistance tester, SPL-1636, or MK loop resistance tester, SPL-18565, is required for this task.

B. References

Reference	Title
05-56-02-200-801	LRT Lid Standard Measurement (P/B 201)
05-56-02-200-802	ExLRT Standard Measurement (P/B 201)
05-56-03-200-801	Loop Resistance Measurement (P/B 201)
05-56-04-200-801	Joint Resistance Measurement (P/B 201)
05-56-05-200-801	Loop Resistance and Joint Resistance Measurement (P/B 201)
27-81-00-040-801	Leading Edge Flaps and Slats - Deactivation (P/B 201)
27-81-00-440-801	Leading Edge Flaps and Slats - Activation (P/B 201)
27-81-00-860-803	Leading Edge Flaps and Slats Extension (P/B 201)
27-81-00-860-804	Leading Edge Flaps and Slats Retraction (P/B 201)
SWPM 20	Standard Wiring Practices Manual

C. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-1636	Tester - Loop Resistance (LRT "-1" for checks up to & including 4 years ONLY, LRT "-2 & -3" applicable for all HIRF/FQIS check/inspection intervals) Part #: 906-10246-3 Supplier: 3X2T2 Opt Part #: 906-10246-1 Supplier: 3X2T2 Opt Part #: 906-10246-2 Supplier: 3X2T2
SPL-18565	Tester - Loop Resistance, MK Part #: XLR-9703-01 Supplier: KC432 Part #: XLR-9703-02 Supplier: KC432

D. Location Zones

Zone	Area
510	Subzone - Left Wing: Leading Edge, Fwd of Front Spar, Inbd of Strut and Nacelle Gap Cover Area

E. Prepare for the Loop Resistance Test

SUBTASK 05-55-25-970-026

(1) Boeing requests that all data recorded while doing this procedure be submitted to The Boeing Company for engineering analysis.

(a) Send the data to one of the following addresses:

1) Electronically: MTCProgLHIRFTaskCardData@boeing.com

ECCN 9E991 BOEING PROPRIETARY - See title page for details

2) By Mail : "The Boeing Company, Attention: Manager, Lightning / HIRF, Mail Code: MC 110-SC15, BLDG 80, 2201 Seal Beach Blvd., Seal Beach, CA USA 90740, USA".

3) By Fax: 206-655-4991.

NOTE: Data sent will help Boeing understand the reliability of the components and will be used to improve the maintenance program.

SUBTASK 05-55-25-840-007

(2) Do this task: Leading Edge Flaps and Slats Extension, TASK 27-81-00-860-803.

SUBTASK 05-55-25-040-017

(3) Do this task: Leading Edge Flaps and Slats - Deactivation, TASK 27-81-00-040-801.

F. Loop Resistance Test of Wire Bundle

SUBTASK 05-55-25-720-026

(1) Do the functional check of the wire bundle shielding.

NOTE: This step checks the wire bundle shielding for the scheduled maintenance check. This step also checks the wire bundle shielding after any repair is done with the wire bundle or connector.

(a) Do this task: Loop Resistance Measurement, TASK 05-56-03-200-801 or Loop Resistance and Joint Resistance Measurement, TASK 05-56-05-200-801 for each wire bundle listed in the Table 623.

NOTE: In the case of multiple wire bundles going to/from a connector, make sure the coupler is only around the desired bundle. This may require removing (and replacing) wire ties to separate the bundles enough for coupler connection.

1) Record the measured value to the data sheet (Table 623).

Table 623/05-55-25-993-852 Wire Bundle Loop Resistance Values - Left Wing Leading Edge (MRB 20-177-00)

Plane:					
Date:					
Technician:					
Bundle Number	Connector Number	Measured Loop Resistance Value (mΩ)	Min/Max Value (mΩ)	Pass Fail	Retest Measured Value/ Comments
W1140	GD00191		12/29		

2) Make sure that the measured value is within the MIN/MAX value range listed in the data sheet (Table 623).

3) If the measured value is not within the MIN/MAX value range, do the troubleshooting step below for the wire bundle shielding failure.

4) This step is complete when all wire bundles listed in the Table 623 were tested and passed.

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SUBTASK 05-55-25-810-019

(2) Do the troubleshooting step for the wire bundle shielding.

NOTE: Perform this step only if the measured value of the Functional Check of the wire bundle shielding is not within the MIN/MAX value range.

NOTE: Record all the measurement data to the data sheet. This should include both initial and final values. Also record the troubleshooting steps taken to the RETEST MEASURED VALUE/COMMENTS column.

(a) If the wire bundle shield resistance is less than the MIN value, do these steps:

1) Check the test setup.

a) Make sure that the couplers are only around the desired wire bundle and closed properly.

2) If the test setup is OK, check the LRT operation, do this task: LRT Lid Standard Measurement, TASK 05-56-02-200-801 or ExLRT Standard Measurement, TASK 05-56-02-200-802.

3) If no problem is found, check the entire length of the wire bundle.

a) Look for signs of chafing or damage to the wire bundle that can cause the shield to short to structure.

NOTE: An example might be an area where bundle insulation has degraded and a portion of the shield is exposed and making contact with structure at an intermediate point in the bundle length. Another might be some metallic object penetrating the insulation and making contact between the shield and structure.

b) If a problem is found, repair or replace in accordance with the SWPM 20.

4) If no defects are found with the wire bundle and the loop resistance value is still less than the MIN value, record this value and contact Boeing for further support.

(b) If the wire bundle shield loop resistance is greater than the MAX value, do this step:

1) Measure the joint resistance across the connector from the ground terminal to primary structure Joint Resistance Measurement, TASK 05-56-04-200-801 or Loop Resistance and Joint Resistance Measurement, TASK 05-56-05-200-801 for each wire bundle listed in the table below for applicable connectors.

a) If joint value measured is greater than maximum joint resistance value in data table listed in the Joint Resistance Measurement, TASK 05-56-04-200-801 or Loop Resistance and Joint Resistance Measurement, TASK 05-56-05-200-801, repair in accordance with the SWPM 20.

b) If joint value measured is not greater than maximum joint resistance value in data table, record this value and contact Boeing for further support.

(c) After the wire bundle or connector is repaired, do the Functional Check of the wire bundle shielding again on this wire bundle.

SUBTASK 05-55-25-800-013

(3) The connector listed in Table 624 is used for the steps above.

Table 624/05-55-25-993-826 Left Wing Leading Edge Connectors (MRB 20-177-00)

Wire Bundle	Connector	WDM	Mate With Equipment
W1140	GD00191	28–41–11	M02945

ECCN 9E991 BOEING PROPRIETARY - See title page for details

G. Put the Airplane Back to Its Usual Condition

SUBTASK 05-55-25-440-016

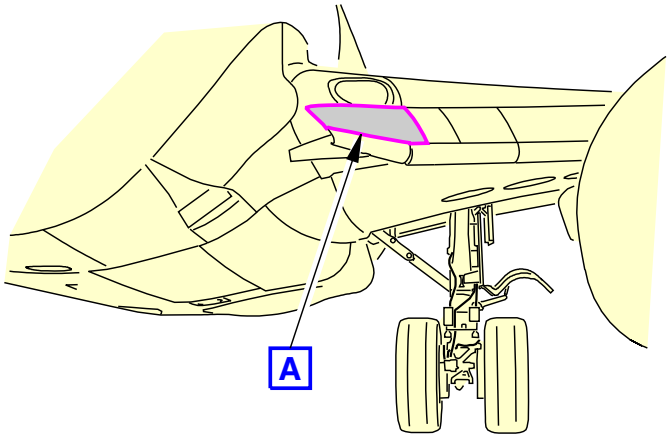
(1) Do this task: Leading Edge Flaps and Slats - Activation, TASK 27-81-00-440-801.

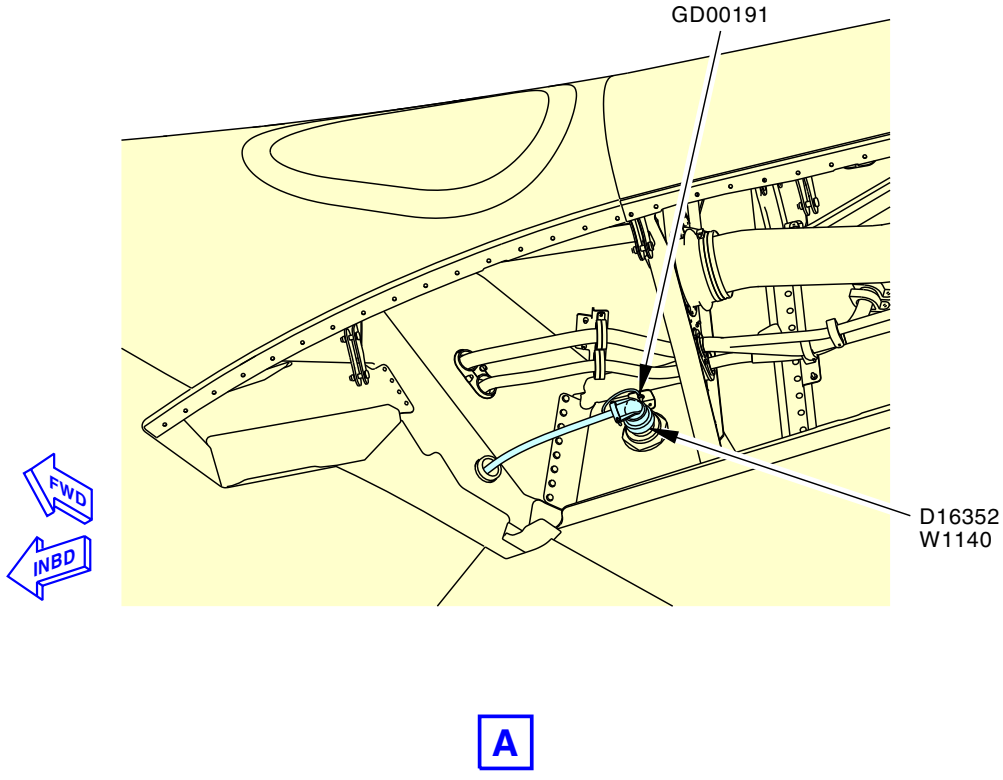
SUBTASK 05-55-25-840-008

(2) Do this task: Leading Edge Flaps and Slats Retraction, TASK 27-81-00-860-804.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details





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Loop Resistance Test of Wire Bundle - Left Wing Leading Edge (MRB 20-177-00) - Connector Location
Figure 612/05-55-25-990-841

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SIA 001-010 PRE SB 737-24-1233

TASK 05-55-25-280-817

14. Loop Resistance Test of Wire Bundle - Left Engine (MRB 20-182-00)

(Figure 613 or Figure 614)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) The loop resistance tester, SPL-1636, or MK loop resistance tester, SPL-18565, is required for this task.

B. References

Reference	Title
05-56-02-200-801	LRT Lid Standard Measurement (P/B 201)
05-56-02-200-802	ExLRT Standard Measurement (P/B 201)
05-56-03-200-801	Loop Resistance Measurement (P/B 201)
05-56-04-200-801	Joint Resistance Measurement (P/B 201)
05-56-05-200-801	Loop Resistance and Joint Resistance Measurement (P/B 201)
SWPM 20	Standard Wiring Practices Manual

C. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-1636	Tester - Loop Resistance (LRT "-1" for checks up to & including 4 years ONLY, LRT "-2 & -3" applicable for all HIRF/FQIS check/inspection intervals) Part #: 906-10246-3 Supplier: 3X2T2 Opt Part #: 906-10246-1 Supplier: 3X2T2 Opt Part #: 906-10246-2 Supplier: 3X2T2
SPL-18565	Tester - Loop Resistance, MK Part #: XLR-9703-01 Supplier: KC432 Part #: XLR-9703-02 Supplier: KC432

D. Location Zones

Zone	Area
431	Engine 1 - Forward Strut Fairing
511	Left Wing - Leading Edge To Front Spar

E. Access Panels

Number	Name/Location
431AT	Forward Strut Fairing, Thumbnail Fairing, Strut 1
431CR	Forward Strut Fairing, Right Overwing Fairing, Strut 1

F. Prepare for the Loop Resistance Test

SUBTASK 05-55-25-970-028

(1) Boeing requests that all data recorded while doing this procedure be submitted to The Boeing Company for engineering analysis.

(a) Send the data to one of the following addresses:

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SIA 001-010 PRE SB 737-24-1233 (Continued)

1) Electronically: MTCProgLHIRFTaskCardData@boeing.com

2) By Mail : "The Boeing Company, Attention: Manager, Lightning / HIRF, Mail Code: MC 110-SC15, BLDG 80, 2201 Seal Beach Blvd., Seal Beach, CA USA 90740, USA".

3) By Fax: 206-655-4991.

NOTE: Data sent will help Boeing understand the reliability of the components and will be used to improve the maintenance program.

SUBTASK 05-55-25-010-020

(2) Open these access panels:

Number	Name/Location
431AT	Forward Strut Fairing, Thumbnail Fairing, Strut 1
431CR	Forward Strut Fairing, Right Overwing Fairing, Strut 1

G. Loop Resistance Test of Wire Bundle

SUBTASK 05-55-25-720-027

(1) Do the functional check of the wire bundle shielding.

NOTE: This step checks the wire bundle shielding for the scheduled maintenance check. This step also checks the wire bundle shielding after any repair is done with the wire bundle or connector.

(a) Do this task: Loop Resistance Measurement, TASK 05-56-03-200-801 or Loop Resistance and Joint Resistance Measurement, TASK 05-56-05-200-801 for each wire bundle listed in the Table 625.

NOTE: In the case of multiple wire bundles going to/from a connector, make sure the coupler is only around the desired bundle. This may require removing (and replacing) wire ties to separate the bundles enough for coupler connection.

1) Record the measured value to the data sheet (Table 625).

Table 625/05-55-25-993-853 Wire Bundle Loop Resistance Values - Left Engine (MRB 20-182-00)

Plane:					
Date:					
Technician:					
Bundle Number	Connector Number	Measured Loop Resistance Value (mΩ)	Min/Max Value (mΩ)	Pass Fail	Retest Measured Value/ Comments
W1062	D30038		6/15		
W1162	D08094P		4/12		

2) Make sure that the measured value is within the MIN/MAX value range listed in the data sheet (Table 625).

3) If the measured value is not within the MIN/MAX value range, do the troubleshooting step below for the wire bundle shielding failure.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SIA 001-010 PRE SB 737-24-1233 (Continued)

4) This step is complete when all wire bundles listed in the Table 625 were tested and passed.

SUBTASK 05-55-25-610-001

(2) Do the troubleshooting step for the wire bundle shielding.

NOTE: Perform this step only if the measured value of the Functional Check of the wire bundle shielding is not within the MIN/MAX value range.

NOTE: Record all the measurement data to the data sheet. This should include both initial and final values. Also record the troubleshooting steps taken to the RETEST MEASURED VALUE/COMMENTS column.

(a) If the wire bundle shield resistance is less than the MIN value, do these steps:

1) Check the test setup.

a) Make sure that the couplers are only around the desired wire bundle and closed properly.

2) If the test setup is OK, check the LRT operation, do this task: LRT Lid Standard Measurement, TASK 05-56-02-200-801 or ExLRT Standard Measurement, TASK 05-56-02-200-802.

3) If no problem is found, check the entire length of the wire bundle.

a) Look for signs of chafing or damage to the wire bundle that can cause the shield to short to structure.

NOTE: An example might be an area where bundle insulation has degraded and a portion of the shield is exposed and making contact with structure at an intermediate point in the bundle length. Another might be some metallic object penetrating the insulation and making contact between the shield and structure.

b) If a problem is found, repair or replace in accordance with the SWPM 20.

4) If no defects are found with the wire bundle and the loop resistance value is still less than the MIN value, record this value and contact Boeing for further support.

(b) If the wire bundle shield loop resistance is greater than the MAX value, do this step:

1) Measure the joint resistance across the connector from the ground terminal to primary structure Joint Resistance Measurement, TASK 05-56-04-200-801 or Loop Resistance and Joint Resistance Measurement, TASK 05-56-05-200-801 for each wire bundle listed in the table below for applicable connectors.

a) If joint value measured is greater than maximum joint resistance value in data table listed in the Joint Resistance Measurement, TASK 05-56-04-200-801 or Loop Resistance and Joint Resistance Measurement, TASK 05-56-05-200-801, repair in accordance with the SWPM 20.

b) If joint value measured is not greater than maximum joint resistance value in data table, record this value and contact Boeing for further support.

(c) After the wire bundle or connector is repaired, do the Functional Check of the wire bundle shielding again on this wire bundle.

SUBTASK 05-55-25-800-014

(3) The connectors listed in Table 626 are used in the steps above.

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SIA 001-010 PRE SB 737-24-1233 (Continued)

Table 626/05-55-25-993-827 Left Engine Connectors (MRB 20-182-00)

Wire Bundle	Connector	WDM	Mate With Equipment
W1062	D30038	24-21-11	AS0004L
W1162	D08094P	24-21-11	AW0258L

H. Put the Airplane Back to Its Usual Condition

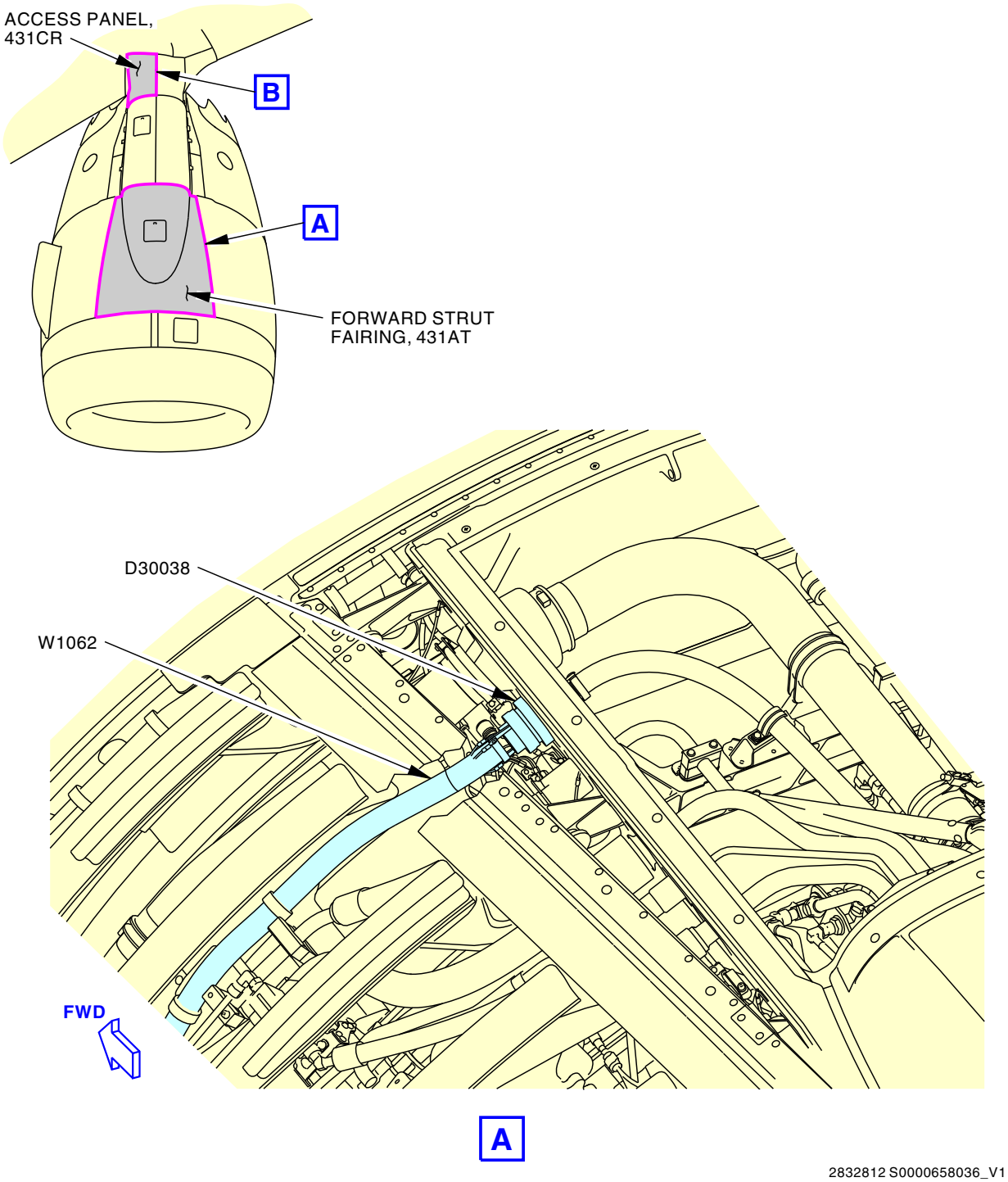
SUBTASK 05-55-25-410-017

(1) Close these access panels:

Number	Name/Location
431AT	Forward Strut Fairing, Thumbnail Fairing, Strut 1
431CR	Forward Strut Fairing, Right Overwing Fairing, Strut 1

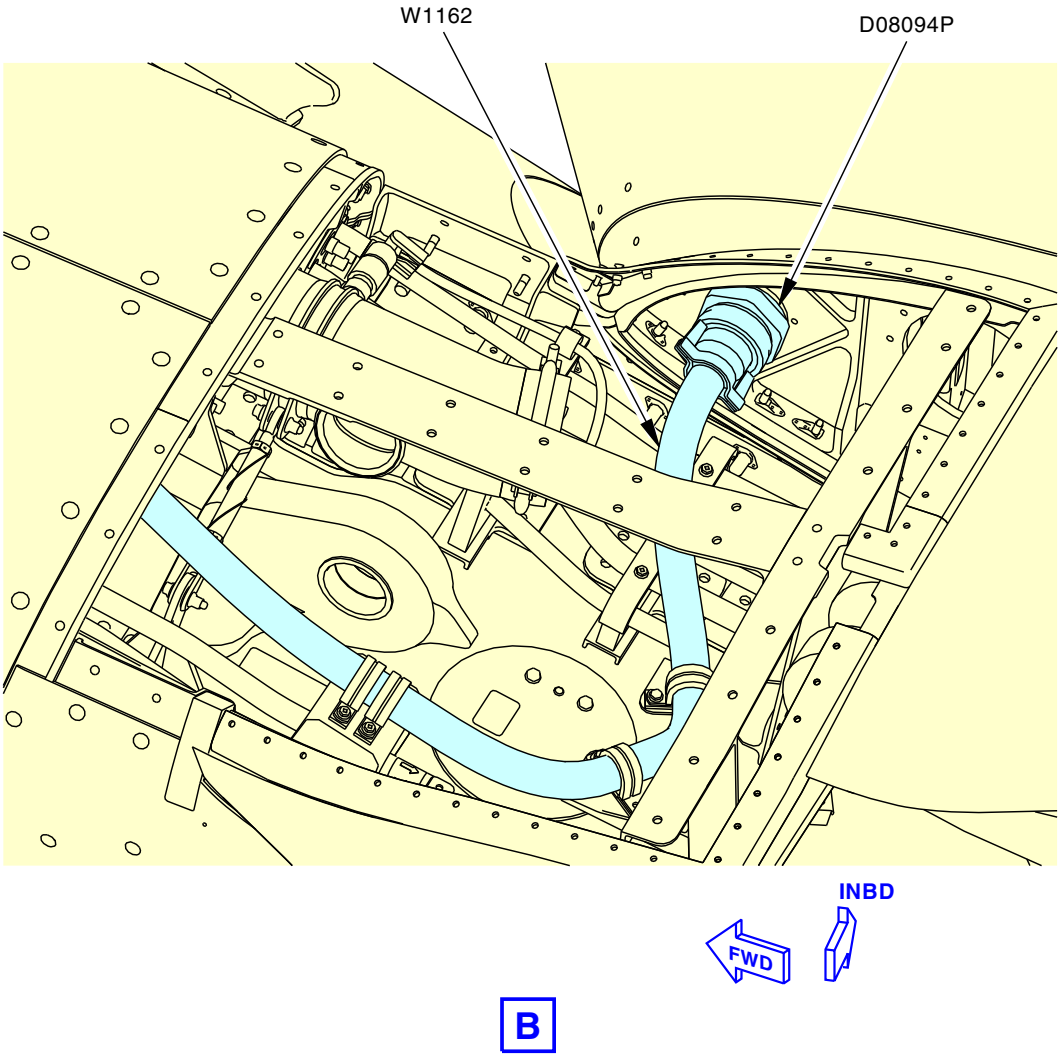
——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Loop Resistance Test of Wire Bundle - Left Engine (MRB 20-182-00)
Figure 613/05-55-25-990-845

ECCN 9E991 BOEING PROPRIETARY - See title page for details



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Loop Resistance Test of Wire Bundle - Left Engine (MRB 20-182-00)
Figure 614/05-55-25-990-846

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SIA ALL

TASK 05-55-25-280-821

15. Loop Resistance Test of Wire Bundle - Left MLG Wheel Well (MRB 20-188-00)

(Figure 615)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) The loop resistance tester, SPL-1636, or MK loop resistance tester, SPL-18565, is required for this task.

B. References

Reference	Title
05-56-02-200-801	LRT Lid Standard Measurement (P/B 201)
05-56-02-200-802	ExLRT Standard Measurement (P/B 201)
05-56-03-200-801	Loop Resistance Measurement (P/B 201)
05-56-04-200-801	Joint Resistance Measurement (P/B 201)
05-56-05-200-801	Loop Resistance and Joint Resistance Measurement (P/B 201)
32-00-01-480-801	Landing Gear Downlock Pins Installation (P/B 201)
SWPM 20	Standard Wiring Practices Manual

C. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-1636	Tester - Loop Resistance (LRT "-1" for checks up to & including 4 years ONLY, LRT "-2 & -3" applicable for all HIRF/FQIS check/inspection intervals) Part #: 906-10246-3 Supplier: 3X2T2 Opt Part #: 906-10246-1 Supplier: 3X2T2 Opt Part #: 906-10246-2 Supplier: 3X2T2
SPL-18565	Tester - Loop Resistance, MK Part #: XLR-9703-01 Supplier: KC432 Part #: XLR-9703-02 Supplier: KC432

D. Location Zones

Zone	Area
133	Main Landing Gear Wheel Well, Body Station 663.75 to Body Station 727.00 - Left

E. Prepare for the Loop Resistance Test

SUBTASK 05-55-25-970-032

(1) Boeing requests that all data recorded while doing this procedure be submitted to The Boeing Company for engineering analysis.

(a) Send the data to one of the following addresses:

1) Electronically: MTCProgLHIRFTaskCardData@boeing.com

2) By Mail : "The Boeing Company, Attention: Manager, Lightning / HIRF, Mail Code: MC 110-SC15, BLDG 80, 2201 Seal Beach Blvd., Seal Beach, CA USA 90740, USA".

ECCN 9E991 BOEING PROPRIETARY - See title page for details

3) By Fax: 206-655-4991.

NOTE: Data sent will help Boeing understand the reliability of the components and will be used to improve the maintenance program.

SUBTASK 05-55-25-860-008

(2) Make sure that the landing gear downlock pins are installed (TASK 32-00-01-480-801).

F. Loop Resistance Test of Wire Bundle

SUBTASK 05-55-25-720-031

(1) Do the functional check of the wire bundle shielding.

NOTE: This step checks the wire bundle shielding for the scheduled maintenance check. This step also checks the wire bundle shielding after any repair is done with the wire bundle or connector.

(a) Do this task: Loop Resistance Measurement, TASK 05-56-03-200-801 or Loop Resistance and Joint Resistance Measurement, TASK 05-56-05-200-801 for each wire bundle listed in the Table 627.

NOTE: In the case of multiple wire bundles going to/from a connector, make sure the coupler is only around the desired bundle. This may require removing (and replacing) wire ties to separate the bundles enough for coupler connection.

1) Record the measured value to the data sheet (Table 627).

Table 627/05-55-25-993-862 Wire Bundle Loop Resistance Values - Left MLG Wheel Well (MRB 20-188-00)

Plane:					
Date:					
Technician:					
Bundle Number	Connector Number	Measured Loop Resistance Value (mΩ)	Min/Max Value (mΩ)	Pass Fail	Retest Measured Value/ Comments
W5375	GD00947		3.5/10		

2) Make sure that the measured value is within the MIN/MAX value range listed in the data sheet (Table 627).

3) If the measured value is not within the MIN/MAX value range, do the troubleshooting step below for the wire bundle shielding failure.

4) This step is complete when all wire bundles listed in Table 627 the were tested and passed.

SUBTASK 05-55-25-810-023

(2) Do the troubleshooting step for the wire bundle shielding.

NOTE: Perform this step only if the measured value of the Functional Check of the wire bundle shielding is not within the MIN/MAX value range.

NOTE: Record all the measurement data to the data sheet. This should include both initial and final values. Also record the troubleshooting steps taken to the RETEST MEASURED VALUE/COMMENTS column.

(a) If the wire bundle shield resistance is less than the MIN value, do these steps:

1) Check the test setup.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

a) Make sure that the couplers are only around the desired wire bundle and closed properly.

2) If the test setup is OK, check the LRT operation, do this task: LRT Lid Standard Measurement, TASK 05-56-02-200-801 or ExLRT Standard Measurement, TASK 05-56-02-200-802.

3) If no problem is found, check the entire length of the wire bundle.

a) Look for signs of chafing or damage to the wire bundle that can cause the shield to short to structure.

NOTE: An example might be an area where bundle insulation has degraded and a portion of the shield is exposed and making contact with structure at an intermediate point in the bundle length. Another might be some metallic object penetrating the insulation and making contact between the shield and structure.

b) If a problem is found, repair or replace in accordance with the SWPM 20.

4) If no defects are found with the wire bundle and the loop resistance value is still less than the MIN value, record this value and contact Boeing for further support.

(b) If the wire bundle shield loop resistance is greater than the MAX value, do this step:

1) Measure the joint resistance across the connector from the ground terminal to primary structure Joint Resistance Measurement, TASK 05-56-04-200-801 or Loop Resistance and Joint Resistance Measurement, TASK 05-56-05-200-801 for each wire bundle listed in the table below for applicable connectors.

a) If joint value measured is greater than maximum joint resistance value in data table listed in the Joint Resistance Measurement, TASK 05-56-04-200-801 or Loop Resistance and Joint Resistance Measurement, TASK 05-56-05-200-801, repair in accordance with the SWPM 20.

b) If joint value measured is not greater than maximum joint resistance value in data table, record this value and contact Boeing for further support.

(c) After the wire bundle or connector is repaired, do the Functional Check of the wire bundle shielding again on this wire bundle.

SUBTASK 05-55-25-800-018

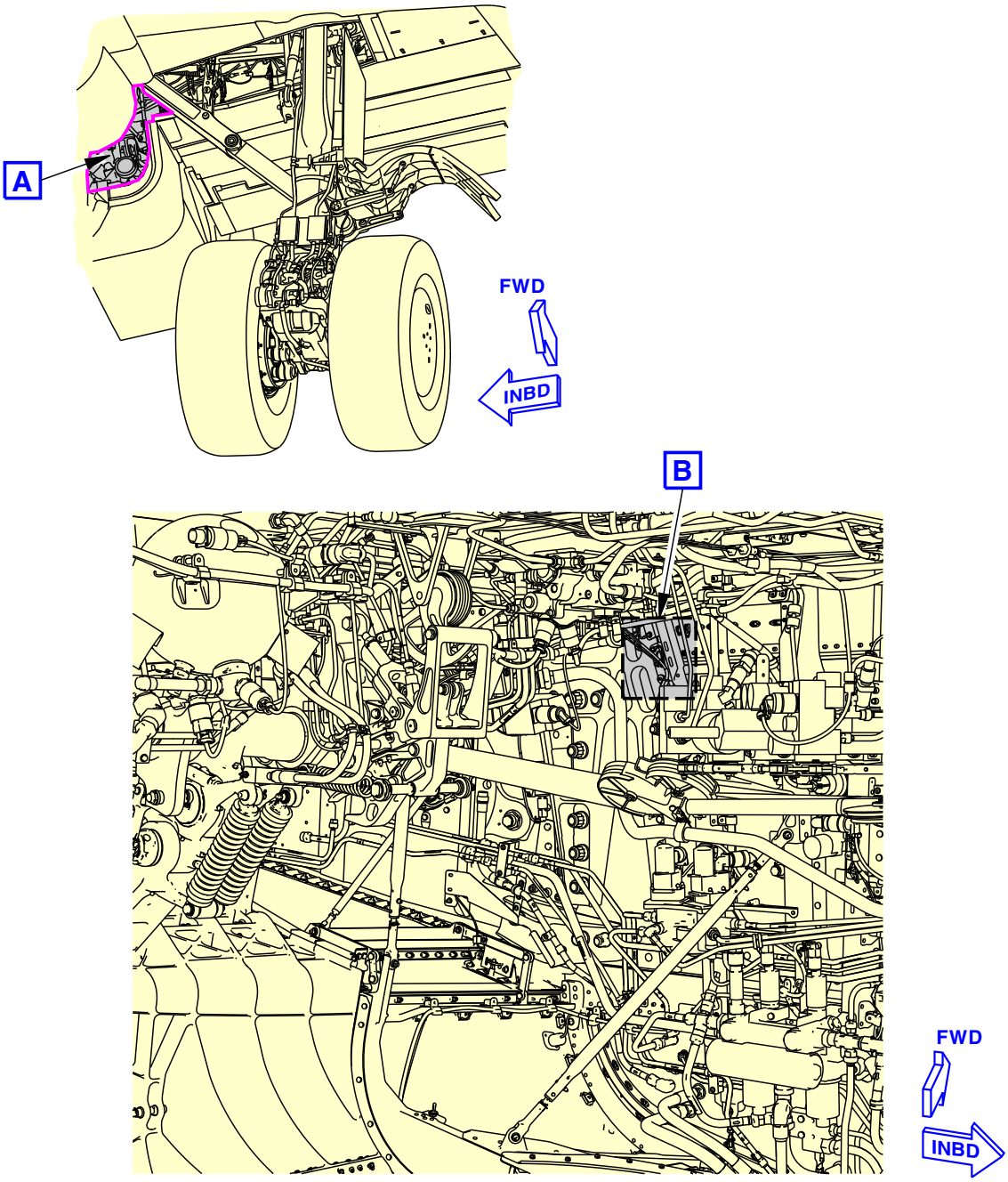
(3) The connectors/grounds listed in Table 628 is used for the steps above.

Table 628/05-55-25-993-861 Left MLG Wheel Well Connectors (MRB 20-188-00)

Wire Bundle	Connector	WDM	Mate With Equipment
W5375	GD00947	22-11-31	N/A

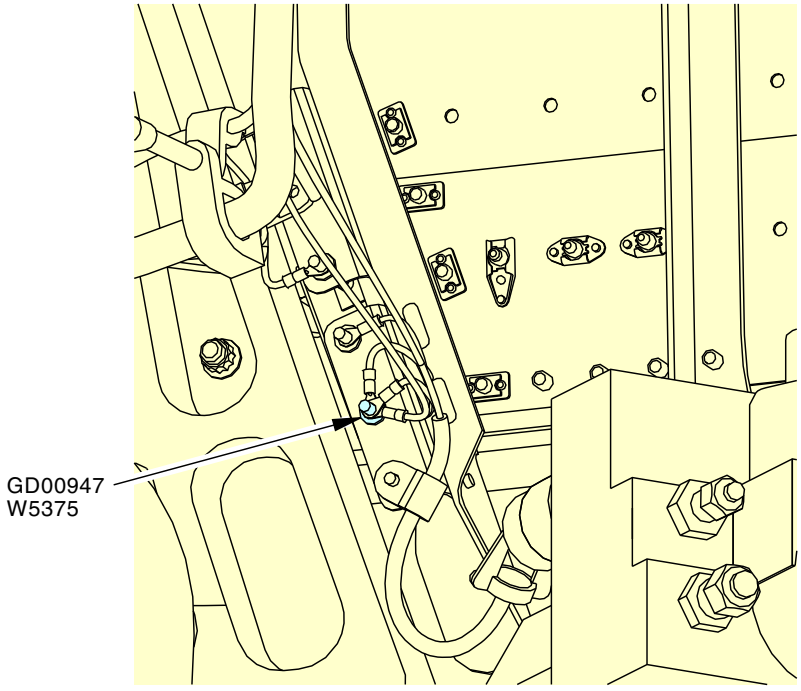
END OF TASK

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Loop Resistance Test of Wire Bundles - Left MLG Wheel Well (MRB 20-188-00) - Connector Locations
Figure 615/05-55-25-990-849 (Sheet 1 of 2)

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LEFT MAIN LANDING GEAR WHEEL WELL

B

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Loop Resistance Test of Wire Bundles - Left MLG Wheel Well (MRB 20-188-00) - Connector Locations
Figure 615/05-55-25-990-849 (Sheet 2 of 2)

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WIRE BUNDLES ON RIGHT SIDE OF THE AIRPLANE - INSPECTION/CHECK

1. General

A. This procedure contains tasks that perform a loop resistance test of wire bundles on right side of the airplane.

TASK 05-55-26-280-801

2. Loop Resistance Test of Wire Bundle - Right MLG Wheel Well (MRB 20-150-00)

(Figure 601)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) The loop resistance tester, SPL-1636 or the MK loop resistance tester, SPL-18565 is required for this task.

B. References

Reference	Title
05-56-02-200-801	LRT Lid Standard Measurement (P/B 201)
05-56-02-200-802	ExLRT Standard Measurement (P/B 201)
05-56-03-200-801	Loop Resistance Measurement (P/B 201)
05-56-04-200-801	Joint Resistance Measurement (P/B 201)
05-56-05-200-801	Loop Resistance and Joint Resistance Measurement (P/B 201)
32-00-01-480-801	Landing Gear Downlock Pins Installation (P/B 201)
SWPM 20	Standard Wiring Practices Manual

C. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-1636	Tester - Loop Resistance (LRT "-1" for checks up to & including 4 years ONLY, LRT "-2 & -3" applicable for all HIRF/FQIS check/inspection intervals) Part #: 906-10246-3 Supplier: 3X2T2 Opt Part #: 906-10246-1 Supplier: 3X2T2 Opt Part #: 906-10246-2 Supplier: 3X2T2
SPL-18565	Tester - Loop Resistance, MK Part #: XLR-9703-01 Supplier: KC432 Part #: XLR-9703-02 Supplier: KC432

D. Location Zones

Zone	Area
134	Main Landing Gear Wheel Well, Body Station 663.75 to Body Station 727.00 - Right

E. Prepare for the Loop Resistance Test

SUBTASK 05-55-26-970-002

(1) Boeing requests that all data recorded while doing this procedure be submitted to The Boeing Company for engineering analysis.

(a) Send the data to one of the following addresses:

1) Electronically: MTCProgLHIRFTaskCardData@boeing.com

ECCN 9E991 BOEING PROPRIETARY - See title page for details

2) By Mail : "The Boeing Company, Attention: Manager, Lightning / HIRF, Mail Code: MC 110-SC15, BLDG 80, 2201 Seal Beach Blvd., Seal Beach, CA USA 90740, USA".

3) By Fax: 206-655-4991.

NOTE: Data sent will help Boeing understand the reliability of the components and will be used to improve the maintenance program.

SUBTASK 05-55-26-860-001

(2) Make sure that the landing gear downlock pins are installed (TASK 32-00-01-480-801).

F. Loop Resistance Test of Wire Bundle

SUBTASK 05-55-26-720-030

(1) Do the functional check of the wire bundle shielding.

NOTE: This step checks the wire bundle shielding for the scheduled maintenance check. This step also checks the wire bundle shielding after any repair is done with the wire bundle or connector.

(a) Do this task: Loop Resistance Measurement, TASK 05-56-03-200-801 or Loop Resistance and Joint Resistance Measurement, TASK 05-56-05-200-801 for each wire bundle listed in the Table 601.

NOTE: In the case of multiple wire bundles going to/from a connector, make sure that the coupler is only around the desired bundle. This may require removing (and replacing) wire ties to separate the bundles enough for coupler connection.

1) Record the measured value to the data sheet (Table 601).

Table 601/05-55-26-993-846 Wire Bundle Loop Resistance Values - Right MLG Wheel Well (MRB 20-150-00)

Plane:					
Date:					
Technician:					
Bundle Number	**Connector Number**	**Measured Loop Resistance Value (mΩ)**	**Min/Max Value (mΩ)**	**Pass Fail**	**Retest Measured Value/Comments**
W1032	D43102P		52/123		
W8122	D46046P		11/26		

2) Make sure that the measured value is within the MIN/MAX value range listed in the data sheet (Table 601).

3) If the measured value is not within the MIN/MAX value range, do the troubleshooting step below for the wire bundle shielding failure.

4) This step is complete when all wire bundles listed in the Table 601 were tested and passed.

SUBTASK 05-55-26-810-007

(2) Do the troubleshooting step for the wire bundle shielding.

NOTE: Perform this step only if the measured value of the Functional Check of the wire bundle shielding is not within the MIN/MAX value range.

NOTE: Record all the measurement data to the data sheet. This should include both initial and final values. Also record the troubleshooting steps taken to the RETEST MEASURED VALUE/COMMENTS column.

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(a) If the wire bundle shield resistance is less than the MIN value, do these steps:

1) Check the test setup.

a) Make sure that the couplers are only around the desired wire bundle and closed properly.

2) If the test setup is OK, check the LRT operation, do this task: LRT Lid Standard Measurement, TASK 05-56-02-200-801 or ExLRT Standard Measurement, TASK 05-56-02-200-802.

3) If no problem is found, check the entire length of the wire bundle.

a) Look for signs of chafing or damage to the wire bundle that can cause the shield to short to structure.

NOTE: An example might be an area where bundle insulation has degraded and a portion of the shield is exposed and making contact with structure at an intermediate point in the bundle length. Another might be some metallic object penetrating the insulation and making contact between the shield and structure.

b) If a problem is found, repair or replace in accordance with the SWPM 20.

4) If no defects are found with the wire bundle and the loop resistance value is still less than the MIN value, record this value and contact Boeing for further support.

(b) If the wire bundle shield loop resistance is greater than the MAX value, do this step:

1) Measure the joint resistance across the connector from the ground terminal to primary structure Joint Resistance Measurement, TASK 05-56-04-200-801 or Loop Resistance and Joint Resistance Measurement, TASK 05-56-05-200-801 for each wire bundle listed in the table below for applicable connectors.

a) If joint value measured is greater than maximum joint resistance value in data table listed in the Joint Resistance Measurement, TASK 05-56-04-200-801 or Loop Resistance and Joint Resistance Measurement, TASK 05-56-05-200-801, repair in accordance with the SWPM 20.

b) If joint value measured is not greater than maximum joint resistance value in data table, record this value and contact Boeing for further support.

(c) After the wire bundle or connector is repaired, do the Functional Check of the wire bundle shielding again on this wire bundle.

SUBTASK 05-55-26-800-001

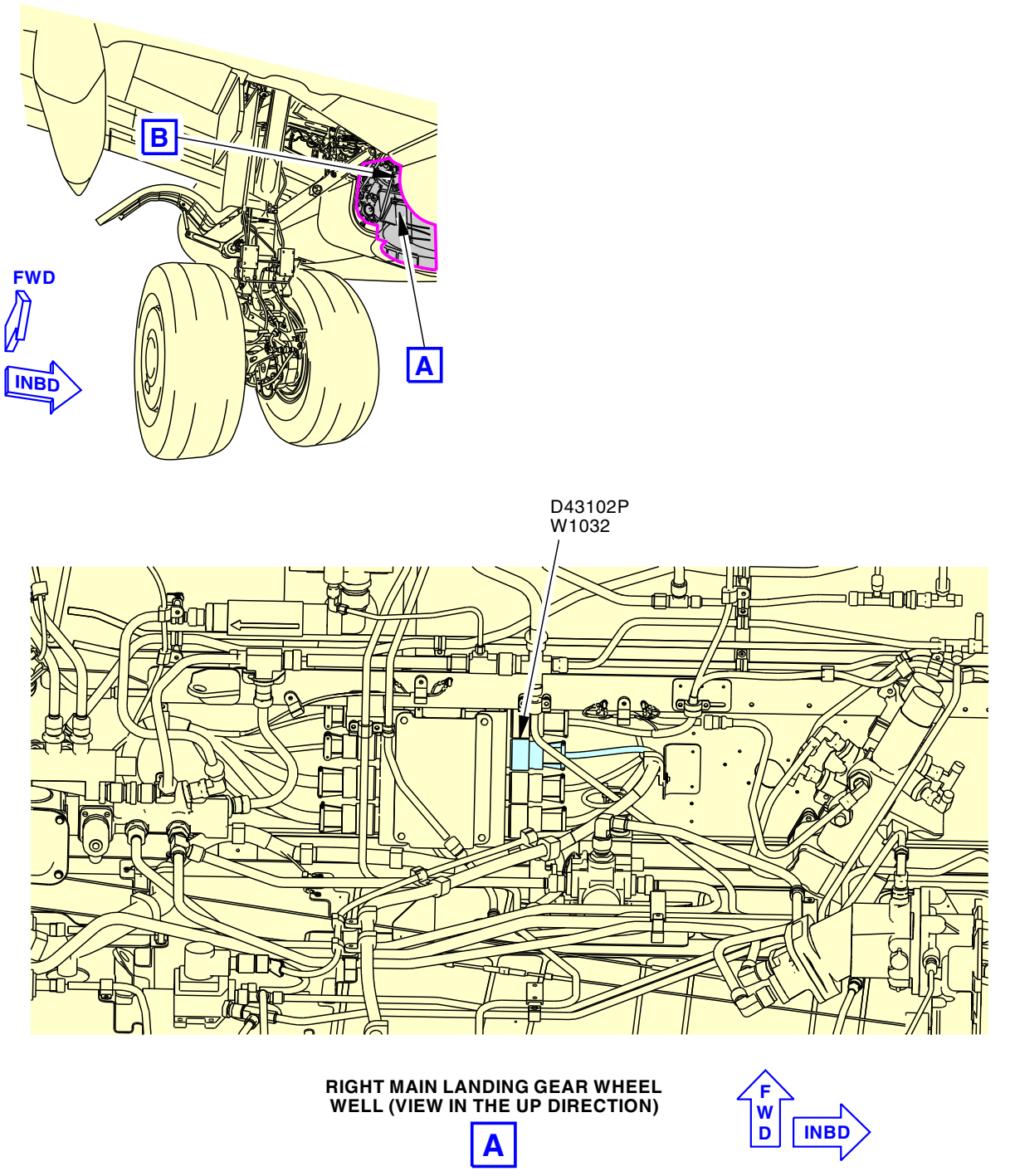
(3) The connectors listed in Table 602 are used for the steps above.

Table 602/05-55-26-993-814 Right MLG Wheel Well Connectors (MRB 20–150–00)

Wire Bundle	Connector	WDM	Mate With Equipment
W1032	D43102P	22–11–11, 22–12–41	AL0720D
W8122	D46046P	27–61–49, 27–83–11, 29–23–11, 29–25–11	AL0675C

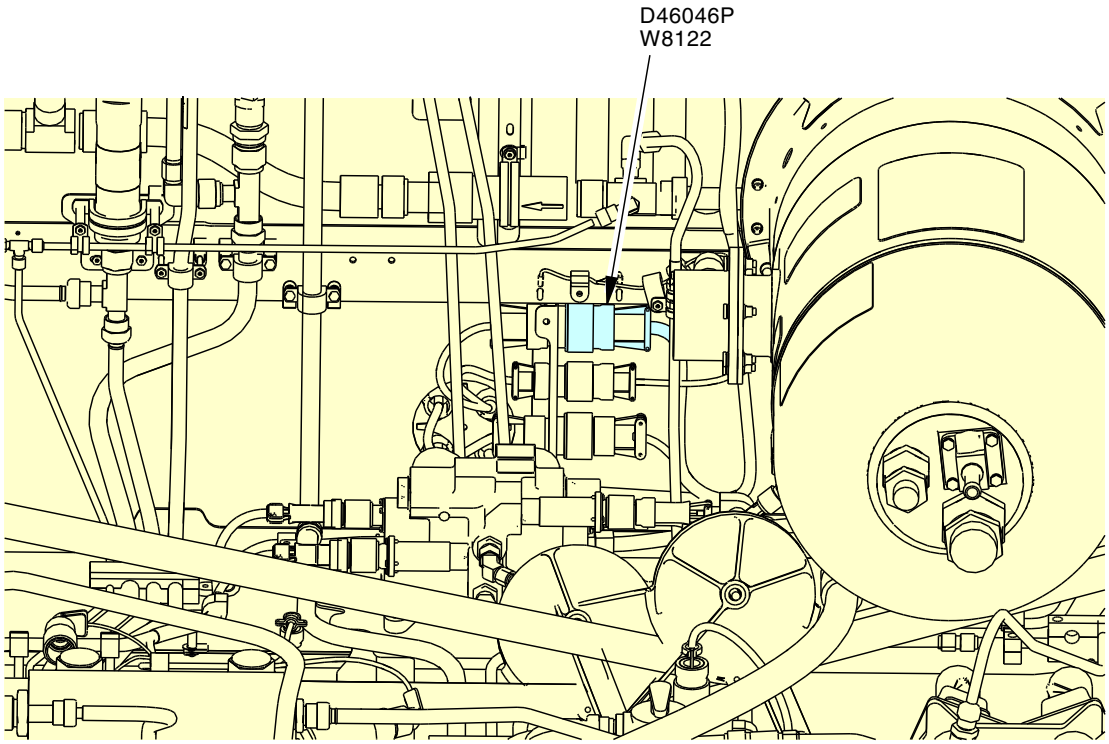
END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Loop Resistance Test of Wire Bundle - Right MLG Wheel Well (MRB 20-150-00) - Connector Location
Figure 601/05-55-26-990-819 (Sheet 1 of 2)

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Loop Resistance Test of Wire Bundle - Right MLG Wheel Well (MRB 20-150-00) - Connector Location
Figure 601/05-55-26-990-819 (Sheet 2 of 2)

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TASK 05-55-26-280-802

3. Loop Resistance Test of Wire Bundle - Right MLG Wheel Well (MRB 20-151-00)

(Figure 602)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) The loop resistance tester, SPL-1636 or the MK loop resistance tester, SPL-18565 is required for this task.

B. References

Reference	Title
05-56-02-200-801	LRT Lid Standard Measurement (P/B 201)
05-56-02-200-802	ExLRT Standard Measurement (P/B 201)
05-56-03-200-801	Loop Resistance Measurement (P/B 201)
05-56-04-200-801	Joint Resistance Measurement (P/B 201)
05-56-05-200-801	Loop Resistance and Joint Resistance Measurement (P/B 201)
32-00-01-480-801	Landing Gear Downlock Pins Installation (P/B 201)
SWPM 20	Standard Wiring Practices Manual

C. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-1636	Tester - Loop Resistance (LRT "-1" for checks up to & including 4 years ONLY, LRT "-2 & -3" applicable for all HIRF/FQIS check/inspection intervals) Part #: 906-10246-3 Supplier: 3X2T2 Opt Part #: 906-10246-1 Supplier: 3X2T2 Opt Part #: 906-10246-2 Supplier: 3X2T2
SPL-18565	Tester - Loop Resistance, MK Part #: XLR-9703-01 Supplier: KC432 Part #: XLR-9703-02 Supplier: KC432

D. Location Zones

Zone	Area
134	Main Landing Gear Wheel Well, Body Station 663.75 to Body Station 727.00 - Right

E. Prepare for the Loop Resistance Test

SUBTASK 05-55-26-970-004

(1) Boeing requests that all data recorded while doing this procedure be submitted to The Boeing Company for engineering analysis.

(a) Send the data to one of the following addresses:

1) Electronically: MTCProgLHIRFTaskCardData@boeing.com

2) By Mail : "The Boeing Company, Attention: Manager, Lightning / HIRF, Mail Code: MC 110-SC15, BLDG 80, 2201 Seal Beach Blvd., Seal Beach, CA USA 90740, USA".

ECCN 9E991 BOEING PROPRIETARY - See title page for details

3) By Fax: 206-655-4991.

NOTE: Data sent will help Boeing understand the reliability of the components and will be used to improve the maintenance program.

SUBTASK 05-55-26-860-002

(2) Make sure that the landing gear downlock pins are installed (TASK 32-00-01-480-801).

F. Loop Resistance Test of Wire Bundle

SUBTASK 05-55-26-720-017

(1) Do the functional check of the wire bundle shielding.

NOTE: This step checks the wire bundle shielding for the scheduled maintenance check. This step also checks the wire bundle shielding after any repair is done with the wire bundle or connector.

(a) Do this task: Loop Resistance Measurement, TASK 05-56-03-200-801 or Loop Resistance and Joint Resistance Measurement, TASK 05-56-05-200-801 for each wire bundle listed in the Table 603.

NOTE: In the case of multiple wire bundles going to/from a connector, make sure that the coupler is only around the desired bundle. This may require removing (and replacing) wire ties to separate the bundles enough for coupler connection.

1) Record the measured value to the data sheet (Table 603).

Table 603/05-55-26-993-845 Wire Bundle Loop Resistance Values - Right MLG Wheel Well (MRB 20-151-00)

Plane:					
Date:					
Technician:					
Bundle Number	**Connector Number**	**Measured Loop Resistance Value (mΩ)**	**Min/Max Value (mΩ)**	**Pass Fail**	**Retest Measured Value/Comments**
W8122	D16424		37/86		
W8122	D16428		39/92		
W7230	D16426		255/600		
W7230	D16496		255/600		

2) Make sure that the measured value is within the MIN/MAX value range listed in the data sheet (Table 603).

3) If the measured value is not within the MIN/MAX value range, do the troubleshooting step below for the wire bundle shielding failure.

4) This step is complete when all wire bundles listed in the Table 603 were tested and passed.

SUBTASK 05-55-26-810-022

(2) Do the troubleshooting step for the wire bundle shielding.

NOTE: Perform this step only if the measured value of the Functional Check of the wire bundle shielding is not within the MIN/MAX value range.

NOTE: Record all the measurement data to the data sheet. This should include both initial and final values. Also record the troubleshooting steps taken to the RETEST MEASURED VALUE/COMMENTS column.

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(a) If the wire bundle shield resistance is less than the MIN value, do these steps:

1) Check the test setup.

a) Make sure that the couplers are only around the desired wire bundle and closed properly.

2) If the test setup is OK, check the LRT operation, do this task: LRT Lid Standard Measurement, TASK 05-56-02-200-801 or ExLRT Standard Measurement, TASK 05-56-02-200-802.

3) If no problem is found, check the entire length of the wire bundle.

a) Look for signs of chafing or damage to the wire bundle that can cause the shield to short to structure.

NOTE: An example might be an area where bundle insulation has degraded and a portion of the shield is exposed and making contact with structure at an intermediate point in the bundle length. Another might be some metallic object penetrating the insulation and making contact between the shield and structure.

b) If a problem is found, repair or replace in accordance with the SWPM 20.

4) If no defects are found with the wire bundle and the loop resistance value is still less than the MIN value, record this value and contact Boeing for further support.

(b) If the wire bundle shield loop resistance is greater than the MAX value, do this step:

1) Measure the joint resistance across the connector from the ground terminal to primary structure Joint Resistance Measurement, TASK 05-56-04-200-801 or Loop Resistance and Joint Resistance Measurement, TASK 05-56-05-200-801 for each wire bundle listed in the table below for applicable connectors.

a) If joint value measured is greater than maximum joint resistance value in data table listed in the Joint Resistance Measurement, TASK 05-56-04-200-801 or Loop Resistance and Joint Resistance Measurement, TASK 05-56-05-200-801, repair in accordance with the SWPM 20.

b) If joint value measured is not greater than maximum joint resistance value in data table, record this value and contact Boeing for further support.

(c) After the wire bundle or connector is repaired, do the Functional Check of the wire bundle shielding again on this wire bundle.

SUBTASK 05-55-26-800-002

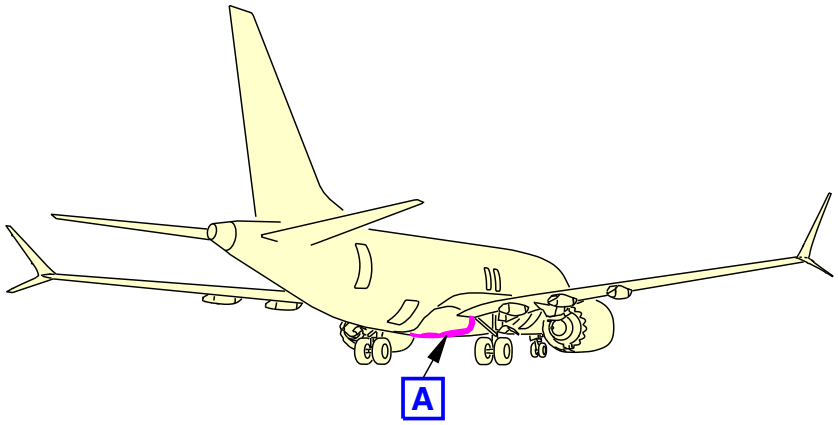
(3) The connectors listed in Table 604 are used for the steps above.

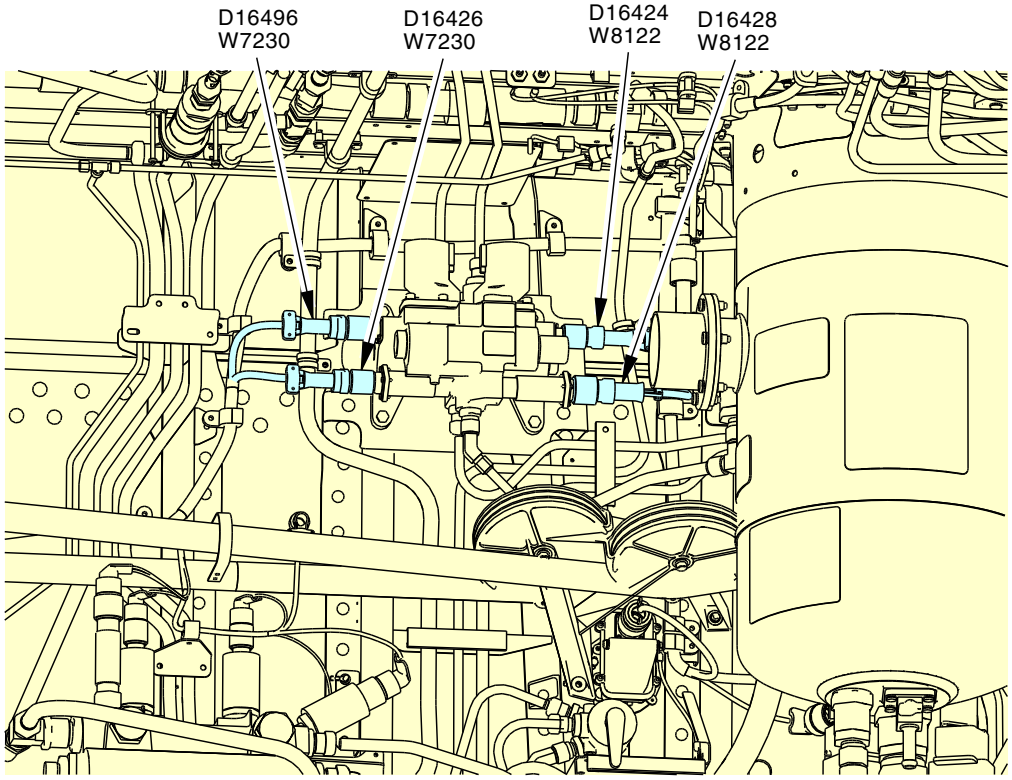
Table 604/05-55-26-993-815 Right MLG Wheel Well Connectors (MRB 20–151–00)

Wire Bundle	Connector	WDM	Mate With Equipment
W8122	D16424	27–61–49	M02988
	D16428	27–61–49	M02988
W7230	D16426	27–61–49	M02988
	D16496	27–61–49	M02988

END OF TASK

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Loop Resistance Test of Wire Bundle - Right MLG Wheel Well (MRB 20-151-00) - Connector Location
Figure 602/05-55-26-990-821

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TASK 05-55-26-280-805

4. Loop Resistance Test of Wire Bundle - Right Wing to Body Fairing (MRB 20-160-00)

(Figure 603)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) The loop resistance tester, SPL-1636 or the MK loop resistance tester, SPL-18565 is required for this task.

B. References

Reference	Title
05-56-02-200-801	LRT Lid Standard Measurement (P/B 201)
05-56-02-200-802	ExLRT Standard Measurement (P/B 201)
05-56-03-200-801	Loop Resistance Measurement (P/B 201)
05-56-04-200-801	Joint Resistance Measurement (P/B 201)
05-56-05-200-801	Loop Resistance and Joint Resistance Measurement (P/B 201)
27-81-00-040-801	Leading Edge Flaps and Slats - Deactivation (P/B 201)
27-81-00-440-801	Leading Edge Flaps and Slats - Activation (P/B 201)
SWPM 20	Standard Wiring Practices Manual

C. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-1636	Tester - Loop Resistance (LRT "-1" for checks up to & including 4 years ONLY, LRT "-2 & -3" applicable for all HIRF/FQIS check/inspection intervals) Part #: 906-10246-3 Supplier: 3X2T2 Opt Part #: 906-10246-1 Supplier: 3X2T2 Opt Part #: 906-10246-2 Supplier: 3X2T2
SPL-18565	Tester - Loop Resistance, MK Part #: XLR-9703-01 Supplier: KC432 Part #: XLR-9703-02 Supplier: KC432

D. Location Zones

Zone	Area
191	Lower Wing-To-Body Fairing - Forward of Wing Box

E. Access Panels

Number	Name/Location
191FR	Forward Wing-To-Body Fairing Panel - Mid Fairing, Above Ram Air Inlet

F. Prepare for the Loop Resistance Test

SUBTASK 05-55-26-970-006

(1) Boeing requests that all data recorded while doing this procedure be submitted to The Boeing Company for engineering analysis.

(a) Send the data to one of the following addresses:

1) Electronically: MTCProgLHIRFTaskCardData@boeing.com

ECCN 9E991 BOEING PROPRIETARY - See title page for details

2) By Mail : "The Boeing Company, Attention: Manager, Lightning / HIRF, Mail Code: MC 110-SC15, BLDG 80, 2201 Seal Beach Blvd., Seal Beach, CA USA 90740, USA".

3) By Fax: 206-655-4991.

NOTE: Data sent will help Boeing understand the reliability of the components and will be used to improve the maintenance program.

SUBTASK 05-55-26-040-011

(2) Do this task: Leading Edge Flaps and Slats - Deactivation, TASK 27-81-00-040-801.

SUBTASK 05-55-26-010-011

(3) Open this access panel:

Number	Name/Location
191FR	Forward Wing-To-Body Fairing Panel - Mid Fairing, Above Ram Air Inlet

G. Loop Resistance Test of Wire Bundle

SUBTASK 05-55-26-720-018

(1) Do the functional check of the wire bundle shielding.

NOTE: This step checks the wire bundle shielding for the scheduled maintenance check. This step also checks the wire bundle shielding after any repair is done with the wire bundle or connector.

(a) Do this task: Loop Resistance Measurement, TASK 05-56-03-200-801 or Loop Resistance and Joint Resistance Measurement, TASK 05-56-05-200-801 for each wire bundle listed in the Table 605.

NOTE: In the case of multiple wire bundles going to/from a connector, make sure that the coupler is only around the desired bundle. This may require removing (and replacing) wire ties to separate the bundles enough for coupler connection.

1) Record the measured value to the data sheet (Table 605).

Table 605/05-55-26-993-847 Wire Bundle Loop Resistance Values - Right Wing to Body Fairing (MRB 20-160-00)

Plane:					
Date:					
Technician:					
Bundle Number	**Connector Number**	**Measured Loop Resistance Value (mΩ)**	**Min/Max Value (mΩ)**	**Pass Fail**	**Retest Measured Value/Comments**
W1278	D39928		6/15		
W1282	D39932		6/15		
W1290	D39974		8/20		
W1292	D39986		7/15		
W1288	D39904		12/28		
W1664	D39943		6/13		
W1138	D39944		11/26		

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2) Make sure that the measured value is within the MIN/MAX value range listed in the data sheet (Table 605).

3) If the measured value is not within the MIN/MAX value range, do the troubleshooting step below for the wire bundle shielding failure.

4) This step is complete when all wire bundles listed in the Table 605 were tested and passed.

SUBTASK 05-55-26-810-009

(2) Do the troubleshooting step for the wire bundle shielding.

NOTE: Perform this step only if the measured value of the Functional Check of the wire bundle shielding is not within the MIN/MAX value range.

NOTE: Record all the measurement data to the data sheet. This should include both initial and final values. Also record the troubleshooting steps taken to the RETEST MEASURED VALUE/COMMENTS column.

(a) If the wire bundle shield resistance is less than the MIN value, do these steps:

1) Check the test setup.

a) Make sure that the couplers are only around the desired wire bundle and closed properly.

2) If the test setup is OK, check the LRT operation, do this task: LRT Lid Standard Measurement, TASK 05-56-02-200-801 or ExLRT Standard Measurement, TASK 05-56-02-200-802.

3) If no problem is found, check the entire length of the wire bundle.

a) Look for signs of chafing or damage to the wire bundle that can cause the shield to short to structure.

NOTE: An example might be an area where bundle insulation has degraded and a portion of the shield is exposed and making contact with structure at an intermediate point in the bundle length. Another might be some metallic object penetrating the insulation and making contact between the shield and structure.

b) If a problem is found, repair or replace in accordance with the SWPM 20.

4) If no defects are found with the wire bundle and the loop resistance value is still less than the MIN value, record this value and contact Boeing for further support.

(b) If the wire bundle shield loop resistance is greater than the MAX value, do this step:

1) Measure the joint resistance across the connector from the ground terminal to primary structure Joint Resistance Measurement, TASK 05-56-04-200-801 or Loop Resistance and Joint Resistance Measurement, TASK 05-56-05-200-801 for each wire bundle listed in the table below for applicable connectors.

a) If joint value measured is greater than maximum joint resistance value in data table listed in the Joint Resistance Measurement, TASK 05-56-04-200-801 or Loop Resistance and Joint Resistance Measurement, TASK 05-56-05-200-801, repair in accordance with the SWPM 20.

b) If joint value measured is not greater than maximum joint resistance value in data table, record this value and contact Boeing for further support.

(c) After the wire bundle or connector is repaired, do the Functional Check of the wire bundle shielding again on this wire bundle.

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SUBTASK 05-55-26-800-003

(3) The connectors listed in Table 606 are used for the steps above.

Table 606/05-55-26-993-816 Right Wing to Body Fairing Connectors (MRB 20-160-00)

Wire Bundle	Connector	WDM	Mate With Equipment
W1278	D39928	26–11–21, 28–21–11, 36–11–22, 36–11–23, 73–21–12, 73–22–11, 74–11–11, 77–12–11, 78–34–21, 78–35–21, 79–31–11	DM0056
W1282	D39932	26–11–21, 28–21–11, 36–11–22, 36–11–23, 73–21–12, 73–22–11, 74–11–11, 77–12–11, 78–34–21, 78–35–21, 79–31–11	DM0056
W1292	D39986	46–13–11, 73–21–11, 73–21–12, 73–21–21, 73–24–12, 73–24–21, 78–32–61	DM0014
W1282	D39932	26–11–21, 26–12–11, 30–21–32, 36–11–23, 73–21–12, 73–22–11, 73–22–41, 74–11–11, 76–21–21, 77–12–21	DM0016
W1290	D39974	46–13–11, 73–21–11, 73–21–21, 73–24–12, 73–24–21, 78–32–61	DM0012
W1288	D39904	26–12–11, 27–81–22, 30–11–11	DM0002
W1664	D39943	23–41–11, 28–41–11, 28–44–11, 30–11–11, 33–42–21, 33–43–11, 33–44–12	DM0051
W1138	D39944	28–41–11	DM0054

H. Put the Airplane Back to Its Usual Condition

SUBTASK 05-55-26-410-008

(1) Close this access panel:

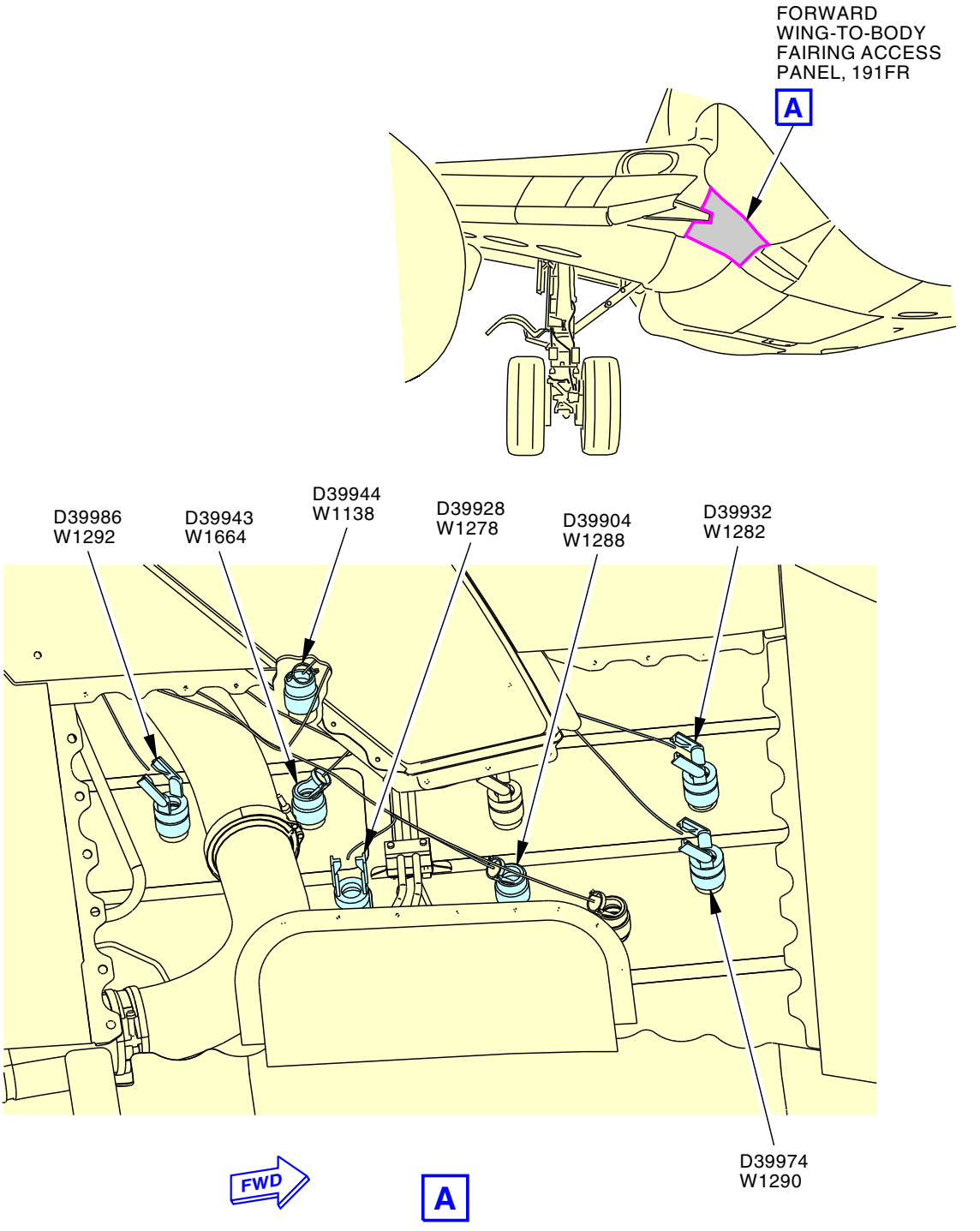
Number	Name/Location
191FR	Forward Wing-To-Body Fairing Panel - Mid Fairing, Above Ram Air Inlet

SUBTASK 05-55-26-440-012

(2) Do this task: Leading Edge Flaps and Slats - Activation, TASK 27-81-00-440-801.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



2546490 S0000605113_V3

Loop Resistance Test of Wire Bundle - Right Wing to Body Fairing (MRB 20-160-00) - Connector Location
Figure 603/05-55-26-990-823

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-55-26-280-806

5. Loop Resistance Test of Wire Bundle - Right Wing to Body Fairing (MRB 20-161-00)

(Figure 604)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) The loop resistance tester, SPL-1636 or the MK loop resistance tester, SPL-18565 is required for this task.

B. References

Reference	Title
05-56-02-200-801	LRT Lid Standard Measurement (P/B 201)
05-56-02-200-802	ExLRT Standard Measurement (P/B 201)
05-56-03-200-801	Loop Resistance Measurement (P/B 201)
05-56-04-200-801	Joint Resistance Measurement (P/B 201)
05-56-05-200-801	Loop Resistance and Joint Resistance Measurement (P/B 201)
21-51-00-800-801	Air Cycle Air Conditioning and Temperature Control System - Deactivation (P/B 201)
21-51-00-800-802	Air Cycle Air Conditioning and Temperature Control System - Activation (P/B 201)
SWPM 20	Standard Wiring Practices Manual

C. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-1636	Tester - Loop Resistance (LRT "-1" for checks up to & including 4 years ONLY, LRT "-2 & -3" applicable for all HIRF/FQIS check/inspection intervals) Part #: 906-10246-3 Supplier: 3X2T2 Opt Part #: 906-10246-1 Supplier: 3X2T2 Opt Part #: 906-10246-2 Supplier: 3X2T2
SPL-18565	Tester - Loop Resistance, MK Part #: XLR-9703-01 Supplier: KC432 Part #: XLR-9703-02 Supplier: KC432

D. Location Zones

Zone	Area
192	Lower Wing-To-Body Fairing - Under Wing Box

E. Access Panels

Number	Name/Location
192CR	ECS Access Door

F. Prepare for the Loop Resistance Test

SUBTASK 05-55-26-970-008

(1) Boeing requests that all data recorded while doing this procedure be submitted to The Boeing Company for engineering analysis.

(a) Send the data to one of the following addresses:

ECCN 9E991 BOEING PROPRIETARY - See title page for details

1) Electronically: MTCProgLHIRFTaskCardData@boeing.com

2) By Mail : "The Boeing Company, Attention: Manager, Lightning / HIRF, Mail Code: MC 110-SC15, BLDG 80, 2201 Seal Beach Blvd., Seal Beach, CA USA 90740, USA".

3) By Fax: 206-655-4991.

NOTE: Data sent will help Boeing understand the reliability of the components and will be used to improve the maintenance program.

SUBTASK 05-55-26-840-001

(2) Do this task: Air Cycle Air Conditioning and Temperature Control System - Deactivation, TASK 21-51-00-800-801.

SUBTASK 05-55-26-010-012

(3) Open this access panel:

Number	Name/Location
192CR	ECS Access Door

G. Loop Resistance Test of Wire Bundle

SUBTASK 05-55-26-720-019

(1) Do the functional check of the wire bundle shielding.

NOTE: This step checks the wire bundle shielding for the scheduled maintenance check. This step also checks the wire bundle shielding after any repair is done with the wire bundle or connector.

(a) Do this task: Loop Resistance Measurement, TASK 05-56-03-200-801 or Loop Resistance and Joint Resistance Measurement, TASK 05-56-05-200-801 for each wire bundle listed in the Table 607.

NOTE: In the case of multiple wire bundles going to/from a connector, make sure that the coupler is only around the desired bundle. This may require removing (and replacing) wire ties to separate the bundles enough for coupler connection.

1) Record the measured value to the data sheet (Table 607).

Table 607/05-55-26-993-848 Wire Bundle Loop Resistance Values - Right Wing to Body Fairing (MRB 20-161-00)

Plane:					
Date:					
Technician:					
Bundle Number	**Connector Number**	**Measured Loop Resistance Value (mΩ)**	**Min/Max Value (mΩ)**	**Pass Fail**	**Retest Measured Value/Comments**
W6230	D40058P		156/368		

2) Make sure that the measured value is within the MIN/MAX value range listed in the data sheet (Table 607).

3) If the measured value is not within the MIN/MAX value range, do the troubleshooting step below for the wire bundle shielding failure.

4) This step is complete when all wire bundles listed in the Table 607 were tested and passed.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 05-55-26-810-010

(2) Do the troubleshooting step for the wire bundle shielding.

NOTE: Perform this step only if the measured value of the Functional Check of the wire bundle shielding is not within the MIN/MAX value range.

NOTE: Record all the measurement data to the data sheet. This should include both initial and final values. Also record the troubleshooting steps taken to the RETEST MEASURED VALUE/COMMENTS column.

(a) If the wire bundle shield resistance is less than the MIN value, do these steps:

1) Check the test setup.

a) Make sure that the couplers are only around the desired wire bundle and closed properly.

2) If the test setup is OK, check the LRT operation, do this task: LRT Lid Standard Measurement, TASK 05-56-02-200-801 or ExLRT Standard Measurement, TASK 05-56-02-200-802.

3) If no problem is found, check the entire length of the wire bundle.

a) Look for signs of chafing or damage to the wire bundle that can cause the shield to short to structure.

NOTE: An example might be an area where bundle insulation has degraded and a portion of the shield is exposed and making contact with structure at an intermediate point in the bundle length. Another might be some metallic object penetrating the insulation and making contact between the shield and structure.

b) If a problem is found, repair or replace in accordance with the SWPM 20.

4) If no defects are found with the wire bundle and the loop resistance value is still less than the MIN value, record this value and contact Boeing for further support.

(b) If the wire bundle shield loop resistance is greater than the MAX value, do this step:

1) Measure the joint resistance across the connector from the ground terminal to primary structure Joint Resistance Measurement, TASK 05-56-04-200-801 or Loop Resistance and Joint Resistance Measurement, TASK 05-56-05-200-801 for each wire bundle listed in the table below for applicable connectors.

a) If joint value measured is greater than maximum joint resistance value in data table listed in the Joint Resistance Measurement, TASK 05-56-04-200-801 or Loop Resistance and Joint Resistance Measurement, TASK 05-56-05-200-801, repair in accordance with the SWPM 20.

b) If joint value measured is not greater than maximum joint resistance value in data table, record this value and contact Boeing for further support.

(c) After the wire bundle or connector is repaired, do the Functional Check of the wire bundle shielding again on this wire bundle.

SUBTASK 05-55-26-800-004

(3) The connector listed in Table 608 is used for the steps above.

Table 608/05-55-26-993-817 Right Wing to Body Fairing Connectors (MRB 20-161-00)

Wire Bundle	Connector	WDM	Mate With Equipment
W6230	D40058P	21–51–24, 36–21–11	AB0536R

ECCN 9E991 BOEING PROPRIETARY - See title page for details

H. Put the Airplane Back to Its Usual Condition

SUBTASK 05-55-26-410-009

(1) Close this access panel:

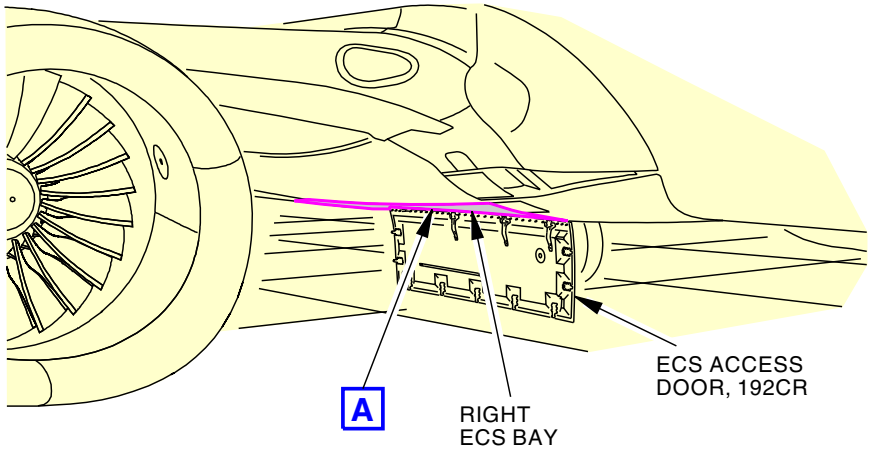
Number	Name/Location
192CR	ECS Access Door

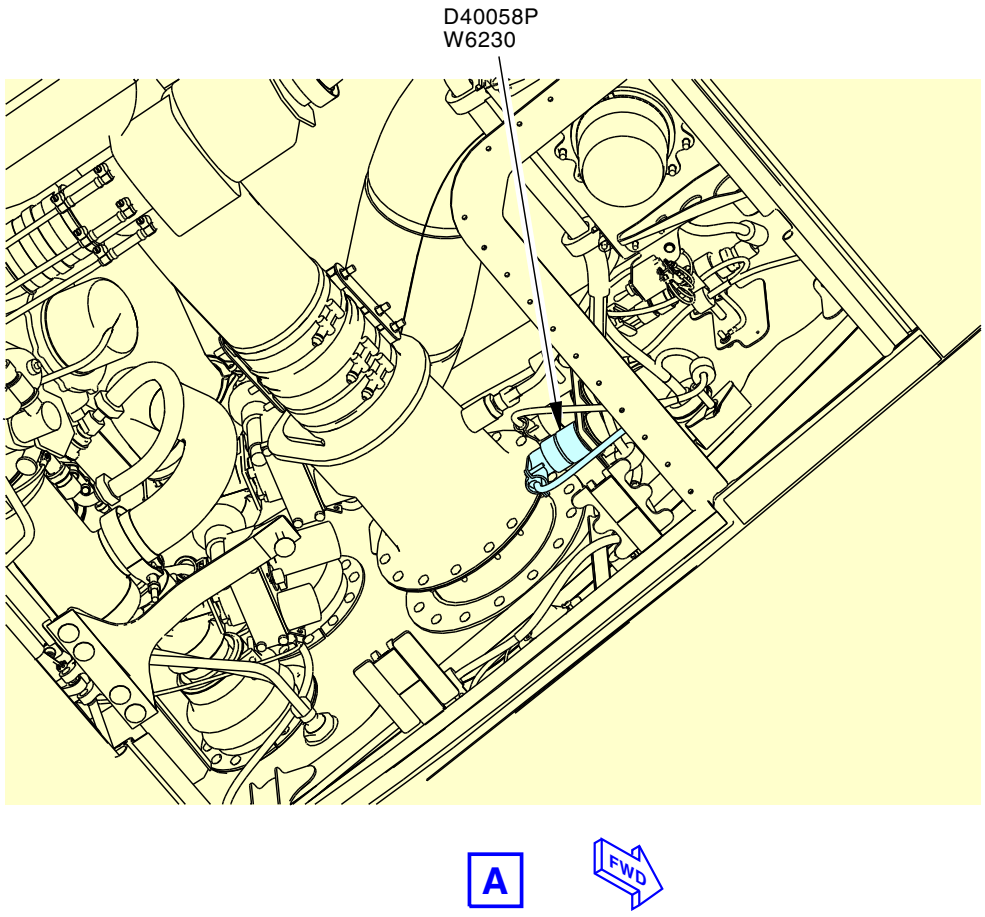
SUBTASK 05-55-26-840-002

(2) Do this task: Air Cycle Air Conditioning and Temperature Control System - Activation, TASK 21-51-00-800-802.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details





2546510 S0000605115_V1

Loop Resistance Test of Wire Bundle - Right Wing to Body Fairing (MRB 20-161-00) - Connector Location
Figure 604/05-55-26-990-825

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-55-26-280-807

6. Loop Resistance Test of Wire Bundle - Right Wing to Body Fairing (MRB 20-162-00)

(Figure 605)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) The loop resistance tester, SPL-1636 or the MK loop resistance tester, SPL-18565 is required for this task.

B. References

Reference	Title
05-56-02-200-801	LRT Lid Standard Measurement (P/B 201)
05-56-02-200-802	ExLRT Standard Measurement (P/B 201)
05-56-03-200-801	Loop Resistance Measurement (P/B 201)
05-56-04-200-801	Joint Resistance Measurement (P/B 201)
05-56-05-200-801	Loop Resistance and Joint Resistance Measurement (P/B 201)
27-81-00-040-801	Leading Edge Flaps and Slats - Deactivation (P/B 201)
27-81-00-440-801	Leading Edge Flaps and Slats - Activation (P/B 201)
SWPM 20	Standard Wiring Practices Manual

C. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-1636	Tester - Loop Resistance (LRT "-1" for checks up to & including 4 years ONLY, LRT "-2 & -3" applicable for all HIRF/FQIS check/inspection intervals) Part #: 906-10246-3 Supplier: 3X2T2 Opt Part #: 906-10246-1 Supplier: 3X2T2 Opt Part #: 906-10246-2 Supplier: 3X2T2
SPL-18565	Tester - Loop Resistance, MK Part #: XLR-9703-01 Supplier: KC432 Part #: XLR-9703-02 Supplier: KC432

D. Location Zones

Zone	Area
191	Lower Wing-To-Body Fairing - Forward of Wing Box

E. Access Panels

Number	Name/Location
191FR	Forward Wing-To-Body Fairing Panel - Mid Fairing, Above Ram Air Inlet

F. Prepare for the Loop Resistance Test

SUBTASK 05-55-26-970-010

(1) Boeing requests that all data recorded while doing this procedure be submitted to The Boeing Company for engineering analysis.

(a) Send the data to one of the following addresses:

1) Electronically: MTCProgLHIRFTaskCardData@boeing.com

ECCN 9E991 BOEING PROPRIETARY - See title page for details

2) By Mail : "The Boeing Company, Attention: Manager, Lightning / HIRF, Mail Code: MC 110-SC15, BLDG 80, 2201 Seal Beach Blvd., Seal Beach, CA USA 90740, USA".

3) By Fax: 206-655-4991.

NOTE: Data sent will help Boeing understand the reliability of the components and will be used to improve the maintenance program.

SUBTASK 05-55-26-040-012

(2) Do this task: Leading Edge Flaps and Slats - Deactivation, TASK 27-81-00-040-801.

SUBTASK 05-55-26-010-013

(3) Open this access panel:

Number	Name/Location
191FR	Forward Wing-To-Body Fairing Panel - Mid Fairing, Above Ram Air Inlet

G. Loop Resistance Test of Wire Bundle

SUBTASK 05-55-26-720-020

(1) Do the functional check of the wire bundle shielding.

NOTE: This step checks the wire bundle shielding for the scheduled maintenance check. This step also checks the wire bundle shielding after any repair is done with the wire bundle or connector.

(a) Do this task: Loop Resistance Measurement, TASK 05-56-03-200-801 or Loop Resistance and Joint Resistance Measurement, TASK 05-56-05-200-801 for each wire bundle listed in the Table 609.

NOTE: In the case of multiple wire bundles going to/from a connector, make sure that the coupler is only around the desired bundle. This may require removing (and replacing) wire ties to separate the bundles enough for coupler connection.

1) Record the measured value to the data sheet (Table 609).

Table 609/05-55-26-993-849 Wire Bundle Loop Resistance Values - Right Wing to Body Fairing (MRB 20-162-00)

Plane:					
Date:					
Technician:					
Bundle Number	**Connector Number**	**Measured Loop Resistance Value (mΩ)**	**Min/Max Value (mΩ)**	**Pass Fail**	**Retest Measured Value/Comments**
W1284	D39936		11/25		

2) Make sure that the measured value is within the MIN/MAX value range listed in the data sheet (Table 609).

3) If the measured value is not within the MIN/MAX value range, do the troubleshooting step below for the wire bundle shielding failure.

4) This step is complete when all wire bundles listed in the Table 609 were tested and passed.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 05-55-26-810-011

(2) Do the troubleshooting step for the wire bundle shielding.

NOTE: Perform this step only if the measured value of the Functional Check of the wire bundle shielding is not within the MIN/MAX value range.

NOTE: Record all the measurement data to the data sheet. This should include both initial and final values. Also record the troubleshooting steps taken to the RETEST MEASURED VALUE/COMMENTS column.

(a) If the wire bundle shield resistance is less than the MIN value, do these steps:

1) Check the test setup.

a) Make sure that the couplers are only around the desired wire bundle and closed properly.

2) If the test setup is OK, check the LRT operation, do this task: LRT Lid Standard Measurement, TASK 05-56-02-200-801 or ExLRT Standard Measurement, TASK 05-56-02-200-802.

3) If no problem is found, check the entire length of the wire bundle.

a) Look for signs of chafing or damage to the wire bundle that can cause the shield to short to structure.

NOTE: An example might be an area where bundle insulation has degraded and a portion of the shield is exposed and making contact with structure at an intermediate point in the bundle length. Another might be some metallic object penetrating the insulation and making contact between the shield and structure.

b) If a problem is found, repair or replace in accordance with the SWPM 20.

4) If no defects are found with the wire bundle and the loop resistance value is still less than the MIN value, record this value and contact Boeing for further support.

(b) If the wire bundle shield loop resistance is greater than the MAX value, do this step:

1) Measure the joint resistance across the connector from the ground terminal to primary structure Joint Resistance Measurement, TASK 05-56-04-200-801 or Loop Resistance and Joint Resistance Measurement, TASK 05-56-05-200-801 for each wire bundle listed in the table below for applicable connectors.

a) If joint value measured is greater than maximum joint resistance value in data table listed in the Joint Resistance Measurement, TASK 05-56-04-200-801 or Loop Resistance and Joint Resistance Measurement, TASK 05-56-05-200-801, repair in accordance with the SWPM 20.

b) If joint value measured is not greater than maximum joint resistance value in data table, record this value and contact Boeing for further support.

(c) After the wire bundle or connector is repaired, do the Functional Check of the wire bundle shielding again on this wire bundle.

SUBTASK 05-55-26-800-005

(3) The connector listed in Table 610 is used for the steps above.

Table 610/05-55-26-993-818 Right Wing to Body Fairing Connectors (MRB 20-162-00)

Wire Bundle	Connector	WDM	Mate With Equipment
W1284	D39936	24–11–21, 24–21–21, 24–24–21, 29–11–11	DM0018

ECCN 9E991 BOEING PROPRIETARY - See title page for details

H. Put the Airplane Back to Its Usual Condition

SUBTASK 05-55-26-410-010

(1) Close this access panel:

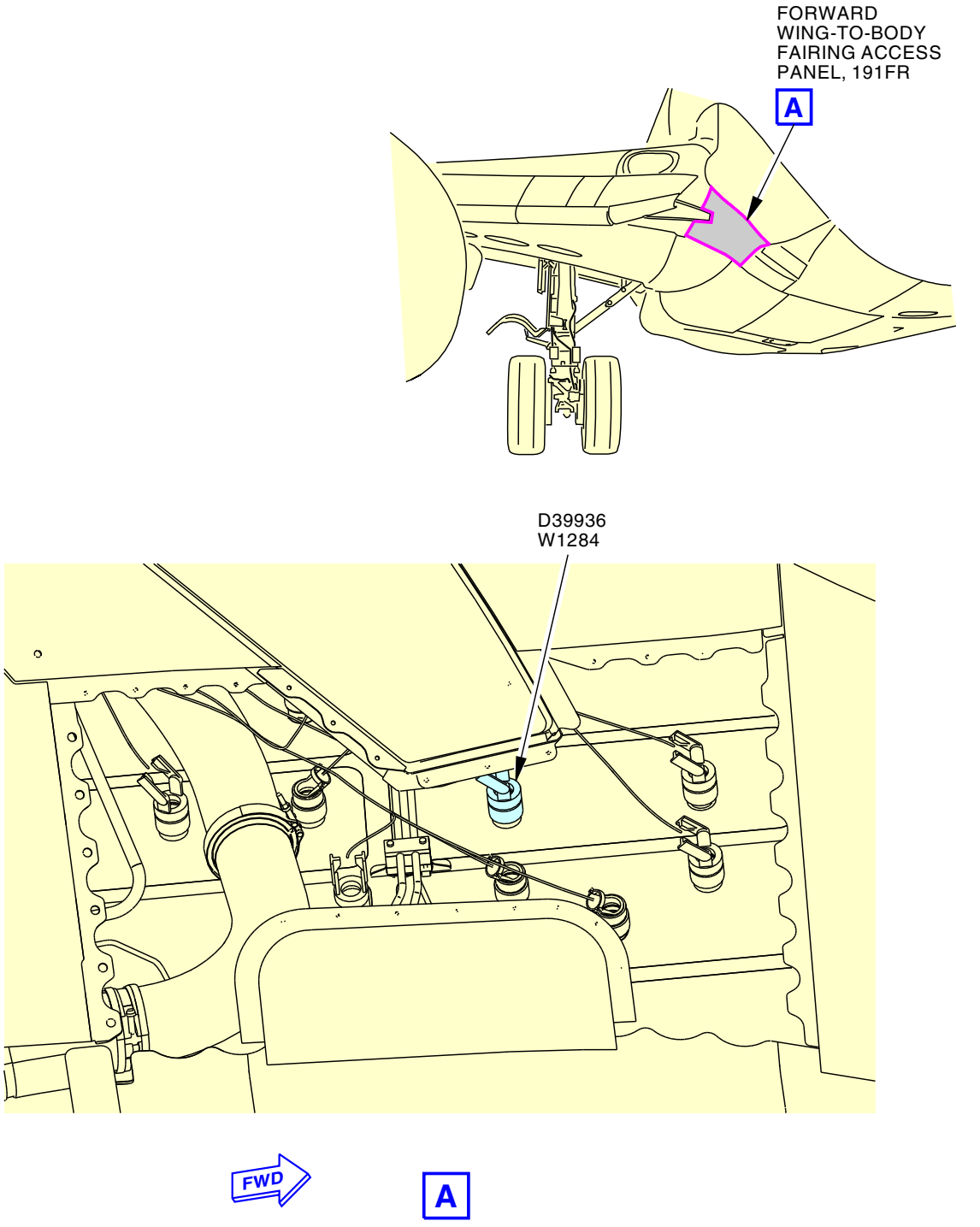
Number	Name/Location
191FR	Forward Wing-To-Body Fairing Panel - Mid Fairing, Above Ram Air Inlet

SUBTASK 05-55-26-440-013

(2) Do this task: Leading Edge Flaps and Slats - Activation, TASK 27-81-00-440-801.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



2546514 S0000605117_V2

Loop Resistance Test of Wire Bundle - Right Wing to Body Fairing (MRB 20-162-00) - Connector Location
Figure 605/05-55-26-990-827

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-55-26-280-809

7. Loop Resistance Test of Wire Bundle - Right Wing to Body Fairing (MRB 20-164-00)

(Figure 606)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) The loop resistance tester, SPL-1636 or the MK loop resistance tester, SPL-18565 is required for this task.

B. References

Reference	Title
05-56-02-200-801	LRT Lid Standard Measurement (P/B 201)
05-56-02-200-802	ExLRT Standard Measurement (P/B 201)
05-56-03-200-801	Loop Resistance Measurement (P/B 201)
05-56-04-200-801	Joint Resistance Measurement (P/B 201)
05-56-05-200-801	Loop Resistance and Joint Resistance Measurement (P/B 201)
21-51-00-800-801	Air Cycle Air Conditioning and Temperature Control System - Deactivation (P/B 201)
21-51-00-800-802	Air Cycle Air Conditioning and Temperature Control System - Activation (P/B 201)
SWPM 20	Standard Wiring Practices Manual

C. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-1636	Tester - Loop Resistance (LRT "-1" for checks up to & including 4 years ONLY, LRT "-2 & -3" applicable for all HIRF/FQIS check/inspection intervals) Part #: 906-10246-3 Supplier: 3X2T2 Opt Part #: 906-10246-1 Supplier: 3X2T2 Opt Part #: 906-10246-2 Supplier: 3X2T2
SPL-18565	Tester - Loop Resistance, MK Part #: XLR-9703-01 Supplier: KC432 Part #: XLR-9703-02 Supplier: KC432

D. Location Zones

Zone	Area
192	Lower Wing-To-Body Fairing - Under Wing Box

E. Access Panels

Number	Name/Location
192CL	ECS Access Door
192CR	ECS Access Door

F. Prepare for the Loop Resistance Test

SUBTASK 05-55-26-970-014

(1) Boeing requests that all data recorded while doing this procedure be submitted to The Boeing Company for engineering analysis.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(a) Send the data to one of the following addresses:

1) Electronically: MTCProgLHIRFTaskCardData@boeing.com

2) By Mail : "The Boeing Company, Attention: Manager, Lightning / HIRF, Mail Code: MC 110-SC15, BLDG 80, 2201 Seal Beach Blvd., Seal Beach, CA USA 90740, USA".

3) By Fax: 206-655-4991.

NOTE: Data sent will help Boeing understand the reliability of the components and will be used to improve the maintenance program.

SUBTASK 05-55-26-840-003

(2) Do this task: Air Cycle Air Conditioning and Temperature Control System - Deactivation, TASK 21-51-00-800-801.

SUBTASK 05-55-26-010-015

(3) Open these access panels:

Number	Name/Location
192CL	ECS Access Door
192CR	ECS Access Door

G. Loop Resistance Test of Wire Bundle

SUBTASK 05-55-26-720-021

(1) Do the functional check of the wire bundle shielding.

NOTE: This step checks the wire bundle shielding for the scheduled maintenance check. This step also checks the wire bundle shielding after any repair is done with the wire bundle or connector.

(a) Do this task: Loop Resistance Measurement, TASK 05-56-03-200-801 or Loop Resistance and Joint Resistance Measurement, TASK 05-56-05-200-801 for each wire bundle listed in the Table 611.

NOTE: In the case of multiple wire bundles going to/from a connector, make sure that the coupler is only around the desired bundle. This may require removing (and replacing) wire ties to separate the bundles enough for coupler connection.

1) Record the measured value to the data sheet (Table 611).

Table 611/05-55-26-993-850 Wire Bundle Loop Resistance Values - Right Wing to Body Fairing (MRB 20-164-00)

Plane:					
Date:					
Technician:					
Bundle Number	**Connector Number**	**Measured Loop Resistance Value (mΩ)**	**Min/Max Value (mΩ)**	**Pass Fail**	**Retest Measured Value/ Comments**
W6504	D40846J		7/16		
W6502	D40846P		8/18		

2) Make sure that the measured value is within the MIN/MAX value range listed in the data sheet (Table 611).

3) If the measured value is not within the MIN/MAX value range, do the troubleshooting step below for the wire bundle shielding failure.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

4) This step is complete when all wire bundles listed in the Table 611 were tested and passed.

SUBTASK 05-55-26-810-013

(2) Do the troubleshooting step for the wire bundle shielding.

NOTE: Perform this step only if the measured value of the Functional Check of the wire bundle shielding is not within the MIN/MAX value range.

NOTE: Record all the measurement data to the data sheet. This should include both initial and final values. Also record the troubleshooting steps taken to the RETEST MEASURED VALUE/COMMENTS column.

(a) If the wire bundle shield resistance is less than the MIN value, do these steps:

1) Check the test setup.

a) Make sure that the couplers are only around the desired wire bundle and closed properly.

2) If the test setup is OK, check the LRT operation, do this task: LRT Lid Standard Measurement, TASK 05-56-02-200-801 or ExLRT Standard Measurement, TASK 05-56-02-200-802.

3) If no problem is found, check the entire length of the wire bundle.

a) Look for signs of chafing or damage to the wire bundle that can cause the shield to short to structure.

NOTE: An example might be an area where bundle insulation has degraded and a portion of the shield is exposed and making contact with structure at an intermediate point in the bundle length. Another might be some metallic object penetrating the insulation and making contact between the shield and structure.

b) If a problem is found, repair or replace in accordance with the SWPM 20.

4) If no defects are found with the wire bundle and the loop resistance value is still less than the MIN value, record this value and contact Boeing for further support.

(b) If the wire bundle shield loop resistance is greater than the MAX value, do this step:

1) Measure the joint resistance across the connector from the ground terminal to primary structure Joint Resistance Measurement, TASK 05-56-04-200-801 or Loop Resistance and Joint Resistance Measurement, TASK 05-56-05-200-801 for each wire bundle listed in the table below for applicable connectors.

a) If joint value measured is greater than maximum joint resistance value in data table listed in the Joint Resistance Measurement, TASK 05-56-04-200-801 or Loop Resistance and Joint Resistance Measurement, TASK 05-56-05-200-801, repair in accordance with the SWPM 20.

b) If joint value measured is not greater than maximum joint resistance value in data table, record this value and contact Boeing for further support.

(c) After the wire bundle or connector is repaired, do the Functional Check of the wire bundle shielding again on this wire bundle.

SUBTASK 05-55-26-800-007

(3) The connectors listed in Table 612 are used for the steps above.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Table 612/05-55-26-993-820 Right Wing to Body Fairing Connectors (MRB 20-164-00)

Wire Bundle	Connector	WDM	Mate With Equipment
W6504	D40846J	21–42–11, 21–51–21	D40846P
W6502	D40846P	21–42–11, 21–51–21	D40846J

H. Put the Airplane Back to Its Usual Condition

SUBTASK 05-55-26-410-012

(1) Close this access panel:

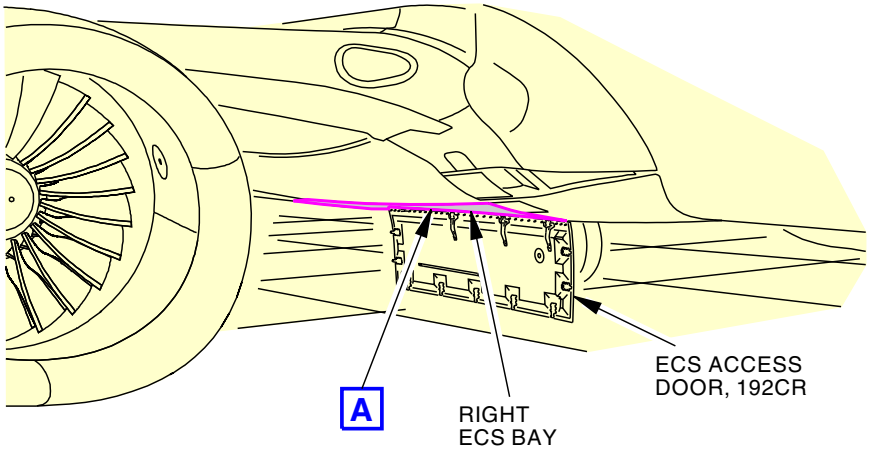
Number	Name/Location
192CR	ECS Access Door

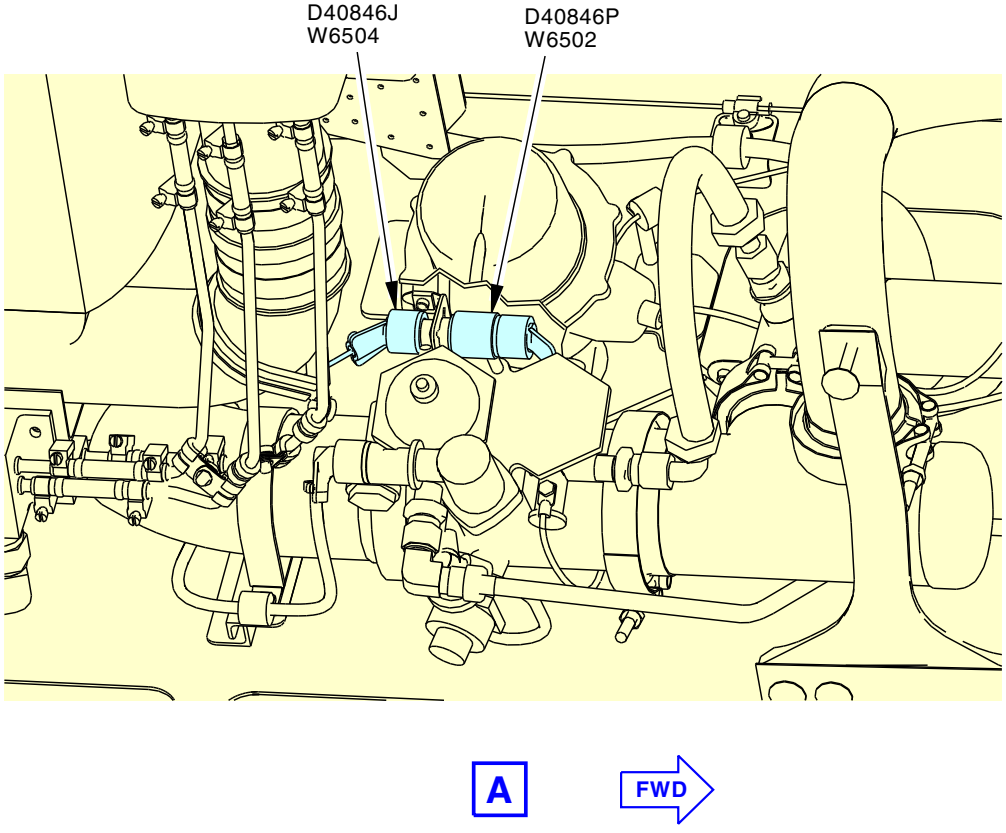
SUBTASK 05-55-26-840-004

(2) Do this task: Air Cycle Air Conditioning and Temperature Control System - Activation, TASK 21-51-00-800-802.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details





2546846 S0000605121_V2

Loop Resistance Test of Wire Bundle - Right Wing to Body Fairing (MRB 20-164-00) - Connector Location
Figure 606/05-55-26-990-831

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-55-26-280-810

8. Loop Resistance Test of Wire Bundle - Right Wing to Body Fairing (MRB 20-178-00)

(Figure 607)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) The loop resistance tester, SPL-1636 or the MK loop resistance tester, SPL-18565 is required for this task.

B. References

Reference	Title
05-56-02-200-801	LRT Lid Standard Measurement (P/B 201)
05-56-02-200-802	ExLRT Standard Measurement (P/B 201)
05-56-03-200-801	Loop Resistance Measurement (P/B 201)
05-56-04-200-801	Joint Resistance Measurement (P/B 201)
05-56-05-200-801	Loop Resistance and Joint Resistance Measurement (P/B 201)
21-51-00-800-801	Air Cycle Air Conditioning and Temperature Control System - Deactivation (P/B 201)
21-51-00-800-802	Air Cycle Air Conditioning and Temperature Control System - Activation (P/B 201)
SWPM 20	Standard Wiring Practices Manual

C. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-1636	Tester - Loop Resistance (LRT "-1" for checks up to & including 4 years ONLY, LRT "-2 & -3" applicable for all HIRF/FQIS check/inspection intervals) Part #: 906-10246-3 Supplier: 3X2T2 Opt Part #: 906-10246-1 Supplier: 3X2T2 Opt Part #: 906-10246-2 Supplier: 3X2T2
SPL-18565	Tester - Loop Resistance, MK Part #: XLR-9703-01 Supplier: KC432 Part #: XLR-9703-02 Supplier: KC432

D. Location Zones

Zone	Area
192	Lower Wing-To-Body Fairing - Under Wing Box

E. Access Panels

Number	Name/Location
192CR	ECS Access Door

F. Prepare for the Loop Resistance Test

SUBTASK 05-55-26-970-016

(1) Boeing requests that all data recorded while doing this procedure be submitted to The Boeing Company for engineering analysis.

(a) Send the data to one of the following addresses:

ECCN 9E991 BOEING PROPRIETARY - See title page for details

1) Electronically: MTCProgLHIRFTaskCardData@boeing.com

2) By Mail : "The Boeing Company, Attention: Manager, Lightning / HIRF, Mail Code: MC 110-SC15, BLDG 80, 2201 Seal Beach Blvd., Seal Beach, CA USA 90740, USA".

3) By Fax: 206-655-4991.

NOTE: Data sent will help Boeing understand the reliability of the components and will be used to improve the maintenance program.

SUBTASK 05-55-26-840-005

(2) Do this task: Air Cycle Air Conditioning and Temperature Control System - Deactivation, TASK 21-51-00-800-801.

SUBTASK 05-55-26-010-016

(3) Open this access panel:

Number	Name/Location
192CR	ECS Access Door

G. Loop Resistance Test of Wire Bundle

SUBTASK 05-55-26-720-022

(1) Do the functional check of the wire bundle shielding.

NOTE: This step checks the wire bundle shielding for the scheduled maintenance check. This step also checks the wire bundle shielding after any repair is done with the wire bundle or connector.

(a) Do this task: Loop Resistance Measurement, TASK 05-56-03-200-801 or Loop Resistance and Joint Resistance Measurement, TASK 05-56-05-200-801 for each wire bundle listed in the Table 613.

NOTE: In the case of multiple wire bundles going to/from a connector, make sure that the coupler is only around the desired bundle. This may require removing (and replacing) wire ties to separate the bundles enough for coupler connection.

1) Record the measured value to the data sheet (Table 613).

Table 613/05-55-26-993-851 Wire Bundle Loop Resistance Values - Right Wing to Body Fairing Connectors (MRB 20-178-00)

Plane:					
Data:					
Technician:					
Bundle Number	**Connector Number**	**Measured Loop Resistance Value (mΩ)**	**Min/Max Value (mΩ)**	**Pass Fail**	**Retest Measured Vale/ Comments**
W6502	D41600		3/8		

2) Make sure that the measured value is within the MIN/MAX value range listed in the data sheet (Table 613).

3) If the measured value is not within the MIN/MAX value range, do the troubleshooting step below for the wire bundle shielding failure.

4) This step is complete when all wire bundles listed in the Table 613 were tested and passed.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 05-55-26-810-014

(2) Do the troubleshooting step for the wire bundle shielding.

NOTE: Perform this step only if the measured value of the Functional Check of the wire bundle shielding is not within the MIN/MAX value range.

NOTE: Record all the measurement data to the data sheet. This should include both initial and final values. Also record the troubleshooting steps taken to the RETEST MEASURED VALUE/COMMENTS column.

(a) If the wire bundle shield resistance is less than the MIN value, do these steps:

1) Check the test setup.

a) Make sure that the couplers are only around the desired wire bundle and closed properly.

2) If the test setup is OK, check the LRT operation, do this task: LRT Lid Standard Measurement, TASK 05-56-02-200-801 or ExLRT Standard Measurement, TASK 05-56-02-200-802.

3) If no problem is found, check the entire length of the wire bundle.

a) Look for signs of chafing or damage to the wire bundle that can cause the shield to short to structure.

NOTE: An example might be an area where bundle insulation has degraded and a portion of the shield is exposed and making contact with structure at an intermediate point in the bundle length. Another might be some metallic object penetrating the insulation and making contact between the shield and structure.

b) If a problem is found, repair or replace in accordance with the SWPM 20.

4) If no defects are found with the wire bundle and the loop resistance value is still less than the MIN value, record this value and contact Boeing for further support.

(b) If the wire bundle shield loop resistance is greater than the MAX value, do this step:

1) Measure the joint resistance across the connector from the ground terminal to primary structure Joint Resistance Measurement, TASK 05-56-04-200-801 or Loop Resistance and Joint Resistance Measurement, TASK 05-56-05-200-801 for each wire bundle listed in the table below for applicable connectors.

a) If joint value measured is greater than maximum joint resistance value in data table listed in the Joint Resistance Measurement, TASK 05-56-04-200-801 or Loop Resistance and Joint Resistance Measurement, TASK 05-56-05-200-801, repair in accordance with the SWPM 20.

b) If joint value measured is not greater than maximum joint resistance value in data table, record this value and contact Boeing for further support.

(c) After the wire bundle or connector is repaired, do the Functional Check of the wire bundle shielding again on this wire bundle.

SUBTASK 05-55-26-800-008

(3) The connector listed in Table 614 is used for the steps above.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Table 614/05-55-26-993-821 Right Wing to Body Fairing Connectors (MRB 20-178-00)

Wire Bundle	Connector	WDM	Mate With Equipment
W6502	D41600	21–42–11, 21–51–21, 21–51–22, 21–61–15, 26–12–11, 33–33–11	DM0060

H. Put the Airplane Back to Its Usual Condition

SUBTASK 05-55-26-410-013

(1) Close this access panel:

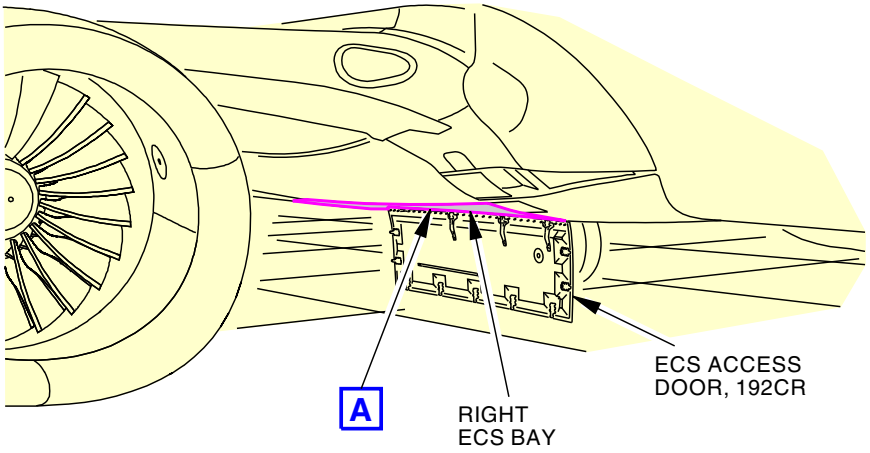
Number	Name/Location
192CR	ECS Access Door

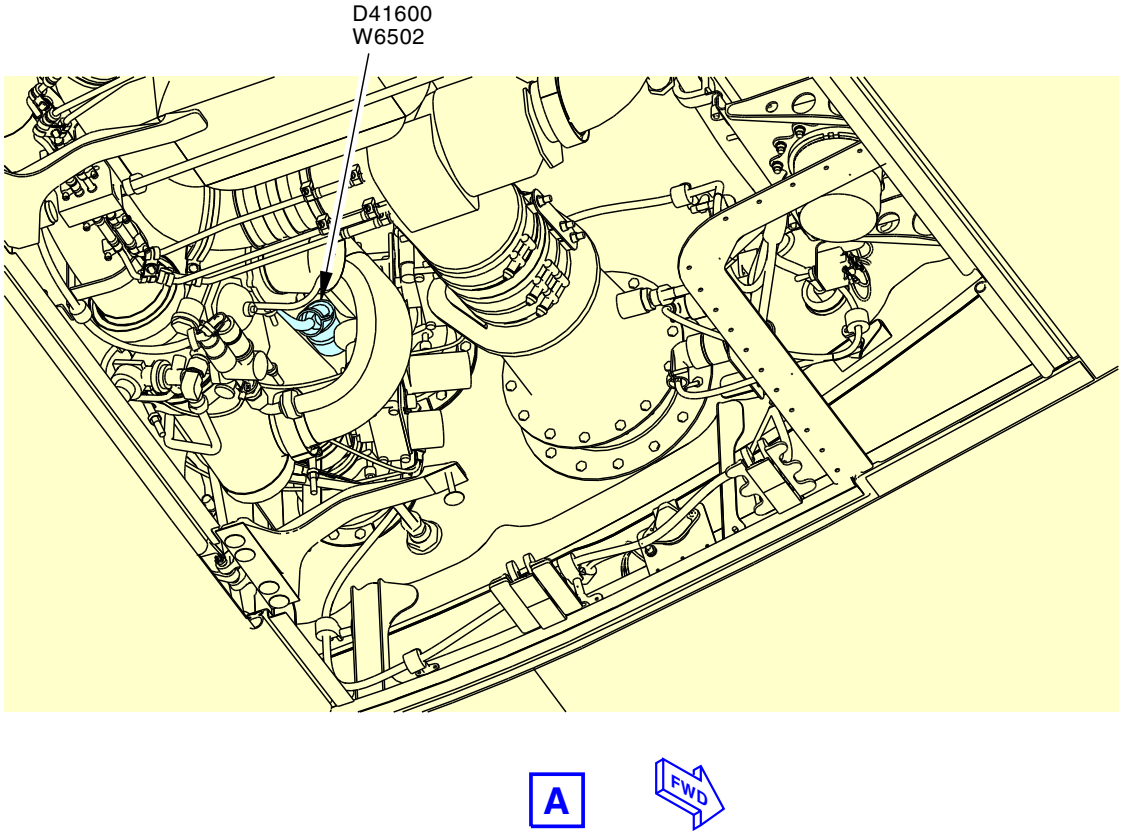
SUBTASK 05-55-26-840-006

(2) Do this task: Air Cycle Air Conditioning and Temperature Control System - Activation, TASK 21-51-00-800-802.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details





2546594 S0000605124_V1

Loop Resistance Test of Wire Bundle - Right Wing to Body Fairing (MRB 20-178-00) - Connector Location
Figure 607/05-55-26-990-833

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-55-26-280-811

9. Loop Resistance Test of Wire Bundle - Right Wing Trailing Edge (MRB 20-156-00)

(Figure 608)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) The loop resistance tester, SPL-1636 or the MK loop resistance tester, SPL-18565 is required for this task.

B. References

Reference	Title
05-56-02-200-801	LRT Lid Standard Measurement (P/B 201)
05-56-02-200-802	ExLRT Standard Measurement (P/B 201)
05-56-03-200-801	Loop Resistance Measurement (P/B 201)
05-56-04-200-801	Joint Resistance Measurement (P/B 201)
05-56-05-200-801	Loop Resistance and Joint Resistance Measurement (P/B 201)
27-51-00-040-801	Trailing Edge Flap System Deactivation (P/B 201)
27-51-00-440-801	Trailing Edge Flap System Reactivation (P/B 201)
SWPM 20	Standard Wiring Practices Manual

C. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-1636	Tester - Loop Resistance (LRT "-1" for checks up to & including 4 years ONLY, LRT "-2 & -3" applicable for all HIRF/FQIS check/inspection intervals) Part #: 906-10246-3 Supplier: 3X2T2 Opt Part #: 906-10246-1 Supplier: 3X2T2 Opt Part #: 906-10246-2 Supplier: 3X2T2
SPL-18565	Tester - Loop Resistance, MK Part #: XLR-9703-01 Supplier: KC432 Part #: XLR-9703-02 Supplier: KC432

D. Location Zones

Zone	Area
651	Right Wing - Rear Spar to Landing Gear Support Beam

E. Access Panels

Number	Name/Location
651GB	Lower inboard fixed trailing edge

F. Prepare for the Loop Resistance Test

SUBTASK 05-55-26-970-018

(1) Boeing requests that all data recorded while doing this procedure be submitted to The Boeing Company for engineering analysis.

(a) Send the data to one of the following addresses:

1) Electronically: MTCProgLHIRFTaskCardData@boeing.com

ECCN 9E991 BOEING PROPRIETARY - See title page for details

2) By Mail : "The Boeing Company, Attention: Manager, Lightning / HIRF, Mail Code: MC 110-SC15, BLDG 80, 2201 Seal Beach Blvd., Seal Beach, CA USA 90740, USA".

3) By Fax: 206-655-4991.

NOTE: Data sent will help Boeing understand the reliability of the components and will be used to improve the maintenance program.

SUBTASK 05-55-26-040-014

(2) Do this task: Trailing Edge Flap System Deactivation, TASK 27-51-00-040-801.

SUBTASK 05-55-26-010-017

(3) Open this access panel:

Number	Name/Location
651GB	Lower inboard fixed trailing edge

G. Loop Resistance Test of Wire Bundle

SUBTASK 05-55-26-720-023

(1) Do the functional check of the wire bundle shielding.

NOTE: This step checks the wire bundle shielding for the scheduled maintenance check. This step also checks the wire bundle shielding after any repair is done with the wire bundle or connector.

(a) Do this task: Loop Resistance Measurement, TASK 05-56-03-200-801 or Loop Resistance and Joint Resistance Measurement, TASK 05-56-05-200-801 for each wire bundle listed in the Table 615.

NOTE: In the case of multiple wire bundles going to/from a connector, make sure that the coupler is only around the desired bundle. This may require removing (and replacing) wire ties to separate the bundles enough for coupler connection.

1) Record the measured value to the data sheet (Table 615).

Table 615/05-55-26-993-852 Wire Bundle Loop Resistance Values - Right Wing Trailing Edge (MRB 20-156-00)

Plane:					
Date:					
Technician:					
Bundle Number	**Connector Number**	**Measured Loop Resistance Value (mΩ)**	**Min/Max Value (mΩ)**	**Pass Fail**	**Retest Measured Value/Comments**
W1034	D40034J		8/20		
W1032	D40034P		7/16		

2) Make sure that the measured value is within the MIN/MAX value range listed in the data sheet (Table 615).

3) If the measured value is not within the MIN/MAX value range, do the troubleshooting step below for the wire bundle shielding failure.

4) This step is complete when all wire bundles listed in the Table 615 were tested and passed.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 05-55-26-810-015

(2) Do the troubleshooting step for the wire bundle shielding.

NOTE: Perform this step only if the measured value of the Functional Check of the wire bundle shielding is not within the MIN/MAX value range.

NOTE: Record all the measurement data to the data sheet. This should include both initial and final values. Also record the troubleshooting steps taken to the RETEST MEASURED VALUE/COMMENTS column.

(a) If the wire bundle shield resistance is less than the MIN value, do these steps:

1) Check the test setup.

a) Make sure that the couplers are only around the desired wire bundle and closed properly.

2) If the test setup is OK, check the LRT operation, do this task: LRT Lid Standard Measurement, TASK 05-56-02-200-801 or ExLRT Standard Measurement, TASK 05-56-02-200-802.

3) If no problem is found, check the entire length of the wire bundle.

a) Look for signs of chafing or damage to the wire bundle that can cause the shield to short to structure.

NOTE: An example might be an area where bundle insulation has degraded and a portion of the shield is exposed and making contact with structure at an intermediate point in the bundle length. Another might be some metallic object penetrating the insulation and making contact between the shield and structure.

b) If a problem is found, repair or replace in accordance with the SWPM 20.

4) If no defects are found with the wire bundle and the loop resistance value is still less than the MIN value, record this value and contact Boeing for further support.

(b) If the wire bundle shield loop resistance is greater than the MAX value, do this step:

1) Measure the joint resistance across the connector from the ground terminal to primary structure Joint Resistance Measurement, TASK 05-56-04-200-801 or Loop Resistance and Joint Resistance Measurement, TASK 05-56-05-200-801 for each wire bundle listed in the table below for applicable connectors.

a) If joint value measured is greater than maximum joint resistance value in data table listed in the Joint Resistance Measurement, TASK 05-56-04-200-801 or Loop Resistance and Joint Resistance Measurement, TASK 05-56-05-200-801, repair in accordance with the SWPM 20.

b) If joint value measured is not greater than maximum joint resistance value in data table, record this value and contact Boeing for further support.

(c) After the wire bundle or connector is repaired, do the Functional Check of the wire bundle shielding again on this wire bundle.

SUBTASK 05-55-26-800-009

(3) The connectors listed in Table 616 are used for the steps above.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Table 616/05-55-26-993-822 Right Wing Trailing Edge Connectors (MRB 20-156-00)

Wire Bundle	Connector	WDM	Mate With Equipment
W1034	D40034J	22–11–11, 22–12–41, 27–18–11, 27–32–11, 27–52–11, 27–53–21, 28–21–11	AW0254R
W1032	D40034P	22–11–11, 22–12–41, 27–18–11, 27–32–11, 27–52–11, 27–53–21, 28–21–11	AW0254R

H. Put the Airplane Back to Its Usual Condition

SUBTASK 05-55-26-410-014

(1) Close this access panel:

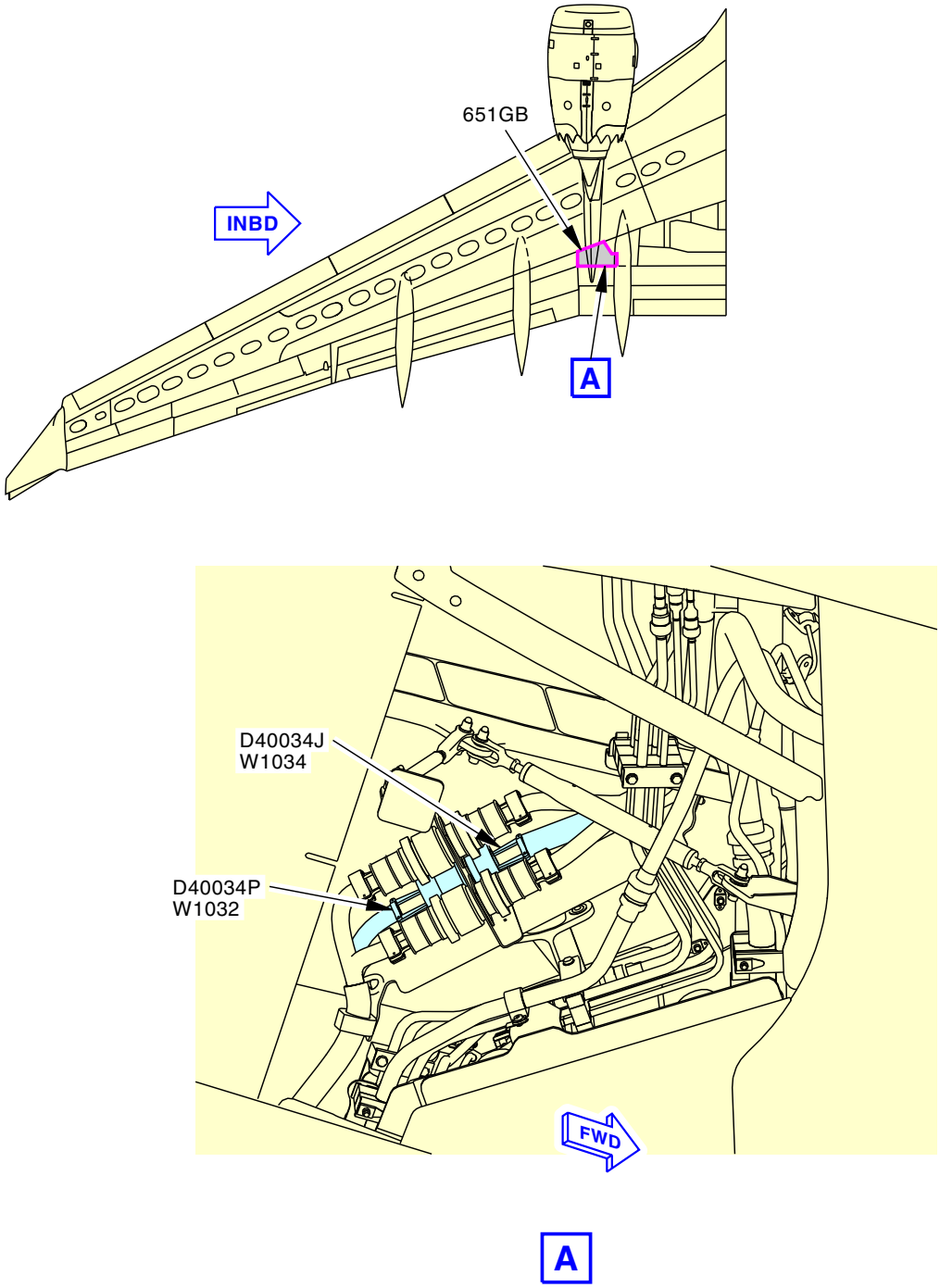
Number	Name/Location
651GB	Lower inboard fixed trailing edge

SUBTASK 05-55-26-440-015

(2) Do this task: Trailing Edge Flap System Reactivation, TASK 27-51-00-440-801.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



2546534 S0000605127_V2

Loop Resistance Test of Wire Bundle - Right Wing Trailing Edge (MRB 20-156-00) - Connector Location
Figure 608/05-55-26-990-835

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-55-26-280-812

10. Loop Resistance Test of Wire Bundle - Right Wing Trailing Edge (MRB 20-159-00)

(Figure 609)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) The loop resistance tester, SPL-1636 or the MK loop resistance tester, SPL-18565 is required for this task.

B. References

Reference	Title
05-56-02-200-801	LRT Lid Standard Measurement (P/B 201)
05-56-02-200-802	ExLRT Standard Measurement (P/B 201)
05-56-03-200-801	Loop Resistance Measurement (P/B 201)
05-56-04-200-801	Joint Resistance Measurement (P/B 201)
05-56-05-200-801	Loop Resistance and Joint Resistance Measurement (P/B 201)
27-51-00-040-801	Trailing Edge Flap System Deactivation (P/B 201)
27-51-00-440-801	Trailing Edge Flap System Reactivation (P/B 201)
SWPM 20	Standard Wiring Practices Manual

C. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-1636	Tester - Loop Resistance (LRT "-1" for checks up to & including 4 years ONLY, LRT "-2 & -3" applicable for all HIRF/FQIS check/inspection intervals) Part #: 906-10246-3 Supplier: 3X2T2 Opt Part #: 906-10246-1 Supplier: 3X2T2 Opt Part #: 906-10246-2 Supplier: 3X2T2
SPL-18565	Tester - Loop Resistance, MK Part #: XLR-9703-01 Supplier: KC432 Part #: XLR-9703-02 Supplier: KC432

D. Location Zones

Zone	Area
651	Right Wing - Rear Spar to Landing Gear Support Beam

E. Access Panels

Number	Name/Location
651BB	Lower Inboard Fixed Trailing Edge, Gear Adjustment Door

F. Prepare for the Loop Resistance Test

SUBTASK 05-55-26-970-020

(1) Boeing requests that all data recorded while doing this procedure be submitted to The Boeing Company for engineering analysis.

(a) Send the data to one of the following addresses:

1) Electronically: MTCProgLHIRFTaskCardData@boeing.com

ECCN 9E991 BOEING PROPRIETARY - See title page for details

2) By Mail : "The Boeing Company, Attention: Manager, Lightning / HIRF, Mail Code: MC 110-SC15, BLDG 80, 2201 Seal Beach Blvd., Seal Beach, CA USA 90740, USA".

3) By Fax: 206-655-4991.

NOTE: Data sent will help Boeing understand the reliability of the components and will be used to improve the maintenance program.

SUBTASK 05-55-26-040-015

(2) Do this task: Trailing Edge Flap System Deactivation, TASK 27-51-00-040-801.

SUBTASK 05-55-26-010-018

(3) Open this access panel:

Number	Name/Location
651BB	Lower Inboard Fixed Trailing Edge, Gear Adjustment Door

G. Loop Resistance Test of Wire Bundle

SUBTASK 05-55-26-720-024

(1) Do the functional check of the wire bundle shielding.

NOTE: This step checks the wire bundle shielding for the scheduled maintenance check. This step also checks the wire bundle shielding after any repair is done with the wire bundle or connector.

(a) Do this task: Loop Resistance Measurement, TASK 05-56-03-200-801 or Loop Resistance and Joint Resistance Measurement, TASK 05-56-05-200-801 for each wire bundle listed in the Table 617.

NOTE: In the case of multiple wire bundles going to/from a connector, make sure that the coupler is only around the desired bundle. This may require removing (and replacing) wire ties to separate the bundles enough for coupler connection.

1) Record the measured value to the data sheet (Table 617).

Table 617/05-55-26-993-853 Wire Bundle Loop Resistance Values - Right Wing Trailing Edge (MRB 20-159-00)

Plane:					
Data:					
Technician:					
Bundle Number	**Connector Number**	**Measured Loop Resistance Value (mΩ)**	**Min/Max Value (mΩ)**	**Pass Fail**	**Retest Measured Value/Comments**
W1134	GD04426		30/70		

2) Make sure that the measured value is within the MIN/MAX value range listed in the data sheet (Table 617).

3) If the measured value is not within the MIN/MAX value range, do the troubleshooting step below for the wire bundle shielding failure.

4) This step is complete when all wire bundles listed in the Table 617 were tested and passed.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 05-55-26-720-011

(2) Do the troubleshooting step for the wire bundle shielding.

NOTE: Perform this step only if the measured value of the Functional Check of the wire bundle shielding is not within the MIN/MAX value range.

NOTE: Record all the measurement data to the data sheet. This should include both initial and final values. Also record the troubleshooting steps taken to the RETEST MEASURED VALUE/COMMENTS column.

(a) If the wire bundle shield resistance is less than the MIN value, do these steps:

1) Check the test setup.

a) Make sure that the couplers are only around the desired wire bundle and closed properly.

2) If the test setup is OK, check the LRT operation, do this task: LRT Lid Standard Measurement, TASK 05-56-02-200-801 or ExLRT Standard Measurement, TASK 05-56-02-200-802.

3) If no problem is found, check the entire length of the wire bundle.

a) Look for signs of chafing or damage to the wire bundle that can cause the shield to short to structure.

NOTE: An example might be an area where bundle insulation has degraded and a portion of the shield is exposed and making contact with structure at an intermediate point in the bundle length. Another might be some metallic object penetrating the insulation and making contact between the shield and structure.

b) If a problem is found, repair or replace in accordance with the SWPM 20.

4) If no defects are found with the wire bundle and the loop resistance value is still less than the MIN value, record this value and contact Boeing for further support.

(b) If the wire bundle shield loop resistance is greater than the MAX value, do this step:

1) Measure the joint resistance across the connector from the ground terminal to primary structure Joint Resistance Measurement, TASK 05-56-04-200-801 or Loop Resistance and Joint Resistance Measurement, TASK 05-56-05-200-801 for each wire bundle listed in the table below for applicable connectors.

a) If joint value measured is greater than maximum joint resistance value in data table listed in the Joint Resistance Measurement, TASK 05-56-04-200-801 or Loop Resistance and Joint Resistance Measurement, TASK 05-56-05-200-801, repair in accordance with the SWPM 20.

b) If joint value measured is not greater than maximum joint resistance value in data table, record this value and contact Boeing for further support.

(c) After the wire bundle or connector is repaired, do the Functional Check of the wire bundle shielding again on this wire bundle.

SUBTASK 05-55-26-800-010

(3) The connector listed in Table 618 is used for the steps above.

Table 618/05-55-26-993-823 Right Wing Trailing Edge Connectors (MRB 20-159-00)

Wire Bundle	Connector	WDM	Mate With Equipment
W1134	GD04426	28–23–11	M03048

ECCN 9E991 BOEING PROPRIETARY - See title page for details

H. Put the Airplane Back to Its Usual Condition

SUBTASK 05-55-26-410-015

(1) Close this access panel:

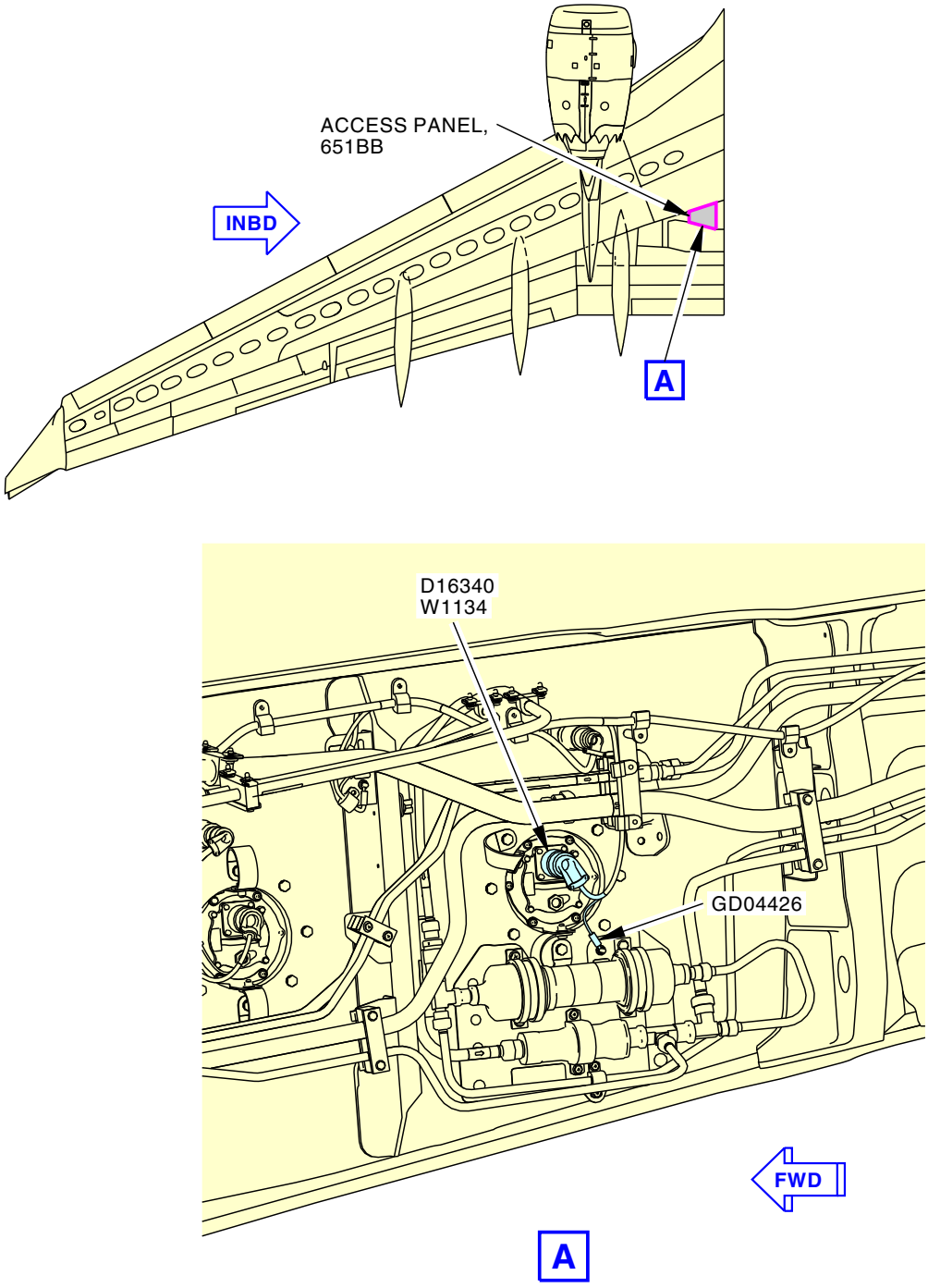
Number	Name/Location
651BB	Lower Inboard Fixed Trailing Edge, Gear Adjustment Door

SUBTASK 05-55-26-440-016

(2) Do this task: Trailing Edge Flap System Reactivation, TASK 27-51-00-440-801.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



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Loop Resistance Test of Wire Bundle - Right Wing Trailing Edge (MRB 20-159-00) - Connector Location
Figure 609/05-55-26-990-837

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-55-26-280-813

11. Loop Resistance Test of Wire Bundle - Right Wing Leading Edge (MRB 20-154-00)

(Figure 610)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) The loop resistance tester, SPL-1636 or the MK loop resistance tester, SPL-18565 is required for this task.

B. References

Reference	Title
05-56-02-200-801	LRT Lid Standard Measurement (P/B 201)
05-56-02-200-802	ExLRT Standard Measurement (P/B 201)
05-56-03-200-801	Loop Resistance Measurement (P/B 201)
05-56-04-200-801	Joint Resistance Measurement (P/B 201)
05-56-05-200-801	Loop Resistance and Joint Resistance Measurement (P/B 201)
27-81-00-040-801	Leading Edge Flaps and Slats - Deactivation (P/B 201)
27-81-00-440-801	Leading Edge Flaps and Slats - Activation (P/B 201)
SWPM 20	Standard Wiring Practices Manual

C. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-1636	Tester - Loop Resistance (LRT "-1" for checks up to & including 4 years ONLY, LRT "-2 & -3" applicable for all HIRF/FQIS check/inspection intervals) Part #: 906-10246-3 Supplier: 3X2T2 Opt Part #: 906-10246-1 Supplier: 3X2T2 Opt Part #: 906-10246-2 Supplier: 3X2T2
SPL-18565	Tester - Loop Resistance, MK Part #: XLR-9703-01 Supplier: KC432 Part #: XLR-9703-02 Supplier: KC432

D. Location Zones

Zone	Area
621	Right Wing - Leading Edge to Front Spar

E. Access Panels

Number	Name/Location
621BB	Engine Fuel Valve Shutoff Access Panel - Slat Station 27

F. Prepare for the Loop Resistance Test

SUBTASK 05-55-26-970-022

(1) Boeing requests that all data recorded while doing this procedure be submitted to The Boeing Company for engineering analysis.

(a) Send the data to one of the following addresses:

1) Electronically: MTCProgLHIRFTaskCardData@boeing.com

ECCN 9E991 BOEING PROPRIETARY - See title page for details

2) By Mail : "The Boeing Company, Attention: Manager, Lightning / HIRF, Mail Code: MC 110-SC15, BLDG 80, 2201 Seal Beach Blvd., Seal Beach, CA USA 90740, USA".

3) By Fax: 206-655-4991.

NOTE: Data sent will help Boeing understand the reliability of the components and will be used to improve the maintenance program.

SUBTASK 05-55-26-040-016

(2) Do this task: Leading Edge Flaps and Slats - Deactivation, TASK 27-81-00-040-801.

SUBTASK 05-55-26-010-019

(3) Open this access panel:

Number	Name/Location
621BB	Engine Fuel Valve Shutoff Access Panel - Slat Station 27

G. Loop Resistance Test of Wire Bundle

SUBTASK 05-55-26-720-025

(1) Do the functional check of the wire bundle shielding.

NOTE: This step checks the wire bundle shielding for the scheduled maintenance check. This step also checks the wire bundle shielding after any repair is done with the wire bundle or connector.

(a) Do this task: Loop Resistance Measurement, TASK 05-56-03-200-801 or Loop Resistance and Joint Resistance Measurement, TASK 05-56-05-200-801 for each wire bundle listed in the Table 619.

NOTE: In the case of multiple wire bundles going to/from a connector, make sure that the coupler is only around the desired bundle. This may require removing (and replacing) wire ties to separate the bundles enough for coupler connection.

1) Record the measured value to the data sheet (Table 619).

Table 619/05-55-26-993-854 Wire Bundle Loop Resistance Values - Right Wing Leading Edge (MRB 20-154-00)

Plane:					
Date:					
Technician:					
Bundle Number	**Connector Number**	**Measured Loop Resistance Value (mΩ)**	**Min/Max Value (mΩ)**	**Pass Fail**	**Retest Measured Value/Comments**
W1288	D00736		77/182		

2) Make sure that the measured value is within the MIN/MAX value range listed in the data sheet (Table 619).

3) If the measured value is not within the MIN/MAX value range, do the troubleshooting step below for the wire bundle shielding failure.

4) This step is complete when all wire bundles listed in the Table 619 were tested and passed.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 05-55-26-810-016

(2) Do the troubleshooting step for the wire bundle shielding.

NOTE: Perform this step only if the measured value of the Functional Check of the wire bundle shielding is not within the MIN/MAX value range.

NOTE: Record all the measurement data to the data sheet. This should include both initial and final values. Also record the troubleshooting steps taken to the RETEST MEASURED VALUE/COMMENTS column.

(a) If the wire bundle shield resistance is less than the MIN value, do these steps:

1) Check the test setup.

a) Make sure that the couplers are only around the desired wire bundle and closed properly.

2) If the test setup is OK, check the LRT operation, do this task: LRT Lid Standard Measurement, TASK 05-56-02-200-801 or ExLRT Standard Measurement, TASK 05-56-02-200-802.

3) If no problem is found, check the entire length of the wire bundle.

a) Look for signs of chafing or damage to the wire bundle that can cause the shield to short to structure.

NOTE: An example might be an area where bundle insulation has degraded and a portion of the shield is exposed and making contact with structure at an intermediate point in the bundle length. Another might be some metallic object penetrating the insulation and making contact between the shield and structure.

b) If a problem is found, repair or replace in accordance with the SWPM 20.

4) If no defects are found with the wire bundle and the loop resistance value is still less than the MIN value, record this value and contact Boeing for further support.

(b) If the wire bundle shield loop resistance is greater than the MAX value, do this step:

1) Measure the joint resistance across the connector from the ground terminal to primary structure Joint Resistance Measurement, TASK 05-56-04-200-801 or Loop Resistance and Joint Resistance Measurement, TASK 05-56-05-200-801 for each wire bundle listed in the table below for applicable connectors.

a) If joint value measured is greater than maximum joint resistance value in data table listed in the Joint Resistance Measurement, TASK 05-56-04-200-801 or Loop Resistance and Joint Resistance Measurement, TASK 05-56-05-200-801, repair in accordance with the SWPM 20.

b) If joint value measured is not greater than maximum joint resistance value in data table, record this value and contact Boeing for further support.

(c) After the wire bundle or connector is repaired, do the Functional Check of the wire bundle shielding again on this wire bundle.

SUBTASK 05-55-26-800-011

(3) The connector listed in Table 620 is used for the steps above.

Table 620/05-55-26-993-824 Right Wing Leading Edge Connectors (MRB 20-154-00)

Wire Bundle	Connector	WDM	Mate With Equipment
W1288	D00736	30–11–11	S00117

ECCN 9E991 BOEING PROPRIETARY - See title page for details

H. Put the Airplane Back to Its Usual Condition

SUBTASK 05-55-26-410-016

(1) Close this access panel:

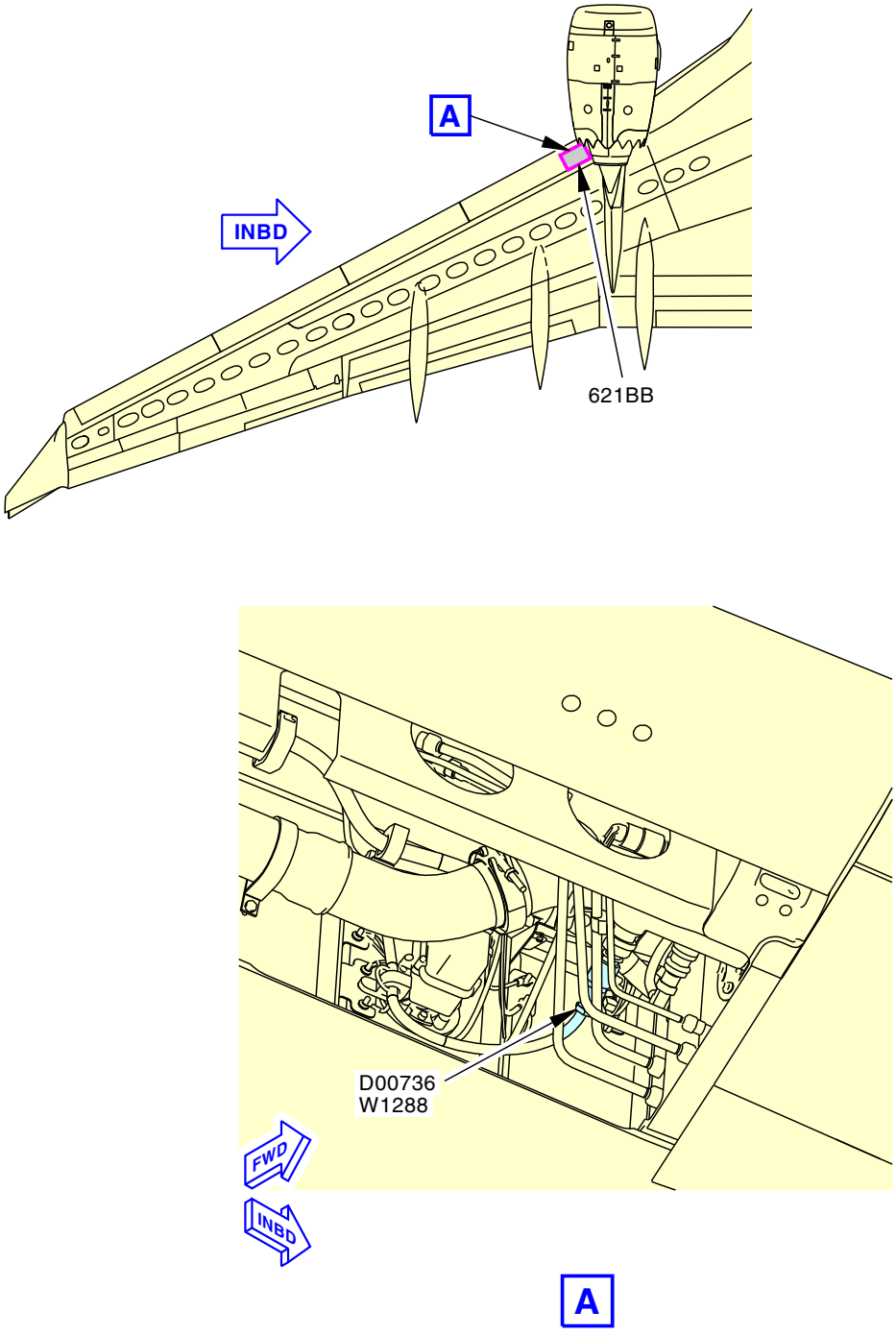
Number	Name/Location
621BB	Engine Fuel Valve Shutoff Access Panel - Slat Station 27

SUBTASK 05-55-26-440-017

(2) Do this task: Leading Edge Flaps and Slats - Activation, TASK 27-81-00-440-801.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



2546557 S0000605133_V2

Loop Resistance Test of Wire Bundle - Right Wing Leading Edge (MRB 20-154-00) - Connector Location
Figure 610/05-55-26-990-839

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-55-26-280-814

12. Loop Resistance Test of Wire Bundle - Right Wing Leading Edge (MRB 20-157-00)

(Figure 611)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) The loop resistance tester, SPL-1636 or the MK loop resistance tester, SPL-18565 is required for this task.

B. References

Reference	Title
05-56-02-200-801	LRT Lid Standard Measurement (P/B 201)
05-56-02-200-802	ExLRT Standard Measurement (P/B 201)
05-56-03-200-801	Loop Resistance Measurement (P/B 201)
05-56-04-200-801	Joint Resistance Measurement (P/B 201)
05-56-05-200-801	Loop Resistance and Joint Resistance Measurement (P/B 201)
27-81-00-040-801	Leading Edge Flaps and Slats - Deactivation (P/B 201)
27-81-00-440-801	Leading Edge Flaps and Slats - Activation (P/B 201)
SWPM 20	Standard Wiring Practices Manual

C. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-1636	Tester - Loop Resistance (LRT "-1" for checks up to & including 4 years ONLY, LRT "-2 & -3" applicable for all HIRF/FQIS check/inspection intervals) Part #: 906-10246-3 Supplier: 3X2T2 Opt Part #: 906-10246-1 Supplier: 3X2T2 Opt Part #: 906-10246-2 Supplier: 3X2T2
SPL-18565	Tester - Loop Resistance, MK Part #: XLR-9703-01 Supplier: KC432 Part #: XLR-9703-02 Supplier: KC432

D. Location Zones

Zone	Area
441	Engine 2 - Forward Strut Fairing

E. Access Panels

Number	Name/Location
441CL	Forward Strut Fairing, Left Overwing Fairing, Strut 2

F. Prepare for the Loop Resistance Test

SUBTASK 05-55-26-970-024

(1) Boeing requests that all data recorded while doing this procedure be submitted to The Boeing Company for engineering analysis.

(a) Send the data to one of the following addresses:

1) Electronically: MTCProgLHIRFTaskCardData@boeing.com

ECCN 9E991 BOEING PROPRIETARY - See title page for details

2) By Mail : "The Boeing Company, Attention: Manager, Lightning / HIRF, Mail Code: MC 110-SC15, BLDG 80, 2201 Seal Beach Blvd., Seal Beach, CA USA 90740, USA".

3) By Fax: 206-655-4991.

NOTE: Data sent will help Boeing understand the reliability of the components and will be used to improve the maintenance program.

SUBTASK 05-55-26-040-017

(2) Do this task: Leading Edge Flaps and Slats - Deactivation, TASK 27-81-00-040-801.

SUBTASK 05-55-26-010-020

(3) Open this access panel:

Number	Name/Location
441CL	Forward Strut Fairing, Left Overwing Fairing, Strut 2

G. Loop Resistance Test of Wire Bundle

SUBTASK 05-55-26-720-026

(1) Do the functional check of the wire bundle shielding.

NOTE: This step checks the wire bundle shielding for the scheduled maintenance check. This step also checks the wire bundle shielding after any repair is done with the wire bundle or connector.

(a) Do this task: Loop Resistance Measurement, TASK 05-56-03-200-801 or Loop Resistance and Joint Resistance Measurement, TASK 05-56-05-200-801 for each wire bundle listed in the Table 621.

NOTE: In the case of multiple wire bundles going to/from a connector, make sure that the coupler is only around the desired bundle. This may require removing (and replacing) wire ties to separate the bundles enough for coupler connection.

1) Record the measured value to the data sheet (Table 621).

Table 621/05-55-26-993-855 Wire Bundle Loop Resistance Values - Right Wing Leading Edge (MRB 20-157-00)

Plane:					
Date:					
Technician:					
Bundle Number	**Connector Number**	**Measured Loop Resistance Value (mΩ)**	**Min/Max Value (mΩ)**	**Pass Fail**	**Retest Measured Value/Comments**
W1266	D30164		9/22		
W1268	D30184		9/22		

2) Make sure that the measured value is within the MIN/MAX value range listed in the data sheet (Table 621).

3) If the measured value is not within the MIN/MAX value range, do the troubleshooting step below for the wire bundle shielding failure.

4) This step is complete when all wire bundles listed in the Table 621 were tested and passed.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 05-55-26-810-017

(2) Do the troubleshooting step for the wire bundle shielding.

NOTE: Perform this step only if the measured value of the Functional Check of the wire bundle shielding is not within the MIN/MAX value range.

NOTE: Record all the measurement data to the data sheet. This should include both initial and final values. Also record the troubleshooting steps taken to the RETEST MEASURED VALUE/COMMENTS column.

(a) If the wire bundle shield resistance is less than the MIN value, do these steps:

1) Check the test setup.

a) Make sure that the couplers are only around the desired wire bundle and closed properly.

2) If the test setup is OK, check the LRT operation, do this task: LRT Lid Standard Measurement, TASK 05-56-02-200-801 or ExLRT Standard Measurement, TASK 05-56-02-200-802.

3) If no problem is found, check the entire length of the wire bundle.

a) Look for signs of chafing or damage to the wire bundle that can cause the shield to short to structure.

NOTE: An example might be an area where bundle insulation has degraded and a portion of the shield is exposed and making contact with structure at an intermediate point in the bundle length. Another might be some metallic object penetrating the insulation and making contact between the shield and structure.

b) If a problem is found, repair or replace in accordance with the SWPM 20.

4) If no defects are found with the wire bundle and the loop resistance value is still less than the MIN value, record this value and contact Boeing for further support.

(b) If the wire bundle shield loop resistance is greater than the MAX value, do this step:

1) Measure the joint resistance across the connector from the ground terminal to primary structure Joint Resistance Measurement, TASK 05-56-04-200-801 or Loop Resistance and Joint Resistance Measurement, TASK 05-56-05-200-801 for each wire bundle listed in the table below for applicable connectors.

a) If joint value measured is greater than maximum joint resistance value in data table listed in the Joint Resistance Measurement, TASK 05-56-04-200-801 or Loop Resistance and Joint Resistance Measurement, TASK 05-56-05-200-801, repair in accordance with the SWPM 20.

b) If joint value measured is not greater than maximum joint resistance value in data table, record this value and contact Boeing for further support.

(c) After the wire bundle or connector is repaired, do the Functional Check of the wire bundle shielding again on this wire bundle.

SUBTASK 05-55-26-800-012

(3) The connectors listed in Table 622 are used for the steps above.

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Table 622/05-55-26-993-825 Right Wing Leading Edge Connectors (MRB 20-157-00)

Wire Bundle	Connector	WDM	Mate With Equipment
W1266	D30164	26–11–21, 26-12-11, 30-21-32, 36-11-23, 73-21-12, 73-22-11, 73-22-41, 74-11-11, 76-21-21, 77-12-21	DM0020
W1268	D30184	46-13-11, 73-21-11, 73-21-21, 73-24-12, 73-21-21, 78-32-61	DM0028

H. Put the Airplane Back to Its Usual Condition

SUBTASK 05-55-26-410-017

(1) Close this access panel:

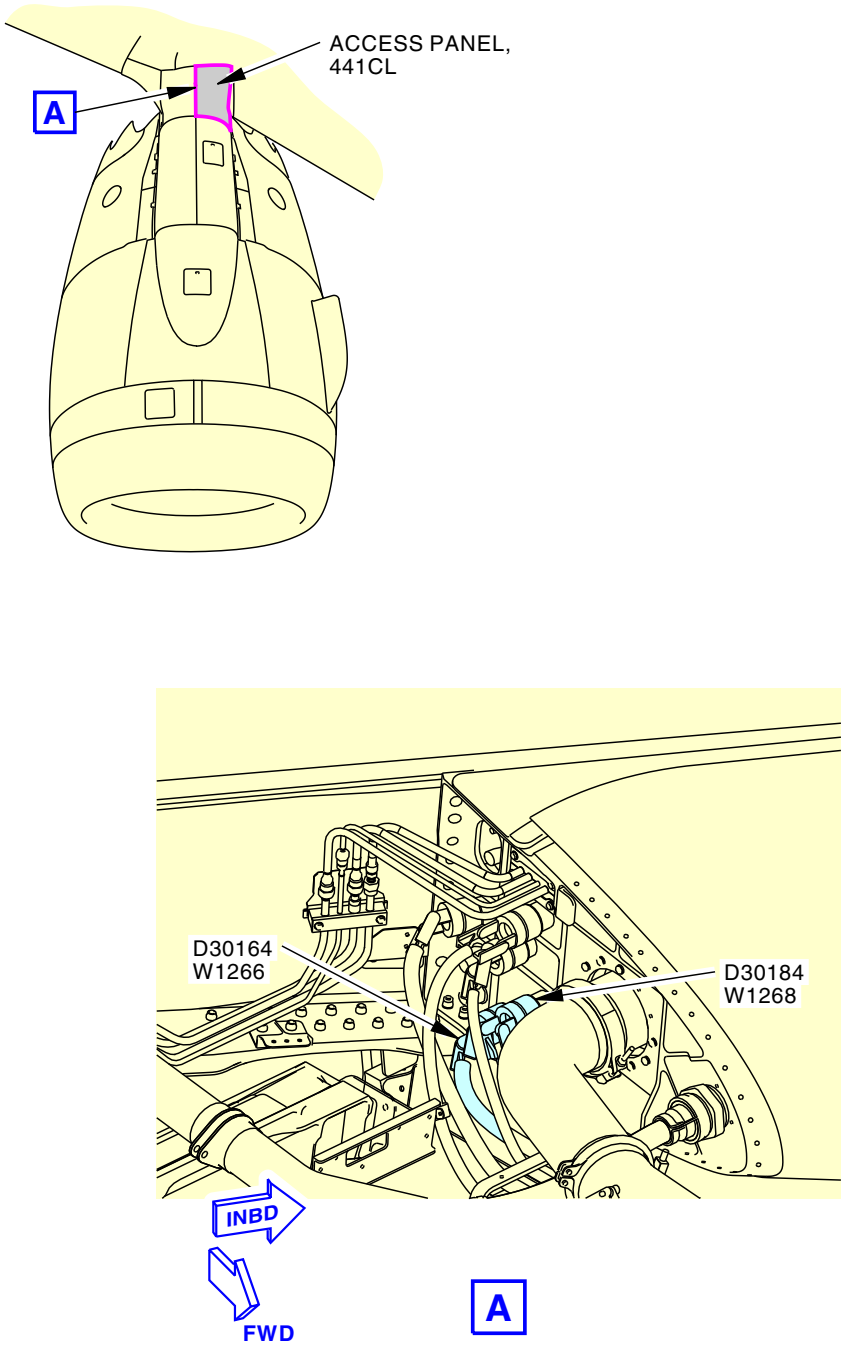
Number	Name/Location
441CL	Forward Strut Fairing, Left Overwing Fairing, Strut 2

SUBTASK 05-55-26-440-018

(2) Do this task: Leading Edge Flaps and Slats - Activation, TASK 27-81-00-440-801.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



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Loop Resistance Test of Wire Bundle - Right Wing Leading Edge (MRB 20-157-00) - Connector Location
Figure 611/05-55-26-990-841

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-55-26-280-815

13. Loop Resistance Test of Wire Bundle - Right Wing Leading Edge (MRB 20-158-00)

(Figure 612)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) The loop resistance tester, SPL-1636 or the MK loop resistance tester, SPL-18565 is required for this task.

B. References

Reference	Title
05-56-02-200-801	LRT Lid Standard Measurement (P/B 201)
05-56-02-200-802	ExLRT Standard Measurement (P/B 201)
05-56-03-200-801	Loop Resistance Measurement (P/B 201)
05-56-04-200-801	Joint Resistance Measurement (P/B 201)
05-56-05-200-801	Loop Resistance and Joint Resistance Measurement (P/B 201)
27-81-00-040-801	Leading Edge Flaps and Slats - Deactivation (P/B 201)
27-81-00-440-801	Leading Edge Flaps and Slats - Activation (P/B 201)
SWPM 20	Standard Wiring Practices Manual

C. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-1636	Tester - Loop Resistance (LRT "-1" for checks up to & including 4 years ONLY, LRT "-2 & -3" applicable for all HIRF/FQIS check/inspection intervals) Part #: 906-10246-3 Supplier: 3X2T2 Opt Part #: 906-10246-1 Supplier: 3X2T2 Opt Part #: 906-10246-2 Supplier: 3X2T2
SPL-18565	Tester - Loop Resistance, MK Part #: XLR-9703-01 Supplier: KC432 Part #: XLR-9703-02 Supplier: KC432

D. Location Zones

Zone	Area
441	Engine 2 - Forward Strut Fairing
611	Right Wing - Leading Edge to Front Spar

E. Access Panels

Number	Name/Location
441CL	Forward Strut Fairing, Left Overwing Fairing, Strut 2
611AB	Inboard Leading Edge, Lower Removable Access Panel

F. Prepare for the Loop Resistance Test

SUBTASK 05-55-26-970-026

(1) Boeing requests that all data recorded while doing this procedure be submitted to The Boeing Company for engineering analysis.

(a) Send the data to one of the following addresses:

ECCN 9E991 BOEING PROPRIETARY - See title page for details

1) Electronically: MTCProgLHIRFTaskCardData@boeing.com

2) By Mail : "The Boeing Company, Attention: Manager, Lightning / HIRF, Mail Code: MC 110-SC15, BLDG 80, 2201 Seal Beach Blvd., Seal Beach, CA USA 90740, USA".

3) By Fax: 206-655-4991.

NOTE: Data sent will help Boeing understand the reliability of the components and will be used to improve the maintenance program.

SUBTASK 05-55-26-040-018

(2) Do this task: Leading Edge Flaps and Slats - Deactivation, TASK 27-81-00-040-801.

SUBTASK 05-55-26-010-021

(3) Open these access panels:

Number	Name/Location
441CL	Forward Strut Fairing, Left Overwing Fairing, Strut 2
611AB	Inboard Leading Edge, Lower Removable Access Panel

G. Loop Resistance Test of Wire Bundle

SUBTASK 05-55-26-720-027

(1) Do the functional check of the wire bundle shielding:

NOTE: This step checks the wire bundle shielding for the scheduled maintenance check. This step also checks the wire bundle shielding after any repair is done with the wire bundle or connector.

(a) Do this task: Loop Resistance Measurement, TASK 05-56-03-200-801 or Loop Resistance and Joint Resistance Measurement, TASK 05-56-05-200-801 for each wire bundle listed in the Table 623:

NOTE: In the case of multiple wire bundles going to/from a connector, make sure that the coupler is only around the desired bundle. This may require removing (and replacing) wire ties to separate the bundles enough for coupler connection.

1) Record the measured value to the data sheet (Table 623).

Table 623/05-55-26-993-856 Wire Bundle Loop Resistance Values - Right Wing Leading Edge (MRB 20-158-00)

Plane:					
Date:					
Technician:					
Bundle Number	**Connector Number**	**Measured Loop Resistance Value (mΩ)**	**Min/Max Value (mΩ)**	**Pass Fail**	**Retest Measured Value/Comments**
W1284	D30114		10/23		
W1264	D30116		10/24		
W1272	D30142		8/19		
W1278	D30148		6/13		
W1270	D30152		5/12		
W1282	D30162		6/15		

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Table 623/05-55-26-993-856 Wire Bundle Loop Resistance Values - Right Wing Leading Edge (MRB 20-158-00) (Continued)

Plane:					
Date:					
Technician:					
Bundle Number	**Connector Number**	**Measured Loop Resistance Value (mΩ)**	**Min/Max Value (mΩ)**	**Pass Fail**	**Retest Measured Value/Comments**
W1292	D30168		7/15		
W1290	D30192		7/17		

2) Make sure that the measured value is within the MIN/MAX value range listed in the data sheet (Table 623).

3) If the measured value is not within the MIN/MAX value range, do the troubleshooting step below for the wire bundle shielding failure.

4) This step is complete when all wire bundles listed in the Table 623 were tested and passed.

SUBTASK 05-55-26-810-018

(2) Do the troubleshooting step for the wire bundle shielding.

NOTE: Perform this step only if the measured value of the Functional Check of the wire bundle shielding is not within the MIN/MAX value range.

NOTE: Record all the measurement data to the data sheet. This should include both initial and final values. Also record the troubleshooting steps taken to the RETEST MEASURED VALUE/COMMENTS column.

(a) If the wire bundle shield resistance is less than the MIN value, do these steps:

1) Check the test setup.

a) Make sure that the couplers are only around the desired wire bundle and closed properly.

2) If the test setup is OK, check the LRT operation, do this task: LRT Lid Standard Measurement, TASK 05-56-02-200-801 or ExLRT Standard Measurement, TASK 05-56-02-200-802.

3) If no problem is found, check the entire length of the wire bundle.

a) Look for signs of chafing or damage to the wire bundle that can cause the shield to short to structure.

NOTE: An example might be an area where bundle insulation has degraded and a portion of the shield is exposed and making contact with structure at an intermediate point in the bundle length. Another might be some metallic object penetrating the insulation and making contact between the shield and structure.

b) If a problem is found, repair or replace in accordance with the SWPM 20.

4) If no defects are found with the wire bundle and the loop resistance value is still less than the MIN value, record this value and contact Boeing for further support.

(b) If the wire bundle shield loop resistance is greater than the MAX value, do this step:

ECCN 9E991 BOEING PROPRIETARY - See title page for details

1) Measure the joint resistance across the connector from the ground terminal to primary structure Joint Resistance Measurement, TASK 05-56-04-200-801 or Loop Resistance and Joint Resistance Measurement, TASK 05-56-05-200-801 for each wire bundle listed in the table below for applicable connectors.
   a) If joint value measured is greater than maximum joint resistance value in data table listed in the Joint Resistance Measurement, TASK 05-56-04-200-801 or Loop Resistance and Joint Resistance Measurement, TASK 05-56-05-200-801, repair in accordance with the SWPM 20.
   b) If joint value measured is not greater than maximum joint resistance value in data table, record this value and contact Boeing for further support.

(c) After the wire bundle or connector is repaired, do the Functional Check of the wire bundle shielding again on this wire bundle.

SUBTASK 05-55-26-800-013

(3) The connectors listed in Table 624 are used for the steps above.

Table 624/05-55-26-993-826 Right Wing Leading Edge Connectors (MRB 20-158-00)

Wire Bundle	Connector	WDM	Mate With Equipment
W1284	D30114	24–11–21, 24–21–21, 24–24–21, 29–11–11	DM0024
W1264	D30116	24–11–21, 24–21–21, 24–24–21, 29–11–11	DM0024
W1272	D30142	46–13–11, 73–21–11, 73–21–12, 73–21–21, 73–24–12, 73–24–21, 78–32–61	DM0026
W1278	D30148	26–11–21, 36–11–22, 36–11–23, 73–21–12, 73–22–11, 74–11–11, 77–12–11, 78–34–21, 78–35–21, 79–31–11	DM0038
W1270	D30152	26–11–21, 36–11–22, 36–11–23, 73–21–12, 73–22–11, 74–11–11, 77–12–11, 78–34–21, 78–35–21, 79–31–11	DM0038
W1282	D30162	26–11–21, 26–12–11, 30–21–32, 36–11–23, 73–21–12, 73–22–11, 73–22–41, 74–11–11, 76–21–21, 77–12–21	DM0020
W1292	D30168	46–13–11, 73–21–11, 73–21–12, 73–21–21, 73–24–12, 73–24–21, 78–32–61	DM0026
W1290	D30192	46–13–11, 73–21–11, 73–21–21, 73–24–12, 73–24–21, 78–32–61	DM0028

ECCN 9E991 BOEING PROPRIETARY - See title page for details

H. Put the Airplane Back to Its Usual Condition

SUBTASK 05-55-26-410-018

(1) Close these access panels:

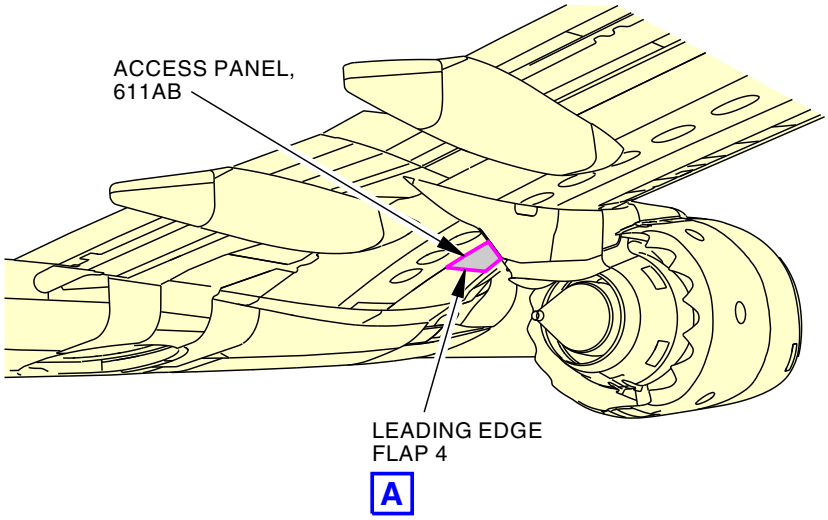
Number	Name/Location
441CL	Forward Strut Fairing, Left Overwing Fairing, Strut 2
611AB	Inboard Leading Edge, Lower Removable Access Panel

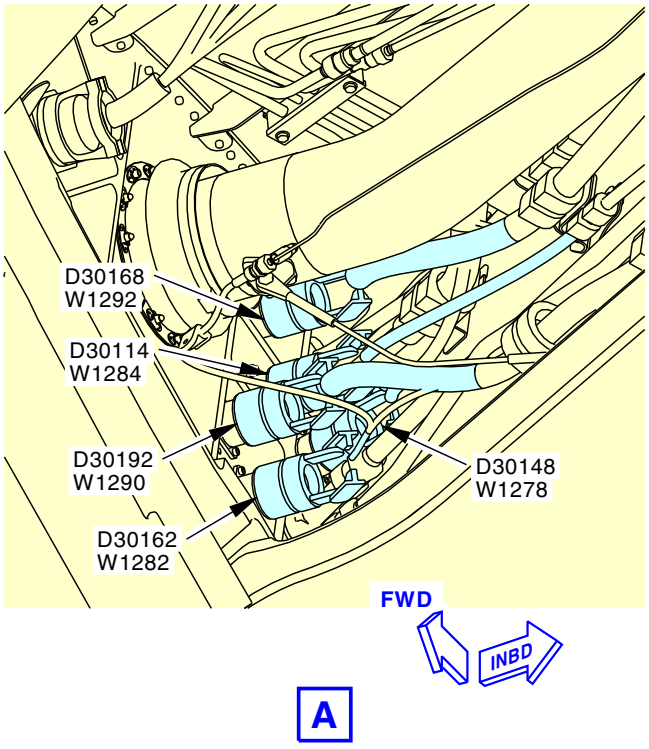
SUBTASK 05-55-26-440-019

(2) Do this task: Leading Edge Flaps and Slats - Activation, TASK 27-81-00-440-801.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details

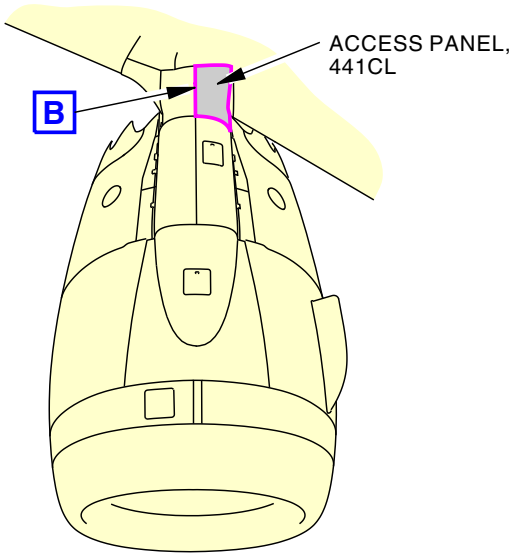


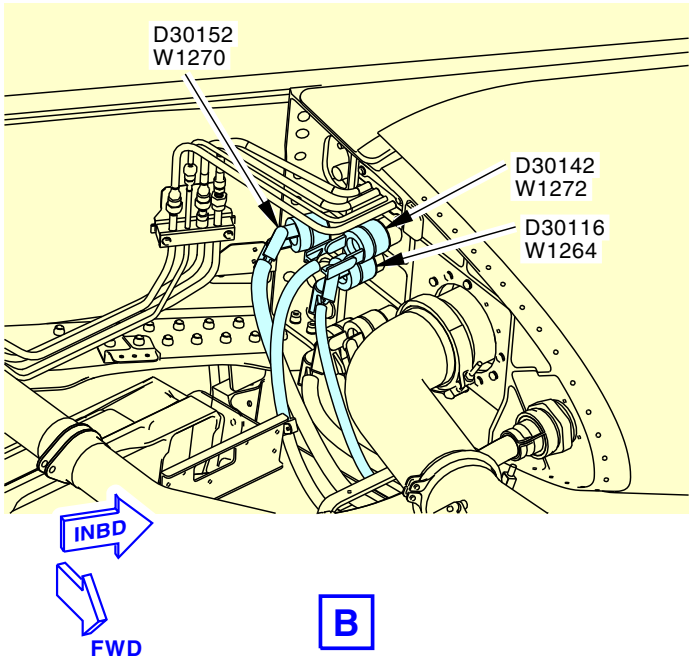


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Loop Resistance Test of Wire Bundle - Right Wing Leading Edge (MRB 20-158-00) - Connector Location
Figure 612/05-55-26-990-843 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details





2546527 S0000605232_V1

Loop Resistance Test of Wire Bundle - Right Wing Leading Edge (MRB 20-158-00) - Connector Location
Figure 612/05-55-26-990-843 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-55-26-280-816

14. Loop Resistance Test of Wire Bundle - Right Wing Leading Edge (MRB 20-177-00)

(Figure 613)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) The loop resistance tester, SPL-1636 or the MK loop resistance tester, SPL-18565 is required for this task.

B. References

Reference	Title
05-56-02-200-801	LRT Lid Standard Measurement (P/B 201)
05-56-02-200-802	ExLRT Standard Measurement (P/B 201)
05-56-03-200-801	Loop Resistance Measurement (P/B 201)
05-56-04-200-801	Joint Resistance Measurement (P/B 201)
05-56-05-200-801	Loop Resistance and Joint Resistance Measurement (P/B 201)
27-81-00-040-801	Leading Edge Flaps and Slats - Deactivation (P/B 201)
27-81-00-440-801	Leading Edge Flaps and Slats - Activation (P/B 201)
27-81-00-860-803	Leading Edge Flaps and Slats Extension (P/B 201)
27-81-00-860-804	Leading Edge Flaps and Slats Retraction (P/B 201)
SWPM 20	Standard Wiring Practices Manual

C. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-1636	Tester - Loop Resistance (LRT "-1" for checks up to & including 4 years ONLY, LRT "-2 & -3" applicable for all HIRF/FQIS check/inspection intervals) Part #: 906-10246-3 Supplier: 3X2T2 Opt Part #: 906-10246-1 Supplier: 3X2T2 Opt Part #: 906-10246-2 Supplier: 3X2T2
SPL-18565	Tester - Loop Resistance, MK Part #: XLR-9703-01 Supplier: KC432 Part #: XLR-9703-02 Supplier: KC432

D. Location Zones

Zone	Area
610	Subzone - Right Wing: Leading Edge, Forward of Front Spar, Inboard of Nacelle Strut, Including Gap Cover Area

E. Prepare for the Loop Resistance Test

SUBTASK 05-55-26-970-028

(1) Boeing requests that all data recorded while doing this procedure be submitted to The Boeing Company for engineering analysis.

(a) Send the data to one of the following addresses:

1) Electronically: MTCProgLHIRFTaskCardData@boeing.com

ECCN 9E991 BOEING PROPRIETARY - See title page for details

2) By Mail : "The Boeing Company, Attention: Manager, Lightning / HIRF, Mail Code: MC 110-SC15, BLDG 80, 2201 Seal Beach Blvd., Seal Beach, CA USA 90740, USA".

3) By Fax: 206-655-4991.

NOTE: Data sent will help Boeing understand the reliability of the components and will be used to improve the maintenance program.

SUBTASK 05-55-26-840-007

(2) Do this task: Leading Edge Flaps and Slats Extension, TASK 27-81-00-860-803.

SUBTASK 05-55-26-040-019

(3) Do this task: Leading Edge Flaps and Slats - Deactivation, TASK 27-81-00-040-801.

F. Loop Resistance Test of Wire Bundle

SUBTASK 05-55-26-720-028

(1) Do the functional check of the wire bundle shielding.

NOTE: This step checks the wire bundle shielding for the scheduled maintenance check. This step also checks the wire bundle shielding after any repair is done with the wire bundle or connector.

(a) Do this task: Loop Resistance Measurement, TASK 05-56-03-200-801 or Loop Resistance and Joint Resistance Measurement, TASK 05-56-05-200-801 for each wire bundle listed in the Table 625.

NOTE: In the case of multiple wire bundles going to/from a connector, make sure that the coupler is only around the desired bundle. This may require removing (and replacing) wire ties to separate the bundles enough for coupler connection.

1) Record the measured value to the data sheet (Table 625).

Table 625/05-55-26-993-857 Wire Bundle Loop Resistance Values - Right Wing Leading Edge (MRB 20-177-00)

Plane:					
Date:					
Technician:					
Bundle Number	**Connector Number**	**Measured Loop Resistance Value (mΩ)**	**Min/Max Value (mΩ)**	**Pass Fail**	**Retest Measured Value/Comments**
W1138	GD00193		11/26		

2) Make sure that the measured value is within the MIN/MAX value range listed in the data sheet (Table 625).

3) If the measured value is not within the MIN/MAX value range, do the troubleshooting step below for the wire bundle shielding failure.

4) This step is complete when all wire bundles listed in the Table 625 were tested and passed.

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SUBTASK 05-55-26-810-019

(2) Do the troubleshooting step for the wire bundle shielding.

NOTE: Perform this step only if the measured value of the Functional Check of the wire bundle shielding is not within the MIN/MAX value range.

NOTE: Record all the measurement data to the data sheet. This should include both initial and final values. Also record the troubleshooting steps taken to the RETEST MEASURED VALUE/COMMENTS column.

(a) If the wire bundle shield resistance is less than the MIN value, do these steps:

1) Check the test setup.

a) Make sure that the couplers are only around the desired wire bundle and closed properly.

2) If the test setup is OK, check the LRT operation, do this task: LRT Lid Standard Measurement, TASK 05-56-02-200-801 or ExLRT Standard Measurement, TASK 05-56-02-200-802.

3) If no problem is found, check the entire length of the wire bundle.

a) Look for signs of chafing or damage to the wire bundle that can cause the shield to short to structure.

NOTE: An example might be an area where bundle insulation has degraded and a portion of the shield is exposed and making contact with structure at an intermediate point in the bundle length. Another might be some metallic object penetrating the insulation and making contact between the shield and structure.

b) If a problem is found, repair or replace in accordance with the SWPM 20.

4) If no defects are found with the wire bundle and the loop resistance value is still less than the MIN value, record this value and contact Boeing for further support.

(b) If the wire bundle shield loop resistance is greater than the MAX value, do this step:

1) Measure the joint resistance across the connector from the ground terminal to primary structure Joint Resistance Measurement, TASK 05-56-04-200-801 or Loop Resistance and Joint Resistance Measurement, TASK 05-56-05-200-801 for each wire bundle listed in the table below for applicable connectors.

a) If joint value measured is greater than maximum joint resistance value in data table listed in the Joint Resistance Measurement, TASK 05-56-04-200-801 or Loop Resistance and Joint Resistance Measurement, TASK 05-56-05-200-801, repair in accordance with the SWPM 20.

b) If joint value measured is not greater than maximum joint resistance value in data table, record this value and contact Boeing for further support.

(c) After the wire bundle or connector is repaired, do the Functional Check of the wire bundle shielding again on this wire bundle.

SUBTASK 05-55-26-800-014

(3) The connector listed in Table 626 is used for the steps above.

Table 626/05-55-26-993-827 Right Wing Leading Edge Connectors (MRB 20-177-00)

Wire Bundle	Connector	WDM	Mate With Equipment
W1138	GD00193	28–41–11	M02946

ECCN 9E991 BOEING PROPRIETARY - See title page for details

G. Put the Airplane Back to Its Usual Condition

SUBTASK 05-55-26-440-020

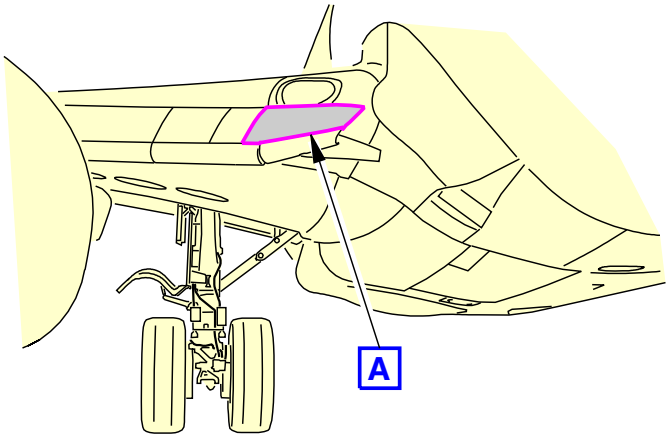
(1) Do this task: Leading Edge Flaps and Slats - Activation, TASK 27-81-00-440-801.

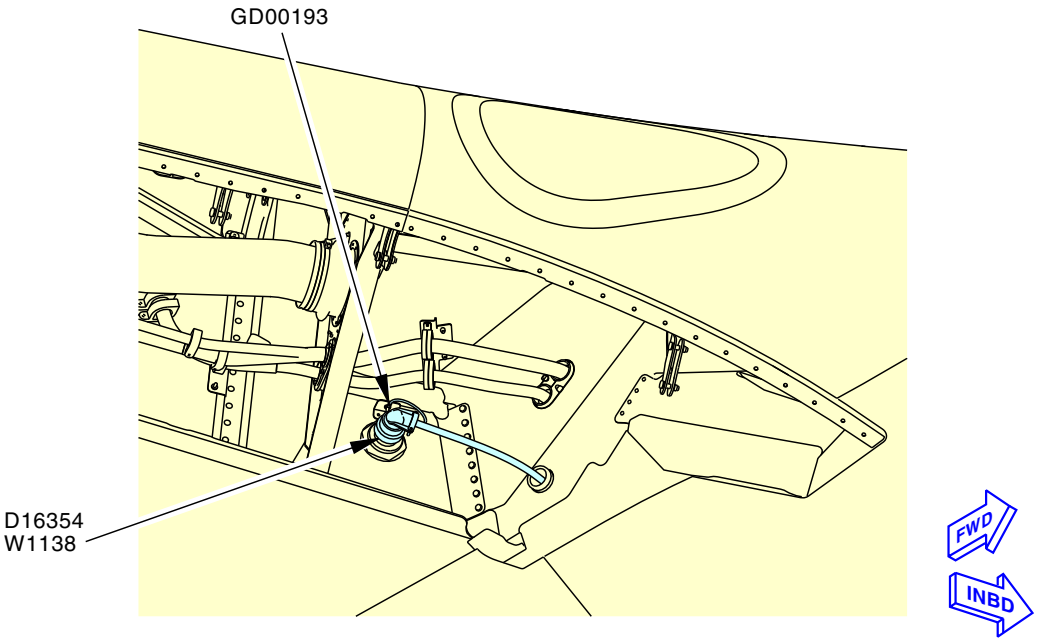
SUBTASK 05-55-26-840-008

(2) Do this task: Leading Edge Flaps and Slats Retraction, TASK 27-81-00-860-804.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details





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Loop Resistance Test of Wire Bundle - Right Wing Leading Edge (MRB 20-177-00) - Connector Location
Figure 613/05-55-26-990-845

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SIA 001-010 PRE SB 737-24-1233

TASK 05-55-26-280-817

15. Loop Resistance Test of Wire Bundle - Right Engine (MRB 20-182-00)

(Figure 614 or Figure 615)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) The loop resistance tester, SPL-1636, or MK loop resistance tester, SPL-18565, is required for this task.

B. References

Reference	Title
05-56-02-200-801	LRT Lid Standard Measurement (P/B 201)
05-56-02-200-802	ExLRT Standard Measurement (P/B 201)
05-56-03-200-801	Loop Resistance Measurement (P/B 201)
05-56-04-200-801	Joint Resistance Measurement (P/B 201)
05-56-05-200-801	Loop Resistance and Joint Resistance Measurement (P/B 201)
SWPM 20	Standard Wiring Practices Manual

C. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-1636	Tester - Loop Resistance (LRT "-1" for checks up to & including 4 years ONLY, LRT "-2 & -3" applicable for all HIRF/FQIS check/inspection intervals) Part #: 906-10246-3 Supplier: 3X2T2 Opt Part #: 906-10246-1 Supplier: 3X2T2 Opt Part #: 906-10246-2 Supplier: 3X2T2
SPL-18565	Tester - Loop Resistance, MK Part #: XLR-9703-01 Supplier: KC432 Part #: XLR-9703-02 Supplier: KC432

D. Location Zones

Zone	Area
441	Engine 2 - Forward Strut Fairing
611	Right Wing - Leading Edge to Front Spar

E. Access Panels

Number	Name/Location
441AT	Forward Strut Fairing, Thumbnail Fairing, Strut 2
441CL	Forward Strut Fairing, Left Overwing Fairing, Strut 2

F. Prepare for the Loop Resistance Test

SUBTASK 05-55-26-970-030

(1) Boeing requests that all data recorded while doing this procedure be submitted to The Boeing Company for engineering analysis.

(a) Send the data to one of the following addresses:

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SIA 001-010 PRE SB 737-24-1233 (Continued)

1) Electronically: MTCProgLHIRFTaskCardData@boeing.com

2) By Mail : "The Boeing Company, Attention: Manager, Lightning / HIRF, Mail Code: MC 110-SC15, BLDG 80, 2201 Seal Beach Blvd., Seal Beach, CA USA 90740, USA".

3) By Fax: 206-655-4991.

NOTE: Data sent will help Boeing understand the reliability of the components and will be used to improve the maintenance program.

SUBTASK 05-55-26-010-022

(2) Open these access panels:

Number	Name/Location
441AT	Forward Strut Fairing, Thumbnail Fairing, Strut 2
441CL	Forward Strut Fairing, Left Overwing Fairing, Strut 2

G. Loop Resistance Test of Wire Bundle

SUBTASK 05-55-26-720-029

(1) Do the functional check of the wire bundle shielding.

NOTE: This step checks the wire bundle shielding for the scheduled maintenance check. This step also checks the wire bundle shielding after any repair is done with the wire bundle or connector.

(a) Do this task: Loop Resistance Measurement, TASK 05-56-03-200-801 or Loop Resistance and Joint Resistance Measurement, TASK 05-56-05-200-801 for each wire bundle listed in the Table 627.

NOTE: In the case of multiple wire bundles going to/from a connector, make sure that the coupler is only around the desired bundle. This can require removing (and replacing) wire ties to separate the bundles enough for coupler connection.

1) Record the measured value to the data sheet (Table 627).

Table 627/05-55-26-993-858 Wire Bundle Loop Resistance Values - Right Engine (MRB 20-182-00)

Plane:					
Date:					
Technician:					
Bundle Number	**Connector Number**	**Measured Loop Resistance Value (mΩ)**	**Min/Max Value (mΩ)**	**Pass Fail**	**Retest Measured Value/Comments**
W1062	D30038		6/15		
W1262	D08194P		4/12		

2) Make sure that the measured value is within the MIN/MAX value range listed in the data sheet (Table 627).

3) If the measured value is not within the MIN/MAX value range, do the troubleshooting step below for the wire bundle shielding failure.

4) This step is complete when all wire bundles listed in the Table 627 were tested and passed.

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SIA 001-010 PRE SB 737-24-1233 (Continued)

SUBTASK 05-55-26-810-020

(2) Do the troubleshooting step for the wire bundle shielding.

NOTE: Perform this step only if the measured value of the Functional Check of the wire bundle shielding is not within the MIN/MAX value range.

NOTE: Record all the measurement data to the data sheet. This should include both initial and final values. Also record the troubleshooting steps taken to the RETEST MEASURED VALUE/COMMENTS column.

(a) If the wire bundle shield resistance is less than the MIN value, do these steps:

1) Check the test setup.

a) Make sure that the couplers are only around the desired wire bundle and closed properly.

2) If the test setup is OK, check the LRT operation, do this task: LRT Lid Standard Measurement, TASK 05-56-02-200-801 or ExLRT Standard Measurement, TASK 05-56-02-200-802.

3) If no problem is found, check the entire length of the wire bundle.

a) Look for signs of chafing or damage to the wire bundle that can cause the shield to short to structure.

NOTE: An example might be an area where bundle insulation has degraded and a portion of the shield is exposed and making contact with structure at an intermediate point in the bundle length. Another might be some metallic object penetrating the insulation and making contact between the shield and structure.

b) If a problem is found, repair or replace in accordance with the SWPM 20.

4) If no defects are found with the wire bundle and the loop resistance value is still less than the MIN value, record this value and contact Boeing for further support.

(b) If the wire bundle shield loop resistance is greater than the MAX value, do this step:

1) Measure the joint resistance across the connector from the ground terminal to primary structure Joint Resistance Measurement, TASK 05-56-04-200-801 or Loop Resistance and Joint Resistance Measurement, TASK 05-56-05-200-801 for each wire bundle listed in the table below for applicable connectors.

a) If joint value measured is greater than maximum joint resistance value in data table listed in the Joint Resistance Measurement, TASK 05-56-04-200-801 or Loop Resistance and Joint Resistance Measurement, TASK 05-56-05-200-801, repair in accordance with the SWPM 20.

b) If joint value measured is not greater than maximum joint resistance value in data table, record this value and contact Boeing for further support.

(c) After the wire bundle or connector is repaired, do the Functional Check of the wire bundle shielding again on this wire bundle.

SUBTASK 05-55-26-800-015

(3) The connectors listed in Table 628 are used in the steps above.

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SIA 001-010 PRE SB 737-24-1233 (Continued)

Table 628/05-55-26-993-828 Right Engine Connectors (MRB 20-182-00)

Wire Bundle	Connector	WDM	Mate With Equipment
1062	D30038	24-21-11	AS0004R
1262	D08194P	24-21-11	AW0258R

H. Put the Airplane Back to Its Usual Condition

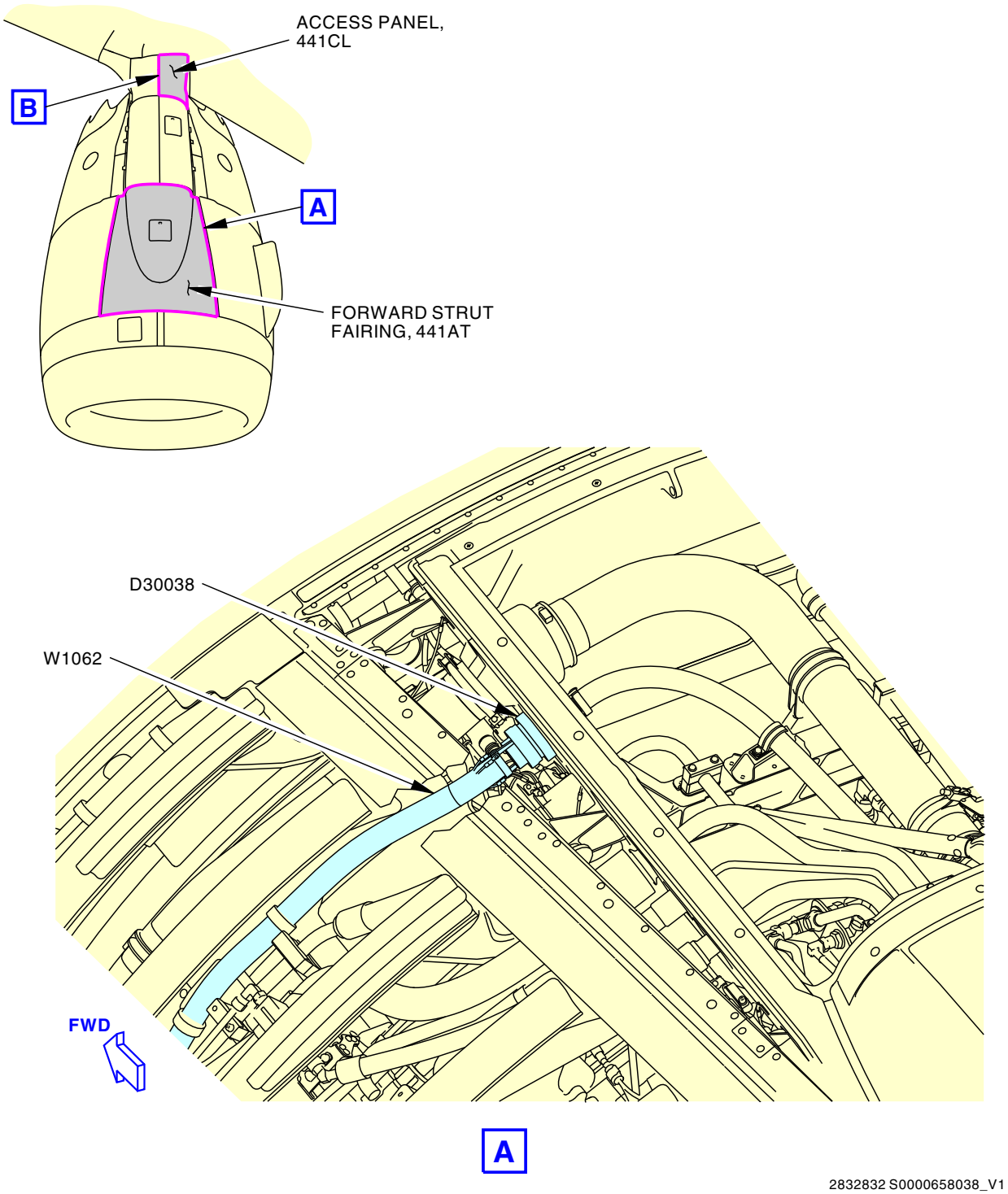
SUBTASK 05-55-26-410-019

(1) Close these access panels:

Number	Name/Location
441AT	Forward Strut Fairing, Thumbnail Fairing, Strut 2
441CL	Forward Strut Fairing, Left Overwing Fairing, Strut 2

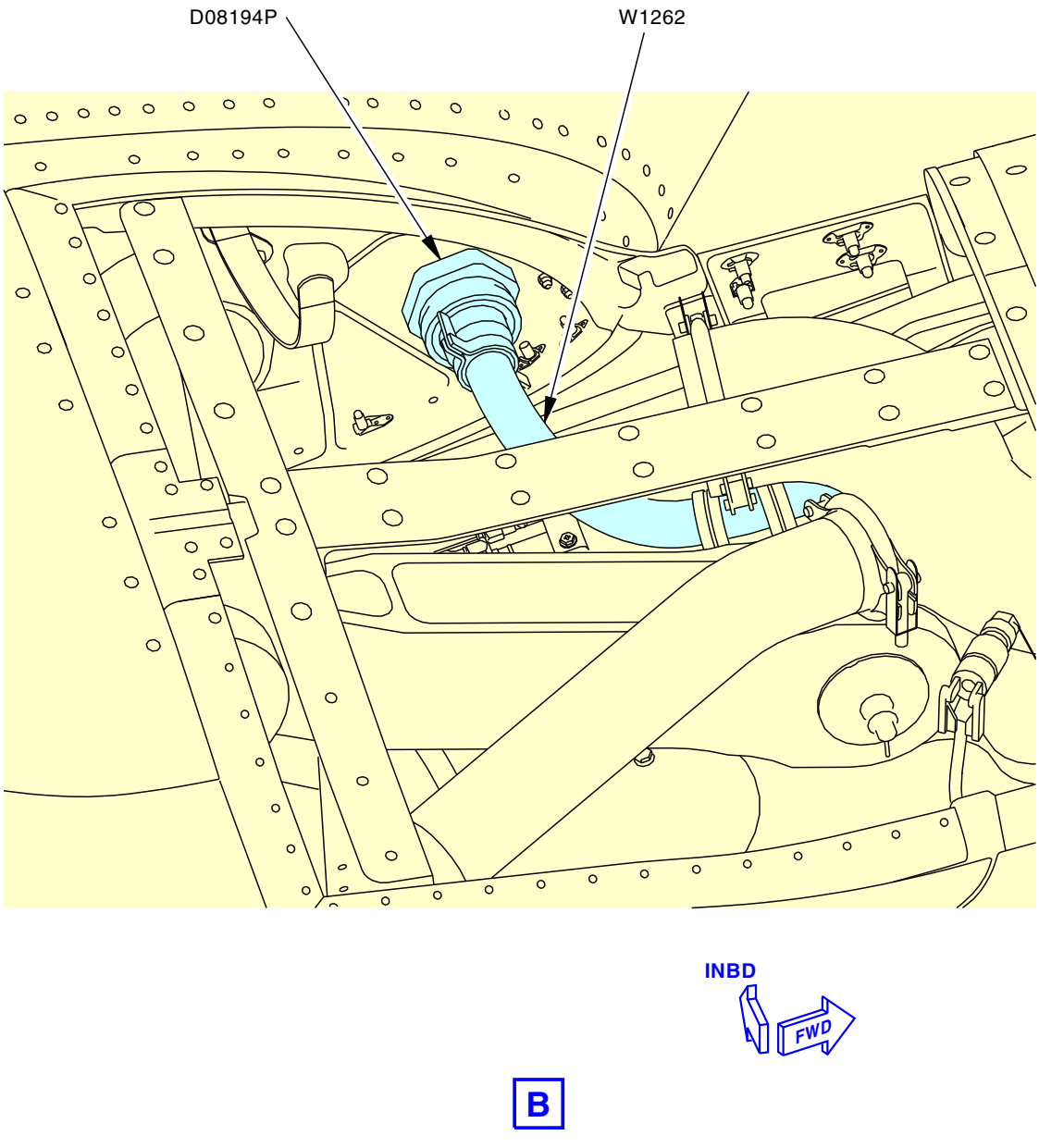
——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Loop Resistance Test of Wire Bundle - Right Engine (MRB 20-182-00)
Figure 614/05-55-26-990-847

ECCN 9E991 BOEING PROPRIETARY - See title page for details



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Loop Resistance Test of Wire Bundle - Right Engine (MRB 20-182-00)
Figure 615/05-55-26-990-848

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SIA ALL

TASK 05-55-26-280-818

16. Loop Resistance Test of Wire Bundle - Right MLG Wheel Well (MRB 20-183-00)

(Figure 616)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) The loop resistance tester, SPL-1636 or the MK loop resistance tester, SPL-18565 is required for this task.

B. References

Reference	Title
05-56-02-200-801	LRT Lid Standard Measurement (P/B 201)
05-56-02-200-802	ExLRT Standard Measurement (P/B 201)
05-56-03-200-801	Loop Resistance Measurement (P/B 201)
05-56-04-200-801	Joint Resistance Measurement (P/B 201)
05-56-05-200-801	Loop Resistance and Joint Resistance Measurement (P/B 201)
32-00-01-480-801	Landing Gear Downlock Pins Installation (P/B 201)
SWPM 20	Standard Wiring Practices Manual

C. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-1636	Tester - Loop Resistance (LRT "-1" for checks up to & including 4 years ONLY, LRT "-2 & -3" applicable for all HIRF/FQIS check/inspection intervals) Part #: 906-10246-3 Supplier: 3X2T2 Opt Part #: 906-10246-1 Supplier: 3X2T2 Opt Part #: 906-10246-2 Supplier: 3X2T2
SPL-18565	Tester - Loop Resistance, MK Part #: XLR-9703-01 Supplier: KC432 Part #: XLR-9703-02 Supplier: KC432

D. Location Zones

Zone	Area
134	Main Landing Gear Wheel Well, Body Station 663.75 to Body Station 727.00 - Right

E. Prepare for the Loop Resistance Test

SUBTASK 05-55-26-970-031

(1) Boeing requests that all data recorded while doing this procedure be submitted to The Boeing Company for engineering analysis.

(a) Send the data to one of the following addresses:

1) Electronically: MTCProgLHIRFTaskCardData@boeing.com

2) By Mail : "The Boeing Company, Attention: Manager, Lightning / HIRF, Mail Code: MC 110-SC15, BLDG 80, 2201 Seal Beach Blvd., Seal Beach, CA USA 90740, USA".

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3) By Fax: 206-655-4991.

NOTE: Data sent will help Boeing understand the reliability of the components and will be used to improve the maintenance program.

SUBTASK 05-55-26-860-003

(2) Make sure that the landing gear downlock pins are installed (TASK 32-00-01-480-801).

F. Loop Resistance Test of Wire Bundle

SUBTASK 05-55-26-720-031

(1) Do the functional check of the wire bundle shielding.

NOTE: This step checks the wire bundle shielding for the scheduled maintenance check. This step also checks the wire bundle shielding after any repair is done with the wire bundle or connector.

(a) Do this task: Loop Resistance Measurement, TASK 05-56-03-200-801 or Loop Resistance and Joint Resistance Measurement, TASK 05-56-05-200-801 for each wire bundle listed in the Table 629.

NOTE: In the case of multiple wire bundles going to/from a connector, make sure that the coupler is only around the desired bundle. This may require removing (and replacing) wire ties to separate the bundles enough for coupler connection.

1) Record the measured value to the data sheet (Table 629).

Table 629/05-55-26-993-859 Wire Bundle Loop Resistance Values - Right MLG Wheel Well (MRB 20-183-00)

Plane:					
Date:					
Technician:					
Bundle Number	**Connector Number**	**Measured Loop Resistance Value (mΩ)**	**Min/Max Value (mΩ)**	**Pass Fail**	**Retest Measured Value/Comments**
W5204	D13838		23/55		
W63	D14112		3.7/9		

2) Make sure that the measured value is within the MIN/MAX value range listed in the data sheet (Table 629).

3) If the measured value is not within the MIN/MAX value range, do the troubleshooting step below for the wire bundle shielding failure.

4) This step is complete when all wire bundles listed in the Table 629 were tested and passed.

SUBTASK 05-55-26-810-023

(2) Do the troubleshooting step for the wire bundle shielding.

NOTE: Perform this step only if the measured value of the Functional Check of the wire bundle shielding is not within the MIN/MAX value range.

NOTE: Record all the measurement data to the data sheet. This should include both initial and final values. Also record the troubleshooting steps taken to the RETEST MEASURED VALUE/COMMENTS column.

(a) If the wire bundle shield resistance is less than the MIN value, do these steps:

1) Check the test setup.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

a) Make sure that the couplers are only around the desired wire bundle and closed properly.

2) If the test setup is OK, check the LRT operation, do this task: LRT Lid Standard Measurement, TASK 05-56-02-200-801 or ExLRT Standard Measurement, TASK 05-56-02-200-802.

3) If no problem is found, check the entire length of the wire bundle.

a) Look for signs of chafing or damage to the wire bundle that can cause the shield to short to structure.

NOTE: An example might be an area where bundle insulation has degraded and a portion of the shield is exposed and making contact with structure at an intermediate point in the bundle length. Another might be some metallic object penetrating the insulation and making contact between the shield and structure.

b) If a problem is found, repair or replace in accordance with the SWPM 20.

4) If no defects are found with the wire bundle and the loop resistance value is still less than the MIN value, record this value and contact Boeing for further support.

(b) If the wire bundle shield loop resistance is greater than the MAX value, do this step:

1) Measure the joint resistance across the connector from the ground terminal to primary structure Joint Resistance Measurement, TASK 05-56-04-200-801 or Loop Resistance and Joint Resistance Measurement, TASK 05-56-05-200-801 for each wire bundle listed in the table below for applicable connectors.

a) If joint value measured is greater than maximum joint resistance value in data table listed in the Joint Resistance Measurement, TASK 05-56-04-200-801 or Loop Resistance and Joint Resistance Measurement, TASK 05-56-05-200-801, repair in accordance with the SWPM 20.

b) If joint value measured is not greater than maximum joint resistance value in data table, record this value and contact Boeing for further support.

(c) After the wire bundle or connector is repaired, do the Functional Check of the wire bundle shielding again on this wire bundle.

SUBTASK 05-55-26-800-016

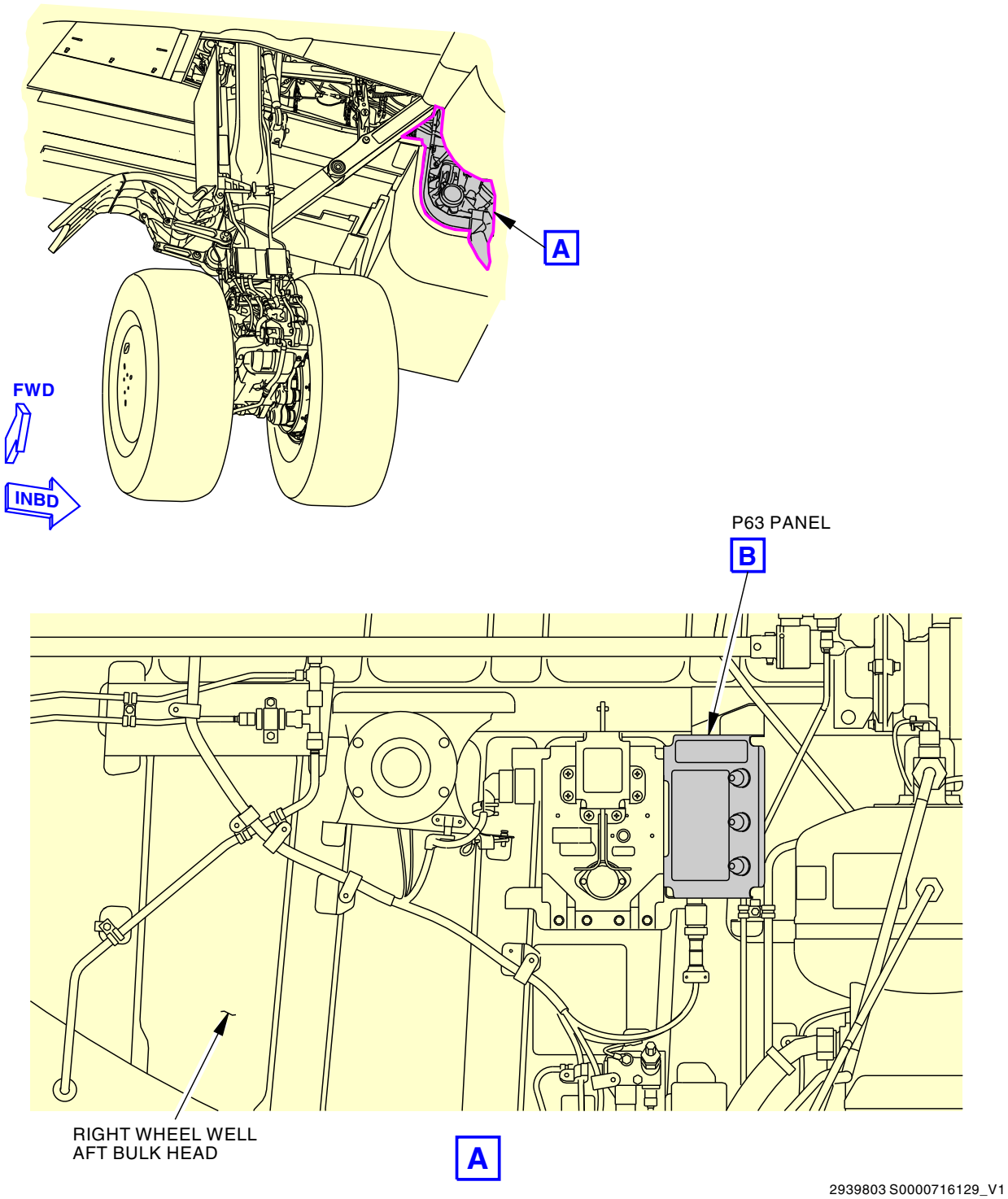
(3) The connectors listed in Table 630 are used for the steps above.

Table 630/05-55-26-993-860 Right MLG Wheel Well Connectors (MRB 20–183–00)

Wire Bundle	Connector	WDM	Mate With Equipment
W5204	D13838	47-30-11	P63
W63	D14112	47-30-11	P63

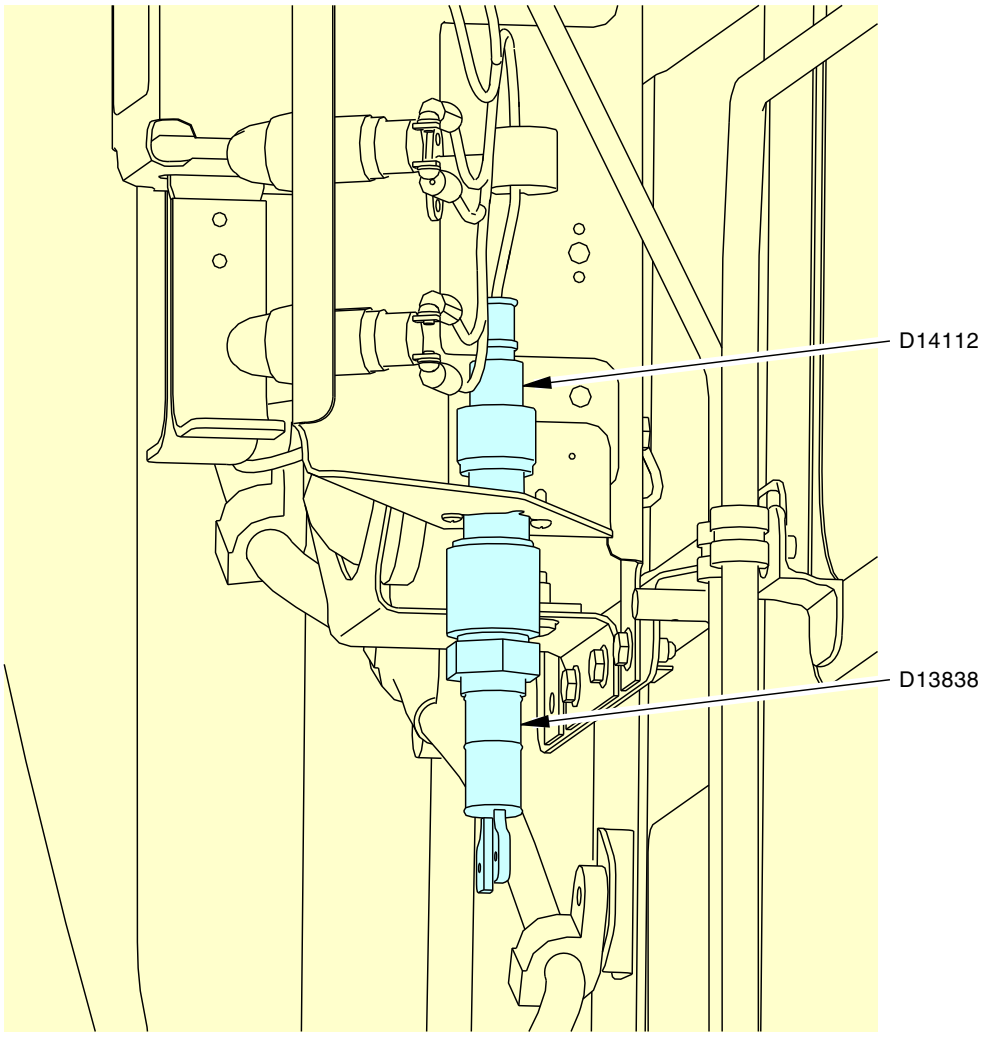
END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Loop Resistance Test of Wire Bundle - Right MLG Wheel Well (MRB 20-183-00)
Figure 616/05-55-26-990-850 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



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Loop Resistance Test of Wire Bundle - Right MLG Wheel Well (MRB 20-183-00)
Figure 616/05-55-26-990-850 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-55-26-280-822

17. Loop Resistance Test of Wire Bundle - Right Wing to Body Fairing (MRB 20-189-00)

(Figure 617)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) The loop resistance tester, SPL-1636 or the MK loop resistance tester, SPL-18565 is required for this task.

B. References

Reference	Title
05-56-02-200-801	LRT Lid Standard Measurement (P/B 201)
05-56-02-200-802	ExLRT Standard Measurement (P/B 201)
05-56-03-200-801	Loop Resistance Measurement (P/B 201)
05-56-04-200-801	Joint Resistance Measurement (P/B 201)
05-56-05-200-801	Loop Resistance and Joint Resistance Measurement (P/B 201)
SWPM 20	Standard Wiring Practices Manual

C. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-1636	Tester - Loop Resistance (LRT "-1" for checks up to & including 4 years ONLY, LRT "-2 & -3" applicable for all HIRF/FQIS check/inspection intervals) Part #: 906-10246-3 Supplier: 3X2T2 Opt Part #: 906-10246-1 Supplier: 3X2T2 Opt Part #: 906-10246-2 Supplier: 3X2T2
SPL-18565	Tester - Loop Resistance, MK Part #: XLR-9703-01 Supplier: KC432 Part #: XLR-9703-02 Supplier: KC432

D. Location Zones

Zone	Area
192	Lower Wing-To-Body Fairing - Under Wing Box

E. Access Panels

Number	Name/Location
192BR	ECS Ram Air Inlet Mixing Duct Panel - Forward

F. Prepare for the Loop Resistance Test

SUBTASK 05-55-26-970-035

(1) Boeing requests that all data recorded while doing this procedure be submitted to The Boeing Company for engineering analysis.

(a) Send the data to one of the following addresses:

1) Electronically: MTCProgLHIRFTaskCardData@boeing.com

2) By Mail : "The Boeing Company, Attention: Manager, Lightning / HIRF, Mail Code: MC 110-SC15, BLDG 80, 2201 Seal Beach Blvd., Seal Beach, CA USA 90740, USA".

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3) By Fax: 206-655-4991.

NOTE: Data sent will help Boeing understand the reliability of the components and will be used to improve the maintenance program.

SUBTASK 05-55-26-010-024

(2) Open this access panel:

Number	Name/Location
192BR	ECS Ram Air Inlet Mixing Duct Panel - Forward

G. Loop Resistance Test of Wire Bundle

SUBTASK 05-55-26-720-036

(1) Do the functional check of the wire bundle shielding.

NOTE: This step checks the wire bundle shielding for the scheduled maintenance check. This step also checks the wire bundle shielding after any repair is done with the wire bundle or connector.

(a) Do this task: Loop Resistance Measurement, TASK 05-56-03-200-801 or Loop Resistance and Joint Resistance Measurement, TASK 05-56-05-200-801 for each wire bundle listed in the (Table 631).

NOTE: In the case of multiple wire bundles going to/from a connector, make sure that the coupler is only around the desired bundle. This may require removing (and replacing) wire ties to separate the bundles enough for coupler connection.

1) Record the measured value to the data sheet (Table 631).

Table 631/05-55-26-993-867 Wire Bundle Loop Resistance Values - Right Wing to Body Fairing Connectors (MRB 20-189-00)

Plane:					
Data:					
Technician:					
Bundle Number	**Connector Number**	**Measured Loop Resistance Value (mΩ)**	**Min/Max Value (mΩ)**	**Pass Fail**	**Retest Measured Vale/ Comments**
W8122	D10533		6/16		

2) Make sure that the measured value is within the MIN/MAX value range listed in the data sheet (Table 631).

3) If the measured value is not within the MIN/MAX value range, do the troubleshooting step below for the wire bundle shielding failure.

4) This step is complete when all wire bundles listed in the Table 631 were tested and passed.

SUBTASK 05-55-26-810-027

(2) Do the troubleshooting step for the wire bundle shielding.

NOTE: Perform this step only if the measured value of the Functional Check of the wire bundle shielding is not within the MIN/MAX value range.

NOTE: Record all the measurement data to the data sheet. This should include both initial and final values. Also record the troubleshooting steps taken to the RETEST MEASURED VALUE/COMMENTS column.

(a) If the wire bundle shield resistance is less than the MIN value, do these steps:

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1) Check the test setup.
   a) Make sure that the couplers are only around the desired wire bundle and closed properly.
2) If the test setup is OK, check the LRT operation, do this task: LRT Lid Standard Measurement, TASK 05-56-02-200-801 or ExLRT Standard Measurement, TASK 05-56-02-200-802.
3) If no problem is found, check the entire length of the wire bundle.
   a) Look for signs of chafing or damage to the wire bundle that can cause the shield to short to structure.
      NOTE: An example might be an area where bundle insulation has degraded and a portion of the shield is exposed and making contact with structure at an intermediate point in the bundle length. Another might be some metallic object penetrating the insulation and making contact between the shield and structure.
   b) If a problem is found, repair or replace in accordance with the SWPM 20.
4) If no defects are found with the wire bundle and the loop resistance value is still less than the MIN value, record this value and contact Boeing for further support.

(b) If the wire bundle shield loop resistance is greater than the MAX value, do this step:
1) Measure the joint resistance across the connector from the ground terminal to primary structure Joint Resistance Measurement, TASK 05-56-04-200-801 or Loop Resistance and Joint Resistance Measurement, TASK 05-56-05-200-801 for each wire bundle listed in the table below for applicable connectors.
   a) If joint value measured is greater than maximum joint resistance value in data table listed in the Joint Resistance Measurement, TASK 05-56-04-200-801 or Loop Resistance and Joint Resistance Measurement, TASK 05-56-05-200-801, repair in accordance with the SWPM 20.
   b) If joint value measured is not greater than maximum joint resistance value in data table, record this value and contact Boeing for further support.

(c) After the wire bundle or connector is repaired, do the Functional Check of the wire bundle shielding again on this wire bundle.

SUBTASK 05-55-26-800-020

(3) The connectors/grounds listed in Table 632 is used for the steps above.

Table 632/05-55-26-993-868 Right Wing to Body Fairing Connectors (MRB 20-189-00)

Wire Bundle	Connector	WDM	Mate With Equipment
W8122	D10533	27-81-51	V00162

H. Put the Airplane Back to Its Usual Condition

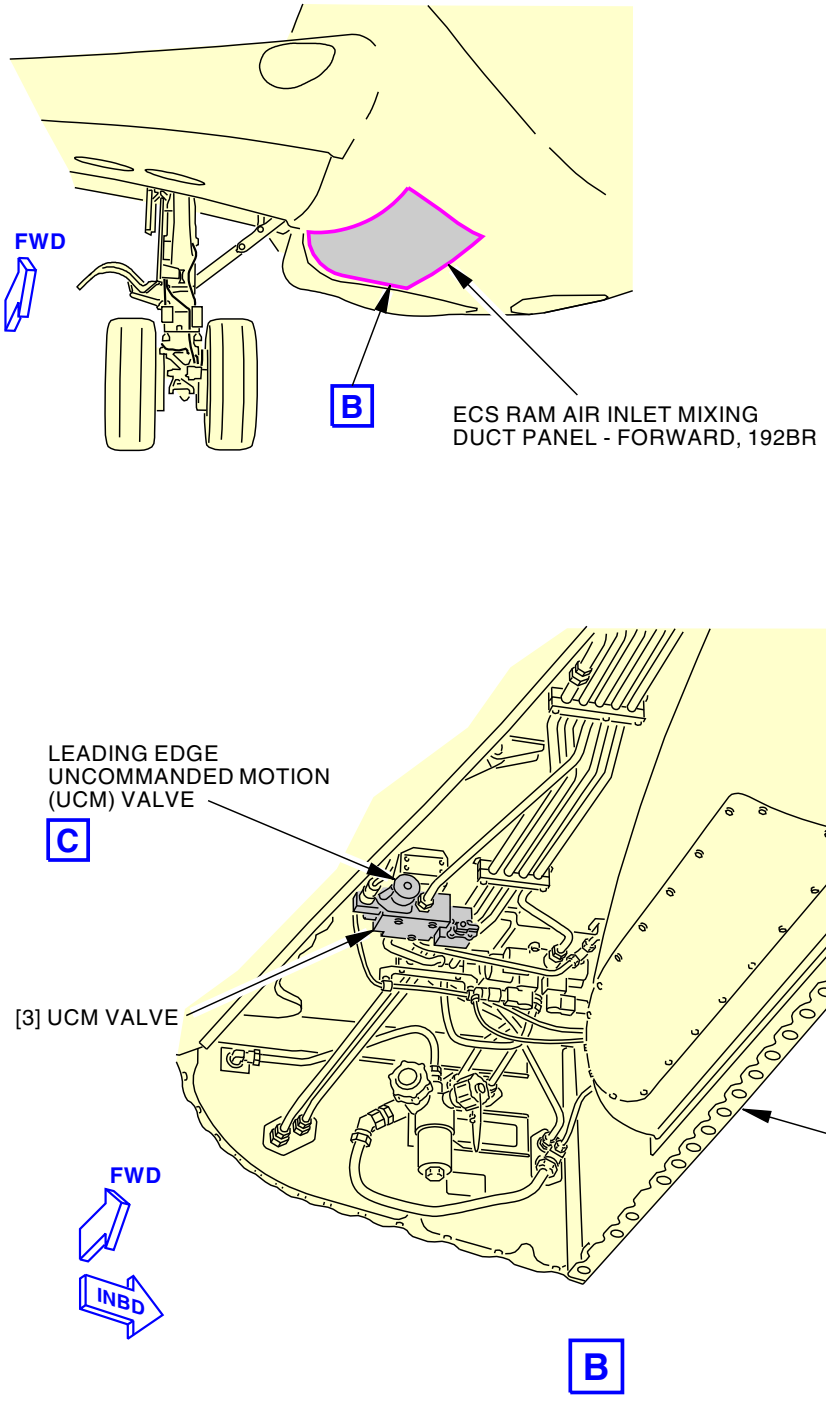
SUBTASK 05-55-26-410-021

(1) Close this access panel:

Number	Name/Location
192BR	ECS Ram Air Inlet Mixing Duct Panel - Forward

END OF TASK

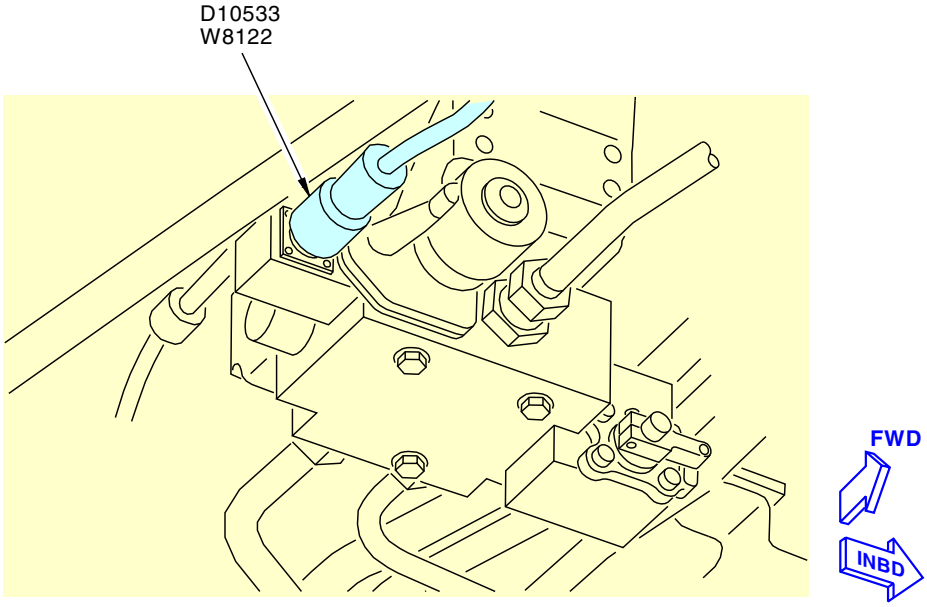
ECCN 9E991 BOEING PROPRIETARY - See title page for details



2973600 S0000752632_V1

Loop Resistance Test of Wire Bundle - Right Wing to Body Fairing (MRB 20-189-00) - Connector Location
Figure 617/05-55-26-990-851 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



2973604 S0000752633_V1

Loop Resistance Test of Wire Bundle - Right Wing to Body Fairing (MRB 20-189-00) - Connector Location
Figure 617/05-55-26-990-851 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

EMPENNAGE WIRE BUNDLES - INSPECTION/CHECK

1. General

A. This procedure contains tasks that perform a loop resistance test of wire bundles in the empennage area of the airplane.

TASK 05-55-46-280-801

2. Loop Resistance Test of Wire Bundle - Tailcone Access Compartment (MRB 20-165-00)

(Figure 601)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) The loop resistance tester, SPL-1636 or the MK loop resistance tester, SPL-18565 is required for this task.

B. References

Reference	Title
05-56-02-200-801	LRT Lid Standard Measurement (P/B 201)
05-56-02-200-802	ExLRT Standard Measurement (P/B 201)
05-56-04-200-801	Joint Resistance Measurement (P/B 201)
05-56-05-200-801	Loop Resistance and Joint Resistance Measurement (P/B 201)
SWPM 20-10-13	REPAIR OF ELECTRICAL WIRE AND CABLE

C. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-1636	Tester - Loop Resistance (LRT "-1" for checks up to & including 4 years ONLY, LRT "-2 & -3" applicable for all HIRF/FQIS check/inspection intervals) Part #: 906-10246-3 Supplier: 3X2T2 Opt Part #: 906-10246-1 Supplier: 3X2T2 Opt Part #: 906-10246-2 Supplier: 3X2T2
SPL-18565	Tester - Loop Resistance, MK Part #: XLR-9703-01 Supplier: KC432 Part #: XLR-9703-02 Supplier: KC432

D. Location Zones

Zone	Area
311	Area Aft of Pressure Bulkhead - Left

E. Access Panels

Number	Name/Location
311BL	Stabilizer Trim Access Door

F. Prepare for the Loop Resistance Test of Wire Bundle

SUBTASK 05-55-46-970-002

(1) Boeing requests that all data recorded while doing this procedure be submitted to The Boeing Company for engineering analysis.

(a) Send the data to one of the following addresses:

ECCN 9E991 BOEING PROPRIETARY - See title page for details

1) Electronically: MTCProgLHIRFTaskCardData@boeing.com

2) By Mail : "The Boeing Company, Attention: Manager, Lightning / HIRF, Mail Code: MC 110-SC15, BLDG 80, 2201 Seal Beach Blvd., Seal Beach, CA USA 90740, USA".

3) By Fax: 206-655-4991.

NOTE: Data sent will help Boeing understand the reliability of the components and will be used to improve the maintenance program.

SUBTASK 05-55-46-010-001

(2) Open this access panel:

Number	Name/Location
311BL	Stabilizer Trim Access Door

G. Loop Resistance Test of Wire Bundle

SUBTASK 05-55-46-720-008

(1) Do the Functional Check of the wire bundle shielding.

NOTE: This step checks the wire bundle shielding for the scheduled maintenance check. This step also checks the wire bundle shielding after any repair is done with the wire bundle or connector.

(a) Measure the loop resistance for each wire bundle listed in the Table 601, do this task: LRT Lid Standard Measurement, TASK 05-56-02-200-801 or ExLRT Standard Measurement, TASK 05-56-02-200-802.

1) In the case of multiple wire bundles going to/from a connector, make sure that the coupler is only around the desired bundle.

NOTE: This may require removing (and replacing) wire ties to separate the bundles enough for coupler connection.

2) Record the measured value to the data sheet (Table 601).

Table 601/05-55-46-993-812 Wire Bundle Loop Resistance Values - Tailcone Access Compartment (MRB 20-165-00)

Plane:						
Date:						
Technician:						
Bundle Number	**Connector Number**	**Measured Loop Resistance Value (mΩ)**	**Min Value (mΩ)**	**Max Value (mΩ)**	**Pass Fail**	**Retest Measured Value/Comment**
W5726	D40790P		29	40		
	D40854P		32	40		
W3377	D43397P		65	154		
W3379	D43399P		55	70		
W6134*[1]	D40842P		500	800		

*[1] A minimum of one inch of coupler separation is required.

3) Make sure that the measured value is within the MIN/MAX value range listed in the data sheet (Table 601).

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4) If the measured value is not within the MIN/MAX value range, do the Troubleshooting step below for the wire bundle shielding failure.

5) This step is complete when all wire bundles listed in the Table 601 were tested and passed.

SUBTASK 05-55-46-810-010

(2) Do the Troubleshooting step for the wire bundle shielding.

(a) Perform this step only if the measured value of the Functional Check of the wire bundle shielding is not within the MIN/MAX value range.

(b) Record all the measurement data to the data sheet (Table 601).

NOTE: This should include both initial and final values.

(c) Record the troubleshooting steps taken to the RETEST MEASURED VALUE/COMMENTS column.

(d) If the wire bundle shield resistance is less than the MIN value, do the following:

1) Check the test setup.

a) Make sure that the couplers are only around the desired wire bundle and closed properly.

2) If the test setup is OK, check the operation of the LRT.

a) Check the LRT operation (LRT Lid Standard Measurement, TASK 05-56-02-200-801 or ExLRT Standard Measurement, TASK 05-56-02-200-802).

3) If no problem is found, check the entire length of the wire bundle.

4) Look for signs of chafing or damage to the wire bundle, that can cause the shield to short to structure.

NOTE: An example might be an area where bundle insulation has degraded and a portion of the shield is exposed and making contact with structure at an intermediate point in the bundle length. Another might be some metallic object penetrating the insulation and making contact between the shield and structure.

a) If a problem is found, repair or replace in accordance with the SWPM 20-10-13.

5) If no defects are found with the wire bundle and the loop resistance value is still less than the MIN value, record this value and contact Boeing for further support.

(e) If the wire bundle shield loop resistance is greater than the MAX value, do the following:

1) Do joint resistance measurement across the connector from the ground terminal to primary structure (Joint Resistance Measurement, TASK 05-56-04-200-801 or Loop Resistance and Joint Resistance Measurement, TASK 05-56-05-200-801).

a) If joint value measured is greater than maximum joint resistance value in data table listed in Joint Resistance Measurement, TASK 05-56-04-200-801 or Loop Resistance and Joint Resistance Measurement, TASK 05-56-05-200-801, repair in accordance with the SWPM 20-10-13.

b) If joint value measured is not greater than maximum joint resistance value in data table, record this value and contact Boeing for further support.

(f) After the wire bundle or connector is repaired, do the Functional Check of the wire bundle shielding again on this wire bundle.

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SUBTASK 05-55-46-800-001

(3) The connectors listed in Table 602 are used for the steps above.

Table 602/05-55-46-993-801 Tailcone Access Compartment Connectors (MRB 20-165-00)

Wire Bundle	Connector	WDM	Mate With Equipment
W5726	D40790P	24–24–31, 49–52–31, 49–62–12, 49–71–21, 49–94–21	AB1050R
	D40854P	49–41–11, 49–52–31, 49–62–12	AB1050R
W3377	D43397P	22–12–31, 22–23–11, 22–23–12, 27–32–31	AB1050L
W3379	D43399P	22–12–41, 27–24–11, 27–32–31	AB1050R
W6134	D40842P	27–28–11	AB1050L

H. Put the Airplane Back to Its Usual Condition

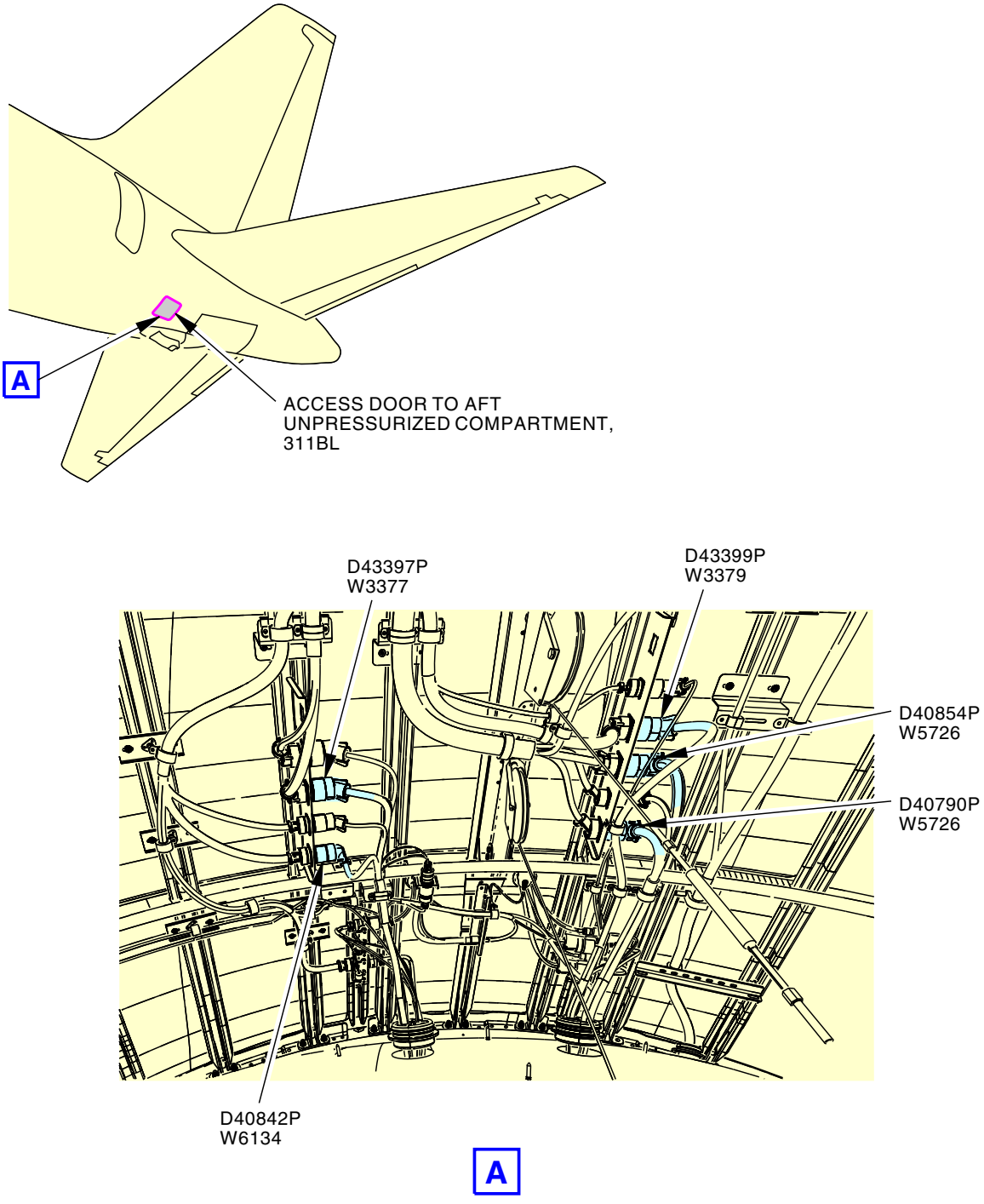
SUBTASK 05-55-46-410-001

(1) Close this access panel:

Number	Name/Location
311BL	Stabilizer Trim Access Door

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



2546651 S0000605236_V2

Loop Resistance Test of Wire Bundle - Tailcone Access Compartment (MRB 20-165-00) - Connector Location
Figure 601/05-55-46-990-802

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-55-46-280-802

3. Loop Resistance Test of Wire Bundle - Tailcone Access Compartment (MRB 20-166-00)

(Figure 602)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) The loop resistance tester, SPL-1636 or the MK loop resistance tester, SPL-18565 is required for this task.

B. References

Reference	Title
05-56-02-200-801	LRT Lid Standard Measurement (P/B 201)
05-56-02-200-802	ExLRT Standard Measurement (P/B 201)
05-56-03-200-801	Loop Resistance Measurement (P/B 201)
05-56-04-200-801	Joint Resistance Measurement (P/B 201)
05-56-05-200-801	Loop Resistance and Joint Resistance Measurement (P/B 201)
SWPM 20-10-13	REPAIR OF ELECTRICAL WIRE AND CABLE

C. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-1636	Tester - Loop Resistance (LRT "-1" for checks up to & including 4 years ONLY, LRT "-2 & -3" applicable for all HIRF/FQIS check/inspection intervals) Part #: 906-10246-3 Supplier: 3X2T2 Opt Part #: 906-10246-1 Supplier: 3X2T2 Opt Part #: 906-10246-2 Supplier: 3X2T2
SPL-8965	LRT Jumper Cable Kit (12-ft cable IA2401-1 & 42-ft cable IA2402-1) Part #: 906-10281-1 Supplier: 3X2T2
SPL-18565	Tester - Loop Resistance, MK Part #: XLR-9703-01 Supplier: KC432 Part #: XLR-9703-02 Supplier: KC432

D. Location Zones

Zone	Area
311	Area Aft of Pressure Bulkhead - Left
317	Tail Cone Compartment - Left
318	Tail Cone Compartment - Right

E. Access Panels

Number	Name/Location
311BL	Stabilizer Trim Access Door
317BL	Tailcone Access Door
318BR	Tailcone Access Door

ECCN 9E991 BOEING PROPRIETARY - See title page for details

F. Prepare for the Loop Resistance Test of Wire Bundle

SUBTASK 05-55-46-970-004

(1) Boeing requests that all data recorded while doing this procedure be submitted to The Boeing Company for engineering analysis.

(a) Send the data to one of the following addresses:

1) Electronically: MTCProgLHIRFTaskCardData@boeing.com

2) By Mail : "The Boeing Company, Attention: Manager, Lightning / HIRF, Mail Code: MC 110-SC15, BLDG 80, 2201 Seal Beach Blvd., Seal Beach, CA USA 90740, USA".

3) By Fax: 206-655-4991.

NOTE: Data sent will help Boeing understand the reliability of the components and will be used to improve the maintenance program.

SUBTASK 05-55-46-010-002

(2) Open these access panels:

Number	Name/Location
311BL	Stabilizer Trim Access Door
317BL	Tailcone Access Door
318BR	Tailcone Access Door

G. Loop Resistance Test of Wire Bundle

SUBTASK 05-55-46-720-010

(1) Do the Functional Check of the wire bundle shielding.

NOTE: This step checks the wire bundle shielding for the scheduled maintenance check. This step also checks the wire bundle shielding after any repair is done with the wire bundle or connector.

(a) Measure the loop resistance for each wire bundle listed in the Table 603, do this task:Loop Resistance Measurement, TASK 05-56-03-200-801 or Loop Resistance and Joint Resistance Measurement, TASK 05-56-05-200-801.

1) In the case of multiple wire bundles going to/from a connector, make sure that the coupler is only around the desired bundle.

NOTE: This may require removing (and replacing) wire ties to separate the bundles enough for coupler connection.

2) Record the measured value to the data sheet (Table 603).

Table 603/05-55-46-993-814 Wire Bundle Loop Resistance Values - Tailcone Access Compartment (MRB 20-167-00)

Plane:					
Date:					
Technician:					
Bundle Number	**Connector Number**	**Measured Loop Resistance Value (mΩ)**	**Min/Max Value (mΩ)**	**Pass Fail**	**Retest Measured Value/Comments**
W3391	D00381		25/58		
W4222	D00700		44/104		
W3399	D01857		52/122		

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Table 603/05-55-46-993-814 Wire Bundle Loop Resistance Values - Tailcone Access Compartment (MRB 20-167-00) (Continued)

Plane:					
Date:					
Technician:					
Bundle Number	**Connector Number**	**Measured Loop Resistance Value (mΩ)**	**Min/Max Value (mΩ)**	**Pass Fail**	**Retest Measured Value/Comments**
W7030	D10531		81/190		
W4724	D15980		32/76		
W7030	D4023P		183/430		

3) Make sure that the measured value is within the MIN/MAX value range listed in the data sheet (Table 603).

4) If the measured value is not within the MIN/MAX value range, do the Troubleshooting step below for the wire bundle shielding failure.

5) This step is complete when all wire bundles listed in the Table 603 were tested and passed.

(b) Do this task to test W3399-D1857:

1) Connect one end of the 12 foot jumper, (jumper cable assembly, LRT (loop resistance tester), SPL-8965) to the housing of switch S773 (NOT the switch connector itself) to ground terminal GD4811–ST.

2) Connect the other end of the 12 foot jumper, (jumper cable assembly, LRT (loop resistance tester), SPL-8965) to ground terminal GD4811-ST.

3) Attach the driver coupler of the LRT to the 12-foot jumper cable.

4) Attach the sense coupler of the LRT to the W3399 wire bundle.

5) Do the Modified Loop Resistance Measurement (Loop Resistance Measurement, TASK 05-56-03-200-801 or Loop Resistance and Joint Resistance Measurement, TASK 05-56-05-200-801) for this setup loop. Make sure the loop resistance value is between 10 - 75 milliohms.

NOTE: The loop resistance value is for reference only (do not record).

SUBTASK 05-55-46-810-008

(2) Do the Troubleshooting step for the wire bundle shielding.

(a) Perform this step only if the measured value of the Functional Check of the wire bundle shielding is not within the MIN/MAX value range.

(b) Record all the measurement data to the data sheet (Table 603).

NOTE: This should include both initial and final values.

(c) Record the troubleshooting steps taken to the RETEST MEASURED VALUE/COMMENTS column.

(d) If the wire bundle shield resistance is less than the MIN value, do the following:

1) Check the test setup.

a) Make sure that the couplers are only around the desired wire bundle and closed properly.

2) If the test setup is OK, check the operation of the LRT.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

a) Check the LRT operation (LRT Lid Standard Measurement, TASK 05-56-02-200-801 or ExLRT Standard Measurement, TASK 05-56-02-200-802).

3) If no problem is found, check the entire length of the wire bundle.

4) Look for signs of chafing or damage to the wire bundle, that can cause the shield to short to structure.

NOTE: An example might be an area where bundle insulation has degraded and a portion of the shield is exposed and making contact with structure at an intermediate point in the bundle length. Another might be some metallic object penetrating the insulation and making contact between the shield and structure.

a) If a problem is found, repair or replace in accordance with the SWPM 20-10-13.

5) If no defects are found with the wire bundle and the loop resistance value is still less than the MIN value, record this value and contact Boeing for further support.

(e) If the wire bundle shield loop resistance is greater than the MAX value, do the following:

1) Do joint resistance measurement across the connector from the ground terminal to primary structure (Joint Resistance Measurement, TASK 05-56-04-200-801 or Loop Resistance and Joint Resistance Measurement, TASK 05-56-05-200-801) .

a) If joint value measured is greater than maximum joint resistance value in data table listed in Joint Resistance Measurement, TASK 05-56-04-200-801 or Loop Resistance and Joint Resistance Measurement, TASK 05-56-05-200-801, repair in accordance with the SWPM 20-10-13.

b) If joint value measured is not greater than maximum joint resistance value in data table, record this value and contact Boeing for further support.

(f) After the wire bundle or connector is repaired, do the Functional Check of the wire bundle shielding again on this wire bundle.

SUBTASK 05-55-46-800-002

(3) The connectors listed in Table 604 are used for the steps above.

Table 604/05-55-46-993-802 Tailcone Access Compartment Connectors (MRB 20-166-00)

Wire Bundle	Connector	WDM	Mate With Equipment
W3391	D00381	22–13–11, 27–41–12	M01659
W4222	D00700	22–13–11, 27–41–12	M01659
W3399	D01857	22–11–12	S00773
W7030	D10531	27–31–11	V00160
W7030	D40236P	27–31–11	D40236J
W4724	D15980	33–43–31	T03033

ECCN 9E991 BOEING PROPRIETARY - See title page for details

H. Put the Airplane Back to Its Usual Condition

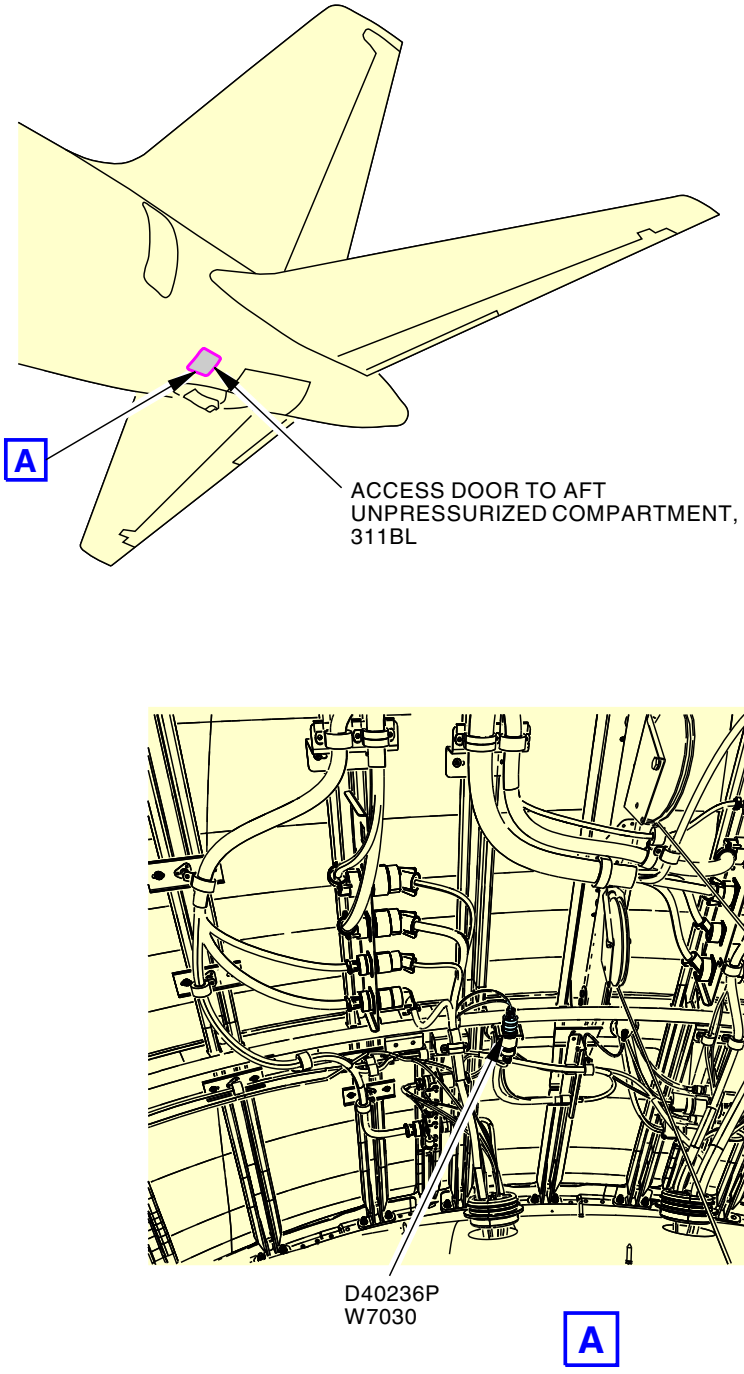
SUBTASK 05-55-46-410-002

(1) Close these access panels:

Number	Name/Location
311BL	Stabilizer Trim Access Door
317BL	Tailcone Access Door
318BR	Tailcone Access Door

——— END OF TASK ———

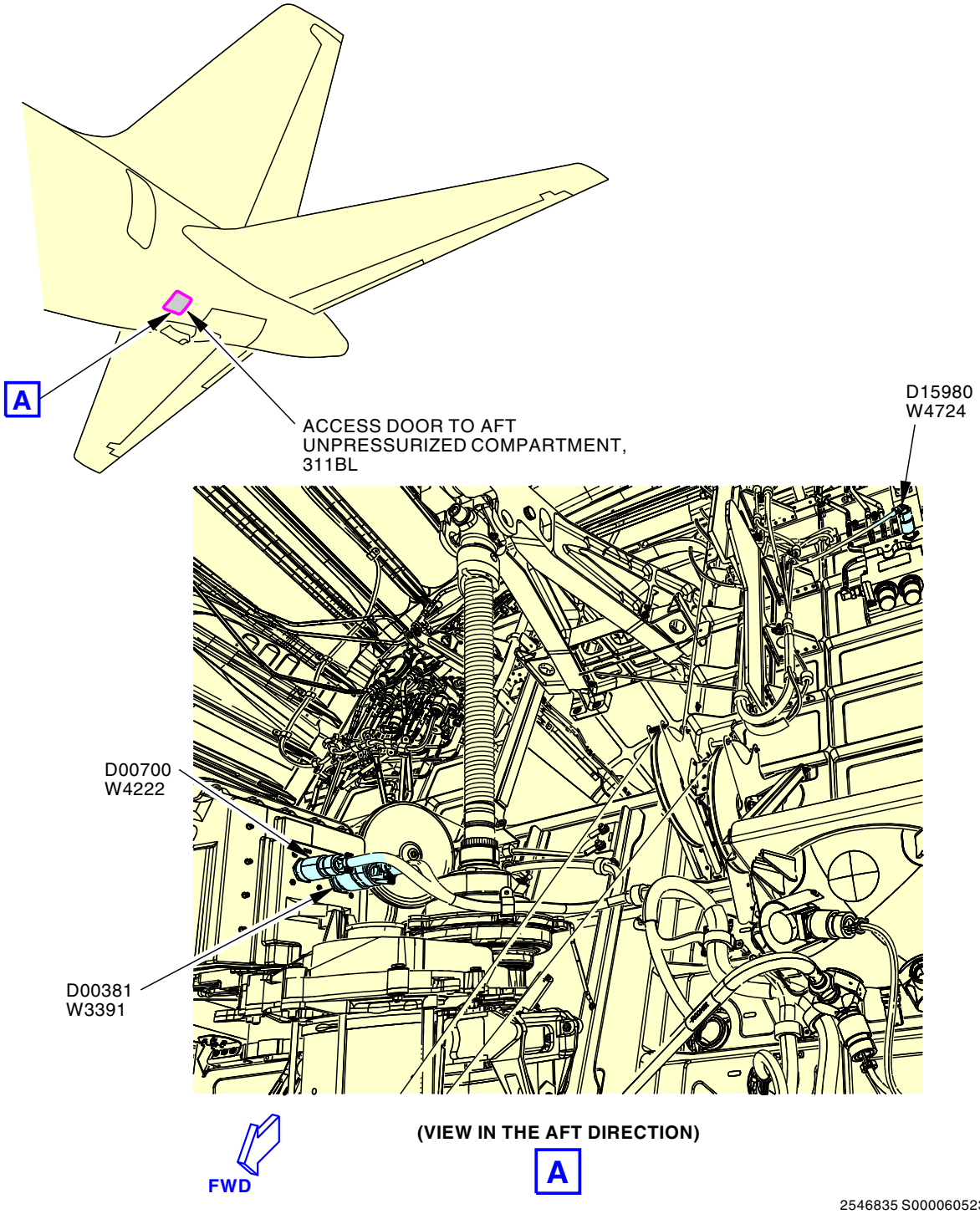
ECCN 9E991 BOEING PROPRIETARY - See title page for details



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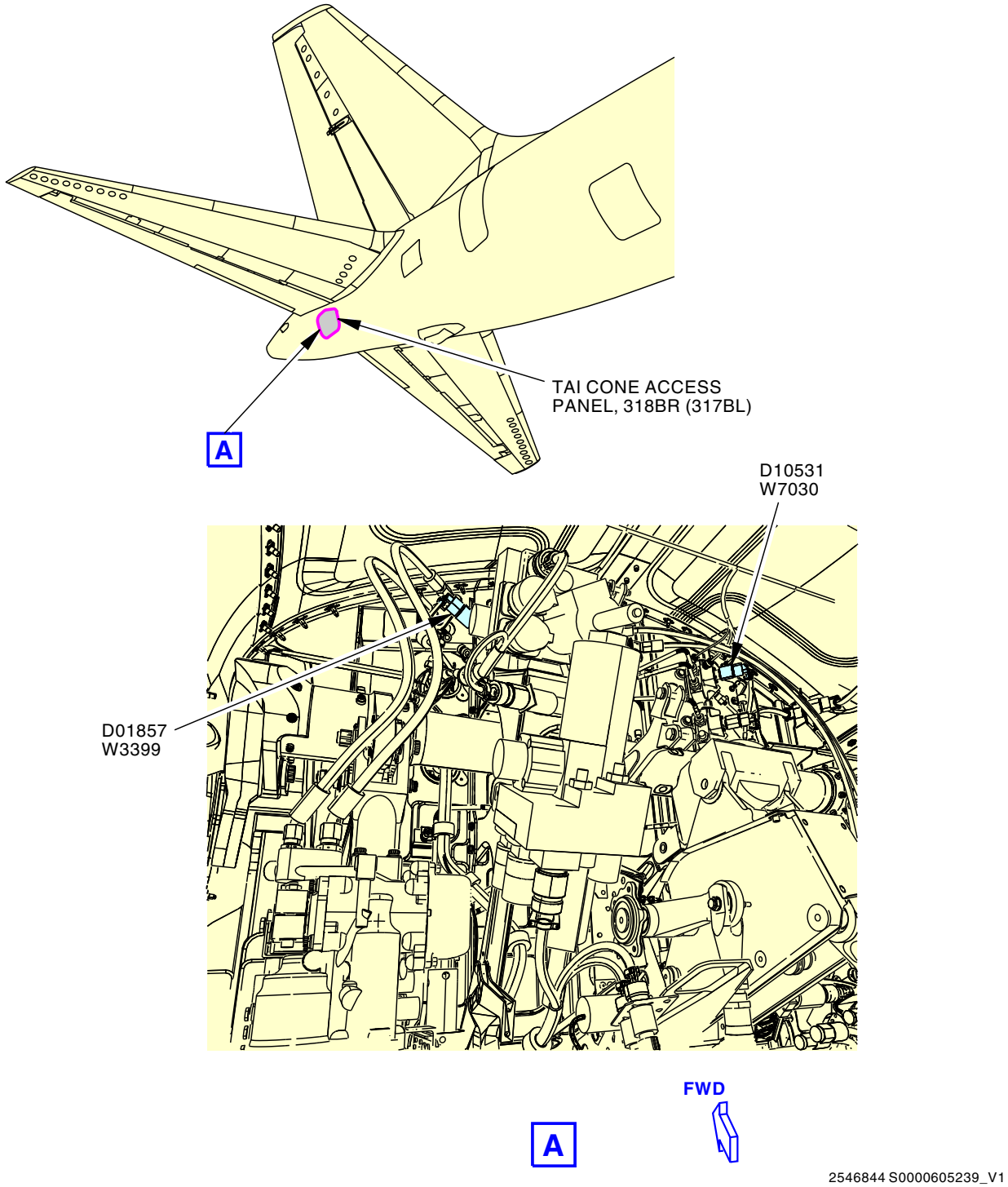
Loop Resistance Test of Wire Bundle - Tailcone Access Compartment (MRB 20-166-00) - Connector Location
Figure 602/05-55-46-990-804 (Sheet 1 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Loop Resistance Test of Wire Bundle - Tailcone Access Compartment (MRB 20-166-00) - Connector Location
Figure 602/05-55-46-990-804 (Sheet 2 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Loop Resistance Test of Wire Bundle - Tailcone Access Compartment (MRB 20-166-00) - Connector Location
Figure 602/05-55-46-990-804 (Sheet 3 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-55-46-280-803

4. Loop Resistance Test of Wire Bundle - Tailcone Access Compartment (MRB 20-167-00)

(Figure 603)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) The loop resistance tester, SPL-1636 or the MK loop resistance tester, SPL-18565 is required for this task.

B. References

Reference	Title
05-56-02-200-801	LRT Lid Standard Measurement (P/B 201)
05-56-02-200-802	ExLRT Standard Measurement (P/B 201)
05-56-03-200-801	Loop Resistance Measurement (P/B 201)
05-56-04-200-801	Joint Resistance Measurement (P/B 201)
05-56-05-200-801	Loop Resistance and Joint Resistance Measurement (P/B 201)
SWPM 20-10-13	REPAIR OF ELECTRICAL WIRE AND CABLE

C. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-1636	Tester - Loop Resistance (LRT "-1" for checks up to & including 4 years ONLY, LRT "-2 & -3" applicable for all HIRF/FQIS check/inspection intervals) Part #: 906-10246-3 Supplier: 3X2T2 Opt Part #: 906-10246-1 Supplier: 3X2T2 Opt Part #: 906-10246-2 Supplier: 3X2T2
SPL-18565	Tester - Loop Resistance, MK Part #: XLR-9703-01 Supplier: KC432 Part #: XLR-9703-02 Supplier: KC432

D. Location Zones

Zone	Area
311	Area Aft of Pressure Bulkhead - Left
317	Tail Cone Compartment - Left
318	Tail Cone Compartment - Right

E. Access Panels

Number	Name/Location
311BL	Stabilizer Trim Access Door
317BL	Tailcone Access Door
318BR	Tailcone Access Door

F. Prepare for the Loop Resistance Test of Wire Bundle

SUBTASK 05-55-46-970-006

(1) Boeing requests that all data recorded while doing this procedure be submitted to The Boeing Company for engineering analysis.

(a) Send the data to one of the following addresses:

ECCN 9E991 BOEING PROPRIETARY - See title page for details

1) Electronically: MTCProgLHIRFTaskCardData@boeing.com

2) By Mail : "The Boeing Company, Attention: Manager, Lightning / HIRF, Mail Code: MC 110-SC15, BLDG 80, 2201 Seal Beach Blvd., Seal Beach, CA USA 90740, USA".

3) By Fax: 206-655-4991.

NOTE: Data sent will help Boeing understand the reliability of the components and will be used to improve the maintenance program.

SUBTASK 05-55-46-010-003

(2) Open these access panels:

Number	Name/Location
311BL	Stabilizer Trim Access Door
317BL	Tailcone Access Door
318BR	Tailcone Access Door

G. Loop Resistance Test of Wire Bundle

SUBTASK 05-55-46-720-011

(1) Do the Functional Check of the wire bundle shielding.

NOTE: This step checks the wire bundle shielding for the scheduled maintenance check. This step also checks the wire bundle shielding after any repair is done with the wire bundle or connector.

(a) Measure the loop resistance for each wire bundle listed in the Table 605, do this task Loop Resistance Measurement, TASK 05-56-03-200-801 or Loop Resistance and Joint Resistance Measurement, TASK 05-56-05-200-801

1) In the case of multiple wire bundles going to/from a connector, make sure that the coupler is only around the desired bundle.

NOTE: This may require removing (and replacing) wire ties to separate the bundles enough for coupler connection.

2) Record the measured value to the data sheet (Table 605).

Table 605/05-55-46-993-815 Wire Bundle Loop Resistance Values - Tailcone Access Compartment (MRB 20-167-00)

Plane:					
Date:					
Technician:					
Bundle Number	**Connector Number**	**Measured Loop Resistance Value (mΩ)**	**Min/Max Value (mΩ)**	**Pass Fail**	**Retest Measured Value/Comments**
W3399	D01677		48/114		
W3399	D01679		48/108		
W3397	D01711		46/108		
W3397	D01829		47/110		
W3397	D02205		43/101		

3) Make sure that the measured value is within the MIN/MAX value range listed in the data sheet (Table 605).

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4) If the measured value is not within the MIN/MAX value range, do the Troubleshooting step below for the wire bundle shielding failure.

5) This step is complete when all wire bundles listed in the Table 605 were tested and passed.

SUBTASK 05-55-46-810-007

(2) Do the Troubleshooting step for the wire bundle shielding.

(a) Perform this step only if the measured value of the Functional Check of the wire bundle shielding is not within the MIN/MAX value range.

(b) Record all the measurement data to the data sheet (Table 605).

NOTE: This should include both initial and final values.

(c) Record the troubleshooting steps taken to the RETEST MEASURED VALUE/COMMENTS column.

(d) If the wire bundle shield resistance is less than the MIN value, do the following:

1) Check the test setup.

a) Make sure that the couplers are only around the desired wire bundle and closed properly.

2) If the test setup is OK, check the operation of the LRT.

a) Check the LRT operation (LRT Lid Standard Measurement, TASK 05-56-02-200-801 or ExLRT Standard Measurement, TASK 05-56-02-200-802).

3) If no problem is found, check the entire length of the wire bundle.

4) Look for signs of chafing or damage to the wire bundle, that can cause the shield to short to structure.

NOTE: An example might be an area where bundle insulation has degraded and a portion of the shield is exposed and making contact with structure at an intermediate point in the bundle length. Another might be some metallic object penetrating the insulation and making contact between the shield and structure.

a) If a problem is found, repair or replace in accordance with the SWPM 20-10-13.

5) If no defects are found with the wire bundle and the loop resistance value is still less than the MIN value, record this value and contact Boeing for further support.

(e) If the wire bundle shield loop resistance is greater than the MAX value, do the following:

1) Do joint resistance measurement across the connector from the ground terminal to primary structure (Joint Resistance Measurement, TASK 05-56-04-200-801 or Loop Resistance and Joint Resistance Measurement, TASK 05-56-05-200-801).

a) If joint value measured is greater than maximum joint resistance value in data table listed in Joint Resistance Measurement, TASK 05-56-04-200-801 or Loop Resistance and Joint Resistance Measurement, TASK 05-56-05-200-801, repair in accordance with the SWPM 20-10-13.

b) If joint value measured is not greater than maximum joint resistance value in data table, record this value and contact Boeing for further support.

(f) After the wire bundle or connector is repaired, do the Functional Check of the wire bundle shielding again on this wire bundle.

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SUBTASK 05-55-46-800-003

(3) The connectors listed in Table 606 are used for the steps above.

Table 606/05-55-46-993-803 Tailcone Access Compartment Connectors (MRB 20-167-00)

Wire Bundle	Connector	WDM	Mate With Equipment
W3399	D01677	22–12–41	M00958
	D01679	22–12–41	M00929
W3397	D01711	22–12–31	M00929
	D01829	22–12–31	M00958
	D02205	22–12–31	M01192

H. Put the Airplane Back to Its Usual Condition

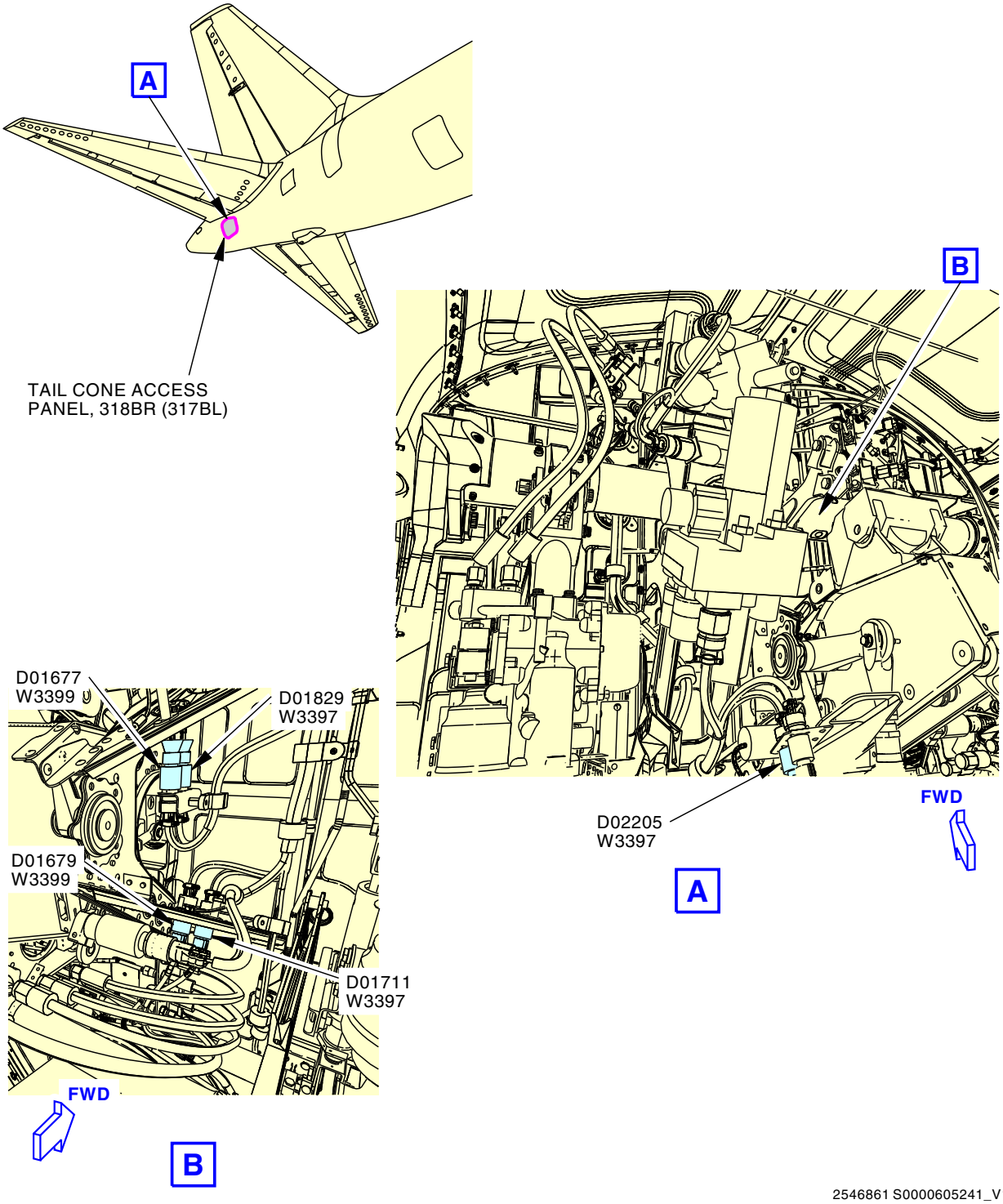
SUBTASK 05-55-46-410-003

(1) Close these access panels:

Number	Name/Location
311BL	Stabilizer Trim Access Door
317BL	Tailcone Access Door
318BR	Tailcone Access Door

END OF TASK

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Loop Resistance Test of Wire Bundle - Tailcone Access Compartment (MRB 20-167-00) - Connector Location
Figure 603/05-55-46-990-806

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-55-46-280-804

5. Loop Resistance Test of Wire Bundle - APU Compartment (MRB 20-174-00)

(Figure 604)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) The loop resistance tester, SPL-1636, or MK loop resistance tester, SPL-18565, is required for this task.

B. References

Reference	Title
05-56-02-200-801	LRT Lid Standard Measurement (P/B 201)
05-56-02-200-802	ExLRT Standard Measurement (P/B 201)
05-56-03-200-801	Loop Resistance Measurement (P/B 201)
05-56-04-200-801	Joint Resistance Measurement (P/B 201)
05-56-05-200-801	Loop Resistance and Joint Resistance Measurement (P/B 201)
SWPM 20-10-13	REPAIR OF ELECTRICAL WIRE AND CABLE

C. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-1636	Tester - Loop Resistance (LRT "-1" for checks up to & including 4 years ONLY, LRT "-2 & -3" applicable for all HIRF/FQIS check/inspection intervals) Part #: 906-10246-3 Supplier: 3X2T2 Opt Part #: 906-10246-1 Supplier: 3X2T2 Opt Part #: 906-10246-2 Supplier: 3X2T2
SPL-18565	Tester - Loop Resistance, MK Part #: XLR-9703-01 Supplier: KC432 Part #: XLR-9703-02 Supplier: KC432

D. Location Zones

Zone	Area
315	APU Compartment - Left
316	APU Compartment - Right

E. Access Panels

Number	Name/Location
315A	APU Cowl Door

F. Prepare for the Loop Resistance Test of Wire Bundle

SUBTASK 05-55-46-970-008

(1) Boeing requests that all data recorded while doing this procedure be submitted to The Boeing Company for engineering analysis.

(a) Send the data to one of the following addresses:

1) Electronically: MTCProgLHIRFTaskCardData@boeing.com

ECCN 9E991 BOEING PROPRIETARY - See title page for details

2) By Mail : "The Boeing Company, Attention: Manager, Lightning / HIRF, Mail Code: MC 110-SC15, BLDG 80, 2201 Seal Beach Blvd., Seal Beach, CA USA 90740, USA".

3) By Fax: 206-655-4991.

NOTE: Data sent will help Boeing understand the reliability of the components and will be used to improve the maintenance program.

SUBTASK 05-55-46-010-004

(2) Open this access panel:

Number	Name/Location
315A	APU Cowl Door

G. Loop Resistance Test of Wire Bundle

SUBTASK 05-55-46-720-012

(1) Do the functional check of the wire bundle shielding.

NOTE: This step checks the wire bundle shielding for the scheduled maintenance check. This step also checks the wire bundle shielding after any repair is done with the wire bundle or connector.

(a) Measure the loop resistance for each wire bundle listed in the Table 607, do this task: Loop Resistance Measurement, TASK 05-56-03-200-801 or Loop Resistance and Joint Resistance Measurement, TASK 05-56-05-200-801.

1) In the case of multiple wire bundles going to/from a connector, make sure that the coupler is only around the desired bundle.

NOTE: This may require removing (and replacing) wire ties to separate the bundles enough for coupler connection.

2) Record the measured value to the data sheet (Table 607).

Table 607/05-55-46-993-816 Wire Bundle Loop Resistance Values - APU Compartment (MRB 20-174-00)

Plane:					
Date:					
Technician:					
Bundle Number	**Connector Number**	**Measured Loop Resistance Value (mΩ)**	**Min/Max Value (mΩ)**	**Pass Fail**	**Retest Measured Value/Comments**
3888448–2	P5		10/24		
	P6		10/24		

3) Make sure that the measured value is within the MIN/MAX value range listed in the data sheet (Table 607).

4) If the measured value is not within the MIN/MAX value range, do the troubleshooting step below for the wire bundle shielding failure.

5) This step is complete when all wire bundles listed in the Table 607 were tested and passed.

SUBTASK 05-55-46-810-009

(2) Do the troubleshooting step for the wire bundle shielding.

(a) Perform this step only if the measured value of the functional check of the wire bundle shielding is not within the MIN/MAX value range.

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(b) Record all the measurement data to the data sheet (Table 607).

NOTE: This should include both initial and final values.

(c) Record the troubleshooting steps taken to the RETEST MEASURED VALUE/COMMENTS column.

(d) If the wire bundle shield resistance is less than the MIN value, do the following:

1) Check the test setup.

a) Make sure that the couplers are only around the desired wire bundle and closed properly.

2) If the test setup is OK, check the operation of the LRT.

a) Check the LRT operation (LRT Lid Standard Measurement, TASK 05-56-02-200-801 or ExLRT Standard Measurement, TASK 05-56-02-200-802).

3) If no problem is found, check the entire length of the wire bundle.

4) Look for signs of chafing or damage to the wire bundle, that can cause the shield to short to structure.

NOTE: An example might be an area where bundle insulation has degraded and a portion of the shield is exposed and making contact with structure at an intermediate point in the bundle length. Another might be some metallic object penetrating the insulation and making contact between the shield and structure.

a) If a problem is found, repair or replace in accordance with the SWPM 20-10-13.

5) If no defects are found with the wire bundle and the loop resistance value is still less than the MIN value, record this value and contact Boeing for further support.

(e) If the wire bundle shield loop resistance is greater than the MAX value, do the following:

1) Do joint resistance measurement across the connector from the ground terminal to primary structure (Joint Resistance Measurement, TASK 05-56-04-200-801 or Loop Resistance and Joint Resistance Measurement, TASK 05-56-05-200-801).

a) If joint value measured is greater than maximum joint resistance value in data table listed in Joint Resistance Measurement, TASK 05-56-04-200-801 or Loop Resistance and Joint Resistance Measurement, TASK 05-56-05-200-801, repair in accordance with the SWPM 20-10-13.

b) If joint value measured is not greater than maximum joint resistance value in data table, record this value and contact Boeing for further support.

(f) After the wire bundle or connector is repaired, do the functional check of the wire bundle shielding again on this wire bundle.

SUBTASK 05-55-46-800-004

(3) The connectors listed in Table 608 are used for the steps above.

Table 608/05-55-46-993-804 APU Compartment Connectors (MRB 20-174-00)

Wire Bundle	Connector	WDM	Mate With Equipment
3888448-2	P5	3888448–2, 49–41–11	M83723/83G1415N
	P6	3888448–2, 49–41–11	M83723/83G1808N

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H. Put the Airplane Back to Its Usual Condition

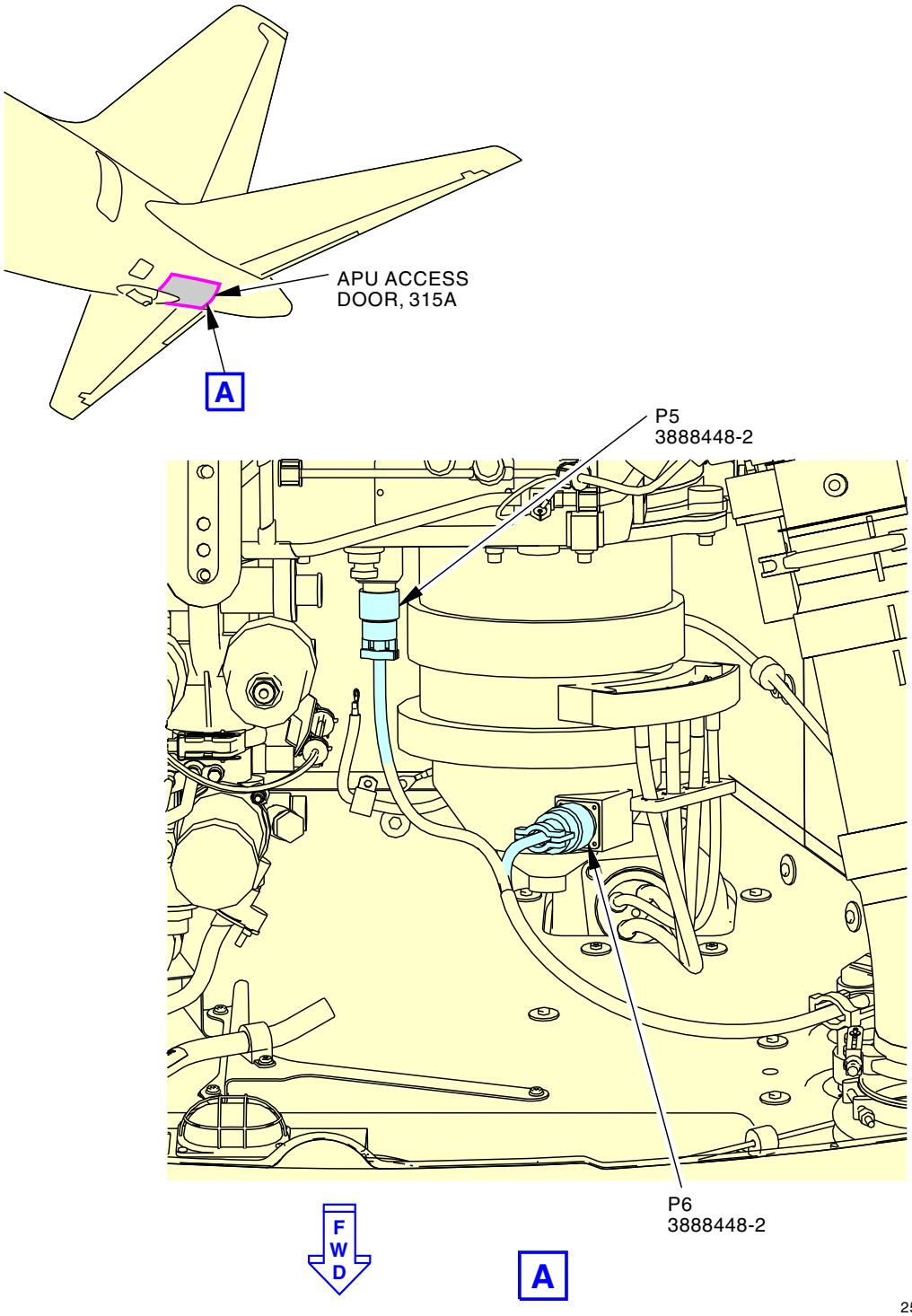
SUBTASK 05-55-46-410-004

(1) Close this access panel:

Number	Name/Location
315A	APU Cowl Door

——— END OF TASK ———

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Loop Resistance Test of Wire Bundle - APU Compartment (MRB 20-174-00) - Connector Location
Figure 604/05-55-46-990-808

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-55-46-280-807

6. Loop Resistance Test of Wire Bundle - Rudder Control Actuator (MRB 20-180-00 and 20-181-00)

(Figure 605, Figure 606)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) The loop resistance tester, SPL-1636 or the MK loop resistance tester, SPL-18565 is required for this task.

B. References

Reference	Title
05-56-02-200-801	LRT Lid Standard Measurement (P/B 201)
05-56-02-200-802	ExLRT Standard Measurement (P/B 201)
05-56-03-200-801	Loop Resistance Measurement (P/B 201)
05-56-04-200-801	Joint Resistance Measurement (P/B 201)
05-56-05-200-801	Loop Resistance and Joint Resistance Measurement (P/B 201)
SWPM 20	Standard Wiring Practices Manual

C. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-1636	Tester - Loop Resistance (LRT "-1" for checks up to & including 4 years ONLY, LRT "-2 & -3" applicable for all HIRF/FQIS check/inspection intervals) Part #: 906-10246-3 Supplier: 3X2T2 Opt Part #: 906-10246-1 Supplier: 3X2T2 Opt Part #: 906-10246-2 Supplier: 3X2T2
SPL-18565	Tester - Loop Resistance, MK Part #: XLR-9703-01 Supplier: KC432 Part #: XLR-9703-02 Supplier: KC432

D. Location Zones

Zone	Area
311	Area Aft of Pressure Bulkhead - Left
324	Vertical Fin - Rear Spar To Trailing Edge

E. Access Panels

Number	Name/Location
311BL	Stabilizer Trim Access Door
324JL	Vertical Fin, Access

F. Prepare for the procedure

SUBTASK 05-55-46-970-011

(1) Make a copy of the data sheet to record data during the task. (Figure 605)

SUBTASK 05-55-46-970-012

(2) Boeing requests that all data recorded while doing this procedure be submitted to The Boeing Company for engineering analysis.

(a) Send the data to one of the following addresses:

ECCN 9E991 BOEING PROPRIETARY - See title page for details

1) Electronically: MTCProgLHIRFTaskCardData@boeing.com

2) By Mail : "The Boeing Company, Attention: Manager, Lightning / HIRF, Mail Code: MC 110-SC15, BLDG 80, 2201 Seal Beach Blvd., Seal Beach, CA USA 90740, USA".

3) By Fax: 206-655-4991.

NOTE: Data sent will help Boeing understand the reliability of the components and will be used to improve the maintenance program.

SUBTASK 05-55-46-010-006

(3) Open these access panels:

Number	Name/Location
311BL	Stabilizer Trim Access Door
324JL	Vertical Fin, Access

G. Procedure

SUBTASK 05-55-46-720-006

(1) Do the functional check of the wire bundle shielding.

NOTE: This step checks the wire bundle shielding for the scheduled maintenance check. This step also checks the wire bundle shielding after any repair is done with the wire bundle or connector.

(a) Do this task: Loop Resistance Measurement, TASK 05-56-03-200-801 or Loop Resistance and Joint Resistance Measurement, TASK 05-56-05-200-801 for each wire bundle listed in the Table.

NOTE: In the case of multiple wire bundles going to/from a connector, make sure the coupler is only around the desired bundle. This may require removing (and replacing) wire ties to separate the bundles enough for coupler connection.

1) Record the measured value to the data sheet.

2) Make sure that the measured value is within the MIN/MAX value range listed in the data sheet.

3) If the measured value is not within the MIN/MAX value range, do the troubleshooting step below for the wire bundle shielding failure.

4) This step is complete when all wire bundles listed in the Table were tested and passed.

SUBTASK 05-55-46-810-005

(2) Do the troubleshooting step for the wire bundle shielding.

NOTE: Perform this step only if the measured value of the Functional Check of the wire bundle shielding is not within the MIN/MAX value range.

NOTE: Record all the measurement data to the data sheet. This should include both initial and final values. Also record the troubleshooting steps taken to the RETEST MEASURED VALUE/COMMENTS column.

(a) If the wire bundle shield resistance is less than the MIN value, do these steps:

1) Check the test setup.

a) Make sure that the couplers are only around the desired wire bundle and closed properly.

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2) If the test setup is OK, check the LRT operation, do this task: LRT Lid Standard Measurement, TASK 05-56-02-200-801 or ExLRT Standard Measurement, TASK 05-56-02-200-802.

3) If no problem is found, check the entire length of the wire bundle.

a) Look for signs of chafing or damage to the wire bundle that can cause the shield to short to structure.

NOTE: An example might be an area where bundle insulation has degraded and a portion of the shield is exposed and making contact with structure at an intermediate point in the bundle length. Another might be some metallic object penetrating the insulation and making contact between the shield and structure.

b) If a problem is found, repair or replace in accordance with the SWPM 20.

4) If no defects are found with the wire bundle and the loop resistance value is still less than the MIN value, record this value and contact Boeing for further support.

(b) If the wire bundle shield loop resistance is greater than the MAX value, do this step:

1) Measure the joint resistance across the connector from the ground terminal to primary structure Joint Resistance Measurement, TASK 05-56-04-200-801 or Loop Resistance and Joint Resistance Measurement, TASK 05-56-05-200-801 for each wire bundle listed in the table below for applicable connectors.

a) If joint value measured is greater than maximum joint resistance value in data table listed in the Joint Resistance Measurement, TASK 05-56-04-200-801 or Loop Resistance and Joint Resistance Measurement, TASK 05-56-05-200-801, repair in accordance with the SWPM 20.

b) If joint value measured is not greater than maximum joint resistance value in data table, record this value and contact Boeing for further support.

(c) After the wire bundle or connector is repaired, do the Functional Check of the wire bundle shielding again on this wire bundle.

SUBTASK 05-55-46-800-005

(3) The connectors listed in Table 609 are used for the steps above.

Table 609/05-55-46-993-805 Rudder Control Actuator Connectors (MRB 20-180-00 and 20–181–00)

Wire Bundle	Connector	WDM	Mate With Equipment
W7381	D11617	22–11–81	M02446
W7383	D11619	22–11–81	M02446
W7381	D45501P	22–11–81	AB1050L
W7383	D45503P	22–11–81	AB1050R

H. Put the Airplane Back to Its Usual Condition

SUBTASK 05-55-46-410-006

(1) Close these access panels:

Number	Name/Location
311BL	Stabilizer Trim Access Door
324JL	Vertical Fin, Access

END OF TASK

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PLANE:	
DATE:	
TECHNICIAN:	

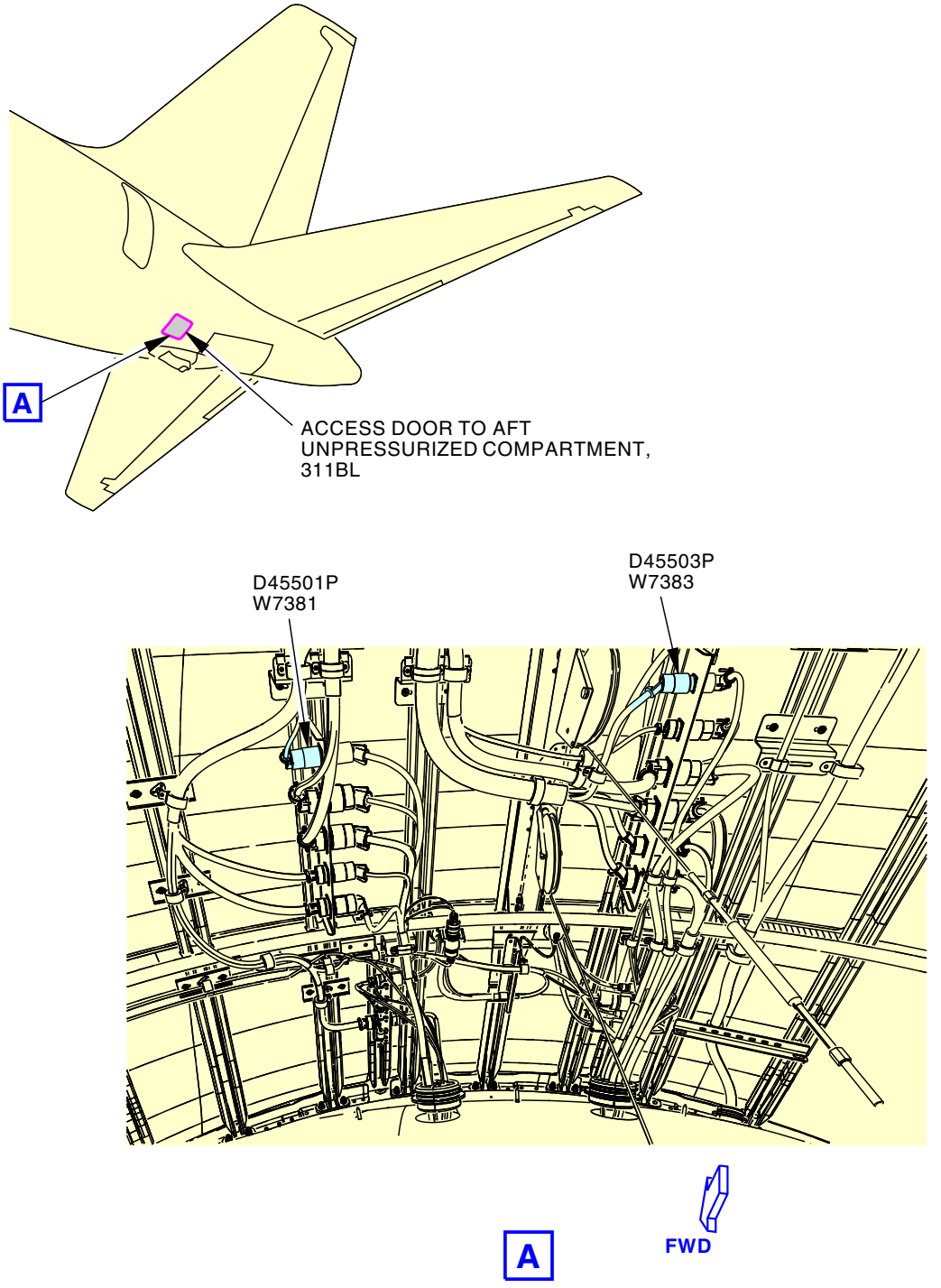
BUNDLE NUMBER	CONNECTOR NUMBER	MEASURED LOOP RESISTANCE VALUE (mΩ)	MIN/MAX VALUE (mΩ)	PASS FAIL	RETEST MEASURED VALUE/COMMENTS
W7381	D11617		14/33		
W7383	D11619		14/33		
W7381	D45501P		16/38		
W7383	D45503P		19/45		

DATA SHEET

2790027 S0000634697_V1

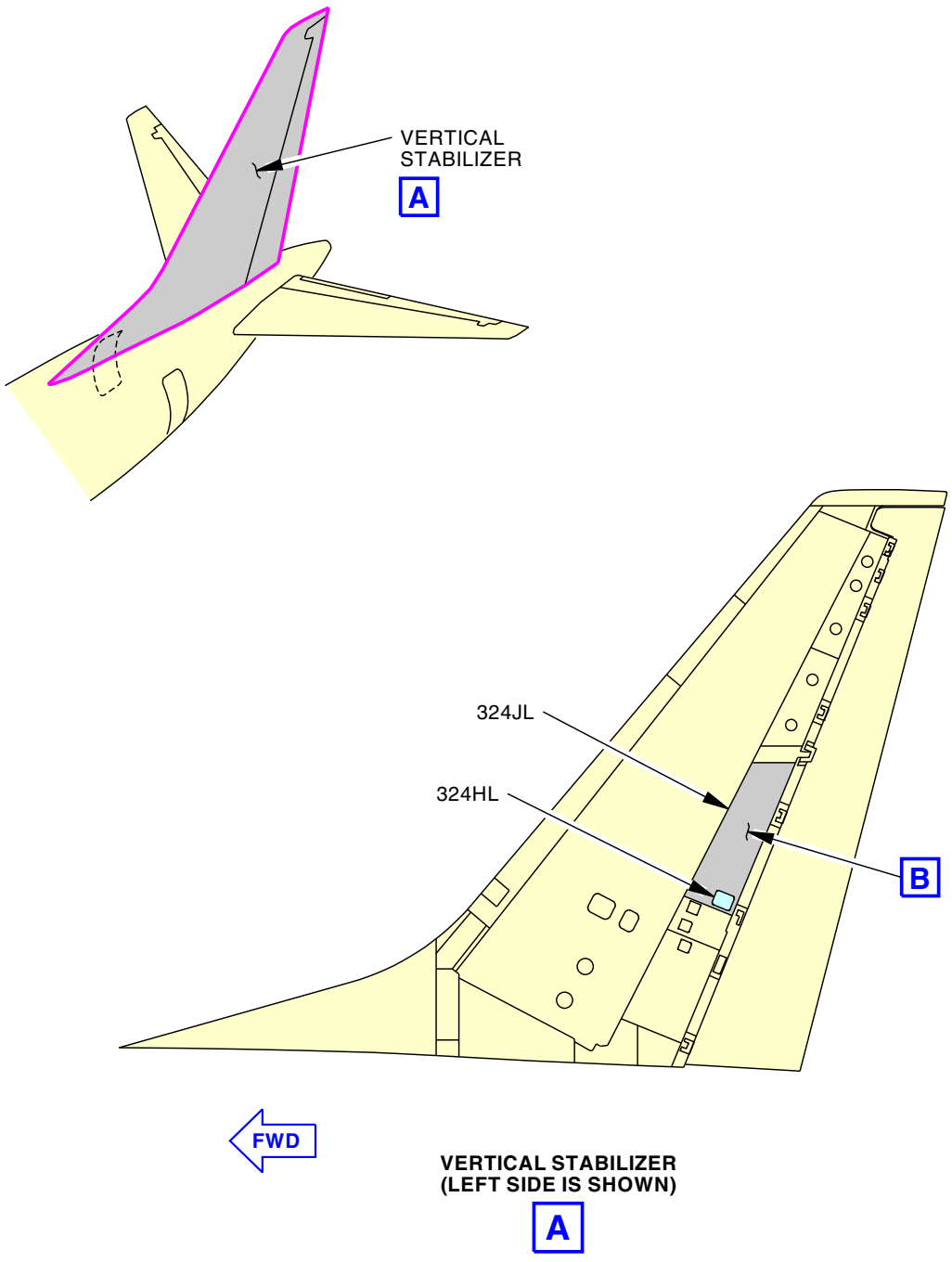
Loop Resistance Test of Wire Bundle - Rudder Control Actuator (MRB 20-180-00 and 20-181-00) - Data Sheet
Figure 605/05-55-46-990-811

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Loop Resistance Test of Wire Bundle - Rudder Control Actuator (MRB 20-180-00 and 20-181-00) - Connector Location
Figure 606/05-55-46-990-812 (Sheet 1 of 3)

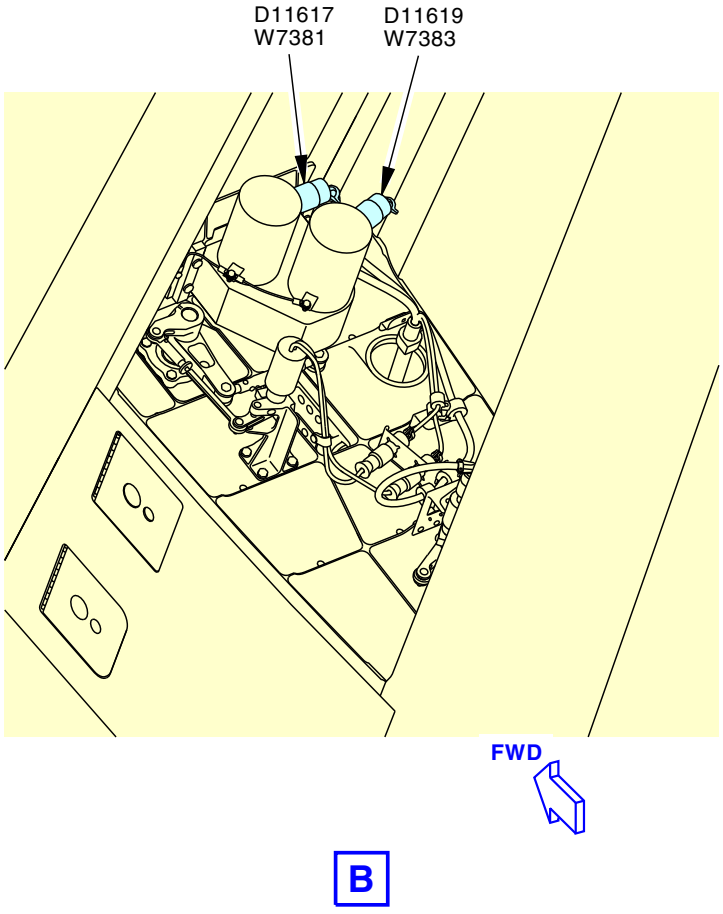
ECCN 9E991 BOEING PROPRIETARY - See title page for details



2790120 S0000634704_V1

Loop Resistance Test of Wire Bundle - Rudder Control Actuator (MRB 20-180-00 and 20-181-00) - Connector Location
Figure 606/05-55-46-990-812 (Sheet 2 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



2790303 S0000634705_V1

Loop Resistance Test of Wire Bundle - Rudder Control Actuator (MRB 20-180-00 and 20-181-00) - Connector Location
Figure 606/05-55-46-990-812 (Sheet 3 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-55-46-280-808

7. Loop Resistance Test Wire Bundle - Vertical Stabilizer (MRB 20-184-00)

(Figure 607)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) The loop resistance tester, SPL-1636 or the MK loop resistance tester, SPL-18565 is required for this task.

B. References

Reference	Title
05-56-02-200-801	LRT Lid Standard Measurement (P/B 201)
05-56-02-200-802	ExLRT Standard Measurement (P/B 201)
05-56-03-200-801	Loop Resistance Measurement (P/B 201)
05-56-04-200-801	Joint Resistance Measurement (P/B 201)
05-56-05-200-801	Loop Resistance and Joint Resistance Measurement (P/B 201)
SWPM 20	Standard Wiring Practices Manual

C. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-1636	Tester - Loop Resistance (LRT "-1" for checks up to & including 4 years ONLY, LRT "-2 & -3" applicable for all HIRF/FQIS check/inspection intervals) Part #: 906-10246-3 Supplier: 3X2T2 Opt Part #: 906-10246-1 Supplier: 3X2T2 Opt Part #: 906-10246-2 Supplier: 3X2T2
SPL-18565	Tester - Loop Resistance, MK Part #: XLR-9703-01 Supplier: KC432 Part #: XLR-9703-02 Supplier: KC432

D. Location Zones

Zone	Area
324	Vertical Fin - Rear Spar To Trailing Edge

E. Access Panels

Number	Name/Location
324DL	Trailing Edge Access

F. Prepare for the procedure

SUBTASK 05-55-46-720-013

(1) Boeing requests that all data recorded while doing this procedure be submitted to The Boeing Company for engineering analysis.

(a) Send the data to one of the following addresses:

1) Electronically: MTCProgLHIRFTaskCardData@boeing.com

2) By Mail : "The Boeing Company, Attention: Manager, Lightning / HIRF, Mail Code: MC 110-SC15, BLDG 80, 2201 Seal Beach Blvd., Seal Beach, CA USA 90740, USA".

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3) By Fax: 206-655-4991.

NOTE: Data sent will help Boeing understand the reliability of the components and will be used to improve the maintenance program.

SUBTASK 05-55-46-010-008

(2) Open this access panel:

Number	Name/Location
324DL	Trailing Edge Access

G. Loop Resistance Test of Wire Bundle

SUBTASK 05-55-46-720-014

(1) Do the functional check of the wire bundle shielding.

NOTE: This step checks the wire bundle shielding for the scheduled maintenance check. This step also checks the wire bundle shielding after any repair is done with the wire bundle or connector.

(a) Do this task: Loop Resistance Measurement, TASK 05-56-03-200-801 or Loop Resistance and Joint Resistance Measurement, TASK 05-56-05-200-801 for each wire bundle listed in the Table 610.

NOTE: In the case of multiple wire bundles going to/from a connector, make sure that the coupler is only around the desired bundle. This may require removing (and replacing) wire ties to separate the bundles enough for coupler connection.

1) Record the measured value to the data sheet (Table 610).

Table 610/05-55-46-993-818 Wire Bundle Loop Resistance Values - Vertical Stabilizer (MRB 20-184-00)

Plane:					
Date:					
Technician:					
Bundle Number	**Connector Number**	**Measured Loop Resistance Value (mΩ)**	**Min/Max Value (mΩ)**	**Pass Fail**	**Retest Measured Value/Comments**
W6136	D10197		24/57		

2) Make sure that the measured value is within the MIN/MAX value range listed in the data sheet (Table 610).

3) If the measured value is not within the MIN/MAX value range, do the troubleshooting step below for the wire bundle shielding failure.

4) This step is complete when all wire bundles listed in the Table 610 were tested and passed.

SUBTASK 05-55-46-810-011

(2) Do the troubleshooting step for the wire bundle shielding.

NOTE: Perform this step only if the measured value of the Functional Check of the wire bundle shielding is not within the MIN/MAX value range.

NOTE: Record all the measurement data to the data sheet. This should include both initial and final values. Also record the troubleshooting steps taken to the RETEST MEASURED VALUE/COMMENTS column.

(a) If the wire bundle shield resistance is less than the MIN value, do these steps:

1) Check the test setup.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

a) Make sure that the couplers are only around the desired wire bundle and closed properly.

2) If the test setup is OK, check the LRT operation, do this task: LRT Lid Standard Measurement, TASK 05-56-02-200-801 or ExLRT Standard Measurement, TASK 05-56-02-200-802.

3) If no problem is found, check the entire length of the wire bundle.

a) Look for signs of chafing or damage to the wire bundle that can cause the shield to short to structure.

NOTE: An example might be an area where bundle insulation has degraded and a portion of the shield is exposed and making contact with structure at an intermediate point in the bundle length. Another might be some metallic object penetrating the insulation and making contact between the shield and structure.

b) If a problem is found, repair or replace in accordance with the SWPM 20.

4) If no defects are found with the wire bundle and the loop resistance value is still less than the MIN value, record this value and contact Boeing for further support.

(b) If the wire bundle shield loop resistance is greater than the MAX value, do this step:

1) Measure the joint resistance across the connector from the ground terminal to primary structure Joint Resistance Measurement, TASK 05-56-04-200-801 or Loop Resistance and Joint Resistance Measurement, TASK 05-56-05-200-801 for each wire bundle listed in the table below for applicable connectors.

a) If joint value measured is greater than maximum joint resistance value in data table listed in the Joint Resistance Measurement, TASK 05-56-04-200-801 or Loop Resistance and Joint Resistance Measurement, TASK 05-56-05-200-801, repair in accordance with the SWPM 20.

b) If joint value measured is not greater than maximum joint resistance value in data table, record this value and contact Boeing for further support.

(c) After the wire bundle or connector is repaired, do the Functional Check of the wire bundle shielding again on this wire bundle.

SUBTASK 05-55-46-800-007

(3) The connectors listed in Table 611 are used for the steps above.

Table 611/05-55-46-993-817 Power Control Unit Connectors (MRB 20-184-00)

Wire Bundle	Connector	WDM	Mate With Equipment
W6136	D10197	27-23-11, 27-25-11	M175

H. Put the Airplane Back to Its Usual Condition

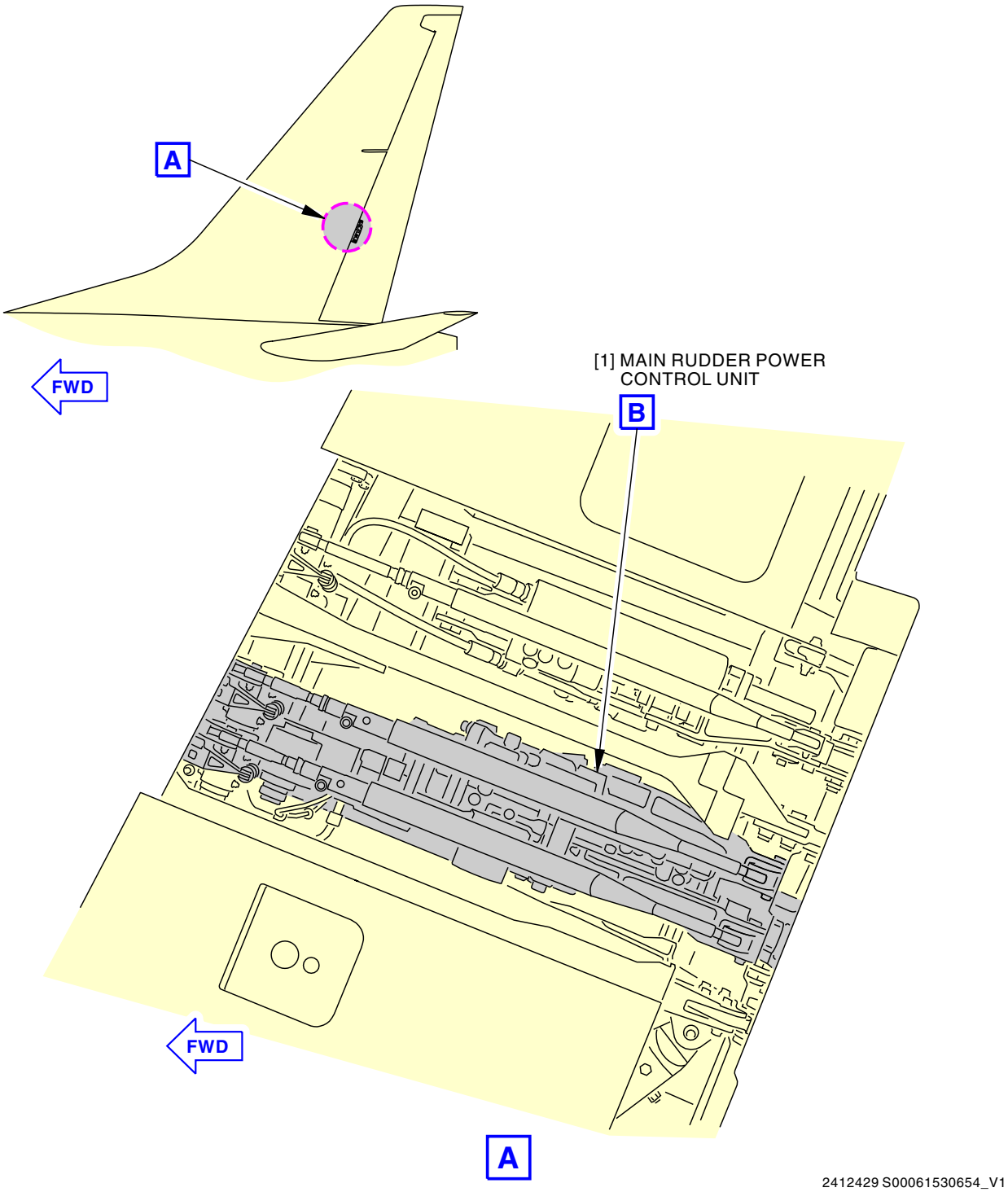
SUBTASK 05-55-46-410-008

(1) Close this access panel:

Number	Name/Location
324DL	Trailing Edge Access

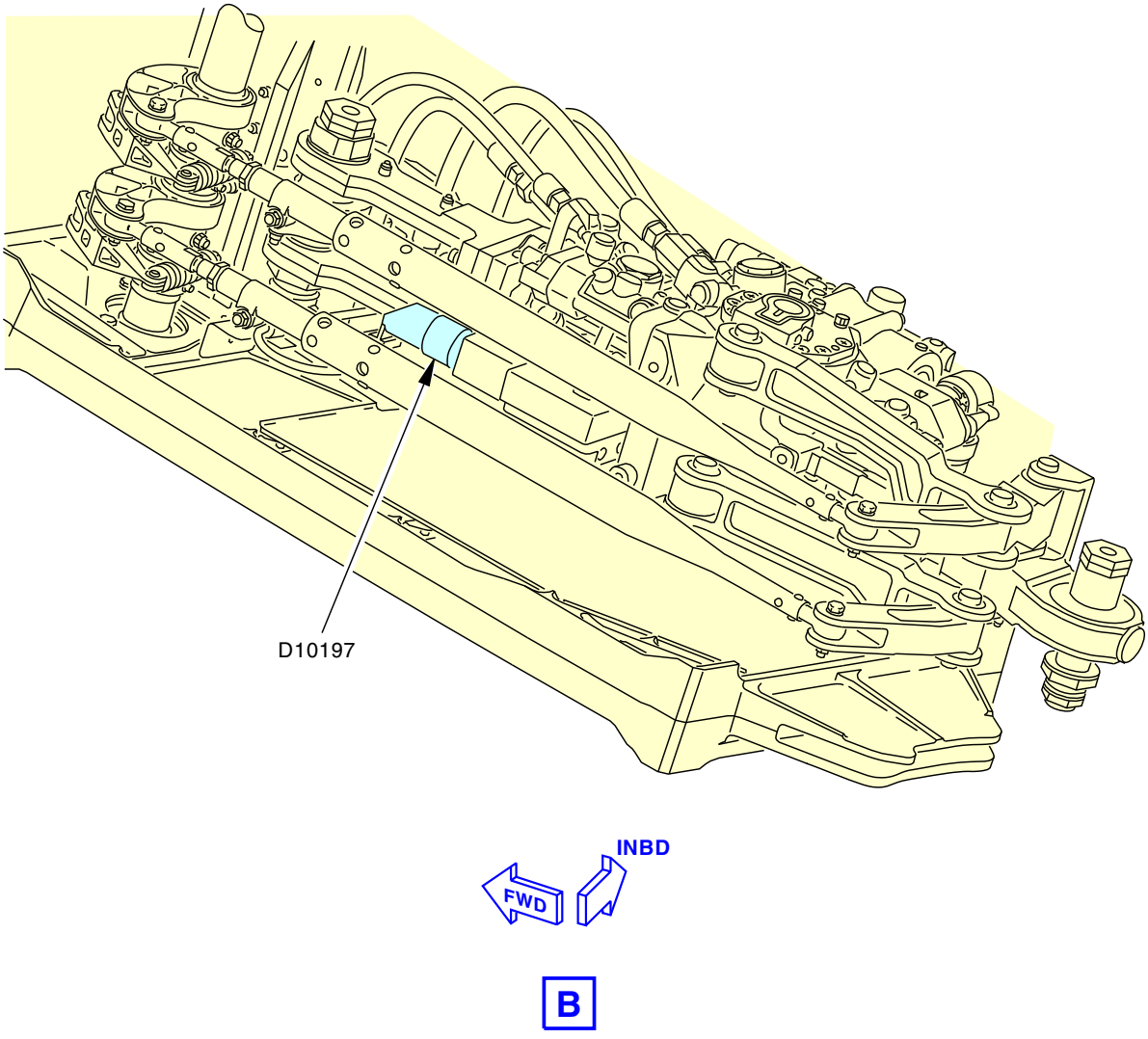
END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Loop Resistance Test Wire Bundle - Vertical Stabilizer (MRB 20-184-00)
Figure 607/05-55-46-990-815 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



2939867 S0000716140_V1

Loop Resistance Test Wire Bundle - Vertical Stabilizer (MRB 20-184-00)
Figure 607/05-55-46-990-815 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

PRESSURE VESSEL WIRE BUNDLES - INSPECTION/CHECK

1. General

A. This procedure has these tasks:

(1) Functionally check the Lightning/HIRF protection components in the LRRA Antenna installation.

TASK 05-55-47-280-801

2. Loop Resistance Test of Wire Bundle - LRRA (MRB 20-153-00)

(Figure 601)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This procedure is a Functional check of the Lightning/HIRF protection components in the LRRA antenna for electrical bond degradation using the Loop Resistance Tester (LRT).

(2) For ease of access, perform the functional check of the LRRA wire bundles at the EE bay area.

(3) The loop resistance tester, SPL-1636, or MK loop resistance tester, SPL-18565, is required for this task.

B. References

Reference	Title
05-56-02-200-801	LRT Lid Standard Measurement (P/B 201)
05-56-02-200-802	ExLRT Standard Measurement (P/B 201)
05-56-03-200-801	Loop Resistance Measurement (P/B 201)
05-56-04-200-801	Joint Resistance Measurement (P/B 201)
05-56-05-200-801	Loop Resistance and Joint Resistance Measurement (P/B 201)
34-33-11 P/B 401	LOW RANGE RADIO ALTIMETER ANTENNA - REMOVAL/INSTALLATION
SWPM Chapter 20	Standard Wiring Practices Manual

C. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-1636	Tester - Loop Resistance (LRT "-1" for checks up to & including 4 years ONLY, LRT "-2 & -3" applicable for all HIRF/FQIS check/inspection intervals) Part #: 906-10246-3 Supplier: 3X2T2 Opt Part #: 906-10246-1 Supplier: 3X2T2 Opt Part #: 906-10246-2 Supplier: 3X2T2
SPL-18565	Tester - Loop Resistance, MK Part #: XLR-9703-01 Supplier: KC432 Part #: XLR-9703-02 Supplier: KC432

D. Location Zones

Zone	Area
117	Electrical and Electronics Compartment - Left
118	Electrical and Electronics Compartment - Right

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(Continued)

Zone	Area
121	Forward Cargo Compartment - Left
122	Forward Cargo Compartment - Right

E. Access Panels

Number	Name/Location
117A	Electronic Equipment Access Door
117AW	Equipment Access Door Cover

F. Prepare for the Loop Resistance Test

SUBTASK 05-55-47-970-004

(1) Boeing requests that all data recorded while doing this procedure be submitted to The Boeing Company for engineering analysis.

(a) Send the data to one of the following addresses:

1) Electronically: MTCProgLHIRFTaskCardData@boeing.com

2) By Mail : "The Boeing Company, Attention: Manager, Lightning / HIRF, Mail Code: MC 110-SC15, BLDG 80, 2201 Seal Beach Blvd., Seal Beach, CA USA 90740, USA".

3) By Fax: 206-655-4991.

NOTE: Data sent will help Boeing understand the reliability of the components and will be used to improve the maintenance program.

SUBTASK 05-55-47-010-002

(2) Open these access panels only when the troubleshooting task is required:

Number	Name/Location
117A	Electronic Equipment Access Door
117AW	Equipment Access Door Cover

G. Loop Resistance Test of Wire Bundle

SUBTASK 05-55-47-720-002

(1) Do the functional check of the wire bundle shielding.

NOTE: This step checks the wire bundle shielding for the scheduled maintenance check. This step also checks the wire bundle shielding after any repair is done with the wire bundle or connector.

(a) For each wire bundle listed in the Table 601, do this task: Loop Resistance Measurement, TASK 05-56-03-200-801 or Loop Resistance and Joint Resistance Measurement, TASK 05-56-05-200-801.

NOTE: In the case of multiple wire bundles going to/from a connector, make sure that the coupler is only around the desired bundle. This may require removing (and replacing) wire ties to separate the bundles enough for coupler connection.

1) Record the measured value to the data sheet (Table 601).

Table 601/05-55-47-993-804 Wire Bundle Loop Resistance Values - LRRA

Plane:		
Date:		
Technician:		

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Table 601/05-55-47-993-804 Wire Bundle Loop Resistance Values - LRRA (Continued)

Bundle Number	Connector Number	Measured Loop Resistance Value (mΩ)	Min/Max Value (mΩ)	Pass Fail	Retest Measured Value/Comments
W5295	D13993A		19-51		
W5293	D13993B		19-51		
W5299	D13995A		19-51		
W5297	D13995B		19-51		

2) Make sure that the measured value is within the MIN/MAX value range listed in the data sheet.

3) If the measured value is not within the MIN/MAX value range, do the troubleshooting step below for the wire bundle shielding failure.

4) This step is complete when all wire bundles listed in the Table 601 were tested and passed.

SUBTASK 05-55-47-800-001

(2) Connectors listed in Table 602 are used for the steps above.

Table 602/05-55-47-993-801 LRRA Connectors (MRB 20-153-00)

WIRE BUNDLE	CONNECTOR	WDM	PNL OR MODULE
W5293	D13993B	34-33-11	M1735
W5295	D13993A	34-33-11	M1735
W5297	D13995B	34-33-21	M1736
W5299	D13995A	34-33-21	M1736

SUBTASK 05-55-47-810-001

(3) Procedure to do the troubleshooting step for the wire bundle shielding:

NOTE: Perform this step only if the measured value of the Functional Check of the wire bundle shielding is not within the MIN/MAX value range.

(a) Record all the measurement data to the data sheet.

NOTE: This should include both initial and final values.

1) Record the troubleshooting steps taken to the RETEST MEASURED VALUE/COMMENTS column.

(b) If the wire bundle shield resistance is less than the MIN value, do the following:

1) Check the test setup.

a) Make sure that the couplers are only around the desired wire bundle and closed properly.

2) If the test setup is OK, check the operation of the LRT (TASK 05-56-02-200-801 or TASK 05-56-02-200-802).

ECCN 9E991 BOEING PROPRIETARY - See title page for details

3) If no problem is found, check the entire length of the wire bundle. Look for signs of chafing or damage to the wire bundle that can cause the shield to short to structure.

NOTE: An example might be an area where bundle insulation has degraded and a portion of the shield is exposed and making contact with structure at an intermediate point in the bundle length. Another might be some metallic object penetrating the insulation and making contact between the shield and structure.

a) If a problem is found, repair or replace in accordance with the SWPM Chapter 20.

4) If no defects are found with the wire bundle and the loop resistance value is still less than the MIN value, record this value and contact Boeing for further support.

(c) If the wire bundle shield loop resistance is greater than the MAX value, do the troubleshooting at the antenna end first (Table 603).

NOTE: When the loop resistance is high, the failure likely is at the antenna end.

1) On the coax connector from plug to airplane structure, do this task: Joint Resistance Measurement, TASK 05-56-04-200-801 or Loop Resistance and Joint Resistance Measurement, TASK 05-56-05-200-801.

a) Make sure that the joint resistance value is not greater than 0.0085 ohm (8.5 milliohms).

b) If the joint resistance value is greater than 0.0085 ohm (8.5 milliohms), do the following:

<1> On the coax connector from plug to receptacle, do this task: Joint Resistance Measurement, TASK 05-56-04-200-801 or Loop Resistance and Joint Resistance Measurement, TASK 05-56-05-200-801.

<2> Make sure that the joint resistance value from plug to receptacle is not greater than 0.005 ohm (5 milliohms).

<3> If the joint resistance value is greater than 0.005 ohm (5 milliohms), repair in accordance with the SWPM Chapter 20.

<4> On the coax connector from receptacle to airplane structure, if the joint resistance value is not greater than 0.005 ohm (5 milliohms), do this task: Joint Resistance Measurement, TASK 05-56-04-200-801 or Loop Resistance and Joint Resistance Measurement, TASK 05-56-05-200-801.

<5> Make sure that the joint resistance value is not greater than 0.0035 ohm (3.5 milliohms).

<a> If the joint resistance value is greater than 0.0035 ohm (3.5 milliohms), replace the antenna (PAGEBLOCK 34-33-11/401).

Table 603/05-55-47-993-805 LRRA Connector Troubleshooting (MRB 20-153-00)

WIRE BUNDLE	CONNECTOR AT LRRA END	CONNECTOR AT ANTENNA END	WDM
W5293	D13993B	D3671	34-33-11
W5295	D13993A	D3675	34-33-11
W5297	D13995B	D3673	34-33-21
W5299	D13995A	D3677	34-33-21

ECCN 9E991 BOEING PROPRIETARY - See title page for details

c) If the joint resistance value is not greater than 0.0085 ohm (8.5 milliohms), move to connector at the LRRA transceiver end of same wire bundle.

(d) After the wire bundle or connector is repaired, do the Functional Check of the wire bundle shielding again on this wire bundle.

H. Put the Airplane Back to Its Usual Condition

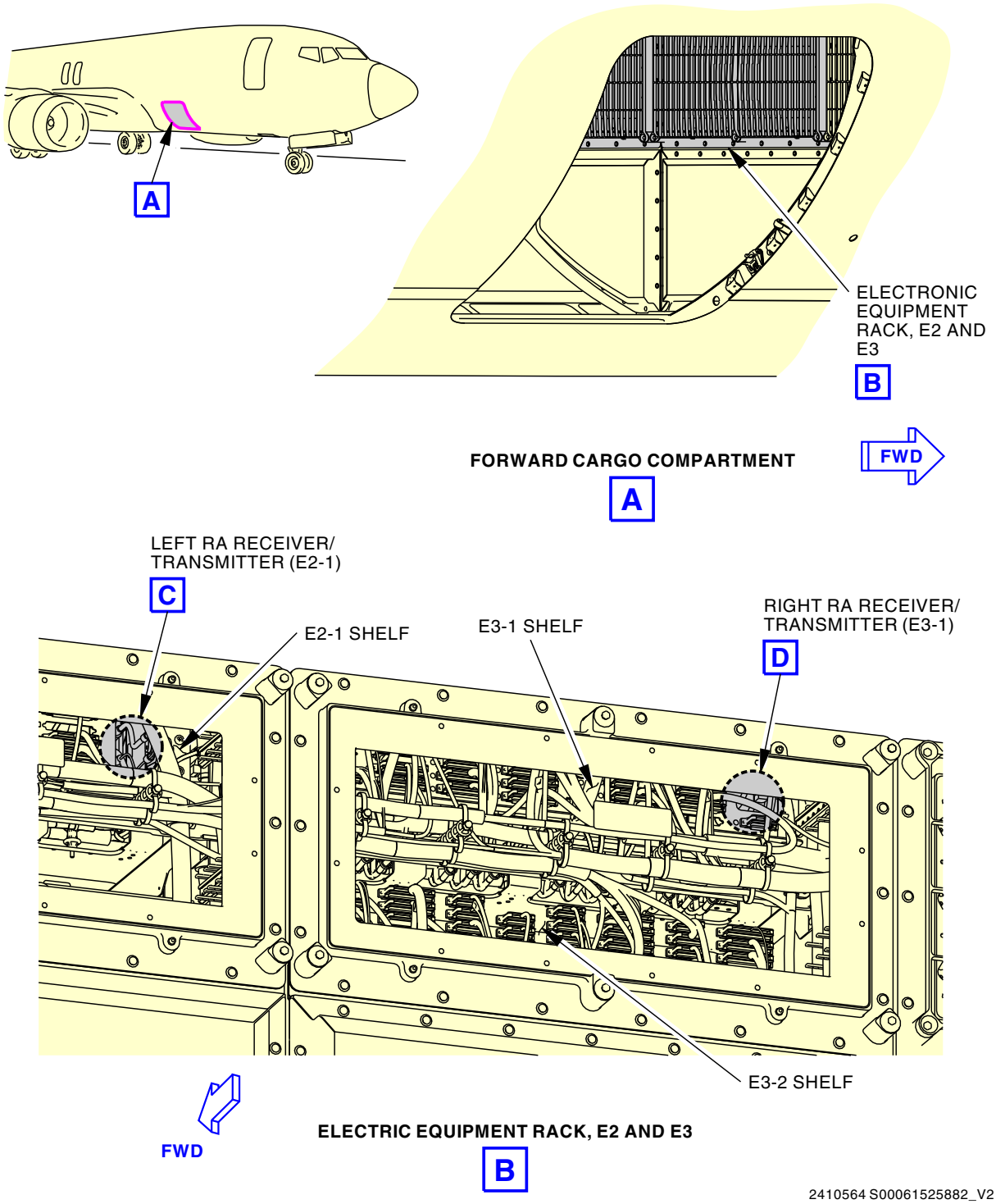
SUBTASK 05-55-47-410-002

(1) Make sure that these access panels are closed:

Number	Name/Location
117A	Electronic Equipment Access Door
117AW	Equipment Access Door Cover

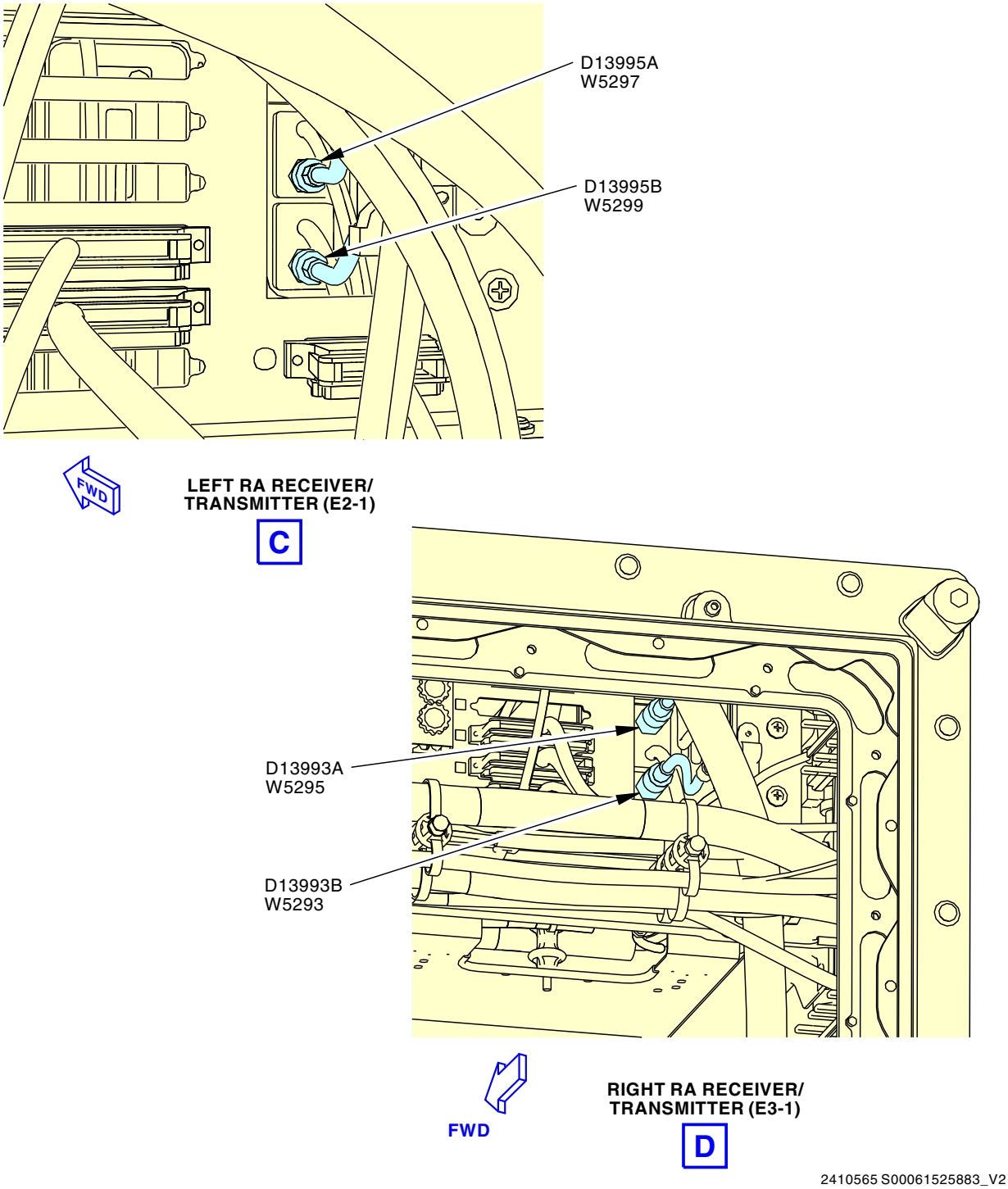
END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Loop Resistance Test of Wire Bundle - LRRA - Connector Location
Figure 601/05-55-47-990-802 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



Loop Resistance Test of Wire Bundle - LRRA - Connector Location
Figure 601/05-55-47-990-802 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

HIRF/LIGHTNING - FQIS WIRING AND BONDING - INSPECTION/CHECK

1. General

A. This procedure contains scheduled maintenance task data.

B. This procedure contains tasks that inspect the bonding of the Fuel Quantity Indicating System (FQIS) wiring connectors at the fuel tank receptacles and inboard disconnect panels.

C. Tasks contained in this procedure are:

(1) FQIS Wiring And Bonding - Inspection

NOTE: This task checks the shielding and connector bonding of the Fuel Quantity Indicating System out-tank wire bundles at the spar penetrations.

(2) FQIS - Out Tank Connectors - Electrical Bonding Resistance Check

(3) FQIS Wire Bundles - Fault isolation

NOTE: This task is only used when the loop resistance value is out-of-range. During the test, record the Loop Resistance and Joint Resistance values to Data sheets.

TASK 05-55-54-200-801

2. FQIS Wiring And Bonding - Inspection

(Figure 601, Figure 602, Figure 603)

NOTE: This procedure is a scheduled maintenance task.

A. General

(1) This task has one or more steps which are a means to satisfy Airworthiness Limitation Instruction (ALI) requirements. An ALI note will follow the step to which it applies. Any step or sub-step that precedes or follows an ALI identified step is not subject to the ALI requirement.

NOTE: This is applicable to Airworthiness Limitation 28-AWL-03.

(2) To inspect the FQIS connectors at the fuel tank spar penetrations, a ladder and safety equipment may be required.

(3) You will do Loop Resistance measurements on the wire bundles at the connectors listed in (Table 602) at the tank end of the bundles.

NOTE: If the Loop Resistance measurement is not within limits, fault isolation on the tested wire bundle is required.

(4) Boeing requests that all data recorded while doing this procedure be submitted to the Boeing Company for engineering analysis. Send the data to one of the following addresses:

(a) Electronically: MTCProgLHIRFTaskCardData@boeing.com.

(b) By mail : "The Boeing Company, Attention: Manager, Lightning / HIRF, Mail Code: MC 2J-51, BLDG 11-14N, 2925 S. 112th St., Tukwila, WA 98108, USA".

(c) By Fax: 206-662-3672.

NOTE: Data sent will help Boeing understand the reliability of the components and will be used to improve the maintenance program.

B. References

Reference	Title
05-00-00-910-801	Airworthiness Limitation Precautions (P/B 201)
05-56-02-200-801	LRT Lid Standard Measurement (P/B 201)
05-56-03-200-801	Loop Resistance Measurement (P/B 201)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(Continued)

Reference	Title
27-81-00-080-801	Leading Edge Flap and Slat Locks Removal (P/B 201)
27-81-00-480-801	Leading Edge Flap and Slat Locks Installation (P/B 201)
27-81-00-860-803	Leading Edge Flaps and Slats Extension (P/B 201)
27-81-00-860-804	Leading Edge Flaps and Slats Retraction (P/B 201)
28-41-00-710-801	Fuel Quantity Indicating System - Operational Test (P/B 501)
32-00-01-480-801	Landing Gear Downlock Pins Installation (P/B 201)
SWPM Chapter 20	Standard Wiring Practices Manual

C. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-1636	Tester - Loop Resistance (LRT "-1" for checks up to & including 4 years ONLY, LRT "-2 & -3" applicable for all HIRF/FQIS check/inspection intervals) Part #: 906-10246-3 Supplier: 3X2T2 Opt Part #: 906-10246-1 Supplier: 3X2T2 Opt Part #: 906-10246-2 Supplier: 3X2T2

D. Location Zones

Zone	Area
133	Main Landing Gear Wheel Well, Body Station 663.75 to Body Station 727.00 - Left
510	Subzone - Left Wing: Leading Edge, Fwd of Front Spar, Inbd of Strut and Nacelle Gap Cover Area
610	Subzone - Right Wing: Leading Edge, Forward of Front Spar, Inboard of Nacelle Strut, Including Gap Cover Area

E. Prepare for the Inspection Procedure

SUBTASK 05-55-54-410-002

(1) Do this task: Landing Gear Downlock Pins Installation, TASK 32-00-01-480-801.

SUBTASK 05-55-54-010-002

(2) Do this step to get access to the bussing plug for No. 1 tank or No. 2 tank located on the front spar:

WARNING MAKE SURE THAT PERSONNEL AND EQUIPMENT STAY AWAY FROM THE LEADING EDGE SLATS, TRAILING EDGE FLAPS, AND DRIVE MECHANISMS. THE FLAPS, SLATS, AND DRIVE MECHANISMS MOVE QUICKLY. THIS CAN CAUSE INJURIES TO PERSONNEL AND DAMAGE TO EQUIPMENT.

(a) Operate the LE flaps to the Full Extend position (TASK 27-81-00-860-803).

ECCN 9E991 BOEING PROPRIETARY - See title page for details

WARNING MAKE SURE THAT YOU INSTALL THE LEADING EDGE FLAP AND SLAT ACTUATORS LOCKOUT SET TO PREVENT ACCIDENTAL OPERATION. THE LEADING EDGE FLAP AND SLAT CAN MOVE QUICKLY. THIS CAN CAUSE INJURY TO PERSONS AND DAMAGE TO EQUIPMENT.

1) Do this task: Leading Edge Flap and Slat Locks Installation, TASK 27-81-00-480-801.

SUBTASK 05-55-54-200-004

28-AWL-03: ALI

(3) To prepare the loop resistance tester, SPL-1636, (LRT) (BAE Systems Dallas Service Center (3X2T2), P/N 906-10246-2 or 906-10246-3 only), for use, do this task: LRT Lid Standard Measurement, TASK 05-56-02-200-801.

NOTE: ALI - Refer to the task: Airworthiness Limitation Precautions, TASK 05-00-00-910-801, for important Information on airworthiness limitation instructions (ALIs).

NOTE: This is applicable to Airworthiness Limitation 28-AWL-03.

F. FQIS Connector Wiring and Bonding Inspection

SUBTASK 05-55-54-760-005

28-AWL-03: ALI

(1) Do a Loop Resistance Measurement on every wire bundle listed in Table 602.

NOTE: ALI - Refer to the task: Airworthiness Limitation Precautions, TASK 05-00-00-910-801, for important Information on airworthiness limitation instructions (ALIs).

NOTE: This is applicable to Airworthiness Limitation 28-AWL-03.

NOTE: Typical LRT connections for the FQIS wire bundles are shown on: Figure 601.

28-AWL-03: ALI

(a) Put the LRT Drive and Sense couplers on the wire bundle before the point where the out-tank wire bundle shields breakout from the bundle, and do this task: Loop Resistance Measurement, TASK 05-56-03-200-801.

NOTE: ALI - Refer to the task: Airworthiness Limitation Precautions, TASK 05-00-00-910-801, for important Information on airworthiness limitation instructions (ALIs).

NOTE: This is applicable to Airworthiness Limitation 28-AWL-03.

(b) Record the value to the data sheet (Table 601).

Table 601/05-55-54-993-807 Wire Bundle Loop Resistance Values

Plane:					
Date:					
Technician:					
Bundle Number	Connector Number	Measured Loop Resistance Value (mΩ)	Min/Max Value (mΩ)	Pass Fail	Retest Measured Value/ Comments
W1140	D16352		12/36		
W1138	D16354		12/36		
W7580	D11316		7/22		

ECCN 9E991 BOEING PROPRIETARY - See title page for details

28-AWL-03: ALI

(c) Make sure the measured resistance value of the shield to ground termination is within the MIN/MAX values listed in the data sheet (Table 601).

NOTE: ALI - Refer to the task: Airworthiness Limitation Precautions, TASK 05-00-00-910-801, for important Information on airworthiness limitation instructions (ALIs).

NOTE: This is applicable to Airworthiness Limitation 28-AWL-03.

(d) If the measured loop resistance value is not within the MIN/MAX values listed in the data sheet, do this task: FQIS Wiring And Bonding - Fault Isolation, TASK 05-55-54-810-801.

(e) If the measured loop resistance value is within the MIN/MAX values, continue to test on the next wire bundle in the Table.

Table 602/05-55-54-993-804

WIRE BUNDLE NUMBER	CONNECTOR	CONN NUMBER	GROUND	WDM
W1140	LEFT MAIN TANK W/O DENSITOMETER	D16352	GD191-ST	28-41-11
W1138	RIGHT MAIN TANK W/O DENSITOMETER	D16354	GD193-ST	28-41-11
W7580	CENTER MAIN TANK W/O DENSITOMETER	D11316	GD3774-ST	28-41-11

SUBTASK 05-55-54-710-003

(2) After doing the loop resistance measurement, perform the visual check on the ground wire terminations, connectors, and backshells associated with the wire bundle and make sure they are hand tight, and that there is no evidence of gross degradation or accidental damage. Also, for connectors with a ground wire which goes from pigtail-to-backshell and ground stud, visually/physically inspect the pigtail-to-backshell terminations and make sure the pigtail is securely fastened to the connector backshell.

(a) If a loose connector or backshell is found, record that condition to the data sheet (Table 601). Repair in accordance with the (SWPM Chapter 20).

(b) If a loose connector or backshell is found and tightened, retest the wire bundle (FQIS Wiring And Bonding - Inspection, TASK 05-55-54-200-801).

(c) Make a note of that condition for future reference.

G. Put the Airplane Back to Its Usual Condition

SUBTASK 05-55-54-710-004

(1) If any FQIS wire bundles were disturbed during the accomplishment of this procedure, then do this task: Fuel Quantity Indicating System - Operational Test, TASK 28-41-00-710-801.

SUBTASK 05-55-54-080-001

WARNING

REMOVE THE LOCK FROM LEADING EDGE FLAP ACTUATOR CAREFULLY TO PREVENT ACCIDENTAL OPERATION OF THE LEADING EDGE FLAPS. THE LEADING EDGE FLAPS CAN MOVE QUICKLY. THIS CAN CAUSE INJURIES TO PERSONNEL, AND DAMAGE TO EQUIPMENT.

(2) Do this task: Leading Edge Flap and Slat Locks Removal, TASK 27-81-00-080-801.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 05-55-54-710-005

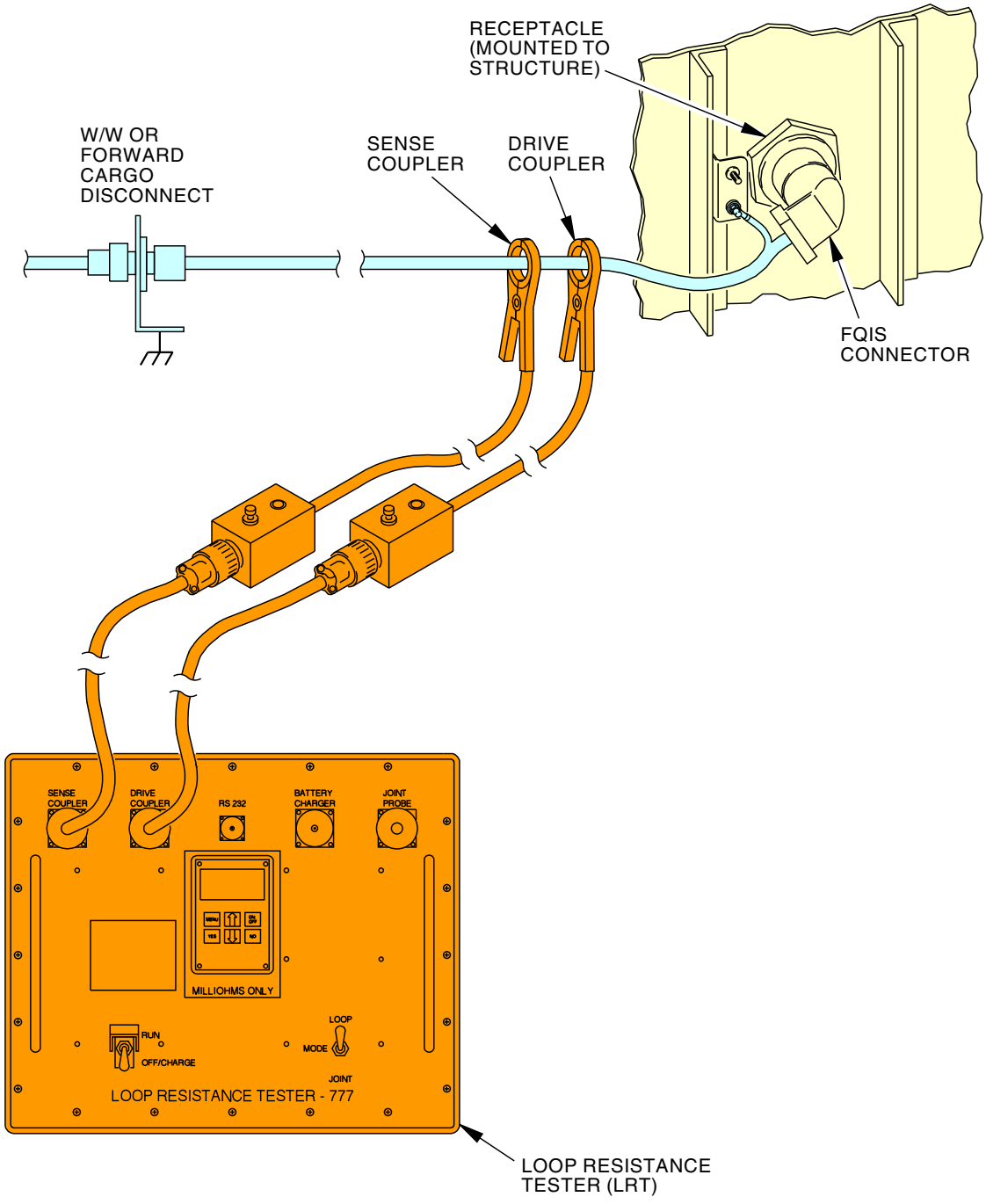
WARNING

MAKE SURE THAT PERSONNEL AND EQUIPMENT STAY AWAY FROM THE LEADING EDGE SLATS, TRAILING EDGE FLAPS, AND DRIVE MECHANISMS. THE FLAPS, SLATS, AND DRIVE MECHANISMS MOVE QUICKLY. THIS CAN CAUSE INJURIES TO PERSONNEL AND DAMAGE TO EQUIPMENT.

(3) Operate the LE flaps to the 0 detent and stowed (LE Flaps retracted) position (TASK 27-81-00-860-804).

END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details

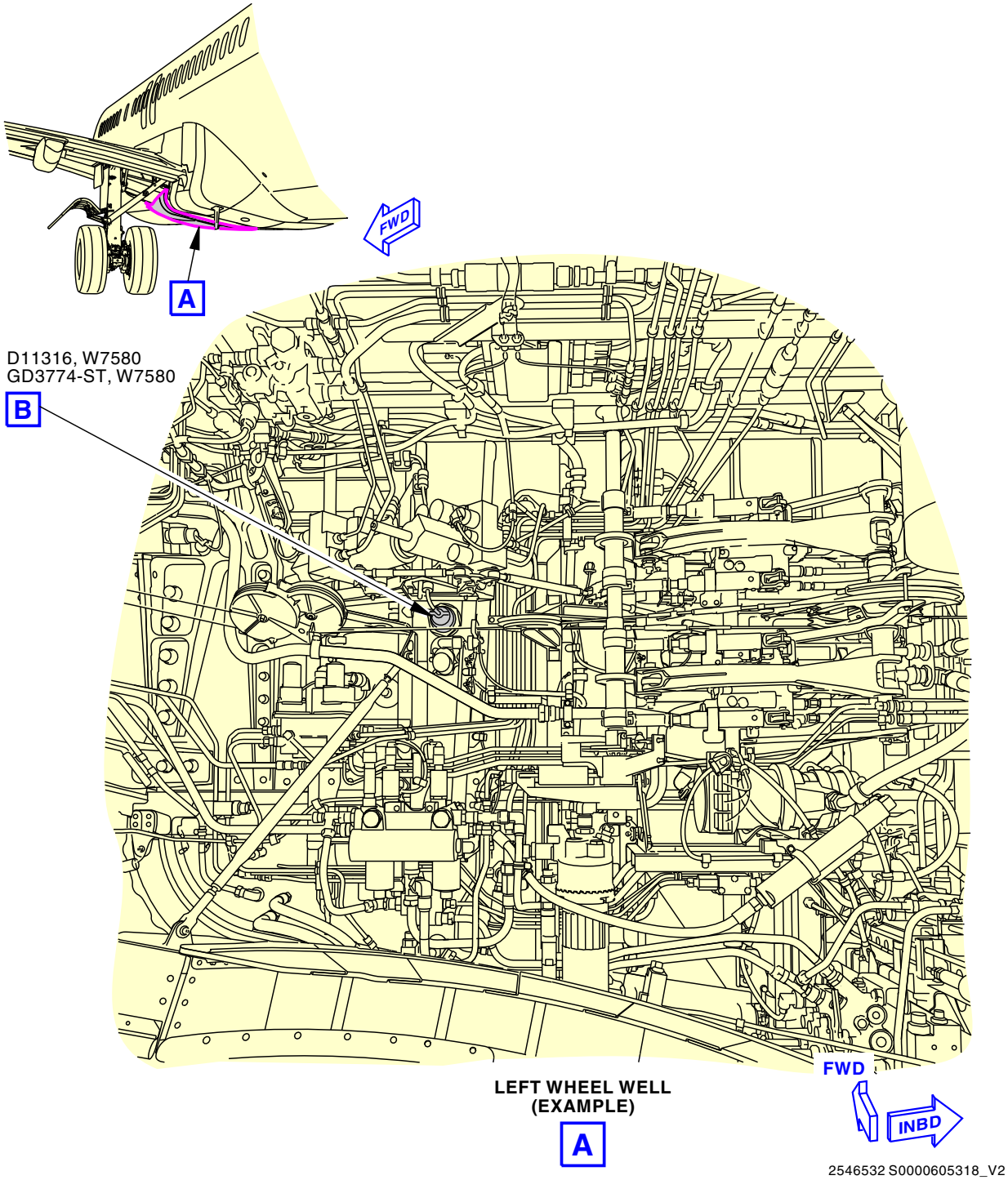


LOOP RESISTANCE TESTER CONNECTIONS - LOOP TEST

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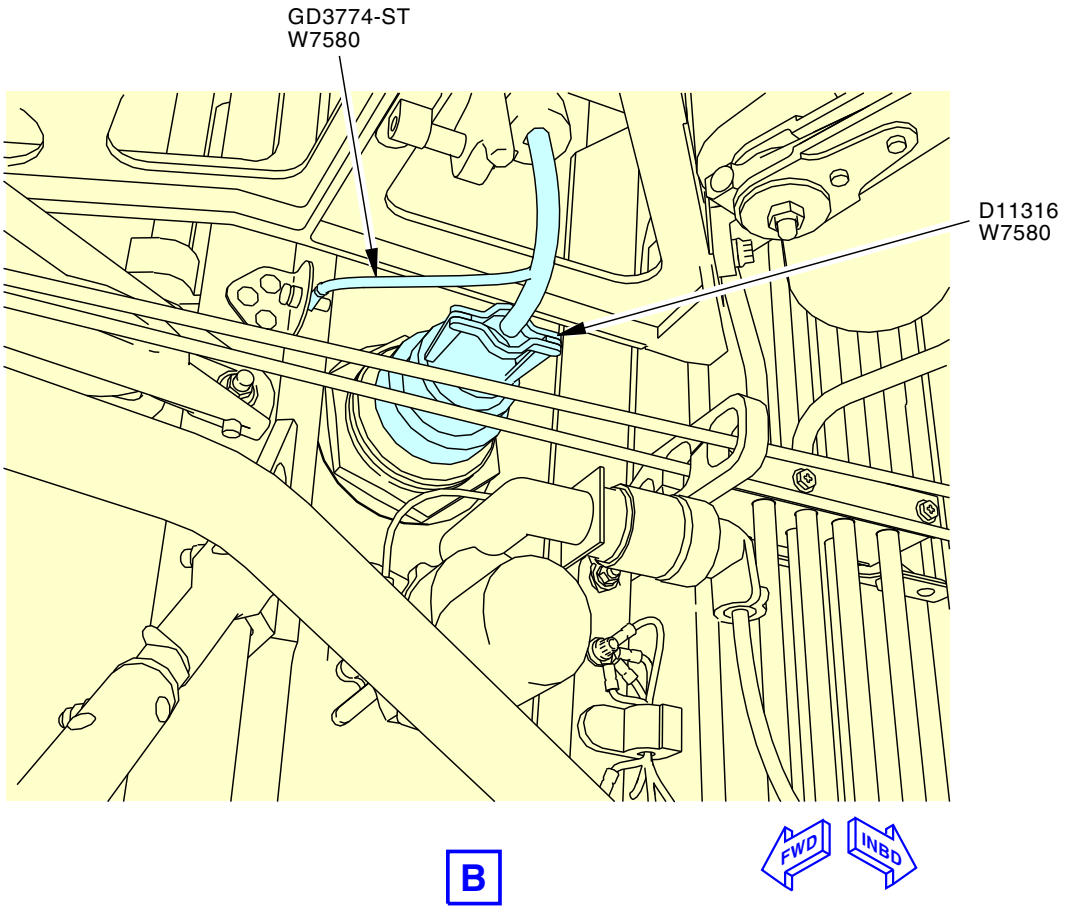
FQIS Wiring And Bonding - Inspection - Loop Resistance Test Connections
Figure 601/05-55-54-990-816

ECCN 9E991 BOEING PROPRIETARY - See title page for details



FQIS Wiring And Bonding - Inspection - Connector Locations
Figure 602/05-55-54-990-817 (Sheet 1 of 2)

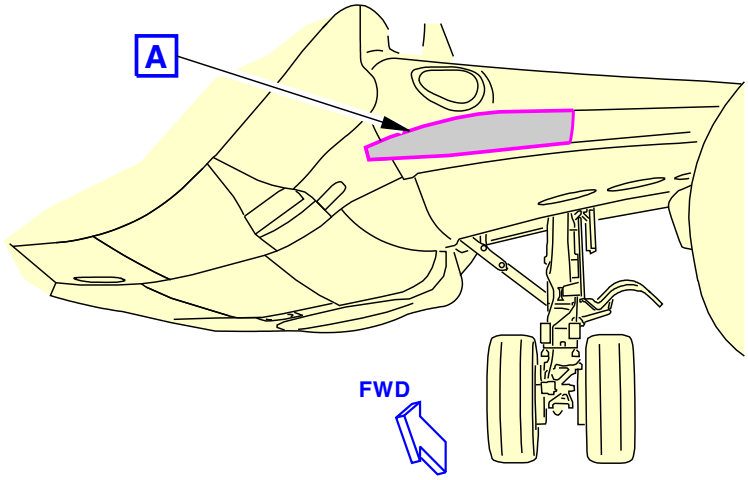
ECCN 9E991 BOEING PROPRIETARY - See title page for details



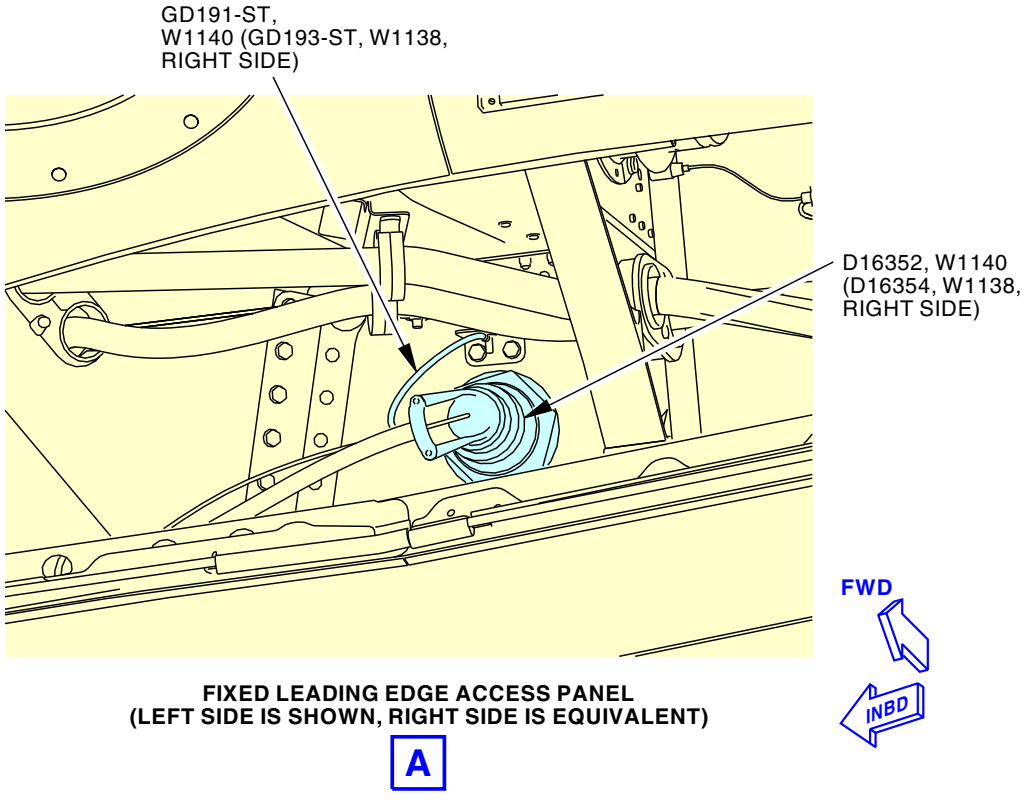
2546108 S0000605320_V1

FQIS Wiring And Bonding - Inspection - Connector Locations
Figure 602/05-55-54-990-817 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



LEFT WING
(RIGHT WING IS EQUIVALENT)



FIXED LEADING EDGE ACCESS PANEL
(LEFT SIDE IS SHOWN, RIGHT SIDE IS EQUIVALENT)

2546759 S0000605323_V2

FQIS Wiring and Bonding Inspection - Connector Locations Engine Valve Shutoff
Figure 603/05-55-54-990-818

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-55-54-200-802

3. FQIS - Out Tank Connectors - Electrical Bonding Resistance Check

(Figure 604)

A. General

(1) This procedure is an unscheduled maintenance task.

(2) This task has one or more steps which are a means to satisfy Critical Design Configuration Control Limitation (CDCCL) requirements. A CDCCL note will follow the step to which it applies. Any step or sub-step that precedes or follows a CDCCL identified step is not subject to the CDCCL requirement.

(a) For important information on CDCCL requirements, refer to this task: Airworthiness Limitation Precautions, TASK 05-00-00-910-801.

NOTE: This is applicable to Airworthiness Limitation 28-AWL-04.

B. References

Reference	Title
05-00-00-910-801	Airworthiness Limitation Precautions (P/B 201)
SWPM 20-20-00	ELECTRICAL BONDING PROCESSES
SWPM Chapter 20	Standard Wiring Practices Manual

C. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
COM-1550	Bonding Meter - Approved, Intrinsically Safe (Approved for use in Class I, Divisions I & II hazardous (classified) locations. Outside these hazardous locations, COM-614 can be used in lieu of COM-1550). Part #: 620LK Supplier: 1CRL2 Part #: M1 Supplier: 3AD17 Part #: M1B Supplier: 3AD17 Part #: T477W (C15292) Supplier: 06659

D. FQIS - Out Tank Connectors - Electrical Bonding Resistance Check

SUBTASK 05-55-54-200-005

28-AWL-04: CDCCL

(1) Measure the electrical bonding resistance from the shield terminal lug on the connector backshell to airplane structure for each connector listed in Table 603 (SWPM 20-20-00):

NOTE: CDCCL - Refer to the task: Airworthiness Limitation Precautions, TASK 05-00-00-910-801, for information on Critical Design Configuration Control Limitations (CDCCLs).

NOTE: This is applicable to Airworthiness Limitation 28-AWL-04.

(a) Use an intrinsically safe approved bonding meter, COM-1550.

(b) To measure the joint resistance, do these steps:

1) Connect one probe of the intrinsically safe approved bonding meter, COM-1550, to the airplane structure within 1 in. (25 mm) of the joint being measured.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

2) Connect the second joint probe to the shield terminal lug on the connector backshell.

3) Record the resistance value.

28-AWL-04: CDCCL

(c) Make sure the electrical bonding resistance from the shield terminal lug on the connector backshell to airplane structure is the “MAX JOINT VALUE” or less listed in Table 603.

NOTE: CDCCL - Refer to the task: Airworthiness Limitation Precautions, TASK 05-00-00-910-801, for information on Critical Design Configuration Control Limitations (CDCCLs).

NOTE: This is applicable to Airworthiness Limitation 28-AWL-04.

(d) If the electrical bonding resistance from the shield terminal lug on the connector backshell to airplane structure is greater than the “MAX JOINT VALUE” listed in Table 603, repair the wiring (SWPM Chapter 20).

Table 603/05-55-54-993-803

WIRE BUNDLE NUMBER	FUNCTION	CONNECTOR	WDM	MAX JOINT VALUE (mOhm)
W1140	LEFT MAIN TANK	D39965	28-41-11	3.0
W1138	RIGHT MAIN TANK	D39944	28-41-11	3.0
W7580	CENTER MAIN TANK	D46202	28-41-11	3.0

E. Put the Airplane Back to Its Usual Condition

SUBTASK 05-55-54-200-006

28-AWL-04: CDCCL

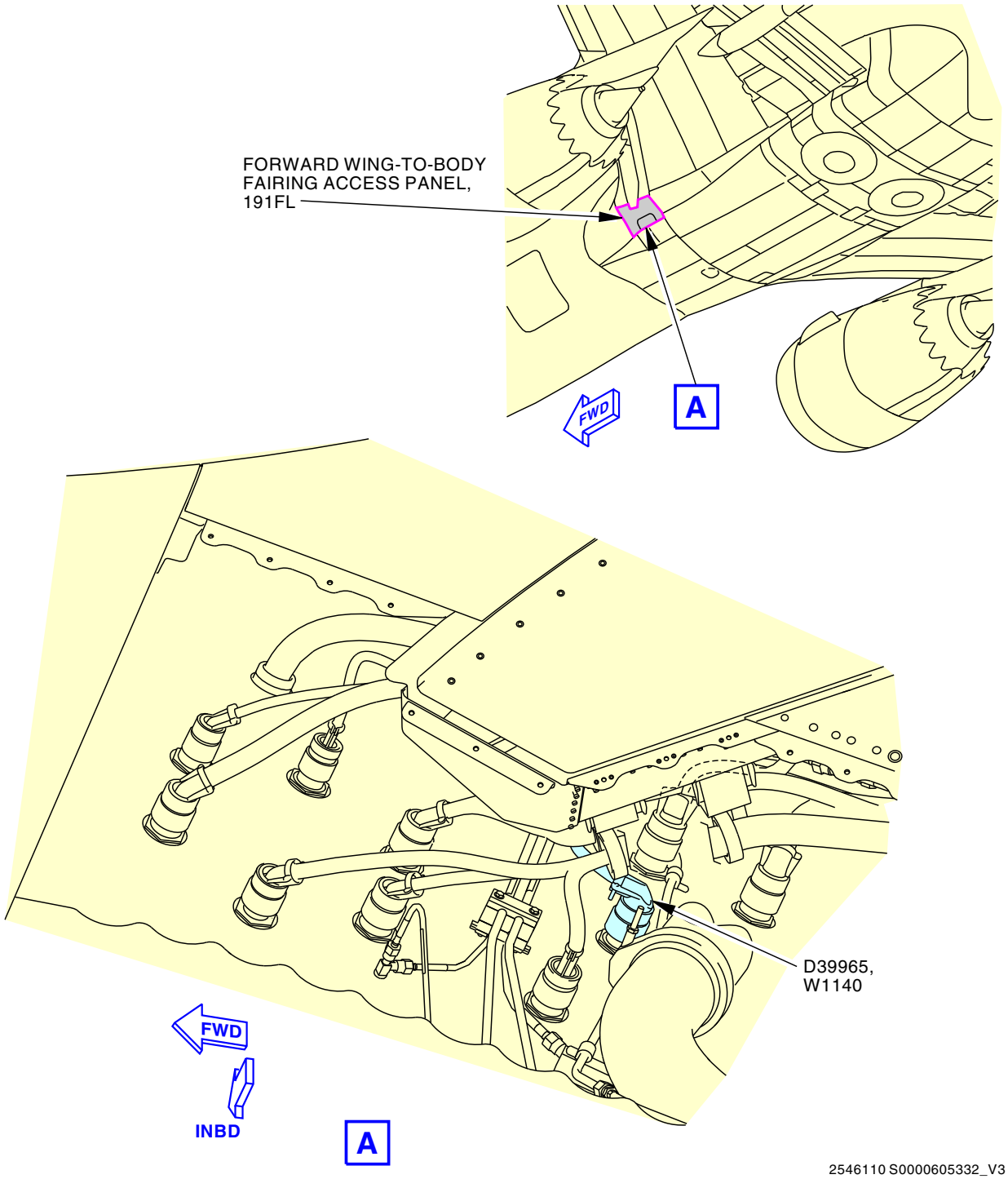
(1) If any FQIS out-tank wire bundle is replaced or the FQIS wire bundle's shield is spliced, repaired, or re-connected, do this task: FQIS Wiring And Bonding - Inspection, TASK 05-55-54-200-801.

NOTE: CDCCL - Refer to the task: Airworthiness Limitation Precautions, TASK 05-00-00-910-801, for information on Critical Design Configuration Control Limitations (CDCCLs).

NOTE: This is applicable to Airworthiness Limitation 28-AWL-04.

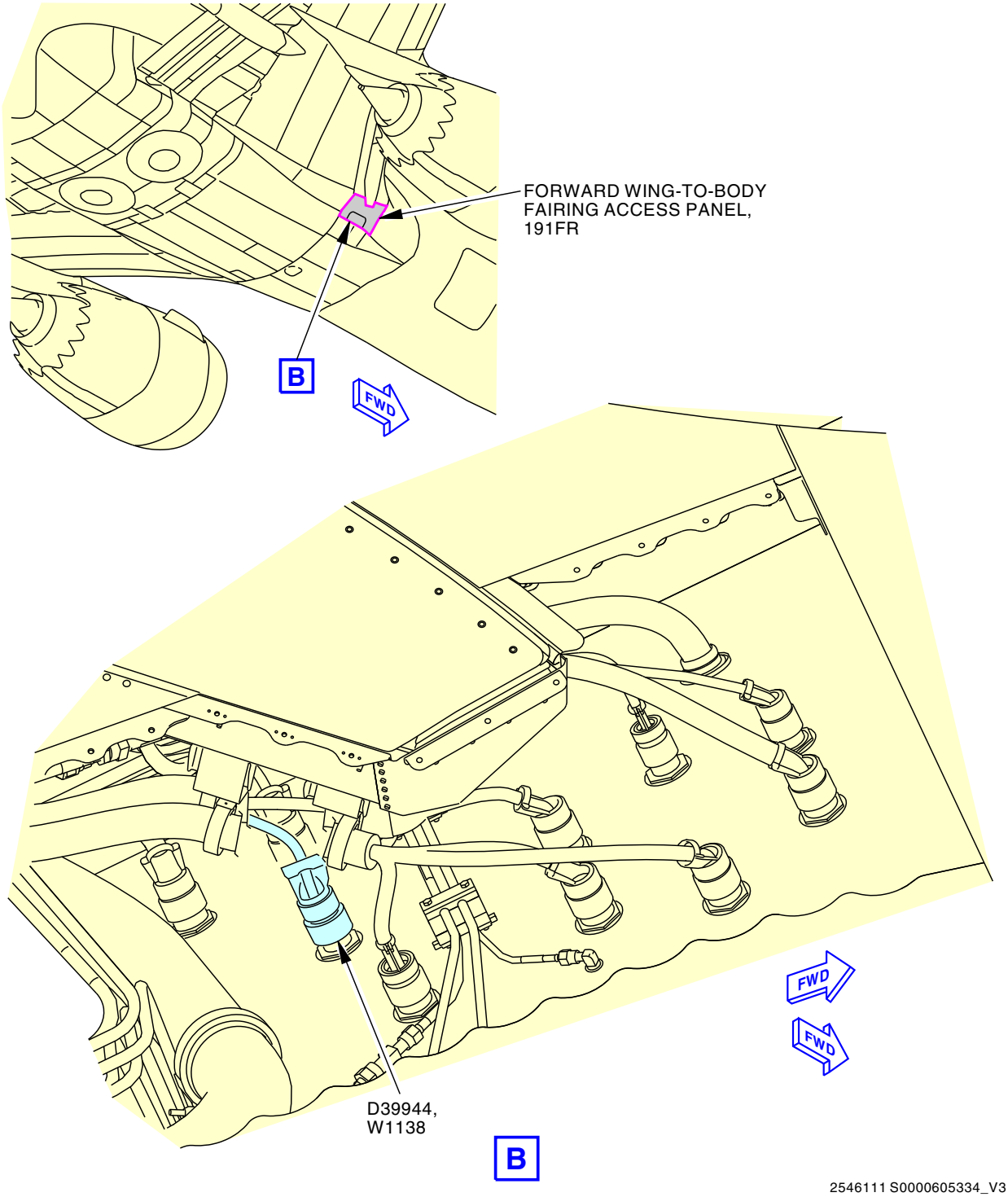
END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details



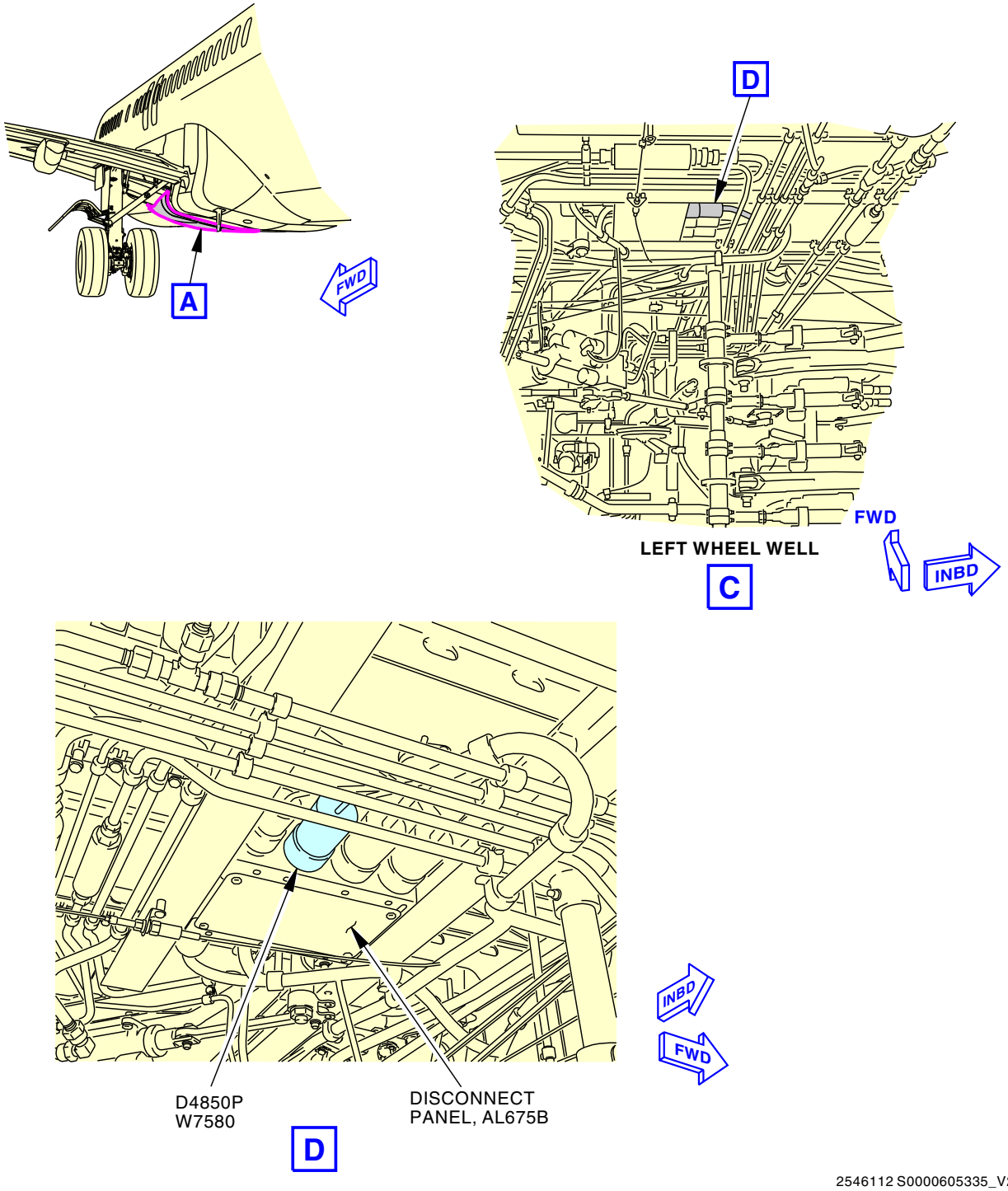
FQIS - Out Tank Connectors
Figure 604/05-55-54-990-810 (Sheet 1 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



FQIS - Out Tank Connectors
Figure 604/05-55-54-990-810 (Sheet 2 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



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FQIS - Out Tank Connectors
Figure 604/05-55-54-990-810 (Sheet 3 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-55-54-810-801

4. FQIS Wiring And Bonding - Fault Isolation

(Figure 605 or Figure 606 or Figure 607)

A. References

Reference	Title
05-56-02-200-801	LRT Lid Standard Measurement (P/B 201)
05-56-02-200-802	ExLRT Standard Measurement (P/B 201)
05-56-04-200-801	Joint Resistance Measurement (P/B 201)
05-56-05-200-801	Loop Resistance and Joint Resistance Measurement (P/B 201)
SWPM Chapter 20	Standard Wiring Practices Manual

B. Location Zones

Zone	Area
133	Main Landing Gear Wheel Well, Body Station 663.75 to Body Station 727.00 - Left
510	Subzone - Left Wing: Leading Edge, Fwd of Front Spar, Inbd of Strut and Nacelle Gap Cover Area
610	Subzone - Right Wing: Leading Edge, Forward of Front Spar, Inboard of Nacelle Strut, Including Gap Cover Area

C. Access Panels

Number	Name/Location
511AT	Inboard Leading Edge, Strakelet Upper Panel
611AT	Inboard Leading Edge, Strakelet Upper Access Panel

D. Procedure

SUBTASK 05-55-54-940-005

(1) These panels must be opened to inspect/check the left and right wing FQIS wire bundle installations.

Number	Name/Location
511AT	Inboard Leading Edge, Strakelet Upper Panel
611AT	Inboard Leading Edge, Strakelet Upper Access Panel

SUBTASK 05-55-54-760-006

(2) To isolate a fault associated with the Loop Resistance Measurement of the FQIS system wire bundles, do the following:

SUBTASK 05-55-54-760-007

(3) If the wire bundle shield loop resistance is GREATER than the MAX VALUE in the Table 601, do these tasks:

NOTE: The main current paths making up the bond at the fuel tank end of the bundle consist of three main parts: the bundle connector to the fuel tank receptacle; the receptacle to structure attachment itself; and the bondstrap from receptacle to structure.

(a) Do this task: Joint Resistance Measurement, TASK 05-56-04-200-801 or Loop Resistance and Joint Resistance Measurement, TASK 05-56-05-200-801, from the ground terminal to primary structure.

1) Record the measured resistance values in the Table 604.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Table 604/05-55-54-993-806 Wire Bundle Loop Resistance Values

Plane:					
Date:					
Technician:					
Bundle Number	Connector Number	Measured Loop Value (mΩ)	Max Value (mΩ)	Pass Fail	Retest Measured Value/Comments
Joint Resistance, Ground Terminal to Bracket:					
W1140	GD-191-ST		1.0		
W1138	GD-193–ST		1.0		
W7580	GD-3774–ST		1.0		
Joint Resistance, Bracket to Spar:					
W1140	GD-191–ST		1.0		
W1138	GD-193–ST		1.0		
W7580	GD-3774–ST		1.0		
Joint Resistance, Backshell to Receptacle:					
W7580	D4850P		5.0		
Joint Resistance, Backshell to Plug:					
W1140	D16352		2.5		
W1138	D39944		2.5		
W7580	D4850P		5.0		
Joint Resistance, Plug to Receptacle;					
W1140	D16352		5.0		
W1138	D39944		5.0		
Joint Resistance, Receptacle to Mating Surface:					
W1140	D16352		2.5		
W1138	D39944		2.5		

2) If the joint value measured is GREATER than the MAX VALUE in the Table 604, repair in accordance with the (SWPM Chapter 20).

3) If the joint value measured is LESS than the MAX VALUE in the Table 604, move to the inboard end of that wire bundle and perform the step below:

(b) Do this task: Joint Resistance Measurement, TASK 05-56-04-200-801 or Loop Resistance and Joint Resistance Measurement, TASK 05-56-05-200-801, from the backshell to primary structure at the inboard end of that wire bundle.

1) Record the measurement value in the Table 604.

2) If the joint value measured is GREATER than the MAX VALUE in the Table 604, repair in accordance with the (SWPM Chapter 20).

3) If the joint value measured is still LESS than the MAX VALUE in the Table 604, repair the wire bundle shield termination in accordance with the (SWPM Chapter 20).

ECCN 9E991 BOEING PROPRIETARY - See title page for details

a) If the shield termination is good and does not require rework, the wire bundle itself has failure. Repair or replace the wire bundle in accordance with the (SWPM Chapter 20).

(c) After the shield termination or wire bundle is repaired or replaced, do this task: FQIS Wiring And Bonding - Inspection, TASK 05-55-54-200-801 on this wire bundle.

SUBTASK 05-55-54-760-008

(4) If the wire bundle shield resistance is LESS than the MIN VALUE in Table 601, do the following:

(a) Check the operation of the LRT. To check the LRT operation, do this task: LRT Lid Standard Measurement, TASK 05-56-02-200-801 or ExLRT Standard Measurement, TASK 05-56-02-200-802.

(b) If no problem is found with the LRT, check the test setup. Make sure the couplers only be clamped around the wire bundle being measured and must be closed properly.

(c) If no problem is found, do a detailed visual inspection along the entire length of the wire bundle being measured. Look for signs of chafing or damage to the wire bundle that would result in the shielding shorting to structure somewhere along its length.

NOTE: An example might be an area where bundle insulation has degraded and a portion of the shield is exposed and making contact with structure at an intermediate point in the bundle length. Another might be some metallic object penetrating the insulation and making contact between the shield and structure.

1) If a problem is found, repair or replace in accordance with the (SWPM Chapter 20).

2) If a problem was found and repaired, retest the wire bundle (FQIS Wiring And Bonding - Inspection, TASK 05-55-54-200-801).

(d) If no defects are found with the wire bundle and the loop resistance value is still LESS than the MIN VALUE, record this value and report this condition to Boeing for investigation and disposition.

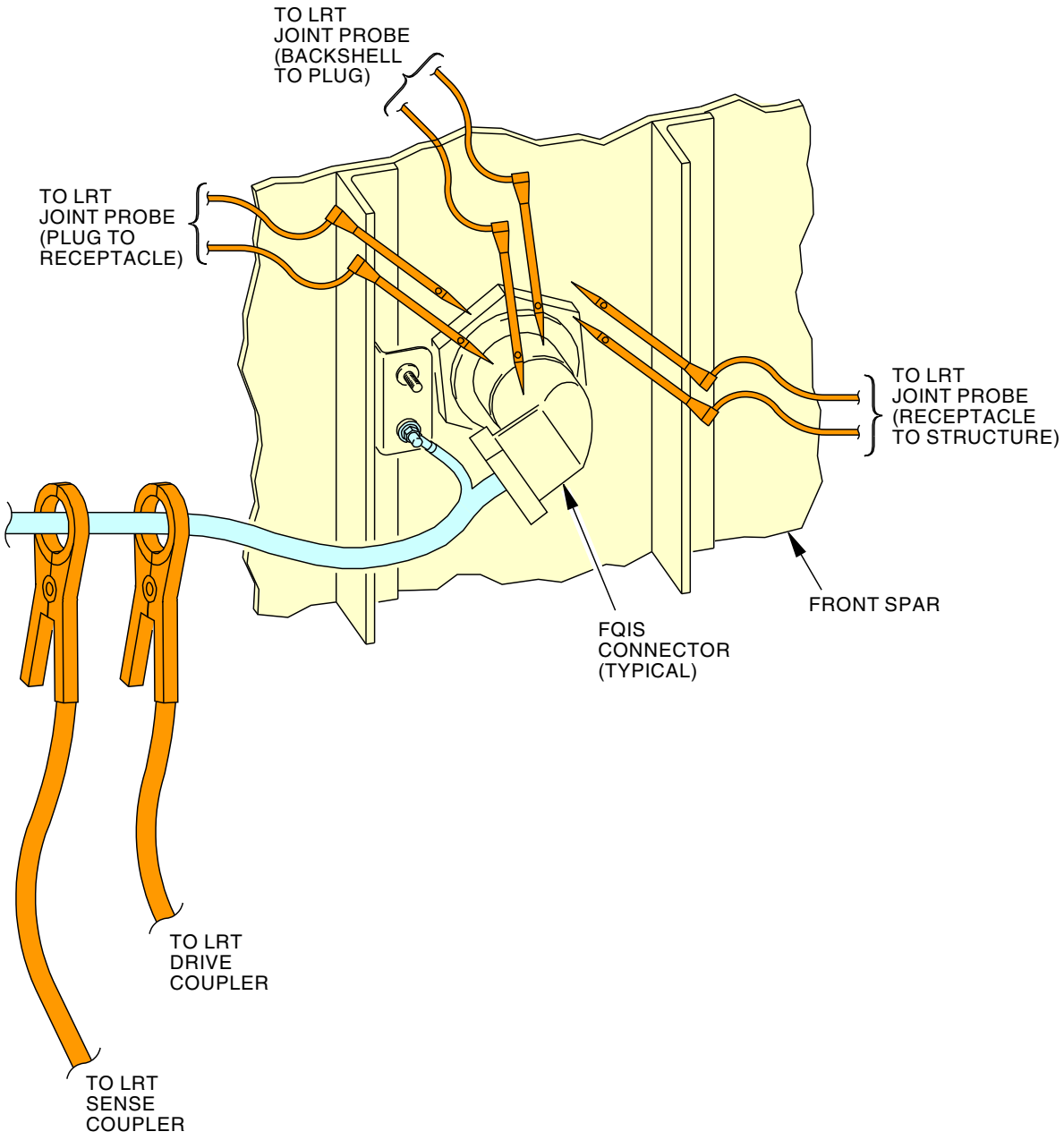
SUBTASK 05-55-54-940-006

(5) Close these access panels:

Number	Name/Location
511AT	Inboard Leading Edge, Strakelet Upper Panel
611AT	Inboard Leading Edge, Strakelet Upper Access Panel

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details

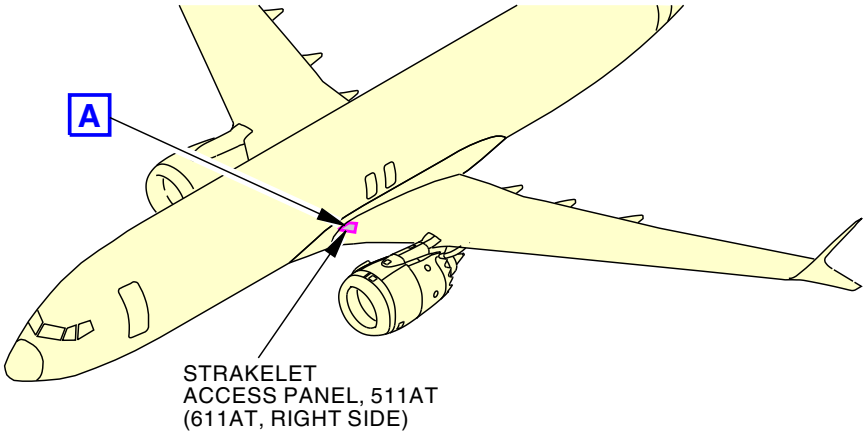


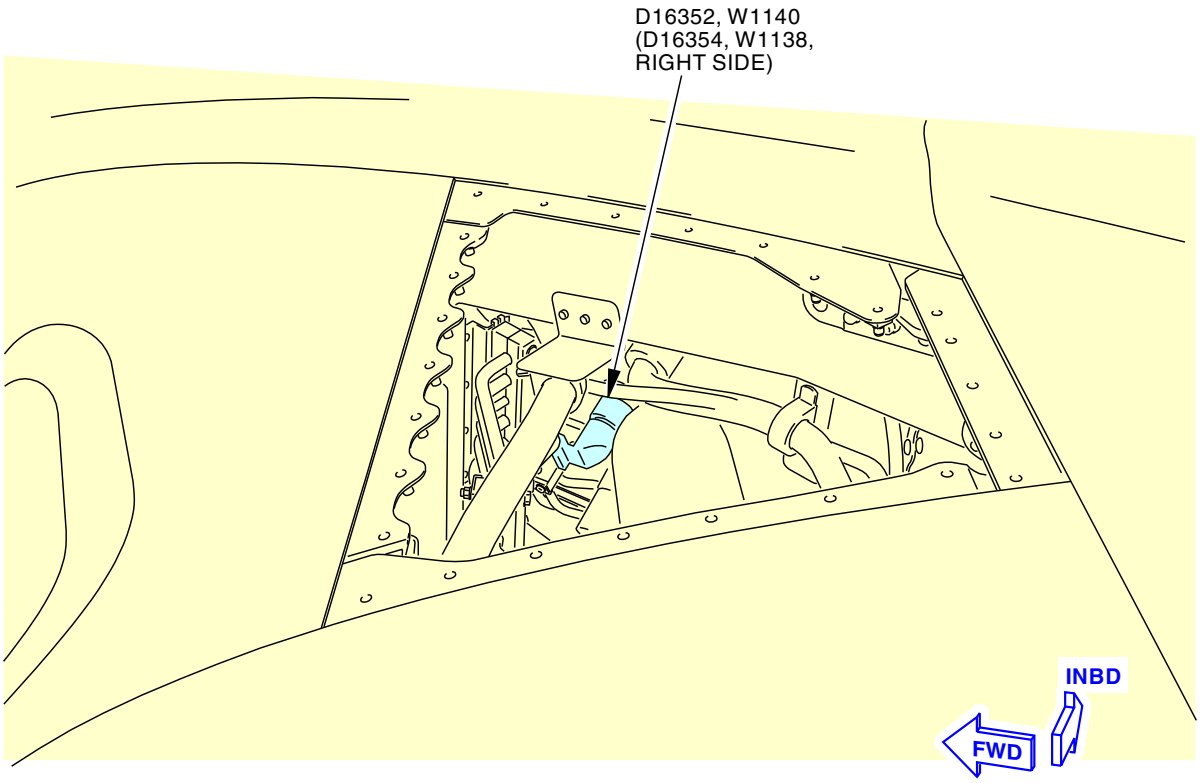
LOOP RESISTANCE TESTER CONNECTIONS - JOINT TEST

2546114 S0000605346_V1

FQIS Wiring And Bonding - Inspection - Joint Resistance Test Connections
Figure 605/05-55-54-990-812

ECCN 9E991 BOEING PROPRIETARY - See title page for details





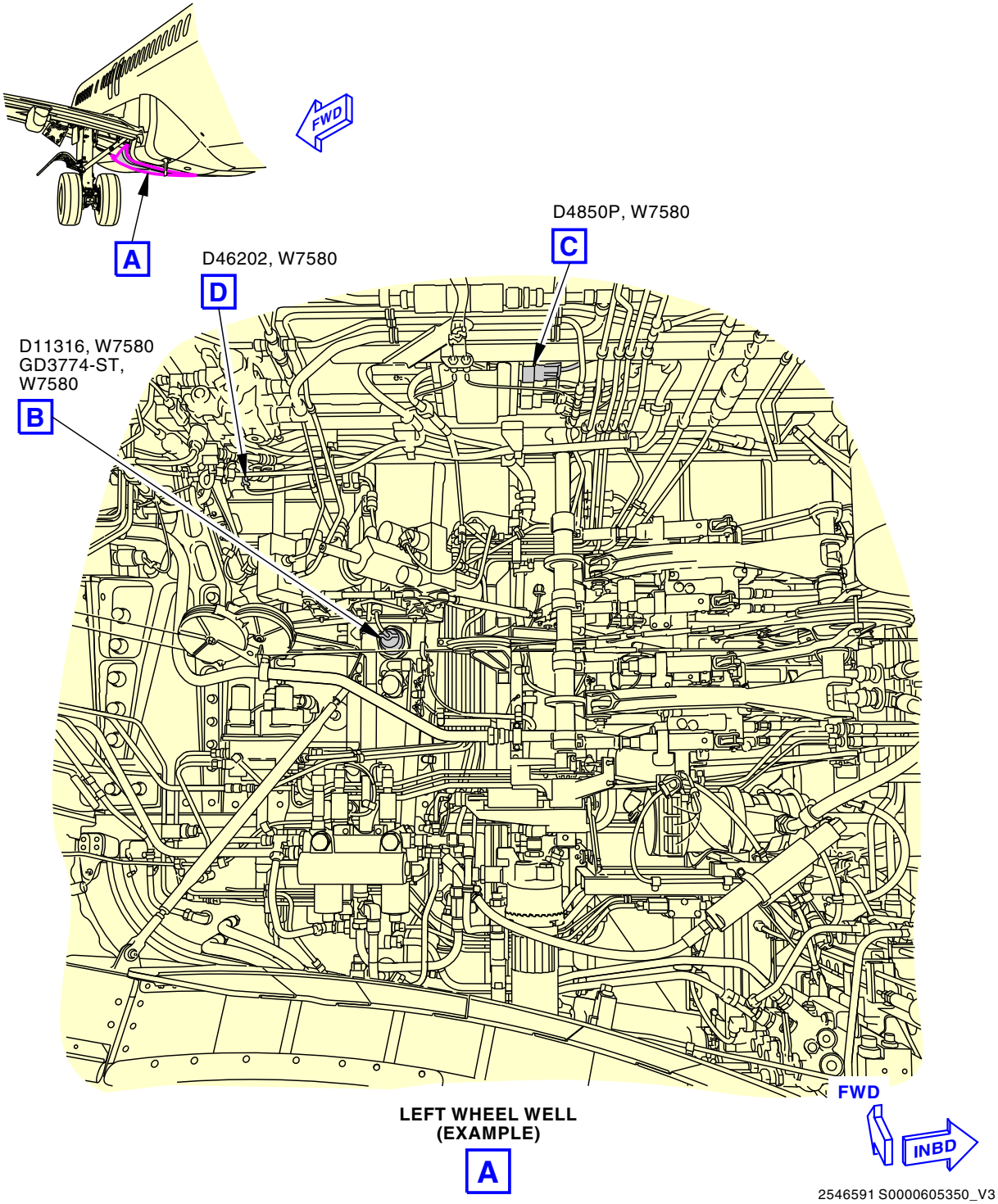
STRAKELET ACCESS PANEL REMOVED
(LEFT SIDE IS SHOWN, RIGHT SIDE IS OPPOSITE)

A

2546116 S0000605347_V1

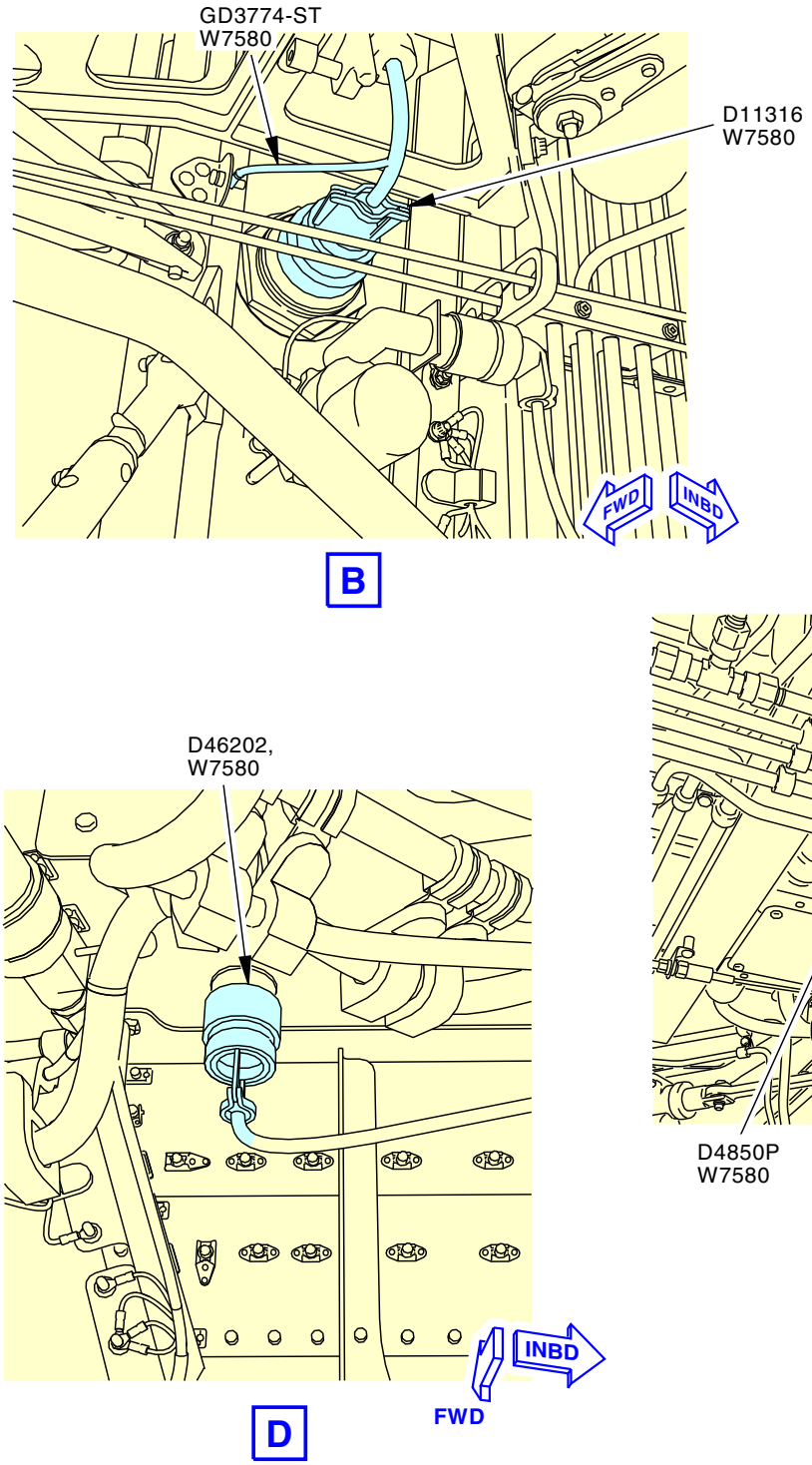
FQIS Wiring And Bonding - Connectors - Strakelet Access
Figure 606/05-55-54-990-813

ECCN 9E991 BOEING PROPRIETARY - See title page for details



FQIS Wiring And Bonding - Inspection - Connector Locations
Figure 607/05-55-54-990-814 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



2546593 S0000605351_V2

FQIS Wiring And Bonding - Inspection - Connector Locations
Figure 607/05-55-54-990-814 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

BOND RESISTANCE MEASUREMENT - MAINTENANCE PRACTICES

1. General

A. This task contains instructions on how to use the Avtron Bond Resistance Tester intrinsically safe approved bonding meter, COM-1550 (Model T477W) or equivalent, to measure and evaluate the resistance across a built-up joint or individual electrical connections/joints.

TASK 05-56-01-760-801

2. Bond Resistance Measurement

(Figure 201)

A. References

Reference	Title
SWPM 20-14-11	Standard Wiring Practices Manual
SWPM Chapter 20	Standard Wiring Practices Manual

B. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
COM-1550	Bonding Meter - Approved, Intrinsically Safe (Approved for use in Class I, Divisions I & II hazardous (classified) locations. Outside these hazardous locations, COM-614 can be used in lieu of COM-1550). Part #: 620LK Supplier: 1CRL2 Part #: M1 Supplier: 3AD17 Part #: M1B Supplier: 3AD17 Part #: T477W (C15292) Supplier: 06659

C. Procedure

SUBTASK 05-56-01-760-001

(1) Connect one intrinsically safe approved bonding meter, COM-1550 probe to one side of a complex joint build-up (structure, LRU, receptacle, bracket, or connector backshell for example) within 1 in. (25 mm) of the joint being measured.

NOTE: A joint may have several electrical connections. For example, a connector mounted on a bracket which is mounted to structure can provide five connections between the bundle shield and "ground": The shield is (1) connected to the connector backshell which is (2) connected to the connector itself which (3) connects to the receptacle which (4) is mounted on the bracket which is (5) connected to structure.

(a) Several kinds of possible measurement connections are shown in Figure 201.

SUBTASK 05-56-01-760-002

(2) Connect the second joint probe to the other side of the joint being measured, within 1 in. (25 mm) of the joint/connector.

NOTE: It may be necessary to wiggle the probes in order to make electrical contact through surface coatings.

SUBTASK 05-56-01-760-003

(3) Record the resistance value of this joint from the Bond Meter display.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(a) The resistance values shown in Table 201 are maximum joint resistance values for common electrical connections/joints.

Table 201/05-56-01-993-801

TYPE OF JOINT	MAXIMUM RESISTANCE (ALUMINUM CONNECTORS) (MILLIOHMS)	MAXIMUM RESISTANCE (STAINLESS CONNECTORS) (MILLIOHMS)
BACKSHELL-TO-RECEPTACLE	2.5	5.0
BACKSHELL-TO-PLUG BODY	2.5	5.0
PLUG-TO-RECEPTACLE	5.0	12.5
FEEDTHROUGH-TO-STRUCTURE/SKIN	10.0	N/A
RECEPTACLE-TO-BRACKET	2.5	5.0
BRACKET-TO-BOND STRAP	1.0	1.0
BOND STRAP-TO-STRUCTURE	1.0	1.0
BRACKET-TO-STRUCTURE	1.0	1.0
RIVETED BRACKET-TO-STRUCTURE	1.0	1.0
OTHER FAY SURFACE BONDS	1.0	1.0

(b) To calculate the maximum allowable resistance for a built-up joint, do the following:

1) Determine what type of electrical connections/joints and how many of each are contained within the built-up joint.

2) Find the maximum allowable resistance for each type of electrical connection/joint contained within the built-up joint.

3) Sum the individual maximum allowable resistances for each electrical connection/joint contained within the built-up joint. This sum is the calculated maximum allowable resistance for the built-up joint.

NOTE: For example, the maximum resistance from a backshell to structure could be the sum of the following values: Backshell-to-Receptacle + Receptacle-to-Bracket + Bracket-to-Structure. Adding up the values in Table 201 (for an aluminum connector) of 2.5 + 2.5 + 1 milliohms each, totals 6 milliohms as a maximum value.

(c) If the measured built-up joint resistance is higher than the calculated maximum allowable resistance, then do a joint resistance measurement across each individual connection/joint to isolate the specific high resistance connection/joint.

1) If an individual connection/joint resistance exceeds the maximum allowable resistance for that type of connection/joint, then repair the faulty connection/joint.

NOTE: Loose connectors and backshells or pigtails can cause an out of tolerance resistance reading.

a) If the resistance of the BACKSHELL-TO-RECEPTACLE is not within limits, refer to: SWPM 20-14-11 for connector replacement or repair due to corrosion or fretting between connectors.

b) If the resistance of the RECEPTACLE-TO-BRACKET is not within limits, refer to: SWPM Chapter 20 for procedures to repair corrosion between surfaces.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

c) If the resistance of the BRACKET-TO-STRUCTURE is not within limits, refer to: SWPM Chapter 20 for procedures to repair corrosion between surfaces of a critical bond.

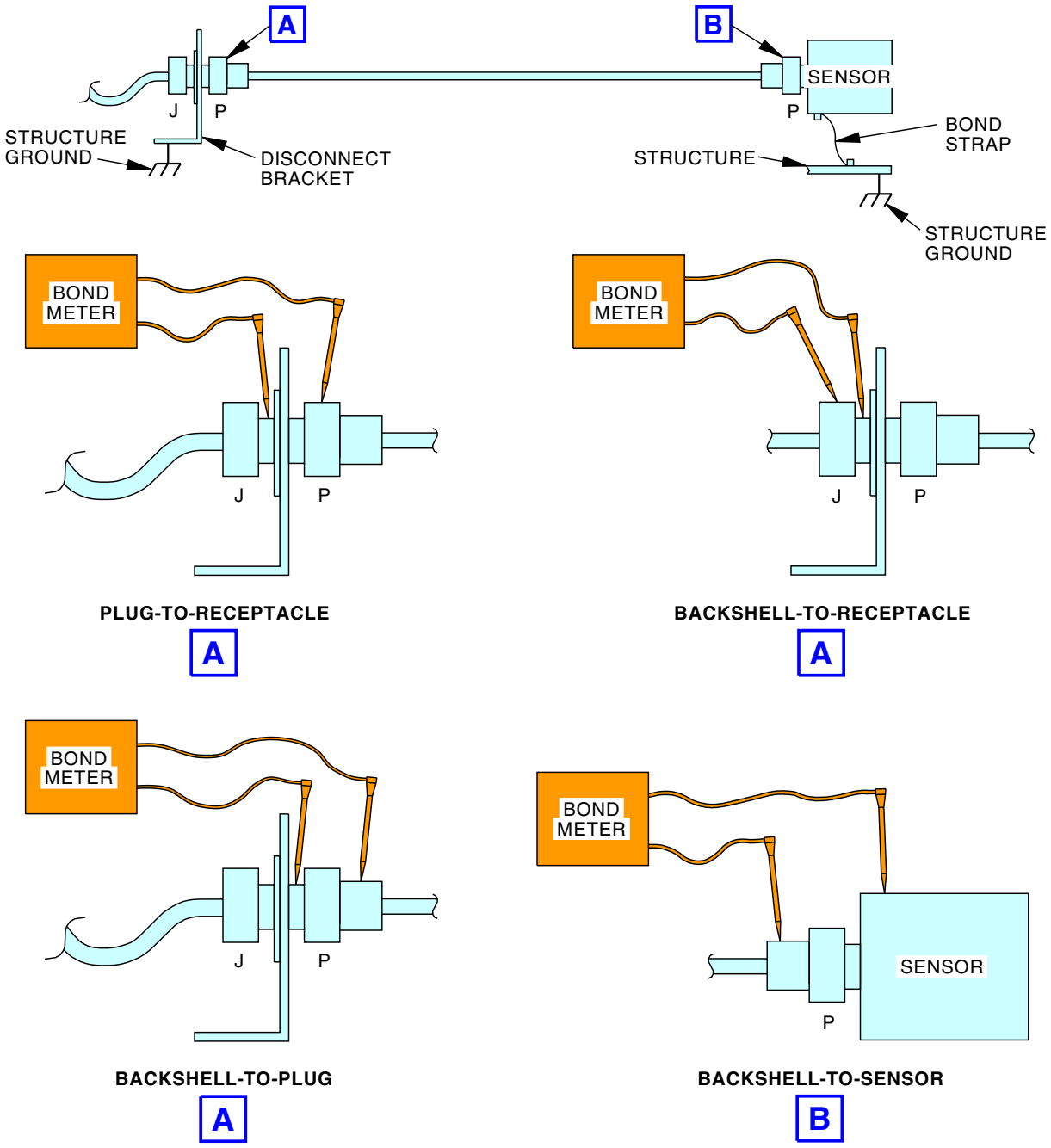
2) After you complete the joint repair, repeat the Joint Buildup Resistance Measurement to verify the repair.

(d) If the measured joint resistance is less than the calculated maximum allowable resistance for the built-up joint, then do the Joint Buildup Resistance Measurement on the next joint, if any, to be tested.

(e) If all of the built-up joints/connections for a particular wire bundle have been measured and joint resistances are less than the calculated maximum allowable resistance for the built-up joints, then the Joint Buildup Resistance Measurement Task is complete.

——— END OF TASK ———

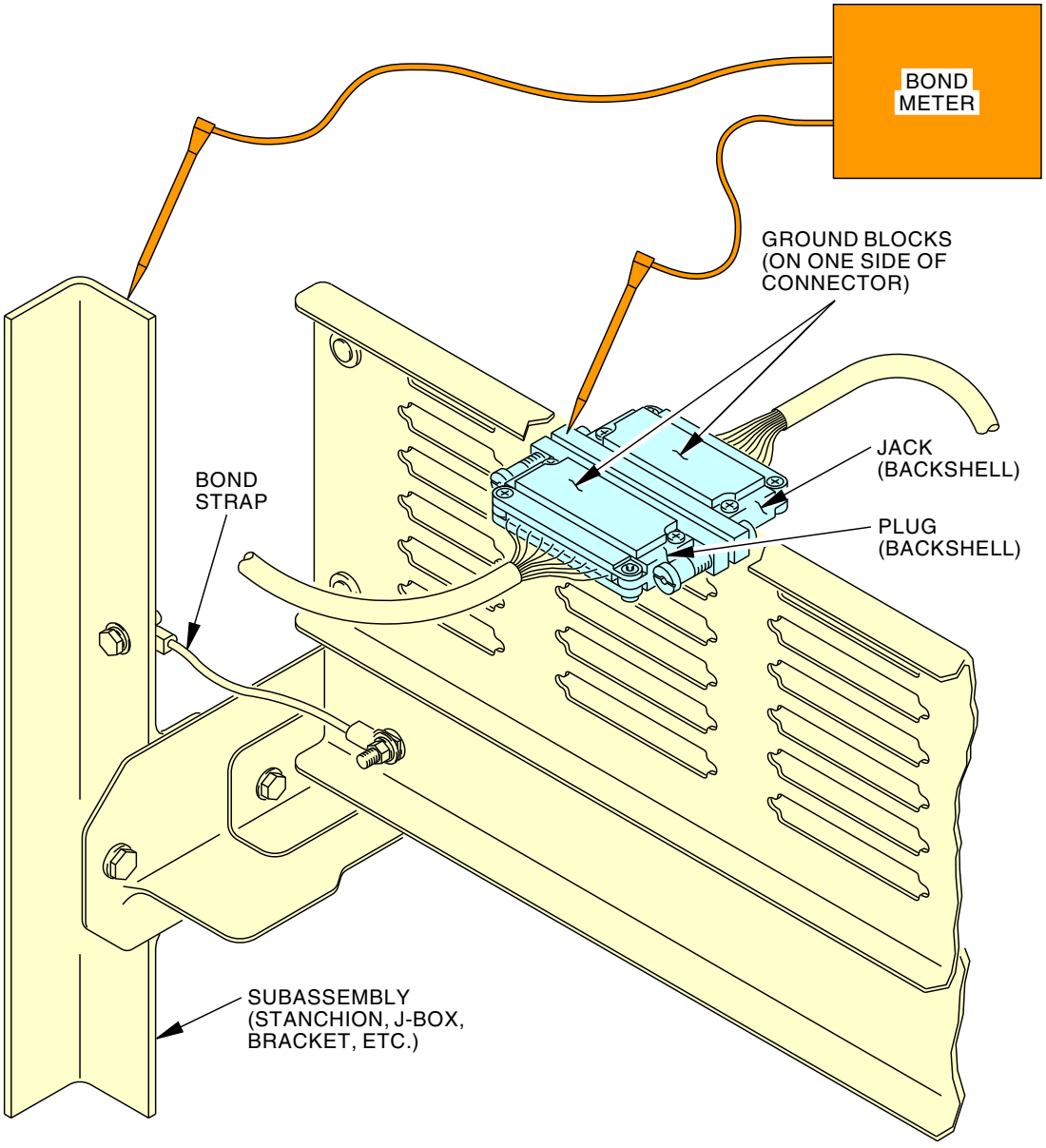
ECCN 9E991 BOEING PROPRIETARY - See title page for details



2410579 S00061525906_V1

Bond Meter General Connections for Joint Build-up Test High Intensity Radiated Field (HIRF) Inspection
Figure 201/05-56-01-990-801 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



RECTANGULAR CONNECTORS

2410580 S00061525907_V1

Bond Meter General Connections for Joint Build-up Test High Intensity Radiated Field (HIRF) Inspection
Figure 201/05-56-01-990-801 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

LOOP RESISTANCE TESTER (LRT)- MAINTENANCE PRACTICES

1. General

A. This Procedure has these tasks:

(1) A Lid Standard Measurement of the Loop Resistance Tester (LRT).

(2) A Standard Measurement of the MK Loop Resistance Tester (ExLRT).

B. The loop resistance tester, SPL-1636 (LRT) and MK loop resistance tester, SPL-18565 (ExLRT) are specialized pieces of test equipment which are used to make non-intrusive wire bundle and coax cable shield resistance measurements. The LRT and the ExLRT can also be used to make resistance measurements across a built-up joint or individual electrical connections/joints.

TASK 05-56-02-200-801

2. LRT Lid Standard Measurement

A. General

(1) This task contains the procedure for performing a Lid Standard Measurement with the LRT. The Lid Standard Measurement is a check of the (LRT) that should be performed whenever the LRT does not appear to be operating correctly. Measurement of the standard resistances on the LRT storage lid provides a quick indication of proper LRT operation. The Lid Standard Measurement consists of the following two parts:

(a) Loop Mode, which makes a check of the loop resistance measurement function.

(b) Joint Mode, which makes a check of the joint resistance measurement function.

B. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-1636	Tester - Loop Resistance (LRT "-1" for checks up to & including 4 years ONLY, LRT "-2 & -3" applicable for all HIRF/FQIS check/inspection intervals) Part #: 906-10246-3 Supplier: 3X2T2 Opt Part #: 906-10246-1 Supplier: 3X2T2 Opt Part #: 906-10246-2 Supplier: 3X2T2

C. Procedure

SUBTASK 05-56-02-820-001

(1) Loop Mode

(a) The various components of the loop resistance tester, SPL-1636 (LRT) are illustrated in Figure 201.

(b) Open the LRT assembly and slide the lid aside to separate it from the base.

(c) Open the lid and remove the Sense/Drive couplers and the Joint Probe assembly.

(d) Connect the blue-coded Sense coupler cable to the blue-coded Sense Coupler connector on the LRT.

(e) Connect the red-coded Drive coupler cable to the red-coded Drive Coupler connector on the LRT.

(f) Connect the Joint Probe assembly to the Joint Probe connector on the LRT.

(g) Lift the safety cover and set the RUN-OFF/CHARGE switch to the RUN position.

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(h) Set the MODE switch to the LOOP position.

(i) Push and hold the ON/OFF push-button switch on the BITE module until "Testing Hardware" shows on the BITE display, then release the ON/OFF switch. A four character symbol will move around the BITE display during the hardware self-test.

NOTE: To conserve the battery, the LRT will automatically power down after 10 minutes of inactivity. To re-apply power, press the “ON” button.

(j) When the "Press Start" indication shows on the BITE display, make sure the LED on each Sense/Drive coupler control box is red.

(k) Connect the Sense/Drive couplers to the cutout in the Reference Standard, built into the storage lid of the LRT.

1) Position the couplers at each end of the cutout, near the Sense/Drive coupler alignment marks (View C, Figure 201).

(l) Begin the Lid Standard Test by pushing the START push-button switch on either of the Sense/Drive coupler control boxes.

(m) Make sure the LED on each of the Sense/Drive coupler control boxes is green.

1) If either LED is red and a "DRV Coup Is Open" or "SNS Coup Is Open" message shows on the BITE display, then the couplers should be checked for proper connection.

a) Gently squeeze and release the coupler handles to improve the connection of the couplers to the Lid Standard. If adjusting the couplers does not change the LEDs to green, replace the LRT.

b) If "Press Start" shows on the BITE display, then push the START push-button on either of the Sense/Drive coupler control boxes and begin the Lid Standard Test again.

2) If either LED is red and a "DRV Coup Is Open" or "SNS Coup Is Open" message does not show on the BITE display, replace the LRT.

3) If the LED on one or both couplers flashes red, then re-connect the couplers to the lid after the "Press Start" message shows on the BITE display.

a) Push the START push-button on either of the Sense/Drive coupler control boxes and begin the Lid Standard Test again.

4) If the message "UNSTABLE" shows on the BITE display and does not clear, set the MODE switch to the JOINT position.

a) When the message "CONNECT PROBES" shows on the BITE display, set the MODE switch back to the LOOP position.

b) Push the START push-button on either of the Sense/Drive coupler control boxes and begin the Lid Standard Test again.

c) If the "UNSTABLE" message continues to show, replace the LRT.

(n) When the Sense/Drive coupler control box LEDs flash green, note the measured resistance value which shows on the BITE display.

1) Make sure the displayed resistance value is 0.5 - 1.0 milliohm.

2) If the displayed resistance value is not 0.5 - 1.0 milliohm, replace the LRT.

SUBTASK 05-56-02-820-002

(2) Joint Mode

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(a) With the Sense/Drive couplers still connected to the Lid Reference Standard, change the MODE switch to the JOINT position.

(b) Make sure the Joint Probe LEDs are red (View B, Figure 201).

(c) Place the tip of one Joint Probe on the first Joint Probe reference mark on the lid Reference Standard (View C, Figure 201).

(d) Place the tip of the other Joint Probe on the second Joint Probe reference mark.

NOTE: The LRT will start the Joint Test when the LEDs on both Joint Probes are green.

(e) When the LED on either Joint Probe flashes green, the measurement shows, in milliohms, on the bottom line of the BITE display.

NOTE: The loop resistance from the previous loop measurement is displayed on the top line of the BITE display during a joint mode measurement.

(f) Note the joint resistance value.

(g) Keep the first Joint Probe in place on the first Joint Probe reference mark and move the second Joint Probe to the next Joint Probe reference mark.

(h) Repeat the above steps until a resistance value has been measured for each Joint Probe reference mark, 2 through 6.

(i) Compare the measured resistance values with the acceptable resistance values listed below:

Table 201/05-56-02-993-801

Measurement Points (Referenced to First Joint Probe Mark)	Resistance Measurement Acceptable Values
Second Joint Probe Reference Mark	0.01 - 0.06 milliohms
Third Joint Probe Reference Mark	0.04 - 0.11 milliohms
Fourth Joint Probe Reference Mark	0.07 - 0.16 milliohms
Fifth Joint Probe Reference Mark	0.10 - 0.21 milliohms
Sixth Joint Probe Reference Mark	0.12 - 0.26 milliohms

1) If all five resistance measurements taken above are within the range of Acceptable Values from Table 201, then this task is complete and the LRT is operational.

2) If any of the five resistance measurements taken above are outside the range of Acceptable Values from the table, then replace the LRT.

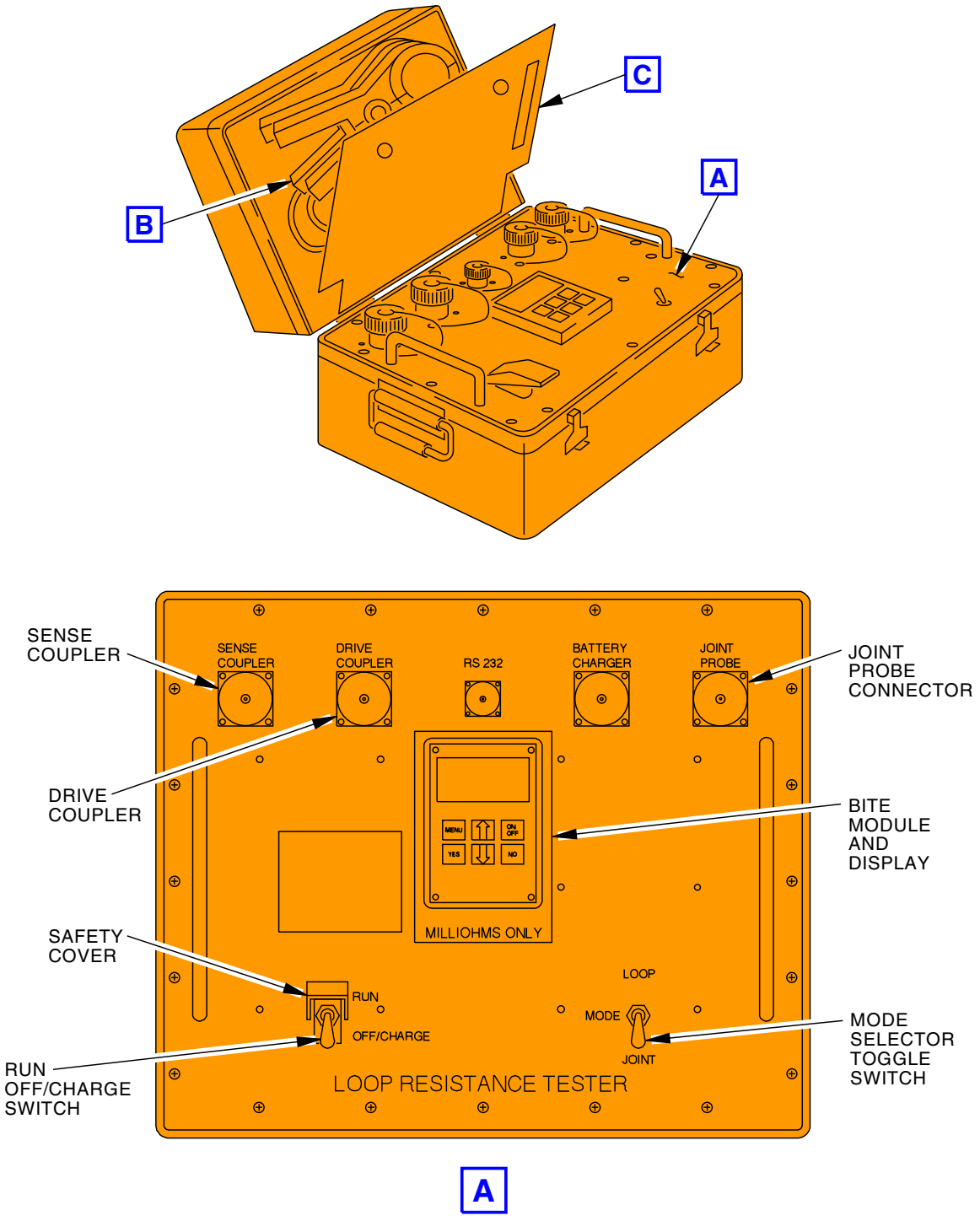
(j) Change the MODE switch to LOOP.

(k) Disconnect the Sense/Drive couplers from the Lid Reference Standard.

(l) This completes the LRT Lid Standard Measurement.

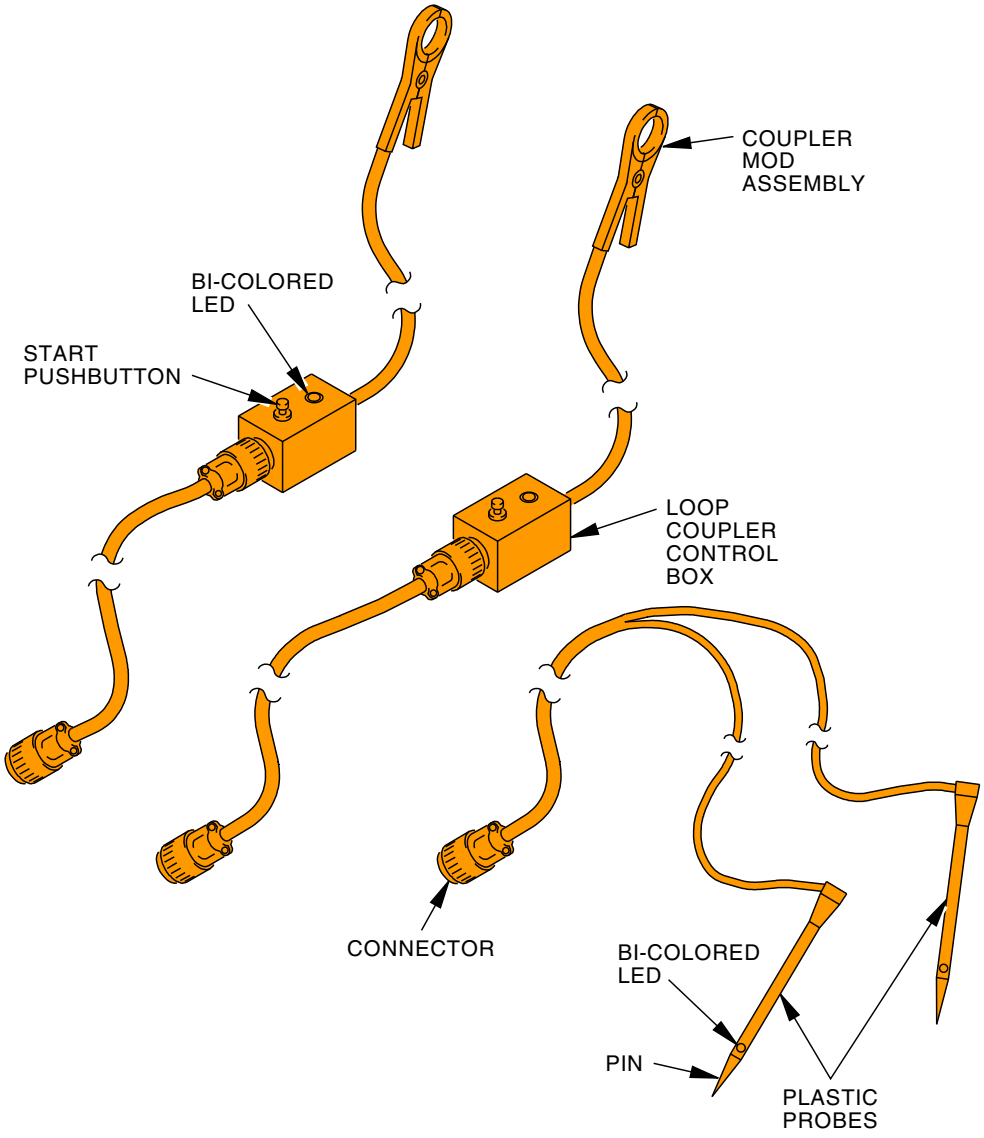
END OF TASK

ECCN 9E991 BOEING PROPRIETARY - See title page for details



High Intensity Radiated Fields (HIRF) Inspection - Loop Resistance Tester (LRT) - Maintenance Practices
Figure 201/05-56-02-990-801 (Sheet 1 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

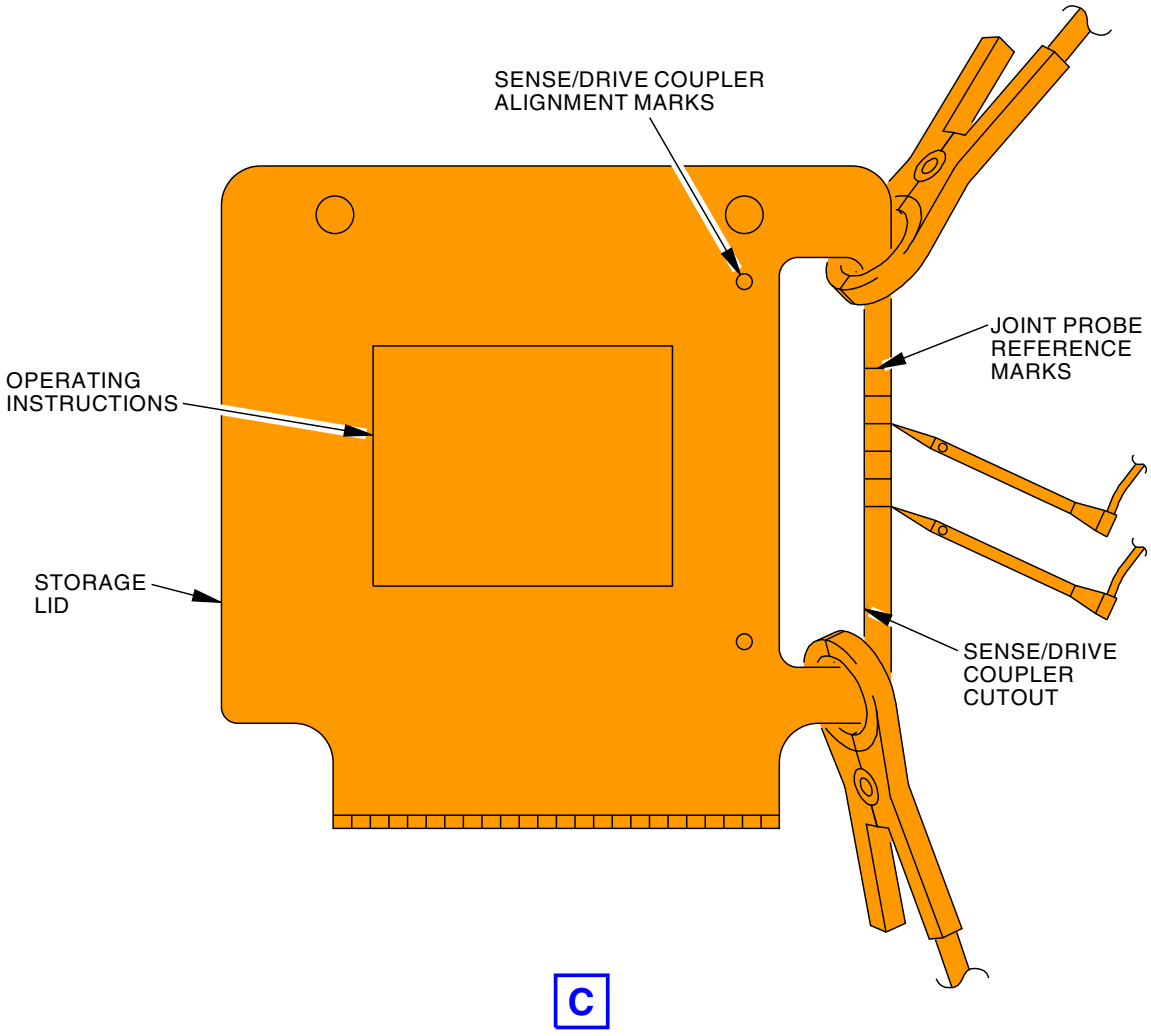


B

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High Intensity Radiated Fields (HIRF) Inspection - Loop Resistance Tester (LRT) - Maintenance Practices
Figure 201/05-56-02-990-801 (Sheet 2 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



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High Intensity Radiated Fields (HIRF) Inspection - Loop Resistance Tester (LRT) - Maintenance Practices
Figure 201/05-56-02-990-801 (Sheet 3 of 3)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 05-56-02-200-802

3. ExLRT Standard Measurement

Figure 202

A. General

(1) This task contains the procedure for performing a standard handle measurement with the ExLRT. The standard handle Measurement is a check of the Loop Resistance Tester that should be performed whenever the ExLRT does not appear to be operating correctly. Measurement of the standard resistances on the LRT Handle provides a quick indication of proper ExLRT operation. The Standard Handle Measurement consists of the following two parts:

(a) Loop Measurement, which makes a check of the loop resistance measurement function.

(b) Joint Measurement, which makes a check of the joint resistance measurement function.

B. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-18565	Tester - Loop Resistance, MK Part #: XLR-9703-01 Supplier: KC432 Part #: XLR-9703-02 Supplier: KC432

C. Prepare for the Measurement

SUBTASK 05-56-02-820-003

(1) Prepare the MK loop resistance tester, SPL-18565, for the measurement (Figure 202).

(a) Remove the ExLRT assembly from it's box.

(b) Connect the Loop cable [4] to the Loop connector [2].

(c) Connect the Joint cable [5] to the Joint connector [3].

(d) To power on, push the Power-on button [1] on the rear of the front panel.

NOTE: The LCD display will show the unit information.

1) If the ExLRT does not turn on, do these steps:

a) Open the battery compartment.

b) Remove the battery.

c) Put the charged battery into the unit.

d) Close the battery compartment.

2) If necessary, refer to the ExLRT user’s guide and contact the device manufacturer.

SUBTASK 05-56-02-820-004

(2) Configure the ExLRT, as follows:

(a) Make sure that LCD display shows 'Manual (continuous)'.

1) If it is not displayed, push the Select button [9].

2) Use the Scroll up button [7] and Scroll down button [8] to select 'Continuous (Default)'.

3) Push the Select button [9].

4) Push the Stop measurement button [10] to go back to Main menu.

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5) Select “Manual (Continuous)”.

6) Push the Select button [9].

7) Select “Continuous (Default)”.

8) Push the Select button [9].

D. ExLRT Standard Measurement

SUBTASK 05-56-02-820-005

(1) Do the self-test of the ExLRT, as follows:

(a) Clamp the couplers of the Loop cable [4] to the self-test handle of ExLRT.

(b) Push the Start measurement button [6].

(c) Make sure that the loop status LED indicator is amber.

(d) Record the value of the Loop resistance.

NOTE: The loop measurements are displayed as a number with two decimal places on left top of LCD screen.

1) If the loop status LED indicator is red and either “Drive coupler is open” or “Sense Coupler is Open” message shows on the LCD display, do these steps:

a) Gently squeeze and release the coupler handles to improve the connection of the coupler around the wire bundle being measured.

b) If adjusting the couplers does not change the loop status indicator to amber, use a different set of calibrated loop couplers.

c) If neither of these actions address the issue, contact the manufacturer.

d) If error message disappears and loop status LED indicator is flashing green, push the Start measurement button [6]. to begin Loop Resistance measurement.

2) If the loop status LED indicator is red and “Loop Unstable” message shows on the LCD display, contact the manufacturer.

(e) Attach one pin of the Joint cable [5] on the joint probe reference mark 1 on self-test handle of ExLRT.

(f) Attach the second pin of the Joint cable [5] on the joint probe reference mark 4.

(g) Record the value of the Joint 1 resistance.

NOTE: The joint measurement will be displayed as a number with two decimal places on right top of LCD screen.

1) If joint status LED indicator is red, check the LCD display for an error message.

2) If necessary, refer to the ExLRT user’s guide for corrective action based on display error message.

(h) Attach the one pin of the Joint cable [5] on the joint probe reference mark 2.

(i) Attach the second pin of the Joint cable [5] on the joint probe reference mark 3.

(j) Record the value of the Joint 2 resistance.

NOTE: The joint measurement will be displayed as a number with two decimal places on right top of LCD screen.

1) If joint status LED indicator is red, check the LCD display for an error message.

2) If necessary, refer to the ExLRT user’s guide for corrective action based on display error message.

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SUBTASK 05-56-02-820-006

(2) If unable to complete the joint resistance measurement, do the steps that follows:

(a) If the joint status indicator is red, check the LCD display for an error message.

1) If the message on the LCD displays "Joint Intermittent", do the following:

a) Push the Stop measurement button [10] and remove the joint probes from the connector to stop the measurement.

b) Push the Start measurement button [6] and re-position probes to correct locations to start measurement.

c) If this fails to clear the "Joint Intermittent" message, contact the manufacturer.

2) If the message on the LCD displays a “Probes not connected to UUT", do the following:

a) Push the Stop measurement button [10] and remove the joint probes from the connector to stop the measurement.

b) Push the Start measurement button [6] and re-position probes to correct locations to start measurement.

3) If this fails to clear the message, then use a different set of calibrated probes.

4) If another set of calibrated probes isn't available or doesn't resolve the error message, contact the manufacturer.

SUBTASK 05-56-02-820-007

(3) Compare the measured resistance values with the acceptable resistance values (Table 202).

Table 202/05-56-02-993-802

Measurement Types	Resistant Measurement Acceptable value
Loop Resistance	9.0–10.0 Milioms
Joint 1 Resistance	7.5–8.5 Milioms
Joint 2 Resistance	0.1–0.3 Milioms

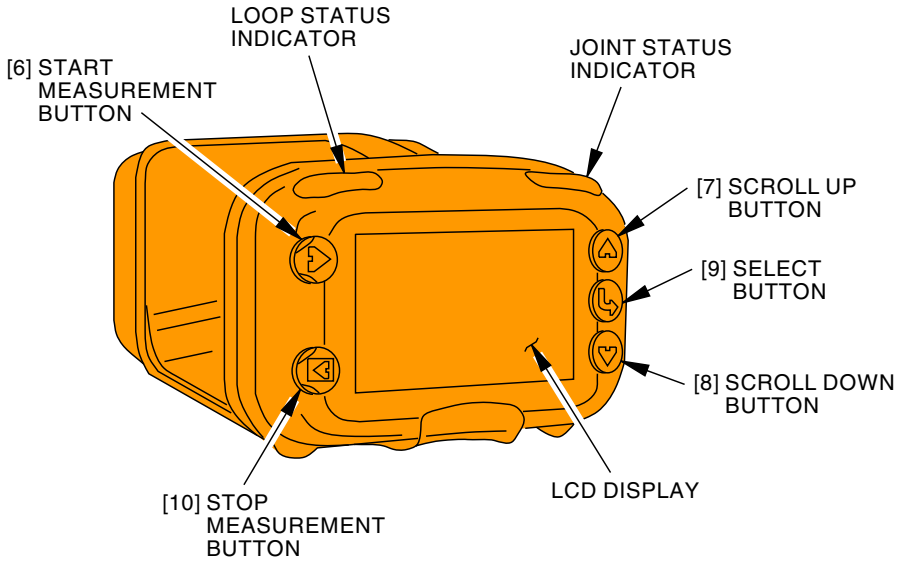
(a) If either the loop or joint resistance values are not in the acceptable range, contact the manufacturer.

(b) If all resistance measurements are in the acceptable range, then this task is completed and the ExLRT is operational.

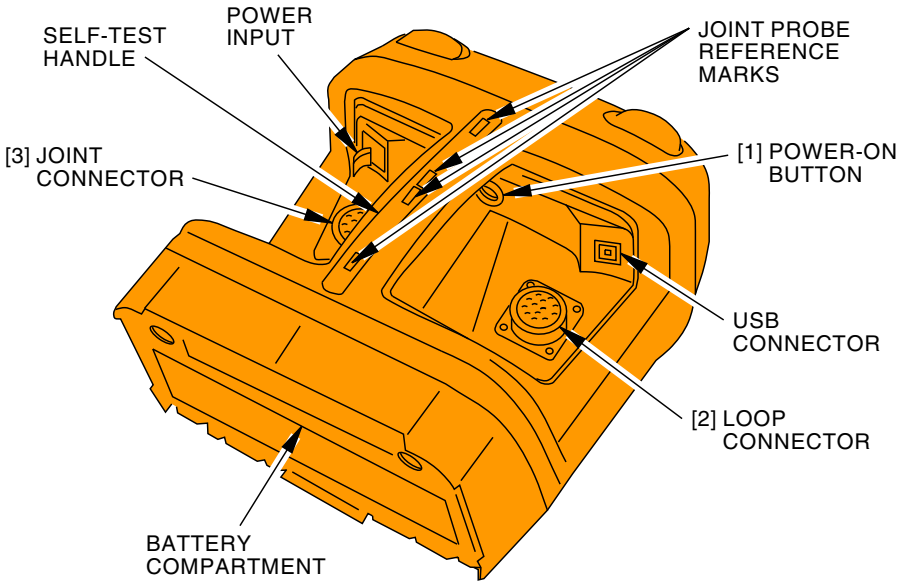
(c) Remove the couplers from the self-test handle of the ExLRT.

——— END OF TASK ———

ECCN 9E991 BOEING PROPRIETARY - See title page for details



MK LOOP RESISTANCE TESTER (ExLRT)
(FRONT VIEW)

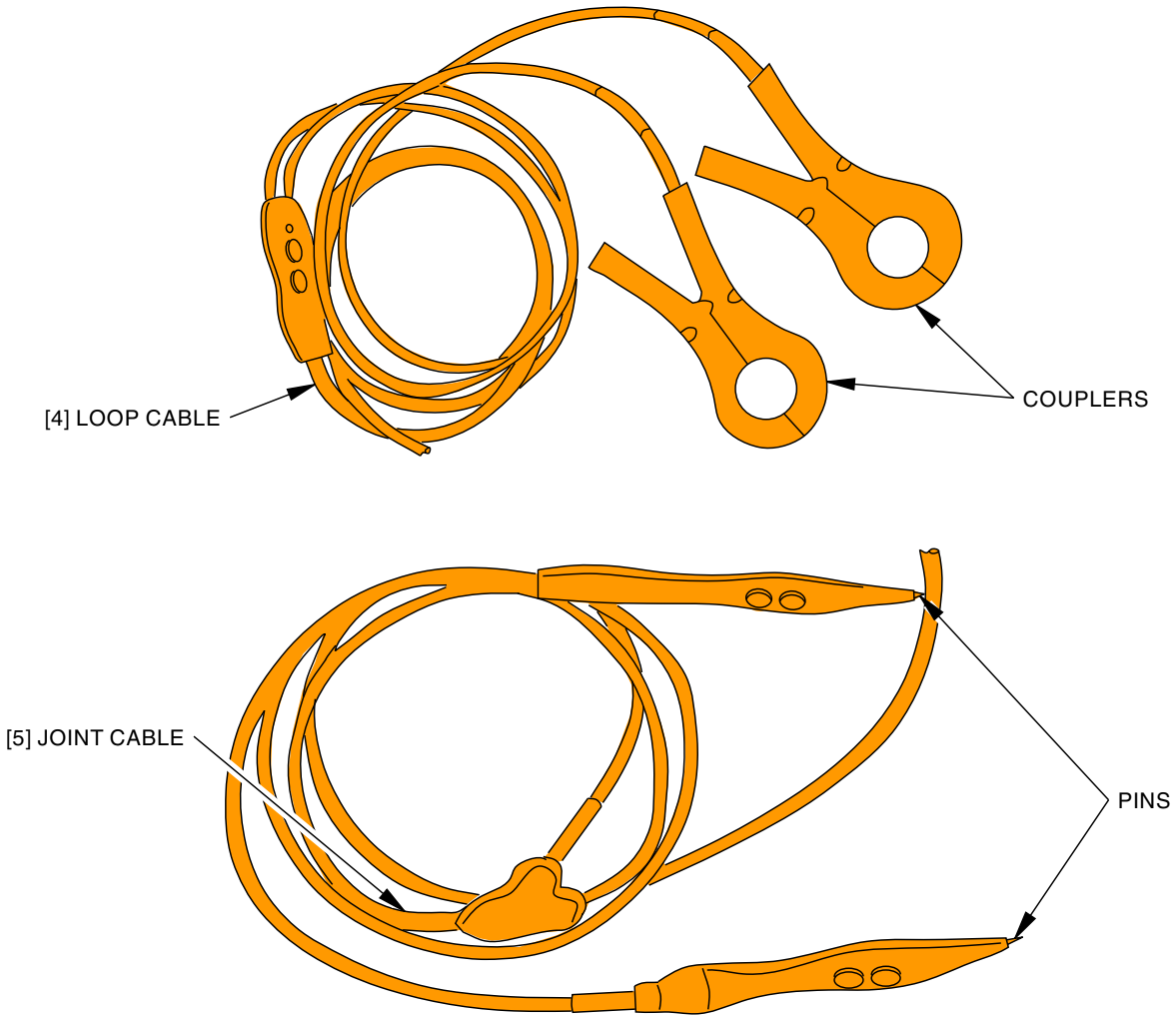


MK LOOP RESISTANCE TESTER (ExLRT)
(TOP VIEW)

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Loop Resistance Tester
Figure 202/05-56-02-990-802 (Sheet 1 of 2)

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Loop Resistance Tester
Figure 202/05-56-02-990-802 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

HIRF/LIGHTNING LOOP RESISTANCE MEASUREMENT - MAINTENANCE PRACTICES

1. General

A. The comments and instructions contained in this procedure apply to loop resistance tester, SPL-1636 (LRT) when so noted.

B. The LRT is used to make non-intrusive wire bundle and coax cable shield resistance measurements by inductively coupling a low voltage into the shield and measuring the current flowing through the shield. The LRT can also be used to make resistance measurements across a built-up joint or individual electrical connections/joints after an electrical loop is first established.

C. This procedure does the Loop Resistance Measurement task.

(1) The Loop Resistance Measurement task contains instructions on how to use the LRT to measure the shield resistance of a wire bundle or coaxial cable. The shield must be electrically connected to airplane structure at both ends in order to form an electrical loop for current to flow. In certain cases, a ground return jumper cable must be used to provide a ground return path because the wire bundle is not connected to airplane structure.

TASK 05-56-03-200-801

2. Loop Resistance Measurement

(Figure 201, Figure 202)

A. References

Reference	Title
05-56-02-200-801	LRT Lid Standard Measurement (P/B 201)
05-56-04-200-801	Joint Resistance Measurement (P/B 201)

B. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-1636	Tester - Loop Resistance (LRT "-1" for checks up to & including 4 years ONLY, LRT "-2 & -3" applicable for all HIRF/FQIS check/inspection intervals) Part #: 906-10246-3 Supplier: 3X2T2 Opt Part #: 906-10246-1 Supplier: 3X2T2 Opt Part #: 906-10246-2 Supplier: 3X2T2

C. Preliminary

SUBTASK 05-56-03-940-001

(1) Prepare the loop resistance tester, SPL-1636 (LRT) for use (Figure 201).

(a) Open the LRT assembly and slide the lid aside to remove it from the base.

(b) Open the lid and remove the Sense/Drive couplers and the joint probe assembly.

(c) Connect the blue-coded Sense coupler cable to the blue-coded Sense Coupler connector on the LRT.

(d) Connect the red-coded Drive coupler cable to the red-coded Drive Coupler connector on the LRT.

(e) Connect the Joint Probe assembly to the Joint Probe connector on the LRT.

(f) Lift the safety cover and set the RUN-OFF/CHARGE switch to the RUN position.

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(g) Set the LRT MODE switch to the LOOP position.

(h) Push and hold the ON/OFF push-button switch on the BITE module until "Testing Hardware" shows on the BITE display, then release the ON/OFF switch. A four character symbol will move around the BITE display during the hardware self-test.

NOTE: To conserve the battery, the LRT will automatically power down after 10 minutes of inactivity. To re-apply power, do the above steps again.

(i) When the "Press Start" indication shows on the BITE display, make sure the LED on each Sense/Drive coupler control box is red.

D. Procedure

SUBTASK 05-56-03-760-001

(1) Connect the couplers.

(a) For a normal Loop Resistance Measurement (Figure 202):

1) Clamp both of the LRT couplers around the wire bundle to be measured.

a) If there are ground wires, such as shield pigtail connections, at the point of measurement on the measured bundle, make sure that such wiring is NOT included within either coupler.

b) Make sure there is at least 4 in. (102 mm) separation between the two couplers. If such separation is impossible to maintain, use the Mu-Metal shields (P/N 906-10249-9) provided with the LRT to obtain the necessary isolation.

NOTE: In the case of multiple wire bundles going to/from a connector, make sure the coupler is only around the desired bundle. This may require removing (and replacing) wire ties to separate the bundles enough for coupler connection.

SUBTASK 05-56-03-760-002

(2) Initiate a Loop Resistance Measurement by pushing the START push-button on either of the Sense/Drive Coupler Control Boxes, causing the LEDs on both boxes to turn green.

(a) When the LEDs flash green, note the loop resistance value shown on the LRT BITE display.

(b) This completes the Loop Resistance measurement.

SUBTASK 05-56-03-810-001

(3) If you are unable to complete the Loop Resistance Measurement, do the steps that follow:

(a) If either LED is red and a "DRV Coup Is Open" or "SNS Coup Is Open" message shows on the BITE display, then the couplers should be checked for proper connection.

1) Gently squeeze and release the coupler handles to improve the connection of the couplers around the wire bundle being measured.

a) If adjusting the couplers does not change the LEDs to green, replace the LRT.

2) If "Press Start" shows on the BITE display, then push the START push-button on either of the Sense/Drive coupler control boxes and begin the Loop Resistance Measurement again.

(b) If either LED is red and a "DRV Coup Is Open" or "SNS Coup Is Open" message does not show on the BITE display, replace the LRT.

(c) If the LED on one or both couplers flashes red, then re-connect the couplers to the wire bundle being measured after the "Press Start" message shows on the BITE display.

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1) Push the START push-button on either coupler control box and begin the Loop Resistance Measurement again.

(d) If the message "UNSTABLE" is displayed and does not clear, set the MODE switch to the JOINT position.

1) When the message "Connect Probes" shows on the BITE display, set the MODE switch back to the LOOP position.

2) When the "Press Start" message appears, push the Start push-button on either of the coupler control boxes and begin the Loop Resistance Measurement again.

3) If this fails to clear the "UNSTABLE" message, then there is a problem with the wire bundle being measured or with the LRT.

NOTE: The "UNSTABLE" message is caused by the LRT detecting a varying resistance. This varying resistance can be caused by a loose connection, a corroded or intermittent electrical joint, a faulty Transorb adapter, or a faulty LRT.

a) Make sure the LRT is operating correctly. Do this task: LRT Lid Standard Measurement, TASK 05-56-02-200-801.

b) If the LRT is operating correctly, then the wire bundle or a connection/joint is faulty and must be repaired or replaced before continuing the measurement. Check each electrical connection in the circuit being measured to isolate the faulty connection/joint. To check the electrical connections, do this task: Joint Resistance Measurement, TASK 05-56-04-200-801.

(e) If the BITE display shows "Joint V TooBig" (Dash-2 LRT only), "Loop I TooBig" or "Loop V TooBig", then stray currents may be circulating through the shield of the wire bundle being measured.

1) If power is applied to any of the equipment attached to this bundle, remove power from the equipment.

2) Any on-board electrical equipment that does not need to be ON should be turned OFF.

3) Make sure no other sources of current or voltage are connected on or near the bundle being tested.

4) In extreme cases, all power may need to be removed from the airplane.

SUBTASK 05-56-03-810-002

(4) For a Dash-2 or -3 LRT, the following BITE display messages may also appear:

(a) Joint TooSmall:

1) This indication is displayed when the Joint Value is too small compared to the Loop Value to give an accurate Joint reading. This condition exceeds the operating capabilities of the LRT.

(b) LNoise V TooBig:

1) This indication is displayed when excessive noise voltage on the wire bundle shield interferes with the LRTs ability to read accurately during Loop Mode. Stray signals on the wire shield may be produced by motors, electronic equipment, or adjacent electronic circuits. This condition can be alleviated by de-energizing equipment in the vicinity of the circuit being tested.

(c) LNoise I TooBig:

ECCN 9E991 BOEING PROPRIETARY - See title page for details

1) This indication is displayed when excessive noise current on the wire bundle shield interferes with the LRTs ability to read accurately during Loop Mode. Stray signals on the wire shield may be produced by motors, electronic equipment, or adjacent electronic circuits. This condition can be alleviated by de-energizing equipment in the vicinity of the circuit being tested.

(d) JNoise V TooBig:

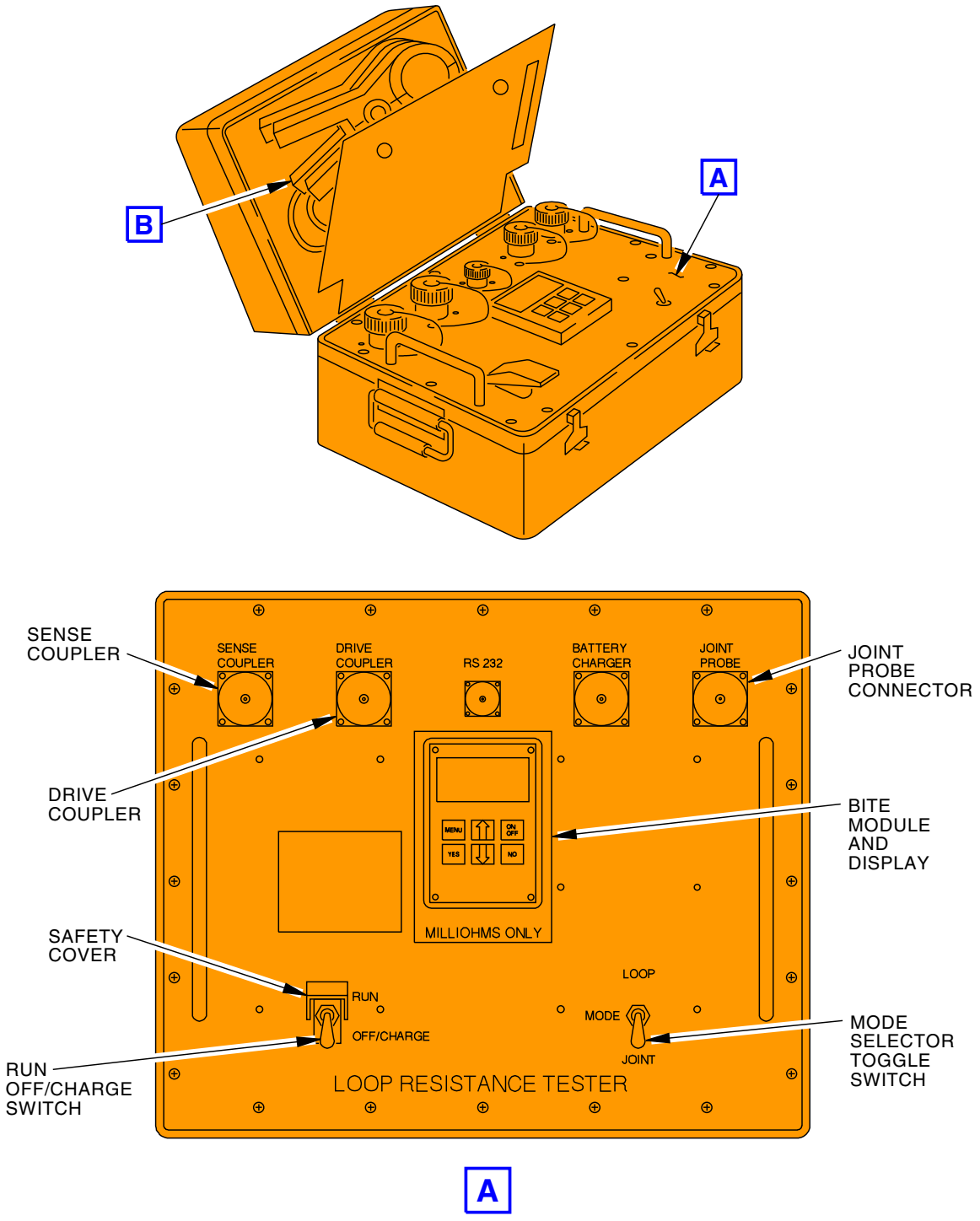
1) This indication is displayed when excessive noise voltage on the wire bundle shield interferes with the LRTs ability to read accurately during Joint Mode. Stray signals on the wire shield may be produced by motors, electronic equipment, or adjacent electronic circuits. This condition can be alleviated by de-energizing equipment in the vicinity of the circuit being tested.

(e) JNoise I TooBig:

1) This indication is displayed when excessive noise current on the wire bundle shield interferes with the LRTs ability to read accurately during Joint Mode. Stray signals on the wire shield may be produced by motors, electronic equipment, or adjacent electronic circuits. This condition can be alleviated by de-energizing equipment in the vicinity of the circuit being tested.

——— END OF TASK ———

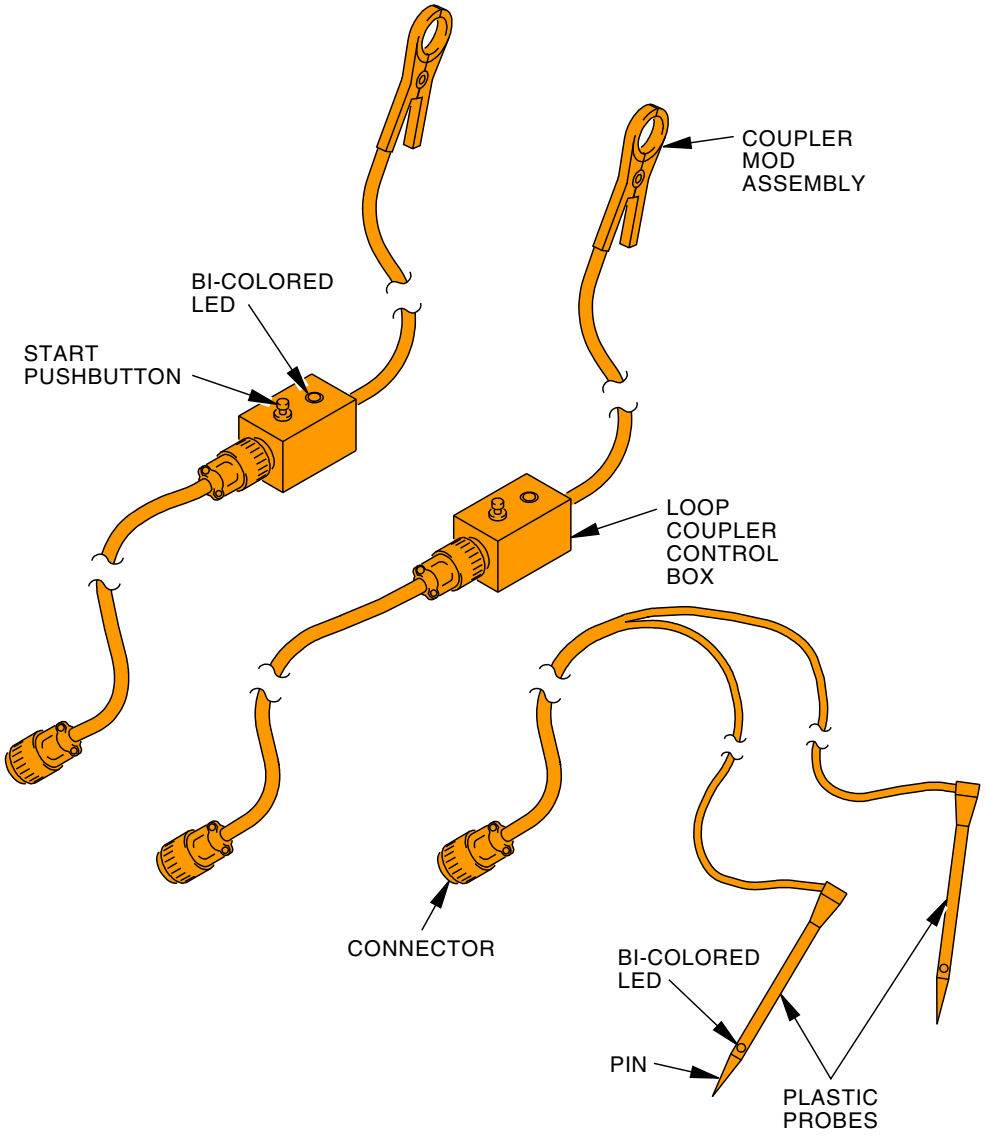
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High Intensity Radiated Fields (HIRF) Inspection Loop Resistance Tester Maintenance Practices
Figure 201/05-56-03-990-801 (Sheet 1 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details

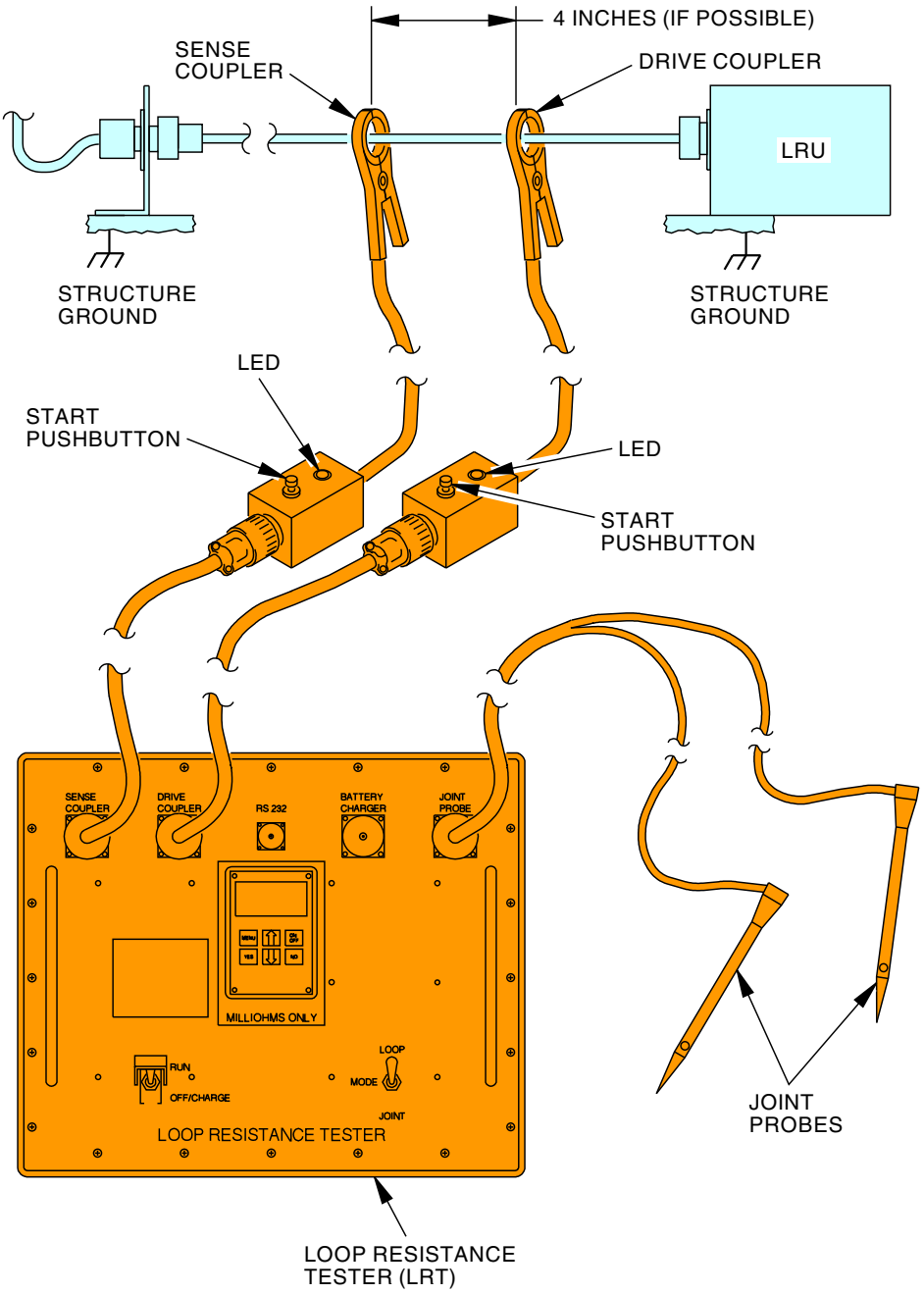


B

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High Intensity Radiated Fields (HIRF) Inspection Loop Resistance Tester Maintenance Practices
Figure 201/05-56-03-990-801 (Sheet 2 of 2)

ECCN 9E991 BOEING PROPRIETARY - See title page for details



2410586 S00061525919_V1

Typical Loop Resistance Tester (LRT) Hookup for Loop Resistance Measurement
Figure 202/05-56-03-990-802

ECCN 9E991 BOEING PROPRIETARY - See title page for details

HIRF/LIGHTNING - JOINT RESISTANCE MEASUREMENT - MAINTENANCE PRACTICES

1. General

A. This task contains instructions on how to use the loop resistance tester, SPL-1636 (LRT) to measure the resistance across a built-up joint or individual electrical connections/joints.

(1) The direct contact voltage and current measurement capabilities of the LRT Joint Probes are used to perform a Joint Resistance Measurement.

(2) The connections/joints to be measured must be contained within the shielding system being measured in the Loop Resistance Mode (the loop current must flow through these joints/ connections).

B. In some cases, the current path to structure may include a subassembly. An example would be one of the connectors mounted to an FSEU Gearbox. In such a case, the bonding of the subassembly-to-structure may also need to be measured. If an out-of-spec joint reading is found, refer to the AMM chapter associated with that particular subsystem for component bonding requirements.

TASK 05-56-04-200-801

2. Joint Resistance Measurement

(Figure 201)

A. References

Reference	Title
05-56-02-200-801	LRT Lid Standard Measurement (P/B 201)
05-56-03-200-801	Loop Resistance Measurement (P/B 201)
SWPM 20-20-00	ELECTRICAL BONDING PROCESSES
SWPM 20-25-11	Overbraid Shields on Wire Bundles

B. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-1636	Tester - Loop Resistance (LRT "-1" for checks up to & including 4 years ONLY, LRT "-2 & -3" applicable for all HIRF/FQIS check/inspection intervals) Part #: 906-10246-3 Supplier: 3X2T2 Opt Part #: 906-10246-1 Supplier: 3X2T2 Opt Part #: 906-10246-2 Supplier: 3X2T2

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C. Procedure

SUBTASK 05-56-04-760-001

(1) To establish an electrical current flow in the wire bundle, joints/connections and bonding straps being measured, do this task: Loop Resistance Measurement, TASK 05-56-03-200-801 before starting the Joint Resistance Measurement.

NOTE: Before a Joint Resistance measurement can be performed, a Loop measurement must have been completed on the wire bundle associated with the joint being measured. The loop resistance tester, SPL-1636 (LRT) continues to monitor the loop resistance of the wire bundle while the joint measurement is being made. If the loop resistance changes by too large an amount, the LEDs on both joint probes will blink red and the message "REDO LOOP" will appear on the BITE display. This message cannot be erased without switching the LRT back to the Loop mode and doing a loop resistance measurement again.

SUBTASK 05-56-04-760-002

(2) Set the Mode Selector switch on the loop resistance tester, SPL-1636 (LRT) to the Joint position.

SUBTASK 05-56-04-760-003

(3) Make sure the LEDs on both Joint Probes are red.

SUBTASK 05-56-04-760-004

(4) Connect one joint probe to one side of a complex joint build-up (structure, LRU, receptacle, bracket, or connector backshell for example) within 1 in. (25 mm) of the joint being measured.

NOTE: A joint may have several electrical connections. For example, a connector mounted on a bracket which is mounted to structure can provide five connections between the bundle shield and "ground": The shield is (1) connected to the connector backshell which is (2) connected to the connector itself which (3) connects to the receptacle which (4) is mounted on the bracket which is (5) connected to structure.

SUBTASK 05-56-04-760-005

(5) Connect the second joint probe to the other side of the joint being measured, within 1 in. (25 mm) of the joint/connector.

NOTE: The LRT will start the Joint Resistance Measurement when the LEDs on both Joint Probes are green. The LEDs change from red to green when electrical continuity is established between the probes. It may be necessary to wiggle the probes in order to make electrical contact through surface coatings.

(a) If the Joint Probes appear to be making good electrical contact and the Joint Probe LEDs do not change to green and no error messages are displayed on the LRT, then, do this task: LRT Lid Standard Measurement, TASK 05-56-02-200-801.

(b) If the BITE display shows "Joint V Too Big", then stray currents may be circulating through the shield of the wire bundle being measured.

1) If power is applied to any of the equipment attached to this bundle, remove power from the equipment.

2) Any on-board electrical equipment that does not need to be ON should be turned OFF.

3) Make sure no other sources of current or voltage are connected on or near the bundle being tested.

4) In extreme cases, all power may need to be removed from the airplane.

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SUBTASK 05-56-04-760-006

(6) When the LEDs on the probes flash green, record the resistance value of this joint from the bottom line of the BITE display.

(a) The resistance values shown in Table 201 are maximum joint resistance values for common electrical connections/joints.

Table 201/05-56-04-993-801

TYPE OF JOINT	MAXIMUM ALLOWABLE RESISTANCE (ALUMINUM CONNECTORS) IN MILLIOHMS	MAXIMUM ALLOWABLE RESISTANCE (STAINLESS/ STEEL) IN MILLIOHMS
BACKSHELL-TO-RECEPTACLE	2.5	5.0
BACKSHELL-TO-PLUG BODY	2.5	5.0
PLUG-TO-RECEPTACLE	5.0	12.5
RECEPTACLE-TO-BRACKET	2.5	5.0
BRACKET-TO-BOND STRAP	1.0	1.0
BOND STRAP-TO-STRUCTURE	1.0	1.0
BRACKET-TO-STRUCTURE	1.0	1.0
RIVETED BRACKET-TO-STRUCTURE	1.0	1.0
OTHER FAY SURFACE BONDS	1.0	1.0

(b) To calculate the maximum allowable resistance for a built-up joint, do the following:

1) Determine what type of electrical connections/joints and how many of each are contained within the built-up joint.

2) Find the maximum allowable resistance for each type of electrical connection/joint contained within the built-up joint.

3) Sum the individual maximum allowable resistances for each electrical connection/joint contained within the built-up joint. This sum is the calculated maximum allowable resistance for the built-up joint.

NOTE: For example, the maximum resistance from a backshell to structure could be the sum of the following values: Backshell-to-Receptacle + Receptacle-to-Bracket + Bracket-to-Structure. Adding up the values in Table 201 (for an aluminum connector) of 2.5 + 2.5 + 1 milliohms each, totals 6 milliohms as a maximum value.

(c) If the measured built-up joint resistance is higher than the calculated maximum allowable resistance, then do a joint resistance measurement across each individual connection/joint to isolate the specific high resistance connection/joint.

1) If an individual connection/joint resistance exceeds the maximum allowable resistance for that type of connection/joint, then repair the faulty connection/joint.

NOTE: Loose connectors and backshells or pigtails can cause an out of tolerance resistance reading.

a) Do the following task: SWPM 20-20-00, or SWPM 20-25-11.

2) After you complete the joint repair, repeat the Joint Buildup Resistance Measurement to verify the repair.

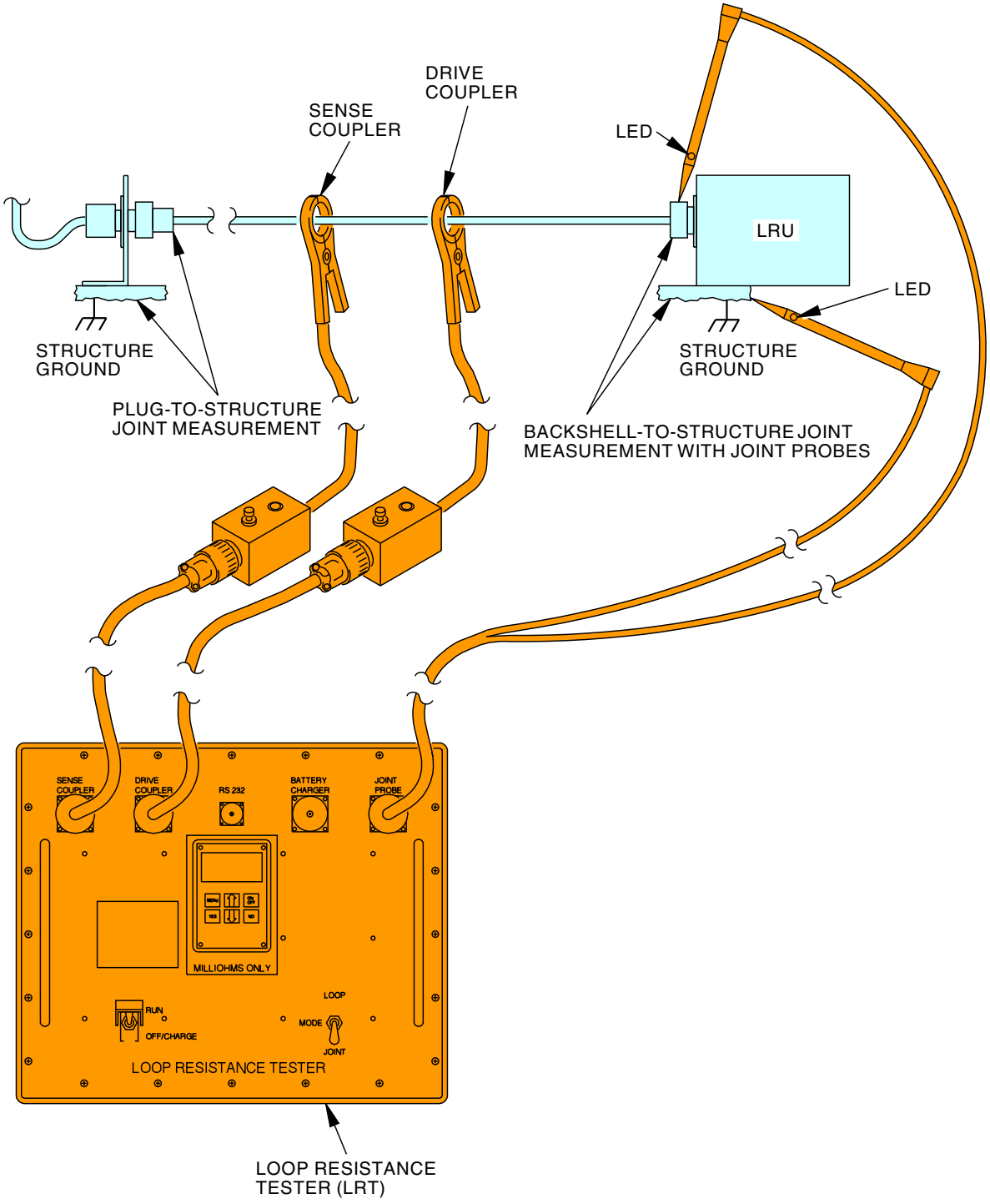
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(d) If the measured joint resistance is less than the calculated maximum allowable resistance for the built-up joint, then do the Joint Buildup Resistance Measurement on the next joint in the wire bundle.

(e) If all of the built-up joints/connections for a particular wire bundle have been measured and joint resistances are less than the calculated maximum allowable resistance for the built-up joints, then the Joint Buildup Resistance Measurement Task is complete.

——— END OF TASK ———

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2410588 S00061525924_V1

Typical Loop Resistance Tester (LRT) Hookup for Joint Buildup Test
Figure 201/05-56-04-990-801

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LOOP RESISTANCE MEASUREMENT AND JOINT RESISTANCE MEASUREMENT - MAINTENANCE PRACTICES

1. General

A. The MK loop resistance tester, SPL-18565 (ExLRT), is a specialized piece of test equipment that is used to make non-intrusive wire bundle and coax cable shield resistance measurements. The ExLRT can also be used to make resistance measurements across a built-up joint or individual electrical connections/joints.

B. This task contains instructions on how to use ExLRT to measure the loop resistance of a wire bundle or coax cable shield and how to measure resistance across a built-up joint or individual electrical connections/joints.

(1) The connections/joints to be measured must be contained within the shielding system being measured in loop resistance mode (the loop current must flow through these joints/ connections).

(2) The direct contact voltage and current measurement capabilities of the ExLRT joint probes used to perform a joint resistance measurement.

C. In some cases, the current path to structure may include a subassembly. An example would be of the connectors mounted to an FSEU gearbox. In such a case, the bonding of the subassembly to structure may also need to be measured. If an out of spec joint reading is found, refer to AMM chapter associated with that particular subsystem for component bonding requirements.

TASK 05-56-05-200-801

2. Loop Resistance and Joint Resistance Measurement

Figure 201Figure 202 or Figure 203Figure 203

A. References

Reference	Title
05-56-02-200-802	ExLRT Standard Measurement (P/B 201)
05-56-02-990-802	Figure: Loop Resistance Tester (P/B 201)
SWPM 20-20-00	ELECTRICAL BONDING PROCESSES
SWPM 20-25-11	Overbraid Shields on Wire Bundles

B. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-18565	Tester - Loop Resistance, MK Part #: XLR-9703-01 Supplier: KC432 Part #: XLR-9703-02 Supplier: KC432

C. Prepare for the Measurement

SUBTASK 05-56-05-940-001

(1) Prepare the MK loop resistance tester, SPL-18565 (ExLRT), for measurement (Figure 05-56-02-990-802).

(a) Remove the ExLRT assembly from its box.

(b) Connect the Loop cable [4] to the Loop connector [2].

(c) Connect theJoint cable [5] to the Joint connector [3].

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(d) Push the Power-on button [1] on the rear of the front panel.

NOTE: The LCD display will show the unit information.

1) If ExLRT will not turn on, do these steps:

a) Change the battery in a safe zone:

<1> Open the battery compartment.

<2> Remove the battery.

<3> Put a charged battery into the unit.

<4> Close the battery compartment.

b) If necessary, refer to ExLRT user's guide and contact the device manufacturer.

D. Loop Resistance Measurement

SUBTASK 05-56-05-760-001

(1) For a normal loop resistance measurement (Figure 202 or Figure 203):

(a) Clamp two couplers around the wire bundle.

1) Make sure that ground wires, such as shield pigtail connections, at the point of measurement on the measured bundle are not included within either coupler.

2) Make sure that there is minimum 4 in. (102 mm) separation between the two couplers.

a) If necessary, skew the couplers 45 degrees.

3) Make sure that the coupler is only around the desired bundle.

a) If necessary, remove (and replace) wire ties to separate the bundles enough for coupler connection.

4) Push the Start measurement button [6] or green button on the loop controller to start a loop resistance measurement.

NOTE: The loop status indicator will flash green when the unit is ready to take a loop resistance measurement.

5) When the loop status indicator is amber, the loop resistance measurement is displayed as a number with two decimal places on top left of LCD display.

SUBTASK 05-56-05-820-002

(2) If either the loop status indicator is red and "Drive coupler is open" or "Sense Coupler is Open" message shows on the LCD display, do these steps:

(a) Gently squeeze and release the coupler handles to improve the connection of the coupler around the wire bundle being measured.

(b) If adjusting the couplers does not change the loop status indicator to amber, do this task: ExLRT Standard Measurement, TASK 05-56-02-200-802.

(c) If error message disappears and loop status indicator is flashing green, push the Start measurement button [6] to begin loop resistance measurement again.

SUBTASK 05-56-05-820-003

(3) If the loop status indicator is red, do these steps:

(a) Push the Stop measurement button [10] to stop the measurement.

(b) Re-connect the couplers to the wire bundle.

(c) Push the Start measurement button [6] to start new measurement.

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SUBTASK 05-56-05-820-005

(4) If this fails to clear the “Loop Unstable” message, then there is a problem with the wire bundle being measured or with the ExLRT.

NOTE: The "Loop Unstable" message is caused by the ExLRT detecting a varying resistance. This varying resistance can be caused by a loose connection, a corroded or intermittent electrical joint, a faulty transorb adapter, or a faulty ExLRT.

(a) Make sure that the ExLRT is operating correctly (ExLRT Standard Measurement, TASK 05-56-02-200-802).

(b) If the ExLRT is operating correctly, then the wire bundle or a connection/joint is faulty and must be repaired or replaced before continuing the measurement.

1) Check each electrical connection in the circuit being measured to isolate the faulty connection/joint.

SUBTASK 05-56-05-820-006

(5) If the loop status indicator is red and “Loop Resistance Low” message displays, do these steps:

(a) Make sure that ground wires, such as shield pigtail connections, at the point of measurement on the measured bundle are not included within either coupler.

(b) Make sure that there is minimum 4 in. (102 mm) separation between the two couplers.

1) If necessary, skew the couplers 45 degrees.

(c) Make sure that the coupler is only around the desired bundle.

1) If necessary, remove (and replace) wire ties to separate the bundles enough for coupler connection.

(d) Make sure that the ExLRT is operating correctly (ExLRT Standard Measurement, TASK 05-56-02-200-802).

SUBTASK 05-56-05-820-007

(6) If the loop status indicator is red and a "Loop Resistance High" message displays, do these steps:

(a) Make sure that the placement of couplers are correct on bundles under test.

(b) Make sure that the ExLRT is operating correctly (ExLRT Standard Measurement, TASK 05-56-02-200-802).

SUBTASK 05-56-05-820-008

(7) If the ExLRT is operating correctly, then the wire bundle or a connection/joint is faulty.

(a) Repair or replace the wire bundle or a connection/joint before continuing the measurement.

(b) Check each electrical connection in the circuit being measured to isolate the faulty connection/joint.

E. Joint Resistance Measurement

SUBTASK 05-56-05-760-003

(1) Complete the loop measurement on the wire bundle associated with the joint being measured.

NOTE: The ExLRT continues to monitor the loop resistance of the wire bundle while the joint measurement is being made.

NOTE: Keep couplers in the same configuration.

SUBTASK 05-56-05-760-004

(2) Make sure that the joint status indicator is flashing green.

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SUBTASK 05-56-05-760-005

(3) Connect one joint probe to one side of a complex joint build-up (structure, Line Replaceable Unit (LRU), receptacle, bracket, or connector backshell for example) within 1 in. (25 mm) of the joint being measured (Figure 203.

NOTE: A joint may have several electrical connections. For example, a connector mounted on a bracket that is mounted to structure can provide five connections between the bundle shield and "ground": The shield is (1) connected to the connector backshell that is (2) connected to the connector itself that (3) connects to the receptacle that (4) is mounted on the bracket that is (5) connected to structure.

SUBTASK 05-56-05-760-006

(4) Connect the second joint probe to the other side of the joint being measured, within 1 in. (25 mm) of the joint/connector.

(a) Make sure that the joint status indicator turn amber.

(b) Make sure that the joint measurement is displayed in the top right of the LCD display.

(c) If necessary, shake the probes to make electrical contact through surface coatings.

(d) If the joint probes appear to be making good electrical contact and the joint probe LED indicator does not change to amber and no error messages are displayed, do this task: ExLRT Standard Measurement, TASK 05-56-02-200-802.

(e) If the joint probe LED indicator is red and the LCD display shows "Joint Low vs Loop", do these steps:

1) Attach one end of the ground return test cable to the shield termination point of the electrical connector under test.

2) Thread the ground return test cable and wire bundle under test through both loop couplers.

3) Connect the other end of the ground return test cable to structure.

4) Push the Start measurement button [6] to start a new measurement, the loop resistance should be much lower than it was previously.

a) If the loop resistance is not lower, check the connection of the ground return test cable.

5) Connect one joint probe to one side of a complex joint build-up (structure, LRU, receptacle, bracket, or connector backshell for example) within 1 in. (25 mm) of the joint being measured (Figure 203).

6) Connect the second joint probe to the other side of the joint being measured, within 1 in. (25 mm) of the joint/connector.

a) Make sure that the joint status indicator turn amber.

b) Make sure that the joint measurement is displayed in the top right of the LCD display.

SUBTASK 05-56-05-760-007

(5) If the joint probe LED indicator is red and the LCD display shows “Joint Intermittent”, do these steps:

(a) Push the Stop measurement button [10] and remove joint probes from the connector to stop the measurement.

(b) Push the Start measurement button [6] and re-position probes to correct locations to start measurement.

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(c) If this fails to clear the “Joint Intermittent” message, then there is a problem with the wire bundle being measured or with the ExLRT.

(d) Make sure that the ExLRT is operating correctly, do this task: ExLRT Standard Measurement, TASK 05-56-02-200-802.

(e) If the ExLRT is operating correctly, then there is a problem with the connection/joint and it must be repaired or replaced before continuing the measurement.

SUBTASK 05-56-05-760-008

(6) When the LED is amber, record the resistance value of the joint shown in the top right of the LCD display.

(a) The following resistance values (Table 201) are maximum joint resistance values for common electrical connections/joints.

Table 201/05-56-05-993-801

TYPE OF JOINT	MAXIMUM ALLOWABLE RESISTANCE (ALUMINUM CONNECTORS) IN MILLIOHMS	MAXIMUM ALLOWABLE RESISTANCE (STAINLESS/ STEEL) IN MILLIOHMS
BACKSHELL-TO-RECEPTACLE	2.5	5.0
BACKSHELL-TO-PLUG BODY	2.5	5.0
PLUG-TO-RECEPTACLE	5.0	12.5
RECEPTACLE-TO-BRACKET	2.5	5.0
BRACKET-TO-BOND STRAP	1.0	1.0
BOND STRAP-TO-STRUCTURE	1.0	1.0
BRACKET-TO-STRUCTURE	1.0	1.0
RIVETED BRACKET-TO-STRUCTURE	1.0	1.0
OTHER FAY SURFACE BONDS	1.0	1.0

(b) Calculate the maximum allowable resistance for a built-up joint.

1) Determine what type of electrical connections/joints and how many of each are contained within the built-up joint.

2) Find the maximum allowable resistance for each type of electrical connection/joint (Table 201) contained within the built-up joint.

3) Sum the individual maximum allowable resistances for each electrical connection/joint contained within the built-up joint.

NOTE: This sum is the calculated maximum allowable resistance for the built-up joint.

(c) If the measured built-up joint resistance is higher than the calculated maximum allowable resistance, then do a joint resistance measurement across each individual connection/joint to isolate the specific high resistance connection/joint.

1) If an individual connection/joint resistance exceeds the maximum allowable resistance (Table 201) for that type of connection/joint, then repair the faulty connection/joint.

NOTE: Loose connectors and backshells or pigtails can cause an out of tolerance resistance reading.

a) Do the following task: (SWPM 20-20-00) or (SWPM 20-25-11).

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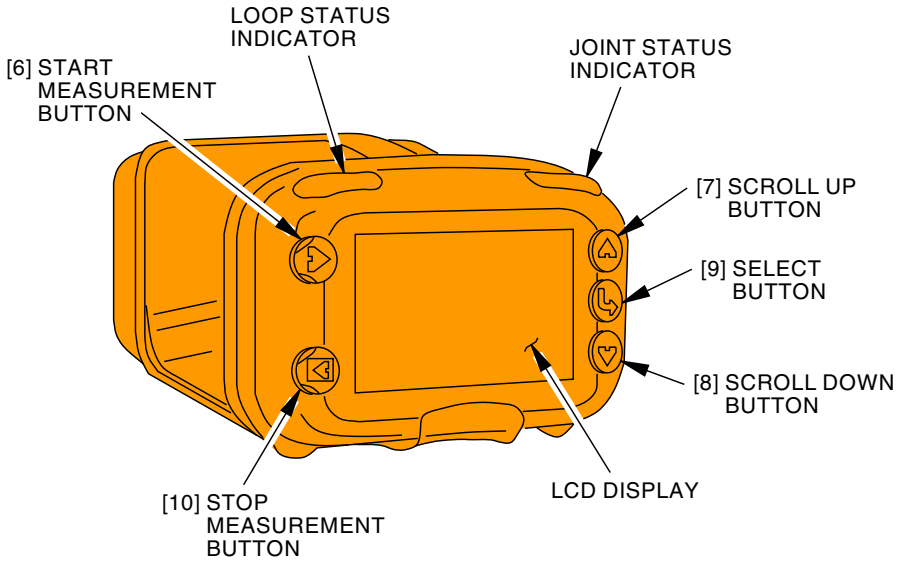
2) After you complete the joint repair, repeat the joint buildup resistance measurement to verify the repair.

(d) If the measured joint resistance is less than the calculated maximum allowable resistance for the built-up joint, then do the joint buildup resistance measurement on the next joint in the wire bundle.

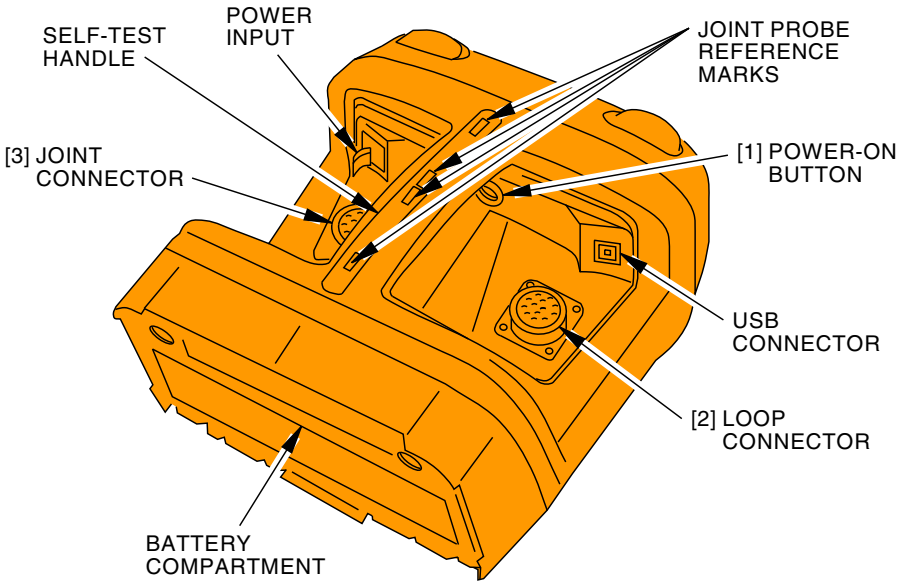
(e) If all of the built-up joints/connections for a particular wire bundle have been measured and joint resistances are less than the calculated maximum allowable resistance for the built-up joints, then the joint buildup resistance measurement task is complete.

——— END OF TASK ———

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MK LOOP RESISTANCE TESTER (ExLRT)
(FRONT VIEW)

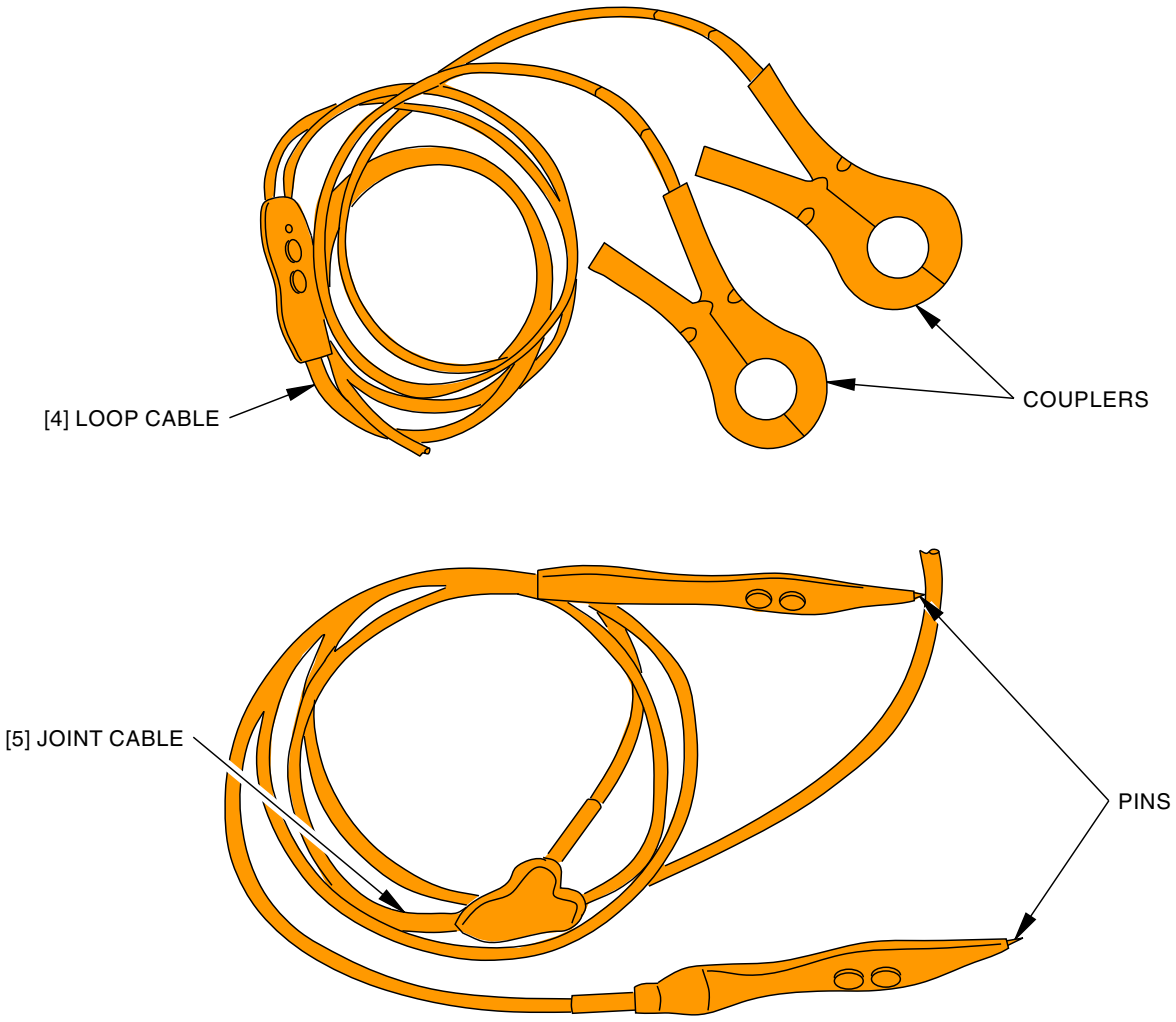


MK LOOP RESISTANCE TESTER (ExLRT)
(TOP VIEW)

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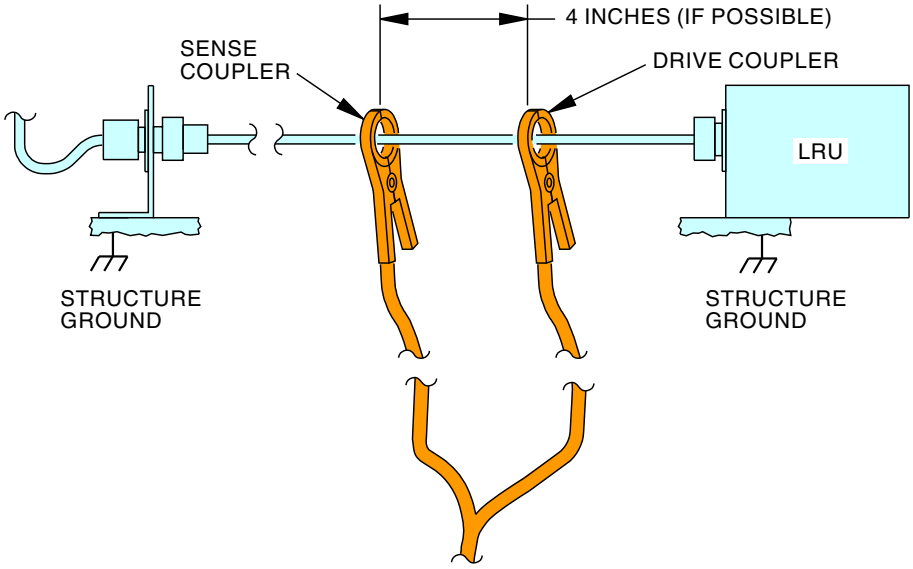
Loop Resistance Tester
Figure 201/05-56-05-990-801 (Sheet 1 of 2)

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Loop Resistance Tester
Figure 201/05-56-05-990-801 (Sheet 2 of 2)

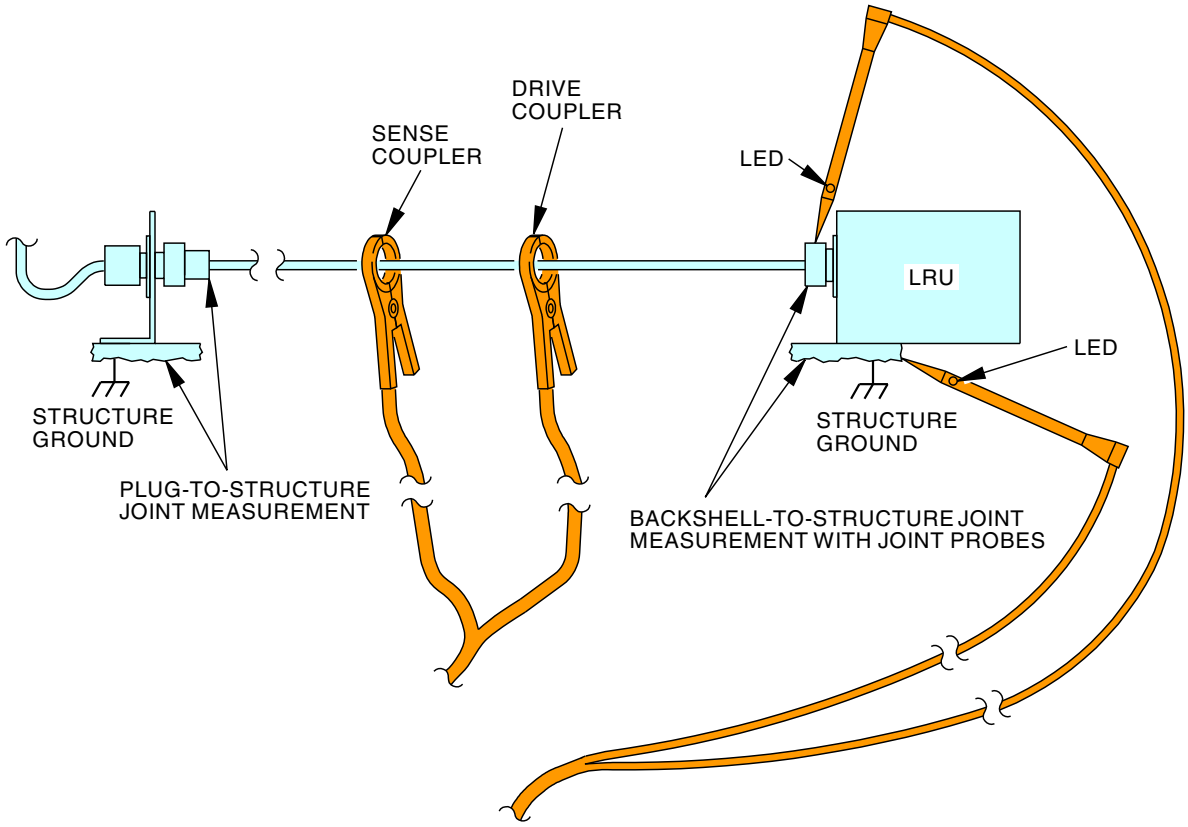
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2929038 S0000708130_V1

Typical Loop Resistance Tester (ExLRT) Hookup for Loop Resistance Measurement
Figure 202/05-56-05-990-802

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Typical Loop Resistance Tester (ExLRT) Hookup for Joint Buildup Test
Figure 203/05-56-05-990-804

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