CHAPTER

5

WINGS



CHAPTER 57 WINGS

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57-EFFECTIV	E PAGES		57-05-03			57-05-03	(cont)	
1 thru 4	SEP 05/2018		201	May 05/2015		237	May 05/2015	
57-CONTENT	S		202	Jan 05/2015		238	Jan 05/2015	
1	Jan 05/2017		203	Jan 05/2015		239	May 05/2015	
2	Jan 05/2017		204	Jan 05/2015		240	Jan 05/2015	
3	Jan 05/2017		205	May 05/2015		241	May 05/2015	
4	Jan 05/2017		206	Jan 05/2015		242	Jan 05/2015	
5	Jan 05/2017		207	May 05/2016		243	Jan 05/2015	
6	Sep 05/2017		208	May 05/2015		244	Jan 05/2015	
7	Jan 05/2017		209	Jan 05/2015		245	May 05/2015	
8	Sep 05/2017		210	May 05/2015		246	Jan 05/2015	
9	Jan 05/2018		211	Jan 05/2015		247	May 05/2015	
10	BLANK		212	Jan 05/2015		248	Jan 05/2015	
57-05-01			213	May 05/2015		249	May 05/2015	
201	Sep 05/2017		214	Jan 05/2015		250	Jan 05/2015	
202	Sep 05/2016		215	May 05/2015		251	Jan 05/2015	
203	Sep 05/2017		216	Jan 05/2015		252	May 05/2015	
204	Sep 05/2016		217	May 05/2015		253	Jan 05/2015	
205	Sep 05/2016		218	Jan 05/2015		254	May 05/2015	
206	Sep 05/2016		219	May 05/2015		255	Jan 05/2015	
207	Sep 05/2016		220	Jan 05/2015		256	May 05/2015	
208	Sep 05/2016		221	May 05/2015		257	Jan 05/2015	
209	Sep 05/2016		222	Jan 05/2015		258	May 05/2016	
210	Sep 05/2016		223	May 05/2015		259	May 05/2015	
211	Sep 05/2016		224	Jan 05/2015		260	Jan 05/2015	
212	Sep 05/2016		225	May 05/2015		261	May 05/2015	
213	Sep 05/2016		226	Jan 05/2015		262	Jan 05/2015	
214	Sep 05/2016		227	May 05/2015		263	May 05/2015	
215	Sep 05/2016		228	Jan 05/2015		264	Jan 05/2015	
216	Sep 05/2016		229	May 05/2015		265	Jan 05/2015	
217	Sep 05/2016		230	Jan 05/2015		266	May 05/2015	
218	Sep 05/2016		231	May 05/2015		267	Jan 05/2015	
219	Sep 05/2016		232	Jan 05/2015		268	May 05/2015	
220	Sep 05/2016		233	May 05/2015		269	Jan 05/2015	
221	Sep 05/2016		234	Jan 05/2015		270	May 05/2015	
222	BLANK		235	May 05/2015		271	Jan 05/2015	
			236	Jan 05/2015		272	May 05/2015	

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57-05-03	(cont)		57-15-00			57-41-10	(cont)	
273	Jan 05/2015		401	May 05/2016		407	Jan 05/2015	
274	May 05/2015		402	Jan 05/2018		408	Sep 05/2017	
275	Jan 05/2015		403	Jan 05/2017		409	Jan 05/2015	
276	May 05/2015		404	May 05/2016		410	Jan 05/2015	
277	Jan 05/2015		405	May 05/2016		411	Jan 05/2015	
278	May 05/2015		406	Jan 05/2016		412	Sep 05/2017	
279	Jan 05/2015		57-25-01			413	Sep 05/2017	
280	May 05/2015		801	Jan 05/2015		414	Sep 05/2017	
281	Jan 05/2015		802	BLANK		415	Sep 05/2017	
282	May 05/2015		57-25-02			416	Sep 05/2017	
283	Jan 05/2015		701	Sep 05/2015		57-41-56		
284	May 05/2015		702	Jan 05/2015		401	Jan 05/2016	
285	Jan 05/2015		703	Jan 05/2015		402	Sep 05/2017	
286	May 05/2015		704	Jan 05/2015		403	Sep 05/2017	
287	Jan 05/2015		57-32-01			404	Sep 05/2017	
288	May 05/2015		401	May 05/2015		405	Sep 05/2017	
289	Jan 05/2016		402	Sep 05/2017		406	Jan 05/2015	
290	May 05/2015		403	Sep 05/2017		407	Jan 05/2015	
291	Jan 05/2015		404	May 05/2018		408	Jan 05/2015	
292	May 05/2015		405	Sep 05/2017		409	Jan 05/2015	
293	Jan 05/2015		406	Sep 05/2017		410	BLANK	
294	May 05/2015		407	Sep 05/2017		57-41-59		
295	Jan 05/2015		408	Sep 05/2017		401	Sep 05/2017	
296	Jan 05/2015		409	Jan 05/2015		402	Sep 05/2017	
297	Jan 05/2015		410	Jan 05/2015		403	Sep 05/2017	
298	May 05/2015		411	Jan 05/2015		404	Jan 05/2015	
298.1	Jan 05/2015		412	Jan 05/2015		57-43-01		
298.2	May 05/2015		413	Jan 05/2015		401	Sep 05/2017	
298.3	Jan 05/2015		414	BLANK		402	Sep 05/2017	
298.4	May 05/2015		57-41-10			403	Sep 05/2017	
298.5	Jan 05/2015		401	Sep 05/2017		404	Sep 05/2017	
298.6	Jan 05/2015		402	Sep 05/2017		405	Sep 05/2017	
298.7			403	Sep 05/2017		406	Sep 05/2017	
298.8	Jan 05/2015		404	Sep 05/2017		407	Sep 05/2017	
	2 33,23.3		405	Jan 05/2015		408	Sep 05/2017	
			406	Jan 05/2015		409	Sep 05/2017	

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57-43-01	(cont)		57-43-03	(cont)		57-52-01		
410	BLANK		410	BLANK		401	Jan 05/2015	
57-43-02			57-51-03			402	Sep 05/2017	
401	Sep 05/2017		801	May 05/2015		403	Sep 05/2017	
402	Sep 05/2017		802	Jan 05/2018		404	Sep 05/2017	
403	Sep 05/2017		803	Jan 05/2018		405	Jan 05/2015	
404	Sep 05/2017		804	Jan 05/2018		406	Jan 05/2015	
405	Sep 05/2017		805	Jan 05/2015		57-52-02		
406	Sep 05/2017		806	BLANK		401	Jan 05/2015	
407	Sep 05/2017		57-51-10			402	Sep 05/2017	
408	Sep 05/2017		401	Sep 05/2017		403	Jan 05/2015	
409	Jan 05/2015		402	Sep 05/2017		404	Jan 05/2015	
410	Jan 05/2015		403	Sep 05/2017		57-52-04		
411	Jan 05/2015		404	Sep 05/2017		401	May 05/2016	
412	Jan 05/2015		405	Jan 05/2015		402	Jan 05/2015	
413	Jan 05/2015		406	Jan 05/2015		403	Jan 05/2015	
414	Jan 05/2015		407	Jan 05/2015		404	Jan 05/2015	
415	Jan 05/2015		408	Jan 05/2015		405	Sep 05/2015	
416	Sep 05/2017		409	Jan 05/2015		406	Jan 05/2015	
417	Sep 05/2017		410	Jan 05/2015		407	Jan 05/2015	
418	Sep 05/2017		411	Jan 05/2015		408	BLANK	
419	Sep 05/2017		412	Jan 05/2015		57-54-01		
420	Sep 05/2017		413	Jan 05/2015		201	Sep 05/2017	
421	Sep 05/2017		414	Jan 05/2015		202	Sep 05/2017	
422	Sep 05/2017		415	Jan 05/2015		203	Sep 05/2017	
423	Sep 05/2017		416	BLANK		204	Sep 05/2017	
424	Sep 05/2017		57-51-10			205	Jan 05/2015	
57-43-03			501	Jan 05/2015		206	Jan 05/2015	
401	Jan 05/2016		502	Sep 05/2017		207	Jan 05/2015	
402	Sep 05/2017		503	Sep 05/2017		208	BLANK	
403	Sep 05/2017		504	Sep 05/2017		57-54-01		
404	Jan 05/2015		505	Sep 05/2017		601	Jan 05/2015	
405	Jan 05/2015		506	Sep 05/2017		602	Jan 05/2015	
406	Jan 05/2015		507	Jan 05/2015		603	Jan 05/2015	
407	Sep 05/2015		508	Jan 05/2015		604	Jan 05/2015	
408	Jan 05/2015		509	Jan 05/2015		605	Jan 05/2015	
409	Jan 05/2015		510	BLANK		606	Jan 05/2015	

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57-54-01	(cont)		57-54-04	(cont)				
607	Jan 05/2015		419	May 05/2015				
608	Jan 05/2015		420	May 05/2015				
57-54-02			421	May 05/2015				
401	Jul 25/2018		422	May 05/2015				
402	Sep 05/2017		423	May 05/2018				
403	Jul 25/2018		424	Sep 05/2015				
404	Sep 05/2017		425	Sep 05/2017				
405	Sep 05/2017		426	May 05/2015				
406	Jan 05/2015		427	May 05/2015				
407	Jan 05/2015		428	May 05/2016				
408	Jan 05/2015		429	May 05/2015				
409	Sep 05/2017		430	May 05/2015				
410	Jul 25/2018		431	May 05/2015				
411	Sep 05/2017		432	BLANK				
412	Sep 05/2017		57-61-00					
413	Jul 25/2018		401	Jan 05/2018				
414	Sep 05/2017		402	Jan 05/2018				
57-54-04			403	Jan 05/2018				
401	Jan 05/2015		404	Jan 05/2018				
402	Jan 05/2015		405	Jan 05/2015				
403	Jan 05/2015		406	Jan 05/2015				
404	Jan 05/2015		57-71-00					
405	Sep 05/2017		401	May 05/2015				
406	Sep 05/2017		402	Sep 05/2017				
407	Sep 05/2017		403	Sep 05/2017				
408	Sep 05/2017		404	Jan 05/2015				
409	Sep 05/2017		405	Jan 05/2015				
410	May 05/2015		406	BLANK				
411	May 05/2015		400	DEANIC				
412	May 05/2015							
413	May 05/2015							
414	May 05/2015							
415	May 05/2015							
416	May 05/2015							
417	May 05/2015							
418	May 05/2015							

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	SECTION			
SUBJECT	SUBJECT	CONF	PAGE	EFFECT
WINGS - CORROSION INSPECTIONS -	57-05-01		201	ARO ALL
MAINTENANCE PRACTICES	0. 00 0.			AITO ALL
INTERNAL - GENERAL VISUAL: WING CENTER SECTION -300ER TASK 57-05-01-210-801-004			201	ARO ALL
INTERNAL - GENERAL VISUAL: LEFT SIDE - ENVIRONMENTAL CONTROL SYSTEMS BAY AND UNDERWING FAIRINGS TASK 57-05-01-210-806			206	ARO ALL
INTERNAL - GENERAL VISUAL: LOWER FUSELAGE - FORWARD KEEL BEAM AREA TASK 57-05-01-210-807			209	ARO ALL
INTERNAL - GENERAL VISUAL: RIGHT SIDE - ENVIRONMENTAL CONTROL SYSTEMS BAY AND UNDERWING FAIRINGS TASK 57-05-01-210-808			211	ARO ALL
EXTERNAL - GENERAL VISUAL: LEFT WING TASK 57-05-01-210-809			214	ARO ALL
EXTERNAL - GENERAL VISUAL: LEFT WING TASK 57-05-01-210-810			216	ARO ALL
EXTERNAL - GENERAL VISUAL: RIGHT WING TASK 57-05-01-210-818			218	ARO ALL
EXTERNAL - GENERAL VISUAL: RIGHT WING TASK 57-05-01-210-819			220	ARO ALL
WINGS - STRUCTURAL INSPECTIONS - MAINTENANCE PRACTICES	57-05-03		201	ARO ALL
INTERNAL - DETAILED: WING CENTER SECTION TASK 57-05-03-211-801			201	ARO ALL
INTERNAL - GENERAL VISUAL: SLAT NUMBER 7			205	ARO ALL
TASK 57-05-03-210-801				
EXTERNAL - GENERAL VISUAL: SLATS NUMBER 1 THROUGH 6 TASK 57-05-03-210-802			208	ARO ALL
EXTERNAL - DETAILED: WING INSPAR AREA (FUEL TANKS) - INBOARD OF WING RIB 17 TASK 57-05-03-211-802			210	ARO ALL



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SUBJECT	SUBJECT CONF	<u>PAGE</u>	EFFECT
INTERNAL - DETAILED: WING INSPAR AREA (FUEL TANKS) - INBOARD OF WING RIB 17 TASK 57-05-03-211-803		213	ARO ALL
EXTERNAL - GENERAL VISUAL: WING INSPAR AREA (FUEL TANKS) - RIB 17 TO WING TIP TASK 57-05-03-211-804		215	ARO ALL
INTERNAL - DETAILED: WING INSPAR AREA (FUEL TANKS) - RIB 17 TO RIB 34 TASK 57-05-03-211-805		217	ARO ALL
INTERNAL - DETAILED: WING INSPAR AREA (FUEL TANKS) - RIB 34 TO WING TIP TASK 57-05-03-211-806		219	ARO ALL
INTERNAL - SPECIAL DETAILED: MAIN TANK - RIB 17 TO RIB 32 - LEFT WING TASK 57-05-03-211-807		221	ARO ALL
INTERNAL - DETAILED: MAIN TANK - RIB 17 TO RIB 32 - LEFT WING TASK 57-05-03-211-808		223	ARO ALL
EXTERNAL - SPECIAL DETAILED: WING INBOARD AND OUTBOARD MAIN FLAP ATTACH BOLTS TASK 57-05-03-211-810		225	ARO ALL
EXTERNAL - DETAILED: LEFT WING INBOARD MAIN FLAP TASK 57-05-03-211-811		225	ARO ALL
INTERNAL - GENERAL VISUAL: LEFT WING INBOARD MAIN FLAP TASK 57-05-03-210-803		227	ARO ALL
INTERNAL - DETAILED: LEFT WING INBOARD MAIN FLAP TASK 57-05-03-211-812		229	ARO ALL
INTERNAL - DETAILED: LEFT WING INBOARD MAIN FLAP SUPPORT TORQUE TUBE TASK 57-05-03-211-831		231	ARO ALL
INTERNAL - GENERAL VISUAL: LEFT WING INBOARD AFT FLAP TASK 57-05-03-210-804		233	ARO ALL



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SUBJECT	SUBJECT CONF PAGE	EFFECT
INTERNAL - GENERAL VISUAL: LEFT WING FLAPERON TASK 57-05-03-210-805	235	ARO ALL
INTERNAL - DETAILED: LEFT WING FLAPERON TASK 57-05-03-211-813	237	ARO ALL
INTERNAL - GENERAL VISUAL: LEFT WING OUTBOARD FLAP TASK 57-05-03-210-806	239	ARO ALL
INTERNAL - DETAILED: LEFT WING OUTBOARD FLAP TASK 57-05-03-211-814	241	ARO ALL
INTERNAL - SPECIAL DETAILED: FLAP SUPPORT FAIRING NUMBER 4 TASK 57-05-03-211-815	245	ARO ALL
INTERNAL - GENERAL VISUAL: INBOARD FLAP CENTER TRACK FAIRING - LEFT WING TASK 57-05-03-210-807	247	ARO ALL
INTERNAL - SPECIAL DETAILED: FLAP SUPPORT FAIRING NUMBER 3 TASK 57-05-03-211-816	249	ARO ALL
INTERNAL - GENERAL VISUAL: OUTBOARD FLAPERON SUPPORT FAIRING - LEFT WING TASK 57-05-03-210-808	252	ARO ALL
EXTERNAL - GENERAL VISUAL: SLAT NUMBER 8 TASK 57-05-03-210-809	254	ARO ALL
INTERNAL - GENERAL VISUAL: SLAT NUMBER 8 TASK 57-05-03-210-810	256	ARO ALL
EXTERNAL - GENERAL VISUAL: SLAT NUMBER 7 TASK 57-05-03-210-818	259	ARO ALL
EXTERNAL - GENERAL VISUAL: SLATS NUMBER 9 THROUGH 14 TASK 57-05-03-210-811	261	ARO ALL



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EXTERNAL - DETAILED: WING INSPAR AREA (FUEL TANKS) - INBOARD OF WING RIB 17 TASK 57-05-03-211-818		263	ARO ALL
INTERNAL - DETAILED: WING INSPAR AREA (FUEL TANKS) - INBOARD OF WING RIB 17 TASK 57-05-03-211-819		266	ARO ALL
EXTERNAL - GENERAL VISUAL: WING INSPAR AREA (FUEL TANKS) - RIB 17 TO WING TIP TASK 57-05-03-211-820		268	ARO ALL
INTERNAL - DETAILED: WING INSPAR AREA (FUEL TANKS) - RIB 17 TO RIB 34 TASK 57-05-03-211-821		270	ARO ALL
INTERNAL - DETAILED: WING INSPAR AREA (FUEL TANKS) - RIB 34 TO WING TIP TASK 57-05-03-211-822		272	ARO ALL
INTERNAL - SPECIAL DETAILED: MAIN TANK - RIB 17 TO RIB 32 - RIGHT WING TASK 57-05-03-211-823		274	ARO ALL
INTERNAL - DETAILED: MAIN TANK - RIB 17 TO RIB 32 - RIGHT WING TASK 57-05-03-211-824		276	ARO ALL
EXTERNAL - DETAILED: RIGHT WING INBOARD MAIN FLAP TASK 57-05-03-211-825		278	ARO ALL
INTERNAL - GENERAL VISUAL: RIGHT WING INBOARD MAIN FLAP TASK 57-05-03-210-812		280	ARO ALL
INTERNAL - DETAILED: RIGHT WING INBOARD MAIN FLAP TASK 57-05-03-211-826		282	ARO ALL
INTERNAL - DETAILED: RIGHT WING INBOARD MAIN FLAP SUPPORT TORQUE TUBE TASK 57-05-03-211-832		284	ARO ALL
INTERNAL - GENERAL VISUAL: RIGHT WING INBOARD AFT FLAP TASK 57-05-03-210-813		286	ARO ALL



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INTERNAL - GENERAL VISUAL: RIGHT WING FLAPERON TASK 57-05-03-210-814		288	ARO ALL
INTERNAL - DETAILED: RIGHT WING FLAPERON TASK 57-05-03-211-827		290	ARO ALL
INTERNAL - GENERAL VISUAL: RIGHT WING OUTBOARD FLAP TASK 57-05-03-210-815		292	ARO ALL
INTERNAL - DETAILED: RIGHT WING OUTBOARD FLAP TASK 57-05-03-211-828		294	ARO ALL
INTERNAL - SPECIAL DETAILED: FLAP SUPPORT FAIRING NUMBER 5 TASK 57-05-03-211-829		298	ARO ALL
INTERNAL - GENERAL VISUAL: INBOARD FLAP CENTER TRACK FAIRING - RIGHT WING TASK 57-05-03-210-816		298.2	ARO ALL
INTERNAL - SPECIAL DETAILED: FLAP SUPPORT FAIRING NUMBER 6 TASK 57-05-03-211-830		298.4	ARO ALL
INTERNAL - GENERAL VISUAL: OUTBOARD FLAPERON SUPPORT FAIRING - RIGHT WING TASK 57-05-03-210-817		298.7	ARO ALL
PANELS - REMOVAL/INSTALLATION	57-15-00	401	ARO ALL
Panel Removal TASK 57-15-00-000-801		401	ARO ALL
Panel Installation TASK 57-15-00-400-801		402	ARO ALL
WING VORTEX GENERATORS - REPAIRS	57-25-01	801	ARO ALL
Repair the Vortex Generator TASK 57-25-01-300-802		801	ARO ALL
WING SKINS - CLEANING/PAINTING	57-25-02	701	ARO ALL
Wing In-spar - Cleaning/Painting TASK 57-25-02-370-801		701	ARO ALL



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RAKED WINGTIP - REMOVAL/INSTALLATION	57-32-01	401	ARO ALL
Raked Wingtip Removal TASK 57-32-01-000-801		401	ARO ALL
Raked Wingtip Installation TASK 57-32-01-400-801		404	ARO ALL
WING LEADING EDGE PANELS - REMOVAL/INSTALLATION	57-41-10	401	ARO ALL
Wing Leading Edge Panel Removal TASK 57-41-10-000-801		401	ARO ALL
Wing Leading Edge Panel Installation TASK 57-41-10-400-801		412	ARO ALL
MAIN TRACK RESTORATION SEAL - REMOVAL/INSTALLATION	57-41-56	401	ARO ALL
Main Track Restoration Seal Removal TASK 57-41-56-000-801		401	ARO ALL
Main Track Restoration Seal Installation TASK 57-41-56-400-801		403	ARO ALL
DEFLECTION CONTROL RESTORATION SEAL - REMOVAL/INSTALLATION	57-41-59	401	ARO ALL
Deflection Control Restoration Seal Removal TASK 57-41-59-000-801		401	ARO ALL
Deflection Control Restoration Seal Installation TASK 57-41-59-400-801		402	ARO ALL
OUTBOARD LEADING EDGE SLAT ROLLERS-REMOVAL/INSTALLATION	57-43-01	401	ARO ALL
Outboard leading edge slat roller removal TASK 57-43-01-020-801		401	ARO ALL
Outboard leading edge slat roller installation TASK 57-43-01-420-801		407	ARO ALL
INBOARD LEADING EDGE SLAT ROLLERS	57-43-02	401	ARO ALL
Inboard Leading Edge Slat Rollers Removal. TASK 57-43-02-020-801		401	ARO ALL
Inboard Leading Edge Slat Rollers Installation. TASK 57-43-02-420-801		416	ARO ALL



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INBOARD LEADING EDGE SLAT SKIRT ASSEMBLY - REMOVAL/INSTALLATION	57-43-03	401	ARO ALL
Inboard Leading Edge Slat Skirt Assembly Removal TASK 57-43-03-000-801		401	ARO ALL
Inboard Leading Edge Slat Skirt Assembly Installation TASK 57-43-03-400-801		407	ARO ALL
AILERON CONDUCTING STRIP - REPAIRS	57-51-03	801	ARO ALL
Repair the Conducting Strip TASK 57-51-03-300-801		801	ARO ALL
WING TRAILING EDGE PANELS - REMOVAL/INSTALLATION	57-51-10	401	ARO ALL
Wing Trailing Edge Panel Removal TASK 57-51-10-000-801		401	ARO ALL
Wing Trailing Edge Panel Installation TASK 57-51-10-400-801		402	ARO ALL
INBOARD FIXED TRAILING EDGE PANELS - ADJUSTMENT/TEST	57-51-10	501	ARO ALL
Inboard Fixed Trailing Edge Panels Adjustment TASK 57-51-10-000-802		501	ARO ALL
UNDERWING FITTING INNER BOLTS - REMOVAL/INSTALLATION	57-52-01	401	ARO ALL
Underwing Fitting Inner Bolt Removal TASK 57-52-01-000-801		401	ARO ALL
Underwing Fitting Inner Bolts Installation TASK 57-52-01-400-801		403	ARO ALL
FLAP SUPPORT UNDERWING INNER ATTACH BOLTS - REMOVAL/INSTALLATION	57-52-02	401	ARO ALL
Support Underwing Inner Attach Bolts Removal TASK 57-52-02-000-801		401	ARO ALL
Support Underwing Inner Attach Bolts Installation TASK 57-52-02-400-801		402	ARO ALL



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SUBJECT	SUBJECT (CONF PAGE	EFFECT
UNDERWING FITTING OUTER BOLTS - REMOVAL/INSTALLATION	57-52-04	401	ARO ALL
Underwing Fitting Outer Bolt Removal TASK 57-52-04-000-801		401	ARO ALL
Underwing Fitting Outer Bolt Installation TASK 57-52-04-400-801		405	ARO ALL
MAIN LANDING GEAR HANGAR LINK - MAINTENANCE PRACTICES	57-54-01	201	ARO ALL
Prepare for the Removal TASK 57-54-01-910-802		201	ARO ALL
Hangar Link Hinge Pin Removal TASK 57-54-01-000-801		202	ARO ALL
Hangar Link Hinge Pin Installation TASK 57-54-01-400-801		203	ARO ALL
Put the Airplane Back to Its Usual Condition TASK 57-54-01-910-803		204	ARO ALL
FORWARD AND AFT TRUNNION BEARING INSPECTION/CHECK	57-54-01	601	ARO ALL
MLG Forward and Aft Trunnion Bearing Wear Limits TASK 57-54-01-910-801		601	ARO ALL
MAIN LANDING GEAR SUPPORT BEAM (OUTBOARD) LOAD DISTRIBUTION PLATES	57-54-02	401	ARO ALL
Prepare for the Removal of the Main Landing Gear Support Beam Distribution Plates TASK 57-54-02-020-801		401	ARO ALL
Main Landing Gear Support Beam Distribution Plates - Removal TASK 57-54-02-000-801		404	ARO ALL
Prepare for the Installation of the Main Landing Gear Support Beam Distribution Plates TASK 57-54-02-400-802		409	ARO ALL
Main Landing Gear Support Beam Distribution Plates - Installation TASK 57-54-02-400-801		410	ARO ALL



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MAIN LANDING GEAR SUPPORT BEAM - REMOVAL/INSTALLATION	57-54-04	401	ARO ALL
Main Landing Gear Support Beam - Removal TASK 57-54-04-000-801		401	ARO ALL
Main Landing Gear Support Beam - Installation TASK 57-54-04-400-801		423	ARO ALL
AILERON HINGE FITTINGS - REMOVAL/INSTALLATION	57-61-00	401	ARO ALL
Aileron Hinge Fitting Removal TASK 57-61-00-000-801		401	ARO ALL
Aileron Hinge Fitting Installation TASK 57-61-00-400-801		402	ARO ALL
SPOILER HINGE FITTINGS - REMOVAL/INSTALLATION	57-71-00	401	ARO ALL
Spoiler Hinge Fitting Removal TASK 57-71-00-000-801		401	ARO ALL
Spoiler Hinge Fitting Installation TASK 57-71-00-400-801		402	ARO ALL



WINGS - CORROSION INSPECTIONS - MAINTENANCE PRACTICES

1. General

A. This procedure contains MSG-3 task card data.

TASK 57-05-01-210-801-004

2. INTERNAL - GENERAL VISUAL: WING CENTER SECTION -300ER

A. General

(1) Applicability

NOTE: This excess sealant removal note applies to 777-200LR and 777-300ER airplanes only at the following locations:

- 1) Fasteners common to center wing section lower splice stringers 10, 14 and 20 (Ref Item #57-15-I01B).
- 2) Fasteners common to center wing section rear spar lower chord (Ref Item #57-15-I01C).

For the airplane models identified above, when conducting this task for airplanes at or beyond the threshold listed in Section 9 of the MPD, remove excess sealant at the locations identified above as follows:

When inspecting from inside of the fuel tank, remove any cap or brush sealant that extends beyond 0.20" around fastener heads or collars. Remove any additional sealant which impairs visibility of the identified parts adjacent to the fastener cap or brush coat. Fillet seals that touch only edges and do not overlap onto the surface of the part do not need to be removed. If sealant is removed for inspection, care must be taken to remove any sealant debris from the fuel tank. Sealant that is installed at the manufacture of the airplane and is later removed for inspections in that area must be reapplied per drawing after completion of the inspections.

Refer to SRM chapter 57-10-10 to identify the location of the rear spar lower chord. Refer to SRM chapter 57-10-03 to identify the location of the lower splice stringers.

B. References

Reference	Title
51-05-01-210-807	777 Basic Task Description (P/B 201)

C. Job Set-up

SUBTASK 57-05-01-010-016

(1) Open access panels, reference Figure 201, Figure 202, Figure 203.

D. Inspection

SUBTASK 57-05-01-210-047

(1) Do the inspection777 Basic Task Description, TASK 51-05-01-210-807.

E. Job Close-up

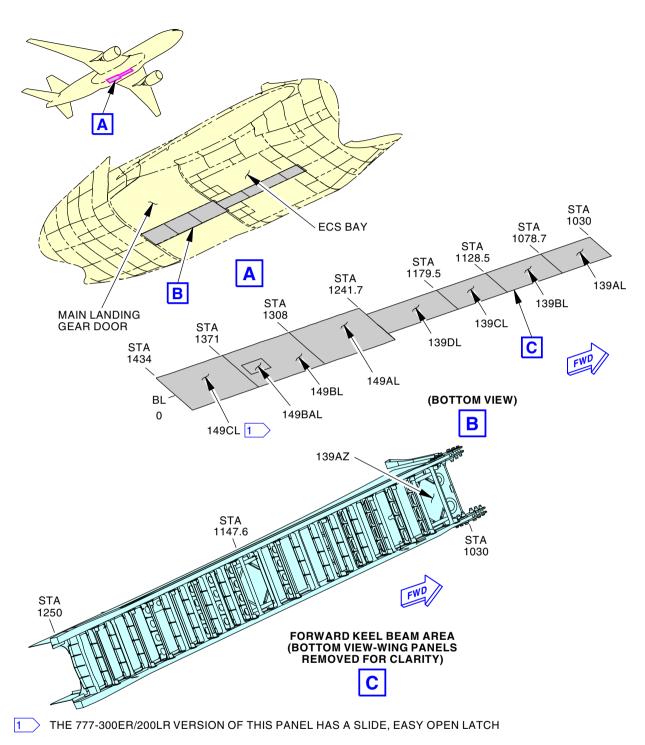
SUBTASK 57-05-01-410-016

(1) Close access panels, reference Figure 201, Figure 202, Figure 203.

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2462583 S0000573781_V2

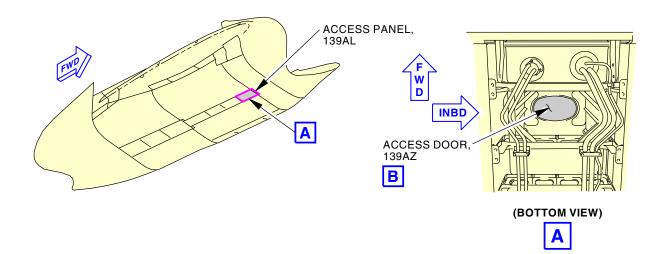
Sub-Major Zone 130,140 - Forward And Aft Keel Beam Area Figure 201/57-05-01-990-897

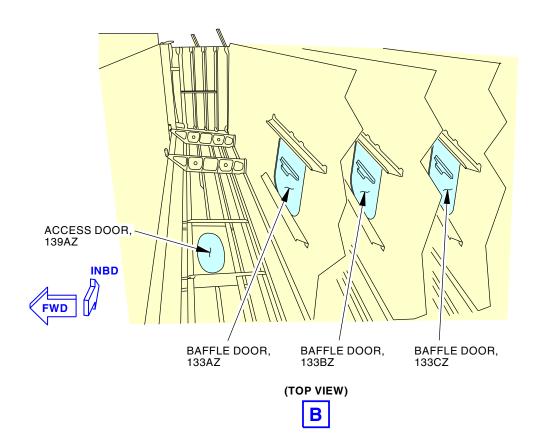
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777-200ER, 200LR, 300, AND 300ER ONLY

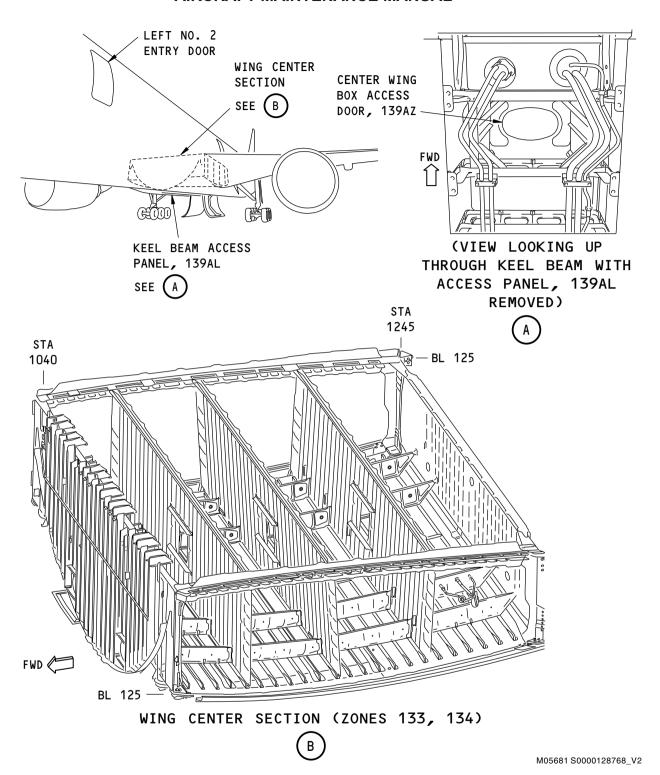
2474286 S0000578813_V2

SUB-MAJOR ZONE 130 FORWARD KEEL BEAM ACCESS TO FUEL TANK Figure 202/57-05-01-990-898

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Wing Center Section Figure 203/57-05-01-990-899 (Sheet 1 of 2)

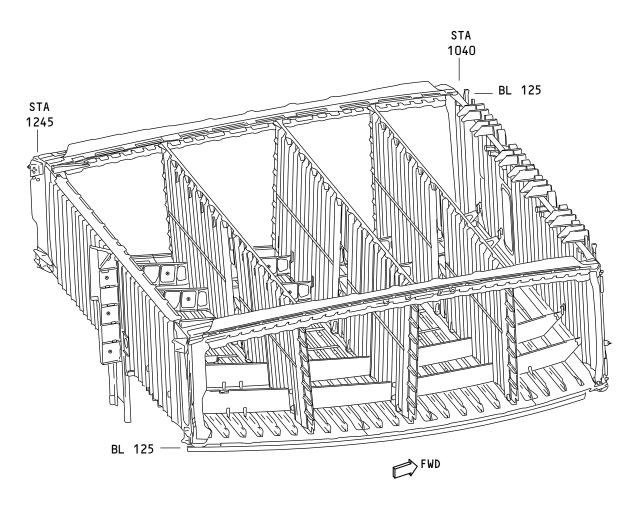
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57-05-01

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WING CENTER SECTION (ZONES 133, 134)



M10670 S0000128769_V1

Wing Center Section Figure 203/57-05-01-990-899 (Sheet 2 of 2)

ARO ALL

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TASK 57-05-01-210-806

3. INTERNAL - GENERAL VISUAL: LEFT SIDE - ENVIRONMENTAL CONTROL SYSTEMS BAY AND UNDERWING FAIRINGS

NOTE: This procedure is a scheduled maintenance task.

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Reference	Title
51-05-01-210-803	777 Basic Task Description (P/B 201)

B. Inspection

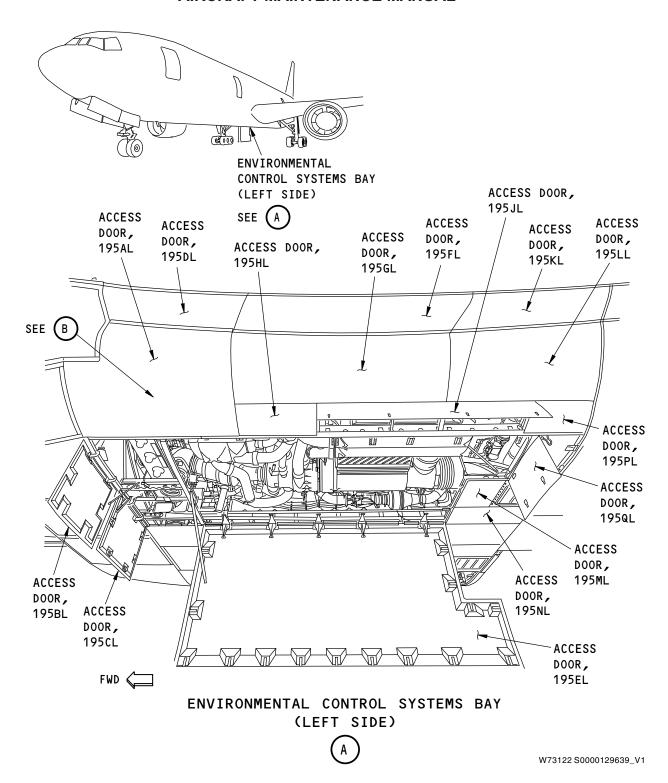
SUBTASK 57-05-01-210-006

(1) Do the inspection 777 Basic Task Description, TASK 51-05-01-210-803.

----- END OF TASK -----

ARO ALL





Left Side - Environmental Control Systems Bay And Underwing Fairings Figure 204/57-05-01-990-851 (Sheet 1 of 2)

EFFECTIVITY

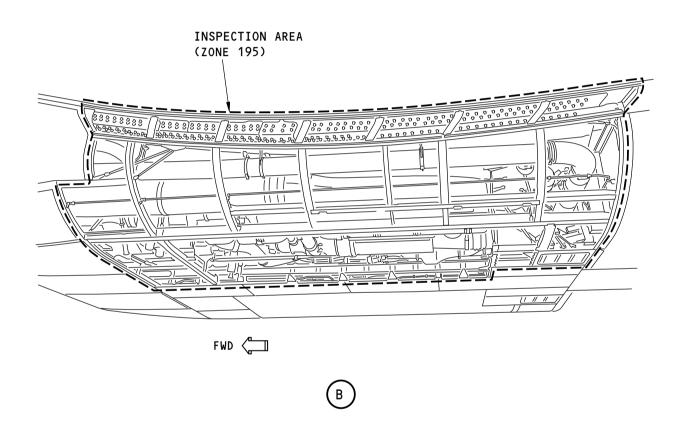
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W73145 S0000129641_V1

Left Side - Environmental Control Systems Bay And Underwing Fairings Figure 204/57-05-01-990-851 (Sheet 2 of 2)

ARO ALL

57-05-01

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TASK 57-05-01-210-807

4. INTERNAL - GENERAL VISUAL: LOWER FUSELAGE - FORWARD KEEL BEAM AREA

NOTE: This procedure is a scheduled maintenance task.

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Reference	Title
51-05-01-210-803	777 Basic Task Description (P/B 201)

B. Inspection

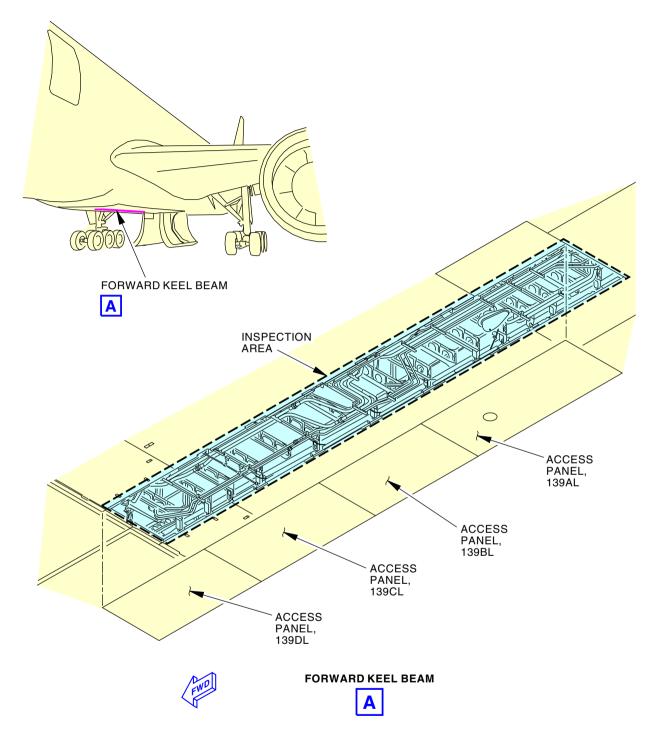
SUBTASK 57-05-01-210-007

(1) Do the inspection 777 Basic Task Description, TASK 51-05-01-210-803.

——— END OF TASK ———

ARO ALL





H94349 S0006397319_V4

Forward Keel Beam Figure 205/57-05-01-990-848

EFFECTIVITY

ARO ALL

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TASK 57-05-01-210-808

5. INTERNAL - GENERAL VISUAL: RIGHT SIDE - ENVIRONMENTAL CONTROL SYSTEMS BAY AND UNDERWING FAIRINGS

NOTE: This procedure is a scheduled maintenance task.

A. References

Reference	Title	
51-05-01-210-803	777 Basic Task Description (P/B 201)	

B. Inspection

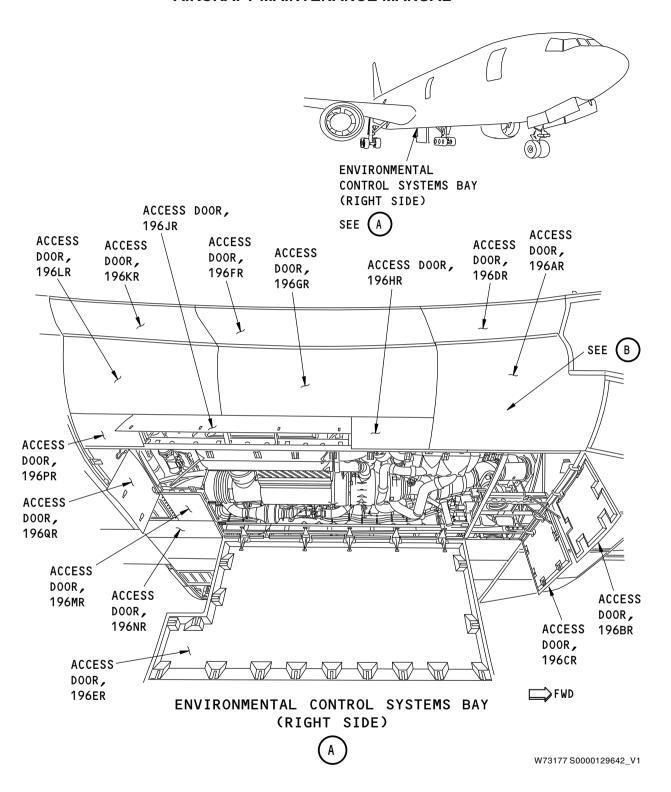
SUBTASK 57-05-01-210-008

(1) Do the inspection 777 Basic Task Description, TASK 51-05-01-210-803.

----- END OF TASK -----

ARO ALL





Lower Fuselage - Right Side - Environmental Control Systems Bay And Underwing Fairings Figure 206/57-05-01-990-852 (Sheet 1 of 2)

FFFECTIVITY

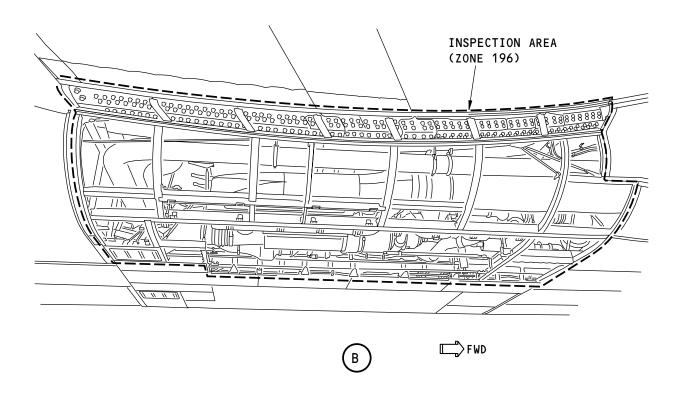
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W73185 S0000129643_V1

Lower Fuselage - Right Side - Environmental Control Systems Bay And Underwing Fairings Figure 206/57-05-01-990-852 (Sheet 2 of 2)

ARO ALL

57-05-01

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TASK 57-05-01-210-809

6. EXTERNAL - GENERAL VISUAL: LEFT WING

NOTE: This procedure is a scheduled maintenance task.

A. References

 Reference
 Title

 51-05-01-210-807
 777 Basic Task Description (P/B 201)

B. Inspection

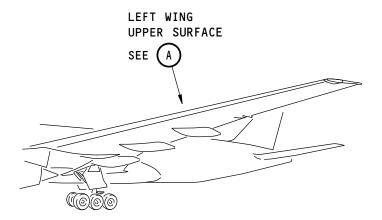
SUBTASK 57-05-01-210-009

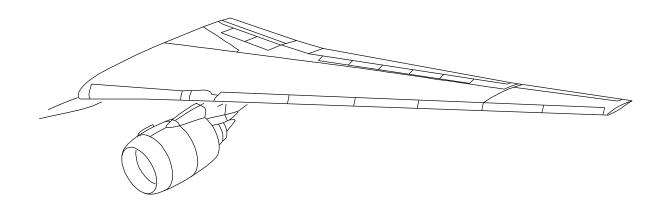
(1) Do the inspection 777 Basic Task Description, TASK 51-05-01-210-807.

——— END OF TASK ———

ARO ALL







LEFT WING UPPER SURFACE



1301669 S0000223754_V1

Left Wing Upper Surface Figure 207/57-05-01-990-843

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TASK 57-05-01-210-810

7. EXTERNAL - GENERAL VISUAL: LEFT WING

NOTE: This procedure is a scheduled maintenance task.

A. References

ReferenceTitle51-05-01-210-807777 Basic Task Description (P/B 201)

B. Inspection

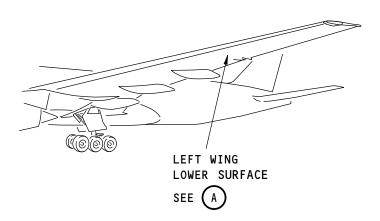
SUBTASK 57-05-01-210-010

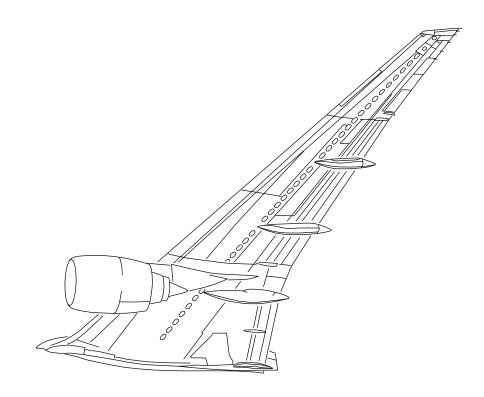
(1) Do the inspection 777 Basic Task Description, TASK 51-05-01-210-807.

——— END OF TASK ———

ARO ALL







LEFT WING LOWER SURFACE



M13598 S0000128790_V1

Left Wing Lower SurfaceGeneral Visual (External) Figure 208/57-05-01-990-858

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57-05-01

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TASK 57-05-01-210-818

8. EXTERNAL - GENERAL VISUAL: RIGHT WING

NOTE: This procedure is a scheduled maintenance task.

A. References

 Reference
 Title

 51-05-01-210-807
 777 Basic Task Description (P/B 201)

B. Inspection

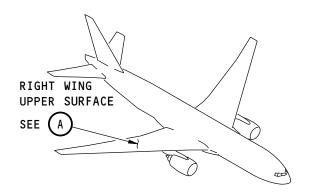
SUBTASK 57-05-01-210-018

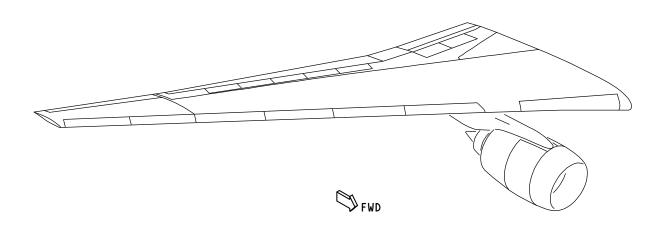
(1) Do the inspection 777 Basic Task Description, TASK 51-05-01-210-807.

——— END OF TASK ———

ARO ALL







RIGHT WING UPPER SURFACE



M11070 S0000128792_V1

Right Wing Upper Surface Figure 209/57-05-01-990-844

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57-05-01

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TASK 57-05-01-210-819

9. EXTERNAL - GENERAL VISUAL: RIGHT WING

NOTE: This procedure is a scheduled maintenance task.

A. References

 Reference
 Title

 51-05-01-210-807
 777 Basic Task Description (P/B 201)

B. Inspection

SUBTASK 57-05-01-210-019

(1) Do the inspection 777 Basic Task Description, TASK 51-05-01-210-807.

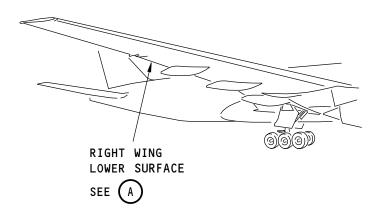
——— END OF TASK ———

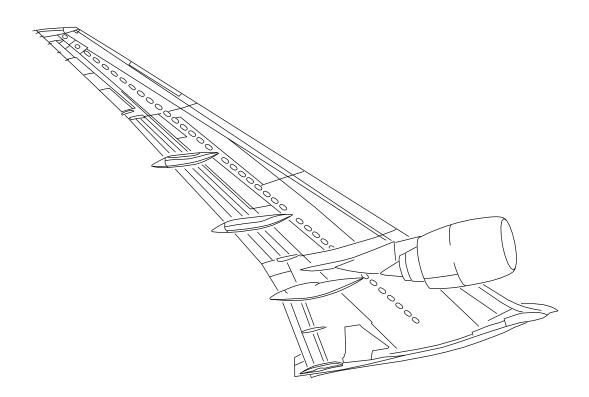
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RIGHT WING LOWER SURFACE



M11273 S0000128793_V1

Right Wing Lower Surface Figure 210/57-05-01-990-845

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WINGS - STRUCTURAL INSPECTIONS - MAINTENANCE PRACTICES

1. General

A. This procedure contains MSG-3 task card data.

TASK 57-05-03-211-801

2. INTERNAL - DETAILED: WING CENTER SECTION

(Figure 201)

NOTE: This procedure is a scheduled maintenance task.

A. Access Panels

Number	Name/Location
133AZ	Baffle Door
133BZ	Baffle Door
133CZ	Baffle Door
139AL	Forward Keel Beam Access Panel
139AZ	Center Wing Access Door

B. Inspection

SUBTASK 57-05-03-010-001

(1) Open these access panels:

<u>Number</u>	Name/Location
139AL	Forward Keel Beam Access Panel
139AZ	Center Wing Access Door

SUBTASK 57-05-03-020-001

(2) Do these steps to remove these baffle doors:

Number	Name/Location
133AZ	Baffle Door
133BZ	Baffle Door
133CZ	Baffle Door

- (a) Remove the 14 bolts and 14 washers from the baffle door.
- (b) Remove the baffle door from the spanwise beams.

SUBTASK 57-05-03-211-001

(3) Do the inspection.

SUBTASK 57-05-03-420-001

(4) Do these steps to install these baffle doors:

<u>Number</u>	Name/Location
133AZ	Baffle Door
133BZ	Baffle Door
133CZ	Baffle Door

- (a) Put the baffle door on the spanwise beam.
- (b) Install the baffle door with 14 washers and 14 bolts.

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SUBTASK 57-05-03-410-001

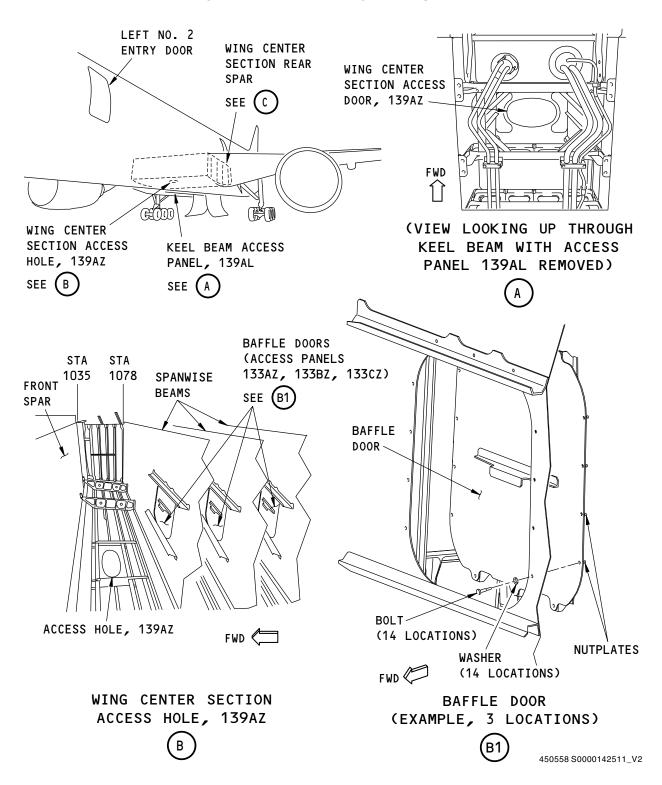
(5) Close these access panels:

<u>Number</u>	Name/Location
139AL	Forward Keel Beam Access Panel
139AZ	Center Wing Access Door

——— END OF TASK ———

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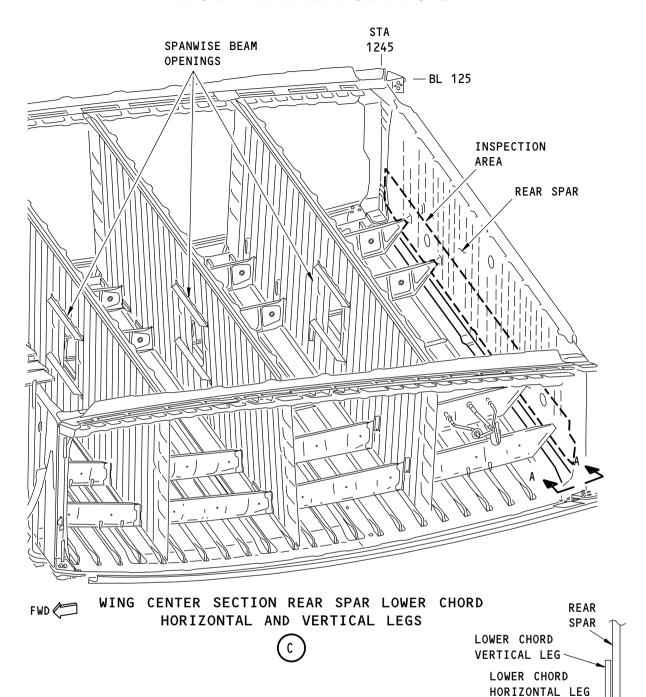


Wing Center Section Rear Spar Lower Chord Legs Figure 201/57-05-03-990-801 (Sheet 1 of 2)

57-05-03 EFFECTIVITY . **ARO ALL** Jan 05/2015 l D633W101-ARO ECCN 9E991 BOEING PROPRIETARY - Copyright © Unpublished Work - See title page for details

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Wing Center Section Rear Spar Lower Chord Legs Figure 201/57-05-03-990-801 (Sheet 2 of 2)

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TASK 57-05-03-210-801

3. INTERNAL - GENERAL VISUAL: SLAT NUMBER 7

(Figure 202)

A. Inspection

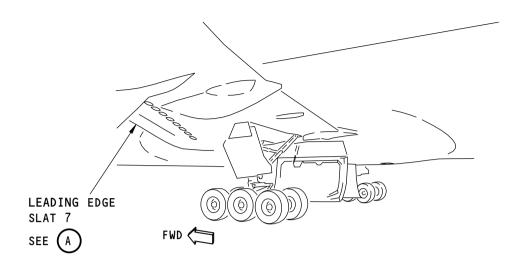
SUBTASK 57-05-03-210-001

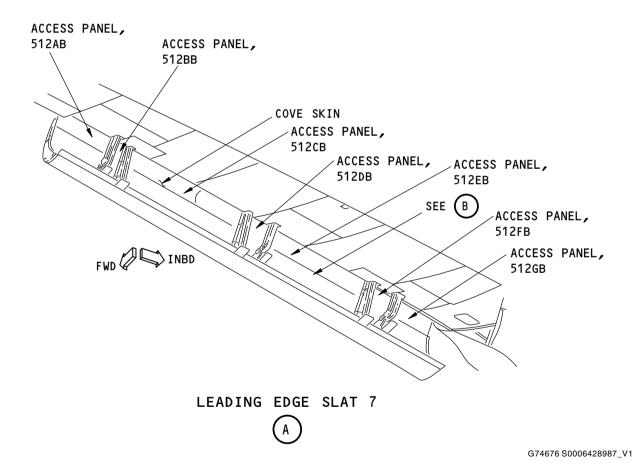
(1) Do the inspection.

------ END OF TASK ------

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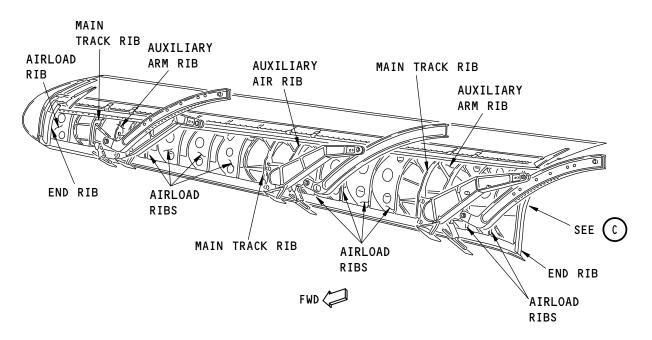
Slat Number 7 General Visual (Internal) Figure 202/57-05-03-990-802 (Sheet 1 of 2)

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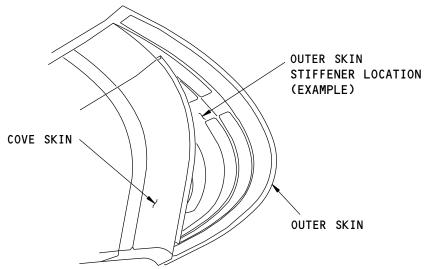
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(COVE SKINS REMOVED)





(RIBS AND TRAILING EDGE WEDGE REMOVED FOR CLARITY)



G74686 S0006428988_V2

Slat Number 7 General Visual (Internal) Figure 202/57-05-03-990-802 (Sheet 2 of 2)

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TASK 57-05-03-210-802

4. EXTERNAL - GENERAL VISUAL: SLATS NUMBER 1 THROUGH 6 (Figure 203)

A. Inspection

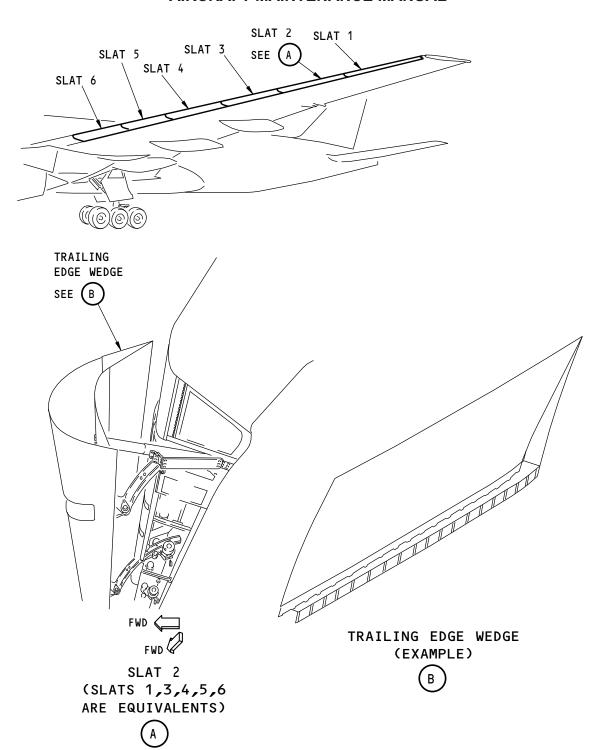
SUBTASK 57-05-03-210-002

(1) Do the inspection.

----- END OF TASK -----

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G74772 S0006428991_V1

Slats Number 1 Through 6 General Visual (External) Figure 203/57-05-03-990-804

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TASK 57-05-03-211-802

5. EXTERNAL - DETAILED: WING INSPAR AREA (FUEL TANKS) - INBOARD OF WING RIB 17 (Figure 204)

Α.	Inspe	ction
		••

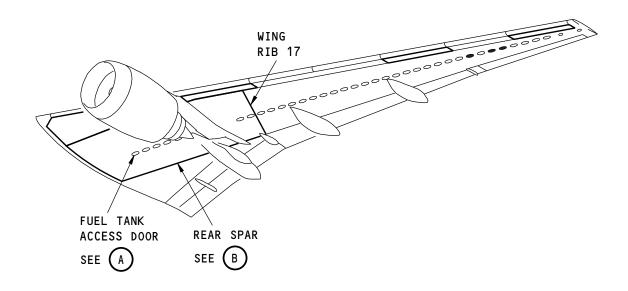
SUBTASK 57-05-03-211-002

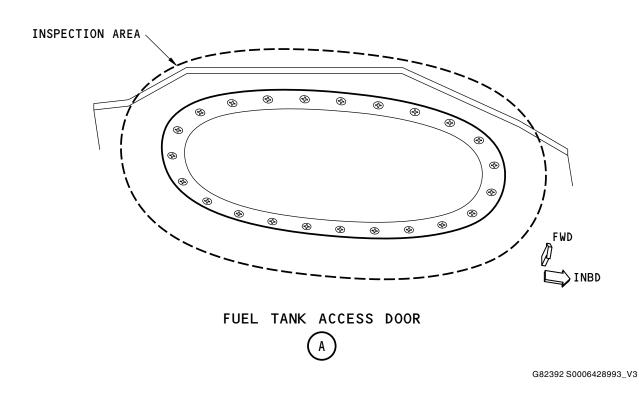
(1) Do the inspection.

----- END OF TASK -----

ARO ALL







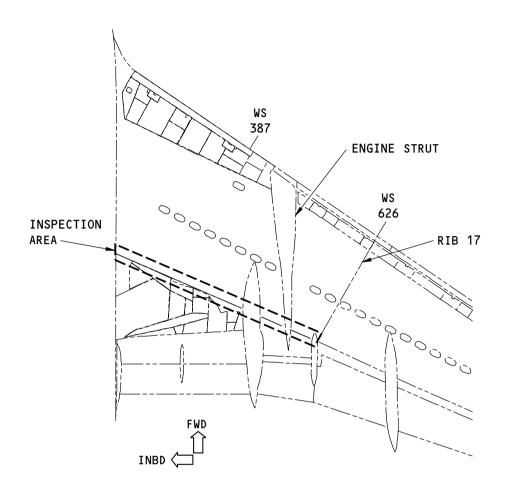
Left Wing Lower Skin Panel (Inboard of Wing Rib 17) Figure 204/57-05-03-990-805 (Sheet 1 of 2)

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LOWER PANEL AT REAR SPAR (RIGHT WING IS OPPOSITE) (BOTTOM VIEW)



NOTE: CANOE FITTING REMOVAL NOT REQUIRED

2089449 S0000439107_V1

Left Wing Lower Skin Panel (Inboard of Wing Rib 17) Figure 204/57-05-03-990-805 (Sheet 2 of 2)

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TASK 57-05-03-211-803

6. INTERNAL - DETAILED: WING INSPAR AREA (FUEL TANKS) - INBOARD OF WING RIB 17 (Figure 205)

Α.	Inc	pec	tion
/\·	1113		

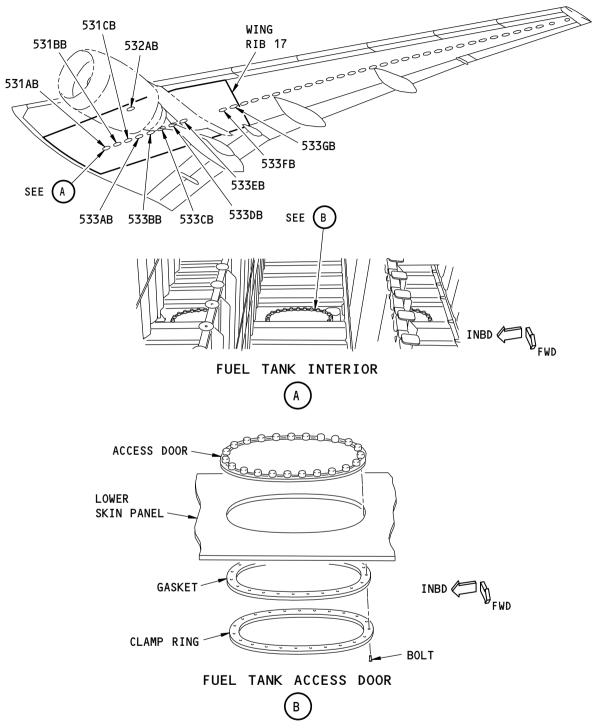
SUBTASK 57-05-03-211-003

(1) Do the inspection.

----- END OF TASK -----

ARO ALL





G82875 S0006428995_V1

Left Wing Fuel Tank Access Holes (Inboard of Wing Rib 17) Figure 205/57-05-03-990-806

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D633W101-ARO

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TASK 57-05-03-211-804

- 7. EXTERNAL GENERAL VISUAL: WING INSPAR AREA (FUEL TANKS) RIB 17 TO WING TIP
 - A. Inspection

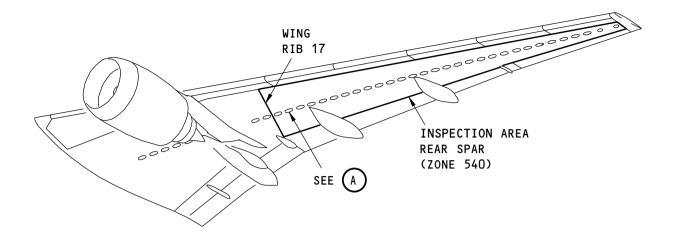
SUBTASK 57-05-03-211-004

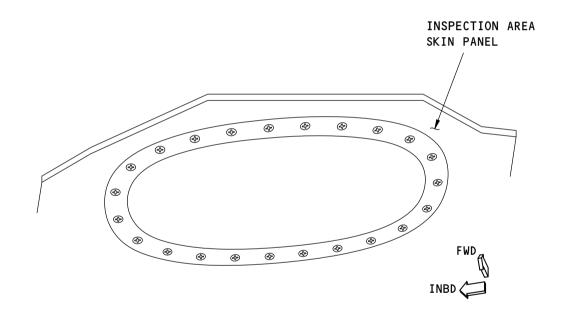
(1) Do the inspection.

----- END OF TASK -----

ARO ALL







FUEL TANK ACCESS DOOR

G82758 S0006428997_V2

EXTERNAL - GENERAL VISUAL: WING INSPAR AREA (FUEL TANKS) - RIB 17 TO WINGTIP Figure 206/57-05-03-990-851

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TASK 57-05-03-211-805

- 8. INTERNAL DETAILED: WING INSPAR AREA (FUEL TANKS) RIB 17 TO RIB 34
 - A. Inspection

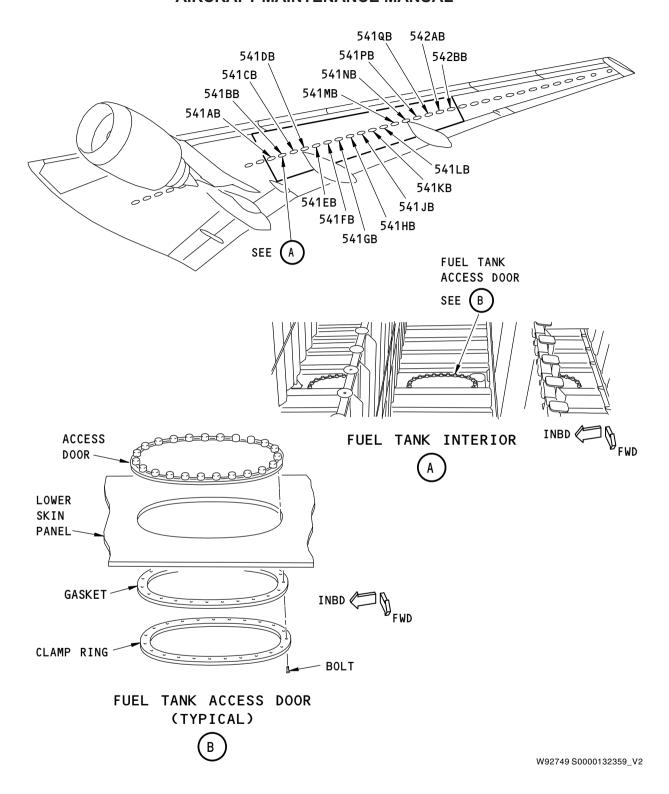
SUBTASK 57-05-03-211-005

(1) Do the inspection.

----- END OF TASK -----

ARO ALL





Left Wing Fuel Tank Access Holes (Wing Rib 17 To 34) Figure 207/57-05-03-990-843

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TASK 57-05-03-211-806

- 9. INTERNAL DETAILED: WING INSPAR AREA (FUEL TANKS) RIB 34 TO WING TIP
 - A. Inspection

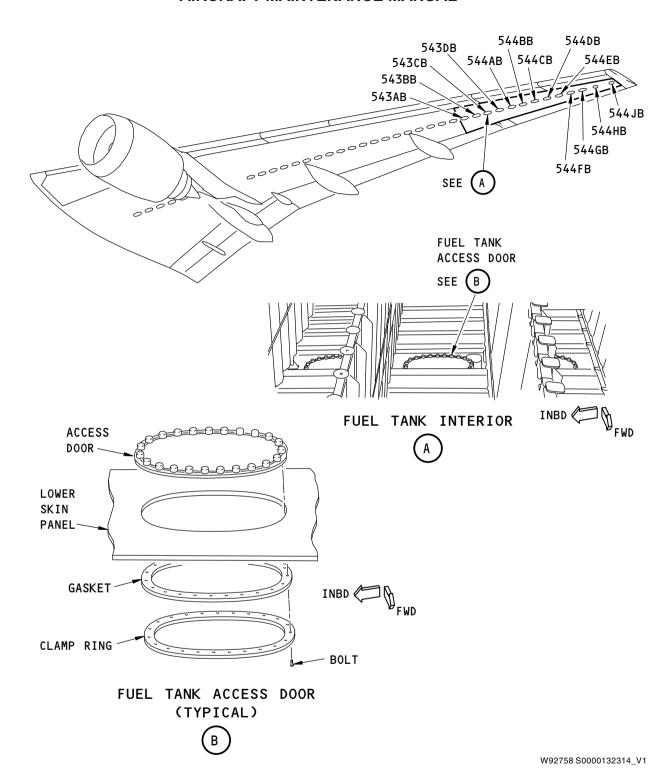
SUBTASK 57-05-03-211-006

(1) Do the inspection.

----- END OF TASK -----

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Left Wing Fuel Tank Access Holes (Wing Rib 34 To Wing Tip). Figure 208/57-05-03-990-842

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TASK 57-05-03-211-807

10. INTERNAL - SPECIAL DETAILED: MAIN TANK - RIB 17 TO RIB 32 - LEFT WING (Figure 209)

Α.	Inc	nar	ction	
Λ.	1113	pet	LIOII	ı

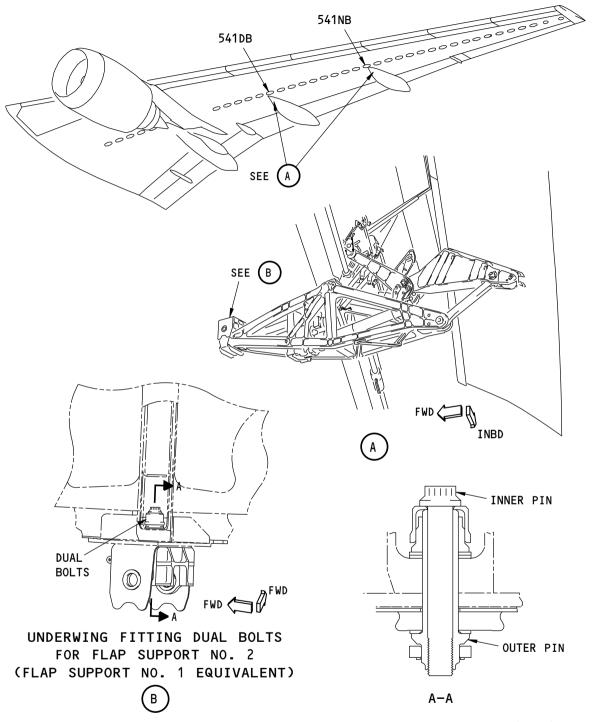
SUBTASK 57-05-03-211-007

(1) Do the inspection.

----- END OF TASK -----

ARO ALL





G87581 S0006429001_V1

Left Wing Outboard Flap - Underwing Fitting Dual Bolts Figure 209/57-05-03-990-808

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TASK 57-05-03-211-808

- 11. INTERNAL DETAILED: MAIN TANK RIB 17 TO RIB 32 LEFT WING
 - A. Inspection

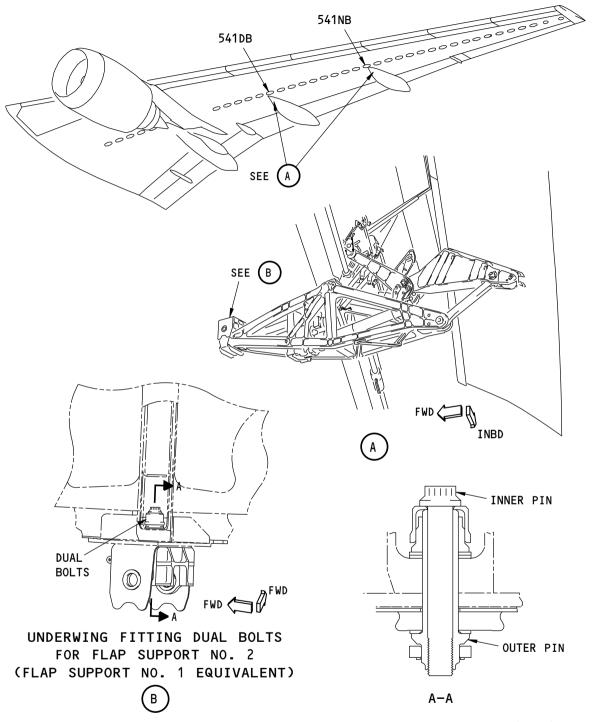
SUBTASK 57-05-03-211-008

(1) Do the inspection.

----- END OF TASK -----

ARO ALL





G87581 S0006429001_V1

Left Wing Outboard Flap - Underwing Fitting Dual Bolts Figure 210/57-05-03-990-845

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57-05-03

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TASK 57-05-03-211-810

12. EXTERNAL - SPECIAL DETAILED: WING INBOARD AND OUTBOARD MAIN FLAP ATTACH BOLTS

NOTE: This procedure is a scheduled maintenance task.

A. References

Reference	Title
27-51-11-200-801	Inboard Trailing Edge Flap Attach Fastener Inspection (P/B 601)
27-51-21-200-801	Outboard Trailing Edge Flap Attach Fastener Inspection
	(P/B 601)

B. Inspection

SUBTASK 57-05-03-211-010

- (1) Do the inspection of inboard flap attach bolts per Inboard Trailing Edge Flap Attach Fastener Inspection, TASK 27-51-11-200-801.
- (2) Do the inspection of outboard flap attach bolts per Outboard Trailing Edge Flap Attach Fastener Inspection, TASK 27-51-21-200-801



TASK 57-05-03-211-811

13. EXTERNAL - DETAILED: LEFT WING INBOARD MAIN FLAP

(Figure 211)

A. Inspection

SUBTASK 57-05-03-211-011

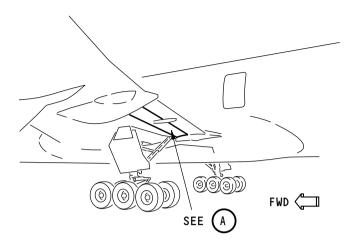
(1) Do the inspection.

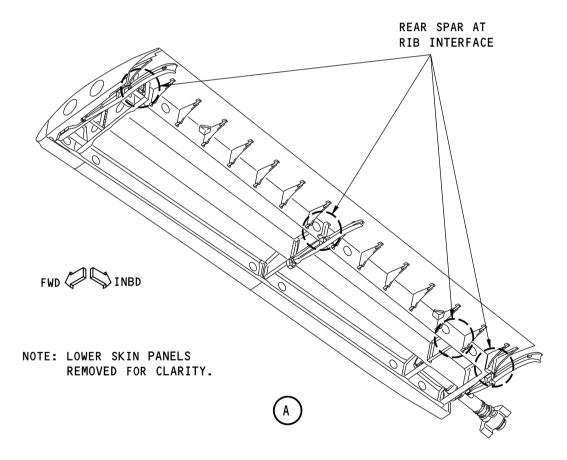
----- END OF TASK -----

57-05-03

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G88696 S0006429006_V1

Left Wing Inboard Main Flap Figure 211/57-05-03-990-809

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TASK 57-05-03-210-803

14. INTERNAL - GENERAL VISUAL: LEFT WING INBOARD MAIN FLAP (Figure 212)

A. Inspection

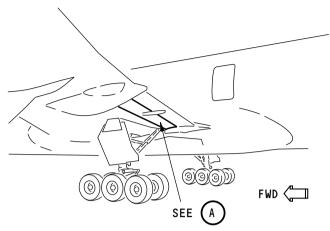
SUBTASK 57-05-03-210-003

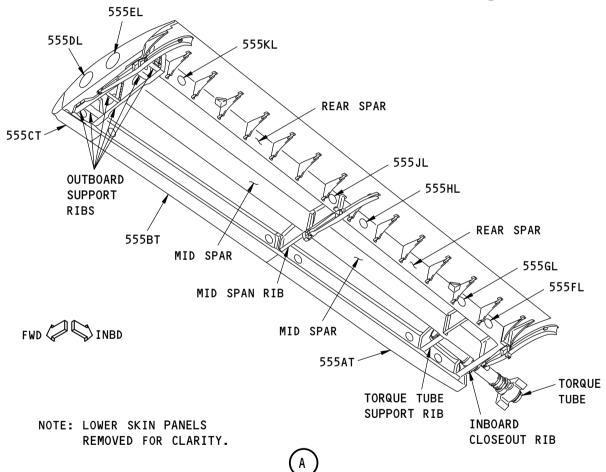
(1) Do the inspection.

----- END OF TASK -----

ARO ALL







G88779 S0006429008_V1

Left Wing Inboard Main Flap Figure 212/57-05-03-990-810

ARO ALL

57-05-03

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TASK 57-05-03-211-812

15. INTERNAL - DETAILED: LEFT WING INBOARD MAIN FLAP

(Figure 213)

A. Inspection

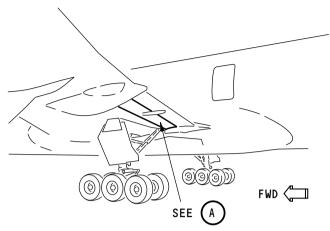
SUBTASK 57-05-03-211-012

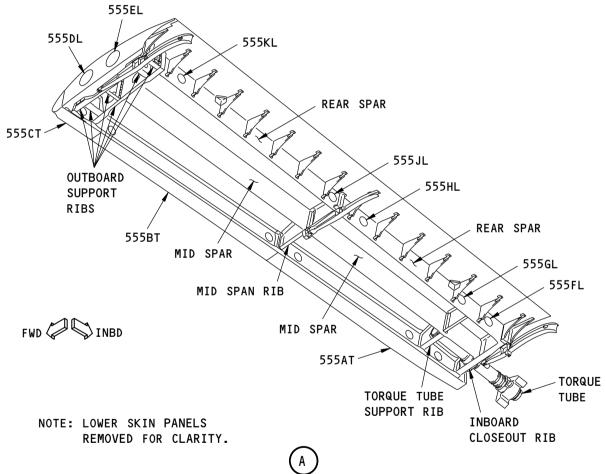
(1) Do the inspection.

----- END OF TASK -----

ARO ALL







G88779 S0006429008_V1

Left Wing Inboard Main Flap Figure 213/57-05-03-990-856

ARO ALL

57-05-03

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TASK 57-05-03-211-831

16.	INTERNAL - DETAILED: LEFT WING INBOARD MAIN FLAP SUPPORT TORQU	E TUBE
	Figure 214	

A. Inspection

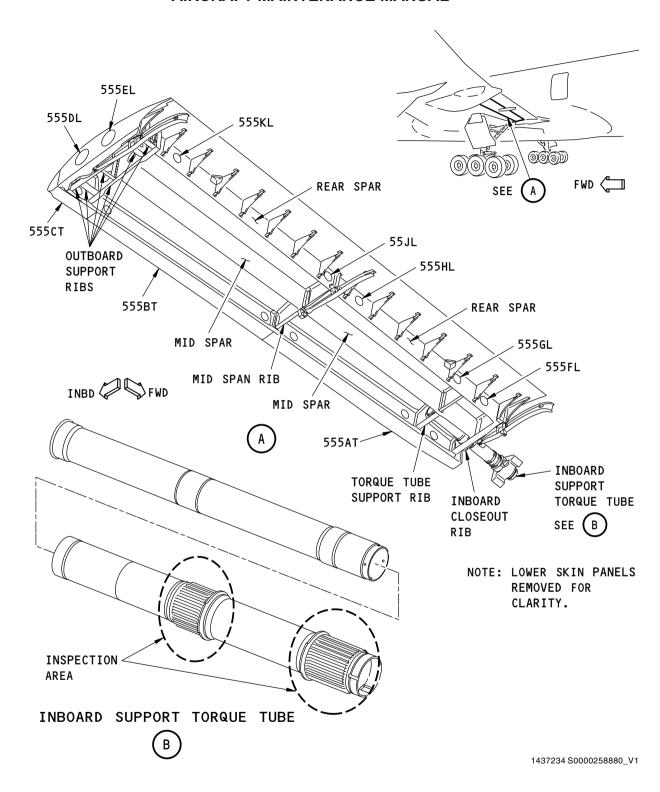
SUBTASK 57-05-03-211-031

(1) Do the inspection.

----- END OF TASK -----

ARO ALL





Left Wing Inboard Main Flap Support Torque Tube Figure 214/57-05-03-990-857

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TASK 57-05-03-210-804

17. INTERNAL - GENERAL VISUAL: LEFT WING INBOARD AFT FLAP (Figure 215)

A. Inspection

SUBTASK 57-05-03-210-004

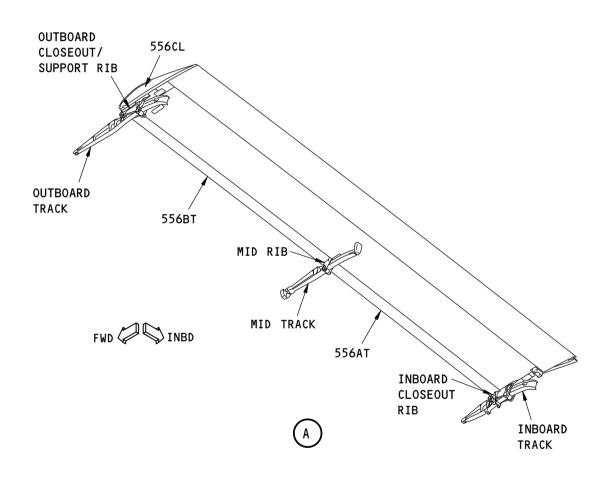
(1) Do the inspection.

----- END OF TASK -----

ARO ALL







G89654 S0006429012_V1

Left Wing Inboard Aft Flap Figure 215/57-05-03-990-812

ARO ALL

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TASK 57-05-03-210-805

18. INTERNAL - GENERAL VISUAL: LEFT WING FLAPERON

(Figure 216)

A. Inspection

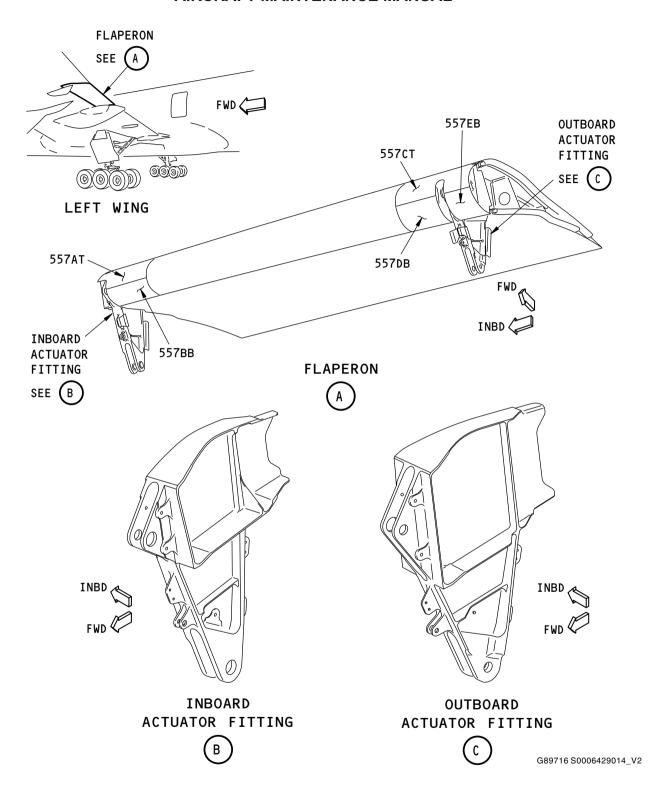
SUBTASK 57-05-03-210-005

(1) Do the inspection.

----- END OF TASK -----

ARO ALL





Left Wing Flaperon Figure 216/57-05-03-990-813

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TASK 57-05-03-211-813

- 19. INTERNAL DETAILED: LEFT WING FLAPERON
 - A. Inspection

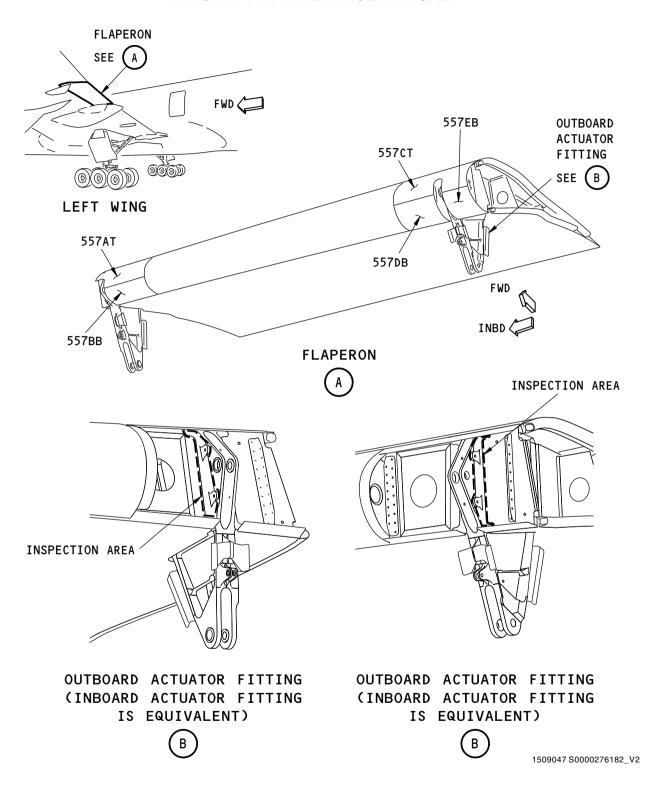
SUBTASK 57-05-03-211-013

(1) Do the inspection.

----- END OF TASK -----

ARO ALL





Left Wing Flaperon Figure 217/57-05-03-990-848

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TASK 57-05-03-210-806

20. INTERNAL - GENERAL VISUAL: LEFT WING OUTBOARD FLAP (Figure 218)

A. Inspection

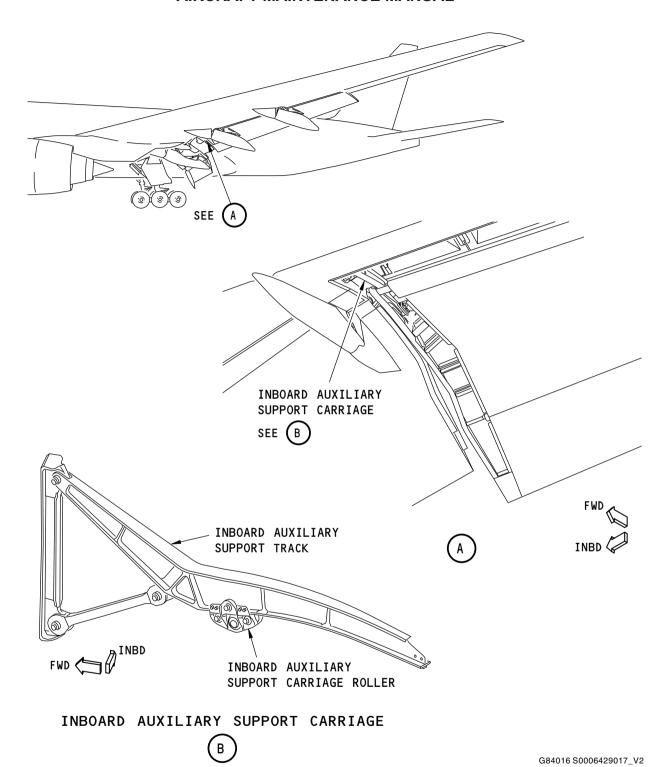
SUBTASK 57-05-03-210-006

(1) Do the inspection.

----- END OF TASK -----

ARO ALL





Left Wing Outboard Flap General Visual (Internal) Figure 218/57-05-03-990-814

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TASK 57-05-03-211-814

21. INTERNAL - DETAILED: LEFT WING OUTBOARD FLAP

(Figure 219)

A. Inspection

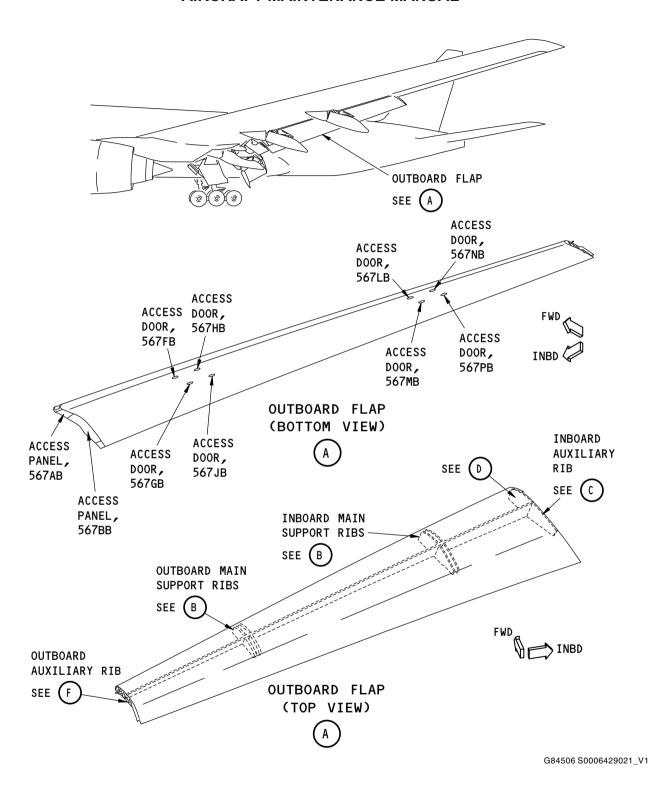
SUBTASK 57-05-03-211-014

(1) Do the inspection.

----- END OF TASK -----

ARO ALL





Left Wing Outboard Flap (Internal) Figure 219/57-05-03-990-815 (Sheet 1 of 3)

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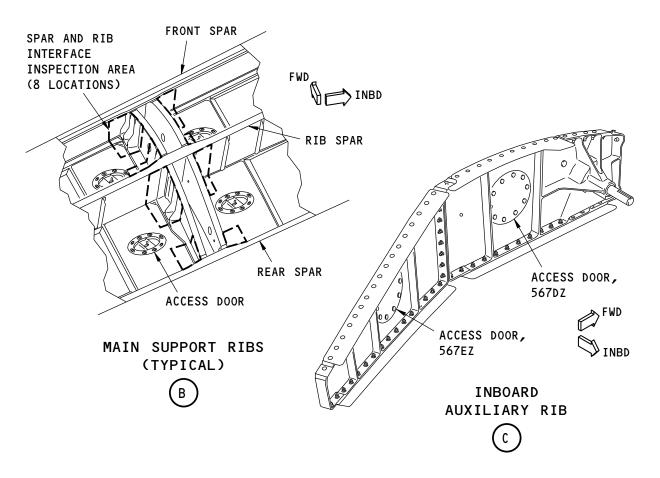
ARO ALL

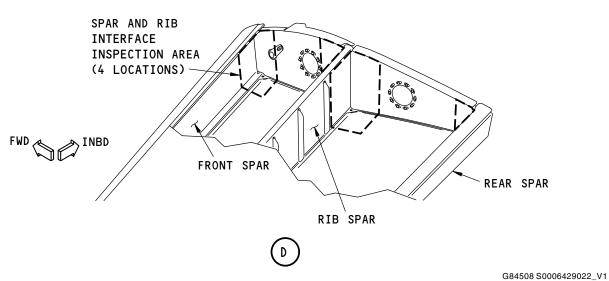
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Left Wing Outboard Flap (Internal) Figure 219/57-05-03-990-815 (Sheet 2 of 3)

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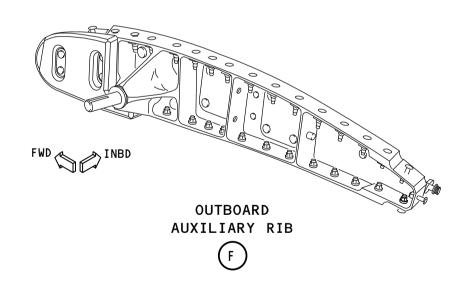


SPAR AND RIB
INTERFACE
INSPECTION AREA
(4 LOCATIONS)

FRONT SPAR

RIB SPAR

INBD



G84857 S0006429023_V1

Left Wing Outboard Flap (Internal) Figure 219/57-05-03-990-815 (Sheet 3 of 3)

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TASK 57-05-03-211-815

22. INTERNAL - SPECIAL DETAILED: FLAP SUPPORT FAIRING NUMBER 4 (Figure 220)

A. Inspection

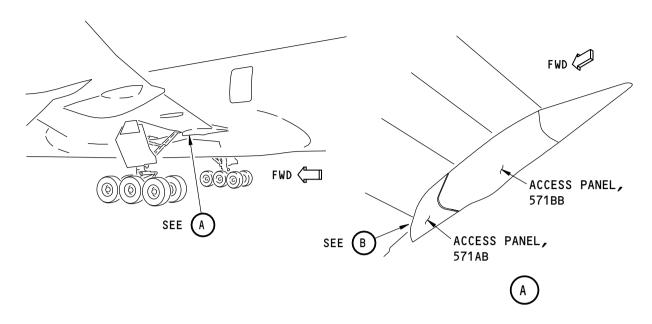
SUBTASK 57-05-03-211-015

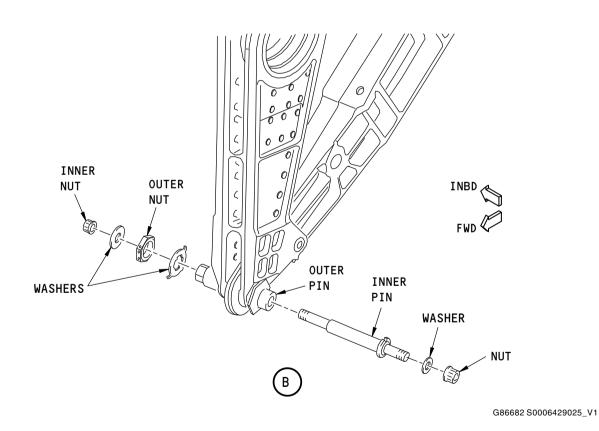
(1) Do the inspection.

----- END OF TASK -----

ARO ALL







Left Wing Flap Support Fairing No. 4 (Internal) Figure 220/57-05-03-990-816

EFFECTIVITY

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TASK 57-05-03-210-807

23. INTERNAL - GENERAL VISUAL: INBOARD FLAP CENTER TRACK FAIRING - LEFT WING (Figure 221)

A. Inspection

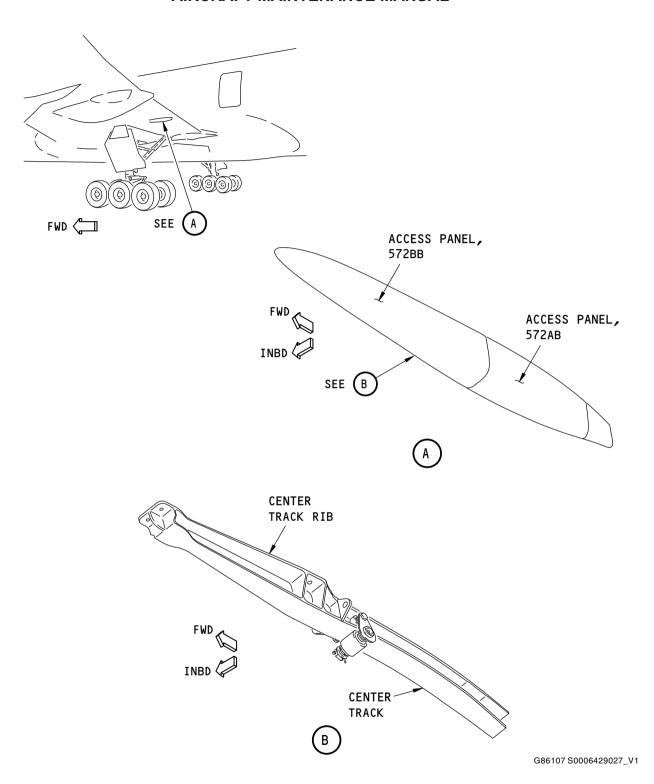
SUBTASK 57-05-03-210-007

(1) Do the inspection.

----- END OF TASK -----

ARO ALL





Left Wing Inboard Flap Center Track Fairing (General Visual Internal) Figure 221/57-05-03-990-817

FFFECTIVITY

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TASK 57-05-03-211-816

24. INTERNAL - SPECIAL DETAILED: FLAP SUPPORT FAIRING NUMBER 3 (Figure 222)

A. Inspection

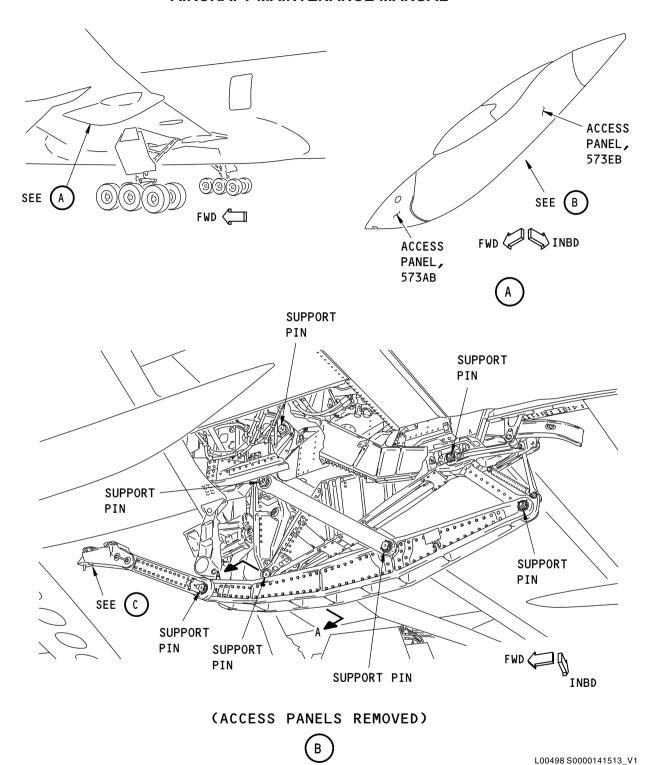
SUBTASK 57-05-03-211-016

(1) Do the inspection.

----- END OF TASK -----

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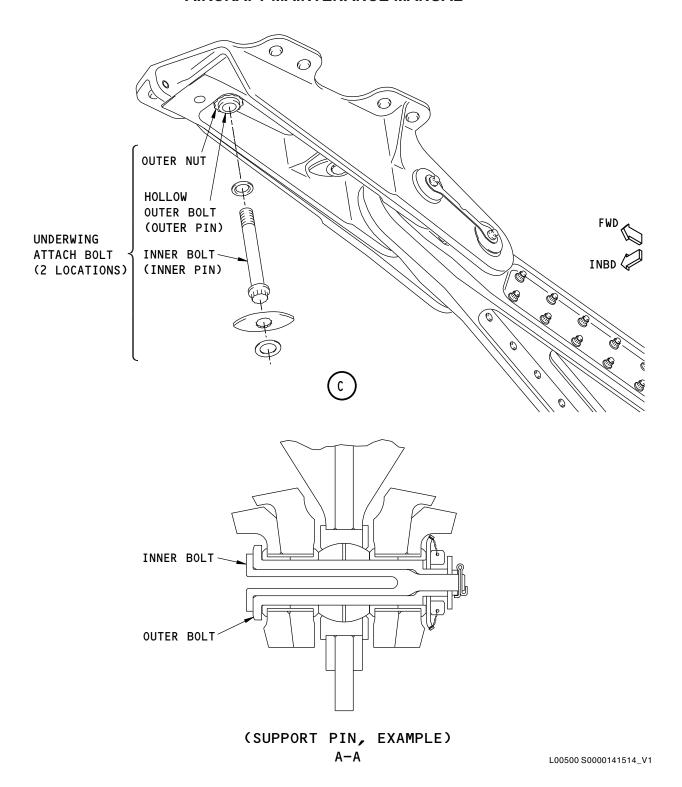
Left Wing Flap Support Fairing No. 3 (Internal) Figure 222/57-05-03-990-818 (Sheet 1 of 2)

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Left Wing Flap Support Fairing No. 3 (Internal) Figure 222/57-05-03-990-818 (Sheet 2 of 2)

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TASK 57-05-03-210-808

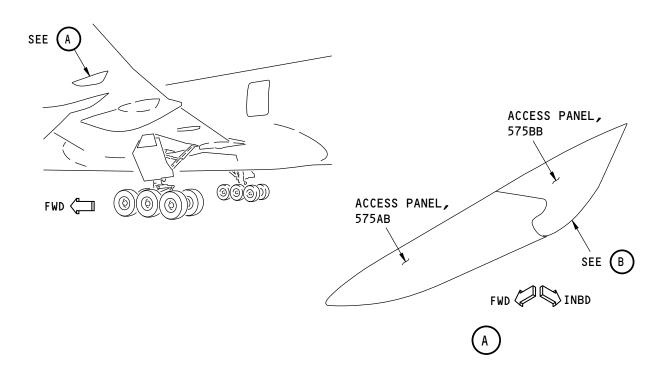
25. INTERNAL - GENERAL VISUAL: OUTBOARD FLAPERON SUPPORT FAIRING - LEFT WING (Figure 223)

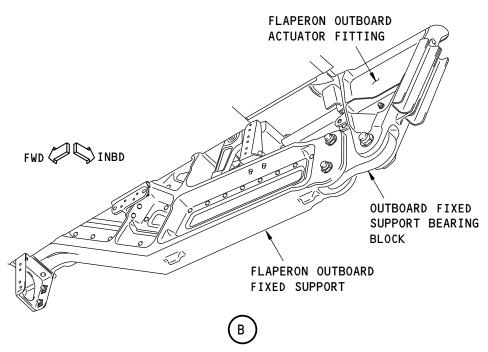
A.	Inspection		
	SUBTASK 57-05-03-210-008		
	(1)	Do the inspection	

——— END OF TASK ———

ARO ALL







G86722 S0006429031_V1

Left Wing Outboard Flaperon Support General Visual (Internal) Figure 223/57-05-03-990-819

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TASK 57-05-03-210-809

26. EXTERNAL - GENERAL VISUAL: SLAT NUMBER 8

(Figure 224)

A. Inspection

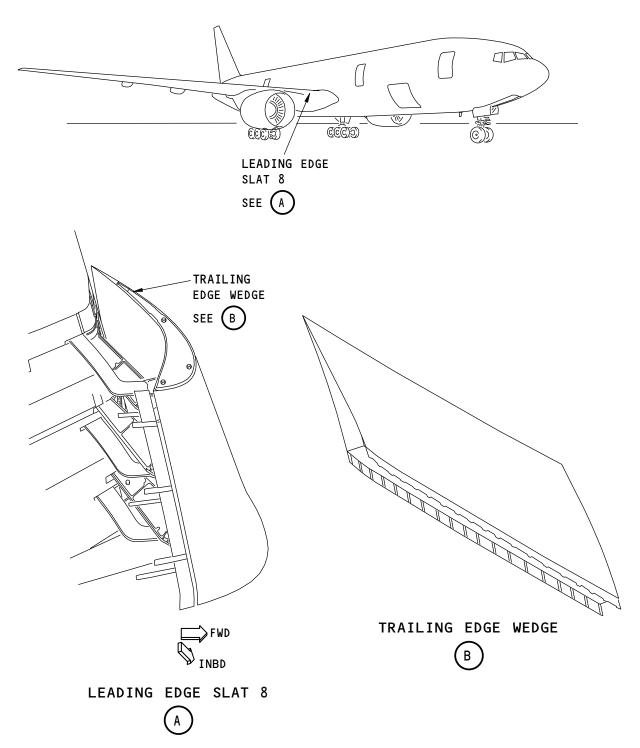
SUBTASK 57-05-03-210-009

(1) Do the inspection.

——— END OF TASK ———

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G74843 S0006429033_V1

Slat Number 8 General Visual (Extenal) Figure 224/57-05-03-990-820

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TASK 57-05-03-210-810

27. INTERNAL - GENERAL VISUAL: SLAT NUMBER 8

(Figure 225)

A. Inspection

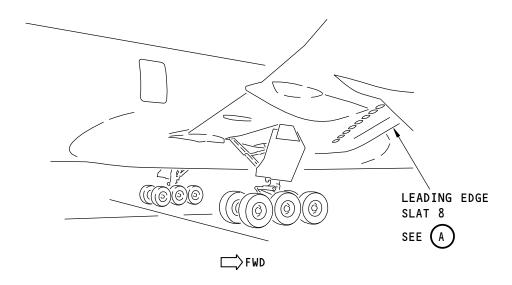
SUBTASK 57-05-03-210-010

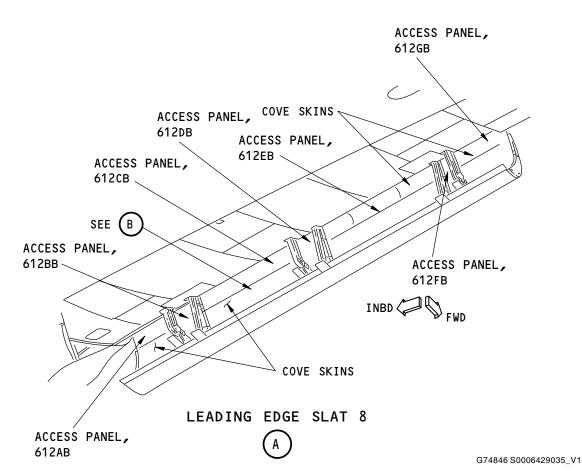
(1) Do the inspection.

----- END OF TASK -----

ARO ALL







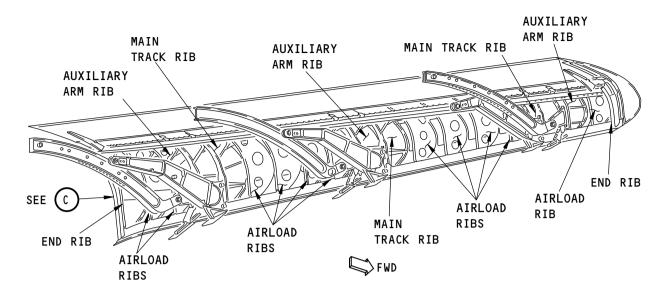
Slat Number 8 General Visual (Internal) Figure 225/57-05-03-990-821 (Sheet 1 of 2)

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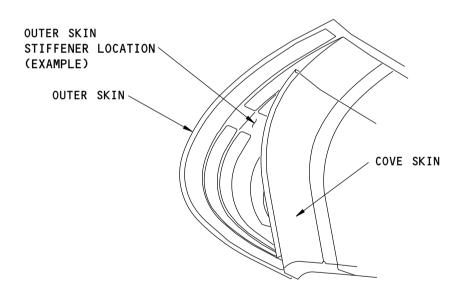
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(COVE SKINS REMOVED)





(RIBS AND TRAILING EDGE WEDGE REMOVED FOR CLARITY)



G74850 S0006429036_V2

Slat Number 8 General Visual (Internal) Figure 225/57-05-03-990-821 (Sheet 2 of 2)

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TASK 57-05-03-210-818

28. EXTERNAL - GENERAL VISUAL: SLAT NUMBER 7

(Figure 226)

A. Inspection

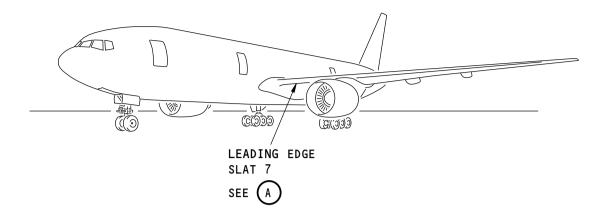
SUBTASK 57-05-03-210-018

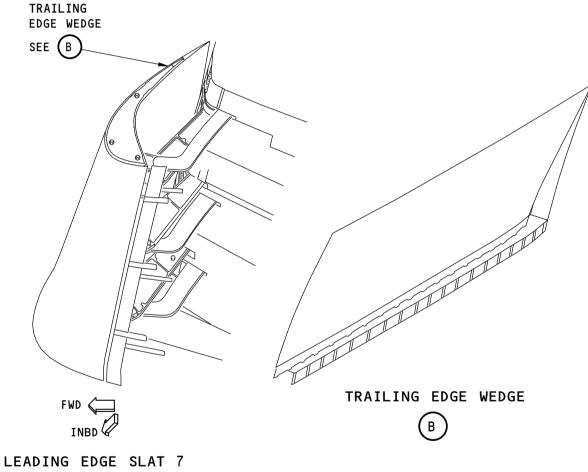
(1) Do the inspection.

----- END OF TASK -----

ARO ALL







Slat Number 7 General Visual (External)

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G74664 S0006428989_V1

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Figure 226/57-05-03-990-839



TASK 57-05-03-210-811

29. EXTERNAL - GENERAL VISUAL: SLATS NUMBER 9 THROUGH 14

(Figure 227)

A. Inspection

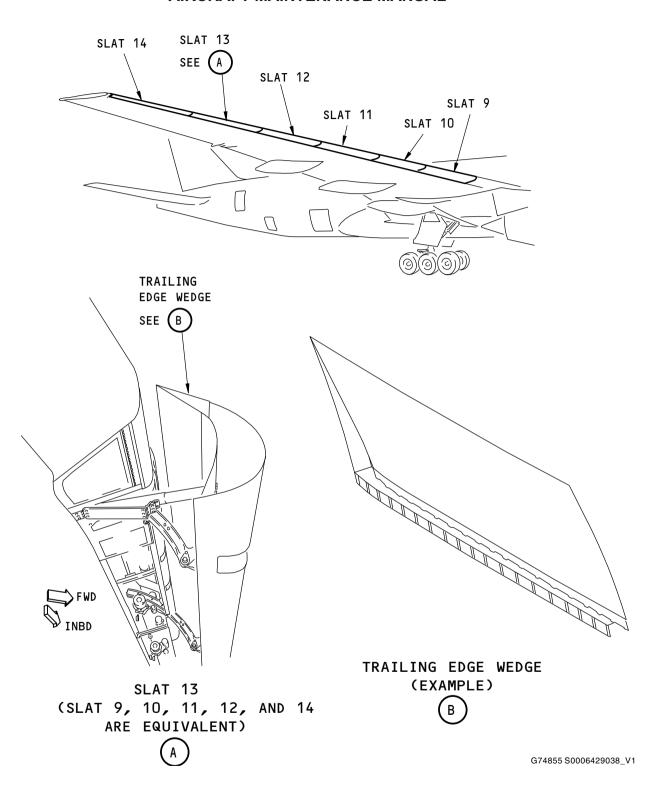
SUBTASK 57-05-03-210-011

(1) Do the inspection.

----- END OF TASK -----

ARO ALL





Slat Number 9 General Visual (External) Figure 227/57-05-03-990-822

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TASK 57-05-03-211-818

30. EXTERNAL - DETAILED: WING INSPAR AREA (FUEL TANKS) - INBOARD OF WING RIB 17 (Figure 228)

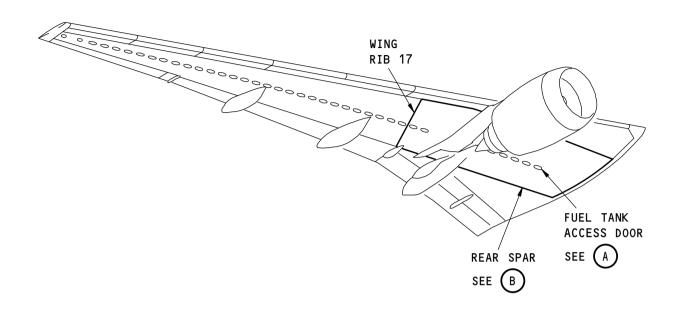
SUBTASK 57-05-03-211-018

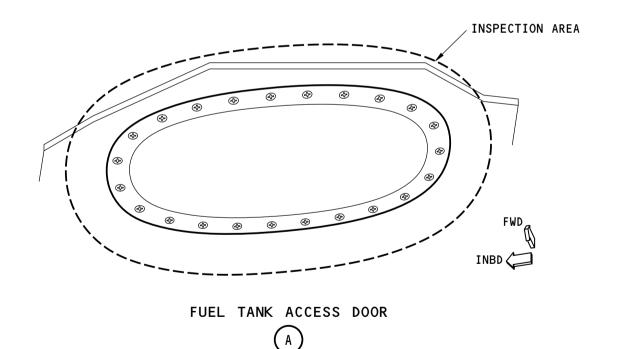
(1) Do the inspection.

----- END OF TASK -----

ARO ALL







G82810 S0006429041_V3

Right Wing Lower Skin Panel (Inboard of Wing Rib 17) Figure 228/57-05-03-990-823 (Sheet 1 of 2)

FFFECTIVITY

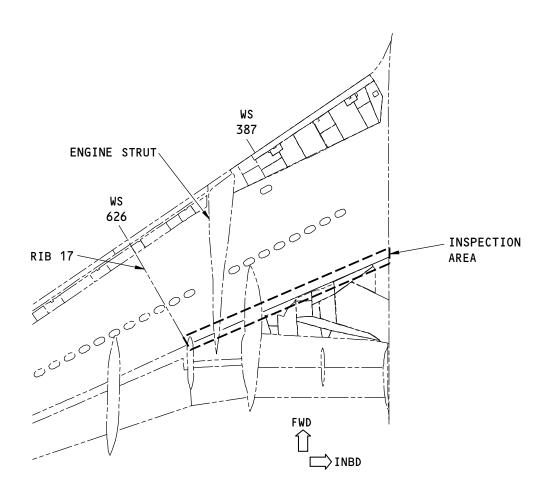
ARO ALL

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LOWER PANEL AT REAR SPAR (LEFT WING IS OPPOSITE) (BOTTOM VIEW)



NOTE: CANOE FITTING REMOVAL NOT REQUIRED

2089066 S0000439092_V1

Right Wing Lower Skin Panel (Inboard of Wing Rib 17) Figure 228/57-05-03-990-823 (Sheet 2 of 2)

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TASK 57-05-03-211-819

31. INTERNAL - DETAILED: WING INSPAR AREA (FUEL TANKS) - INBOARD OF WING RIB 17 (Figure 229)

		4.5
Α.	Inspe	ction

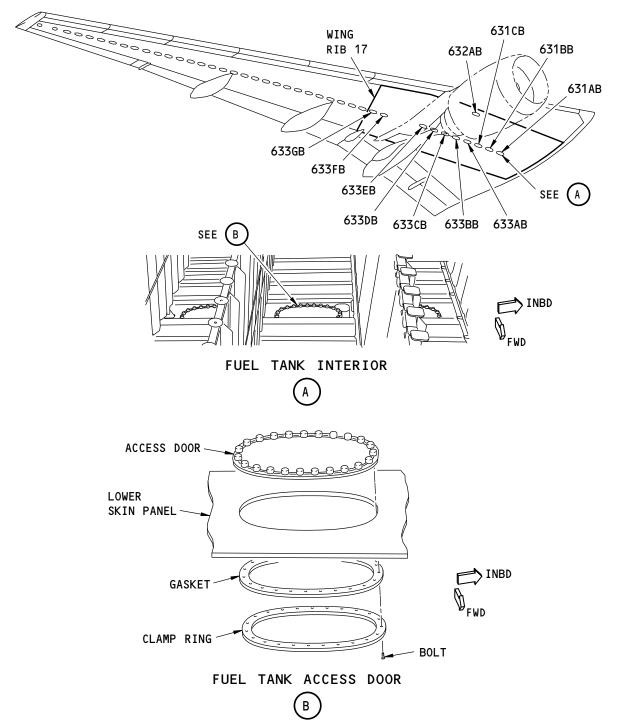
SUBTASK 57-05-03-211-019

(1) Do the inspection.

----- END OF TASK -----

ARO ALL





G83011 S0006429043_V1

Right Wing Fuel Tank Access Holes (Inboard of Wing Rib 17) Figure 229/57-05-03-990-824

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TASK 57-05-03-211-820

32. EXTERNAL - GENERAL VISUAL: WING INSPAR AREA (FUEL TANKS) - RIB 17 TO WING TIP (Figure 230)

A.	Inspection
Λ.	mopcodon

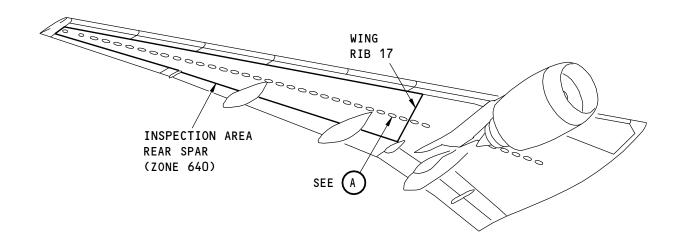
SUBTASK 57-05-03-211-020

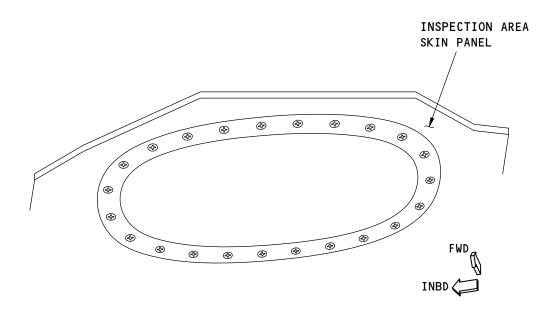
(1) Do the inspection.

----- END OF TASK -----

ARO ALL







FUEL TANK ACCESS DOOR

G82773 S0006429045_V2

Right Wing Lower Skin Panel (Outboard of Wing Rib 17) Figure 230/57-05-03-990-825

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TASK 57-05-03-211-821

33. INTERNAL - DETAILED: WING INSPAR AREA (FUEL TANKS) - RIB 17 TO RIB 34 (Figure 231)

Α.	Insi	pect	ion

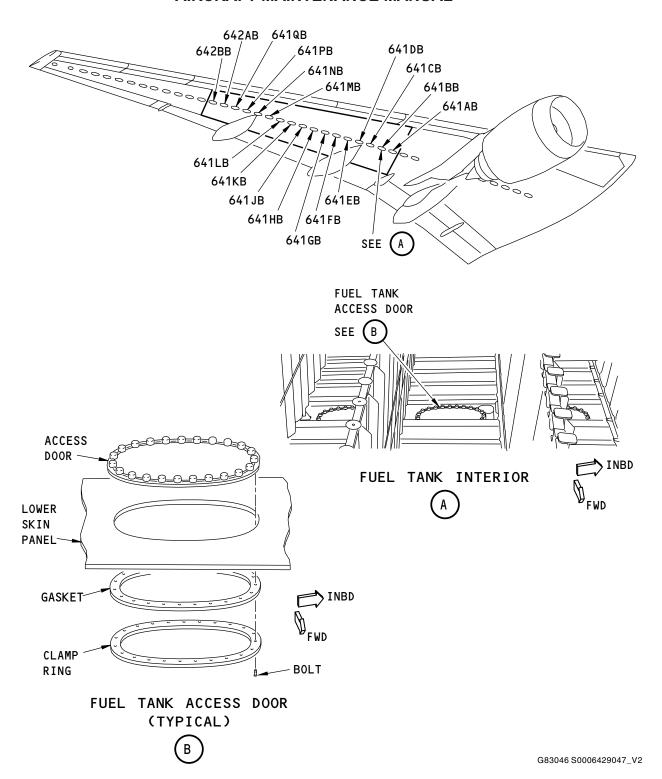
SUBTASK 57-05-03-211-021

(1) Do the inspection.

----- END OF TASK -----

ARO ALL





Right Wing Fuel Tank Access Holes (Outboard of Wing Rib 17) Figure 231/57-05-03-990-826

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TASK 57-05-03-211-822

- 34. INTERNAL DETAILED: WING INSPAR AREA (FUEL TANKS) RIB 34 TO WING TIP
 - A. Inspection

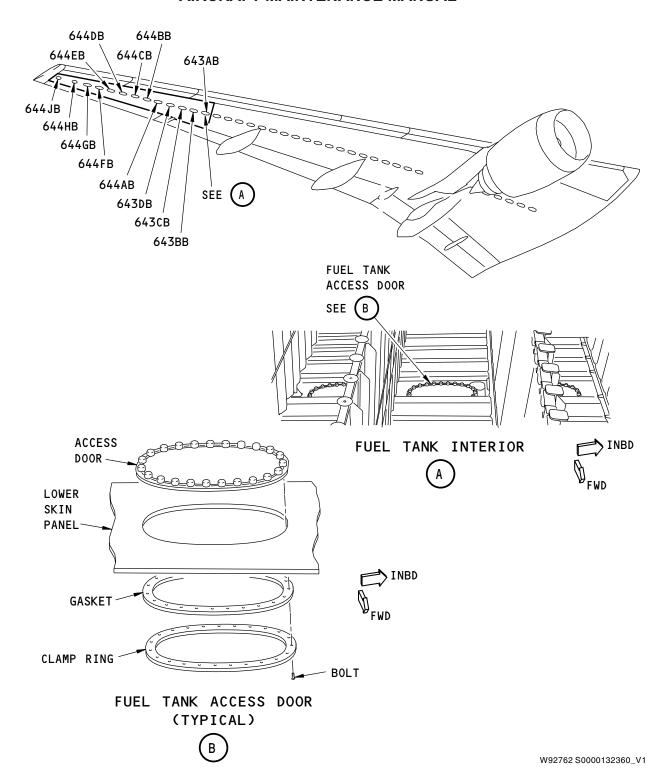
SUBTASK 57-05-03-211-022

(1) Do the inspection.

——— END OF TASK ———

ARO ALL





Right Wing Fuel Tank Access Holes (Wing Rib 34 To Wing Tip) Figure 232/57-05-03-990-844

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TASK 57-05-03-211-823

35. INTERNAL - SPECIAL DETAILED: MAIN TANK - RIB 17 TO RIB 32 - RIGHT WING (Figure 233)

			4.5	
Α.	Ins	ne	cti	n
/\·	1113		O CI	U 11

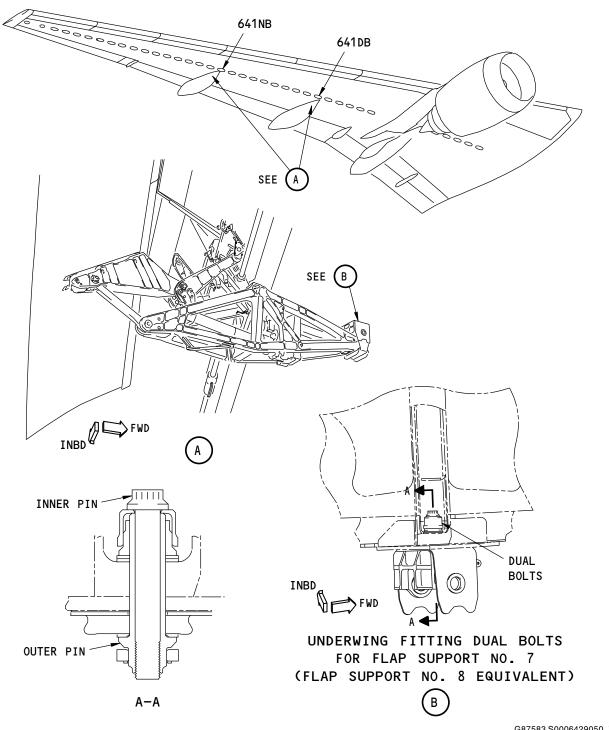
SUBTASK 57-05-03-211-023

(1) Do the inspection.

----- END OF TASK -----

ARO ALL





G87583 S0006429050_V1

Right Wing Outboard Flap - Underwing Fitting Dual Bolts Figure 233/57-05-03-990-827

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TASK 57-05-03-211-824

- 36. INTERNAL DETAILED: MAIN TANK RIB 17 TO RIB 32 RIGHT WING
 - A. Inspection

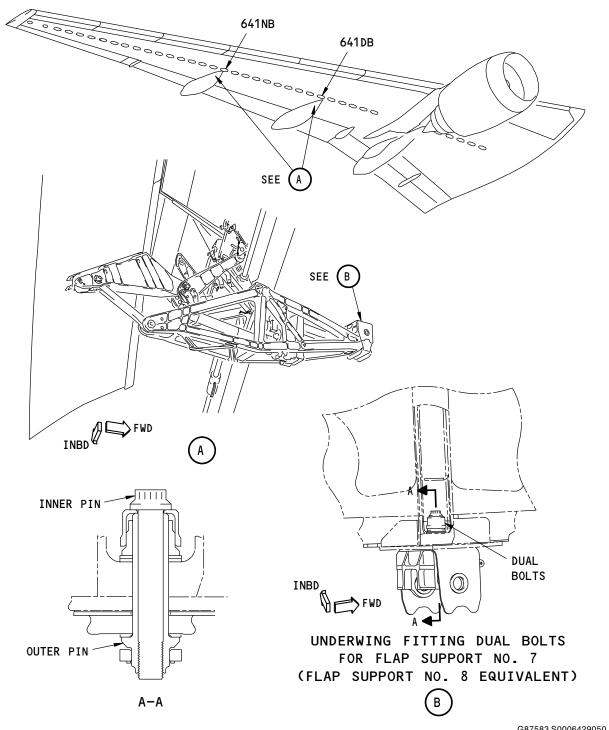
SUBTASK 57-05-03-211-024

(1) Do the inspection.

——— END OF TASK ———

ARO ALL





G87583 S0006429050_V1

Right Wing Outboard Flap - Underwing Fitting Dual Bolts Figure 234/57-05-03-990-846

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TASK 57-05-03-211-825

37. EXTERNAL - DETAILED: RIGHT WING INBOARD MAIN FLAP

(Figure 235)

A. Inspection

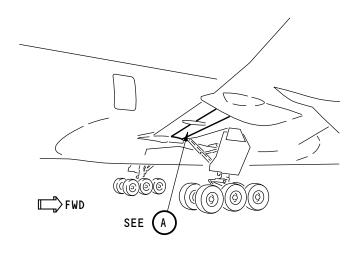
SUBTASK 57-05-03-211-025

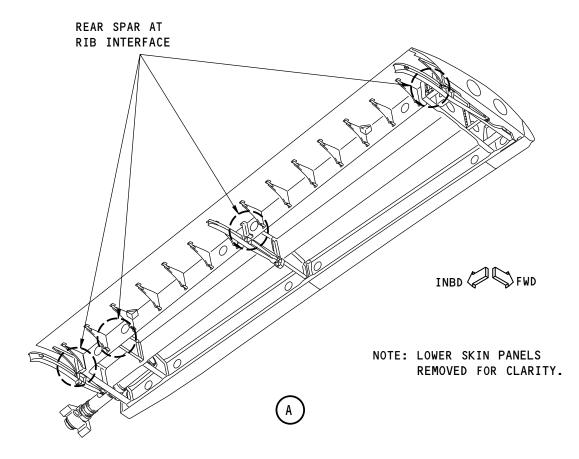
(1) Do the inspection.

----- END OF TASK -----

ARO ALL







G88703 S0006429053_V1

Right Wing Inboard Main Flap Figure 235/57-05-03-990-828

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TASK 57-05-03-210-812

38. INTERNAL - GENERAL VISUAL: RIGHT WING INBOARD MAIN FLAP (Figure 236)

A. Inspection

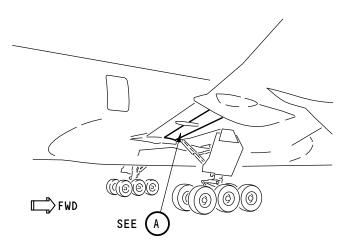
SUBTASK 57-05-03-210-012

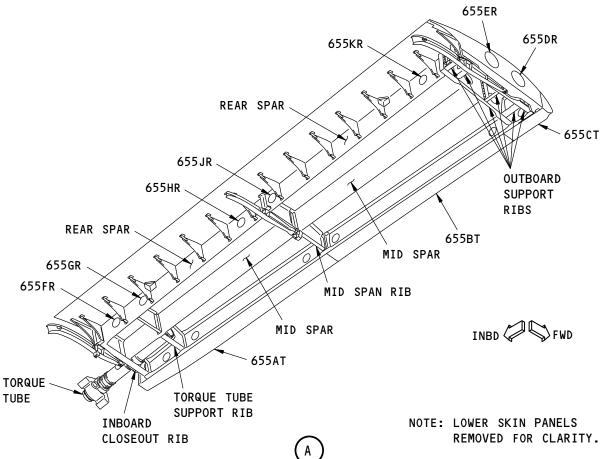
(1) Do the inspection.

----- END OF TASK -----

ARO ALL







G88781 S0006429055_V2

Right Wing Inboard Main Flap Figure 236/57-05-03-990-829

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TASK 57-05-03-211-826

39. INTERNAL - DETAILED: RIGHT WING INBOARD MAIN FLAP

(Figure 237)

A. Inspection

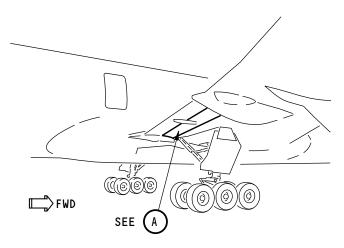
SUBTASK 57-05-03-211-026

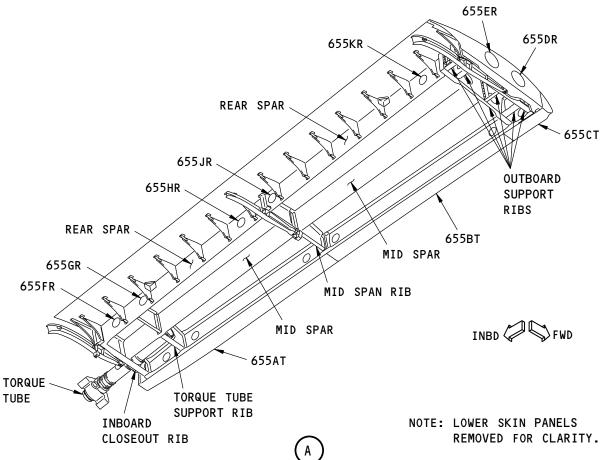
(1) Do the inspection.

----- END OF TASK -----

ARO ALL







G88783 S0006429057_V2

RIGHT WING INBOARD MAIN FLAP Figure 237/57-05-03-990-855

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TASK 57-05-03-211-832

40. INTERNAL - DETAILED: RIGHT WING INBOARD MAIN FLAP SUPPORT TORQUE TUBE Figure 238

A. Inspection

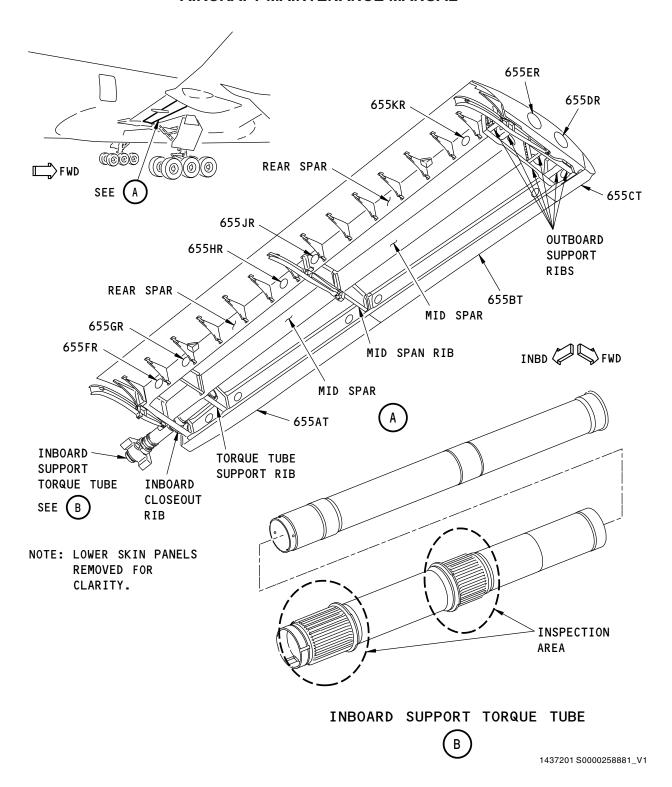
SUBTASK 57-05-03-211-032

(1) Do the inspection.

----- END OF TASK -----

ARO ALL





Right Wing Inboard Main Flap Support Torque Tube Figure 238/57-05-03-990-858

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TASK 57-05-03-210-813

- **41.** INTERNAL GENERAL VISUAL: RIGHT WING INBOARD AFT FLAP (Figure 239)
 - A. Inspection

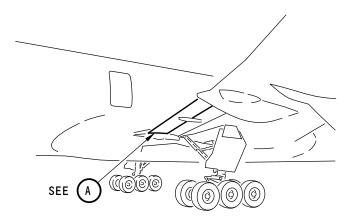
SUBTASK 57-05-03-210-013

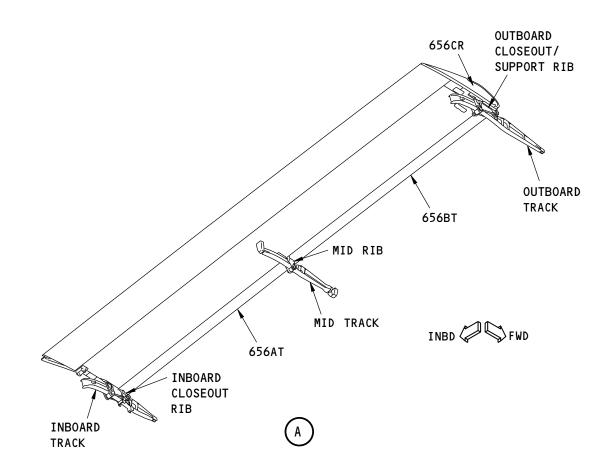
(1) Do the inspection.

----- END OF TASK -----

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Right Wing Inboard Aft Flap Figure 239/57-05-03-990-831

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TASK 57-05-03-210-814

42. INTERNAL - GENERAL VISUAL: RIGHT WING FLAPERON

(Figure 240)

A. Inspection

SUBTASK 57-05-03-210-014

(1) Do the inspection.

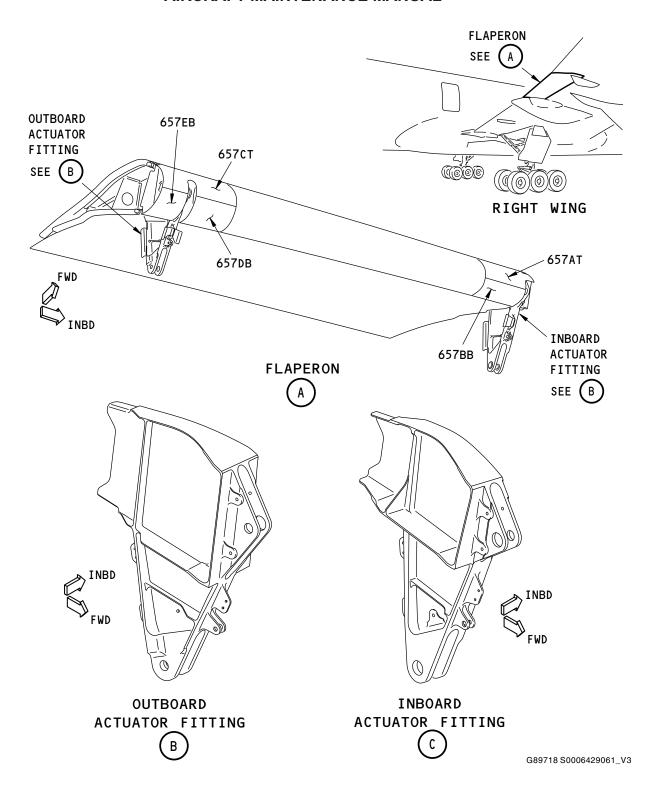
----- END OF TASK -----

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Right Wing Flaperon Figure 240/57-05-03-990-832

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TASK 57-05-03-211-827

- 43. INTERNAL DETAILED: RIGHT WING FLAPERON
 - A. Inspection

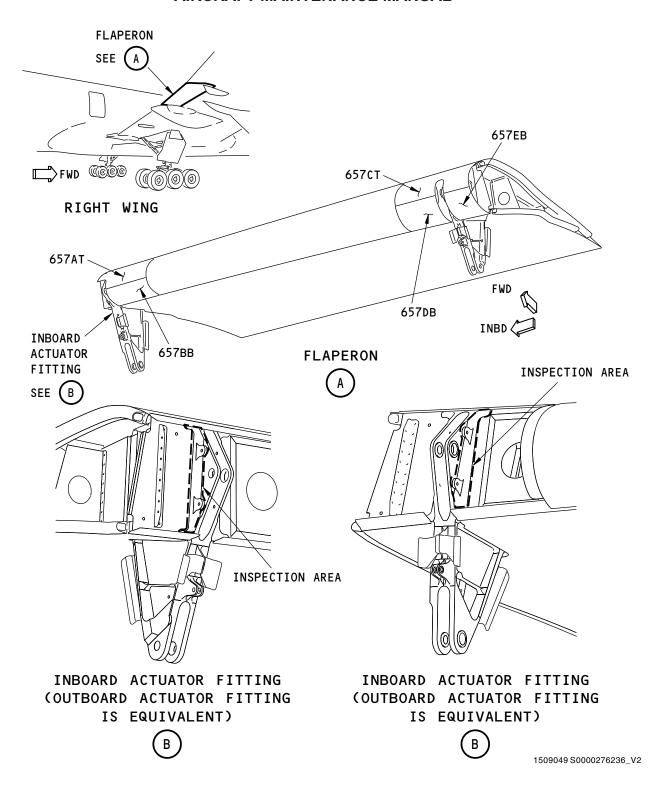
SUBTASK 57-05-03-211-027

(1) Do the inspection.

——— END OF TASK ———

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Right Wing Flaperon Figure 241/57-05-03-990-849

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TASK 57-05-03-210-815

44. INTERNAL - GENERAL VISUAL: RIGHT WING OUTBOARD FLAP (Figure 242)

A. Inspection

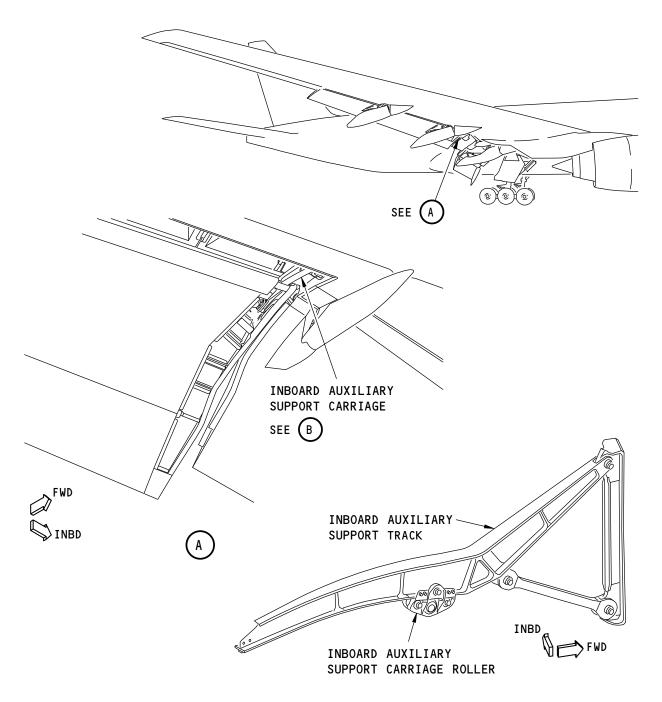
SUBTASK 57-05-03-210-015

(1) Do the inspection.

----- END OF TASK -----

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INBOARD AUXILIARY SUPPORT CARRIAGE



Right Wing Outboard Flap General Visual (Internal) Figure 242/57-05-03-990-833

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TASK 57-05-03-211-828

45. INTERNAL - DETAILED: RIGHT WING OUTBOARD FLAP

(Figure 243)

A. Inspection

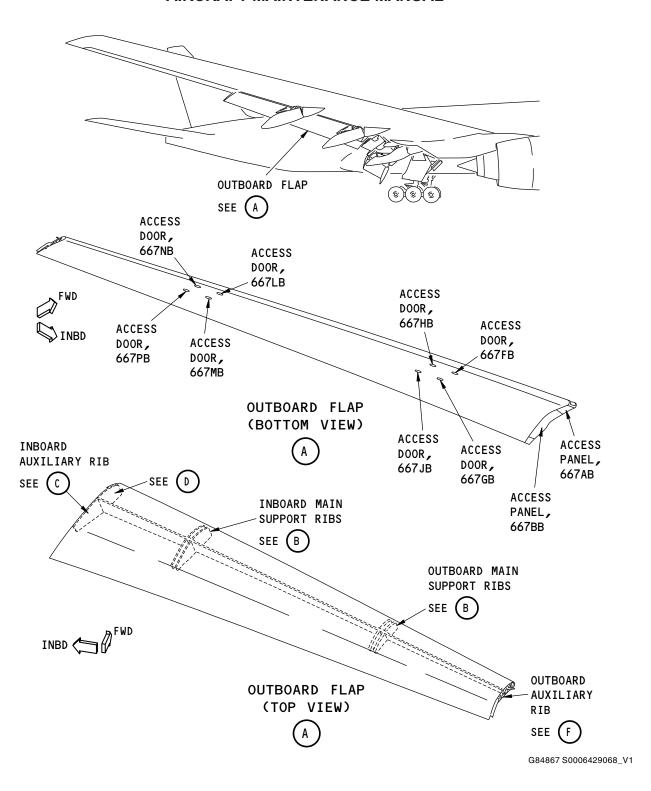
SUBTASK 57-05-03-211-028

(1) Do the inspection.

——— END OF TASK ———

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Right Wing Outboard Flap (Internal) Figure 243/57-05-03-990-834 (Sheet 1 of 3)

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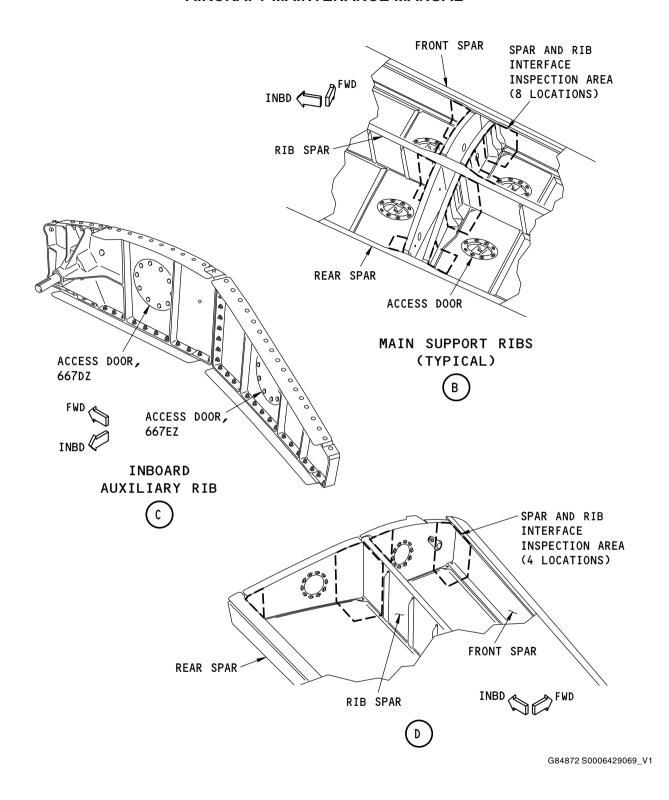
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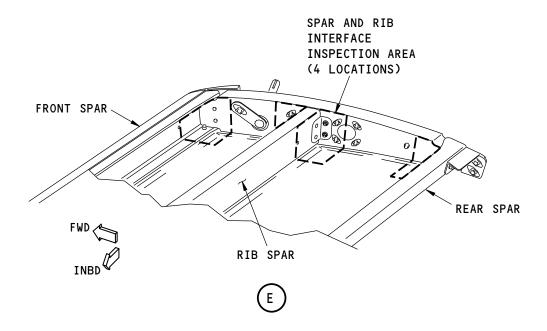
Right Wing Outboard Flap (Internal) Figure 243/57-05-03-990-834 (Sheet 2 of 3)

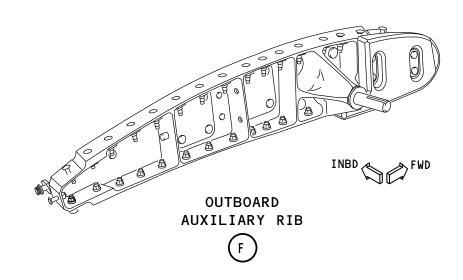
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Right Wing Outboard Flap (Internal) Figure 243/57-05-03-990-834 (Sheet 3 of 3)

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TASK 57-05-03-211-829

- **46.** INTERNAL SPECIAL DETAILED: FLAP SUPPORT FAIRING NUMBER 5 (Figure 244)
 - A. Inspection

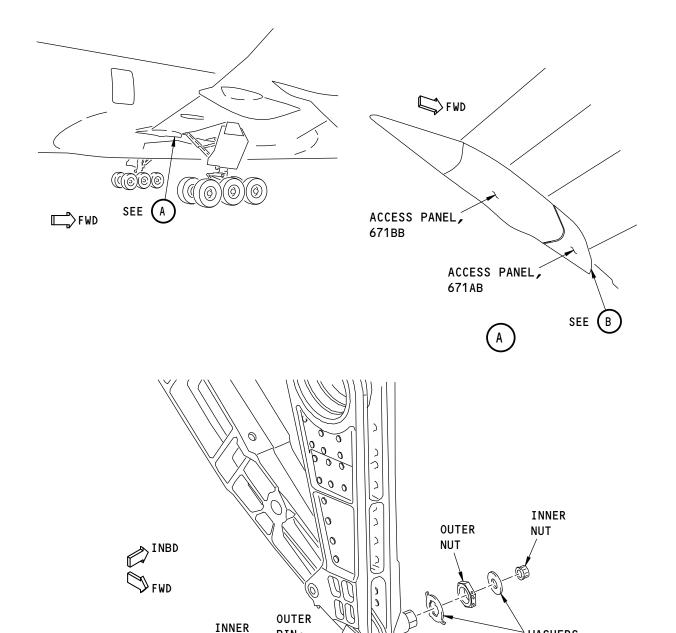
SUBTASK 57-05-03-211-029

(1) Do the inspection.

----- END OF TASK -----

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Right Wing Flap Support Fairing No. 5 (Internal) Figure 244/57-05-03-990-835

PIN

PIN

WASHER

NUT

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WASHERS

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TASK 57-05-03-210-816

47. INTERNAL - GENERAL VISUAL: INBOARD FLAP CENTER TRACK FAIRING - RIGHT WING (Figure 245)

		4.0
Α.	Inspe	ection

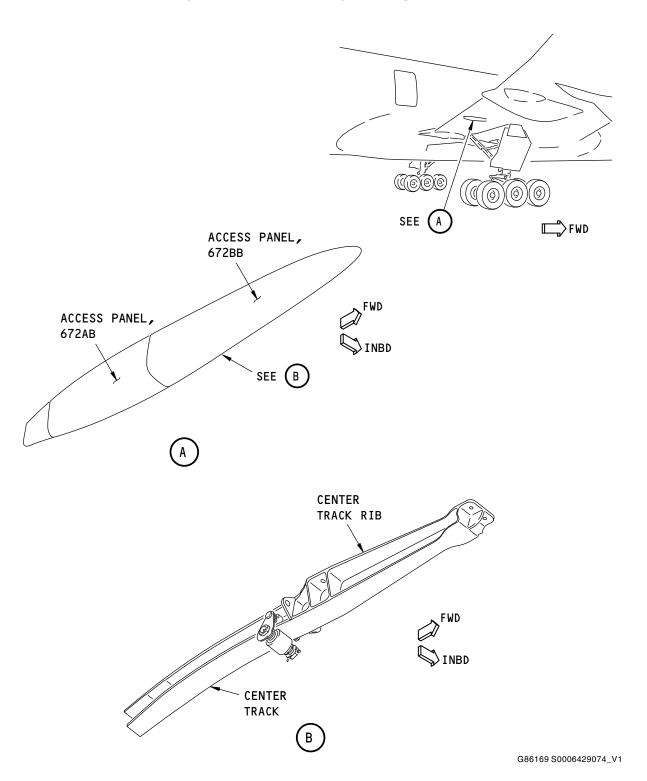
SUBTASK 57-05-03-210-016

(1) Do the inspection.

——— END OF TASK ———

ARO ALL





Right Wing Inboard Flap Center Track Fairing (General Visual Internal) Figure 245/57-05-03-990-836

EFFECTIVITY

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TASK 57-05-03-211-830

- **48.** INTERNAL SPECIAL DETAILED: FLAP SUPPORT FAIRING NUMBER 6 (Figure 246)
 - A. Inspection

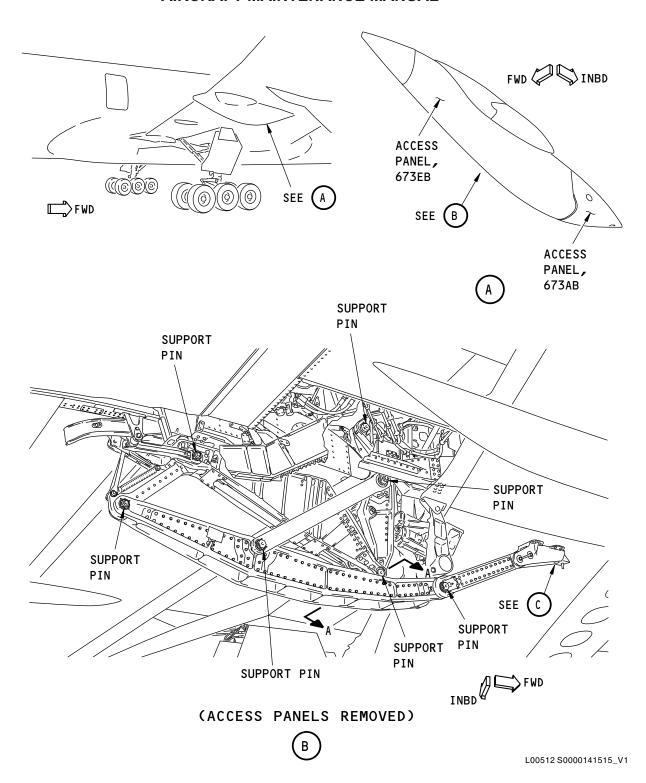
SUBTASK 57-05-03-211-030

(1) Do the inspection.

----- END OF TASK -----

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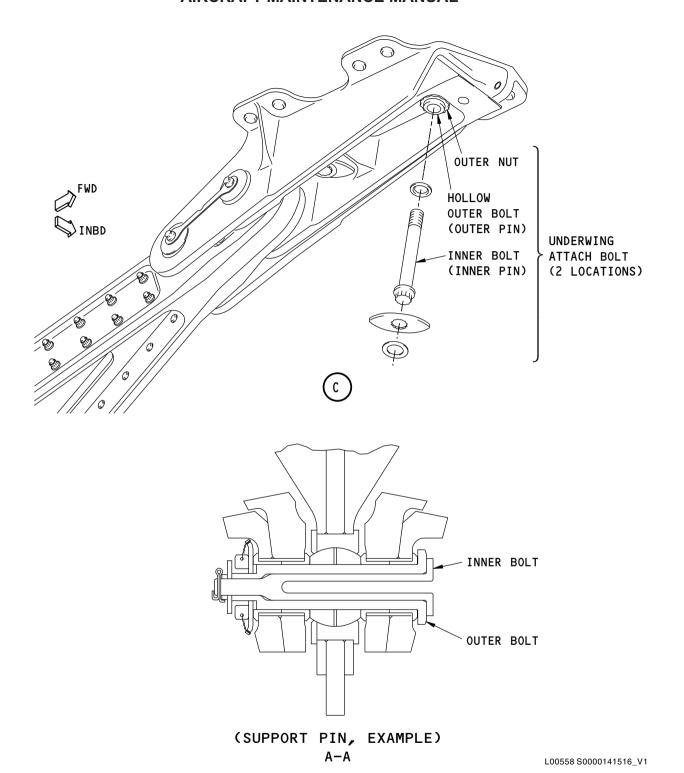
Right Wing Flap Support Fairing No. 6 (Internal) Figure 246/57-05-03-990-837 (Sheet 1 of 2)

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Right Wing Flap Support Fairing No. 6 (Internal) Figure 246/57-05-03-990-837 (Sheet 2 of 2)

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TASK 57-05-03-210-817

49. INTERNAL - GENERAL VISUAL: OUTBOARD FLAPERON SUPPORT FAIRING - RIGHT WING (Figure 247)

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/\·	1113		

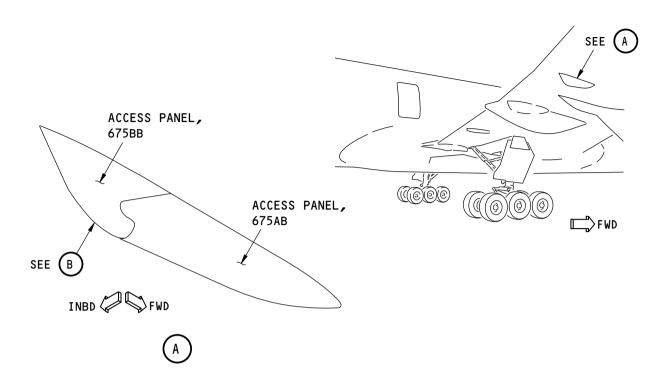
SUBTASK 57-05-03-210-017

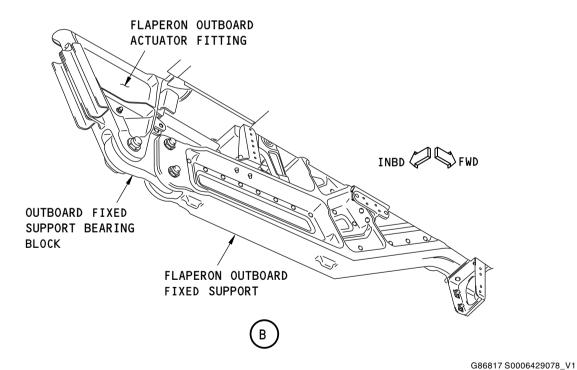
(1) Do the inspection.

----- END OF TASK -----

ARO ALL







Right Wing Outboard Flaperon Support General Visual (Internal) Figure 247/57-05-03-990-838

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57-05-03

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PANELS - REMOVAL/INSTALLATION

1. General

- A. This procedure has these tasks:
 - (1) Removal of the wing panels
 - (2) Installation of the wing panels.
- B. These panels are in this procedure:
 - (1) Outboard Wing Access Panels
 - (2) Wingtip Access Panels.

TASK 57-15-00-000-801

2. Panel Removal

(Figure 401)

A. Location Zones

Zone	Area
543	Main Tank - Rib 34 - Rib 37, WS 1074 - WS 1155; and Surge Tank - Rib 37 - Rib 38 - WS 1155 - WS 1182
544	Surge Tank - Rib 38 - Rib 41 - WS 1182 - WS 1264.5; and Spar Area - Rib 41 (WS 1264.5) - Wing Tip (WBL 1233)
643	Main Tank - Rib 34 - Rib 37 - WS 1074 - WS 1155; and Surge Tank - Rib 37 - Rib 38 - Ws 1155 - WS 1182
644	Surge Tank - Rib 38 - Rib 41 - WS 1182 - WS 1264.5; and Spar Area - Rib 41 (WS 1264.5) to wing tip (WBL 1233)

B. Procedure

SUBTASK 57-15-00-020-003

- (1) Outboard Wing Access Panel Removal
 - (a) Hold the clamp ring on the access door and remove the mounting bolts.
 - (b) Remove the clamp ring and the gasket.
 - (c) Push up on the access door.
 - If the access door does not move freely, use a rubber mallet and hit lightly around the access door.
 - (d) Remove the access door.

SUBTASK 57-15-00-020-002

- (2) Wingtip Access Panel Removal
 - (a) Remove the fasteners from the panel.

NOTE: Two fasteners do not have sealant because they make an electrical ground.

(b) Remove the panel.

FND	OF '	TASK	
	· •		

ARO ALL 57-15-00



TASK 57-15-00-400-801

3. Panel Installation

(Figure 401)

A. Consumable Materials

Reference	Description	Specification
A00247	Sealant - Pressure And Environmental - Chromate Type	BMS5-95
B00083	Solvent - VM&P Naphthas	TT-N-95 Type II, ASTM D-3735 Type III
C00528	Compound - Corrosion Preventive, Petroleum Hot Application (Soft Film)	MIL-C-11796 Class III
D00020	Grease - Aircraft Oscillating Bearing	MIL-G-25537 (NATO G-365)
D50050	Grease - Multipurpose, Helicopter Oscillating Bearing Grease with Calcium Soap Thickener - Aeroshell 14	MIL-G-25537
G50237	Compound - Corrosion Inhibiting, Non-drying - Cor-Ban 27L	BMS3-38

B. Location Zones

Zone	Area
543	Main Tank - Rib 34 - Rib 37, WS 1074 - WS 1155; and Surge Tank - Rib 37 - Rib 38 - WS 1155 - WS 1182
544	Surge Tank - Rib 38 - Rib 41 - WS 1182 - WS 1264.5; and Spar Area - Rib 41 (WS 1264.5) - Wing Tip (WBL 1233)
643	Main Tank - Rib 34 - Rib 37 - WS 1074 - WS 1155; and Surge Tank - Rib 37 - Rib 38 - Ws 1155 - WS 1182
644	Surge Tank - Rib 38 - Rib 41 - WS 1182 - WS 1264.5; and Spar Area - Rib 41 (WS 1264.5) to wing tip (WBL 1233)

C. Procedure

SUBTASK 57-15-00-420-003

- (1) Outboard Wing Access Panel Installation
 - (a) Remove the rubber protector in the access door opening.
 - (b) Make sure the access door areas on the wing skin, that the rubber door seal touches, are clean.
 - 1) Use solvent, B00083, to clean the surface if it is necessary.
 - (c) Make sure the gasket is in good condition.
 - (d) Apply both sides of the gasket and clamp ring with Aeroshell 14 helicopter grease, D50050, (recommended) or Cor-Ban 27L Compound, G50237.
 - (e) Put the access panel in its position on the wing.
 - (f) Put the clamp ring on the gasket with the countersink end of the holes face up.
 - 1) Make sure that the clamp ring and gasket holes align.
 - NOTE: The holes are not symmetrical.
 - (g) Set and hold the gasket and the clamp ring in the opening between the outer face of the access door and the wing skin while you install the mounting bolts for the access door.

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- (h) Do the steps that follow to install mounting bolts:
 - 1) Apply a thin layer of compound, C00528, to the mounting bolts shank and threads.

NOTE: Do not mix compound, C00528, and grease, D00020, together.

- 2) Tighten the mounting bolts to 35 ±5 in-lb (4 ±1 N·m).
 - NOTE: Tighten the mounting bolt as shown in (Figure 401).

SUBTASK 57-15-00-420-002

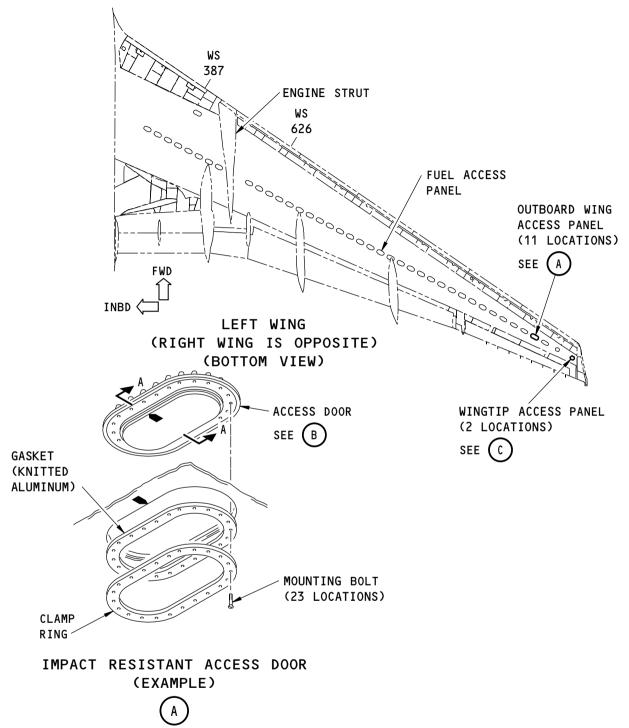
- (2) Wingtip Access Panel Installation
 - (a) Put the panel in its position on the wing.
 - (b) Install the two fasteners for the electrical ground without sealant.
 - (c) Install the remaining fasteners with (sealant, A00247).
 - (d) Tighten the fasteners to 35 ±5 in-lb (4 ±1 N·m).
 - (e) Put the airplane back to it's usual condition.

——— END OF TASK ———

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Wing Panels Installation Figure 401/57-15-00-990-801 (Sheet 1 of 3)

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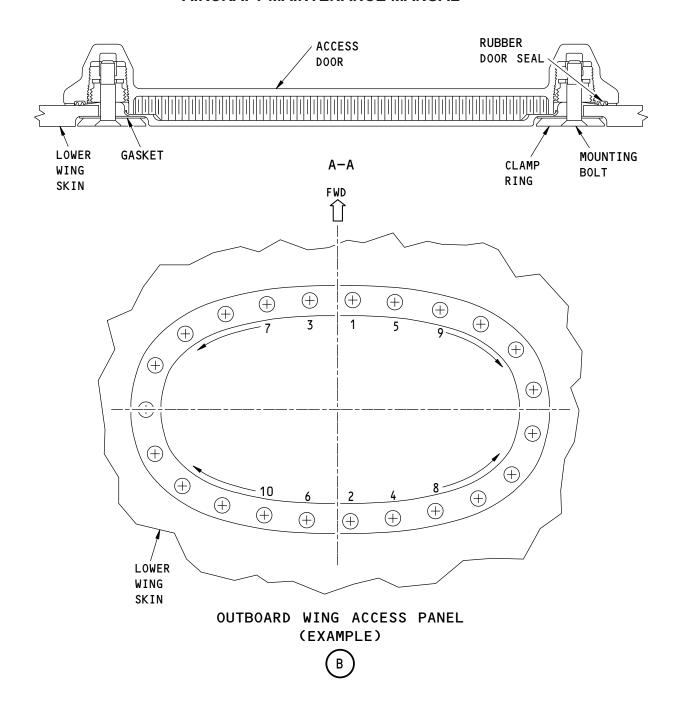
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NOTE: TORQUE THE MOUNT BOLTS IN THE SEQUENCE SHOWN BY THE NUMBERS.

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Wing Panels Installation Figure 401/57-15-00-990-801 (Sheet 2 of 3)

FFFECTIVITY

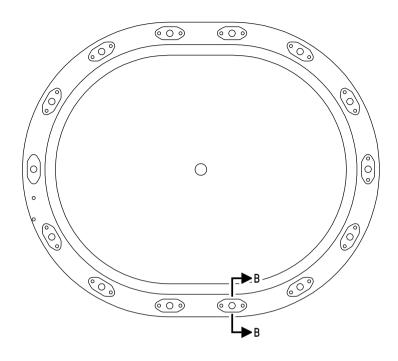
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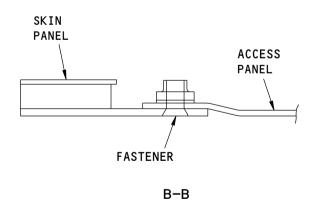
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WINGTIP ACCESS PANEL (EXAMPLE)





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Wing Panels Installation Figure 401/57-15-00-990-801 (Sheet 3 of 3)

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WING VORTEX GENERATORS - REPAIRS

1. General

- A. This procedure contains one task. The task gives instructions to do repairs on the wing vortex generators.
- B. The repairs done in this procedure are temporary. It is satisfactory to have these temporary repairs only until the airplane gets to a location that can do permanent repairs. You must obey the instructions in the Structural Repair Manual 57-20-01 when you do the permanent repairs.

TASK 57-25-01-300-802

2. Repair the Vortex Generator

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Reference	Title
SRM 57-20-01	Structural Repair Manual

B. Location Zones

Zone	Area
500	Left Wing
600	Right Wing

C. Procedure

SUBTASK 57-25-01-300-001

(1) Do the repair of the Vortex Generator SRM 57-20-01

----- END OF TASK -----

ARO ALL 57-25-01



WING SKINS - CLEANING/PAINTING

TASK 57-25-02-370-801

1. Wing In-spar - Cleaning/Painting

A. General

- (1) This procedure gives instructions to apply protective coating to the wing in-spar upper and lower skins.
- (2) The Boeing recommended protective finish for the wing in-spar area is as follows.
 - (a) Wing in-spar upper skin: BMS10-79 Type III primer and BMS10-60 Type II topcoat.
 - (b) Wing in-spar lower skin: BMS5-95 sprayable sealant, BMS10-79 Type III primer, and BMS10-60 Type II topcoat.

B. References

Reference	Title
29-11-00-860-808	Main Hydraulic System Power Removal (P/B 201)
51-24-10-370-801	BMS10-79 Primer Application (P/B 701)
51-24-11-370-801	BMS10-60, Type II, Polyurethane Topcoat Application (P/B 701)
51-31-01-370-802	BMS5-95 Sprayable Sealant Application (P/B 201)

C. Consumable Materials

Reference	Description	Specification
A50193	Sealant - Pressure And	BMS5-95 Type I Class F
	Environmental-Chromate (For Spray Application As A Primer)	
C00033	Coating - Protective Enamel, Flexibility Use	BMS10-60 Type II
C00175	Primer - Urethane Compatible, Corrosion Resistant (Less Than 1% Aromatic Amines)	BMS10-79 Type III

D. Location Zones

Zone	Area
500	Left Wing
600	Right Wing

E. Prepare for the Cleaning/Painting

SUBTASK 57-25-02-040-001

- (1) Move the FLT CONTROL HYD VALVE POWER on the pilot's overhead panel to SHUT OFF..
 - (a) WING, L
 - (b) WING, C
 - (c) WING, R
 - (d) Make sure that the amber VALVE CLOSED light illuminates for each switch.

SUBTASK 57-25-02-040-002

(2) Remove hydraulic power, Main Hydraulic System Power Removal, TASK 29-11-00-860-808.

ARO ALL 57-25-02



F. Wing In-Spar Protective Finish Application

SUBTASK 57-25-02-370-001

- (1) If there are exterior areas where BMS10-20 Type II corrosion-resistant fuel tank primer has been removed or damaged and the bare aluminum is exposed, apply BMS10-79 Type III primer, C00175 to the bare aluminum (BMS10-79 Primer Application, TASK 51-24-10-370-801).
 - (a) Apply the BMS10-79 Type III primer before applying the BMS5-95 sprayable sealant or the additional BMS10-79 Type III layer.

SUBTASK 57-25-02-370-002

- (2) Do the steps that follow to paint the wing in-spar upper skin.
 - (a) Apply BMS10-79 Type III primer, C00175 (BMS10-79 Primer Application, TASK 51-24-10-370-801).
 - (b) Apply BMS10-60 type II coating, C00033 (BMS10-60, Type II, Polyurethane Topcoat Application, TASK 51-24-11-370-801).

SUBTASK 57-25-02-370-003

- (3) Do the steps that follow to paint the wing in-spar lower skin.
 - (a) Apply BMS5-95 Class F sprayable sealant, A50193 (Figure 701).
 - 1) Apply the sprayable sealant at the front spar, rear spar, and splice stringer locations (BMS5-95 Sprayable Sealant Application, TASK 51-31-01-370-802).
 - (b) Apply BMS10-79 Type III primer, C00175.
 - (c) Apply BMS10-60 Type II coating, C00033.

G. Put the Airplane Back to Its Usual Condition

SUBTASK 57-25-02-440-001

- (1) Move the FLT CONTROL HYD VALVE POWER switches that follow, on the pilot's overhead panel, to NORM.
 - (a) WING, L
 - (b) WING, C
 - (c) WING, R
 - (d) Make sure that the amber light turns off for each switch.

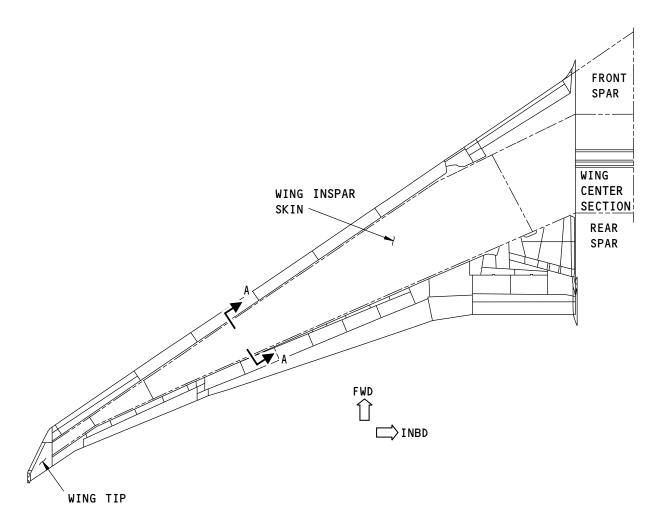
SUBTASK 57-25-02-440-002

(2) If necessary, turn on hydraulic power.

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LEFT WING UPPER SURFACE (RIGHT WING IS SIMILAR)

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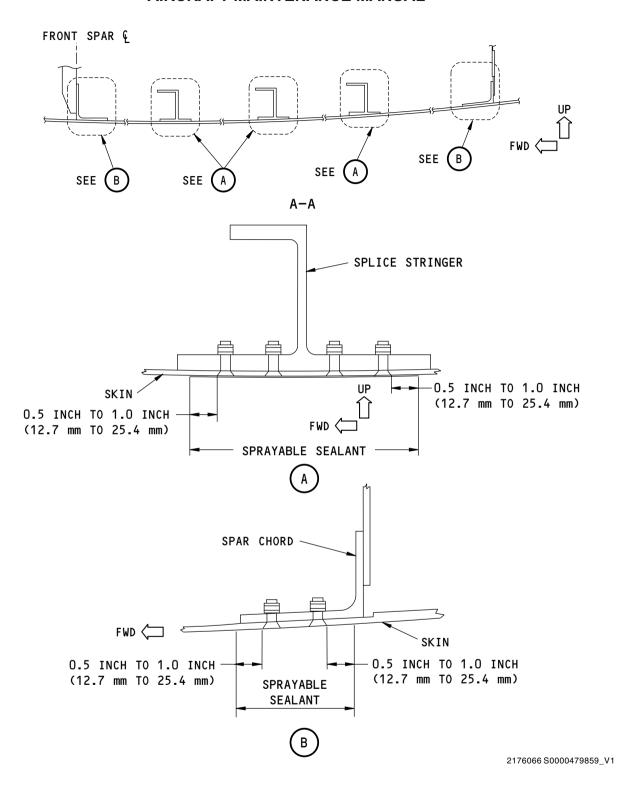
BMS5-95 Application Areas Figure 701/57-25-02-990-801 (Sheet 1 of 2)

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BMS5-95 Application Areas Figure 701/57-25-02-990-801 (Sheet 2 of 2)

EFFECTIVITY

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RAKED WINGTIP - REMOVAL/INSTALLATION

1. General

- A. This procedure has these tasks:
 - (1) Raked wingtip Removal.
 - (2) Raked wingtip Installation.

TASK 57-32-01-000-801

2. Raked Wingtip Removal

A. References

Reference	Title
20-10-27-400-801	Attach Flight Control and Nacelle Surfaces Personnel
	Equipment Shock Absorbing Lanyard (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-4125	Sling - Raked Wing Tip
	Part #: J57003-16 Supplier: 81205 Opt Part #: J57003-1 Supplier: 81205
STD-1177	Harness - Body

C. Location Zones

Zone	Area	
545	Raked Wing Tip, Left	
645	Raked Wing Tip, Right	

D. Access Panels

Number	Name/Location
544MB	Wingbox Rib Access Door
545CB	Wingtip Light Assembly Access Panel
545EB	Wingtip Access Panel
545HB	Aft Wingtip Access Panel
561SB	Outboard Fixed Trailing Edge Panel
644MB	Wingbox Rib Access Door
645CB	Wingtip Light Access Panel
645EB	Wingtip Access Panel
645HB	Wingtip Trailing Edge Access Panel
661SB	Outboard Fixed Trailing Edge Panel

E. Prepare for Removal

SUBTASK 57-32-01-860-001

(1) Remove electrical power from the wingtip [26] as follows:

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

Left Power Management Panel, P110

Row	<u>Col</u>	<u>Number</u>	<u>Name</u>
Ε	18	C33481	L POS LT
Е	24	C33487	WHT ANTI-COLL LTS

Right Power Management Panel, P210

Row	<u>Col</u>	<u>Number</u>	<u>Name</u>
Ε	9	C33486	RD ANTI-COLL LTS
Ε	13	C33480	R POS LT

SUBTASK 57-32-01-940-001



ATTACH A SAFETY HARNESS WHEN YOU DO WORK ON TOP OF THE WING. FAILURE TO ATTACH A SAFETY HARNESS CAN CAUSE INJURY OR DAMAGE.

(2) Attach the body harness, STD-1177 to the wing. To attach the body harness, STD-1177, do this task: Attach Flight Control and Nacelle Surfaces Personnel Equipment Shock Absorbing Lanyard, TASK 20-10-27-400-801.

F. Procedure

SUBTASK 57-32-01-020-001



DO NOT TOUCH THE POWER SUPPLY FOR 3 MINUTES AFTER YOU REMOVE THE POWER. ELECTRICAL SHOCK CAN CAUSE INJURY TO PERSONS OR DAMAGE TO EQUIPMENT CAN OCCUR.

(1) Disconnect the wires from the wingtip [26] as follows:

(a)

Under the left wing, open these wingtip access panels:

<u>Number</u>	Name/Location
544MB	Wingbox Rib Access Door
545CB	Wingtip Light Assembly Access Panel
545EB	Wingtip Access Panel
545HB	Aft Wingtip Access Panel
561SB	Outboard Fixed Trailing Edge Panel

(b)

Under the right wing, open these wingtip access panels:

<u>Number</u>	Name/Location
644MB	Wingbox Rib Access Door
645CB	Wingtip Light Access Panel
645EB	Wingtip Access Panel
645HB	Wingtip Trailing Edge Access Panel
661SB	Outboard Fixed Trailing Edge Panel

(c) Disconnect the three electrical connectors [1] for the wingtip lights.

SUBTASK 57-32-01-010-001

(2) Remove the forward light assembly [25] housing as follows:

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- (a) Remove the fifty six fasteners [23] from around the light assembly [25] housing.
- (b) Remove the four (two upper surface and two lower surface) fasteners [24] from around the light assembly housing.
- (c) Tag and save the fasteners.



MAKE SURE YOU DO NOT PULL ON THE WIRES WHEN THEY COME OUT OF THE LIGHT ASSEMBLY. DAMAGE TO THE WIRES AND WIRE CONNECTORS MAY OCCUR IF THEY CATCH IN THE LIGHT ASSEMBLY HOLES.

(d) Carefully pull the light assembly housing outward.

NOTE: The raked wingtip weighs approximately 110 lbs (49.9 kg). Without the light assembly the wingtip weighs 95 lbs (43.1 kg).

SUBTASK 57-32-01-480-001

- (3) Install the raked wing tip sling, SPL-4125 onto the raked wingtip [26] as follows (Figure 402)
 - (a) Remove the three GSE bolts on the upper surface of the wingtip.
 - (b) Tag and save the three bolts.
 - (c) Attach the three raked wing tip sling, SPL-4125 fittings to the wingtip.
 - (d) Attach the raked wing tip sling, SPL-4125 to the overhead crane.
 - (e) Lift the overhead crane until the three sling ropes are equally supporting the wingtip.

<u>NOTE</u>: Balance the overhead crane tension, so you can tighten the bolts that hold the wingtip to the wing, without damage to the bolt threads or to the wingtip.

SUBTASK 57-32-01-020-002

- (4) Remove the wingtip [26] as follows (Figure 401):
 - (a) Remove the fasteners that attach the raked wingtip [26] to the wing in the following sequence:
 - 1) Remove the bonding jumper nuts [9], [11] and washers [8], [10].
 - 2) Remove the bonding jumpers [6], [7] and [18].
 - 3) Remove the two bolts [19], washers [20], [21] and nuts [22] forward of the front spar.
 - 4) Remove the two bolts [12] and washers [13] aft of the rear spar.
 - 5) Remove the eight primary nuts [5], [17] and washers [4], [16], leaving the bolts [2], [14] in position.
 - 6) Remove the eight primary bolts [2], [14] and washers [3], [15] one at a time, removing the forward upper and rear lower bolt last to prevent the wingtip from binding on the other bolts.
 - (b) Tag the bolts, washers and nuts that are removed to correctly install them later into the applicable holes.



EFFECTIVITY

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MAKE SURE YOU DO NOT PULL ON THE WIRES WHEN THEY COME OUT OF THE WINGTIP. DAMAGE TO THE WIRES AND WIRE CONNECTORS MAY OCCUR IF THEY CATCH IN THE WINGTIP HOLES.

(c) Carefully pull the wingtip [26] outboard.



(d) Use the overhead crane and the raked wing tip sling, SPL-4125 to move the wingtip to a designated location.

----- END OF TASK -----

TASK 57-32-01-400-801

3. Raked Wingtip Installation

A. References

Reference	Title
20-10-27-400-801	Attach Flight Control and Nacelle Surfaces Personnel
	Equipment Shock Absorbing Lanyard (P/B 201)
SWPM 20-20-00	Standard Wiring Practices Manual
SWPM 20-20-10	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
SPL-4125	Sling - Raked Wing Tip
	Part #: J57003-16 Supplier: 81205 Opt Part #: J57003-1 Supplier: 81205
STD-1177	Harness - Body

C. Consumable Materials

Reference	Description	Specification
A00247	Sealant - Pressure And Environmental - Chromate Type	BMS5-95
A00723	Sealant - Corrosion Inhibitive, 2-Part - PR-1405-G	
A02315	Sealant - Low Density, Synthetic Rubber. 2 Part	BMS5-142 Type II
G50136	Compound - Corrosion Inhibiting, Non-drying Paste	BMS3-38
G50313	Agent - Non-Peelable Parting (Henkel Loctite - Frekote 710-NC Mold Release)	BAC5000
G50366	Agent - Parting, Peelable, AZ 534-2B (0A3C8 - Aztec Chemical, Inc., El Monte, CA)	BAC5000, PSD 6-187
G50367	Agent - Peelable Parting (Aztec Chemical AZ 634-2)	MIL-PRF-6799, BAC5000

D. Expendables/Parts

AMM Item	Description	AIPC Reference	AIPC Effectivity	
26	Wingtip	57-31-01-25-135	ARO ALL	
		57-31-01-25-140	ARO ALL	

E. Location Zones

Zone	Area	
545	Raked Wing Tip, Left	
645	Raked Wing Tip, Right	

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F. Access Panels

Number	Name/Location
544MB	Wingbox Rib Access Door
545CB	Wingtip Light Assembly Access Panel
545EB	Wingtip Access Panel
545HB	Aft Wingtip Access Panel
561SB	Outboard Fixed Trailing Edge Panel
644MB	Wingbox Rib Access Door
645CB	Wingtip Light Access Panel
645EB	Wingtip Access Panel
645HB	Wingtip Trailing Edge Access Panel
661SB	Outboard Fixed Trailing Edge Panel

G. Procedure

SUBTASK 57-32-01-840-001

(1) Apply PR-1405-G sealant, A00723 to the wingtip faying surface (Zone 2) where the four rear spar fasteners [2] are installed (Figure 401).

SUBTASK 57-32-01-840-002

(2) Apply a thin coat of corrosion inhibiting material, G50136, corrosion preventive compound to Zone 1, the entire surface of the mating closure ribs of the wing except where PR-1405-G sealant, A00723 has just been applied.

SUBTASK 57-32-01-400-001

- (3) Install the raked wingtip [26] as follows:
 - (a) Put the wingtip [26] to the wing and visually align.

<u>NOTE</u>: Only new wingtips require fairing flush and gap adjustment. No adjustment is necessary for usual wingtip maintenance removal and installation.

- 1) Align the new wingtip per Figure 401 (Sheet 2).
- (b) Put the electrical connectors [1] through the holes in the wingtip [26].
- (c) Pull the electrical connectors [1] through the holes as you put the wingtip [26] in its correct position.

SUBTASK 57-32-01-420-001

- (4) Install the wingtip [26] fasteners as follows:
 - (a) Apply the corrosion preventive corrosion inhibiting material, G50136 to the bolt shanks, bolt threads and inside surface of the bolt holes for the rear spar bolts [2].
 - (b) Install the four rear spar bolts [2] and washers [3] before the corrosion preventive corrosion inhibiting material, G50136 is dry.
 - (c) Apply a thin layer of PR-1405-G sealant, A00723 to the bolt shanks, bolt threads and inside surface of the bolt holes for the front spar bolts [14].
 - (d) Install the four front spar bolts [14] and washers [15] before the PR-1405-G sealant, A00723 is dry.
 - (e) Install the four rear spar washers [4] and nuts [5] on the rear spar bolts [2].
 - (f) Install the four front spar washers [16] and nuts [17] on the front spar bolts [14].
 - (g) Torque the eight nuts in the following sequence:
 - 1) Torque the four rear spar nuts [5] to 910 ±50 in-lb (103 ±6 N·m).

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- 2) Wait 20 minutes for corrosion inhibiting material, G50136 to squeeze out.
- 3) Re-torque four rear spar nuts [5] to 910 ±50 in-lb (103 ±6 N·m).
 - All re-torquing to be accomplished before the squeeze-out life of the sealant expires.
- 4) Make sure there is a minimum running torque of 34 pound-inches (3.8 newton-meters) for the four front spar nuts [17].
- 5) Torque the front spar nuts [17] to 650 \pm 50 in-lb (73 \pm 6 N·m).
- 6) Wait 20 minutes for the corrosion inhibiting material, G50136 to squeeze out.
- 7) Re-torque the front spar nuts [17] to 650 ±50 in-lb (73 ±6 N·m).
 - All re-torquing to be accomplished before the squeeze-out life of the sealant expires.

SUBTASK 57-32-01-420-002

- (5) Install the remaining fasteners as follows:
 - (a) Apply the corrosion preventive corrosion inhibiting material, G50136 to the bolt shanks, bolt threads and inside surface of the bolt holes for the two bolts [19] in the forward light assembly.
 - (b) Install the two bolts [19], washers [20], [21] and nuts [22] before the corrosion preventive corrosion inhibiting material, G50136 is dry.
 - (c) Apply the corrosion preventive corrosion inhibiting material, G50136 to the bolt shanks, bolt threads and inside surface of the bolt holes for the two bolts [12] aft of the rear spar fasteners [2].
 - (d) Install the two bolts [12] and washers [13] before the corrosion preventive corrosion inhibiting material, G50136 is dry.
 - (e) Torque the two nuts [22] and bolts [12] in the following sequence:
 - 1) Torque the two nuts [22] forward of the front spar to 125 ±12 in-lb (14 ±1 N·m)).
 - 2) Wait 20 minutes for the corrosion inhibiting material, G50136 to squeeze out.
 - Re-torque the two nuts [22] to 125 ±12 in-lb (14 ±1 N·m).
 - All re-torquing to be accomplished before the squeeze-out life of the sealant expires.
 - 4) Torque the two bolts [12] aft of the rear spar fasteners [2] to 75 ±7 in-lb (8 ±1 N·m).
 - 5) Wait 20 minutes for the corrosion inhibiting material, G50136 to squeeze out.
 - 6) Re-torque the two bolts [12] to 75 ±7 in-lb (8 ±1 N·m)
 - a) All re-torquing to be accomplished before the squeeze-out life of the sealant expires.

SUBTASK 57-32-01-100-001

- (6) Check the interface between the wingtip [26] and the wing.
 - (a) Clean any BMS3-38 or PR-1405G along the interface of the wingtip [26] and the wing.

SUBTASK 57-32-01-080-001

(7) Remove the raked wing tip sling, SPL-4125 from the wingtip [26] (Figure 402).

SUBTASK 57-32-01-420-003

(8) Install the three GSE bolts in the holes where the wingtip sling was attached.

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SUBTASK 57-32-01-420-005

(9) Connect the three electrical connectors [1] to the wingtip lights.

SUBTASK 57-32-01-420-006

(10) Install the bonding jumpers [6], [7] and [18] per SWPM 20-20-10.

SUBTASK 57-32-01-420-007

- (11) Install the bonding jumper nuts [9], [11] and washers [8], [10].
 - (a) Do a resistance check and make sure that maximum resistance does not exceed 0.10 Milliohms.
 - (b) Apply sealant, A00247 around the entire bonding jumper opening.

H. Put the Airplane Back to Its Usual Condition.

SUBTASK 57-32-01-410-001

- (1) Install the forward light assembly [25] housing as follows:
 - (a) Bond the light assembly [25] housing to the structure per SWPM 20-20-00 Section 11.
 - (b) Put the light assembly [25] housing in its correct position.
 - 1) Align the light assembly [25] per Figure 401 (Sheet 2).
 - (c) Wet install the fasteners [23] around the light assembly [25] with sealant, A00247.
 - Leave out one or two fasteners to use the exposed countersink holes for resistance test.
 - (d) Do a resistance test between the fastener [23] and the structure.
 - 1) Make sure the maximum resistance does not exceed 0.0012 Ohms.
 - (e) Wet install the remaining fasteners [23] around the light assembly with sealant, A00247.
 - (f) Apply sealant, A02315 or sealant, A00247 to the countersink holes and fastener threads.
 - (g) Wet install the four (two upper surface and two lower surface) fasteners [24] around the light assembly with sealant, A00247.
 - (h) Apply aerodynamic sealant, A02315 in the gaps between the light assembly and the wing structure.

SUBTASK 57-32-01-210-001

(2) Make sure the interior of the raked wingtip is free of all foreign objects.

SUBTASK 57-32-01-410-002

- (3) Install the wingtip access panels as follows:
 - (a) Apply parting agent to the wingtip access panels.
 - NOTE: Any peelable or non-peelable parting agent per BAC5000 or SOPM 20–50–19 (such as Frekote 710-NC non-peelable parting agent, G50313, peelable parting agent, G50366 or AZ 634-2 peelable parting agent, G50367) is acceptable to use.
 - (b) Install the wingtip access panels with the bolts.
 - (c)

Under the left wing, close these wingtip access panels:

<u>Number</u>	Name/Location
544MB	Wingbox Rib Access Door
545CB	Wingtip Light Assembly Access Panel
545EB	Wingtip Access Panel

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(Continued)

<u>Number</u>	Name/Location
545HB	Aft Wingtip Access Panel
561SB	Outboard Fixed Trailing Edge Panel

(d)

Under the right wing, close these wingtip access panels:

<u>Number</u>	Name/Location
644MB	Wingbox Rib Access Door
645CB	Wingtip Light Access Panel
645EB	Wingtip Access Panel
645HB	Wingtip Trailing Edge Access Panel
661SB	Outboard Fixed Trailing Edge Panel

- (e) Apply aerodynamic sealant, A02315 in the gaps between the wingtip and the wing structure.
- (f) Apply aerodynamic sealant, A02315 in the gap around the access panels.

SUBTASK 57-32-01-860-002

- (4) Apply electrical power to the wingtip as follows:
 - (a) Close these circuit breakers:

Left Power Management Panel, P110

Row	<u>Col</u>	<u>Number</u>	<u>Name</u>
Ε	18	C33481	L POS LT
Ε	24	C33487	WHT ANTI-COLL LTS

Right Power Management Panel, P210

Row	<u>Col</u>	<u>Number</u>	<u>Name</u>
Ε	9	C33486	RD ANTI-COLL LTS
Ε	13	C33480	R POS LT

SUBTASK 57-32-01-860-003

- (5) Do an operational check of the wingtip lights.
 - (a) At the overhead panel, P5, set the applicable light switches to the on mode.
 - 1) Make sure the position lights come on.
 - 2) Make sure the anti-collision light (strobe) flashes.
 - (b) Set the applicable light switches to the off mode.
 - 1) Make sure the lights go off.

SUBTASK 57-32-01-940-002

(6) Remove the body harness, STD-1177. To remove the body harness, STD-1177, do this task: Attach Flight Control and Nacelle Surfaces Personnel Equipment Shock Absorbing Lanyard, TASK 20-10-27-400-801.

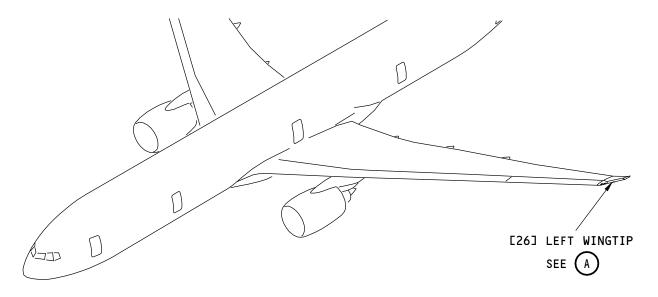
SUBTASK 57-32-01-720-001

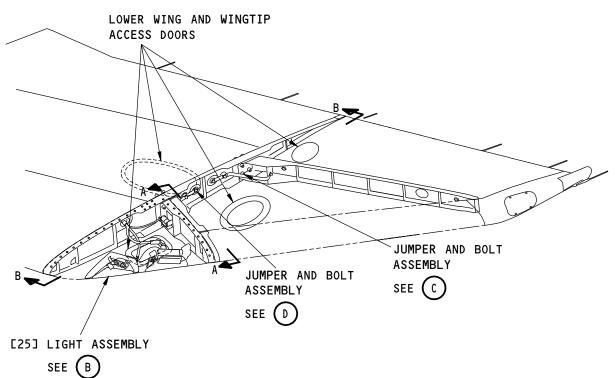
(7) Remove electrical power if it is not necessary.

----- END OF TASK -----

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LEFT WINGTIP
(RIGHT WINGTIP IS OPPOSITE)

A

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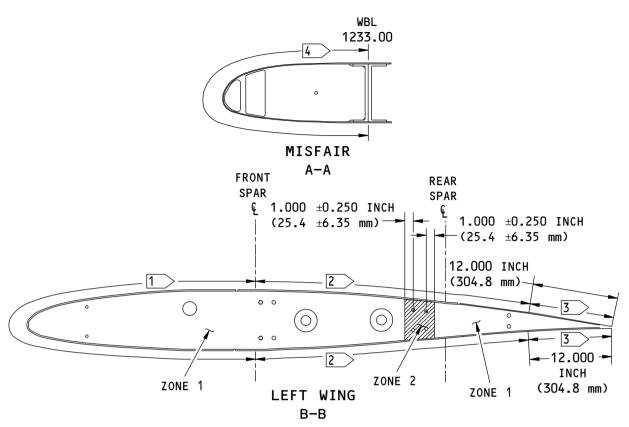
Raked Wingtip Installation Figure 401/57-32-01-990-801 (Sheet 1 of 4)

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NOTE: ALL DIMENSIONS ARE IN INCHES (MILLIMETERS ARE IN PARENTHESES).

- 1 MAXIMUM MISFAIR ACROSS WBL 1233.00. FOR INDICATED REGION IS 0.030 INCH (0.762 mm)
- 2 MAXIMUM MISFAIR ACROSS WBL 1233.00. FOR INDICATED REGION IS 0.040 INCH (1.016 mm)
- MISFAIR ALLOWABLE ACROSS WBL 1233.00.
 INCREASES FROM 0.040 INCH (1.016 mm) TO A MAXIMUM OF 0.080 INCH (2.032 mm)
 ALLOWABLE MISFAIR FOR ANY POINT IN THIS REGION
 IS CALCULATED BY:
 ALLOWABLE MISFAIR = 0.080 INCH (2.032 mm) -

<u>[0.040 INCH (1.016 mm) * (DISTANCE FROM TE)]</u> 12.00 (304.8 mm)

MAXIMUM MISFAIR BETWEEN LIGHT ASSEMBLY AND WINGTIP PANELS
IS 0.020 INCH (0.508 mm) FOR INDICATED REGION.
UP TO 13.00 INCHES (330.2 mm) ALONG SPLICE CAN EXCEED 0.020 INCH (0.508 mm).
BUT CAN NOT EXCEED 0.030 INCH (0.762 mm). THE 13 INCH (330.2 mm) LIMIT
IS THE SUM OF ALL SEGMENTS THAT EXCEED 0.020 INCH (0.508 mm).

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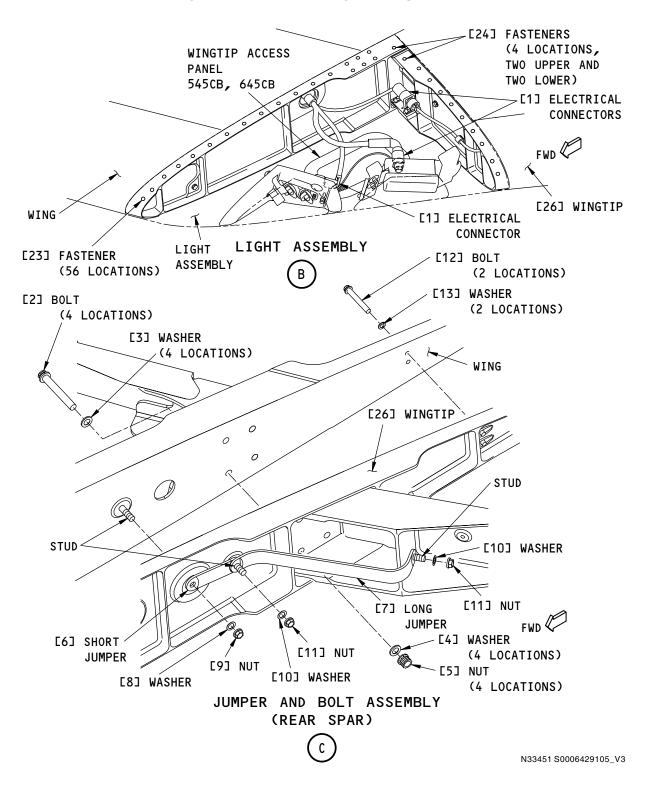
Raked Wingtip Installation Figure 401/57-32-01-990-801 (Sheet 2 of 4)

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Raked Wingtip Installation Figure 401/57-32-01-990-801 (Sheet 3 of 4)

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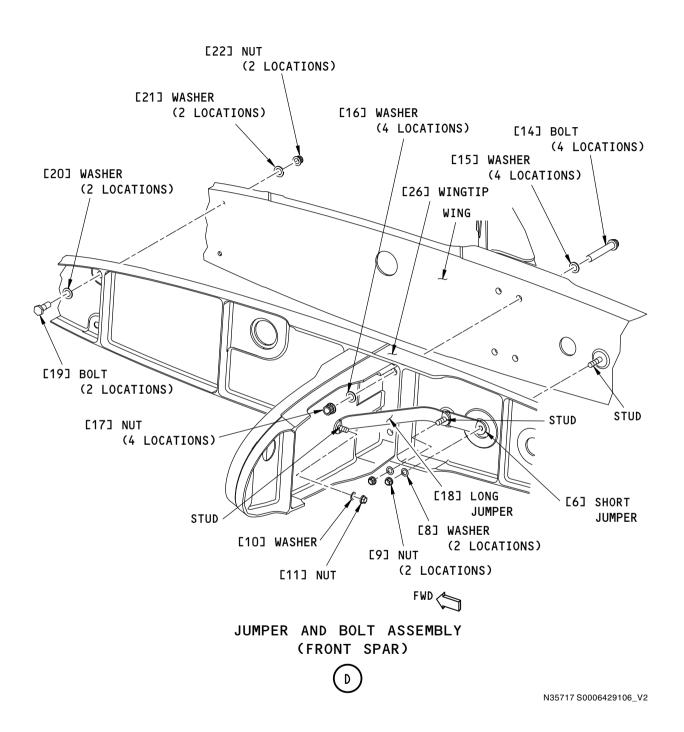
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Raked Wingtip Installation Figure 401/57-32-01-990-801 (Sheet 4 of 4)

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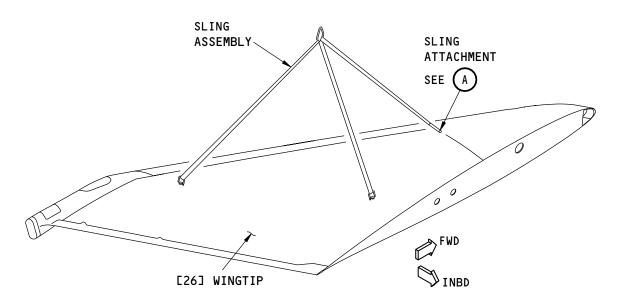
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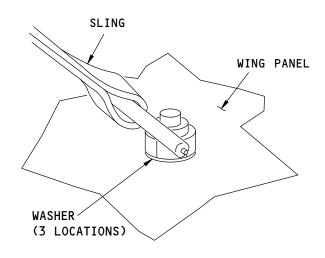
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RAKED WINGTIP INSTALLATION



SLING ATTACHMENT (EXAMPLE)



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Raked Wingtip Sling Attachment Figure 402/57-32-01-990-802

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WING LEADING EDGE PANELS - REMOVAL/INSTALLATION

1. General

- A. This procedure has these tasks:
 - (1) Removal of the wing leading edge panels
 - (2) Installation of the wing leading edge panels.
- B. These panels and doors are in this procedure:
 - (1) Upper Nacelle Strut Interface (Gap Cover) Panel.
 - (2) Blowout Door
 - (3) Refueling Station Door.
 - (4) Leading Edge Panels
 - (5) Thermal Anti-Ice (TAI) Door.
- C. For missing fastener requirements for the wing leading edge panels, see SRM 51-10-08.

TASK 57-41-10-000-801

2. Wing Leading Edge Panel Removal

A. 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-1558	Adapter - Access Panel, Leverage	
	Part #: 3008-550 Supplier: 55856	
	Part #: B20004-42 Supplier: 81205	
	Opt Part #: B20004-21 Supplier: 81205	

B. Location Zones

Zone	Area
510	Subzone 510 - Wing Leading Edge - Forward of Front Spar
520	Subzone 520 - Wing Leading Edge - Forward of Front Spar
610	Subzone 610 - Wing Leading Edge - Forward of Front Spar
620	Subzone 620 - Wing Leading Edge - Forward of Front Spar

C. Procedure

SUBTASK 57-41-10-020-001

(1) Remove the gap cover [1] as follows (Upper Nacelle Strut Interface (Gap Cover) 513BT / 613BT Panel Installation/Figure 401):

NOTE: Make a record of the locations of the fasteners during removal of the panels.



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.

(a) Remove the bolts from the gap cover [1].

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WHEN REMOVING PANEL FASTENERS, MAKE SURE THAT THE DRIVER BIT IS IN LINE WITH A FASTENER. THIS WILL PREVENT DRIVER BIT WOBBLE WHICH CAN CAUSE DAMAGE TO THE FASTENER RECESSES AND THREADS.

- (b) The following can help remove the bolts:
 - 1) A leverage access panel adapter, SPL-1558,
 - 2) A removal anti cam-out ribbed (ACR) bit,

NOTE: The bit should have a hardness of 56-58 RC.

NOTE: A combination removal/installation ACR bit is not recommended.



ONLY APPLY FASTENER REMOVAL COMPOUND TO THE BIT IF NEEDED. CLEAN THE BIT AFTER EACH USE. DO NOT APPLY FASTENER REMOVAL COMPOUND TO THE FASTENER RECESSES, HOLES, OR THREADS. THIS CAN CAUSE DAMAGE TO THE FASTENERS.

- 3) Apply a fastener removal compound on the driver bit if a fastener is difficult to remove
- (c) Carefully remove the gap cover [1] from the wing.
- (d) Examine the area to make sure objects are not left in the slat track housing assembly.

SUBTASK 57-41-10-020-002

(2) Remove the blowout door [21] as follows (Blowout Door Installation/Figure 402):

NOTE: Make a record of the locations of the fasteners during removal of the panels.

- (a) Open the blowout door [21].
- (b) Disconnect the electrical jumpers [24].
- (c) Disconnect the strut [22].



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.

- (d) Remove the bolts from one side of the hinge [23].
- (e) Remove the door [21].
- (f) Examine the area to make sure objects are not left in the slat track housing assembly.

SUBTASK 57-41-10-020-003

(3) Remove the refueling station door [41] as follows (Refueling Station Door Installation/Figure 403):

NOTE: Make a record of the locations of the fasteners during removal of the panels.

- (a) Open the refueling station door [41].
- (b) Remove these parts to disconnect the strut [44]:
 - 1) Cotter pins.
 - Washers.
 - 3) Clevis pin.

57-41-10

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(c) Disconnect the electrical jumpers [43].



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.

- (d) Remove the bolts from one side of the hinge [42].
- (e) Remove the door [41].
- (f) Examine the area to make sure objects are not left in the slat track housing assembly.

SUBTASK 57-41-10-020-004

(4) Remove the leading edge panels [61] as follows (Fixed Leading Edge Panel Installation/Figure 404):

NOTE: Make a record of the locations of the fasteners during removal of the panels.



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.

(a) Remove the bolts from the leading edge panels [61].



WHEN REMOVING PANEL FASTENERS, MAKE SURE THAT THE DRIVER BIT IS IN LINE WITH A FASTENER. THIS WILL PREVENT DRIVER BIT WOBBLE WHICH CAN CAUSE DAMAGE TO THE FASTENER RECESSES AND THREADS.

- 1) The following can help remove the bolts from the panels [61]:
 - a) A leverage access panel adapter, SPL-1558,
 - b) A removal anti cam-out ribbed (ACR) bit,

NOTE: The bit should have a hardness of 56-58 RC.

NOTE: A combination removal/installation ACR bit is not recommended.

NOTE: The ACR bit will help prevent damage to the head of the fastener.



ONLY APPLY FASTENER REMOVAL COMPOUND TO THE BIT IF NEEDED. CLEAN THE BIT AFTER EACH USE. DO NOT APPLY FASTENER REMOVAL COMPOUND TO THE FASTENER RECESSES, HOLES, OR THREADS. THIS CAN CAUSE DAMAGE TO THE FASTENERS.

- c) Apply a fastener removal compound on the driver bit if a fastener is difficult to remove.
- (b) Carefully remove the panel [61] from the wing.
- (c) Examine the area to make sure objects are not left in the slat track housing assembly.

EFFECTIVITY 57-41-10



SUBTASK 57-41-10-020-005



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.

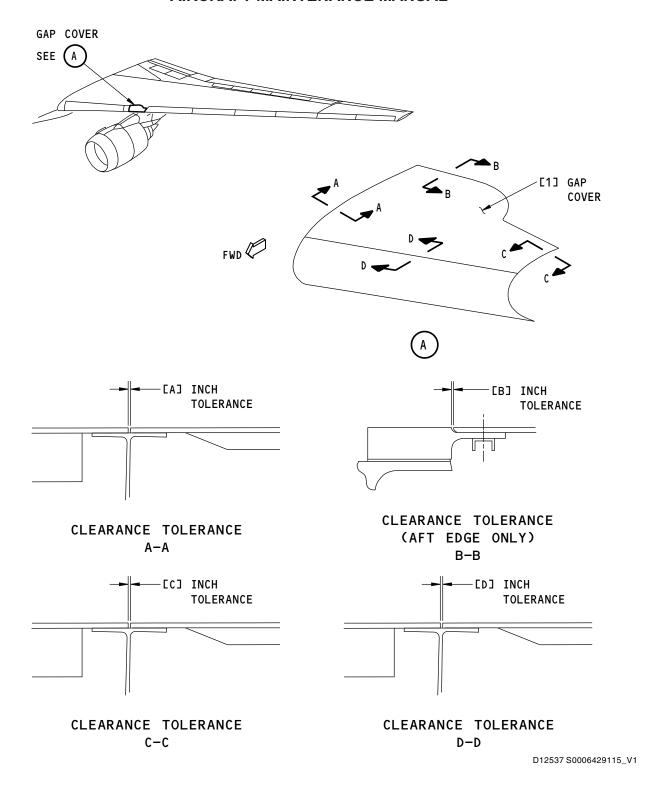
- (5) Remove the Thermal Anti-Ice (TAI) Door [81] as follows (Thermal Anti-Ice (TAI) Door Installation/Figure 405):
 - (a) Move the leading edge slats [82] to the fully down position.
 - (b) Make the leading edge slats [82] inoperable.
 - (c) Remove the bolt [85], washer [86], and nut [87] in two locations to disconnect the Thermal Anti-Ice (TAI) door [81] from the Thermal Anti-Ice (TAI) tube [83].
 - (d) Remove the bolts [84] in three locations to disconnect the Thermal Anti-Ice (TAI) door [81] from the leading edge structure.
 - (e) Remove the Thermal Anti-Ice (TAI) door [81].
 - (f) Examine the area to make sure objects are not left in the slat track housing assembly.

NOTE: Make a record of the locations of the fasteners during removal of the panels.



FFFECTIVITY 57-41-10





Upper Nacelle Strut Interface (Gap Cover) 513BT / 613BT Panel Installation Figure 401/57-41-10-990-811

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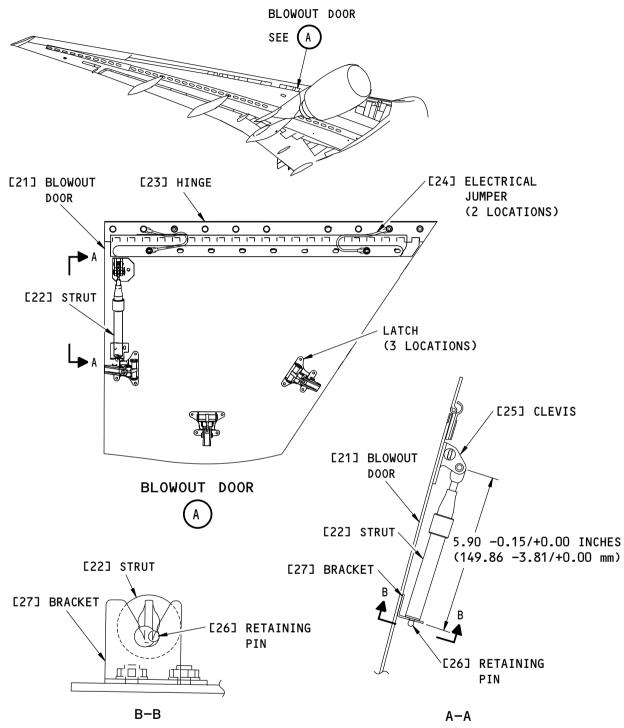
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Blowout Door Installation Figure 402/57-41-10-990-812

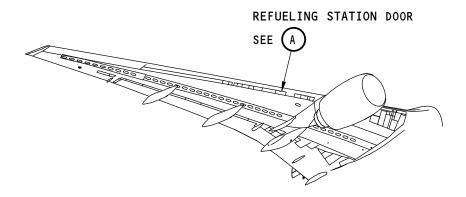
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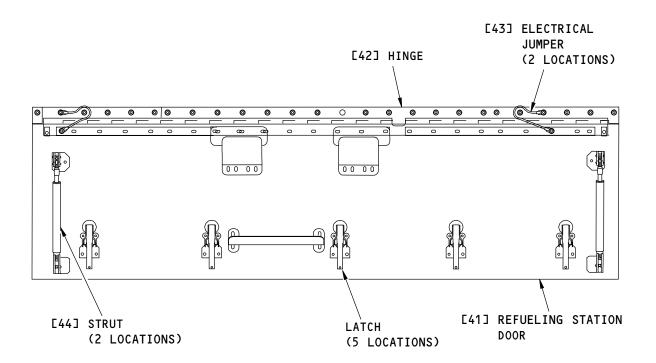
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REFUELING STATION DOOR



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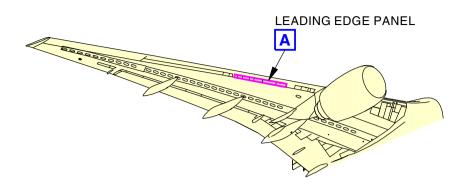
Refueling Station Door Installation Figure 403/57-41-10-990-813

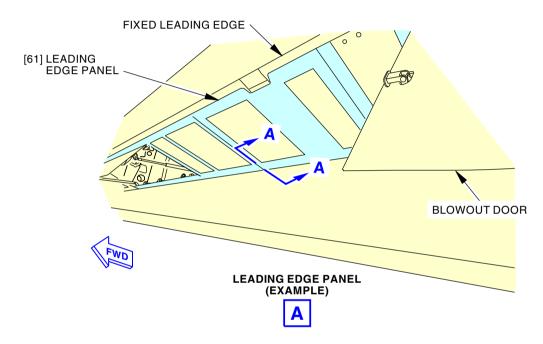
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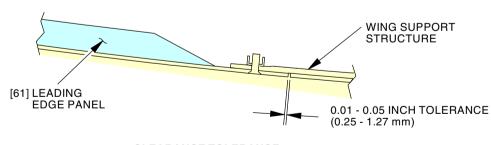
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CLEARANCE TOLERANCE
A-A

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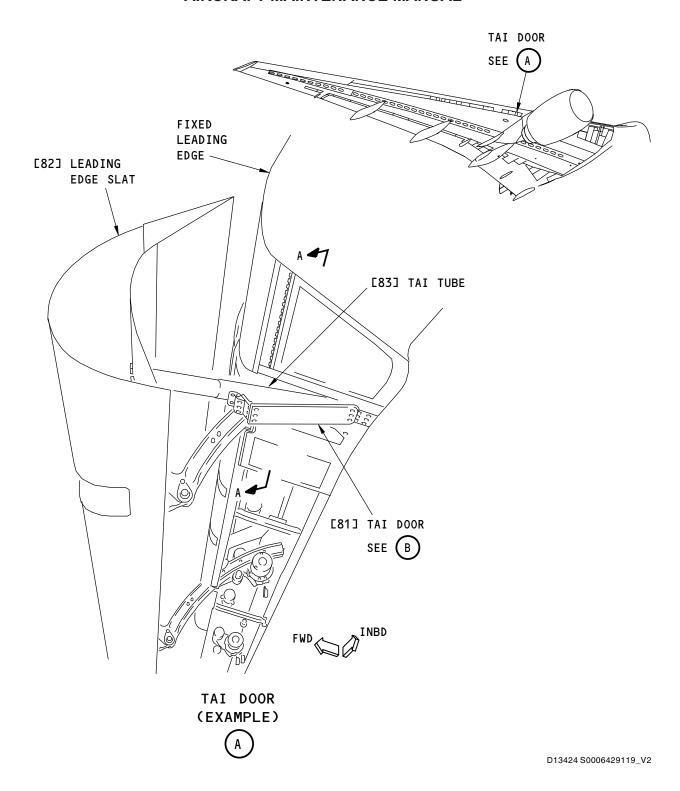
Fixed Leading Edge Panel Installation Figure 404/57-41-10-990-814

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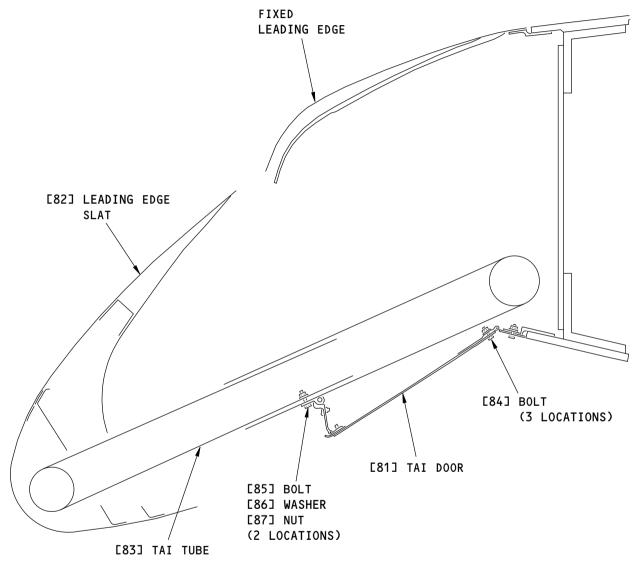
Thermal Anti-Ice (TAI) Door Installation Figure 405/57-41-10-990-815 (Sheet 1 of 3)

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A-A

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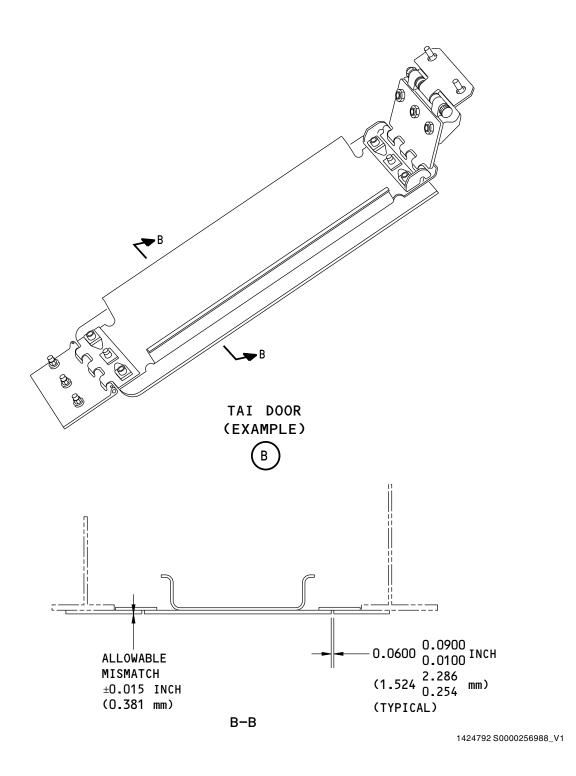
Thermal Anti-Ice (TAI) Door Installation Figure 405/57-41-10-990-815 (Sheet 2 of 3)

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Thermal Anti-Ice (TAI) Door Installation Figure 405/57-41-10-990-815 (Sheet 3 of 3)

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TASK 57-41-10-400-801

3. Wing Leading Edge Panel Installation

A. References

Reference	Title
20-11-00 P/B 201	STANDARD TORQUE VALUES - MAINTENANCE PRACTICES
27-81-00-860-804	Extend the Leading Edge Slats (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-1558	Adapter - Access Panel, Leverage	
	Part #: 3008-550 Supplier: 55856	
	Part #: B20004-42 Supplier: 81205	
	Opt Part #: B20004-21 Supplier: 81205	

C. Consumable Materials

Reference	Description	Specification
D50004	Compound - Antiseize	BMS3-28

D. Location Zones

Zone	Area
510	Subzone 510 - Wing Leading Edge - Forward of Front Spar
520	Subzone 520 - Wing Leading Edge - Forward of Front Spar
610	Subzone 610 - Wing Leading Edge - Forward of Front Spar
620	Subzone 620 - Wing Leading Edge - Forward of Front Spar

E. Procedure

SUBTASK 57-41-10-420-001

- (1) Install the gap cover [1] as follows (Upper Nacelle Strut Interface (Gap Cover) 513BT / 613BT Panel Installation/Figure 401):
 - (a) Carefully put the gap cover [1] in its position on the wing.



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.

(b) Install the bolts.



WHEN INSTALLING FASTENERS, MAKE SURE THAT THE DRIVER BIT IS IN LINE WITH A FASTENER. THIS WILL PREVENT DRIVER BIT WOBBLE WHICH CAN CAUSE DAMAGE TO THE FASTENER RECESSES AND THREADS.

- (c) This information can help to install the bolts:
 - 1) Use a leverage access panel adapter, SPL-1558 to install the bolts.

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2) Make sure that the fasteners have:

NOTE: If any fasteners need to be replaced, it is recommended that K-coated titanium bolts with cadmium plated Cres nut-plates be installed where applicable.

- a) Correct grip length.
- b) Threads and recesses that have not been damaged.
- 3) Remove excess paint or debris on fastener recesses.



ONLY LUBRICATE FASTENERS FOR ACCESS PANELS. LUBRICATION OF OTHER FASTENERS CAN CAUSE FAULTY EQUIPMENT AND HARM PERSONS.

- 4) Lubricate the threads of the fasteners with compound, D50004.
- Install fasteners with a fastener tool and an installation anti cam-out (ACR) driver bit.

NOTE: Use decreased lubricated fastener torques, (STANDARD TORQUE

VALUES - MAINTENANCE PRACTICES, PAGEBLOCK 20-11-00/201).

NOTE: A combination removal/installation ACR bit is not recommended. The bit

should have a hardness of 56-58 RC.

SUBTASK 57-41-10-200-001

(2) Make sure the clearances around the gap cover [1] are as shown in (Table 401):

Table 401/57-41-10-993-806 Gap Cover Clearances (Key to Fig. 401)

AIRPLANE EFFECTIVITY	ITEM	FIGURE	LIMITS	AVERAGE MAXIMUM
ALL	А	401	0.060 0.090	
ALL	В	401	0.060 0.200	
ALL	С	401	0.060 0.090	
ALL	D	401	0.060 0.090	

SUBTASK 57-41-10-420-002

- (3) Install the blowout door [21] as follows (Blowout Door Installation/Figure 402):
 - (a) Put the door [21] in its position on the wing.



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.

- (b) Install the bolts to attach the hinge [23].
- (c) Connect the electrical jumpers [24].
- (d) Connect the strut [22] as follows:
 - 1) Make the length of the strut 5.85 in. (148.59 mm) to 5.90 in. (149.86 mm).

ARO ALL



Rotate the retaining pin [26] to the position shown.

- Make sure that the retaining pin [26] fully retracts.
- 3) Engage the strut [22] in the bracket [27].
- (e) Close the blowout door [21].

SUBTASK 57-41-10-420-003

- (4) Install the refueling station door [41] as follows (Refueling Station Door Installation/Figure 403):
 - (a) Put the door [41] in its position on the wing.



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.

- (b) Install the bolts to attach the hinge [42].
- (c) Connect the electrical jumpers [43].
- (d) Install these parts to connect the strut [44] to the bracket on the fuselage:
 - 1) Cotter pins.
 - 2) Washers.
 - 3) Clevis pin.
- (e) Close the refueling station door [41].

SUBTASK 57-41-10-420-004

- (5) Install the leading edge panels [61] as follows (Fixed Leading Edge Panel Installation/Figure 404):
 - (a) Carefully put the panel [61] in its position on the wing.



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.

(b) Install the bolts for the leading edge panels [61].



WHEN INSTALLING FASTENERS, MAKE SURE THAT THE DRIVER BIT IS IN LINE WITH A FASTENER. THIS WILL PREVENT DRIVER BIT WOBBLE WHICH CAN CAUSE DAMAGE TO THE FASTENER RECESSES AND THREADS.

- (c) This information can help to install the bolts:
 - 1) Use a leverage access panel adapter, SPL-1558 to install the bolts.
 - 2) Make sure that the fasteners have:

<u>NOTE</u>: If any fasteners need to be replaced, it is recommended that K-coated titanium bolts with cadmium plated Cres nut-plates be installed where applicable.

- a) Correct grip length, and
- b) Threads and recesses that are not damaged.

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3) Remove excess paint or debris on fastener recesses.



ONLY LUBRICATE FASTENERS FOR ACCESS PANELS. LUBRICATION OF OTHER FASTENERS CAN CAUSE FAULTY EQUIPMENT AND HARM PERSONS.

- 4) Lubricate the threads of the fasteners with compound, D50004.
- Install fasteners with a fastener tool and an installation anti cam-out (ACR) driver hit
 - a) Torque the fasteners as follows:

Fixed Leading Edge Panel Fastener Torque

Example of Bolt Part Number	Thread Size	Diameter Dash Number	Torque Range lbf-in (N m)
BACB30XD3K6	0.19900-32	-3	18 (2.03) - 22 (2.49)
BACB30XD4K6	0.2500–28	-4	30 (3.39) - 34 (3.84)

NOTE: A combination removal/installation ACR bit is not recommended. The bit should have a hardness of 56-58 RC.

(d) Make sure the gap around the panel is 0.01 in. (0.25 mm) to 0.05 in. (1.27 mm).

NOTE: The leading edge slats must be fully rigged before you measure the clearance at the forward edge.

SUBTASK 57-41-10-420-005



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.

- (6) Examine the area to make sure that objects are not left in the slat track housing assembly.
- (7) Install the Thermal Anti-Ice (TAI) Door [81] as follows (Thermal Anti-Ice (TAI) Door Installation/Figure 405):
 - (a) Make sure the leading edge slats [82] are in the fully down position.
 - (b) Make sure the leading edge slats [82] are inoperable.
 - (c) Put the Thermal Anti-Ice (TAI) door [81] in its position on the Thermal Anti-Ice (TAI) tube [83].
 - (d) Install the bolts [84] in three locations to connect the Thermal Anti-Ice (TAI) door [81] to the leading edge structure.
 - (e) Install the bolt [85], washer [86], and nut [87] in two locations to connect the Thermal Anti-Ice (TAI) door [81] to the Thermal Anti-Ice (TAI) tube [83].
 - (f) Retract the slats [82].
 - (g) Make sure that the Thermal Anti-Ice (TAI) door [81] fully seals the opening.

SUBTASK 57-41-10-420-006

(8) Before you rig the Thermal Anti-Ice (TAI) door [81], make sure that the outboard slats [82] are rigged and in the fully retracted (cruise) position.

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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.

- (9) Examine the area to make sure objects are not left in the slat track housing assembly.
- (10) Adjust the Thermal Anti-Ice (TAI) door [81] as follows:
 - (a) Loosen the 3 bolts that attach the forward hinge to the forward edge of the door and the 3 bolts that attach the aft hinge to the aft edge of the door. Refer to Figure 405 (Sheet 3).
 - 1) Do not loosen the two bolts [85] common to the serrated forward hinge halves.
 - (b) Extend the outboard slats 1.25 +/-0.25 revolution of the outboard slat drive torque tube.
 - (c) Push on the forward end of the seal door with hand pressure into the contour until the seal door lands make contact along the entire length on adjacent panels.
 - (d) While you maintain the hand pressure on the forward end of the door, tighten the 3 bolts that attach the forward hinge assembly and the 3 bolts that attach the aft hinge assembly.
 - 1) If insufficient adjustment exists, loosen the 2 bolts [85] common to the serrated hinge halves and adjust as necessary.
 - (e) Tighten the bolts after adjustment.
 - (f) Repeat the process to push the door and to tighten and loosen the bolts if it is necessary.
 - (g) Retract the outboard slats to fully retracted (cruise) position (Extend the Leading Edge Slats, TASK 27-81-00-860-804).
 - (h) Do a check for fit and fair of the Thermal Anti-Ice (TAI) door [81].
 - (i) Operate the slats for smooth operation of the door.
 - NOTE: The slat lower edge will contact and slide against the deflector plate.
 - (j) Make a final inspection of the Thermal Anti-Ice (TAI) door [81].
 - 1) Do a check for mismatch between the door in the rigged position and the adjacent structure. Refer to Figure 405 (Sheet 3).

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EFFECTIVITY



MAIN TRACK RESTORATION SEAL - REMOVAL/INSTALLATION

1. General

- A. This procedure has these tasks:
 - (1) Removal of the seal doors for the main slat tracks.
 - (2) Installation of the seal doors.
- B. Each restoration seal assembly has these primary components:
 - (1) two track covers
 - (2) seal door
 - (3) bracket assembly
 - (4) roller
 - (5) roller pin
 - (6) four link arms
 - (7) two torque shafts
 - (8) two torsion springs.

TASK 57-41-56-000-801

2. Main Track Restoration Seal Removal

(Figure 401)

A. References

Reference	Title
27-81-00-040-801	Leading Edge Slat - Deactivation (P/B 201)
29-11-00-860-808	Main Hydraulic System Power Removal (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-1696	Equipment - Clamp, Leading Edge Slat Drive Shaft
	Part #: J27046-1 Supplier: 81205

C. Location Zones

Zone	Area
510	Subzone 510 - Wing Leading Edge - Forward of Front Spar
520	Subzone 520 - Wing Leading Edge - Forward of Front Spar
610	Subzone 610 - Wing Leading Edge - Forward of Front Spar
620	Subzone 620 - Wing Leading Edge - Forward of Front Spar

D. Prepare to remove the restoration seal assembly.

SUBTASK 57-41-56-860-001

(1) Move the leading edge slats to their fully extended position.

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SUBTASK 57-41-56-860-002



DO THE LEADING EDGE SLAT DEACTIVATION PROCEDURE BEFORE YOU DO WORK ON THE SLAT SYSTEM. WITH THE SLATS ACTIVATED, THE SLATS CAN MOVE QUICKLY AND CAUSE INJURY TO PERSONS OR DAMAGE TO EQUIPMENT.

- (2) To deactivate the leading Edge Slats, do this task: Leading Edge Slat Deactivation, TASK 27-81-00-040-801.
 - (a) Install locking leading edge slat drive shaft clamp equipment, SPL-1696 on the slat actuators to prevent all slat movement.
 - (b) To remove hydraulic power, do this task: Main Hydraulic System Power Removal, TASK 29-11-00-860-808.

SUBTASK 57-41-56-010-001

(3) If you will remove the link arms [8] and torque shaft [14], remove the leading edge panel to get access from below.

E. Removal

SUBTASK 57-41-56-020-001

(1) Get access to the seal door as follows:



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.

- (a) Remove the bolts from the track covers on each side of the door.
- (b) Remove the track covers.
- (c) Pull the door [1] down to fully disengage it from the tracks.
- (d) Examine the area to make sure objects are not left in the slat track housing assembly.

SUBTASK 57-41-56-020-002

- (2) Disconnect the door [1] assembly as follows:
 - (a) To prevent damage to the rib, hold the linkage with a non-metal tool between the linkage and rib.

NOTE: If the linkage is free, it can cause damage to the rib.

- (b) Remove the retainer ring [6] and washer [21] on the end of the roller pin [5].
- (c) Pull the roller pin [5] out and remove the washer [20].
- (d) Remove the roller [7].
- (e) Remove the door [1] with the bracket assembly [16].

SUBTASK 57-41-56-020-003

EFFECTIVITY

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(3) Remove the link arms [8], if it is necessary, as follows:





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.

- (a) Do these steps for each torque shaft [14] assembly:
 - 1) While holding the torque shaft [14] with one hand, carefully loosen the bolt [9] that connects it to the link arm [8].
 - 2) When the bolt [9] has been loosened enough, the torque shaft [14] can be unwound about 270 degrees to remove the tension from the torsion spring [13].
 - 3) Remove the bolt [9] from the torque shaft [14].
- (b) Pull the link arms [8] from the leading edge.
- (c) Examine the area to make sure objects are not left in the slat track housing assembly.

SUBTASK 57-41-56-020-004

(4) Remove the torque shaft [14] and the torsion spring [13] on each side as follows:



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.

- (a) Disconnect the torque shaft [14] from the torsion spring [13] by removing the nut [12], bolt [10], and washers [11] that attach the torsion spring [13] to the torque shaft [14].
- (b) Remove the torque shaft [14].
- (c) Disconnect the torsion spring [13] from the main track rib by removing the attach nut [12], bolt [15] and washer [11].
- (d) Remove the torsion spring [13].
- (e) Examine the area to make sure objects are not left in the slat track housing assembly.



TASK 57-41-56-400-801

3. Main Track Restoration Seal Installation

(Figure 401)

A. Consumable Materials

Reference	Description	Specification
A00247	Sealant - Pressure And Environmental -	BMS5-95
	Chromate Type	

B. Location Zones

Zone	Area
510	Subzone 510 - Wing Leading Edge - Forward of Front Spar
520	Subzone 520 - Wing Leading Edge - Forward of Front Spar
610	Subzone 610 - Wing Leading Edge - Forward of Front Spar
620	Subzone 620 - Wing Leading Edge - Forward of Front Spar

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C. Prepare to install the restoration seal assembly.

SUBTASK 57-41-56-210-001

(1) Make sure the leading edge slats are in their fully extended position.

SUBTASK 57-41-56-860-003



DO THE LEADING EDGE SLAT DEACTIVATION PROCEDURE BEFORE YOU DO WORK ON THE SLAT SYSTEM. WITH THE SLATS ACTIVATED, THE SLATS CAN MOVE QUICKLY AND CAUSE INJURY TO PERSONS OR DAMAGE TO EQUIPMENT.

(2) Make sure the leading edge slats will not operate.

D. Procedure

SUBTASK 57-41-56-210-002



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.

(1) Examine the area to make sure objects are not left in the slat track housing assembly.

SUBTASK 57-41-56-420-001

- (2) Install the torque shaft [14] and the torsion spring [13] on each side as follows:
 - (a) Put the torque shaft [14] through the torsion spring [13].
 - (b) Put the end of the torque shaft [14] in the main track rib.
 - (c) Attach the torsion spring [13] to the main track rib using the nut [12], washers [11] and bolt [15].

NOTE: Do not fully tighten the nut.

(d) Attach the torsion spring [13] to the torque shaft [14] using the bolt [10], washers [11], and nut [12].

NOTE: Do not fully tighten the nut.

SUBTASK 57-41-56-420-002

- (3) Install the link arms [8] as follows:
 - (a) Put the ends of the link arms [8] in the main track ribs.



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.

- (b) Examine the area to make sure objects are not left in the slat track housing assembly.
- (c) One each side, put the bolt [9] with the washer [11] through the torque shaft [14] and into the link arm [8].

NOTE: You will tighten the torque shaft [14] assembly and the torsion spring [13] connections after you install the door.

SUBTASK 57-41-56-420-003

- (4) Connect the door assembly as follows:
 - (a) Align the roller [7], bracket assembly [16], and the link arms [8].

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- (b) Install the roller pin [5].
- (c) Attach the retainer ring [6] and washer [21] on the end of the roller pin [5].

SUBTASK 57-41-56-420-004

- (5) Attach the track covers as follows:
 - (a) Put the door [1] in its position in the tracks.
 - (b) Put the track covers in their positions on top of the tracks.



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.

- (c) Examine the area to make sure objects are not left in the slat track housing assembly.
- (d) Install the fasteners with sealant, A00247.

SUBTASK 57-41-56-420-005

(6) Do these steps to tighten the torque shaft [14] on each side, if it is necessary:

NOTE: This step is necessary if you removed the link arms [8] and there is no tension on the torsion spring [13].

- (a) Hold the door [1] tightly in its fully retracted position.
- (b) Turn the torque shaft [14] aft until the groove in the bolt [9] engages the groove in the link arm [8].

NOTE: The torque shaft will be aligned 90 degrees to the bottom link arm [8] and there will be tension on the torsion spring [13].

- (c) Tighten the bolt [9] for the torque shaft [14].
- (d) Tighten the nut [12] at each torsion spring [13] connection.

SUBTASK 57-41-56-200-001

- (7) Do a test of the door [1]:
 - (a) Make sure the door [1] moves smoothly along the track.
 - (b) Make sure the roller [7] is free to roll.
 - (c) Make sure the torsion spring [13] pushes the door [1] down to fully contact the opening with the slats fully extended.

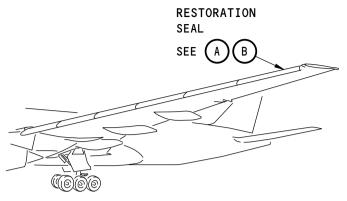
NOTE: Verify operation of restoration seal door [1] by ensuring that the door roller [7] contacts the slat track with the slat fully extended. An additional downward force of 5 pounds (2.26 kgs) or less may be applied to the door by hand to fully extend the door.

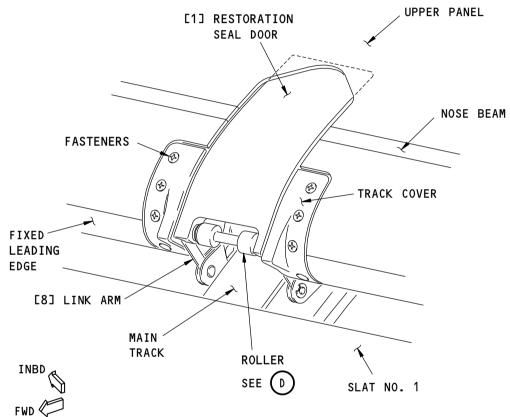
E. Put the Airplane back to its Usual Condition.

	END (OF TASK	
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RESTORATION SEAL (EXTERNAL VIEW) (EXAMPLE)



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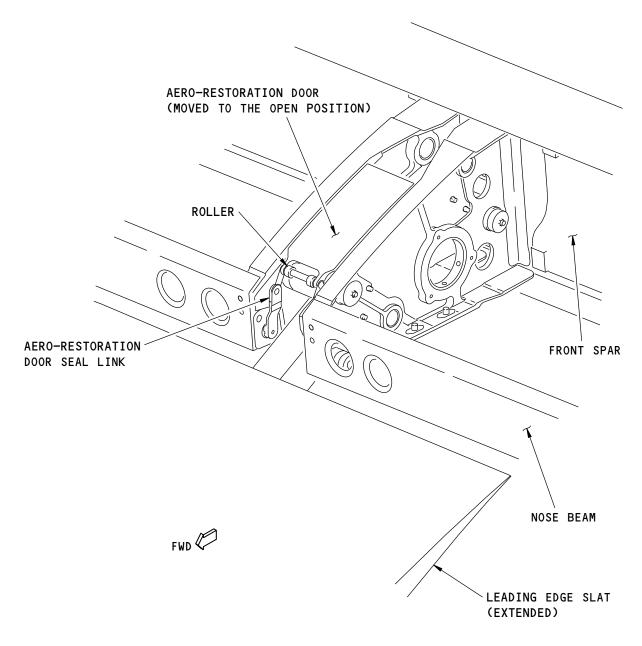
Restoration Seal Installation Figure 401/57-41-56-990-803 (Sheet 1 of 4)

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LEADING EDGE SLAT AERO-RESTORATION SEAL (EXAMPLE)

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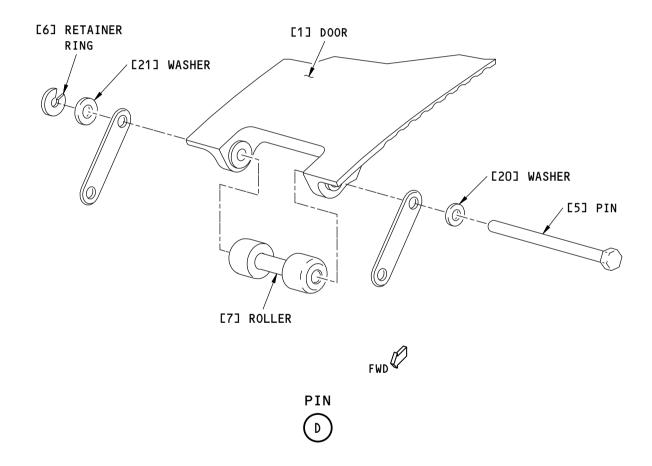
Restoration Seal Installation Figure 401/57-41-56-990-803 (Sheet 2 of 4)

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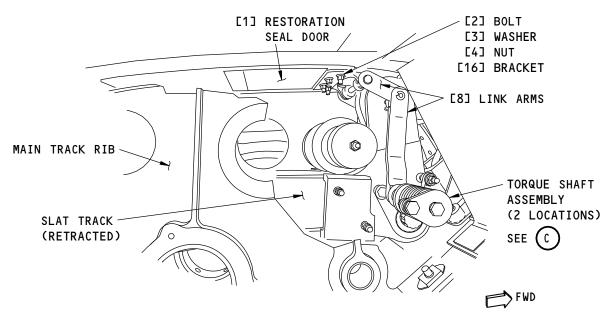
Restoration Seal Installation Figure 401/57-41-56-990-803 (Sheet 3 of 4)

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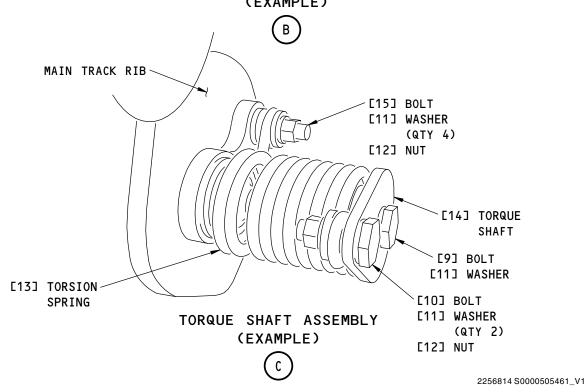
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RESTORATION SEAL (INTERNAL VIEW) (EXAMPLE)



Restoration Seal Installation Figure 401/57-41-56-990-803 (Sheet 4 of 4)

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DEFLECTION CONTROL RESTORATION SEAL - REMOVAL/INSTALLATION

1. General

- A. This procedure has these tasks:
 - (1) Removal of the seal doors for the slat deflection control fittings.
 - (2) Installation of the seal doors.
- B. Each restoration seal assembly has these primary components:
 - (1) the door assembly
 - (2) springs
 - (3) bolts and spacers
 - (4) angles.

TASK 57-41-59-000-801

2. Deflection Control Restoration Seal Removal

(Figure 401)

A. References

Reference	Title
27-81-00-040-801	Leading Edge Slat - Deactivation (P/B 201)
29-11-00-860-808	Main Hydraulic System Power Removal (P/B 201)

B. Location Zones

Zone	Area
510	Subzone 510 - Wing Leading Edge - Forward of Front Spar
520	Subzone 520 - Wing Leading Edge - Forward of Front Spar
610	Subzone 610 - Wing Leading Edge - Forward of Front Spar
620	Subzone 620 - Wing Leading Edge - Forward of Front Spar

C. Prepare to remove the restoration seal assembly.

SUBTASK 57-41-59-860-001

(1) Move the leading edge slats to their fully extended position.

SUBTASK 57-41-59-860-002



DO THE LEADING EDGE SLAT DEACTIVATION PROCEDURE BEFORE YOU DO WORK ON THE SLAT SYSTEM. WITH THE SLATS ACTIVATED, THE SLATS CAN MOVE QUICKLY AND CAUSE INJURY TO PERSONS OR DAMAGE TO EQUIPMENT.

- (2) To deactivate the leading Edge Slats, do this task: Leading Edge Slat Deactivation, TASK 27-81-00-040-801 .
 - (a) Install locks on the slat actuators to prevent all slat movement.
 - (b) Do this task: Main Hydraulic System Power Removal, TASK 29-11-00-860-808.

D. Removal

SUBTASK 57-41-59-020-001

(1) Remove the leading edge panel to get access to the seal door from below.

SUBTASK 57-41-59-020-002

(2) Do these steps in two locations to disconnect the door assembly:

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- (a) Remove the nut.
- (b) Remove the washer.



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.

- (c) Remove the bolt with the spacer.
- (d) Remove the door from the leading edge.
- (e) Examine the area to make sure objects are not left in the slat track housing assembly.

----- END OF TASK -----

TASK 57-41-59-400-801

3. Deflection Control Restoration Seal Installation

(Figure 401)

A. References

Reference	Title
27-81-00-040-801	Leading Edge Slat - Deactivation (P/B 201)
29-11-00-860-801	Main Hydraulic System Pressurization (P/B 201)
29-11-00-860-808	Main Hydraulic System Power Removal (P/B 201)

B. Location Zones

Zone	Area
510	Subzone 510 - Wing Leading Edge - Forward of Front Spar
520	Subzone 520 - Wing Leading Edge - Forward of Front Spar
610	Subzone 610 - Wing Leading Edge - Forward of Front Spar
620	Subzone 620 - Wing Leading Edge - Forward of Front Spar

C. Prepare to install the restoration seal assembly.

SUBTASK 57-41-59-210-001

(1) Make sure the leading edge slats are in their fully extended position.

SUBTASK 57-41-59-860-003



DO THE LEADING EDGE SLAT DEACTIVATION PROCEDURE BEFORE YOU DO WORK ON THE SLAT SYSTEM. WITH THE SLATS ACTIVATED, THE SLATS CAN MOVE QUICKLY AND CAUSE INJURY TO PERSONS OR DAMAGE TO EQUIPMENT.

(2) Make sure the leading edge slats will not operate, do this task: Leading Edge Slat - Deactivation, TASK 27-81-00-040-801 .

D. Procedure

SUBTASK 57-41-59-860-004

(1) Put the deflection control seal door in its correct position.

SUBTASK 57-41-59-420-001

- (2) Do these steps at two locations to connect the door assembly:
 - (a) Make sure the spring arm will apply force to the door in the down direction.

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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.

- (b) Examine the area to make sure objects are not left in the slat track housing assembly.
- (c) Install the bolt with the spacer.
- (d) Install the washer.
- (e) Install the nut.

SUBTASK 57-41-59-710-001

- (3) Do a test of the door as follows:
 - (a) Make sure the door moves up and down smoothly.
 - (b) Make sure the springs push the door down.
 - (c) Make sure the door fully seals the opening with the slats fully extended.

SUBTASK 57-41-59-820-001

(4) If the door does not fully seal the opening, add shims behind the angles to make the door flush against the skin.

E. Put the Airplane Back to its Usual Condition.

SUBTASK 57-41-59-020-003

(1) Remove the slat actuator locks.

SUBTASK 57-41-59-710-002

- (2) Make the leading edge slats operable as follows:
 - (a) Do this task: do this task: Main Hydraulic System Pressurization, TASK 29-11-00-860-801.
 - (b) Move these FLT CONTROL HYD VALVE POWER switches on the pilots overhead panel to the NORM position:
 - 1) TAIL, L
 - 2) TAIL, C
 - 3) TAIL, R
 - (c) Make sure the amber VALVE CLOSED lights go off.

SUBTASK 57-41-59-720-001

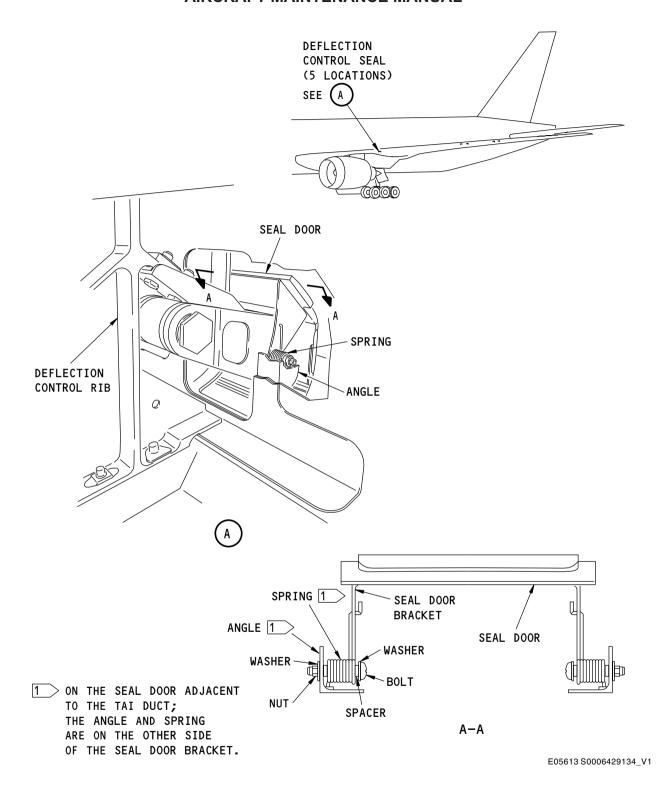
- (3) Operate the leading edge slats.
 - (a) Make sure the doors operate smoothly.
 - (b) Do this task: do this task: Main Hydraulic System Power Removal, TASK 29-11-00-860-808.

END	OF 1	TASK	
	OF I	IASN	

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Deflection Control Seal Installation Figure 401/57-41-59-990-801

EFFECTIVITY

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OUTBOARD LEADING EDGE SLAT ROLLERS-REMOVAL/INSTALLATION

1. General

- A. This procedure has these tasks:
 - (1) Outboard leading edge slat roller removal.
 - (2) Outboard leading edge slat roller installation.
- B. There are 6 outboard leading edge slats on each wing. This procedure is applicable for the leading edge slats 1 thru 6 and 9 thru 14.

NOTE: The wing leading edge slat main tracks should not have primer or enamel on both upper and lower track surfaces that have direct contact with the leading edge slat rollers. The tracks should be wiped off with lint-free cloth and examined for presence of primer or enamel.

TASK 57-43-01-020-801

2. Outboard leading edge slat roller removal

A. References

Reference	Title
27-81-15-000-801	Outboard Leading Edge Slat Removal (P/B 401)

B. Location Zones

Zone	Area
522	Slat No. 6
523	Slat No. 5
524	Slat No. 4
525	Slat No. 3
526	Slat No. 2
527	Slat No. 1
622	Slat No. 9
623	Slat No. 10
624	Slat No. 11
625	Slat No. 12
626	Slat No. 13
627	Slat No. 14

C. Prepare for the removal

SUBTASK 57-43-01-020-001

(1) Remove the applicable outboard leading edge slat before accessing the roller assemblies. To remove the leading edge slat, do this task: Outboard Leading Edge Slat Removal, TASK 27-81-15-000-801

SUBTASK 57-43-01-020-002



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.

- (2) To remove Roller [8], do these steps:
 - (a) Remove and discard the Cotter Pin [1] from Bolt [6].

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- (b) Remove the Nut [2] and.
- (c) Remove the Washer [10].
- (d) While holding the Roller [8], remove Bolt [6] and Washer [12].
- (e) Remove the Roller [8] and Washer [13].
- (f) Remove the Bushing [4].
- (g) Label the following parts:
 - 1) Bolt [6]
 - 2) Roller [8]
 - 3) Washer [10]
 - 4) Washer [12]
 - 5) Washer [13]
 - 6) Nut [2]
 - 7) Bushing [4]
- (h) Examine the area to make sure objects are not left in the slat track housing assembly.

SUBTASK 57-43-01-020-003



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.

- (3) To remove Roller [9], do these steps:
 - (a) Remove and discard the Cotter Pin [1] from Bolt [7].
 - (b) Remove the Nut [3].
 - (c) Remove the Washer [11].
 - (d) While holding the Roller [9], remove Bolt [7] and Washer [14].
 - (e) Remove the Roller [9] and Washer [15].
 - (f) Remove the Bushing [5].
 - (g) Label the following parts:
 - 1) Bolt [7]
 - 2) Roller [9]
 - 3) Washer [11]
 - 4) Washer [14]
 - 5) Washer [15]
 - 6) Nut [3]
 - 7) Bushing [5]
 - (h) Examine the area to make sure objects are not left in the slat track housing assembly.

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SUBTASK 57-43-01-020-004



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) To remove Roller [22], do these steps:
 - (a) Remove and discard the Cotter Pin [1] from Bolt [20].
 - (b) Remove the Nut [16].
 - (c) Remove the Washer [24].
 - (d) While holding the Roller [22], remove Bolt [20] and Washer [26].
 - (e) Remove the Roller [22] and Washer [27].
 - (f) Remove the Bushing [18].
 - (g) Label the following parts:
 - 1) Bolt [20]
 - 2) Roller [22]
 - 3) Washer [24]
 - 4) Washer [26]
 - 5) Washer [27]
 - 6) Nut [16]
 - 7) Bushing [18]
 - (h) Examine the area to make sure objects are not left in the slat track housing assembly.

SUBTASK 57-43-01-020-005



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.

- (5) To remove Roller [23], do these steps:
 - (a) Remove and discard the Cotter Pin [1] from Bolt [21].
 - (b) Remove the Nut [17].
 - (c) Remove the Washer [25].
 - (d) While holding the Roller [23], remove Bolt [21] and Washer [28].
 - (e) Remove the Roller [23] and Washer [29].
 - (f) Remove the Bushing [19].
 - (g) Label the following parts:
 - 1) Bolt [21]
 - 2) Roller [23]
 - 3) Washer [25]
 - 4) Washer [28]
 - 5) Washer [29]
 - 6) Nut [17]

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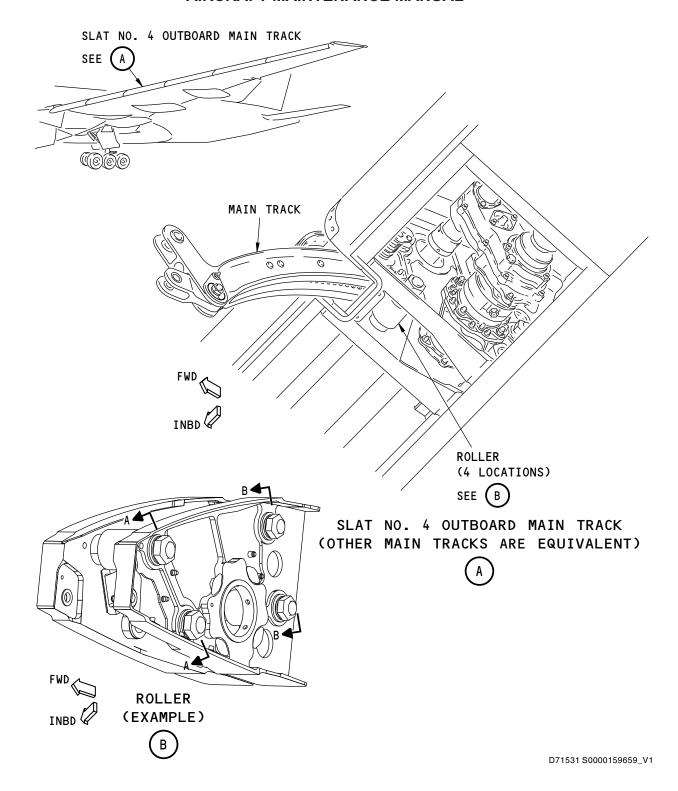
7) Bushing [19]

(h)	Examine the area to	make sure obiects are	not left in the slat track	chousing assembly.
(''')	Examine the area to	make sale objects are	not left in the slat traci	t nodoling doocinoly.

----- END OF TASK -----

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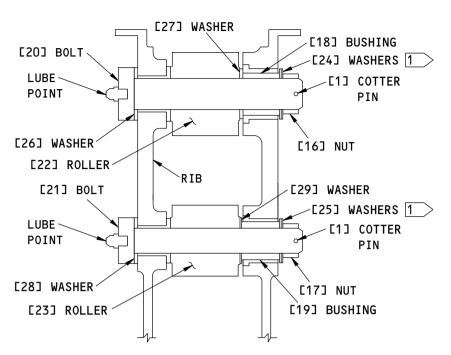
Outboard Fixed Leading Edge Slat Roller Installation Figure 401/57-43-01-990-801 (Sheet 1 of 2)

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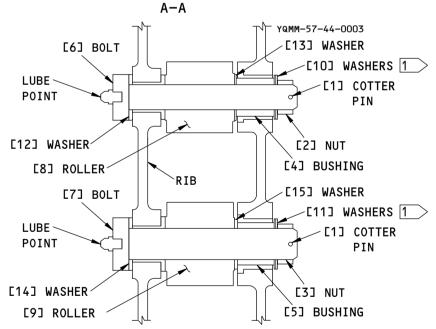
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FORWARD ROLLER



1 USE A MINIMUM OF 1 WASHER AND A MAXIMUM OF 3 WASHERS AFT ROLLER B-B

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Outboard Fixed Leading Edge Slat Roller Installation Figure 401/57-43-01-990-801 (Sheet 2 of 2)

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TASK 57-43-01-420-801

3. Outboard leading edge slat roller installation

A. References

Reference	Title
12-21-08-640-802	Outboard Slat Rollers and Pinion Bearing Lubrication (P/B 301)
27-81-15-400-801	Outboard Leading Edge Slat Installation (P/B 401)

B. Location Zones

Area	
Slat No. 6	
Slat No. 5	
Slat No. 4	
Slat No. 3	
Slat No. 2	
Slat No. 1	
Slat No. 9	
Slat No. 10	
Slat No. 11	
Slat No. 12	
Slat No. 13	
Slat No. 14	
	Slat No. 6 Slat No. 5 Slat No. 4 Slat No. 3 Slat No. 2 Slat No. 1 Slat No. 1 Slat No. 9 Slat No. 10 Slat No. 11 Slat No. 11 Slat No. 12 Slat No. 13

C. Prepare for the installation

SUBTASK 57-43-01-420-001



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.

- (1) Examine the area to make sure objects are not left in the slat track housing assembly.
- (2) To install the Roller [23], do these steps:
 - (a) Install the Bushing [19].
 - (b) Install the Roller [23] and Washer [29].
 - (c) While holding the Roller [23] and Washer [29] in place, install the Bolt [21] and Washer [28].
 - (d) Install the Washer [25].

NOTE: The quantities for the Washer [25] can vary because of adjustments. Use a minimum of one washer and a maximum of three washers.

- (e) Install the Nut [17] by doing the following steps:
 - 1) Torque the Nut [17] to a torque range between 1100.00 in-lb (124.28 N·m) to 1900.00 in-lb (214.67 N·m).
 - 2) Rotate the Nut [17] an additional one castellation maximum to align the Nut [17] and bolt cotter pin hole.
 - 3) Install the Cotter Pin [1] per SUBTASK 20-10-23-420-003.
 - 4) Rotate the Roller [23] to make sure no binding occurs.

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SUBTASK 57-43-01-420-002



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.

- (3) Examine the area to make sure objects are not left in the slat track housing assembly.
- (4) To install the Roller [22], do these steps:
 - (a) Install the Bushing [18].
 - (b) Install the Roller [22] and Washer [27].
 - (c) While holding the Roller [22] and Washer [27] in place, install the Bolt [20] and Washer [26].
 - (d) Install the Washer [24].

NOTE: The quantities for the Washer [24] can vary because of adjustments. Use a minimum of one washer and a maximum of three washers.

- (e) Install the Nut [16] by doing the following steps:
 - 1) Torque the Nut [16] to a torque range between1100.00 in-lb (124.28 N·m) to 1900.00 in-lb (214.67 N·m).
 - 2) Rotate the Nut [16] an additional one castellation maximum to align the Nut [16] and bolt cotter pin hole.
 - 3) Install the Cotter Pin [1] per SUBTASK 20-10-23-420-003.
 - 4) Rotate the Roller [22] to make sure no binding occurs.

SUBTASK 57-43-01-420-003



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.

- (5) Examine the area to make sure objects are not left in the slat track housing assembly.
- (6) To install the Roller [9], do these steps:
 - (a) Install the Bushing [5].
 - (b) Install the Roller [9] and Washer [15].
 - (c) While holding the Roller [9] and Washer [15] in place, install the Bolt [7] and Washer [14].
 - (d) Install the Washer [11].

NOTE: The quantities for the Washer [11] can vary because of adjustments. Use a minimum of one washer and a maximum of three washers.

- (e) Install the Nut [3] by doing the following steps:
 - 1) Torque the Nut [3] to a torque range between 700 in-lb (79 N·m) to 1250 in-lb (141 N·m).
 - 2) Rotate the Nut [3] an additional one castellation maximum to align the Nut [3] and bolt cotter pin hole.
 - 3) Install the Cotter Pin [1] per SUBTASK 20-10-23-420-003.
 - Rotate the Roller [9] to make sure no binding occurs.

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SUBTASK 57-43-01-420-004



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.

- (7) Examine the area to make sure objects are not left in the slat track housing assembly.
- (8) To install the Roller [8], do these steps:
 - (a) Install the Bushing [4].
 - (b) Install the Roller [8] and Washer [13].
 - (c) While holding the Roller [8] and Washer [13] in place, install the Bolt [6] and Washer [12].
 - (d) Install the Washer [10].

NOTE: The quantities for the Washer [10] can vary because of adjustments. Use a minimum of one washer and a maximum of three washers.

- (e) Install the Nut [2] by doing the following steps:
 - 1) Torque the Nut [2] to a torque range between 700 in-lb (79 N·m) to 1250 in-lb (141 N·m).
 - Rotate the Nut [2] an additional one castellation maximum to align the Nut [2] and bolt cotter pin hole.
 - 3) Install the Cotter Pin [1] per SUBTASK 20-10-23-420-003.
 - 4) Rotate the Roller [8] to make sure no binding occurs.

SUBTASK 57-43-01-600-001

- (9) Lubricate Roller [8], Roller [9], Roller [22], Roller [23] at the lube points found on Bolt [6], Bolt [7], Bolt [20] and Bolt [21].
 - (a) To lubricate the rollers, do this task: Outboard Slat Rollers and Pinion Bearing Lubrication, TASK 12-21-08-640-802.

SUBTASK 57-43-01-420-005

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- (10) Install the applicable outboard leading edge slat.
 - (a) To install the leading edge slat, do this task: Outboard Leading Edge Slat Installation, TASK 27-81-15-400-801.

------ END OF TASK ------



INBOARD LEADING EDGE SLAT ROLLERS

1. General

- A. This procedure has these tasks.
 - (1) Removal of the Inboard Leading Edge Slat Rollers.
 - (2) Installation of the Inboard Leading Edge Slat Rollers.

TASK 57-43-02-020-801

2. Inboard Leading Edge Slat Rollers Removal.

A. References

Reference	Title
27-81-10-000-801	Inboard Leading Edge Slat Removal (P/B 401)

B. Location Zones

Zone	Area		
512	Slat No. 7		
612	Slat No. 8		

C. Inboard Slat Station 380, Prepare for the removal

SUBTASK 57-43-02-020-001

- (1) Remove the applicable inboard leading edge slat before accessing the roller assemblies. To remove the leading edge slat, do this task: Inboard Leading Edge Slat Removal, TASK 27-81-10-000-801
- (2) Identify the rollers at the inboard slat station (ISS) 380 (Figure 401).

Inboard Slat Station 380 Roller Bolt Configuration

ISS	Slat Rib Roller Location (FWD/AFT)	Upper Bolt Head Position (INBD/OUTBD)	Lower Bolt Head Position (INBD/OUTBD)
380	FWD	OUTBD	INBD
380	AFT	OUTBD	OUTBD

SUBTASK 57-43-02-020-002



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.

- (3) To remove ISS 380, Aft Upper roller [4], do these steps:
 - (a) If installed, remove the retainer bolt [9] and retainer [10].
 - (b) Remove and discard the cotter pin [1] from bolt [6].
 - (c) Remove the nut [2].
 - (d) Remove the washer [3].
 - (e) Hold the roller [4], and remove bolt [6] and washer [8].
 - (f) Remove the roller [4] and washer [7].
 - (g) Remove the bushing [5].
 - (h) Label these parts:

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- 1) bolt [6]
- 2) roller [4]
- 3) washer [3]
- 4) washer [8]
- 5) washer [7]
- 6) nut [2]
- 7) bushing [5]
- (i) Examine the area to make sure that objects are not left in the slat track housing assembly.

SUBTASK 57-43-02-020-003



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) To remove ISS 380, Aft Lower roller [16], do these steps:
 - (a) Remove and discard the cotter pin [11] from bolt [18].
 - (b) Remove the nut [12].
 - (c) Remove the washer [13].
 - (d) Hold the roller [16], and remove bolt [18] and washer [15].
 - (e) Remove the roller [16] and washer [17].
 - (f) Remove the bushing [14].
 - (g) Label these parts:
 - 1) bolt [18]
 - 2) roller [16]
 - 3) washer [13]
 - 4) washer [15]
 - 5) washer [17]
 - 6) nut [12]
 - 7) bushing [14]
 - (h) Examine the area to make sure that objects are not left in the slat track housing assembly.

SUBTASK 57-43-02-020-004



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.

- (5) To remove ISS 380, FWD Upper roller [26], do these steps:
 - (a) Remove and discard the cotter pin [21] from bolt [28].
 - (b) Remove the nut [22].
 - (c) Remove the washer [23].

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- (d) Hold the roller [26], and remove bolt [28] and washer [25].
- (e) Remove the roller [26] and washer [27].
- (f) Remove thebushing [24].
- (g) Label these parts:
 - 1) bolt [28]
 - 2) roller [26]
 - 3) washer [23]
 - 4) washer [25]
 - 5) washer [27]
 - 6) nut [22]
 - 7) bushing [24]
- (h) Examine the area to make sure that objects are not left in the slat track housing assembly.

SUBTASK 57-43-02-020-005



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.

- (6) To remove ISS 380, FWD Lower roller [36], do these steps:
 - (a) Remove and discard the cotter pin [31] from bolt [38].
 - (b) Remove the nut [32].
 - (c) Remove the washer [33].
 - (d) Hold the roller [36], and remove bolt [38] and washer [37].
 - (e) Remove the roller [36] and washer [35].
 - (f) Remove the bushing [34].
 - (g) Label these parts:
 - 1) bolt [38]
 - 2) roller [36]
 - washer [33]
 - 4) washer [37]
 - 5) washer [35]
 - 6) nut [32]
 - 7) bushing [34]
 - (h) Examine the area to make sure that objects are not left in the slat track housing assembly.

D. Inboard Slat Station 289, Prepare for the removal

SUBTASK 57-43-02-020-007

(1) Remove the applicable inboard leading edge slat before accessing the roller assemblies. To remove the leading edge slat, do this task: Inboard Leading Edge Slat Removal, TASK 27-81-10-000-801

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(2) Identify the rollers at the inboard slat stations (ISS) 289 (Figure 401).

Inboard Slat Station Roller Bolt Configuration

ISS	Slat Rib Roller Location (FWD/AFT)	Upper Bolt Head Position (INBD/OUTBD)	Lower Bolt Head Position (INBD/OUTBD)
289	FWD	INBD	INBD
289	AFT	INBD	INBD

SUBTASK 57-43-02-400-002



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.

- (3) To remove ISS 289, Aft Upper roller [46], do these steps:
 - (a) Remove and discard the cotter pin [41] from bolt [48].
 - (b) Remove the nut [42].
 - (c) Remove the washer [43].
 - (d) Hold the roller [46], and remove bolt [48] and washer [47].
 - (e) Remove the roller [46] and washer [45].
 - (f) Remove the bushing [44].
 - (g) Label these parts:
 - 1) bolt [48]
 - 2) roller [46]
 - 3) washer [43]
 - 4) washer [47]
 - 5) washer [45]
 - 6) nut [42]
 - 7) bushing [44]
 - (h) Examine the area to make sure that objects are not left in the slat track housing assembly.

SUBTASK 57-43-02-020-006



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) To remove IS 289, Aft Lower roller [56], do these steps:
 - (a) Remove and discard the cotter pin [51] from bolt [58].
 - (b) Remove the nut [52].
 - (c) Remove the washer [53].
 - (d) Hold the roller [56], and remove bolt [58] and washer [57].
 - (e) Remove the roller [56] and washer [55].

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- (f) Remove the bushing [54].
- (g) Label these parts:
 - 1) bolt [58]
 - 2) roller [56]
 - 3) washer [53]
 - 4) washer [57]
 - 5) washer [55]
 - 6) nut [52]
 - 7) bushing [54]
- (h) Examine the area to make sure that objects are not left in the slat track housing assembly.

SUBTASK 57-43-02-020-008



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.

- (5) To remove ISS 289, FWD Upper roller [66], do these steps:
 - (a) Remove and discard the cotter pin [61] from bolt [68].
 - (b) Remove the nut [62].
 - (c) Remove the washer [63].
 - (d) Hold the roller [66], and remove bolt [68] and washer [67].
 - (e) Remove the roller [66] and washer [65].
 - (f) Remove the bushing [64].
 - (g) Label these parts:
 - 1) bolt [68]
 - 2) roller [66]
 - 3) washer [63]
 - 4) washer [67]
 - 5) washer [65]
 - 6) nut [62]
 - 7) bushing [64]
 - (h) Examine the area to make sure that objects are not left in the slat track housing assembly.

SUBTASK 57-43-02-020-009



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.

- (6) To remove ISS 289, FWD Lower roller [76], do these steps:
 - (a) Remove and discard the cotter pin [71] from bolt [78].

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- (b) Remove the nut [72].
- (c) Remove the washer [73].
- (d) Hold the roller [76], and remove bolt [78] and washer [77].
- (e) Remove the roller [76] and washer [75].
- (f) Remove the bushing [74].
- (g) Label these parts:
 - 1) bolt [78]
 - 2) roller [76]
 - 3) washer [73]
 - 4) washer [77]
 - 5) washer [75]
 - 6) nut [72]
 - 7) bushing [74]
- (h) Examine the area to make sure that objects are not left in the slat track housing assembly.

E. Inboard Slat Station 218, Prepare for the removal

SUBTASK 57-43-02-020-010

- (1) Remove the applicable inboard leading edge slat before accessing the roller assemblies. To remove the leading edge slat, do this task: Inboard Leading Edge Slat Removal, TASK 27-81-10-000-801
- (2) Identify the rollers at the inboard slat stations (ISS) 218 (Figure 401).

Inboard Slat Station Roller Bolt Configuration

ISS	Slat Rib Roller Location (FWD/AFT)	Upper Bolt Head Position (INBD/OUTBD)	Lower Bolt Head Position (INBD/OUTBD)
218	FWD	INBD	INBD
218	AFT	INBD	INBD

SUBTASK 57-43-02-020-011



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.

- (3) To remove ISS 218, Aft Upper roller [86], do these steps:
 - (a) If installed, remove the retainer bolt [90] and retainer [89].
 - (b) Remove and discard the cotter pin [81] from bolt [88].
 - (c) Remove the nut [82].
 - (d) Remove the washer [83].
 - (e) Hold the roller [86], and remove bolt [88] and washer [87].
 - (f) Remove the roller [86] and washer [85].
 - (g) Remove the bushing [84].
 - (h) Label these parts:

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- 1) bolt [88]
- 2) roller [86]
- 3) washer [83]
- 4) washer [87]
- 5) washer [85]
- 6) nut [82]
- 7) bushing [84]
- (i) Examine the area to make sure that objects are not left in the slat track housing assembly.

SUBTASK 57-43-02-020-012



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) To remove ISS 218, Aft Lower roller [96], do these steps:
 - (a) Remove and discard the cotter pin [91] from bolt [98].
 - (b) Remove the nut [92].
 - (c) Remove the washer [93].
 - (d) Hold the roller [96], and remove bolt [98] and washer [97].
 - (e) Remove the roller [96] and washer [95].
 - (f) Remove the bushing [94].
 - (g) Label these parts:
 - 1) bolt [98]
 - 2) roller [96]
 - 3) washer [93]
 - 4) washer [97]
 - 5) washer [95]
 - 6) nut [92]
 - 7) bushing [94]
 - (h) Examine the area to make sure that objects are not left in the slat track housing assembly.

SUBTASK 57-43-02-020-013



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.

- (5) To remove ISS 218, FWD Upper roller [106], do these steps:
 - (a) If installed, remove the retainer bolt [110] and retainer [109].
 - (b) Remove and discard the cotter pin [101] from bolt [108].
 - (c) Remove the nut [102].

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- (d) Remove the washer [103].
- (e) Hold the roller [106], and remove bolt [108] and washer [107].
- (f) Remove the roller [106] and washer [105].
- (g) Remove the bushing [104].
- (h) Label these parts:
 - 1) bolt [108]
 - 2) roller [106]
 - 3) washer [103]
 - 4) washer [107]
 - 5) washer [105]
 - 6) nut [102]
 - 7) bushing [104]
- (i) Examine the area to make sure that objects are not left in the slat track housing assembly.

SUBTASK 57-43-02-020-014



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.

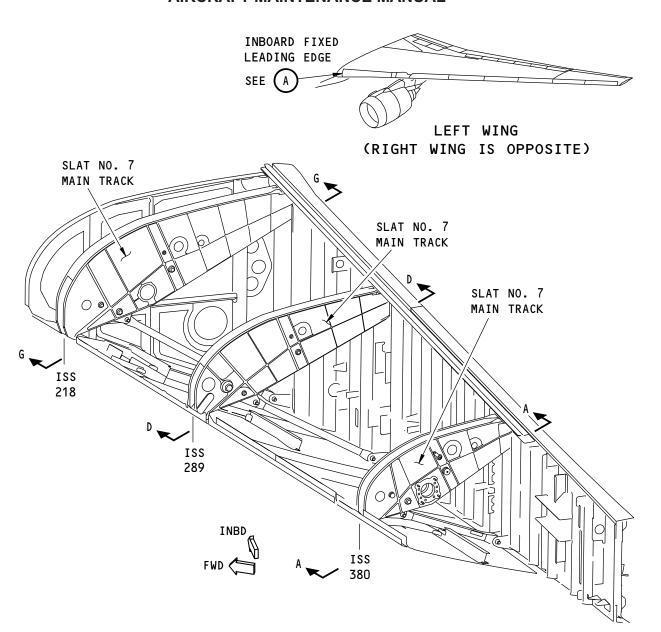
- (6) To remove ISS 218, FWD Lower roller [116], do these steps:
 - (a) Remove and discard the cotter pin [111] from bolt [118].
 - (b) Remove the nut [112].
 - (c) Remove the washer [113].
 - (d) Hold the roller [116], and remove bolt [118] and washer [117].
 - (e) Remove the roller [116] and washer [115].
 - (f) Remove the bushing [114].
 - (g) Label these parts:
 - 1) bolt [118]
 - 2) roller [116]
 - 3) washer [113]
 - 4) washer [117]
 - 5) washer [115]
 - 6) nut [112]
 - 7) bushing [114]
 - (h) Examine the area to make sure that objects are not left in the slat track housing assembly.

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INBOARD FIXED LEADING EDGE



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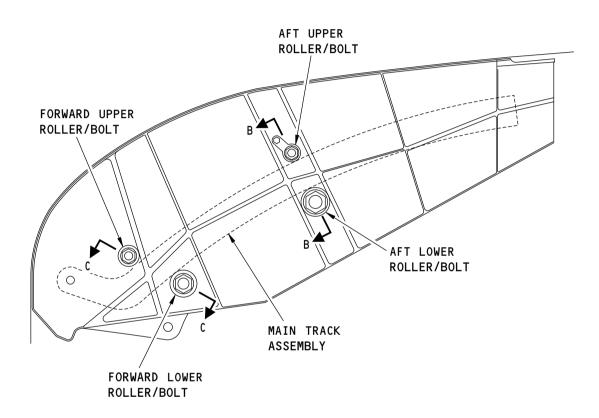
Inboard Fixed Leading Edge Slat Roller Installation Figure 401/57-43-02-990-801 (Sheet 1 of 7)

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(ISS 380 RIB) A-A

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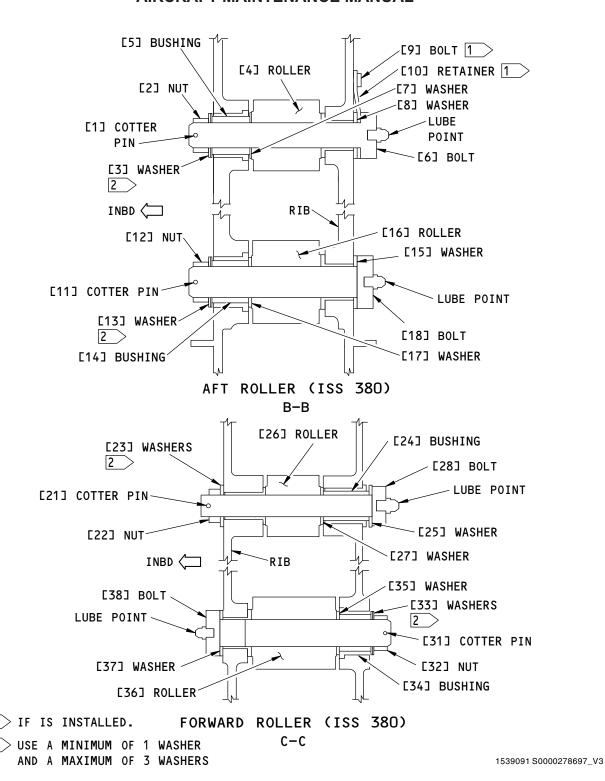
Inboard Fixed Leading Edge Slat Roller Installation Figure 401/57-43-02-990-801 (Sheet 2 of 7)

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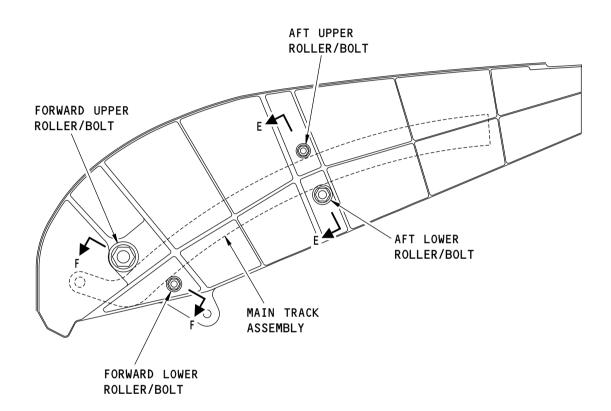




Inboard Fixed Leading Edge Slat Roller Installation Figure 401/57-43-02-990-801 (Sheet 3 of 7)







(ISS 289 RIB) D-D

2112552 S0000451901_V1

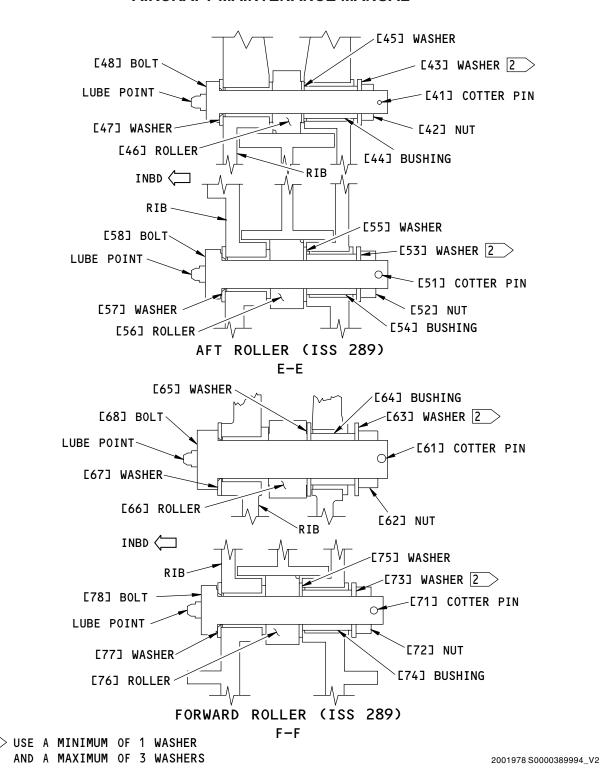
Inboard Fixed Leading Edge Slat Roller Installation Figure 401/57-43-02-990-801 (Sheet 4 of 7)

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Inboard Fixed Leading Edge Slat Roller Installation Figure 401/57-43-02-990-801 (Sheet 5 of 7)

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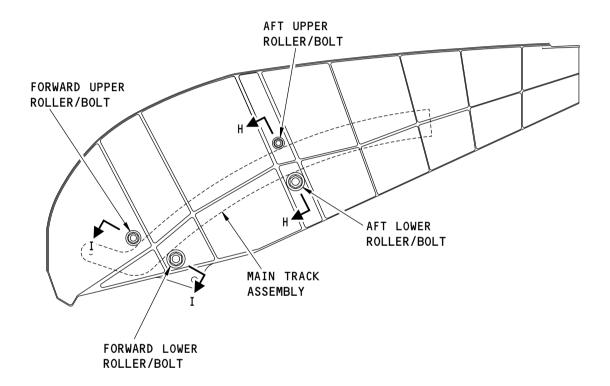
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(ISS 218 RIB) G-G

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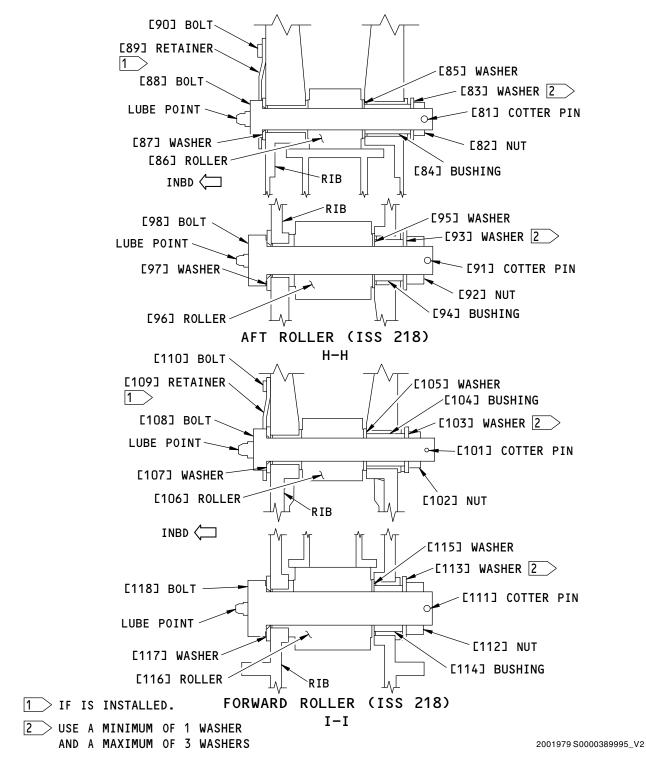
Inboard Fixed Leading Edge Slat Roller Installation Figure 401/57-43-02-990-801 (Sheet 6 of 7)

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Inboard Fixed Leading Edge Slat Roller Installation Figure 401/57-43-02-990-801 (Sheet 7 of 7)

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TASK 57-43-02-420-801

3. Inboard Leading Edge Slat Rollers Installation.

A. References

Reference	Title
12-21-08-640-801	Inboard Slat Rollers and Pinion Bearing Lubrication (P/B 301)
27-81-10-400-801	Inboard Leading Edge Slat Installation (P/B 401)

B. Location Zones

Zone	Area
512	Slat No. 7
612	Slat No. 8

C. Inboard Slat Station 380, Prepare for the installation

SUBTASK 57-43-02-420-007

(1) Identify the roller and roller bolt (INBD or OUTBD) position and torque at the inboard slat stations (ISS) 380 (Figure 401).

ISS 380 Roller Bolt Configuration and Torque

ISS	Slat Rib Roller Location (FWD/AFT)	Upper Bolt Head Position (INBD/OUTBD)	Torque Inch - pounds (Nm)	Lower Bolt Head Position (INBD/OUTBD)	Torque Inch - pounds (Nm)
380	FWD	OUTBD	800 - 1250 (90 - 141)	INBD	1100 - 2000 (124 - 226)
380	AFT	OUTBD	200 - 350 (22.6 - 39.5)	OUTBD	1500 - 2800 (169 - 316)

SUBTASK 57-43-02-420-001

(2) To install the ISS 380, Aft Lower roller [16], do these steps:



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.

- (a) Examine the area to make sure that objects are not left in the slat track housing assembly.
- (b) Install the bushing [14].
- (c) Install the roller [16] and washer [17].
- (d) Hold the roller [16] and washer [17] in place, and install the bolt [18] and washer [15].
- (e) Install the washer [13].

NOTE: The quantities for the washer [13] can vary because of adjustments. Use a minimum of one washer and a maximum of three washers.

- (f) To install the ISS 380, Aft Lower nut [12], do these steps:
 - 1) Torque nut [12] to the lower torque listed in the above ISS 380 Roller Bolt Configuration and Torque table (Aft Lower Position).
 - 2) Rotate the nut [12] an additional one castellation maximum to align the nut [12] and bolt cotter pin hole.
 - 3) Install the cotter pin [11] per SUBTASK 20-10-23-420-003.
 - 4) Rotate the roller [16] to make sure no binding occurs.

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SUBTASK 57-43-02-420-002

(3) To install the ISS 380, Aft Upper roller [4], do these steps:



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.

- (a) Examine the area to make sure that objects are not left in the slat track housing assembly.
- (b) Install the bushing [5].
- (c) Install the roller [4] and washer [7].
- (d) Hold the roller [4] and washer [7] in place, and install the bolt [6] and washer [8].
- (e) Install the washer [3].

NOTE: The quantities for the washer [3] can vary because of adjustments. Use a minimum of one washer and a maximum of three washers.

- (f) To install the ISS 380, Aft Upper nut [2], do these steps:
 - 1) Torque nut [2] to the lower torque listed in the above ISS 380 Roller Bolt Configuration and Torque table (Aft Upper Position).
 - 2) Rotate the nut [2] an additional one castellation maximum to align the nut [2] and bolt cotter pin hole.
 - 3) Install the cotter pin [1] per SUBTASK 20-10-23-420-003.
 - 4) Rotate the roller [4] to make sure no binding occurs.
- (g) If removed, install the retainer bolt [9] and retainer [10].

SUBTASK 57-43-02-420-003

(4) To install the ISS 380, FWD Lower roller [36], do these steps:



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.

- (a) Examine the area to make sure that objects are not left in the slat track housing assembly.
- (b) Install the bushing [34].
- (c) Install the roller [36] and washer [35].
- (d) Hold the roller [36] and washer [35] in place, and install the bolt [38] and washer [37].
 NOTE: At ISS 380, the forward lower roller bolt [38] head is inboard (Figure 401).
- (e) Install the washer [33].

NOTE: The quantities for the washer [33] can vary because of adjustments. Use a minimum of one washer and a maximum of three washers.

- (f) To install the ISS 380 FWD Lower nut [32], do these steps:
 - 1) Torque the nut [32] to the lower torque listed in the above ISS 380 Roller Bolt Configuration and Torque table (FWD Lower Position).

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- 2) Rotate the nut [32] an additional one castellation maximum to align the nut [32] and bolt cotter pin hole.
- 3) Install the cotter pin [31] per SUBTASK 20-10-23-420-003.
- 4) Rotate the roller [36] to make sure that no binding occurs.

SUBTASK 57-43-02-420-004

(5) To install the ISS 380 FWD Upper roller [26], do these steps:



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.

- (a) Examine the area to make sure that objects are not left in the slat track housing assembly.
- (b) Install the bushing [24].
- (c) Install the roller [26] and washer [27].
- (d) Hold the roller [26] and washer [27] in place, and install the bolt [28] and washer [25].
- (e) Install the washer [23].

NOTE: The quantities for the washer [23] can vary because of adjustments. Use a minimum of one washer and a maximum of three washers.

- (f) To install the ISS 380 FWD Upper nut [22], do these steps:
 - 1) Torque nut [22] to the lower torque listed in the above ISS 380 Roller Bolt Configuration and Torque table (FWD Upper Position).
 - 2) Rotate the nut [22] an additional one castellation maximum to align the nut [22] and bolt cotter pin hole.
 - 3) Install the cotter pin [21] per SUBTASK 20-10-23-420-003.
 - 4) Rotate the roller [26] to make sure that no binding occurs.

SUBTASK 57-43-02-420-005

- (6) Lubricate roller [4], roller [16], roller [26] and roller [36] at the lube points found on bolt [6], bolt [18], bolt [28] and bolt [38].
 - (a) To lubricate the rollers, do this task: Inboard Slat Rollers and Pinion Bearing Lubrication, TASK 12-21-08-640-801.

SUBTASK 57-43-02-420-006

- (7) Install the applicable inboard leading edge slat.
 - (a) To install the leading edge slat, do this task: Inboard Leading Edge Slat Installation, TASK 27-81-10-400-801.
- D. Inboard Slat Station 289, Prepare for the installation

SUBTASK 57-43-02-420-008

 Identify the roller, roller bolt (INBD or OUTBD) position, and torque at the inboard slat stations (ISS) 289 (Figure 401).

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ISS 289 Roller Bolt Configuration and Torque

ISS	Slat Rib Roller Location (FWD/AFT)	Upper Bolt Head Position (INBD/OUTBD)	Torque Inch - pounds (Nm)	Lower Bolt Head Position (INBD/OUTBD)	Torque Inch - pounds (Nm)
289	FWD	INBD	4000 - 7000 (452 - 791)	INBD	400 - 700 (45 - 79)
289	AFT	INBD	200 - 350 (23 - 39.5)	INBD	800 - 1250 (90 - 141)

SUBTASK 57-43-02-420-009

(2) To install the ISS 289, FWD Lower roller [76], do these steps:



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.

- (a) Examine the area to make sure that objects are not left in the slat track housing assembly.
- (b) Install the bushing [74].
- (c) Install the roller [76] and washer [75].
- (d) Hold the roller [76] and washer [75] in place, and install the bolt [78] and washer [77].
- (e) Install the washer [73].

NOTE: The quantities for the washer [73] can vary because of adjustments. Use a minimum of one washer and a maximum of three washers.

- (f) To install the ISS 289, FWD Lower nut [72], do these steps:
 - 1) Torque nut [72] to the lower torque listed in the above ISS 289 Roller Bolt Configuration and Torque table (FWD Lower Position).
 - 2) Rotate the nut [72] an additional one castellation maximum to align the nut [72] and bolt cotter pin hole.
 - 3) Install the cotter pin [71] per SUBTASK 20-10-23-420-003.
 - 4) Rotate the roller [76] to make sure no binding occurs.

SUBTASK 57-43-02-420-010

(3) To install the ISS 289, FWD Upper roller [66], do these steps:



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.

- (a) Examine the area to make sure that objects are not left in the slat track housing assembly.
- (b) Install the bushing [64].
- (c) Install the roller [66] and washer [65].
- (d) Hold the roller [66] and washer [65] in place, and install the bolt [68] and washer [67].

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Install the washer [63].

NOTE: The quantities for the washer [63] can vary because of adjustments. Use a minimum of one washer and a maximum of three washers.

- To install the ISS 289, FWD Upper nut [62], do these steps:
 - Torque nut [62] to the lower torque listed in the above ISS 289 Roller Bolt Configuration and Torque table (FWD Upper Position).
 - Rotate the nut [62] an additional one castellation maximum to align the nut [62] and 2) bolt cotter pin hole.
 - Install the cotter pin [61] per SUBTASK 20-10-23-420-003. 3)
 - 4) Rotate the roller [66] to make sure that no binding occurs.

SUBTASK 57-43-02-420-011

To install the ISS 289, Aft Lower roller [56], do these steps:



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.

- Examine the area to make sure that objects are not left in the slat track housing assembly.
- Install the bushing [54]. (b)
- Install the roller [56] and washer [55]. (c)
- Hold the roller [56] and washer [55] in place, and install the bolt [58] and washer [57]. (d)
- (e) Install the washer [53].

NOTE: The quantities for the washer [53] can vary because of adjustments. Use a minimum of one washer and a maximum of three washers.

- To install the ISS 289, Aft Lower nut [52], do these steps:
 - Torque nut [52] to the lower torque listed in the above ISS 289 Roller Bolt Configuration and Torque table (Aft Lower Position).
 - Rotate the nut [52] an additional one castellation maximum to align the nut [52] and bolt cotter pin hole.
 - Install the cotter pin [51] per SUBTASK 20-10-23-420-003.
 - Rotate the roller [56] to make sure no binding occurs. 4)

SUBTASK 57-43-02-420-012

To install the ISS 289, Aft Upper roller [46], do these steps:



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.

- Examine the area to make sure that objects are not left in the slat track housing (a) assembly.
- Install the bushing [44]. (b)

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- (c) Install the roller [46] and washer [45].
- (d) Hold the roller [46] and washer [45] in place, and install the bolt [48] and washer [47].
- (e) Install the washer [43].

NOTE: The quantities for the washer [43] can vary because of adjustments. Use a minimum of one washer and a maximum of three washers.

- (f) To install the ISS 289, Aft Upper nut [42], do these steps:
 - 1) Torque nut [42] to the lower torque listed in the above ISS 289 Roller Bolt Configuration and Torque table (Aft Upper Position).
 - 2) Rotate the nut [42] an additional one castellation maximum to align the nut [42] and bolt cotter pin hole.
 - Install the cotter pin [41] per SUBTASK 20-10-23-420-003.
 - 4) Rotate the roller [46] to make sure no binding occurs.

SUBTASK 57-43-02-420-013

- (6) Lubricate roller [46], roller [56], roller [66], roller [76] at the lube points found on bolt [48], bolt [58], bolt [68] and bolt [78].
 - (a) To lubricate the rollers, do this task: Inboard Slat Rollers and Pinion Bearing Lubrication, TASK 12-21-08-640-801.

SUBTASK 57-43-02-420-014

- (7) Install the applicable inboard leading edge slat.
 - (a) To install the leading edge slat, do this task: Inboard Leading Edge Slat Installation, TASK 27-81-10-400-801.

E. Inboard Slat Station 218, Prepare for the installation

SUBTASK 57-43-02-420-015

(1) Identify the roller, roller bolt (INBD or OUTBD) position and torque at the inboard slat stations (ISS) 218 (Figure 401).

ISS 218 Roller Bolt Configuration and Torque

ISS	Slat Rib Roller Location (FWD/AFT)	Upper Bolt Head Position (INBD/OUTBD)	Torque Inch - pounds (Nm)	Lower Bolt Head Position (INBD/OUTBD)	Torque Inch - pounds (Nm)
218	FWD	INBD	800 - 1250 (90 - 141)	INBD	1100 - 2000 (124 - 226)
218	AFT	INBD	200 - 350 (23 - 39.5)	INBD	1100 - 2000 (124 - 226)

SUBTASK 57-43-02-420-016

(2) To install the ISS 218, FWD Lower roller [116], do these steps:



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.

- (a) Examine the area to make sure that objects are not left in the slat track housing assembly.
- (b) Install the bushing [114].
- (c) Install the roller [116] and washer [115].

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- (d) Hold the roller [116] and washer [115] in place, and install the bolt [118] and washer [117].
- (e) Install the washer [113].

NOTE: The quantities for the washer [113] can vary because of adjustments. Use a minimum of one washer and a maximum of three washers.

- (f) To install the ISS 218, FWD Lower nut [112], do these steps:
 - 1) Torque nut [112] to the lower torque listed in the above ISS 218 Roller Bolt Configuration and Torque table (FWD Lower Position).
 - 2) Rotate the nut [112] an additional one castellation maximum to align the nut [112] and bolt cotter pin hole.
 - 3) Install the cotter pin [111] per SUBTASK 20-10-23-420-003.
 - 4) Rotate the roller [116] to make sure that no binding occurs.

SUBTASK 57-43-02-420-017

(3) To install the ISS 218, FWD Upper roller [106], do these steps:



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.

- (a) Examine the area to make sure that objects are not left in the slat track housing assembly.
- (b) Install the bushing [104].
- (c) Install the roller [106] and washer [105].
- (d) Hold the roller [106] and washer [105] in place, and install the bolt [108] and washer [107].
- (e) Install the washer [103].

NOTE: The quantities for the washer [103] can vary because of adjustments. Use a minimum of one washer and a maximum of three washers.

- (f) To install the ISS 218, FWD Upper nut [102], do these steps:
 - 1) Torque nut [102] to the lower torque listed in the above ISS 218 Roller Bolt Configuration and Torque table (FWD Upper Position).
 - Rotate the nut [102] an additional one castellation maximum to align the nut [102] and bolt cotter pin hole.
 - 3) Install the cotter pin [101] per SUBTASK 20-10-23-420-003.
 - 4) Rotate the roller [106] to make sure that no binding occurs.
- (g) If removed, install the retainer bolt [110] and retainer [109].

SUBTASK 57-43-02-420-018

(4) To install the ISS 218, Aft Lower roller [96], do these steps:

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EFFECTIVITY





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.

- (a) Examine the area to make sure that objects are not left in the slat track housing assembly.
- (b) Install the bushing [94].
- (c) Install the roller [96] and washer [95].
- (d) Hold the roller [96] and washer [95] in place, and install the bolt [98] and washer [97].
- (e) Install the washer [93].

NOTE: The quantities for the washer [93] can vary because of adjustments. Use a minimum of one washer and a maximum of three washers.

- (f) To install the ISS 218, Aft Lower nut [92], do these steps:
 - 1) Torque nut [92] to the lower torque listed in the above ISS 218 Roller Bolt Configuration and Torque table (Aft Lower Position).
 - 2) Rotate the nut [92] an additional one castellation maximum to align the nut [92] and bolt cotter pin hole.
 - 3) Install the cotter pin [91] per SUBTASK 20-10-23-420-003.
 - 4) Rotate the roller [96] to make sure no binding occurs.

SUBTASK 57-43-02-420-019

(5) To install the ISS 218, Aft Upper roller [86], do these steps:



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.

- (a) Examine the area to make sure that objects are not left in the slat track housing assembly.
- (b) Install the bushing [84].
- (c) Install the roller [86] and washer [85].
- (d) Hold the roller [86] and washer [85] in place, and install the bolt [88] and washer [87].
- (e) Install the washer [83].

NOTE: The quantities for the washer [83] can vary because of adjustments. Use a minimum of one washer and a maximum of three washers.

- (f) To install the ISS 218, Aft Upper nut [82], do these steps:
 - 1) Torque nut [82] to the lower torque listed in the above ISS 218 Roller Bolt Configuration and Torque table (Aft Upper Position).
 - 2) Rotate the nut [82] an additional one castellation maximum to align the nut [82] and bolt cotter pin hole.
 - 3) Install the cotter pin [81] per SUBTASK 20-10-23-420-003.
 - 4) Rotate the roller [86] to make sure no binding occurs.

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(g) If removed, install the retainer bolt [90] and retainer [89].

SUBTASK 57-43-02-420-020

- (6) Lubricate roller [86], roller [96], roller [106], and roller [116] at the lube points found on bolt [88], bolt [98], bolt [108], and bolt [118].
 - (a) To lubricate the rollers, do this task: Inboard Slat Rollers and Pinion Bearing Lubrication, TASK 12-21-08-640-801.

SUBTASK 57-43-02-420-021

- (7) Install the applicable inboard leading edge slat.
 - (a) To install the leading edge slat, do this task: Inboard Leading Edge Slat Installation, TASK 27-81-10-400-801.



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INBOARD LEADING EDGE SLAT SKIRT ASSEMBLY - REMOVAL/INSTALLATION

1. General

- A. This procedure has these tasks:
 - (1) Inboard leading edge slat skirt assembly removal.
 - (2) Inboard leading edge slat skirt assembly installation.

TASK 57-43-03-000-801

2. Inboard Leading Edge Slat Skirt Assembly Removal

A. References

Reference	Title
27-81-00-040-801	Leading Edge Slat - Deactivation (P/B 201)
27-81-00-860-804	Extend the Leading Edge Slats (P/B 201)
32-00-15-480-801	Landing Gear Door Safety Pins Installation (P/B 201)
32-00-30-480-801	Landing Gear Downlock Pins Installation (P/B 201)
78-31-00-040-806-H00	Thrust Reverser Deactivation For Ground Maintenance (P/B 201)

B. Location Zones

Zone	Area
512	Slat No. 7
612	Slat No. 8

C. Access Panels

Number	Name/Location
511CB	Inboard Fixed Leading Edge Panel
511EB	Inboard Fixed Leading Edge Panel
511FB	Inboard Fixed Leading Edge Panel
511GB	Inboard Fixed Leading Edge Panel
511JB	Inboard Fixed Leading Edge Panel
511KB	Inboard Fixed Leading Edge Panel
511LB	Inboard Fixed Leading Edge Panel
511MB	Inboard Fixed Leading Edge Panel
611CB	Inboard Fixed Leading Edge Panel
611EB	Inboard Fixed Leading Edge Panel
611FB	Inboard Fixed Leading Edge Panel
611GB	Inboard Fixed Leading Edge Panel
611JB	Inboard Fixed Leading Edge Panel
611KB	Inboard Fixed Leading Edge Panel
611LB	Inboard Fixed Leading Edge Panel
611MB	Inboard Fixed Leading Edge Panel

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D. Prepare for Removal

SUBTASK 57-43-03-040-001



DO THE DEACTIVATION PROCEDURE TO PREVENT THE OPERATION OF THE THRUST REVERSER. THE ACCIDENTAL OPERATION OF THE THRUST REVERSER CAN CAUSE INJURIES TO PERSONNEL AND DAMAGE TO EQUIPMENT.

(1) To deactivate the thrust reversers, do this task: Thrust Reverser Deactivation For Ground Maintenance, TASK 78-31-00-040-806-H00

SUBTASK 57-43-03-490-001



MAKE SURE THAT THE DOWNLOCK PINS ARE INSTALLED IN ALL OF THE LANDING GEAR BEFORE YOU MOVE THE CONTROL LEVER. WITHOUT THE DOWNLOCK PINS, THE LANDING GEAR CAN RETRACT AND CAUSE INJURIES TO PERSONNEL AND DAMAGE TO EQUIPMENT.

(2) To install the downlock pins, do this task: Landing Gear Downlock Pins Installation, TASK 32-00-30-480-801.

SUBTASK 57-43-03-430-001



OBEY THE INSTALLATION PROCEDURE FOR THE DOOR SAFETY PINS. THE DOORS OPEN AND CLOSE QUICKLY. THE MOVEMENT OF THE DOORS CAN CAUSE INJURIES TO PERSONS AND DAMAGE TO EQUIPMENT.

(3) To install landing gear door safety pins, do this task: Landing Gear Door Safety Pins Installation, TASK 32-00-15-480-801.

SUBTASK 57-43-03-860-001

(4) To extend the leading edge slats, do this task: Extend the Leading Edge Slats, TASK 27-81-00-860-804.

SUBTASK 57-43-03-040-002



DO THE DEACTIVATION PROCEDURE FOR THE LEADING EDGE SLATS. THE SLATS RETRACT QUICKLY. THIS CAN CAUSE INJURIES TO PERSONNEL OR DAMAGE TO EQUIPMENT.

(5) To deactivate the leading edge slats, do this task: Leading Edge Slat - Deactivation, TASK 27-81-00-040-801.

SUBTASK 57-43-03-010-001

Number

- (6) Remove access panels to gain access and make slat door adjustments.
 - (a) Remove these access panels for the left wing leading edge slat:

Number	<u>Name/Location</u>
511CB	Inboard Fixed Leading Edge Panel
511EB	Inboard Fixed Leading Edge Panel
511FB	Inboard Fixed Leading Edge Panel
511GB	Inboard Fixed Leading Edge Panel
511JB	Inboard Fixed Leading Edge Panel
511KB	Inboard Fixed Leading Edge Panel
511LB	Inboard Fixed Leading Edge Panel

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(Continued)

<u>Number</u>	Name/Location
511MB	Inboard Fixed Leading Edge Panel

(b) Remove these access panels for the right wing leading edge slat:

<u>Number</u>	Name/Location
611CB	Inboard Fixed Leading Edge Panel
611EB	Inboard Fixed Leading Edge Panel
611FB	Inboard Fixed Leading Edge Panel
611GB	Inboard Fixed Leading Edge Panel
611JB	Inboard Fixed Leading Edge Panel
611KB	Inboard Fixed Leading Edge Panel
611LB	Inboard Fixed Leading Edge Panel
611MB	Inboard Fixed Leading Edge Panel

E. Inboard Leading Edge Slat Skirt Assembly Removal

SUBTASK 57-43-03-020-001

- (1) Do the steps to remove the leading edge slat skirt doors:
 - (a) Remove the nut [5], washer [3], spring [4], washer [3], and bolt [2].
 - (b) Remove the nut [6], washer [7], and bolt [1].
 - (c) Remove the leading edge skirt door [8].

SUBTASK 57-43-03-020-002

- (2) Do the steps to remove the leading edge slat skirt doors:
 - (a) Remove the nut [21], washer [19], spring [20], washer [19], and bolt [18].
 - (b) Remove the nut [23], washer [24], and bolt [22].
 - (c) Remove the leading edge slat skirt door [17].

SUBTASK 57-43-03-020-003

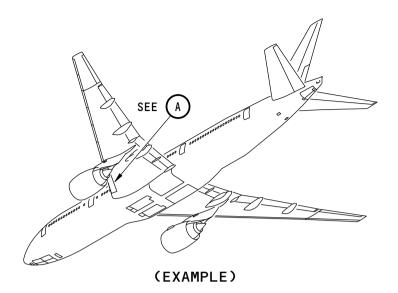
- (3) Do the steps to remove the leading edge slat skirt bracket.
 - (a) Remove the nut [9], washer [10], and bolt [12].
 - (b) Remove the nut [9], washer [10], and bolt [11].
 - (c) Remove the plate [15] and the leading edge slat skirt bracket [13].

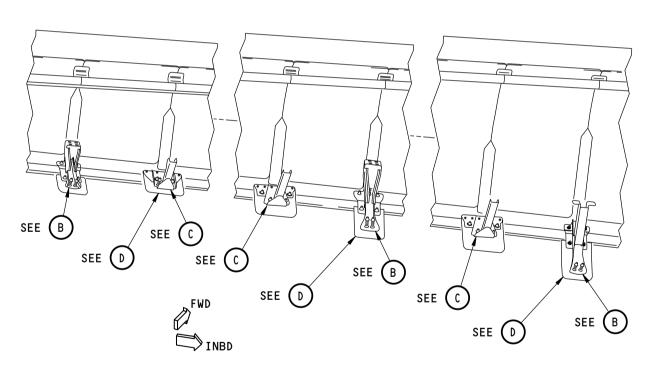


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(LEFT SIDE IS SHOWN, RIGHT SIDE IS OPPOSITE)



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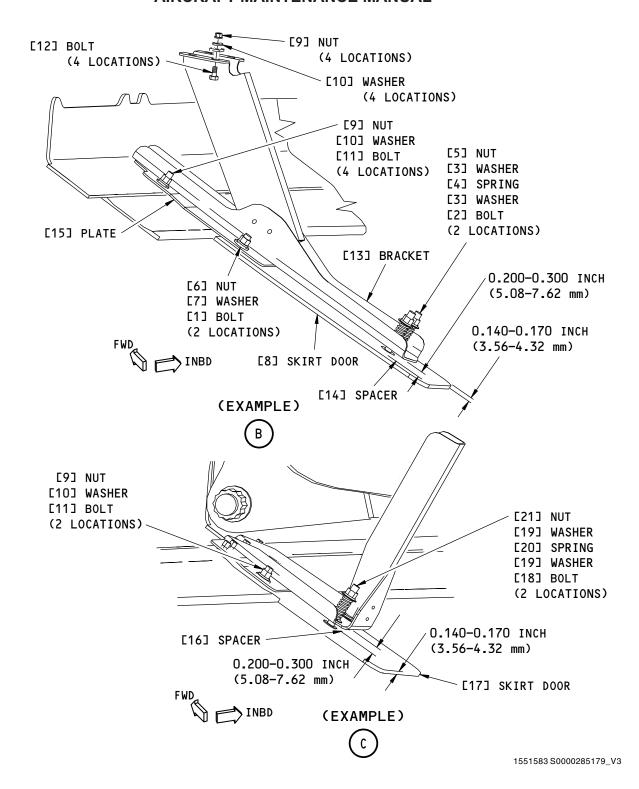
Inboard Leading Edge Slat Skirt Assembly Installation Figure 401/57-43-03-990-801 (Sheet 1 of 3)

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Inboard Leading Edge Slat Skirt Assembly Installation Figure 401/57-43-03-990-801 (Sheet 2 of 3)

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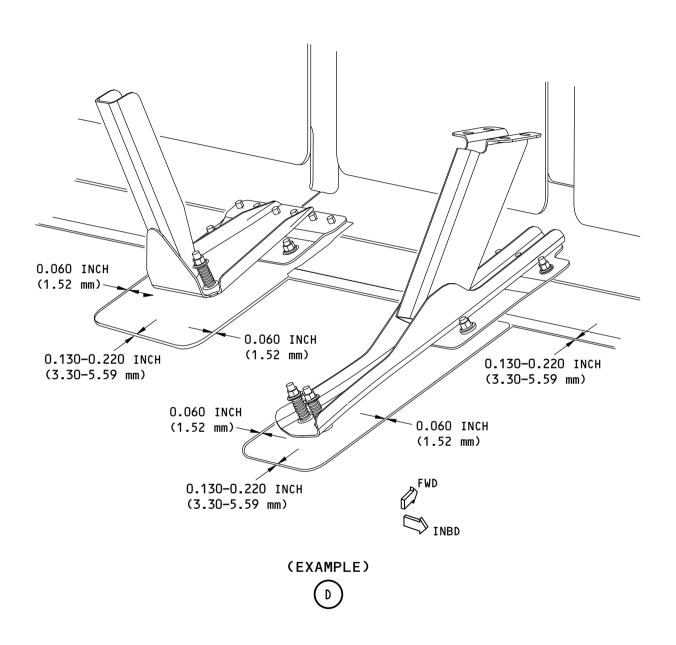
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Inboard Leading Edge Slat Skirt Assembly Installation Figure 401/57-43-03-990-801 (Sheet 3 of 3)

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TASK 57-43-03-400-801

3. Inboard Leading Edge Slat Skirt Assembly Installation

A. References

Reference	Title
27-81-00 P/B 501	LEADING EDGE SLAT SYSTEM - ADJUSTMENT/TEST
27-81-00-440-801	Leading Edge Slat Reactivation (P/B 201)
27-81-00-860-805	Retract the Leading Edge Slats (P/B 201)
27-81-10-400-801	Inboard Leading Edge Slat Installation (P/B 401)
32-00-15-080-801	Landing Gear Door Safety Pins Removal (P/B 201)
32-00-30-080-801	Landing Gear Downlock Pins Removal (P/B 201)
78-31-00-440-805-H00	Thrust Reverser Activation After Ground Maintenance (P/B 201)

B. Consumable Materials

Reference	Description	Specification
A00247	Sealant - Pressure And Environmental -	BMS5-95
	Chromate Type	

C. Access Panels

Number	Name/Location
511CB	Inboard Fixed Leading Edge Panel
511EB	Inboard Fixed Leading Edge Panel
511FB	Inboard Fixed Leading Edge Panel
511GB	Inboard Fixed Leading Edge Panel
511JB	Inboard Fixed Leading Edge Panel
511KB	Inboard Fixed Leading Edge Panel
511LB	Inboard Fixed Leading Edge Panel
511MB	Inboard Fixed Leading Edge Panel
611CB	Inboard Fixed Leading Edge Panel
611EB	Inboard Fixed Leading Edge Panel
611FB	Inboard Fixed Leading Edge Panel
611GB	Inboard Fixed Leading Edge Panel
611JB	Inboard Fixed Leading Edge Panel
611KB	Inboard Fixed Leading Edge Panel
611LB	Inboard Fixed Leading Edge Panel
611MB	Inboard Fixed Leading Edge Panel
1.1	- Pro- Edward Old Associated London Barton

D. Inboard Leading Edge Slat Skirt Assembly Installation

SUBTASK 57-43-03-420-001

- (1) Do the steps to install the leading edge slat skirt bracket.
 - (a) Place the plate [15] and the leading edge slat skirt bracket [13] in position.
 - (b) Install the bolt [12], washer [10], and nut [9] wet with sealant, A00247. Tighten the fasteners.
 - (c) Install the bolt [11], washer [10], and nut [9] wet with sealant, A00247. Tighten the fasteners.

SUBTASK 57-43-03-420-002

- (2) Do the steps to install the flexible slat skirt extension doors:
 - (a) Place the leading edge slat skirt door [8] in its position.

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- (b) Install the bolt [1], washer [7], and nut [6] wet with sealant, A00247. Do not tighten the fasteners.
- (c) Install the bolt [2], spacer [14], washer [3], spring [4], washer [3], and nut [6] wet with sealant, A00247. Do not tighten the fasteners.

SUBTASK 57-43-03-420-003

- (3) Do the steps to install the flexible slat skirt extension doors:
 - (a) Place the leading edge slat skirt door [17] in its position.
 - (b) Install the bolt [22], washer [24], and nut [23] wet with sealant, A00247. Do not tighten the fasteners.
 - (c) Install the nut [21], spacer [16], washer [19], spring [20], washer [19], and bolt [18] wet with sealant, A00247. Do not tighten the fasteners.

SUBTASK 57-43-03-820-001

- (4) Do the steps to align the flexible slat skirt extension doors:
 - (a) Set gaps of flexible slat skirt extension doors to adjacent panels as Figure 401.
 - (b) Tighten the fasteners.
 - NOTE: For detailed procedure to adjust the panels, refer to Inboard Leading Edge Slat Installation, TASK 27-81-10-400-801.
 - (c) Remove the spacers.

SUBTASK 57-43-03-410-001

(5) Replace these access panels:

<u>Number</u>	Name/Location
511CB	Inboard Fixed Leading Edge Panel
511EB	Inboard Fixed Leading Edge Panel
511FB	Inboard Fixed Leading Edge Panel
511GB	Inboard Fixed Leading Edge Panel
511JB	Inboard Fixed Leading Edge Panel
511KB	Inboard Fixed Leading Edge Panel
511LB	Inboard Fixed Leading Edge Panel
511MB	Inboard Fixed Leading Edge Panel
611CB	Inboard Fixed Leading Edge Panel
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611JB	Inboard Fixed Leading Edge Panel
611KB	Inboard Fixed Leading Edge Panel
611LB	Inboard Fixed Leading Edge Panel
611MB	Inboard Fixed Leading Edge Panel

SUBTASK 57-43-03-440-001

(6) To activate leading edge slats, do this task: Leading Edge Slat Reactivation, TASK 27-81-00-440-801.

SUBTASK 57-43-03-860-002

(7) To retract the leading edge slats, do this task: Retract the Leading Edge Slats, TASK 27-81-00-860-805.

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SUBTASK 57-43-03-090-001

(8) To remove leading gear safety pins, do this task: Landing Gear Door Safety Pins Removal, TASK 32-00-15-080-801.

SUBTASK 57-43-03-090-002

(9) To remove downlock pins, do this task: Landing Gear Downlock Pins Removal, TASK 32-00-30-080-801.

SUBTASK 57-43-03-440-002

(10) To active thrust reversers, do this task: Thrust Reverser Activation After Ground Maintenance, TASK 78-31-00-440-805-H00.

SUBTASK 57-43-03-710-001

(11) To do a test of the leading edge slats, do this task: LEADING EDGE SLAT SYSTEM -ADJUSTMENT/TEST, PAGEBLOCK 27-81-00/501

SUBTASK 57-43-03-840-001

(12) Return airplane to the serviceable condition.

——— END OF TASK ———

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- EFFECTIVITY -



AILERON CONDUCTING STRIP - REPAIRS

1. General

- A. This section contains one task:
 - (1) The repair of a static discharger conducting strip at the outboard aileron.
- B. The repair of the conducting strip is as follows:
 - (1) Remove the static dischargers,
 - (2) Remove the damaged conducting strip,
 - (3) Clean the new conducting strip,
 - (4) Bond the new conducting strip to the aileron,
 - (5) Install the static dischargers,
 - (6) Apply a smooth finish to the conducting strip.
- C. This procedure gives instructions to repair the items as follows:
 - (1) The aluminum conducting strip found on the outboard aileron trailing edge above the static dischargers.
 - (a) You must replace the conducting strip if more than half the width of the strip is damaged.
 - (2) The static discharger attaches to the outboard aileron.
 - (a) Static dischargers also attach to the conducting strip. The conducting strip is bonded with adhesive to the aileron surface. Then the conducting strip is electrically bonded to the aileron grounding strap.
 - (b) If the electrical bond of the ground strap to the conducting strip becomes weak, these conditions will follow:
 - 1) The static dischargers to the aileron can become electrically isolated.
 - 2) The static dischargers will not operate.
 - (c) If you find these conditions, you must repair the electrical bond of the ground strap.

TASK 57-51-03-300-801

2. Repair the Conducting Strip

(Figure 801)

A. References

Reference	Title
20-41-00-760-801	Electrical Bonding (P/B 201)
23-61-01-000-801	Static Discharger Removal (P/B 201)
23-61-01-200-802	Static Discharger Inspection/Check (P/B 201)
23-61-01-400-801	Static Discharger Installation (P/B 201)
SRM 51-70-04	Structural Repair Manual
SRM 51-70-10-2	Structural Repair 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.

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Reference	Description
COM-1550	Bonding Meters - 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 #: T477W Supplier: 01014 Opt Part #: M1B Supplier: 3AD17

C. Consumable Materials

Reference	Description	Specification
A01076	Adhesive - Synthetic Rubber	BAC5010 Type 93 (BMS5-95 Class B)
B01000	Solvent - General Cleaning Of Metal	
C00033	Coating - Protective Enamel, Flexibility Use	BMS10-60 Type II
C00175	Primer - Urethane Compatible, Corrosion Resistant (Less Than 1% Aromatic Amines)	BMS10-79 Type III
C00862	Coating - Chemical Conversion - Bonderite M-CR 600 Aero (Formerly Alodine 600)	
G00034	Cotton Wiper - Process Cleaning Absorbent Wiper (Cheesecloth, Gauze)	BMS15-5 Class A
G00251	Abrasive - Mat, Non-Woven, Non-Metallic	A-A-58054

D. Location Zones

Zone	Area
568	Left Wing Aileron
668	Right Wing Aileron

E. Remove the Conducting Strip

SUBTASK 57-51-03-020-001

(1) Trim the conducting strip at the ends of the damaged area (upper skin only), or near the base of each static discharger found at the ends of the damaged area (lower skin only).

SUBTASK 57-51-03-010-001

(2) Remove the static dischargers (lower skin only) if it is necessary, (TASK 23-61-01-000-801). SUBTASK 57-51-03-350-001

(3) Remove the damaged parts of the conducting strip.



DO NOT APPLY PRESSURE TO THE SURFACE OF THE AILERON. THIS MAY CAUSE DAMAGE TO THE COMPOSITE.

- (a) Scrape or peel strip from wing tip where possible. Use care to prevent damage.
- (b) Complete the removal of residue by sanding with abrasive mat, G00251.

F. Install the Conducting Strip

SUBTASK 57-51-03-350-002

(1) Make a new conducting strip from 6061-T4 bare sheet aluminum that is the same size and width of the removed strip.

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- (a) (Lower skin only) Trim to size to overlap the existing conducting strip under the static discharger locations.
- (b) Drill holes in the new strip to align with the static discharger base attach holes in the remaining strips (lower skin only).
- (c) (Upper skin only) Trim to size to fit between the existing conducting strip ends, leaving 0.25 inch (6.35 mm) at each end of the splice strip.
- (d) (Upper skin only) Trim two additional smaller splice strips about 2 inches (50.8 mm) long.

SUBTASK 57-51-03-110-001

(2) Before installation, prepare the surface of the new conducting strip:



DO NOT GET SOLVENTS IN YOUR MOUTH, OR YOUR EYES, OR ON YOUR SKIN. DO NOT BREATHE THE FUMES FROM SOLVENTS. SOLVENTS ARE HAZARDOUS MATERIALS. SOLVENTS MAY BE FLAMMABLE OR HARMFUL TO THE ENVIRONMENT. REFER TO PRODUCT MATERIAL SAFETY DATA SHEETS (MSDS) AND LOCAL REQUIREMENTS FOR PROPER HANDLING PROCEDURES.

- (a) Remove the finish by abrading areas where the existing strip will overlap with the repair strip (lower skin) or the smaller splice strips (upper skin).
- (b) Use the Phosphoric Acid Non-Tank Anodize (PANTA) method (preferred) or the BOEGEL sol-gel method (alternate) to prepare the conductive strip and the repair area for bonding (SRM 51-70-10-2, paragraphs 13 and 14 respectively).
- (c) Apply primer, C00175 to the entire strip except top and bottom surfaces of the areas of overlap with the existing conductive strip (lower skin only).

SUBTASK 57-51-03-420-001

(3) Bond the conducting strip:



DO NOT GET SOLVENTS IN YOUR MOUTH, OR YOUR EYES, OR ON YOUR SKIN. DO NOT BREATHE THE FUMES FROM SOLVENTS. SOLVENTS ARE HAZARDOUS MATERIALS. SOLVENTS MAY BE FLAMMABLE OR HARMFUL TO THE ENVIRONMENT. REFER TO PRODUCT MATERIAL SAFETY DATA SHEETS (MSDS) AND LOCAL REQUIREMENTS FOR PROPER HANDLING PROCEDURES.

- (a) Apply Series 80 solvent, B01000 to the area where you removed the conducting strip.
- (b) Clean the areas of the remaining conducting strip above the static discharger.
- (c) Use a clean cotton wiper, G00034 to absorb the solvent before it dries.
 - NOTE: To prevent contamination on the surfaces, permit no more than 1 hour span from the time you clean to the time you bond.
- (d) Apply a thin layer of adhesive, A01076 to the trailing edge of the aileron and to the conducting strip.
- (e) Do not apply adhesive, A01076 to the ends of the strip where it makes an overlap with the remaining strip.
 - NOTE: New and remaining strips must have full electrical contact at areas that make an overlap
- (f) Remove the unwanted adhesive with a cotton wiper, G00034 lightly moist with a Series 80 solvent, B01000.

NOTE: Do not permit the solvent to get in the area that you bond.

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- (g) Apply pressure and dry the bond, (SRM 51-70-04).
- (h) (Upper skin only) Apply the two smaller aluminum strips over the edges of the existing conducting strip and the conducting strip repair splice, and hold them in place.

SUBTASK 57-51-03-410-001

- (4) To complete the static discharger installation, you must obey (TASK 23-61-01-400-801) and the instructions that follow:
 - (a) Apply sealant if it is necessary to fill the space where the new conducting strip makes an overlap with the remaining strip.
 - (b) Use the intrinsically safe approved bonding meter, COM-1550 to check the resistance between the discharger base and the conducting strip, (TASK 20-41-00-760-801).
 - (c) To make sure that there is electrical contact between the strips, measure to the remaining conductive strip and to the new conducting strip.
 - NOTE: The resistance must be no more than 0.10 ohms.
 - (d) Measure the conductivity between the remaining conducting strip ends (Upper skin only).
 - (e) Measure the resistance between the rod and the base of the static dischargers that you installed, do this task: Static Discharger Inspection/Check, TASK 23-61-01-200-802.

G. Conducting Strip Finish

SUBTASK 57-51-03-140-001

(1) Use abrasive mat, G00251 to abrade the conducting strip surface.

SUBTASK 57-51-03-160-003

(2) Wash and make sure the conducting strip surface is clean.

SUBTASK 57-51-03-370-001

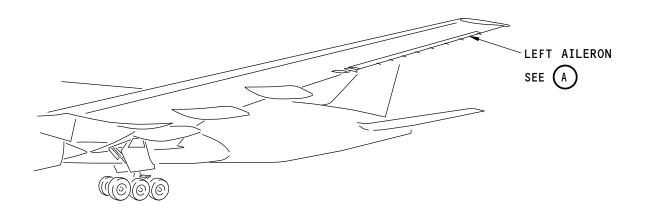
- (3) Apply Bonderite M-CR 600 Aero coating, C00862 to bare metal surface of conducting strip.
- SUBTASK 57-51-03-370-002
- (4) Apply primer, C00175 to any exposed conductive strips.

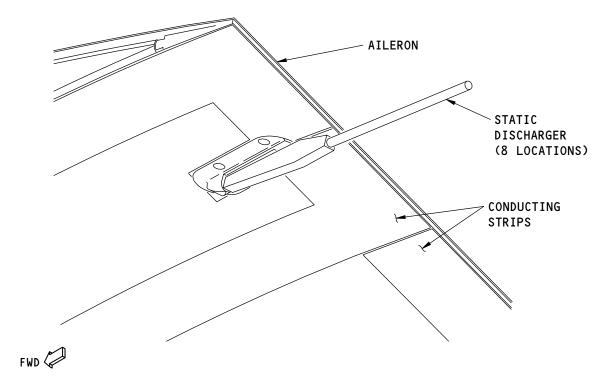
SUBTASK 57-51-03-370-003

(5) Apply coating, C00033 to cover the primer.

——— END OF TASK ———







LEFT AILERON (RIGHT AILERON IS OPPOSITE)



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Aileron Conducting Strip Repair Figure 801/57-51-03-990-801

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WING TRAILING EDGE PANELS - REMOVAL/INSTALLATION

1. General

- A. This procedure has these tasks:
 - (1) Removal of the wing trailing edge panels.
 - (2) Installation of the wing trailing edge panels.
- B. For missing fastener requirements for the wing trailing edge panels, see SRM 51-10-08.

TASK 57-51-10-000-801

2. Wing Trailing Edge Panel Removal

(Figure 401, Figure 402, Figure 403, Figure 404, Figure 405, Figure 406)

A. References

Reference	Title
29-11-00-860-808	Main Hydraulic System Power Removal (P/B 201)

B. Location Zones

Zone	Area
550	Subzone 550 - Wing Trailing Edge - Aft of Rear Spar
560	Subzone 560 - Wing Trailing Edge - Aft of Rear Spar - Outboard of Flaperon
650	Subzone 650 - Wing Trailing Edge - Aft of Rear Spar
660	Subzone 660 - Wing Trailing Edge - Aft of Rear Spar - Outboard of Flaperon

C. Procedure

SUBTASK 57-51-10-860-001



YOU MUST PREVENT ALL POSSIBLE OPERATION OF THE AILERONS, SPOILERS, AND FLAPS WHEN YOU WORK ON OR NEAR THE WING TRAILING EDGE. THESE FLIGHT CONTROLS MOVE QUICKLY AND WITH FORCE AND CAN CAUSE INJURY.

- (1) Prevent all possible operation of the ailerons, spoilers, and flaps as follows:
 - (a) Move these FLT CONTROL HYD VALVE POWER switches on the pilot's overhead panel to the SHUT OFF position:
 - 1) WING, L
 - 2) WING, C
 - 3) WING, R
 - (b) Make sure the amber VALVE CLOSED lights come on.
 - (c) Do this task: Main Hydraulic System Power Removal, TASK 29-11-00-860-808.

SUBTASK 57-51-10-020-001

- (2) Remove the hinged trailing edge panels (Figure 401) as follows:
 - (a) Open the panel.
 - (b) Remove the cotter pin from each hinge pin.
 - (c) Remove the washer from each hinge pin.
 - (d) Remove each hinge pin.
 - (e) Remove the panel.

ARO ALL



SUBTASK 57-51-10-020-002

- (3) Remove the trailing edge flaperon door (Figure 402) as follows:
 - (a) Pull the door away from the flap.
 - (b) Remove the retaining ring from one side of the pin.
 - (c) Remove the washer.
 - (d) Hold the door while you remove the pin.
 - (e) Carefully pull the door to disengage the ends of the springs from the retainer.

SUBTASK 57-51-10-020-003

- (4) Remove the outboard access panel for the main landing gear (Figure 403) as follows:
 - (a) Open the access panel.
 - (b) Disconnect the electrical jumper between the panel and the wing.
 - (c) Remove the cotter pin from each hinge pin.
 - (d) Remove the washer from each hinge pin.
 - (e) Remove the hinge pins.
 - (f) Remove the access panel.

SUBTASK 57-51-10-020-004

- (5) Remove the upper and lower trailing edge seals (Figure 404, Figure 405) as follows:
 - (a) If it is necessary, move the flight control surface to get access to the applicable seal.
 - (b) Remove the fasteners.
 - (c) Remove the locknut strip.
 - (d) Remove the seal retainer if it is installed.
 - (e) Remove the seal.



TASK 57-51-10-400-801

3. Wing Trailing Edge Panel Installation

(Figure 401, Figure 402, Figure 403, Figure 404, Figure 405, Figure 406)

A. Consumable Materials

Reference	Description	Specification
C00766	Primer - Nonchromated Primer For	BMS10-103 Type I
	Composites	

B. Location Zones

Zone	Area
550	Subzone 550 - Wing Trailing Edge - Aft of Rear Spar
560	Subzone 560 - Wing Trailing Edge - Aft of Rear Spar - Outboard of Flaperon
650	Subzone 650 - Wing Trailing Edge - Aft of Rear Spar
660	Subzone 660 - Wing Trailing Edge - Aft of Rear Spar - Outboard of Flaperon

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C. Procedure

SUBTASK 57-51-10-860-002



YOU MUST PREVENT ALL POSSIBLE OPERATION OF THE AILERONS, SPOILERS, AND FLAPS WHEN YOU WORK ON OR NEAR THE WING TRAILING EDGE. THESE FLIGHT CONTROLS MOVE QUICKLY AND WITH FORCE AND CAN CAUSE INJURY.

(1) Make sure the ailerons, spoilers, and flaps will not operate.

SUBTASK 57-51-10-020-005

- (2) Install the hinged trailing edge panels (Figure 401) as follows:
 - (a) If the panel is a new or a replacement panel, trim the aft and outboard edges of the panel as required then seal the edge with primer, C00766.
 - (b) Hold the panel in its correct position on the wing.
 - (c) Install the hinge pins.
 - (d) Install the washer on each hinge pin.
 - (e) Install the cotter pin on each hinge pin.
 - (f) Make sure the panel opens and closes freely.
 - (g) Close the panel.
 - (h) Make sure the flushness around the panel is -0.02 to 0.02 inch.

SUBTASK 57-51-10-020-006

- (3) Install the trailing edge flaperon door (Figure 402) as follows:
 - (a) Put the ends of the springs into the retainer on the intercostal.

NOTE: Do not move the spring more than 50 degrees from its free position during installation.

- (b) Hold the door in its position on the trailing edge.
- (c) Install the hinge pin.
- (d) Install the washer on the pin.
- (e) Install the retaining ring.
- (f) Make sure the pin is attached correctly with a washer and retaining ring on each side.
- (g) Make sure the door moves freely.
- (h) Make sure the spring holds the door seal against the flap.

SUBTASK 57-51-10-020-007

- (4) Install the outboard access panel for the main landing gear (Figure 403) as follows:
 - (a) If the panel is a new or a replacement panel, trim the aft and outboard edges of the panel as required then seal the edge with primer, C00766.
 - (b) Hold the access panel in its correct position on the wing.
 - (c) Install the bolt through each hinge.
 - (d) Put a washer on each bolt.
 - (e) Install a cotter pin on each bolt.
 - (f) Connect the electrical jumper between the door and the wing.
 - (g) Make sure the door opens and closes freely.

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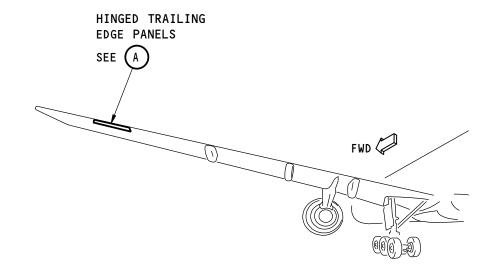
SUBTASK 57-51-10-020-008

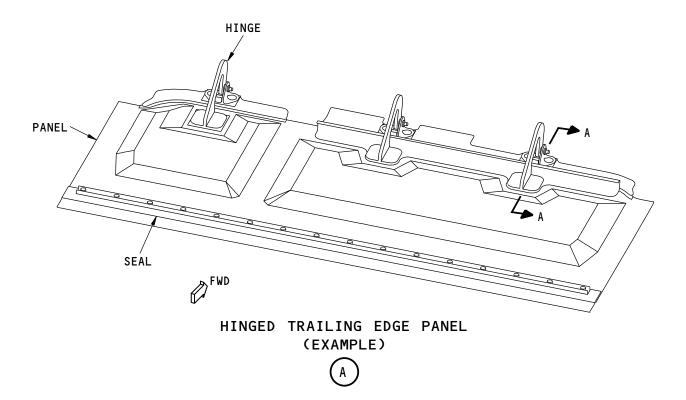
- (5) Install the upper and lower trailing edge seals (Figure 404, Figure 405) as follows:
 - (a) If it is necessary, move the flight control surface to get access to the applicable seal.
 - (b) Put these parts in their correct position:
 - 1) seal must be compressed. (Figure 405)
 - 2) seal retainer (if it is installed)
 - 3) locknut strip.
 - (c) Install the fasteners.

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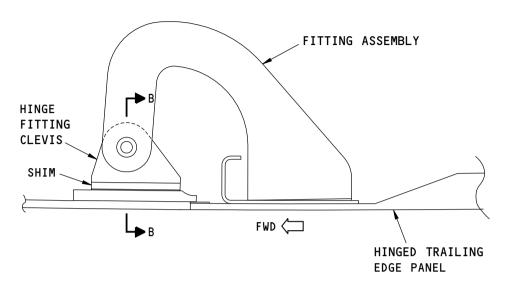
Hinged Trailing Edge Panels Installation Figure 401/57-51-10-990-801 (Sheet 1 of 2)

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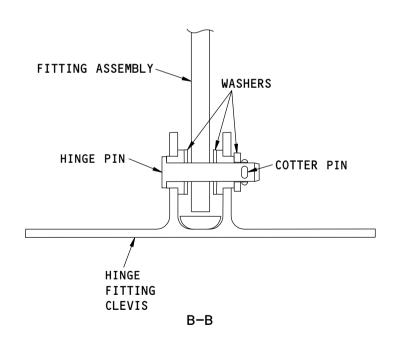
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A-A



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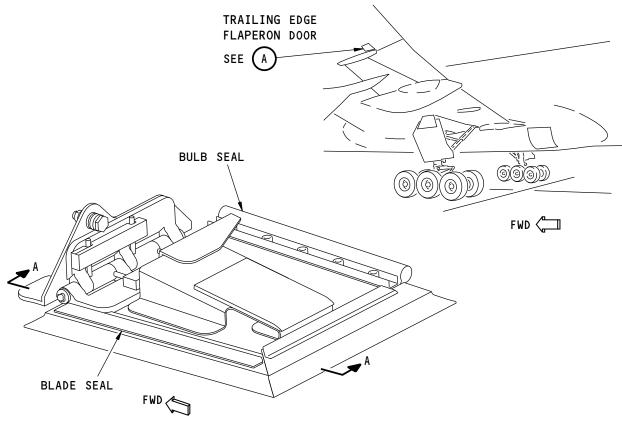
Hinged Trailing Edge Panels Installation Figure 401/57-51-10-990-801 (Sheet 2 of 2)



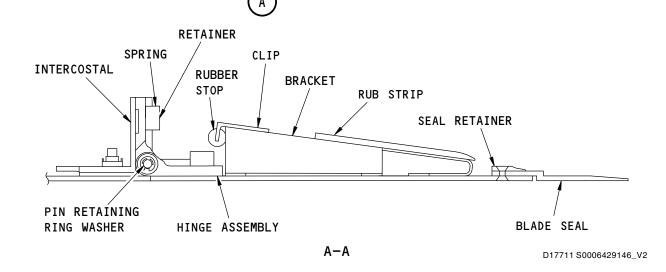
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LEFT TRAILING EDGE FLAPERON DOOR (RIGHT TRAILING EDGE FLAPERON DOOR IS OPPOSITE)



Trailing Edge Flaperon Door Installation Figure 402/57-51-10-990-802

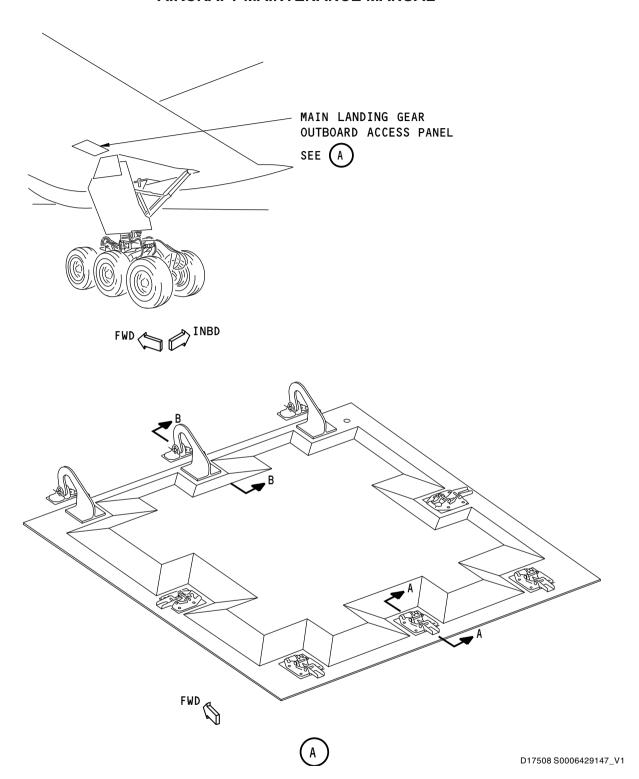
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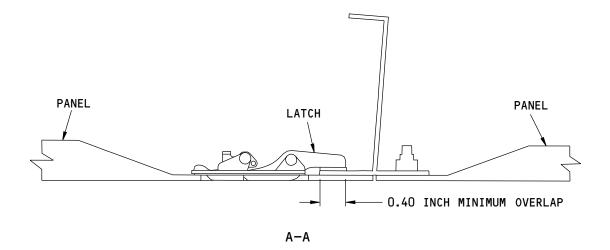
Main Landing Gear Outboard Access Panel Installation Figure 403/57-51-10-990-803 (Sheet 1 of 2)

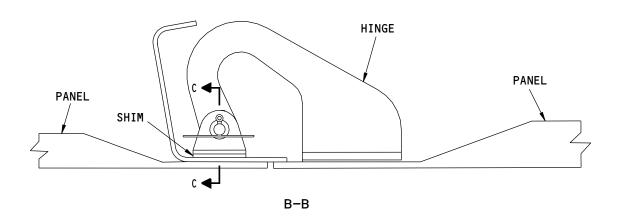
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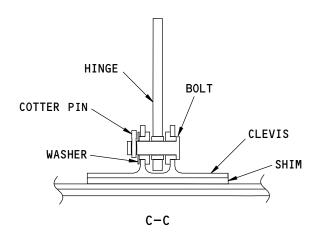
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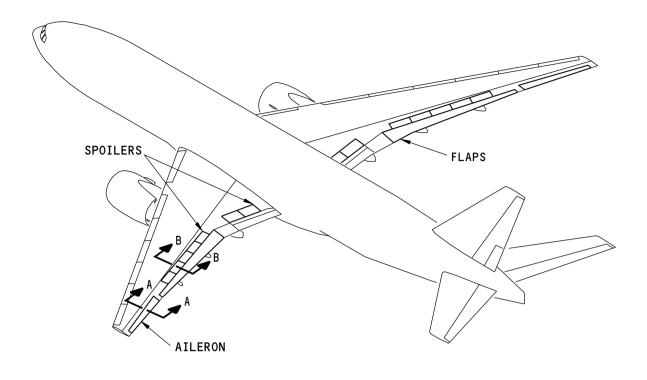
Main Landing Gear Outboard Access Panel Installation Figure 403/57-51-10-990-803 (Sheet 2 of 2)

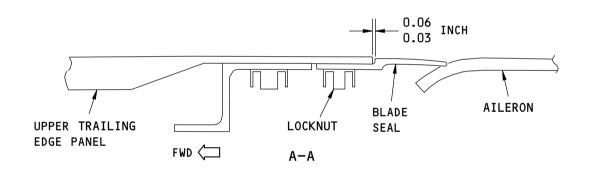


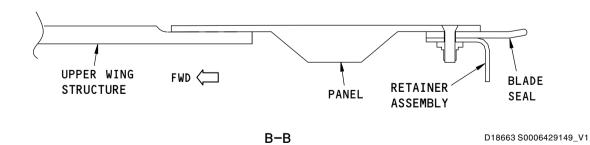
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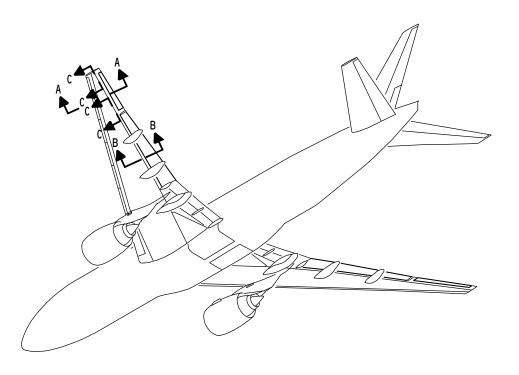
Upper Trailing Edge Seals Figure 404/57-51-10-990-804

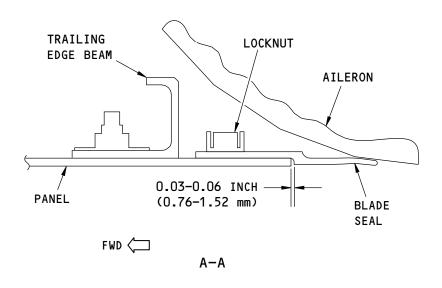
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Lower Trailing Edge Seals Figure 405/57-51-10-990-805 (Sheet 1 of 2)

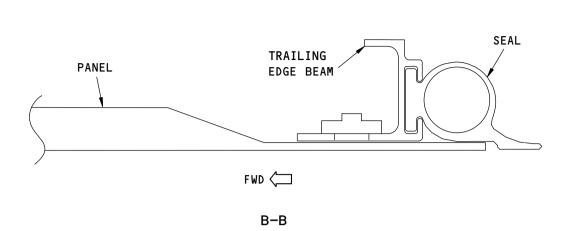
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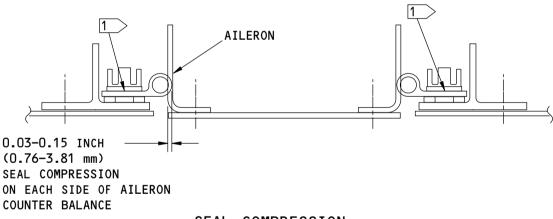
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SEAL COMPRESSION C-C

TO OBTAIN BULB SEAL COMPRESSION SLOT ATTACH HOLES IN BULB SEAL AN ADDITIONAL 0.10 INCH (2.54 mm) TOWARDS OR AWAY FROM BULB SEAL AND RELOCATE SEAL.

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Lower Trailing Edge Seals Figure 405/57-51-10-990-805 (Sheet 2 of 2)

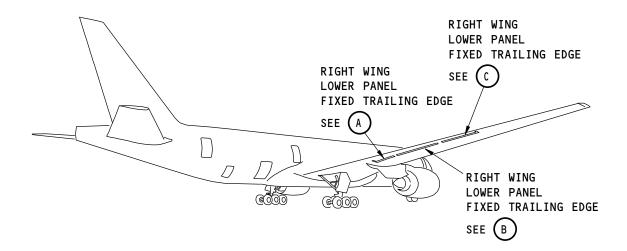
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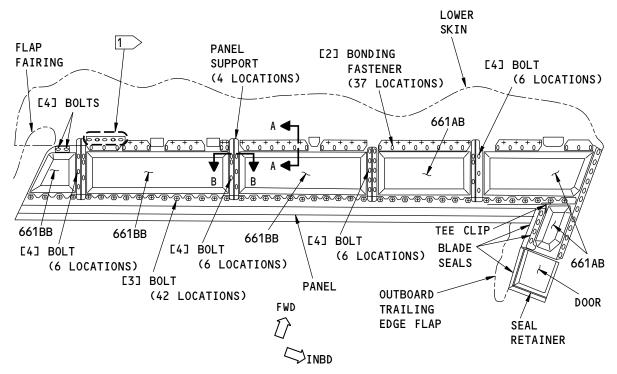
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RIGHT WING LOWER PANEL FIXED TRAILING EDGE (BOTTOM VIEW)



1 DO NOT REMOVE.

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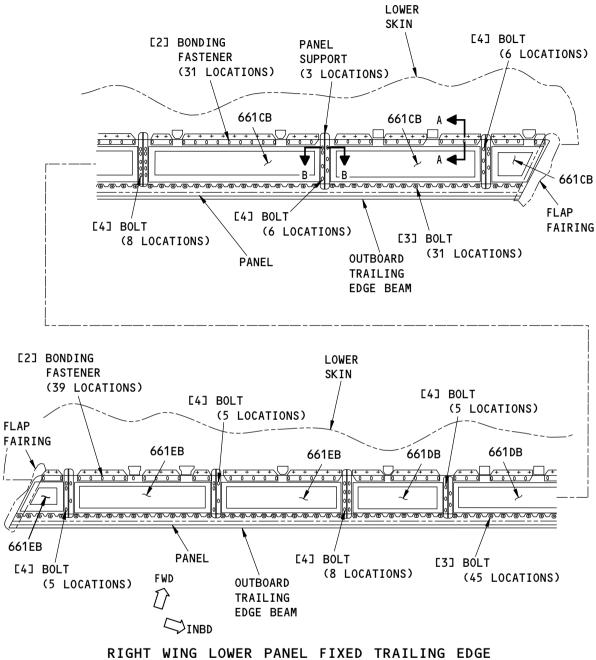
Midspar Lower Trailing Edge Panels Installation Figure 406/57-51-10-990-809 (Sheet 1 of 3)

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(BOTTOM VIEW)



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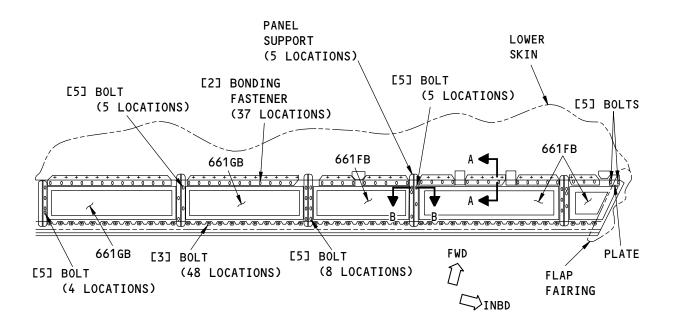
Midspar Lower Trailing Edge Panels Installation Figure 406/57-51-10-990-809 (Sheet 2 of 3)

· EFFECTIVITY **ARO ALL** D633W101-ARO

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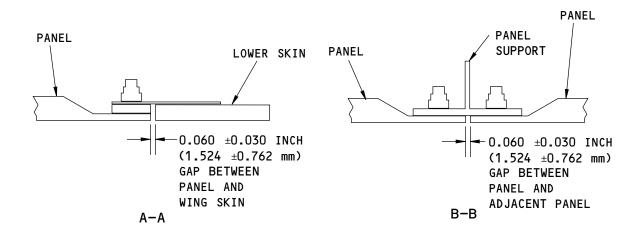
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RIGHT WING LOWER PANEL FIXED TRAILING EDGE (BOTTOM VIEW)





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Midspar Lower Trailing Edge Panels Installation Figure 406/57-51-10-990-809 (Sheet 3 of 3)

EFFECTIVITY

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INBOARD FIXED TRAILING EDGE PANELS - ADJUSTMENT/TEST

1. General

- A. This procedure has one task:
 - (1) The adjustment of the upper and lower inboard fixed trailing edge panels.
- B. This procedure has dimensions for the adjustment of the inboard fixed trailing edge panels in these load conditions:
 - (1) Airplane at Operational Empty Weight (OEW) on body and wing jacks, with or without engines. NOTE: This is the most accurate condition for adjustment.
 - (2) Airplane at OEW on body jacks, with or without engines.
 - (3) Airplane at OEW weight on wheels, no fuel, with or without engines.
 - (4) On the landing gear with 100,000 pounds of fuel.
 - NOTE: If the airplane has a different amount of fuel, you can interpolate/extrapolate with the no-fuel and 100K fuel conditions.
- C. If you adjust or remove a tie rod other than the tie rods mentioned in this procedure (the diagonal tie rods and the tie rods A, B, C, and D), the adjustment of the panels can be more difficult.

TASK 57-51-10-000-802

2. Inboard Fixed Trailing Edge Panels Adjustment

(Figure 501)

(Table 501, Table 502)

A. References

Reference	Title
09-11-00-580-801	Maintenance Towing (P/B 201)
27-51-00-040-801	Trailing Edge Flap Deactivation (P/B 201)
27-51-00-440-801	Trailing Edge Flap Reactivation (P/B 201)
27-51-00-860-804	Extend the Trailing Edge Flaps (P/B 201)
27-51-00-860-805	Retract the Trailing Edge Flaps (P/B 201)
27-61-00-040-803	Spoiler Deactivation (With the Spoilers Down) (P/B 201)
27-61-00-440-801	Spoiler Activation (P/B 201)
32-00-15-080-801	Landing Gear Door Safety Pins Removal (P/B 201)
32-00-15-480-801	Landing Gear Door Safety Pins Installation (P/B 201)
32-00-30-080-801	Landing Gear Downlock Pins Removal (P/B 201)
32-00-30-480-801	Landing Gear Downlock Pins Installation (P/B 201)

B. Location Zones

Zone	Area
552	Landing Gear Support Beam & Rear Spar to Wing Trailing Edge - Left Wing
652	Landing Gear Support Beam & Rear Spar to Wing Trailing Edge - Right Wing

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C. Prepare for the Adjustment Procedure

SUBTASK 57-51-10-820-001



MAKE SURE THAT NO PRELOADS EXIST IN THE MAIN LANDING GEAR (MLG). LATERAL AND/OR TORSIONAL PRELOADS IN THE MLG AFFECT RIGGING MEASUREMENTS. PRELOADS IN THE MLG WILL GIVE WRONG MISFAIR MEASUREMENTS. IF MISFAIR MEASUREMENTS ARE INCORRECT, DAMAGE TO THE AIRPLANE MAY OCCUR WHEN YOU EXTEND OR RETRACT THE FLAPS.

(1) If the airplane is on its landing gear, tow the airplane forward and aft in a straight line for a minimum of 20 feet (6.1 meters) to remove preloads from its landing gear, (TASK 09-11-00-580-801).

SUBTASK 57-51-10-480-001



MAKE SURE THE DOWNLOCK PINS ARE INSTALLED ON ALL THE LANDING GEAR. WITHOUT THE DOWNLOCK PINS, THE LANDING GEAR COULD RETRACT AND CAUSE INJURIES TO PERSONS AND DAMAGE TO EQUIPMENT.

(2) If the downlock pins are not installed on the main and nose landing gear, do this task: Landing Gear Downlock Pins Installation, TASK 32-00-30-480-801.

SUBTASK 57-51-10-480-002



OBEY THE INSTALLATION PROCEDURE FOR THE DOOR GROUND SAFETY PINS. THE DOORS OPEN AND CLOSE QUICKLY. THE MOVEMENT OF THE DOORS CAN CAUSE INJURIES TO PERSONS OR DAMAGE TO EQUIPMENT.

(3) Do this task: Landing Gear Door Safety Pins Installation, TASK 32-00-15-480-801.

SUBTASK 57-51-10-820-002

(4) Do this task: Spoiler Deactivation (With the Spoilers Down), TASK 27-61-00-040-803.

SUBTASK 57-51-10-820-003

(5) Make sure that the airplane has its flaps fully retracted, (TASK 27-51-00-860-805).

SUBTASK 57-51-10-040-001



DO THE TRAILING EDGE FLAP DEACTIVATION PROCEDURE BEFORE YOU DO WORK NEAR THE FLAP SYSTEM. WITH THE FLAPS ACTIVATED, THE FLAPS CAN MOVE AND CAUSE INJURY TO PERSONS OR DAMAGE TO EQUIPMENT.

(6) Do this task: Trailing Edge Flap Deactivation, TASK 27-51-00-040-801.

D. Procedure

SUBTASK 57-51-10-200-001

- (1) Measure the misfairs between the fixed upper panel and the flap upper surface at two locations, (Figure 501), (Misfair A and Misfair C).
 - (a) Make sure that you are using the correct misfair range for the airplane's weight status.

 NOTE: See the notes in the table for more information on "Airplane Weight Status".

SUBTASK 57-51-10-200-002

(2) Measure the misfairs between the fixed lower panel and the flap lower surface at two locations, (Figure 501), (Misfair B and Misfair D).

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Table 501/57-51-10-993-807 Misfair Limits - Inboard Fixed Trailing Edge Panels

AIRPLANE WEIGHT STATUS *[1]	MISFAIR LIMITS (INCHES)			
AIRPLANE WEIGHT STATUS 153	MISFAIR A	MISFAIR B *[2]	MISFAIR C	MISFAIR D *[2]
AJ (Airplane on Jacks)	0.24 ±0.04	0.00 ±0.03	0.24 ±0.04	0.00 ±0.03
AJNG (Airplane on Jacks, No Landing Gear)	0.24 ±0.04	0.00 ±0.03	0.24 ±0.04	0.00 ±0.03
BJ (Body Jacks)	0.28 ±0.04	-0.02 ±0.03	0.27 ±0.04	0.00 ±0.03
OEW (Operational Empty Weight) *[3]	0.38 ±0.04	0.17 ±0.03	0.29 ±0.04	0.12 ±0.03
SFLF (Standard Flight Load Fuel) *[3]	0.44 ±0.04	0.22 ±0.03	0.31 ±0.04	0.15 ±0.03

- *[1] Definitions: AJ = Airplane at OEW on wing and body jacks, with or without engines. AJNG = Airplane at OEW on wing and body jacks, without landing gear. BJ = Airplane at OEW only body jacks, with or without engines. OEW = Operational Empty Weight. Weight on wheels, no fuel, with or with engines. SFLF = Standard Flight Load Fuel. OEW with 100,000 pounds of fuel: 50,000 pounds of fuel in each of the Main Tanks of the wings. The amount of fuel in the center tank does not affect the misfair limits in the above table. If the airplane has a different amount of fuel in the Main Tanks, interpolate or extrapolate from the OEW and 100,000 pound fuel conditions to find the misfair limits. The fuel load in the left Main Tank should be equal to the fuel load in the right Main Tank while you measure the misfair limits.
- *[2] A negative value is when the flap is higher than the lower fixed panel. A positive value is when the flap is in the airstream.
- *[3] CAUTION: LATERAL AND/OR TORSIONAL PRELOADS IN THE MAIN LANDING GEAR AFFECT RIGGING MEASUREMENTS. PRIOR TO RIGGING ON GEAR, RELIEVE PRELOAD BY TOWING THE AIRPLANE BACK AND FORTH IN A STRAIGHT LINE FOR A MINIMUM OF 20 FEET (6.1 METERS).

SUBTASK 57-51-10-820-004

- (3) If the misfairs are not in the range of the limits shown in (Table 501), adjust the panel as follows:
 - (a) Do this task: Trailing Edge Flap Reactivation, TASK 27-51-00-440-801.
 - (b) To extend the inboard trailing edge flaps, do this task: Extend the Trailing Edge Flaps, TASK 27-51-00-860-804.

NOTE: Only extend the flaps as necessary to get access to the tie rods.



DO THE TRAILING EDGE FLAP DEACTIVATION PROCEDURE BEFORE YOU DO WORK NEAR THE FLAP SYSTEM. WITH THE FLAPS ACTIVATED, THE FLAPS CAN MOVE AND CAUSE INJURY TO PERSONS OR DAMAGE TO EQUIPMENT.

- (c) Do this task: Trailing Edge Flap Deactivation, TASK 27-51-00-040-801.
- (d) Remove the two diagonal tie rods shown on Sheet 1 of (Figure 501).
 - 1) Put a label on each diagonal tie rod to show its position for installation.
- (e) Adjust the applicable tie rods A, B, C, and D for the upper and lower panels to their reference lengths as shown in (Table 502).

NOTE: If you adjust a tie rod other than tie rods "A", "B", "C", or "D", the adjustment of the panels will be more difficult.

NOTE: Diagonal tie rods do not need a reference length for this procedure.

- 1) Loosen the locking nuts on the ends of the tie rods.
- 2) Adjust the length of the tie rods by turning the rods with your hands.
- 3) Tighten the locking nuts on the tie rods.

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4) After adjustment of a tie rod, the threads must be visible in the entire inspection hole, (Figure 501) (Detail B).

Table 502/57-51-10-993-808 Reference Lengths of Tie Rods

Tie Rod	Reference Length (Detail B, Figure 501)
A	5.02 INCH (128 MM)
В	3.06 INCH (77.7 MM)
С	5.12 INCH (130 MM)
D	8.43 INCH (214 MM)

- (f) Do this task: Trailing Edge Flap Reactivation, TASK 27-51-00-440-801.
- (g) Retract the inboard trailing edge flaps fully.



DO THE TRAILING EDGE FLAP DEACTIVATION PROCEDURE BEFORE YOU DO WORK NEAR THE FLAP SYSTEM. WITH THE FLAPS ACTIVATED, THE FLAPS CAN MOVE AND CAUSE INJURY TO PERSONS OR DAMAGE TO EQUIPMENT.

- (h) Do this task: Trailing Edge Flap Deactivation, TASK 27-51-00-040-801.
- (i) Measure the misfair between the fixed upper panel and the flap upper surface (Misfair A and Misfair C), see (Figure 501).
- (j) Measure the misfair between the fixed lower panel and the flap lower surface (Misfair B and Misfair D), see (Figure 501).
- (k) Do this task: Trailing Edge Flap Reactivation, TASK 27-51-00-440-801.
- (I) Extend the inboard trailing edge flaps.

NOTE: Only extend the flaps as needed to get access to the tie rods.



DO THE TRAILING EDGE FLAP DEACTIVATION PROCEDURE BEFORE YOU DO WORK NEAR THE FLAP SYSTEM. WITH THE FLAPS ACTIVATED, THE FLAPS CAN MOVE AND CAUSE INJURY TO PERSONS OR DAMAGE TO EQUIPMENT.

- (m) Do this task: Trailing Edge Flap Deactivation, TASK 27-51-00-040-801.
- (n) Adjust the tie rods as needed to get the misfair between the inboard fixed upper panel and the flap upper surface in the range shown on (Table 501).
 - 1) Loosen the locking nuts on the ends of the tie rods.
 - 2) Adjust the length of the tie rods by turning the rods with your hands.
 - 3) Tighten the locking nuts on the tie rods.
 - 4) After adjustment of a tie rod, the threads must be visible in the entire inspection hole, (Figure 501) (Detail B).
- (o) Adjust the tie rods as needed to get the misfair between the inboard fixed lower panel and the flap lower surface in the range shown on (Table 501).

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- Loosen the locking nuts on the ends of the tie rods.
- Adjust the length of the tie rods by turning the rods with your hands.
- Tighten the locking nuts on the tie rods.
- After adjustment of a tie rod, the threads must be visible in the entire inspection hole, (Figure 501) (Detail B).
- Until you get in the needed misfair ranges (Table 501), continue to adjust the tie rods.
 - 1) Do this task: Trailing Edge Flap Reactivation, TASK 27-51-00-440-801.
 - Retract the flaps fully, do this task: Retract the Trailing Edge Flaps, TASK 27-51-00-860-805.



DO THE TRAILING EDGE FLAP DEACTIVATION PROCEDURE BEFORE YOU DO WORK NEAR THE FLAP SYSTEM. WITH THE FLAPS ACTIVATED, THE FLAPS CAN MOVE AND CAUSE INJURY WARNING TO PERSONS OR DAMAGE TO EQUIPMENT.

- Do this task: Trailing Edge Flap Deactivation, TASK 27-51-00-040-801.
- 4) Measure the misfairs.
- Do this task: Trailing Edge Flap Reactivation, TASK 27-51-00-440-801.
- Extend the flaps.

NOTE: Only extend the flaps as needed to get access to the tie rods.



DO THE TRAILING EDGE FLAP DEACTIVATION PROCEDURE BEFORE YOU DO WORK NEAR THE FLAP SYSTEM. WITH THE FLAPS ACTIVATED, THE FLAPS CAN MOVE AND CAUSE INJURY WARNING TO PERSONS OR DAMAGE TO EQUIPMENT.

- Do this task: Trailing Edge Flap Deactivation, TASK 27-51-00-040-801.
- Adjust the tie rods.
 - a) Loosen the locking nuts on the ends of the tie rods.
 - b) Adjust the length of the tie rods by turning the rods with your hands.
 - c) Tighten the locking nuts on the tie rods.
 - d) After adjustment of a tie rod, the threads must be visible in the entire inspection hole, (Figure 501) (Detail B).
- When you get the misfairs needed at the upper and lower panels, install the two diagonal (q) tie rods.

NOTE: Reference lengths are not needed. Install the diagonal tie rods to provide transverse support to the panel support structure.

- 1) After the adjustment, the threads must be visible in the entire inspection hole.
- Tighten the nuts that attach the diagonal tie rods 50 to 80 lb-in (5.6 to 9.0 Nm).
- 3) Install lockwire on the nuts.
- (r) Do this task: Trailing Edge Flap Reactivation, TASK 27-51-00-440-801.
- (s) Make sure that the misfairs are in the limits, (Table 501).

E. Put the Airplane Back to its Usual Condition

SUBTASK 57-51-10-840-001

(1) If you will not do work in this area, do the following:

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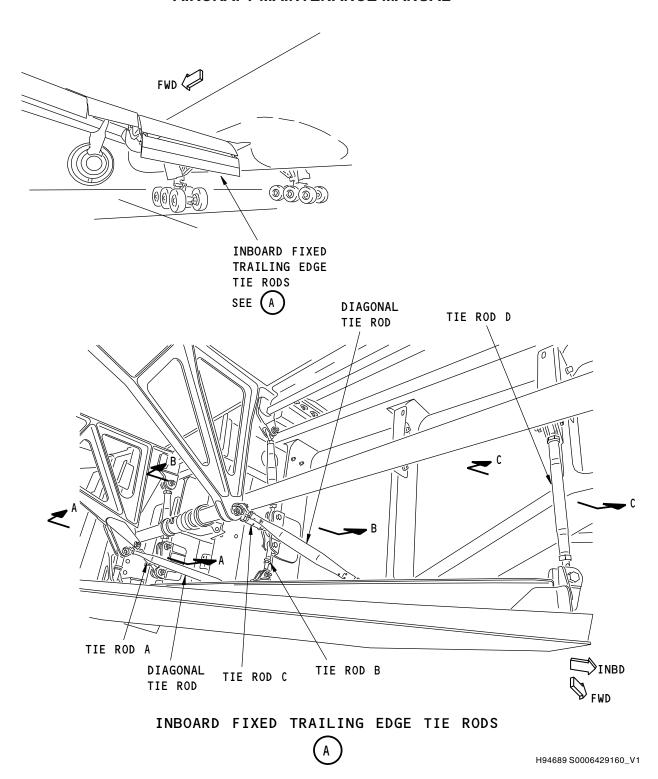


- (a) Do this task: Spoiler Activation, TASK 27-61-00-440-801.
- (b) Do this task: Trailing Edge Flap Reactivation, TASK 27-51-00-440-801.
- (c) Do this task: Landing Gear Door Safety Pins Removal, TASK 32-00-15-080-801.
- (d) Do this task: Landing Gear Downlock Pins Removal, TASK 32-00-30-080-801.

----- END OF TASK -----

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Inboard Fixed Trailing Edge Panels Adjustment Figure 501/57-51-10-990-806 (Sheet 1 of 3)

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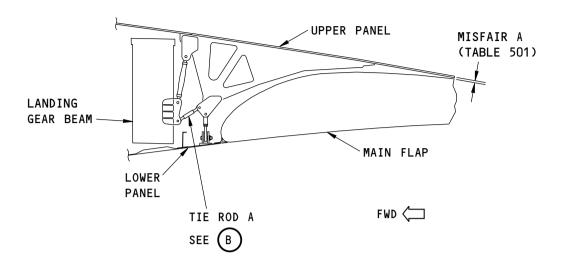
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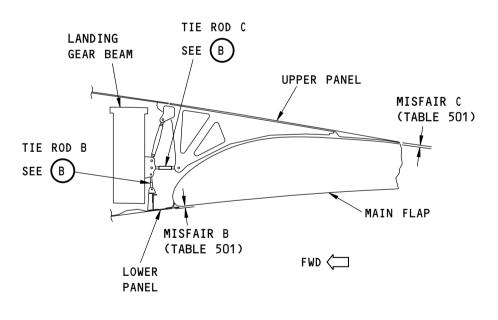
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A-A



B-B

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Inboard Fixed Trailing Edge Panels Adjustment Figure 501/57-51-10-990-806 (Sheet 2 of 3)

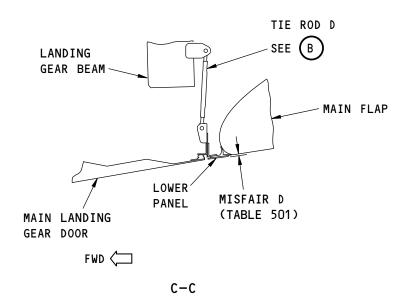
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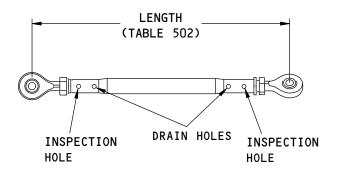
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TIE ROD
(EXAMPLE)

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Inboard Fixed Trailing Edge Panels Adjustment Figure 501/57-51-10-990-806 (Sheet 3 of 3)

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UNDERWING FITTING INNER BOLTS - REMOVAL/INSTALLATION

1. General

- A. At the outboard and inboard support linkages of the outboard flaps there are dual bolts. There are a pair of dual bolts at the forward end of each support linkage. The dual bolts have an inner and outer bolt. Only the inner bolt is removed and installed in this procedure.
- B. This procedure has these tasks:
 - (1) Removal of the inner bolts at the underwing fittings of the outboard flap, and
 - (2) Installation of the inner bolts at the underwing fittings of the outboard flap.

TASK 57-52-01-000-801

2. Underwing Fitting Inner Bolt Removal

(Figure 401)

A. References

Reference	Title
06-44-00-800-802	Finding an Access Door or Panel on the Wings (P/B 201)
12-11-02-650-801	Fuel Tank Sump Drain Valve - Tank Entry (P/B 301)
20-10-23-000-801	Lockwire, Cotter Pins, and Lockrings - Removal (P/B 401)
27-51-00-040-801	Trailing Edge Flap Deactivation (P/B 201)
27-51-28-000-801	Outboard Flap Support Fairing Removal (P/B 401)
28-11-00-010-801	Purging and Fuel Tank Entry (P/B 201)
28-11-01-000-801	Main Tank Access Door Removal (P/B 401)
28-26-00-650-803	Suction Defueling (P/B 201)

B. Location Zones

Zone	Area
500	Left Wing
541	Main Tank - Rib 17 to Rib 32 - Left Wing
600	Right Wing
641	Main Tank - Rib 17 to Rib 32 - Right Wing

C. Access Panels

Number	Name/Location
541DB	Access Door
541NB	Access Door
641DB	Access Door
641NB	Access Door

D. Prepare to Remove One Inner Bolt

SUBTASK 57-52-01-020-001

- (1) Drain the fuel tanks:
 - (a) Do this task: Suction Defueling, TASK 28-26-00-650-803.
 - (b) To get remaining fuel, do this task: Fuel Tank Sump Drain Valve Tank Entry, TASK 12-11-02-650-801.
 - (c) Do this task: Purging and Fuel Tank Entry, TASK 28-11-00-010-801.

SUBTASK 57-52-01-020-002

(2) Do this task: Trailing Edge Flap Deactivation, TASK 27-51-00-040-801.

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(a) Extend the Trailing Edge Flaps to the 30 unit position.

SUBTASK 57-52-01-020-003

(3) To remove the Outboard Flap Support Fairing, do this task: Outboard Flap Support Fairing Removal, TASK 27-51-28-000-801.

SUBTASK 57-52-01-020-004

(4) Put a support below the Outboard Flap Support Linkage to support the linkage to the Rear Spar Fittings.

SUBTASK 57-52-01-020-005

(5) To remove the access panels, do these tasks: Finding an Access Door or Panel on the Wings, TASK 06-44-00-800-802 and Main Tank Access Door Removal, TASK 28-11-01-000-801 Open these access panels:

<u>Number</u>	Name/Location
541DB	Access Door
541NB	Access Door
641DB	Access Door
641NB	Access Door

E. Procedure

SUBTASK 57-52-01-020-006



DO NOT DISTURB THE SEALANT UNDER THE NUT RETAINER. THE SEALANT WILL BE DISTURBED IF YOU MOVE THE NUT RETAINER. IF THE SEALANT ON THE NUT RETAINER IS DISTURBED, FUEL MAY LEAK FROM THE FUEL TANK. IF FUEL LEAKS FROM THE FUEL TANK, THIS MAY CAUSE DAMAGE TO EQUIPMENT AND PERSONS.

(1) Remove the fay surface sealant from the Underwing Fitting inner bolt [1] around the head and threads (Figure 401).

SUBTASK 57-52-01-020-007



DO NOT REMOVE MORE THAN ONE BOLT AT A TIME. ONE ADJACENT INNER BOLT MUST STAY INSTALLED WHILE THE OTHER IS REMOVED. IF BOTH BOLTS ARE REMOVED, DAMAGE TO THE EQUIPMENT MAY OCCUR.

(2) Make sure that two Underwing Fitting inner bolts [1] are installed at the forward end of the applicable flap support.

SUBTASK 57-52-01-020-014

- (3) Remove the lockwire from the retaining ring [2].
 - (a) Do this task: Lockwire, Cotter Pins, and Lockrings Removal, TASK 20-10-23-000-801.

SUBTASK 57-52-01-020-008



DO NOT REMOVE MORE THAN ONE BOLT AT A TIME. ONE ADJACENT INNER BOLT MUST STAY INSTALLED WHILE THE OTHER IS REMOVED. IF BOTH BOLTS ARE REMOVED, DAMAGE TO THE EQUIPMENT MAY OCCUR.

(4) Remove one Underwing Fitting retaining ring [2], bolt retainer [3], and the inner bolt [1].

------ END OF TASK ------

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TASK 57-52-01-400-801

3. Underwing Fitting Inner Bolts Installation

(Figure 401)

A. References

Reference	Title
06-44-00-800-802	Finding an Access Door or Panel on the Wings (P/B 201)
12-11-01-650-801	Pressure Refueling (P/B 301)
20-10-23-400-801	Lockwire, Cotter Pins, and Lockrings - Installation (P/B 401)
27-51-00-440-801	Trailing Edge Flap Reactivation (P/B 201)
27-51-28-400-801	Outboard Flap Support Fairing Installation (P/B 401)

B. Consumable Materials

Reference	Description	Specification
A00436	Sealant - Fuel Tank	BMS5-45 (Supersedes
		BMS5-26)
A00767	Sealant - Fuel Tank	BMS5-45

C. Location Zones

Zone	Area
500	Left Wing
541	Main Tank - Rib 17 to Rib 32 - Left Wing
600	Right Wing
641	Main Tank - Rib 17 to Rib 32 - Right Wing

D. Access Panels

Number	Name/Location
541DB	Access Door
541NB	Access Door
641DB	Access Door
641NB	Access Door

E. Procedure

SUBTASK 57-52-01-420-001



DO NOT DISTURB THE SEALANT UNDER THE NUT RETAINER. THE SEALANT WILL BE DISTURBED IF YOU MOVE THE NUT RETAINER. IF THE SEALANT ON THE NUT RETAINER IS DISTURBED, FUEL MAY LEAK FROM THE FUEL TANK. IF FUEL LEAKS FROM THE FUEL TANK, THIS MAY CAUSE DAMAGE TO EQUIPMENT AND PERSONS.

- (1) Install the Underwing Fitting inner bolt [1]:
 - (a) Put the inner bolt [1] into its hole without sealant.

NOTE: Make sure that you have the correct bolt orientation. The head of the bolt must be in the fuel tank (Figure 401).

- (b) For the No. 1 and No. 8 flap support inner bolt:
 - 1) Tighten the inner bolt [1] to run on torque plus 300 to 400 lb-in (33.9 to 45.2 Nm).
- (c) For the No. 2 and No. 7 flap support inner bolt:
 - 1) Tighten the inner bolt [1] to run on torque plus 450 to 550 lb-in (50.8 to 62.2 Nm).
- (d) Install the bolt retainer [3] and the retaining ring [2].

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- (e) Install lockwire on the retaining ring [2].
 - Do this task: Lockwire, Cotter Pins, and Lockrings Installation, TASK 20-10-23-400-801.
- (f) Apply sealant, A00767 to the head and the thread end of the inner bolt [1] as shown in the illustration: (Figure 401).

NOTE: You can use the sealant, A00436 as an alternative sealant.

SUBTASK 57-52-01-420-002



DO NOT REMOVE MORE THAN ONE BOLT AT A TIME. ONE ADJACENT INNER BOLT MUST STAY INSTALLED WHILE THE OTHER IS REMOVED. IF BOTH BOLTS ARE REMOVED, DAMAGE TO THE EQUIPMENT MAY OCCUR.

(2) If you remove and install the adjacent Underwing Fitting inner bolt [1], use the same steps already done for removal and installation of the bolt.

F. Put the Airplane Back to Its Normal Condition

SUBTASK 57-52-01-020-009

(1) To install the applicable access panels, do this task: (Finding an Access Door or Panel on the Wings, TASK 06-44-00-800-802).

Close these access panels:

<u>Number</u>	Name/Location
541DB	Access Door
541NB	Access Door
641DB	Access Door
641NB	Access Door

SUBTASK 57-52-01-020-010

(2) Remove the support from below the Outboard Flap Support Linkage.

SUBTASK 57-52-01-020-011

(3) To install the Outboard Flap Support Fairing, do this task: Outboard Flap Support Fairing Installation, TASK 27-51-28-400-801.

SUBTASK 57-52-01-020-012

(4) Do this task: Trailing Edge Flap Reactivation, TASK 27-51-00-440-801.

SUBTASK 57-52-01-020-013

(5) To add fuel to the airplane, do this task: Pressure Refueling, TASK 12-11-01-650-801.

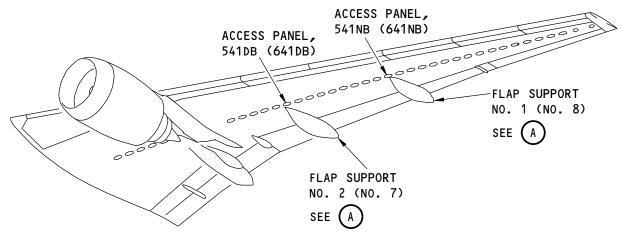


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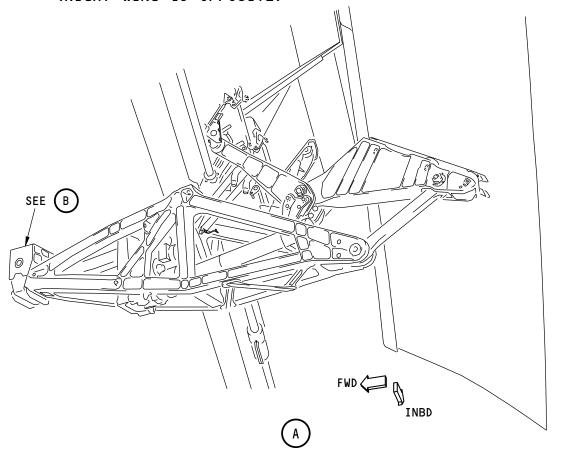
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LEFT WING (RIGHT WING IS OPPOSITE)



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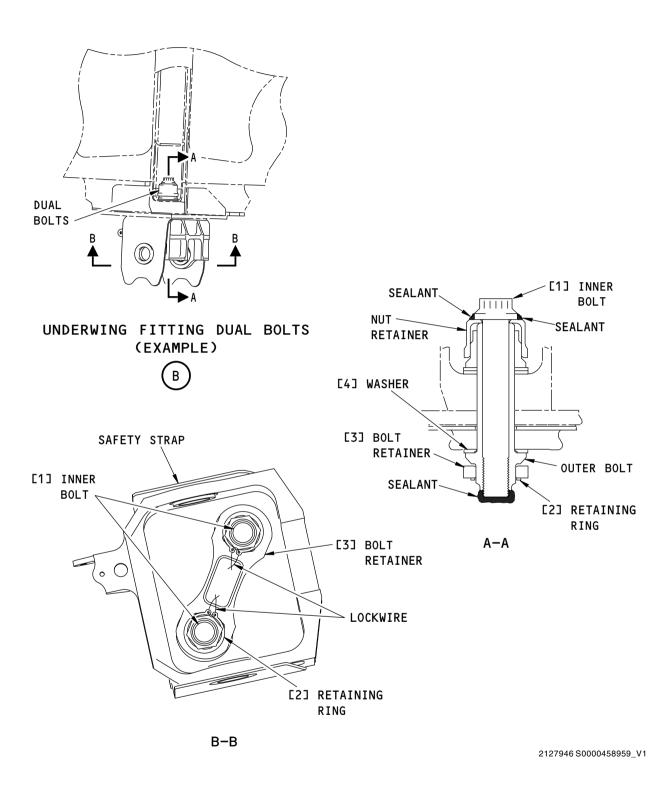
Underwing Fitting Inner Bolts Installation Figure 401/57-52-01-990-801 (Sheet 1 of 2)

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Underwing Fitting Inner Bolts Installation Figure 401/57-52-01-990-801 (Sheet 2 of 2)

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FLAP SUPPORT UNDERWING INNER ATTACH BOLTS - REMOVAL/INSTALLATION

1. General

- A. At the Number 3 Support and the Number 6 Support, you will see the attach bolts. Each attach bolt has an inner bolt and an outer bolt. This procedure removes and installs only the inner bolt.
- B. This procedure has these tasks:
 - (1) Removal of the underwing fitting inner bolts.
 - (2) Installation of the underwing fitting inner bolts.

TASK 57-52-02-000-801

2. Support Underwing Inner Attach Bolts Removal

(Figure 401)

A. References

Reference	Title
06-44-00-800-802	Finding an Access Door or Panel on the Wings (P/B 201)
27-51-18-000-804	Outboard Flap Support Forward Fairing Removal (P/B 401)

B. Consumable Materials

Reference	Description	Specification
G01505	Lockwire - Safety And Lock	NASM20995

C. Location Zones

Zone	Area
570	Subzone 570 - Wing Trailing Edge Flap Fairings
573	Flap Support Fairing No. 3
670	Subzone 670 - Wing Trailing Edge Flap Fairing
673	Flap Support Fairing No. 6

D. Access Panels

Number	Name/Location
573AB	Flap Support Fairing No. 3 - Fwd
573EB	Flap Support Fairing No. 3 - Aft
673AB	Flap Support Fairing No. 6 - Fwd
673EB	Flap Support Fairing No. 6 - Aft

E. Prepare to Remove One Inner Bolt

SUBTASK 57-52-02-020-001

(1) To remove the following fairings do this task:(TASK 06-44-00-800-802)Outboard Flap Support Forward Fairing Removal, TASK 27-51-18-000-804

Open these access panels:

<u>Number</u>	Name/Location
573AB	Flap Support Fairing No. 3 - Fwd
573EB	Flap Support Fairing No. 3 - Aft
673AB	Flap Support Fairing No. 6 - Fwd
673EB	Flap Support Fairing No. 6 - Aft

F. Procedure

SUBTASK 57-52-02-020-002

(1) Remove the lockwire, G01505 from the threaded end of the inner bolt [1].

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SUBTASK 57-52-02-020-003



DO NOT REMOVE MORE THAN ONE BOLT AT A TIME. ONE ADJACENT INNER BOLT MUST STAY INSTALLED WHILE THE OTHER IS REMOVED. IF BOTH BOLTS ARE REMOVED, DAMAGE TO THE EQUIPMENT MAY OCCUR.

(2) Remove the inner bolt [1], the bolt retainer [3], the washer [2], and the washer [4], (Figure 401).

------ END OF TASK ------

TASK 57-52-02-400-801

3. Support Underwing Inner Attach Bolts Installation

(Figure 401)

A. References

Reference	Title
06-44-00-800-802	Finding an Access Door or Panel on the Wings (P/B 201)
27-51-18-400-804	Outboard Flap Support Forward Fairing Installation (P/B 401)

B. Consumable Materials

Reference	Description	Specification
G01505	Lockwire - Safety And Lock	NASM20995

C. Location Zones

Zone	Area
570	Subzone 570 - Wing Trailing Edge Flap Fairings
573	Flap Support Fairing No. 3
670	Subzone 670 - Wing Trailing Edge Flap Fairing
673	Flap Support Fairing No. 6

D. Access Panels

Number	Name/Location
573AB	Flap Support Fairing No. 3 - Fwd
573EB	Flap Support Fairing No. 3 - Aft
673AB	Flap Support Fairing No. 6 - Fwd
673EB	Flap Support Fairing No. 6 - Aft

E. Procedure

SUBTASK 57-52-02-420-001

- (1) Install the inner bolt:
 - (a) Put the inner bolt [1] into its hole with the washer [2].
 - (b) Tighten the inner bolt [1] to 300 to 400 lb-in (33.9 to 45.2 Nm).
 - (c) Install the bolt retainer [3] and the washer [4], and the lockwire, G01505.

SUBTASK 57-52-02-420-002



DO NOT REMOVE MORE THAN ONE BOLT AT A TIME. ONE ADJACENT INNER BOLT MUST STAY INSTALLED WHILE THE OTHER IS REMOVED. IF BOTH BOLTS ARE REMOVED, DAMAGE TO THE EQUIPMENT MAY OCCUR.

(2) If you will remove and install the adjacent inner bolt [1], use the same steps done before.

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F. Put the Airplane Back to Its Normal Condition

SUBTASK 57-52-02-020-004

(1) To install the applicable fairings do this task: (TASK 06-44-00-800-802)Outboard Flap Support Forward Fairing Installation, TASK 27-51-18-400-804

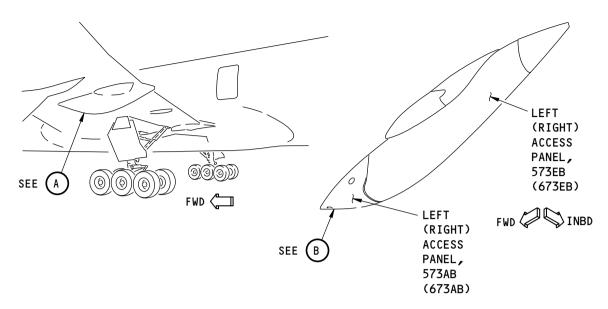
Close these access panels:

<u>Number</u>	Name/Location
573AB	Flap Support Fairing No. 3 - Fwd
573EB	Flap Support Fairing No. 3 - Aft
673AB	Flap Support Fairing No. 6 - Fwd
673EB	Flap Support Fairing No. 6 - Aft

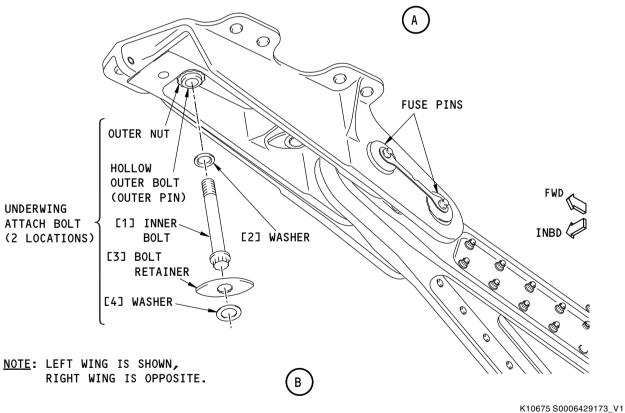
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FLAP SUPPORT FAIRING NO. 3 (LEFT WING) FLAP SUPPORT FAIRING NO. 6 (RIGHT WING)



Support Underwing Inner Attach Bolt Installation Figure 401/57-52-02-990-801

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UNDERWING FITTING OUTER BOLTS - REMOVAL/INSTALLATION

1. General

- A. At the outboard and inboard support linkages of the outboard flaps, there are dual bolts. There are a pair of dual bolts at the forward end of each support linkage. The dual bolts have an inner and outer bolt
- B. This procedure has these tasks:
 - (1) Removal of the outer bolts at the underwing fittings of the outboard flap.
 - (2) Installation of the outer bolts at the underwing fittings of the outboard flap.

TASK 57-52-04-000-801

2. Underwing Fitting Outer Bolt Removal

(Figure 401)

A. General

(1) This task includes the steps to remove the underwing fitting outer bolt.

B. References

Reference	Title
06-44-00-800-802	Finding an Access Door or Panel on the Wings (P/B 201)
12-11-02-650-801	Fuel Tank Sump Drain Valve - Tank Entry (P/B 301)
20-10-23-000-801	Lockwire, Cotter Pins, and Lockrings - Removal (P/B 401)
27-51-00-040-801	Trailing Edge Flap Deactivation (P/B 201)
27-51-22-000-801	Outboard Flap Outboard Support Mechanism Removal (P/B 401)
27-51-28-000-801	Outboard Flap Support Fairing Removal (P/B 401)
28-11-00-010-801	Purging and Fuel Tank Entry (P/B 201)
28-11-01-000-801	Main Tank Access Door Removal (P/B 401)
28-26-00-650-803	Suction Defueling (P/B 201)
57-52-01-000-801	Underwing Fitting Inner Bolt Removal (P/B 401)

C. Location Zones

Zone	Area
500	Left Wing
541	Main Tank - Rib 17 to Rib 32 - Left Wing
600	Right Wing
641	Main Tank - Rib 17 to Rib 32 - Right Wing

D. Access Panels

Number	Name/Location
541DB	Access Door
541NB	Access Door
641DB	Access Door
641NB	Access Door

E. Prepare to Remove One Outer Bolt

SUBTASK 57-52-04-020-001

- (1) Drain the fuel tanks:
 - (a) Do this task: Suction Defueling, TASK 28-26-00-650-803.

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- (b) To get remaining fuel, do this task: Fuel Tank Sump Drain Valve Tank Entry, TASK 12-11-02-650-801.
- (c) Do this task: Purging and Fuel Tank Entry, TASK 28-11-00-010-801.

SUBTASK 57-52-04-020-002

- (2) Do this task: Trailing Edge Flap Deactivation, TASK 27-51-00-040-801.
 - (a) Extend the Trailing Edge Flaps to the 30 unit position.

SUBTASK 57-52-04-020-003

(3) To remove the Outboard Flap Support Fairing, do this task: Outboard Flap Support Fairing Removal, TASK 27-51-28-000-801.

SUBTASK 57-52-04-020-004

(4) Put a support below the Outboard Flap Support Linkage to support the linkage to the Rear Spar Fittings (TASK 27-51-22-000-801).

SUBTASK 57-52-04-020-005

(5) To remove the access panels, do these tasks: Finding an Access Door or Panel on the Wings, TASK 06-44-00-800-802 and Main Tank Access Door Removal, TASK 28-11-01-000-801 Open these access panels:

<u>Number</u>	Name/Location
541DB	Access Door
541NB	Access Door
641DB	Access Door
641NB	Access Door

SUBTASK 57-52-04-020-006

(6) Make sure to remove the underwing fitting inner bolt, do this task: Underwing Fitting Inner Bolt Removal, TASK 57-52-01-000-801.

F. Underwing Fitting Outer Bolt Removal

SUBTASK 57-52-04-020-007

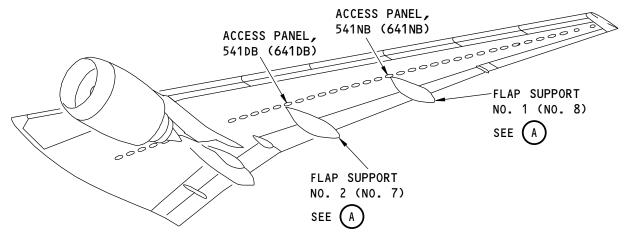
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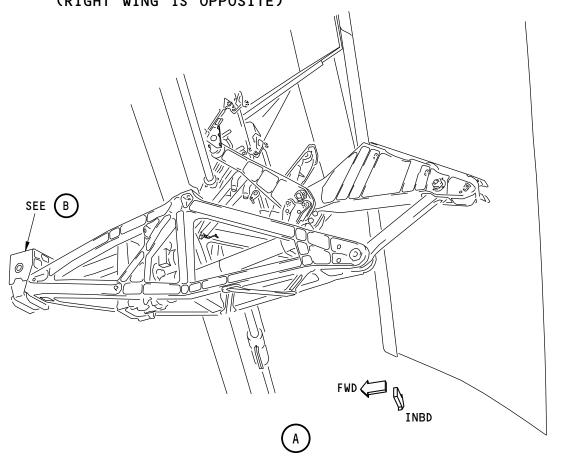
- (1) Remove the outer bolt as follows:
 - NOTE: One adjacent outer bolt must stay installed while the other bolt is removed. If both bolts are removed, damage to the equipment may occur.
 - (a) Remove the nut retainer.
 - (b) Make sure to remove the sealant on the head of the outer bolt.
 - (c) Remove the lockwire, do this task: Lockwire, Cotter Pins, and Lockrings Removal, TASK 20-10-23-000-801.
 - (d) Remove [2] Retaining Ring and [3] Bolt Retainer.
 - (e) Loosen the nut at the end of the outer bolt.
 - (f) Remove the nut, washers, [4] washer, and outer bolt.

EN	D OF	TASK	
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LEFT WING (RIGHT WING IS OPPOSITE)



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Underwing Fitting Outer Bolts Installation Figure 401/57-52-04-990-801 (Sheet 1 of 2)

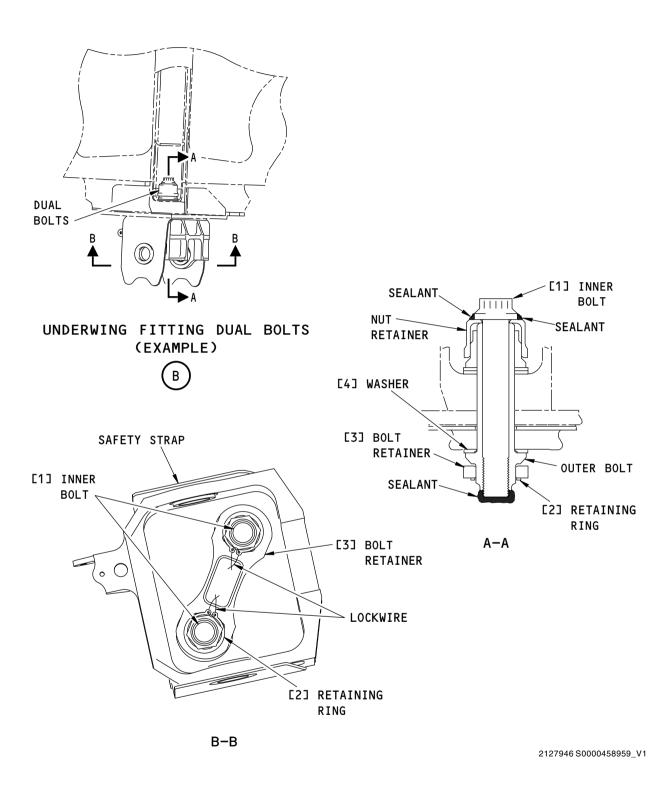
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Underwing Fitting Outer Bolts Installation Figure 401/57-52-04-990-801 (Sheet 2 of 2)

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TASK 57-52-04-400-801

3. Underwing Fitting Outer Bolt Installation

(Figure 401)

A. General

(1) This task includes the steps to install the underwing fitting outer bolt.

B. References

Reference	Title
06-44-00-800-802	Finding an Access Door or Panel on the Wings (P/B 201)
12-11-01-650-801	Pressure Refueling (P/B 301)
20-10-23-400-801	Lockwire, Cotter Pins, and Lockrings - Installation (P/B 401)
27-51-00-440-801	Trailing Edge Flap Reactivation (P/B 201)
27-51-28-400-801	Outboard Flap Support Fairing Installation (P/B 401)
57-52-01-400-801	Underwing Fitting Inner Bolts Installation (P/B 401)

C. Consumable Materials

Reference	Description	Specification
A00247	Sealant - Pressure And Environmental -	BMS5-95
	Chromate Type	
A00436	Sealant - Fuel Tank	BMS5-45 (Supersedes
		BMS5-26)
A00767	Sealant - Fuel Tank	BMS5-45

D. Location Zones

Zone	Area
500	Left Wing
541	Main Tank - Rib 17 to Rib 32 - Left Wing
600	Right Wing
641	Main Tank - Rib 17 to Rib 32 - Right Wing

E. Access Panels

Number	Name/Location
541DB	Access Door
541NB	Access Door
641DB	Access Door
641NB	Access Door

F. Underwing Fitting Outer Bolt Installation

SUBTASK 57-52-04-400-001

- (1) Install the underwing fitting outer bolt as follows:
 - (a) Install the outer bolt without sealant and washer into the fitting and do the following:
 - 1) Determine the number of washers to install between the nut and fitting on the Flap Support No.1/8 assembly.
 - a) If the distance from the bottom of the spotface to the top of the outer bolt is less than 1.55 in. (39.37 mm), then use 1 washer under the nut.
 - b) If the distance is 1.55 in. (39.37 mm) 1.65 in. (41.91 mm), then install 2 washers under the nut.

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- c) If the distance is 1.65 in. (41.91 mm) 1.75 in. (44.45 mm), then install 3 washers under the nut.
- d) If you are using reworked outer bolts on A-market airplanes, then install 4 washers under the nut for measured distances of 1.75 in. (44.45 mm) 1.85 in. (46.99 mm).
- e) On reworked outer bolts of A-market airplanes and for distances greater than 1.85 in. (46.99 mm), install 5 washers under the nut.
- 2) Determine the number of washers to install between the nut and fitting on the Flap Support No.2/7assembly.
 - a) If the distance from the bottom of the spotface to the top of the outer bolt is less than 1.68 in. (42.67 mm), then use 1 washer under the nut.
 - b) If the distance is 1.68 in. (42.67 mm) 1.78 in. (45.21 mm), then install 2 washers under the nut.
 - c) If the distance is 1.78 in. (45.21 mm) 1.88 in. (47.75 mm), then install 3 washers under the nut.
 - d) If you are using reworked outer bolts on A-market airplanes, then install 4 washers under the nut for measured distances of 1.88 in. (47.75 mm) 1.98 in. (50.29 mm).
 - e) On reworked outer bolts of A-market airplanes and for distances greater than 1.98 in. (50.29 mm), install 5 washers under the nut.
- (b) Remove the outer bolt and reinstall the [4] washer and outer bolt with sealant, A00247 as shown in the Figure 401.
- (c) Install the nut and washers on the end of the outer bolt as shown in the Figure 401.
- (d) Tighten the nut slightly to remove the excess gap in the joint.
- (e) Turn the outer bolt to align flats on the head.
- (f) Install the [3] bolt retainer and [2] retaining rings.
- (g) Install the lockwire in the holes of the [2] retaining rings, do this task: Lockwire, Cotter Pins, and Lockrings Installation, TASK 20-10-23-400-801.
 - NOTE: The lockwire is installed using the single wire method.
- (h) For the nut on the Flap Support No.1/8 assembly, tighten the nut to 3120 in-lb (353 N·m) 3360 in-lb (380 N·m).
- (i) Make sure to wait a minimum of 20 minutes but less than 80 hours and tighten the nut again.
- (j) For the nut on the Flap Support No.2/7 assembly, tighten the nut to 4200 in-lb (475 N·m) 4440 in-lb (502 N·m).
- (k) Make sure to wait a minimum of 20 minutes but less than 80 hours and tighten the nut again.
- (I) Make sure to put sealant, A00767 in the nut retainer.
 - <u>NOTE</u>: The nut retainer with the sealant is necessary for an absolute fuel seal.
- (m) Install the nut retainer on to the nut as shown in Figure 401.
- (2) Make sure to install the underwing fitting inner bolt, do this task: Underwing Fitting Inner Bolts Installation, TASK 57-52-01-400-801.

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(3) Make sure to apply a fillet seal of sealant, A00767 to the head of the outer bolt as shown in Detail A-A of the Figure 401.

NOTE: You can use the sealant, A00436 as an alternative sealant.

G. Put the Airplane Back to Its Usual Condition

SUBTASK 57-52-04-020-008

(1) To install the applicable access panels, do this task: (Finding an Access Door or Panel on the Wings, TASK 06-44-00-800-802).

Close these access panels:

<u>Number</u>	Name/Location
541DB	Access Door
541NB	Access Door
641DB	Access Door
641NB	Access Door

SUBTASK 57-52-04-020-009

(2) Remove the support from below the Outboard Flap Support Linkage.

SUBTASK 57-52-04-410-001

(3) To install the Outboard Flap Support Fairing, do this task: Outboard Flap Support Fairing Installation, TASK 27-51-28-400-801.

SUBTASK 57-52-04-840-002

(4) Do this task: Trailing Edge Flap Reactivation, TASK 27-51-00-440-801.

SUBTASK 57-52-04-840-001

(5) To add fuel to the airplane, do this task: Pressure Refueling, TASK 12-11-01-650-801.

----- END OF TASK -----



MAIN LANDING GEAR HANGAR LINK - MAINTENANCE PRACTICES

1. General

- A. This procedure has these tasks for the hangar link:
 - (1) Prepare for the removal.
 - (2) Removal of a hinge pin assembly
 - (3) Installation of a hinge pin assembly.
 - (4) Put the Airplane Back to Its Usual Condition.

TASK 57-54-01-910-802

2. Prepare for the Removal

(Figure 201)

A. General

(1) It is necessary to do this task before you do a removal procedure for the hangar link components.

B. References

Reference	Title
07-11-01-580-804	Lift the Airplane with Jacks (P/B 201)
07-11-03-580-801	Lift the Airplane with Axle Jacks (P/B 201)
29-11-00-860-808	Main Hydraulic System Power Removal (P/B 201)
32-00-15-480-801	Landing Gear Door Safety Pins Installation (P/B 201)
32-00-30-480-801	Landing Gear Downlock Pins Installation (P/B 201)

C. Location Zones

Zone	Area
143	Main Landing Gear Wheel Well, Left
551	Rear Spar to Landing Gear Support Beam - Left Wing
661	Rear Spar to Trailing Edge - Outboard of Flaperon - Right Wing

D. Procedure

SUBTASK 57-54-01-480-002



MAKE SURE THE DOWNLOCK PINS ARE INSTALLED ON ALL THE LANDING GEAR. WITHOUT THE DOWNLOCK PINS, THE LANDING GEAR COULD RETRACT AND CAUSE INJURIES TO PERSONS AND DAMAGE TO EQUIPMENT.

(1) If the downlock pins are not installed in the nose and main landing gear, do this task: Landing Gear Downlock Pins Installation, TASK 32-00-30-480-801.

SUBTASK 57-54-01-010-002



OBEY THE INSTALLATION PROCEDURE FOR THE LANDING GEAR DOOR SAFETY PINS. THE DOORS OPEN AND CLOSE QUICKLY. THE MOVEMENT OF THE DOORS CAN CAUSE INJURIES TO PERSONS OR DAMAGE TO EQUIPMENT.

(2) Do this task: Landing Gear Door Safety Pins Installation, TASK 32-00-15-480-801.

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SUBTASK 57-54-01-860-001

(3) For the center hydraulic system, do this task: Main Hydraulic System Power Removal, TASK 29-11-00-860-808

SUBTASK 57-54-01-420-001

(4) Lift the airplane until the main landing gear wheels are above the ground, (TASK 07-11-01-580-804).

SUBTASK 57-54-01-580-001

(5) To lift the Main Landing Gear to remove the pressure from the hinge pin, do this task: Lift the Airplane with Axle Jacks, TASK 07-11-03-580-801.



TASK 57-54-01-000-801

3. Hangar Link Hinge Pin Removal

(Figure 201)

A. Location Zones

Zone	Area
143	Main Landing Gear Wheel Well, Left
144	Main Landing Gear Wheel Well, Right

B. Procedure

SUBTASK 57-54-01-940-001

(1) Get access to the hangar link [1] through the Main Landing Gear wheel well.

SUBTASK 57-54-01-020-002

- (2) Remove the hinge pin on the Upper Forward Pin Assembly: (Figure 201)
 - (a) Remove the nut [13], and bolt [14] from the hinge pin assembly.
 - (b) Remove the nut [15].



YOU MUST SUPPORT THE HANGER FITTING IF YOU WILL REMOVE ALL OF THE HINGE PINS. THE HANGAR FITTING MAY FALL CAUSING INJURY TO PERSONS OR DAMAGE TO EQUIPMENT.

(c) Remove the hinge pin [12].

SUBTASK 57-54-01-020-004

- (3) Remove the hinge pin on the Upper Aft Pin Assembly: (Figure 201)
 - (a) Remove the washer [10] and nut [11] from the hinge pin assembly.



YOU MUST SUPPORT THE HANGER FITTING IF YOU WILL REMOVE ALL OF THE HINGE PINS. THE HANGAR FITTING MAY FALL CAUSING INJURY TO PERSONS OR DAMAGE TO EQUIPMENT.

(b) Remove the hinge pin [9] from the airplane.

SUBTASK 57-54-01-020-006

- (4) Remove the hinge pin on the Lower Pin Assembly. (Figure 201)
 - (a) Remove the nut [2], and bolt [3].
 - (b) Remove the retainer nut [4].
 - (c) Remove the washers [5], [6], and [7].

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YOU MUST SUPPORT THE HANGER FITTING IF YOU WILL REMOVE ALL OF THE HINGE PINS. THE HANGAR FITTING MAY FALL CAUSING INJURY TO PERSONS OR DAMAGE TO EQUIPMENT.

- (d) Remove the hinge pin [8].
- (e) Remove the hangar fitting [1] from the airplane.

------ END OF TASK ------

TASK 57-54-01-400-801

4. Hangar Link Hinge Pin Installation

(Figure 201)

A. Consumable Materials

Reference	Description	Specification
D00633	Grease - Aircraft General Purpose	BMS3-33

B. Procedure

SUBTASK 57-54-01-420-003

- (1) Install the hinge pin on the Lower Pin Assembly. (Figure 201)
 - (a) Apply the grease, D00633 to the hinge pin [8].
 - (b) Install the hinge pin [8].
 - (c) Install the washers [5], [6], and [7].
 - (d) Apply the grease, D00633 to the retainer nut [4].
 - (e) Install the retainer nut [4].
 - 1) Torque the retainer nut [4] to between 300 in-lbs (33.9 n-m) and 500 in-lbs (56.49 n-m).
 - (f) Install the nut [2], and the bolt [3].

SUBTASK 57-54-01-420-005

- (2) Install the hinge pin on the Upper Aft Pin Assembly. (Figure 201)
 - (a) Apply grease, D00633 to the hinge pin [9].
 - (b) Install the hinge pin [9].
 - (c) Install the nut [11], and the washer [10].
 - 1) Torque nut [11] until seated.
 - 2) Align nut [11] with hole through the hinge pin [9].
 - 3) Torque the nut [11] up to 1100 in-lbs (124.28 n-m) maximum.

SUBTASK 57-54-01-420-007

- (3) Install the hinge pin on the Upper Forward Pin Assembly. (Figure 201)
 - (a) Apply grease, D00633 to the hinge pin [12] on the Upper Forward Pin Assembly.
 - (b) Install the hinge pin [12].
 - (c) Apply grease, D00633 to the nut [15].
 - (d) Install the nut [15].
 - 1) Torque the nut [15] to between 300 in-lbs (33.9 n-m) and 500 in-lbs (56.49 n-m).

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2) Install the nut [13] and the bolt [14].

TASK 57-54-01-910-803

5. Put the Airplane Back to Its Usual Condition

(Figure 201)

A. General

(1) It is necessary to do this task after you do an installation procedure for any of the hangar link components.

B. References

Reference	Title
07-11-01-580-805	Lower the Airplane Off of the Jacks (P/B 201)
12-21-14-640-806-002	Lower Main Landing Gear and Actuating Mechanisms Lubrication (P/B 301)
32-00-15-080-801	Landing Gear Door Safety Pins Removal (P/B 201)

C. Location Zones

Zone	Area
731	Left Main Landing Gear
741	Right Main Landing Gear

D. Procedure

SUBTASK 57-54-01-710-002

(1) Remove all ropes or straps that you used.

SUBTASK 57-54-01-080-001

(2) To lower the airplane and remove the jacks, do this task: Lower the Airplane Off of the Jacks, TASK 07-11-01-580-805.

SUBTASK 57-54-01-640-001

(3) Lubricate the hanger link assembly at the grease fittings, do this task: Lower Main Landing Gear and Actuating Mechanisms Lubrication, TASK 12-21-14-640-806-002.

SUBTASK 57-54-01-410-001



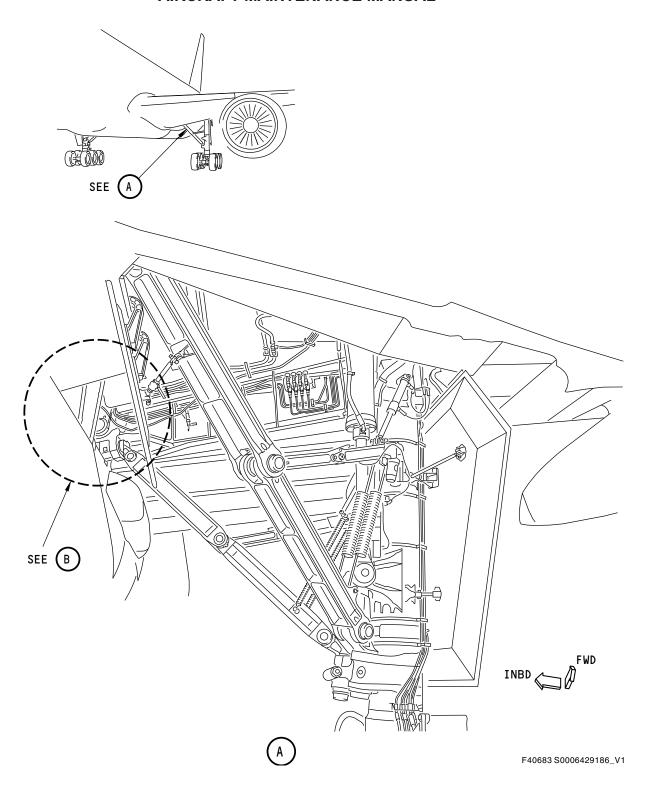
OBEY THE REMOVAL PROCEDURE FOR THE LANDING GEAR DOOR SAFETY PINS. THE DOORS OPEN AND CLOSE QUICKLY. THE MOVEMENT OF THE DOORS CAN CAUSE INJURIES TO PERSONS OR DAMAGE TO EQUIPMENT.

(4) Do this task: Landing Gear Door Safety Pins Removal, TASK 32-00-15-080-801.

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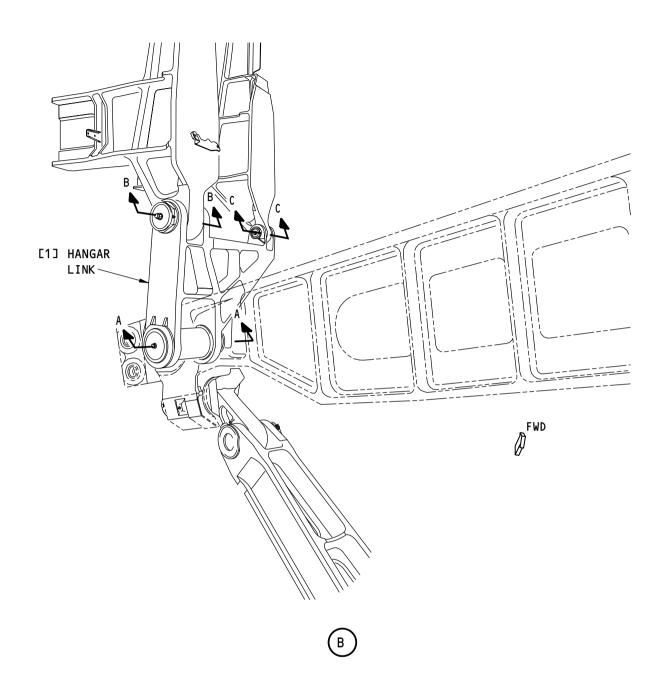
Main Landing Gear Hangar Link Installation Figure 201/57-54-01-990-804 (Sheet 1 of 3)

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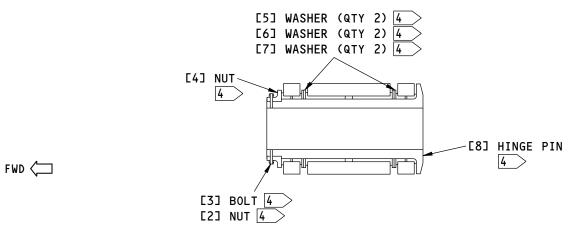
Main Landing Gear Hangar Link Installation Figure 201/57-54-01-990-804 (Sheet 2 of 3)

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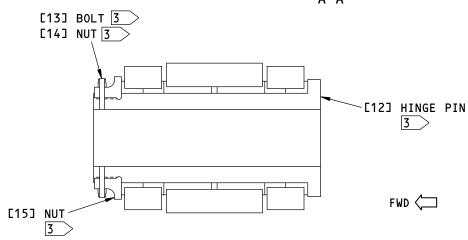
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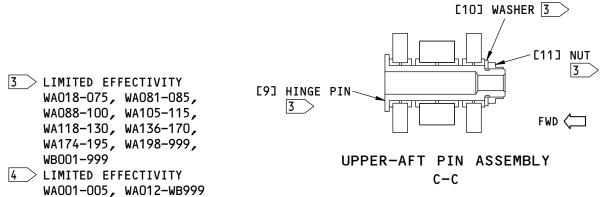




LOWER PIN ASSEMBLY A-A



UPPER-FORWARD PIN ASSEMBLY B-B



Main Landing Gear Hangar Link Installation Figure 201/57-54-01-990-804 (Sheet 3 of 3)

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FORWARD AND AFT TRUNNION BEARING INSPECTION/CHECK

1. General

- A. This procedure inspects the following:
 - (1) The forward trunnion bearing inner and outer race. (Figure 601)
 - (2) The aft trunnion bearing inner and outer race. (Figure 601)

TASK 57-54-01-910-801

2. MLG Forward and Aft Trunnion Bearing Wear Limits

(Figure 601)

A. References

Reference	Title
32-11-01-020-801	Main Landing Gear Removal (P/B 401)
32-11-01-420-801	Main Landing Gear Installation (P/B 401)

B. Location Zones

Zone	Area
551	Rear Spar to Landing Gear Support Beam - Left Wing
651	Rear Spar to Landing Gear Support Beam - Right Wing

C. Prepare for the procedure:

SUBTASK 57-54-01-480-001

(1) Remove the Forward and Aft Trunnion Assemblies, do this task: Main Landing Gear Removal, TASK 32-11-01-020-801

SUBTASK 57-54-01-010-001

(2) Make sure the dimensions for each part are within tolerance. (Figure 602) (Table 601)

Table 601/57-54-01-993-803

			Design Diam		Wear	Limits			
Index No.	RACE Part Name	Dim	Min	Max	Perm- itted Wear Dim.	Max Dia. Clear- ance	Replace Worn Part	Repair Worn Part	Repair Instr.
1 2	Outer Inner	ID OD	8.4020 8.3990	8.4030 8.4000	8.4105 8.3965	0.010 0.010	X X		
1 2	Outer Inner	ID OD	8.6020 8.5980	8.6030 8.6000	8.6115 8.5960	0.011 0.011	X X		
1*[1] 2*[1]	Outer Inner	ID OD	8.6020 8.5980	8.6030 8.6000	8.6115 8.5960	0.011 0.011	X X		
3 4	Outer Inner	ID OD	7.6025 7.5990	7.6035 7.6000	7.6060 7.5915	0.010 0.010	X X		

*[1] [2]WA014-WA017, WA087-WA093, WA103-WA104, WA118-WA119, WA133-WA137, WA173-WA175, WA221-WA223, WA231-WA232, WA261-WA266, WB001-WB021, WB031-WB046, WB051-WB082, WB121-WB125, WB411-WB413, WB481-WB484, WB501-WB507, WB531-WB535, WB591-WB595, WB601-WB606, WC051-WC073, WC101-WC103, AND WC111-WC112 ONLY

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D. Put the airplane back to its usual condition.

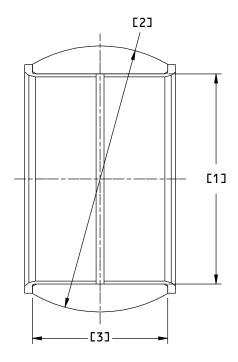
SUBTASK 57-54-01-710-001

(1) Install the Forward and Aft Trunnion Assemblies. do this task: Main Landing Gear Installation, TASK 32-11-01-420-801

----- END OF TASK -----

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FORWARD TRUNNION INNER RACE 1

REFERENCE NUMBER	[1]	[2]	[3]
DESIGN DIMENSION	6.6380 6.6365		4.274 4.269
REPAIR LIMIT	6.6980	8.397	4.239

- 1 WA001-WA013, WA076-WA080, WA086, WA101, WA102, WA116, WA117, WA131, WA132, WA171, WA172
- 2 LIMIT FOR CHROME PLATE BUILD-UP TO DESIGN DIMENSIONS AND FINISH
- 3 LIMIT FOR INSTALLATION OF OVERSIZE BUSHINGS

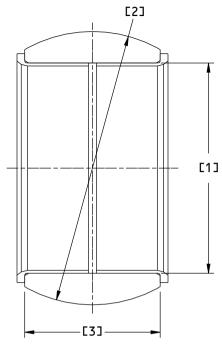
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Race Repair and Refinish Figure 601/57-54-01-990-801 (Sheet 1 of 3)

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FORWARD TRUNNION INNER RACE 4

REFERENCE NUMBER	[1]	[2]	[3]
DESIGN DIMENSION	6.6350 6.6335		4.274 4.269
REPAIR LIMIT	6.6950	8.596	4.239

WA014-WA017, WA087-WA093, WA103, WA104, WA118, WA119, WA133-WA137, WA173-WA175, WA221-WA223, WA231, WA232, WA261-WA266, WB001-WB021, WB031-WB046, WB051-WB082, WB121-WB125, WB411-WB413, WB481-WB484, WB501-WB507, WB531-WB535, WB591-WB595, WB601-WB606, WC051-WC073, WC101-WC103, WC111, WC112

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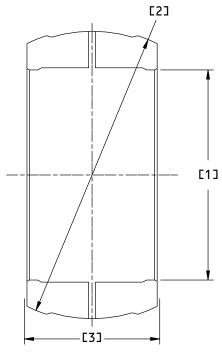
Race Repair and Refinish Figure 601/57-54-01-990-801 (Sheet 2 of 3)

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AFT TRUNNION SPLIT BALL

REFERENCE NUMBER	[1]	[2]	[3]
DESIGN DIMENSION	5.5025 5.5000		3.400
REPAIR LIMIT	5.5625 3	7.597	3.390

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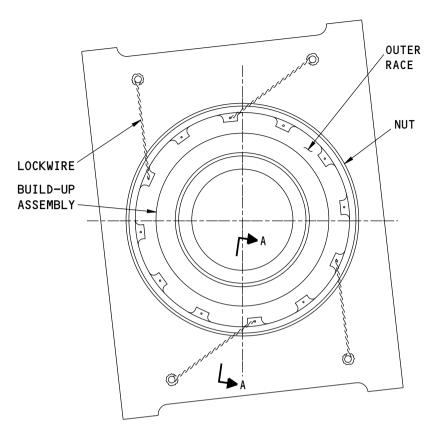
Race Repair and Refinish Figure 601/57-54-01-990-801 (Sheet 3 of 3)

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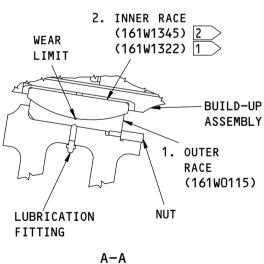
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FORWARD TRUNNION

- 1 WA001-WA013, WA076-WA080, WA086, WA101, WA102, WA116, WA117, WA131, WA132, WA171, WA172
- 2 WA014-WA017, WA087-WA093, WA103, WA104, WA118, WA119, WA133-WA137, WA173-WA175, WA221-WA223, WA231, WA232, WA261-WA266, WB001-WB021, WB031-WB046, WB051-WB082, WB121-WB125, WB411-WB413, WB481-WB484, WB501-WB507, WB531-WB535, WB591-WB595, WB601-WB606, WC051-WC073, WC101-WC103, WC111, WC112



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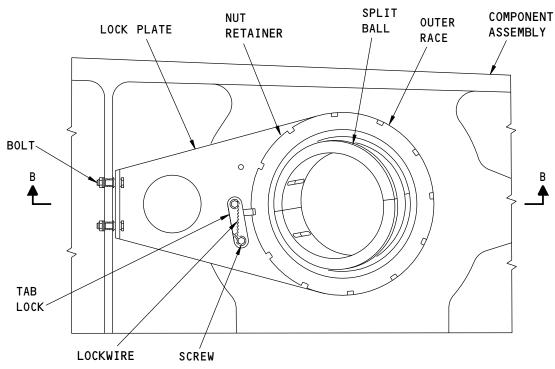
Forward and Aft Trunnion Wear Limits Figure 602/57-54-01-990-802 (Sheet 1 of 3)

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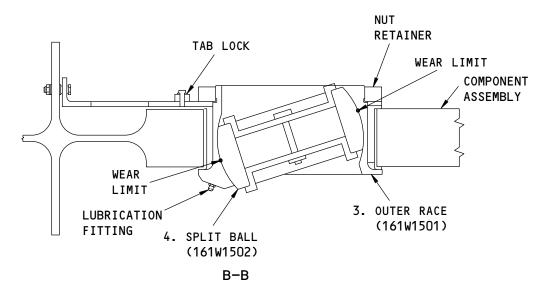
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AFT TRUNNION



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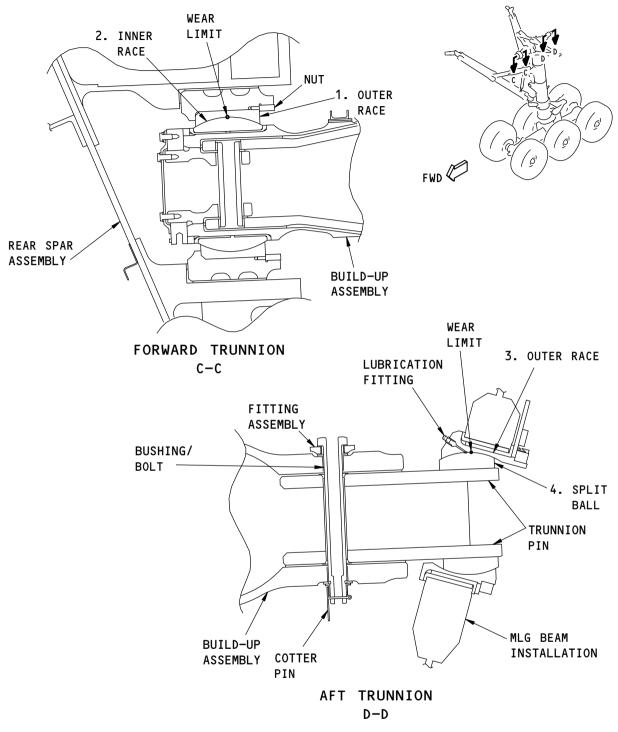
Forward and Aft Trunnion Wear Limits Figure 602/57-54-01-990-802 (Sheet 2 of 3)

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Forward and Aft Trunnion Wear Limits Figure 602/57-54-01-990-802 (Sheet 3 of 3)

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MAIN LANDING GEAR SUPPORT BEAM (OUTBOARD) LOAD DISTRIBUTION PLATES

1. General

- A. This procedure contains two tasks.
 - The first task removes the Main Landing Gear (MLG) Support Beam Load Distribution Plates.
 - (2) The second task installs the MLG Support Beam Load Distribution Plates.
 - NOTE: The MLG Support Beam Load Distribution Plates are located on the outboard end of the MLG Support Beam.
- B. This procedure is to be used to remove/install the MLG Support Beam Load Distribution Plates in the right or left wing.

TASK 57-54-02-020-801

2. Prepare for the Removal of the Main Landing Gear Support Beam Distribution Plates Figure 401

A. General

(1) It is necessary to do this task before the Main Landing Gear (MLG) Support Beam Load Distribution Plates Removal procedure.

B. References

Reference	Title
07-11-01-580-804	Lift the Airplane with Jacks (P/B 201)
29-11-00-860-808	Main Hydraulic System Power Removal (P/B 201)
32-00-15-480-801	Landing Gear Door Safety Pins Installation (P/B 201)
32-00-30-480-801	Landing Gear Downlock Pins Installation (P/B 201)
32-11-18-960-801	Main Landing Gear Truck Assembly Removal (P/B 401)

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-1853	Retainer Equipment, MLG/NLG Torsion Link
	Part #: J32054-91 Supplier: 81205
	Part #: J32054-92 Supplier: 81205

D. Location Zones

Zone	Area
551	Rear Spar to Landing Gear Support Beam - Left Wing
552	Landing Gear Support Beam & Rear Spar to Wing Trailing Edge - Left Wing
555	Left Wing Inboard Main Flap
651	Rear Spar to Landing Gear Support Beam - Right Wing
652	Landing Gear Support Beam & Rear Spar to Wing Trailing Edge - Right Wing
655	Right Wing Inboard Main Flap
732	Left Main Landing Gear Body Door
742	Right Main Landing Gear Body Door

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E. Access Panels

Number	Name/Location
551DT	Left Main Landing Gear Upper Wing Panel
551EB	Inboard Fixed Trailing Edge Panel
552DB	Inboard Fixed Trailing Edge Panel
651DT	Right Main Landing Gear Upper Wing Panel
651EB	Inboard Fixed Trailing Edge Panel
652DB	Inboard Fixed Trailing Edge Panel
733	Left Main Landing Gear Shock Strut Door
734	Left Main Landing Gear Drag Strut Door
735	Left Main Landing Gear Trunnion Door
743	Right Main Landing Gear Shock Strut Door
744	Right Main Landing Gear Drag Strut Door
745	Right Main Landing Gear Trunnion Door

F. Procedure

SUBTASK 57-54-02-420-002



SUPPLY SUPPORT FOR THE LOAD DISTRIBUTION PLATES. IF YOU DO NOT, THE PLATES CAN CAUSE INJURIES TO PERSONNEL OR DAMAGE TO EQUIPMENT.



MAKE SURE THAT THE DOWNLOCK PINS ARE INSTALLED ON ALL THE LANDING GEAR. WITHOUT THE DOWNLOCK PINS, THE LANDING GEAR CAN RETRACT. THIS CAN CAUSE INJURIES TO PERSONS, AND DAMAGE TO EQUIPMENT.

- Install the main landing gear downlock pins.
 - (a) Do this task: Landing Gear Downlock Pins Installation, TASK 32-00-30-480-801.

SUBTASK 57-54-02-010-002



OBEY THE INSTALLATION PROCEDURE FOR THE DOOR LOCKS. THE DOORS OPEN AND CLOSE QUICKLY. THE MOVEMENT OF THE DOORS CAN CAUSE INJURIES TO PERSONS AND DAMAGE TO EQUIPMENT.

- (2) Open the MLG doors and install the landing gear door locks.
 - (a) Do this task: Landing Gear Door Safety Pins Installation, TASK 32-00-15-480-801.

SUBTASK 57-54-02-000-005

- (3) Remove the pressure from the center hydraulic system.
 - (a) Do this task: Main Hydraulic System Power Removal, TASK 29-11-00-860-808.

SUBTASK 57-54-02-000-006

(4) Open these access panels:

<u>Number</u>	Name/Location
551DT	Left Main Landing Gear Upper Wing Panel
551EB	Inboard Fixed Trailing Edge Panel
552DB	Inboard Fixed Trailing Edge Panel
651DT	Right Main Landing Gear Upper Wing Panel

ARO ALL



(Continued)

<u>Number</u>	Name/Location
651EB	Inboard Fixed Trailing Edge Panel
652DB	Inboard Fixed Trailing Edge Panel
733	Left Main Landing Gear Shock Strut Door
734	Left Main Landing Gear Drag Strut Door
735	Left Main Landing Gear Trunnion Door
743	Right Main Landing Gear Shock Strut Door
744	Right Main Landing Gear Drag Strut Door
745	Right Main Landing Gear Trunnion Door

SUBTASK 57-54-02-840-001

- (5) If the MLG is not installed, put a support jack under the MLG support beam near the outboard end
 - (a) Adjust the jack to remove the load on the support beam plate fuse pins.
- (6) If the MLG is installed, remove the load from the outboard end of the MLG support beam as follows:
 - (a) Do the steps that follow to prepare to relieve the landing gear weight from the side brace components:



DO NOT REMOVE THE VALVE BODY UNTIL YOU DEFLATE THE SHOCK STRUT FULLY. THE AIR PRESSURE CAN BLOW THE VALVE BODY OUT AND CAUSE INJURIES TO PERSONNEL.

- (b) Deflate the MLG shock strut (Main Landing Gear Truck Assembly Removal, TASK 32-11-18-960-801, Subtask 32-11-18-020-001, Step 2.E(6)).
 - 1) Remove the cap for the air valve.
 - 2) Loosen the air valve swivel nut a maximum of two turns.
 - NOTE: Fluid in the shock strut [1] will have bubbles when you release the pressure. Deflate the shock strut slowly to prevent the leakage of the fluid through the air valve.
 - 3) Loosen the air valve swivel nut fully when all of the pressure in the shock strut is released
- (c) Install the retainer equipment, SPL-1853 to hold the MLG shock strut in its compressed position, (Main Landing Gear Truck Assembly Removal, TASK 32-11-18-960-801).
- (d) To lift the airplane until the wheels are above the ground, do this task: Lift the Airplane with Jacks, TASK 07-11-01-580-804.
- (e) Do the steps that follow to relieve the landing gear weight from the side brace components.
 - 1) Attach a strap between the left and the right landing gear truck beams.
 - Disconnect the end of the downlock actuator and springs the drag brace and the side brace.
 - 3) Push UP on the drag brace and side brace lock links to move it from the over-center position.
 - 4) Tighten the strap between the left and right landing gear until the weight on the side brace components is removed.

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- (f) Use two jacks to jack the MLG to remove the load on the MLG support beam plates fuse pins (Lift the Airplane with Jacks, TASK 07-11-01-580-804).
 - NOTE: Incremental jacking of the MLG will need to be done on each jack to relieve the load from the support beam plate fuse pins.
- (g) If the load is not removed by the last step, put a support jack below the MLG support beam, near the outboard end.
- (h) Adjust it to remove the load on the support beam plate fuse pins.

SUBTASK 57-54-02-000-008

- (7) Install auxiliary jacks D, E, F, G, H.
 - (a) Do this task:(TASK 07-11-01-580-804)

NOTE: Use auxiliary jacks to stabilize the airplane. No preload is required on the jacks.



TASK 57-54-02-000-801

3. Main Landing Gear Support Beam Distribution Plates - Removal

Figure 401

A. General

- (1) This procedure provides instructions on how to remove the Main Landing Gear (MLG) Support Beam Load Distribution Plates.
 - (a) Complete the MLG Support Beam Load Distribution Plates preparation procedure prior to this task.
 - NOTE: Complete the preparation for the removal procedure prior to this procedure.

 Maintain the airplane configuration from the completion of the preparation for the removal procedure. Prepare for beam, parts, or airplane movements.
 - 1) Do this task: Prepare for the Removal of the Main Landing Gear Support Beam Distribution Plates, TASK 57-54-02-020-801.

B. Location Zones

Zone	Area
551	Rear Spar to Landing Gear Support Beam - Left Wing
552	Landing Gear Support Beam & Rear Spar to Wing Trailing Edge - Left Wing
555	Left Wing Inboard Main Flap
651	Rear Spar to Landing Gear Support Beam - Right Wing
652	Landing Gear Support Beam & Rear Spar to Wing Trailing Edge - Right Wing
655	Right Wing Inboard Main Flap
732	Left Main Landing Gear Body Door
742	Right Main Landing Gear Body Door

C. Outboard MLG Support Beam Load Distribution Plates Removal

NOTE: The MLG Support Beam Load Distribution Plates are located on the outboard end of the beam. The MLG Support Beam Load Distribution Plates are very heavy and must be strapped and secured to avoid injury to people and damage to equipment.

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SUBTASK 57-54-02-020-001



SUPPLY SUPPORT FOR THE LOAD DISTRIBUTION PLATES. IF YOU DO NOT, THE PLATES CAN CAUSE INJURIES TO PERSONNEL OR DAMAGE TO EQUIPMENT.



MAKE SURE THAT THE DOWNLOCK PINS ARE INSTALLED ON ALL THE LANDING GEAR. WITHOUT THE DOWNLOCK PINS, THE LANDING GEAR CAN RETRACT. THIS CAN CAUSE INJURIES TO PERSONS, AND DAMAGE TO EQUIPMENT.



OBEY THE INSTALLATION PROCEDURE FOR THE DOOR LOCKS. THE DOORS OPEN AND CLOSE QUICKLY. THE MOVEMENT OF THE DOORS CAN CAUSE INJURIES TO PERSONS AND DAMAGE TO EQUIPMENT.

- (1) Remove (disconnect) the Rod ASSY OUTBD MLG Beam [1] from the outboard end of the Main Landing Gear Support Beam [5].
 - (a) Remove the cotter pin [2], nut [3], two washers [4], and bolt [7].NOTE: Keep the hardware (bolt, washers and nut) for the installation.
 - (b) Push the Rod ASSY OUTBD MLG Beam [1] away from the Main Landing Gear Support Beam [5].

SUBTASK 57-54-02-000-002

- (2) Remove the fuse pin [14] from the Main Landing Gear Support Beam [5].
 - (a) Remove the self-locking nut [9], washer [10], crossbolt [11], fuse pin nut [12], and washer [13].
 - <u>NOTE</u>: Keep the hardware (bolt, washers and nuts) for the installation.
 - (b) Remove the fuse pin [14].

SUBTASK 57-54-02-000-003

- (3) Remove the upper fuse pin [21] from the MLG Support Beam Load Distribution Plate Assembly OUTBD MLG Beam [6] and the fitting assembly OUTBD MLG beam support [15].
 - (a) Remove the cotter pin [16], self-locking nut [17], crossbolt [18], fuse pin nut [19], and two washers [20].
 - NOTE: Keep the hardware (bolt, washers and nuts) for the installation.
 - (b) Remove the fuse pin [21].

SUBTASK 57-54-02-000-004

- (4) Remove the lower fuse pin [27] from the MLG Support Beam Load Distribution Plate Assembly
 OUTBD MLG Beam [6] and the fitting assembly OUTBD MLG beam support [15].
 - (a) Remove the cotter pin [22], self-locking nut [23], crossbolt [24], fuse pin nut [25], and two washers [26].
 - NOTE: Keep the hardware (bolt, washers and nuts) for the installation.
 - (b) Remove the fuse pin [27].

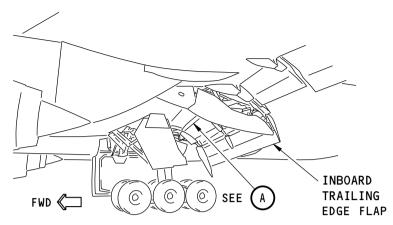
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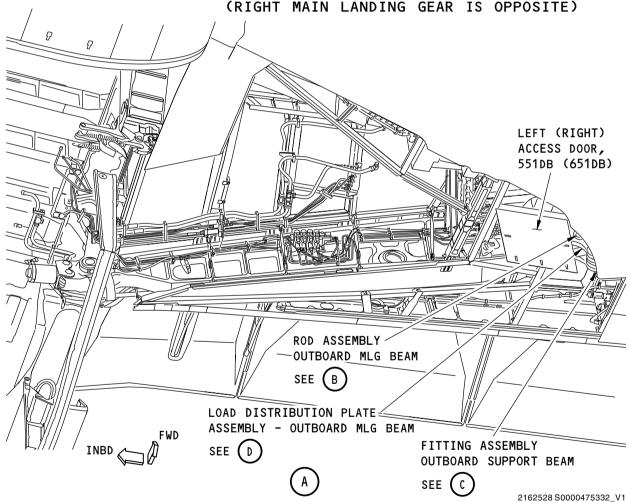
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LEFT MAIN LANDING GEAR (RIGHT MAIN LANDING GEAR IS OPPOSITE)

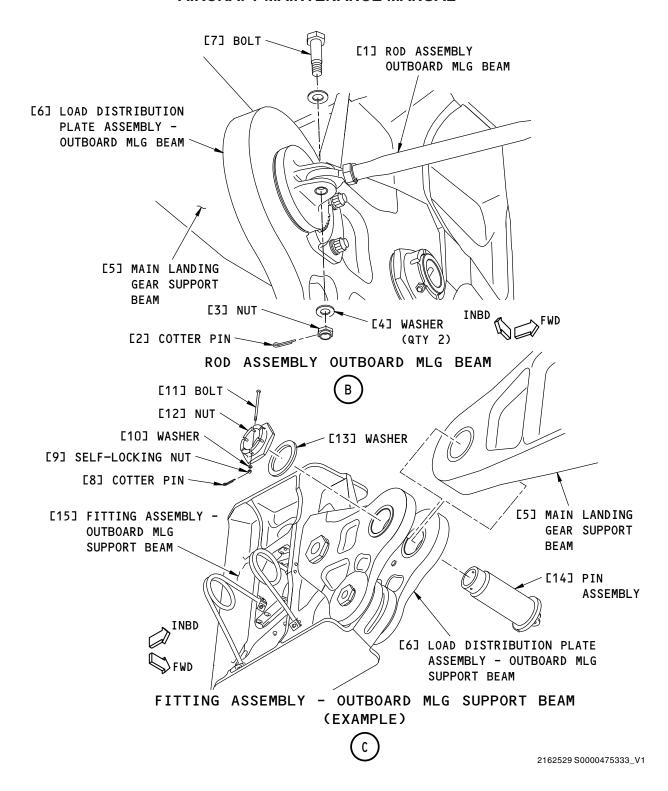


Main Landing Gear Support Beam Load Distribution Plates Installation Figure 401/57-54-02-990-802 (Sheet 1 of 3)

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Main Landing Gear Support Beam Load Distribution Plates Installation Figure 401/57-54-02-990-802 (Sheet 2 of 3)

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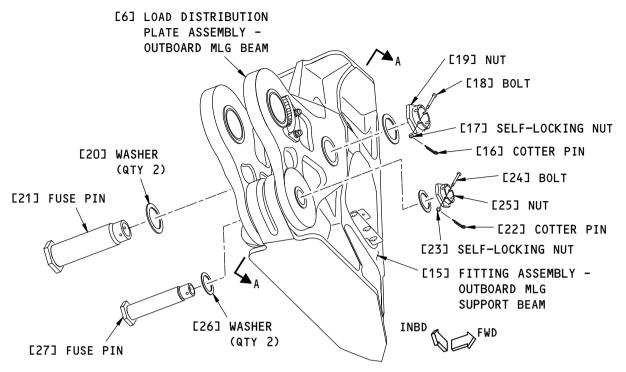
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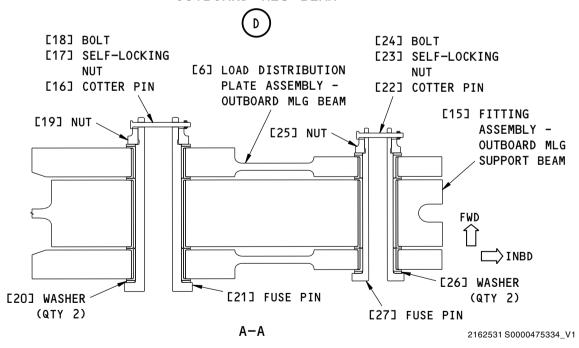
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LOAD DISTRIBUTION PLATE ASSEMBLY - OUTBOARD MLG BEAM



Main Landing Gear Support Beam Load Distribution Plates Installation Figure 401/57-54-02-990-802 (Sheet 3 of 3)

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TASK 57-54-02-400-802

4. Prepare for the Installation of the Main Landing Gear Support Beam Distribution Plates
Figure 401

A. General

 Do this task before the Main Landing Gear (MLG) Support Beam Load Distribution Plates Installation task.

NOTE: These tasks depend on no change to the airplane configuration established by the removal procedure (Main Landing Gear Support Beam Distribution Plates - Removal, TASK 57-54-02-000-801).

B. Location Zones

Zone	Area
551	Rear Spar to Landing Gear Support Beam - Left Wing
552	Landing Gear Support Beam & Rear Spar to Wing Trailing Edge - Left Wing
555	Left Wing Inboard Main Flap
651	Rear Spar to Landing Gear Support Beam - Right Wing
652	Landing Gear Support Beam & Rear Spar to Wing Trailing Edge - Right Wing
655	Right Wing Inboard Main Flap
732	Left Main Landing Gear Body Door
742	Right Main Landing Gear Body Door

C. Procedure

SUBTASK 57-54-02-400-007



SUPPLY SUPPORT FOR THE LOAD DISTRIBUTION PLATES. IF YOU DO NOT, THE PLATES CAN CAUSE INJURIES TO PERSONNEL OR DAMAGE TO EQUIPMENT.



MAKE SURE THAT THE DOWNLOCK PINS ARE INSTALLED ON ALL THE LANDING GEAR. WITHOUT THE DOWNLOCK PINS, THE LANDING GEAR CAN RETRACT. THIS CAN CAUSE INJURIES TO PERSONS, AND DAMAGE TO EQUIPMENT.



OBEY THE INSTALLATION PROCEDURE FOR THE DOOR LOCKS. THE DOORS OPEN AND CLOSE QUICKLY. THE MOVEMENT OF THE DOORS CAN CAUSE INJURIES TO PERSONS AND DAMAGE TO EQUIPMENT.

(1) Make sure that the airplane has been maintained in the configuration defined in the task: Main Landing Gear Support Beam Distribution Plates - Removal, TASK 57-54-02-000-801.

NOTE: A maintained configuration includes, but is not limited to: access panels, electrical, circuit breakers, jacks and supports, landing gear down lock pins, door locks, hydraulic system, MLG.

------ END OF TASK ------

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TASK 57-54-02-400-801

5. Main Landing Gear Support Beam Distribution Plates - Installation

Figure 401

A. General

(1) This procedure provides instructions on how to install the Main Landing Gear (MLG) Support Beam Load Distribution Plates.

B. References

Reference	Title
07-11-01-580-804	Lift the Airplane with Jacks (P/B 201)
07-11-01-580-805	Lower the Airplane Off of the Jacks (P/B 201)
29-11-00-860-801	Main Hydraulic System Pressurization (P/B 201)
32-00-30-080-801	Landing Gear Downlock Pins Removal (P/B 201)
32-11-18-400-801	Main Landing Gear Truck Assembly Installation (P/B 401)

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-1853	Retainer Equipment, MLG/NLG Torsion Link	
	Part #: J32054-91 Supplier: 81205	
	Part #: J32054-92 Supplier: 81205	

D. Consumable Materials

Reference	Description	Specification
D00015	Grease - Aircraft Bearing (Use BMS 3-24 until existing stocks are depleted, BMS 3-33	BMS3-24 (Superseded by BMS3-33)
	supersedes BMS 3-24)	by billed do)

E. Location Zones

Zone	Area
551	Rear Spar to Landing Gear Support Beam - Left Wing
552	Landing Gear Support Beam & Rear Spar to Wing Trailing Edge - Left Wing
555	Left Wing Inboard Main Flap
651	Rear Spar to Landing Gear Support Beam - Right Wing
652	Landing Gear Support Beam & Rear Spar to Wing Trailing Edge - Right Wing
655	Right Wing Inboard Main Flap
732	Left Main Landing Gear Body Door
742	Right Main Landing Gear Body Door

F. Access Panels

Number	Name/Location
551DT	Left Main Landing Gear Upper Wing Panel
551EB	Inboard Fixed Trailing Edge Panel
552DB	Inboard Fixed Trailing Edge Panel
651DT	Right Main Landing Gear Upper Wing Panel
651EB	Inboard Fixed Trailing Edge Panel
652DB	Inboard Fixed Trailing Edge Panel

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(Continued)

Number	Name/Location
733	Left Main Landing Gear Shock Strut Door
734	Left Main Landing Gear Drag Strut Door
735	Left Main Landing Gear Trunnion Door
743	Right Main Landing Gear Shock Strut Door
744	Right Main Landing Gear Drag Strut Door
745	Right Main Landing Gear Trunnion Door

G. MLG Support Beam Load Distribution Plates Installation



SUPPLY SUPPORT FOR THE LOAD DISTRIBUTION PLATES. IF YOU DO NOT, THE PLATES CAN CAUSE INJURIES TO PERSONNEL OR DAMAGE TO EQUIPMENT.



MAKE SURE THAT THE DOWNLOCK PINS ARE INSTALLED ON ALL THE LANDING GEAR. WITHOUT THE DOWNLOCK PINS, THE LANDING GEAR CAN RETRACT. THIS CAN CAUSE INJURIES TO PERSONS, AND DAMAGE TO EQUIPMENT.



OBEY THE INSTALLATION PROCEDURE FOR THE DOOR LOCKS. THE DOORS OPEN AND CLOSE QUICKLY. THE MOVEMENT OF THE DOORS CAN CAUSE INJURIES TO PERSONS AND DAMAGE TO EQUIPMENT.

SUBTASK 57-54-02-400-008

- (1) Install the MLG support beam distribution plates to the structure fitting assembly (Figure 401).
 - (a) Use undersized fuse pin or a dowel, as a temporary pin to support the Load Distribution Plate Assembly OUTBD MLG Beam [6] to the fitting assembly OUTBD MLG beam support [15].
 - NOTE: You can use undersized fuse pins or wood dowels through the fuse pin holes to support the plates. Undersize the Wood dowel diameters 0.03125 inches (0.7938 mm) less than the removed fuse pin diameter. Undersized fuse pins of 0.005 inches (0.127 mm) can also be used.
 - (b) Align the Load Distribution Plate Assembly OUTBD MLG Beam [6] and fitting assembly OUTBD MLG beam support [15] fuse pin bushings.

SUBTASK 57-54-02-400-009

- (2) Install the upper fuse pin [21].
 - (a) Apply grease, D00015 to the entire shank and underside of the head of the fuse pin [21].
 - (b) Install, but do not tighten the fuse pin [21], two washers [20], and fuse pin nut [19].
 - 1) Make sure that the fuse pin head direction is as shown on the outboard side.
 - (c) Temporarily clamp the Load Distribution Plate Assembly OUTBD MLG Beam [6] together to close gaps.
 - (d) Finger tighten fuse pin nut [19] where no gaps are between the head of fuse pin [21], two washers [20], and the bushing flange.

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 Make sure that the fuse pin nut [19] castellation is aligned with the fuse pin crossbolt hole.

NOTE: If necessary, loosen the fuse pin nut [19] to nearest castellation to align the holes.

- (e) Install the crossbolt [18] and self-locking nut [17].
 - 1) Tighten the nut.
 - 2) Install the cotter pin [16].

SUBTASK 57-54-02-400-010

- (3) Install the lower fuse pin [27].
 - (a) Apply grease, D00015 to the entire shank and underside of the head of the fuse pin [27].
 - (b) Install, but do not tighten the fuse pin [27], two washers [26], and fuse pin nut [25].
 - 1) Make sure that the fuse pin head direction is as shown on the outboard side.
 - (c) Temporarily clamp the Load Distribution Plate Assembly OUTBD MLG Beam [6] together to close gaps
 - (d) Finger tighten fuse pin nut [25] where no gaps are between the head of fuse pin [27], two washers [26], and bushing flange.
 - 1) Make sure that the fuse pin nut [25] castellation is aligned with the fuse pin crossbolt hole.

NOTE: If necessary, loosen the fuse pin nut [19] to nearest castellation to align the holes.

- (e) Install the crossbolt [24] and self-locking nut [23].
 - 1) Tighten the nut.
 - 2) Install the cotter pin [22].

SUBTASK 57-54-02-400-017

- (4) If the MLG is not installed, use the support jack under the MLG support beam near the outboard end to align the bushing.
 - (a) Adjust the jack to align the MLG support beam outboard fuse pin bushing with the MLG distribution plate fuse pin bushing.
 - 1) Incrementally jack the MLG support beam to align its fuse pin bushing with the distribution plate fuse pin bushings.

SUBTASK 57-54-02-400-011

- (5) If the MLG is installed, align the MLG support beam outboard fuse pin bushing with the MLG distribution plate fuse pin bushings.
 - (a) Use two jacks to jack the MLG to align/adjust the Main Landing Gear Support Beam [5] fuse pin bushing with the Load Distribution Plate Assembly OUTBD MLG Beam [6] fuse pin bushings (Lift the Airplane with Jacks, TASK 07-11-01-580-804).

NOTE: Incrementally jack the MLG to align the support beam fuse pin bushing with the distribution plate fuse pin bushings.

SUBTASK 57-54-02-400-012

- (6) Install the fuse pin [14].
 - (a) Apply grease, D00015 to the entire shank and underside of the head of the fuse pin [14].
 - (b) Install, but do not tighten the fuse pin [14], washer [13], and fuse pin nut [12] with the fuse pin head direction as shown on the inboard side.

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- Temporarily clamp the Load Distribution Plate Assembly OUTBD MLG Beam [6] and Main Landing Gear Support Beam [5] together to close gaps
- Finger tighten fuse pin nut [12] where no gaps are between the head of fuse pin [14], washer [13], and bushing flange.
 - Make sure that the fuse pin nut [12] castellation is aligned with the fuse pin crossbolt hole.

NOTE: If necessary, loosen the fuse pin nut [12] to nearest castellation to align the

- (e) Install the crossbolt [11], washer [10], and self-locking nut [9].
 - Tighten the nut.
 - 2) Install the cotter pin [8].

SUBTASK 57-54-02-400-013

- (7) Install the Rod ASSY OUTBD MLG Beam [1] to the fuse pin [14].
 - (a) Move the Rod ASSY OUTBD MLG Beam [1] over to the fuse pin [14] clevis.
 - NOTE: Turn the fuse pin to allow the rod to fit in the fuse pin tag.
 - (b) Align the clevis bolt hole with the fuse pin bolt hole.
 - (c) Install bolt [7] with the head direction as shown, two washers [4], and nut [3].
 - 1) Tighten the bolt.
 - (d) Install the cotter pin [2]

H. Put the Airplane Back to Its Usual Condition

SUBTASK 57-54-02-400-014

- (1) Remove the axle jacks.
- (2) Lower the airplane and remove the jacks.
 - Do this task: Lower the Airplane Off of the Jacks, TASK 07-11-01-580-805 or .Lower the Airplane Off of the Jacks, TASK 07-11-01-580-805.
- (3) Remove the main landing gear inner cylinder retention strap for the shock strut.
 - Do this task: retainer equipment, SPL-1853 (Main Landing Gear Truck Assembly Installation, TASK 32-11-18-400-801).
- Do the 'Put the Airplane Back to Its Usual Condition' in Main Landing Gear Truck Assembly Installation, TASK 32-11-18-400-801.

SUBTASK 57-54-02-400-015

- Restore the hydraulic system power.
 - (a) Do this task: Main Hydraulic System Pressurization, TASK 29-11-00-860-801.

SUBTASK 57-54-02-400-016

- (6) Remove the MLG downlock pins.
 - (a) Do this task: Landing Gear Downlock Pins Removal, TASK 32-00-30-080-801.

SUBTASK 57-54-02-410-001

(7) Close these access panels:

<u>Number</u>	Name/Location
551DT	Left Main Landing Gear Upper Wing Panel
551EB	Inboard Fixed Trailing Edge Panel
552DB	Inboard Fixed Trailing Edge Panel

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(Continued)

<u>Number</u>	Name/Location
651DT	Right Main Landing Gear Upper Wing Panel
651EB	Inboard Fixed Trailing Edge Panel
652DB	Inboard Fixed Trailing Edge Panel
733	Left Main Landing Gear Shock Strut Door
734	Left Main Landing Gear Drag Strut Door
735	Left Main Landing Gear Trunnion Door
743	Right Main Landing Gear Shock Strut Door
744	Right Main Landing Gear Drag Strut Door
745	Right Main Landing Gear Trunnion Door

—— END OF TASK ——

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MAIN LANDING GEAR SUPPORT BEAM - REMOVAL/INSTALLATION

1. General

- A. This procedure has two tasks.
 - (1) The first task is to remove the main landing gear support beam.
 - (2) The second task is the installation of the main landing gear support beam.

NOTE: This procedure requires the removal and installation of a large number of complex systems and structural components. To successfully complete the tasks, a detailed plan and extensive tagging methodology is recommended.

TASK 57-54-04-000-801

2. Main Landing Gear Support Beam - Removal

Figure 401

A. General

- (1) This task includes steps to remove the Main Landing Gear (MLG) Support Beam:
 - (a) Prepare for the MLG Gear Support Beam Removal.
 - (b) MLG Support Beam Removal.

NOTE: Figures shown are examples that do not contain all the design specific differences. The Figure configurations shown do illustrate information detailed in the procedural steps.

B. References

Reference	Title
06-44-00 P/B 201	WINGS (MAJOR ZONES 500 AND 600) ACCESS DOORS AND PANELS - MAINTENANCE PRACTICES
27-51-00-040-801	Trailing Edge Flap Deactivation (P/B 201)
27-51-00-860-804	Extend the Trailing Edge Flaps (P/B 201)
27-51-11 P/B 401	INBOARD TRAILING EDGE FLAP - REMOVAL/INSTALLATION
27-51-11-000-801	Inboard Trailing Edge Flap Removal (P/B 401)
27-51-13 P/B 401	INBOARD FLAP, INBOARD SUPPORT MECHANISM - REMOVAL/INSTALLATION
27-51-15 P/B 401	INBOARD FLAP TRANSMISSION - MAINTENANCE PRACTICES
27-51-15-000-801	Inboard Flap Inboard Transmission Removal (P/B 401)
29-11-00-860-807	Main Hydraulic System and the Reservoir Depressurization (P/B 201)
29-11-00-860-808	Main Hydraulic System Power Removal (P/B 201)
32-00-30-480-801	Landing Gear Downlock Pins Installation (P/B 201)
32-09-00-040-801	Air Mode Simulation - Preparation (P/B 201)
32-11-01 P/B 401	MAIN LANDING GEAR - REMOVAL/INSTALLATION
32-11-01-020-803	Main Landing Gear Removal, Using an Overhead Crane (P/B 401)
57-51-10-000-801	Wing Trailing Edge Panel Removal (P/B 401)
57-54-01-000-801	Hangar Link Hinge Pin Removal (P/B 201)
57-54-01-910-802	Prepare for the Removal (P/B 201)

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(Continued)

Reference	Title
57-54-02-000-801	Main Landing Gear Support Beam Distribution Plates - Removal (P/B 401)
57-54-02-020-801	Prepare for the Removal of the Main Landing Gear Support Beam Distribution Plates (P/B 401)

C. Location Zones

Zone	Area
100	Lower Half of Fuselage
117	Main Equipment Center, Left
118	Main Equipment Center, Right
143	Main Landing Gear Wheel Well, Left
144	Main Landing Gear Wheel Well, Right
197	Aft Wing-to-Body Fairings, Left
211	Flight Compartment, Left
212	Flight Compartment, Right
434	Aft Strut Fairing - Left Nacelle Strut
444	Aft Strut Fairing - Right Nacelle Strut
551	Rear Spar to Landing Gear Support Beam - Left Wing
552	Landing Gear Support Beam & Rear Spar to Wing Trailing Edge - Left Wing
555	Left Wing Inboard Main Flap
556	Left Wing Inboard Aft Flap
571	Flap Support Fairing No. 4
572	Inboard Flap Center Track Fairing - Left Wing
573	Flap Support Fairing No. 3
651	Rear Spar to Landing Gear Support Beam - Right Wing
652	Landing Gear Support Beam & Rear Spar to Wing Trailing Edge - Right Wing
655	Right Wing Inboard Main Flap
656	Right Wing Inboard Aft Flap
671	Flap Support Fairing No. 5
672	Inboard Flap Center Track Fairing - Right Wing
673	Flap Support Fairing No. 6
700	Landing Gear and Landing Gear Doors
731	Left Main Landing Gear
732	Left Main Landing Gear Body Door
733	Left Main Landing Gear Shock Struct Door
734	Left Main Landing Gear Drag Strut Door
735	Left Main Landing Gear Trunnion Door
741	Right Main Landing Gear
742	Right Main Landing Gear Body Door
743	Right Main Landing Gear Shock Strut Door
744	Right Main Landing Gear Drag Strut Door
745	Right Main Landing Gear Trunnion Door

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D. Access Panels

Number	Name/Location
193JL	Overwing Fairing Torque Tube Door
194JR	Overwing Fairing Torque Tube Door
551BB	Inboard Fixed Trailing Edge Panel
551DB	Inboard Fixed Trailing Edge Panel
551DT	Left Main Landing Gear Upper Wing Panel
551EB	Inboard Fixed Trailing Edge Panel
551FB	Inboard Fixed Trailing Edge Panel
552BB	Inboard Fixed Trailing Edge Panel
552DB	Inboard Fixed Trailing Edge Panel
552EB	Inboard Fixed Trailing Edge Panel
552FB	Inboard Fixed Trailing Edge Panel
555EL	Inboard Main Flap Panel
651BB	Inboard Fixed Trailing Edge Panel
651DB	Inboard Fixed Trailing Edge Panel
651DT	Right Main Landing Gear Upper Wing Panel
651EB	Inboard Fixed Trailing Edge Panel
651FB	Inboard Fixed Trailing Edge Panel
652BB	Inboard Fixed Trailing Edge Panel
652CB	Inboard Fixed Trailing Edge Panel
652DB	Inboard Fixed Trailing Edge Panel
655ER	Inboard Main Flap Panel
Duamana fa	with Main Landing Cook Cunnert Doom Domeyal

E. Prepare for the Main Landing Gear Support Beam Removal

SUBTASK 57-54-04-040-001

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

Left Power Management Panel, P110

Row	<u>Col</u>	<u>Number</u>	<u>Name</u>
Н	26	C32600	PSEU 1 PRI PWR
L	19	C29604	R HYD PUMP CTRL
M	19	C32617	LG TIRE PRESSURE INDICATOR
M	21	C32610	LG ANTISKID 2,6,10/4,8,12 CB 1
M	28	C29607	C1 HYD PUMP CTRL
Ν	27	C32619	LG MAIN GEAR STEERING
Ν	28	C32618	LG BRAKE TEMP MONITOR

Right Power Management Panel, P210

Row	<u>Col</u>	<u>Number</u>	<u>Name</u>
L	4	C29605	L HYD PUMP CTRL
L	5	C29608	C2-HYD PUMP CTRL
L	13	C32601	PSEU 2 PRI PWR
M	1	C32611	LG ANTISKID 1,5,9/3,7,11 CB 2

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Standby Power Management Panel, P310

Row	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	1	C32603	PSEU 1 ALTN PWR
D	2	C32624	PSEU 2 ALTN PWR
D	4	C29609	C HYD AIR PUMP 1
D	5	C29606	HYD AIR PUMP 2
Н	1	C32609	LG ANTISKID 1,5,9/3,7,11 CB 1
Н	2	C32612	LG ANTISKID 2,6,10/4,8,12 CB 2

SUBTASK 57-54-04-040-002

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

Left Power Management Panel, P110

Row	<u>Col</u>	<u>Number</u>	<u>Name</u>
K	17	C27631	FLAPS ELEC CTRL RLY PWR
L	17	C32636	SEMI-LEVER GEAR CONTROL, LEFT

Left Power Panel, P100

Row	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	2	C27301	FLAPS ELEC MOT PWR

Right Power Management Panel, P210

Row	<u>Col</u>	<u>Number</u>	<u>Name</u>
K	9	C27632	FLAPS PRI DR CTRL 2
L	22	C32637	SEMI-LEVER GEAR CONTROL, RIGHT

Standby Power Management Panel, P310

Row	Col	<u>Number</u>	<u>Name</u>
G	11	C27604	FLAPS PRI DR CTRL 1

SUBTASK 57-54-04-010-001

- (3) Remove the left wing access panels (WINGS (MAJOR ZONES 500 AND 600) ACCESS DOORS AND PANELS MAINTENANCE PRACTICES, PAGEBLOCK 06-44-00/201, INBOARD TRAILING EDGE FLAP REMOVAL/INSTALLATION, PAGEBLOCK 27-51-11/401, INBOARD FLAP, INBOARD SUPPORT MECHANISM REMOVAL/INSTALLATION, PAGEBLOCK 27-51-13/401, INBOARD FLAP TRANSMISSION MAINTENANCE PRACTICES, PAGEBLOCK 27-51-15/401, MAIN LANDING GEAR REMOVAL/INSTALLATION, PAGEBLOCK 32-11-01/401).
 - (a) Open these access panels:

<u>Number</u>	Name/Location
193JL	Overwing Fairing Torque Tube Door
551BB	Inboard Fixed Trailing Edge Panel
551DB	Inboard Fixed Trailing Edge Panel
551DT	Left Main Landing Gear Upper Wing Panel
551EB	Inboard Fixed Trailing Edge Panel
551FB	Inboard Fixed Trailing Edge Panel
552BB	Inboard Fixed Trailing Edge Panel
552DB	Inboard Fixed Trailing Edge Panel
552EB	Inboard Fixed Trailing Edge Panel

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(Continued)

<u>Number</u>	Name/Location
552FB	Inboard Fixed Trailing Edge Panel
555EL	Inboard Main Flap Panel

SUBTASK 57-54-04-010-002

- (4) Remove the right wing access panels (WINGS (MAJOR ZONES 500 AND 600) ACCESS DOORS AND PANELS MAINTENANCE PRACTICES, PAGEBLOCK 06-44-00/201, INBOARD TRAILING EDGE FLAP REMOVAL/INSTALLATION, PAGEBLOCK 27-51-11/401, INBOARD FLAP, INBOARD SUPPORT MECHANISM REMOVAL/INSTALLATION, PAGEBLOCK 27-51-13/401, INBOARD FLAP TRANSMISSION MAINTENANCE PRACTICES, PAGEBLOCK 27-51-15/401, MAIN LANDING GEAR REMOVAL/INSTALLATION, PAGEBLOCK 32-11-01/401).
 - (a) Open these access panels:

<u>Number</u>	Name/Location
194JR	Overwing Fairing Torque Tube Door
651BB	Inboard Fixed Trailing Edge Panel
651DB	Inboard Fixed Trailing Edge Panel
651DT	Right Main Landing Gear Upper Wing Panel
651EB	Inboard Fixed Trailing Edge Panel
651FB	Inboard Fixed Trailing Edge Panel
652BB	Inboard Fixed Trailing Edge Panel
652CB	Inboard Fixed Trailing Edge Panel
652DB	Inboard Fixed Trailing Edge Panel
655ER	Inboard Main Flap Panel

SUBTASK 57-54-04-000-017

(5) Tag and remove the wiring systems and wire bundles that will inhibit the removal and installation tasks of this procedure.

SUBTASK 57-54-04-040-003



MAKE SURE THAT THE DOWNLOCK PINS ARE INSTALLED IN ALL OF THE LANDING GEAR. WITHOUT THE DOWNLOCK PINS, THE LANDING GEAR CAN RETRACT AND CAUSE INJURIES TO PERSONS AND DAMAGE TO EQUIPMENT.

- (6) Install the downlock pins in the nose and main landing gear.
 - (a) Do this task: Landing Gear Downlock Pins Installation, TASK 32-00-30-480-801.

SUBTASK 57-54-04-020-001

- (7) Extend the trailing edge flaps to the 30-unit position.
 - (a) Do this task: Extend the Trailing Edge Flaps, TASK 27-51-00-860-804.

SUBTASK 57-54-04-040-009

- (8) Deactivate the trailing edge flaps.
 - (a) Do this task: Trailing Edge Flap Deactivation, TASK 27-51-00-040-801

SUBTASK 57-54-04-000-001

(9) Disconnect the attached linkages and rods between the panel support and the MLG support beams.

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SUBTASK 57-54-04-000-002

- (10) Remove the necessary Inboard Trailing Edge Panels.
 - (a) Do this task: Wing Trailing Edge Panel Removal, TASK 57-51-10-000-801.

SUBTASK 57-54-04-000-003

- (11) Remove the Inboard Trail Edge (TE) Flaps.
 - (a) Do this task: Inboard Trailing Edge Flap Removal, TASK 27-51-11-000-801.

SUBTASK 57-54-04-000-005

- (12) Remove the Inboard Flap Inboard Transmission.
 - (a) Do this task: Inboard Flap Inboard Transmission Removal, TASK 27-51-15-000-801.

SUBTASK 57-54-04-000-018

- (13) Remove the Inboard TE Flap, inboard support mechanism.
 - (a) Do these removal tasks: INBOARD FLAP, INBOARD SUPPORT MECHANISM -REMOVAL/INSTALLATION, PAGEBLOCK 27-51-13/401.

SUBTASK 57-54-04-040-006

- (14) Depressurize the hydraulic system.
 - (a) Do this task: Main Hydraulic System and the Reservoir Depressurization, TASK 29-11-00-860-807.

SUBTASK 57-54-04-040-007

- (15) Remove the center hydraulic system power.
 - (a) Do this task: Main Hydraulic System Power Removal, TASK 29-11-00-860-808.

SUBTASK 57-54-04-000-006

- (16) Disconnect the hydraulic lines from the main landing gear beam.
 - NOTE: Tag and remove the hydraulic systems that will inhibit the removal and installation tasks.
 - (a) Attach tags to the hydraulic lines to make the installation of the hydraulic lines easier.
 - (b) Put a cap on each of the hydraulic ports.
 - (c) Put a plug on each of the hydraulic lines.

SUBTASK 57-54-04-000-007

(17) Disconnect the attach linkages between the panel support and the main landing gear support beam.

SUBTASK 57-54-04-000-008

- (18) Remove the Main Landing Gear (MLG).
 - (a) Do this task: Main Landing Gear Removal, Using an Overhead Crane, TASK 32-11-01-020-803.
 - NOTE: The overhead crane that was used to remove the MLG can also be used to lift and lower the Main Landing Gear Support Beam.

SUBTASK 57-54-04-730-001

(19) If electrical power is supplied to the airplane while it is on jacks, do the step that follows:





PREPARE THE SAFETY-SENSITIVE SYSTEMS FOR THE AIR MODE BEFORE YOU OPEN THE AIR/GROUND CIRCUIT BREAKERS. IN THE AIR MODE, MANY OF THE AIRPLANE SYSTEMS CAN OPERATE. THIS CAN CAUSE INJURIES TO PERSONNEL, AND DAMAGE TO EQUIPMENT.

(a) Do this task: Air Mode Simulation - Preparation, TASK 32-09-00-040-801.

NOTE: Make sure the APU does not initiate the autostart sequence when the airplane is lifted with the jacks. This is when electrical power is not supplied.

SUBTASK 57-54-04-000-015

- (20) Remove the inboard and outboard panel support assembles.
 - (a) Remove the end of the panel support assembly [2] that attaches to the MLG support beam.
 - 1) Remove the cotter pin [7], castellated nut [8], two washers [9], washer [10] and bolt [11].

NOTE: Take in to account that there are two washers [9] on the MLG support beam castellated nut [8] position.

NOTE: Label the direction of the bolts prior to removal.

- (b) Remove the end of the panel support assembly [2] that attaches to the spoiler beam assembly.
 - 1) Remove the cotter pin [12], castellated nut [13], washer [14], washer [15], and bolt [16].

NOTE: Label the direction of the bolts prior to removal.

SUBTASK 57-54-04-000-012

(21) Remove the MLG support beam diagonal stabilizer brace.

NOTE: These steps are for the primary diagonal stabilizer brace installed on the 777-200LR and 777-300ER airplanes.

- (a) Make sure the load on the MLG support beam diagonal stabilizer brace [5] has been removed.
- (b) Remove the bottom end of the MLG support beam diagonal stabilizer brace [5] that attaches to the MLG support beam [1].
 - 1) Remove the nut [17], washer [18], washer [19], and bolt [20].
- (c) Remove the top end of the MLG support beam diagonal stabilizer brace [5] that attaches to the wing rear spar assembly.
 - 1) Remove the nut [21], washer [22], washer [23], and bolt [24].
- (22) Remove the MLG support beam diagonal stabilizer brace.

NOTE: These steps are for the substitute diagonal stabilizer brace that can be installed on the 777-200LR and 777-300ER airplanes.

- (a) Make sure the load on the brace has been removed.
- (b) Remove the bottom end of the MLG support beam diagonal stabilizer brace [5] that attaches to MLG support beam [1].
 - 1) Remove the cotter pin [25], castellation nut [26], washer [27], two washer (non-metallic)s [28], and the fuse pin [29].

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- (c) Remove the top end of the MLG support beam diagonal stabilizer brace [5] that attaches to the wing rear spar assembly.
 - 1) Remove the cotter pin [30], castellation nut [31], washer [32], and fuse pin [33].

SUBTASK 57-54-04-000-013

- (23) Remove the lower MLG support beam stabilizer brace.
 - (a) Make sure the load on the brace has been removed.
 - (b) Remove the end of the MLG support beam lower stabilizer brace [4] that attaches to the MLG support beam [1].
 - 1) Remove the nut [34], retainer cap [35], bolt [36], retainer cap [37], nut [38], retainer cap [39], and fuse pin [40].
 - (c) Remove the end of the MLG support beam lower stabilizer brace [4] that attaches to the wing rear spar assembly.
 - 1) Remove the nut [41], retainer cap [42], bolt [43], retainer cap [44], nut [45], washer [46], and fuse pin [47].

SUBTASK 57-54-04-000-014

(24) Remove the upper MLG support beam stabilizer brace.

NOTE: In order to remove the upper brace the cap plate [55] will have to be removed.

- (a) Remove the end of the MLG support beam upper stabilizer brace [6] that attaches to the MLG support beam [1].
 - 1) Remove the nut [48], retainer cap [49], bolt [50], retainer cap [51], nut [52], retainer cap [53], fuse pin [54] and four washers [64].
- (b) Remove the end of the MLG support beam upper stabilizer brace [6] that attaches to the inboard fixed trailing edge beam.
 - 1) Remove the six fasteners [56] and cap plate [55].
 - 2) Remove the nut [57], retainer cap [58], bolt [59], retainer cap [60], nut [61], washer [62], and fuse pin [63].

F. Main Landing Gear (MLG) Support Beam Removal

SUBTASK 57-54-04-000-009



GET SUFFICIENT AID FROM OTHER PERSONNEL AND EQUIPMENT TO HOLD THE COMPONENT DURING THE REMOVAL, AND INSTALLATION. THE COMPONENT IS HEAVY. THIS WILL PREVENT INJURIES TO PERSONNEL, AND DAMAGE TO EQUIPMENT.

(1) Hold the MLG Support Beam with support structure.

NOTE: Support the MLG Support Beam. The MLG support beam weighs about 668 pounds (303 KG). To support it safely and effectively, use a crane, spreader bar, and two slings. Hydraulic jacks with a cradle can also be used. Use pads to protect the equipment from the support beam.

- (2) Remove the MLG Support Beam (Inboard) Hanger Link.
 - (a) Do this task: Prepare for the Removal, TASK 57-54-01-910-802.
 - (b) Do this task: Hangar Link Hinge Pin Removal, TASK 57-54-01-000-801.

SUBTASK 57-54-04-000-010

(3) Remove the MLG Support Beam (Outboard) Load Distribution Plates.

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- (a) Do this task: Prepare for the Removal of the Main Landing Gear Support Beam Distribution Plates, TASK 57-54-02-020-801.
- (b) Do this task: Main Landing Gear Support Beam Distribution Plates Removal, TASK 57-54-02-000-801.

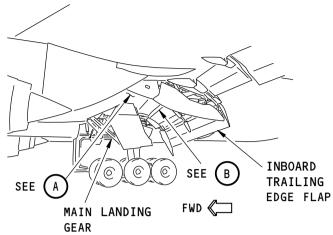
SUBTASK 57-54-04-000-011

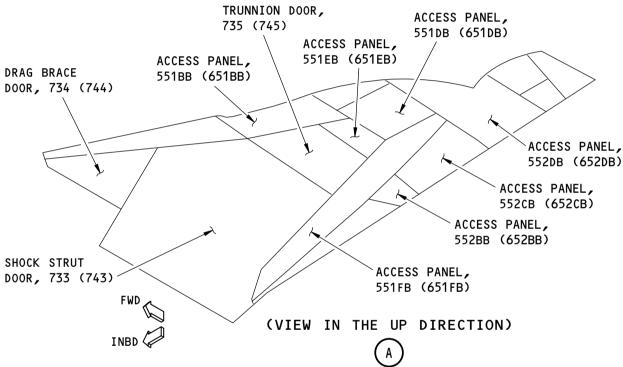
- (4) Use the crane, spreader bar, and two slings to carefully lower the MLG support beam [1].
 - (a) Place the beam on a stable platform.

----- END OF TASK -----

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NOTE: FIGURES SHOWN ARE EXAMPLES THAT DO NOT CONTAIN ALL THE DESIGN SPECIFIC DIFFERENCES. THE FIGURE CONFIGURATIONS SHOWN DO ILLUSTRATE INFORMATION DETAIL IN THE PROCEDURAL STEPS.

1 REFERENCE EXAMPLE VIEW, SEE SPECIFIC AMM FOR PART ASSEMBLY INSTALLATION DETAILS. FOR EXAMPLE, SEE AMM 32 FOR MAIN LANDING GEAR PARTS.

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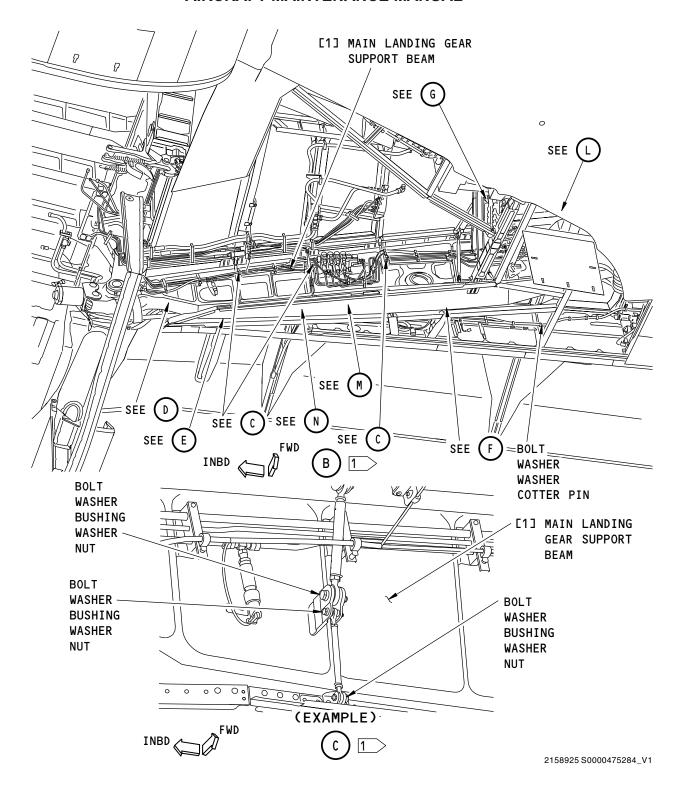
Main Landing Gear Support Beam Installation Figure 401/57-54-04-990-801 (Sheet 1 of 13)

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Main Landing Gear Support Beam Installation Figure 401/57-54-04-990-801 (Sheet 2 of 13)

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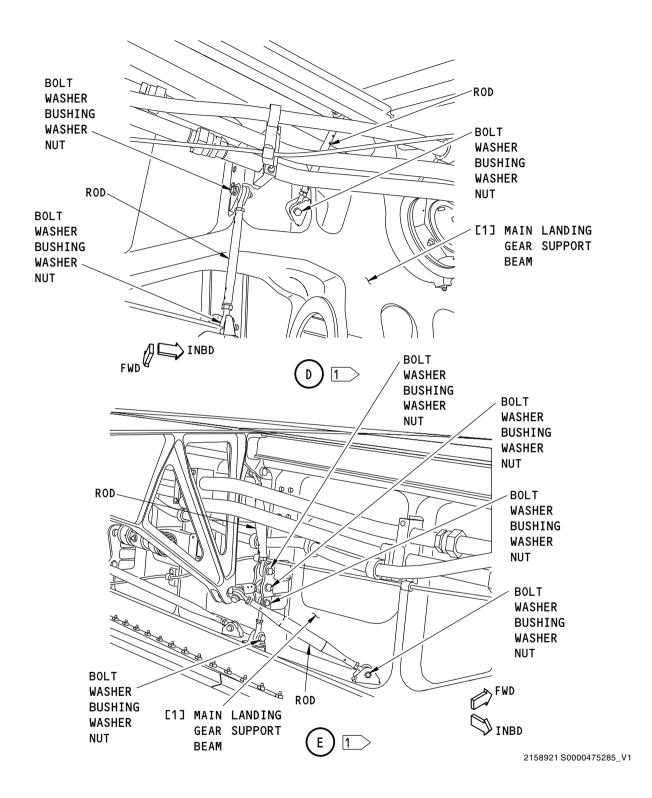
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Main Landing Gear Support Beam Installation Figure 401/57-54-04-990-801 (Sheet 3 of 13)

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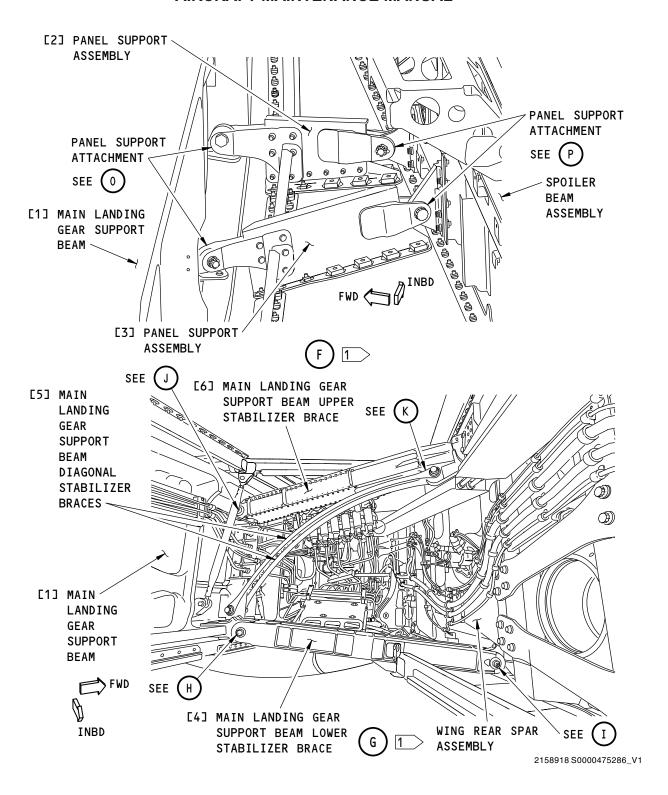
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Main Landing Gear Support Beam Installation Figure 401/57-54-04-990-801 (Sheet 4 of 13)

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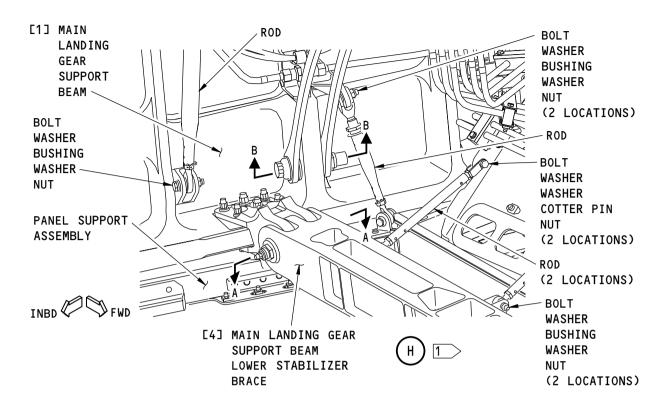
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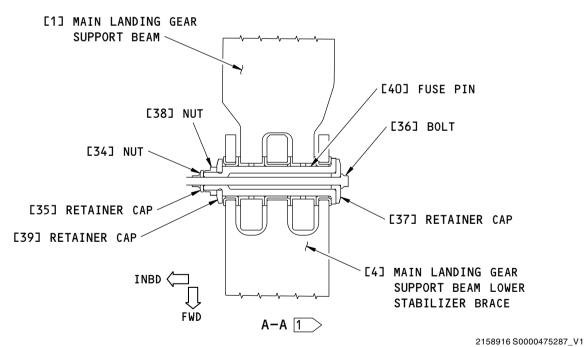
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Main Landing Gear Support Beam Installation Figure 401/57-54-04-990-801 (Sheet 5 of 13)

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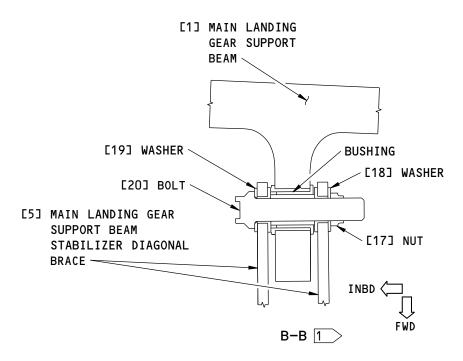
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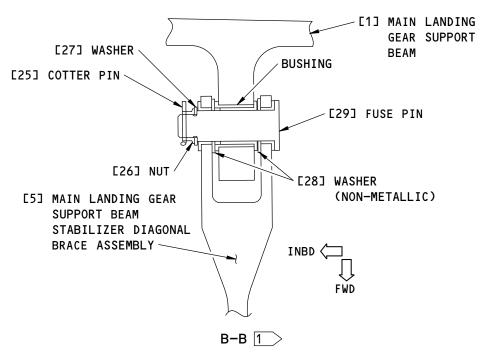
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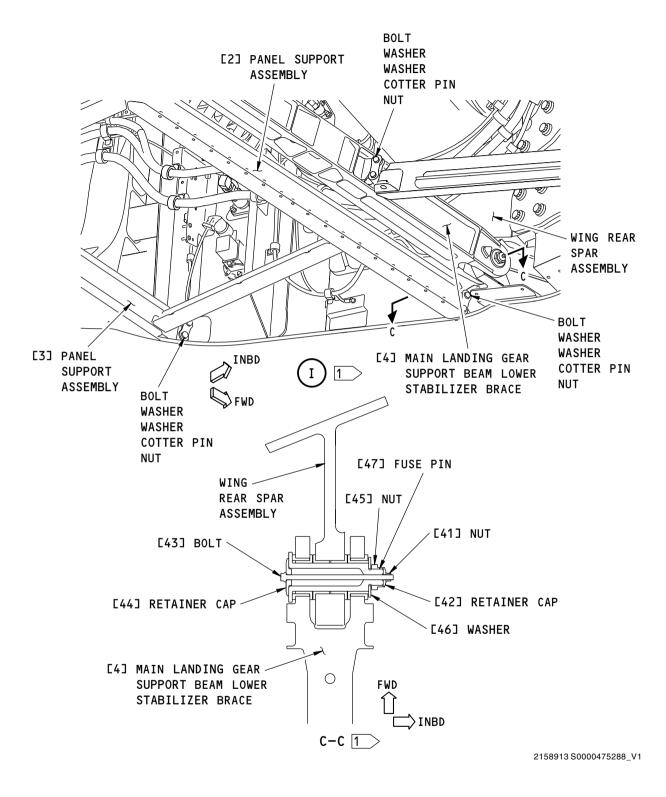
Main Landing Gear Support Beam Installation Figure 401/57-54-04-990-801 (Sheet 6 of 13)

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Main Landing Gear Support Beam Installation Figure 401/57-54-04-990-801 (Sheet 7 of 13)

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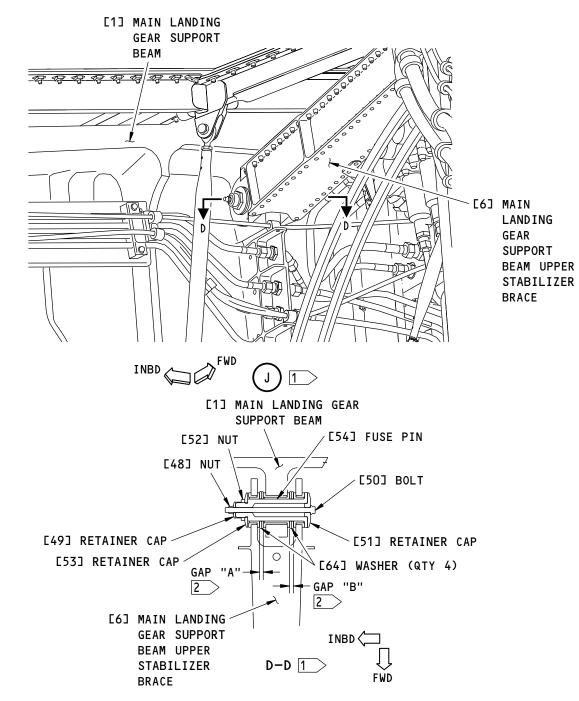
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GAP "A" AND "B" ARE 0.000-0.030 INCHES (0.762 mm) EQUAL WITHIN 0.030 INCHES (0.762 mm). DO NOT PRELOAD THE CLEVIS OF THE STABILIZER BRACE ASSEMBLY.

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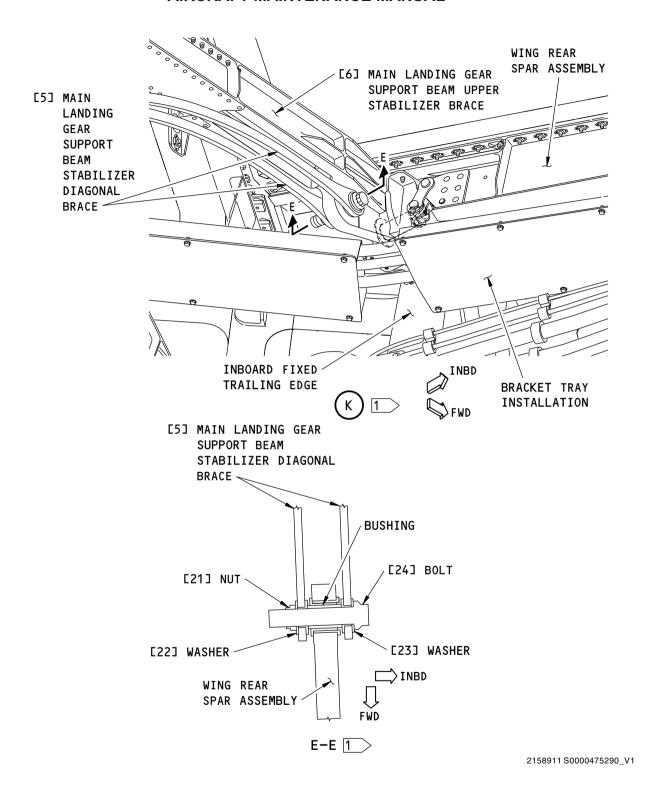
Main Landing Gear Support Beam Installation Figure 401/57-54-04-990-801 (Sheet 8 of 13)

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Main Landing Gear Support Beam Installation Figure 401/57-54-04-990-801 (Sheet 9 of 13)

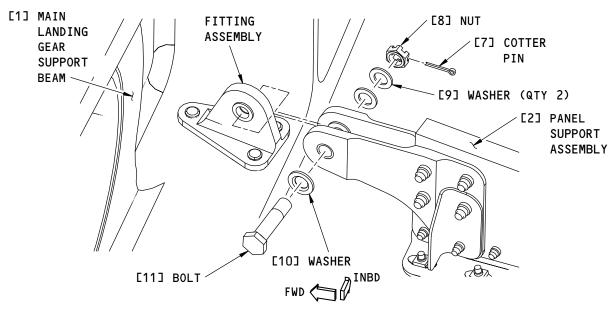
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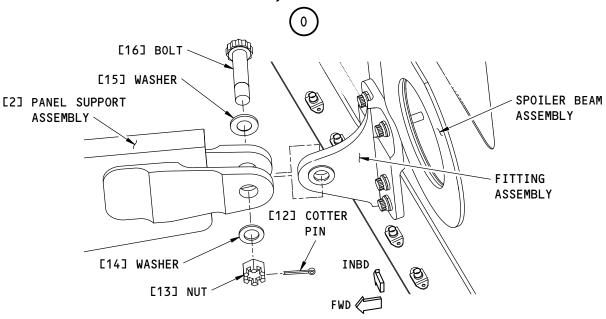
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PANEL SUPPORT ATTACHMENT (INBOARD-FORWARD IS SHOWN, OUTBOARD-FORWARD IS OPPOSITE)



PANEL SUPPORT ATTACHMENT (INBOARD-AFT IS SHOWN, OUTBOARD-AFT IS OPPOSITE)



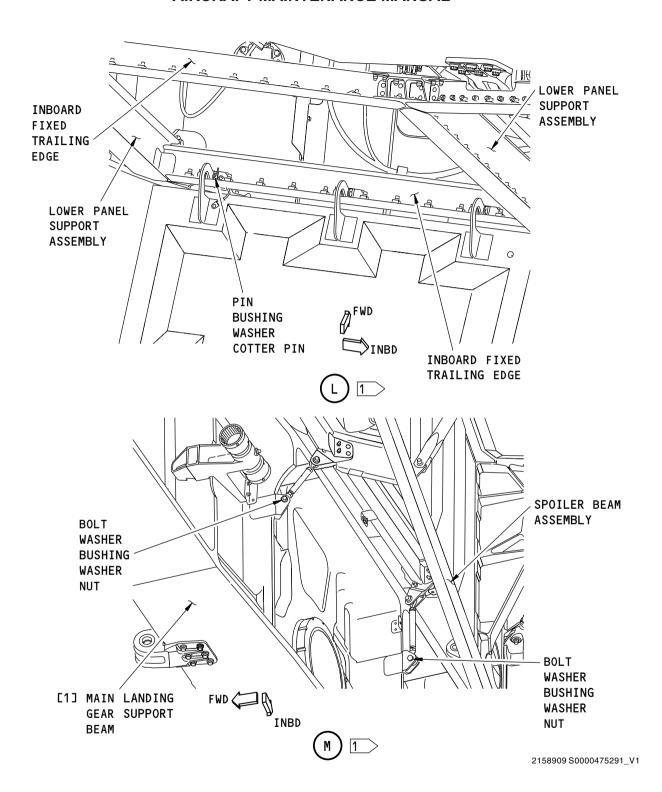
Main Landing Gear Support Beam Installation Figure 401/57-54-04-990-801 (Sheet 10 of 13)

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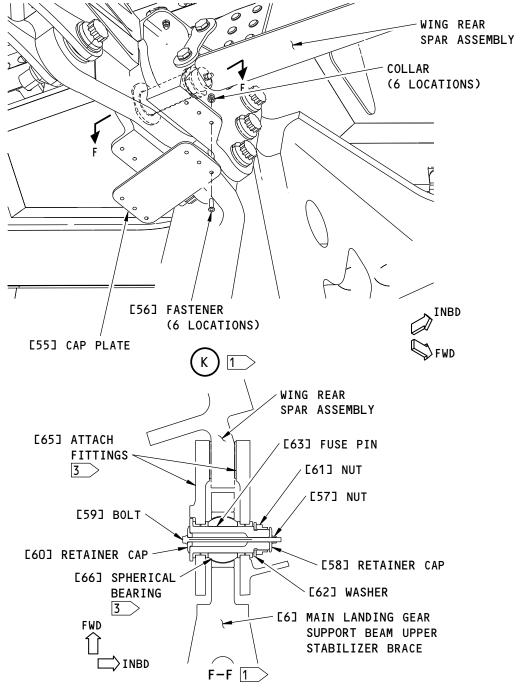
Main Landing Gear Support Beam Installation Figure 401/57-54-04-990-801 (Sheet 11 of 13)

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3 USE SPECIAL CARE TO MAINTAIN 0.010 INCHES (0.254 mm) NOMINAL GAP BETWEEN [65] ATTACH FITTING ASSEMBLY AND [66] SPHERICAL BEARING.

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Main Landing Gear Support Beam Installation Figure 401/57-54-04-990-801 (Sheet 12 of 13)

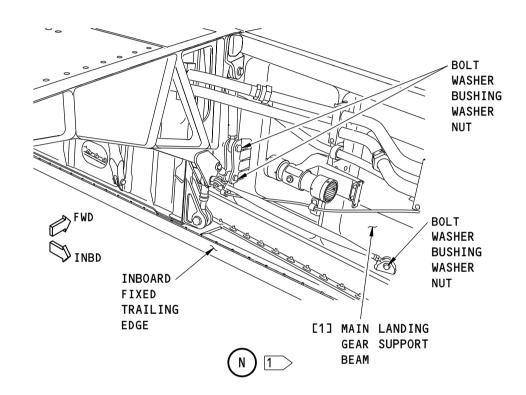
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Main Landing Gear Support Beam Installation Figure 401/57-54-04-990-801 (Sheet 13 of 13)

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TASK 57-54-04-400-801

3. Main Landing Gear Support Beam - Installation

Figure 401

A. General

- (1) This task includes these steps to install the Main Landing Gear (MLG) Support Beam:
 - (a) Prepare for the Installation of the MLG Support Beam.
 - (b) MLG Support Beam Installation.
 - (c) Installation of the MLG.
 - (d) Put the Airplane Back to its Usual Condition.

NOTE: All bushings, bearings, fuse pins, and shims are to be replaced prior to this procedure, unless specified otherwise within a procedure. Components such as bearing, bushing, fuse pin, and shim dimensional gaps and tolerances can be found in the Component Maintenance Manual (CMM) 57-54-17 if not specified within this procedure.

NOTE: Figures shown are examples that do not contain all the design specific differences. The Figure configurations shown do illustrate information detailed in the procedural steps.

B. References

06-44-00 P/B 201	WINGS (MAJOR ZONES 500 AND 600) ACCESS DOORS AND PANELS - MAINTENANCE PRACTICES
	LA CICINIO A IDDI ANE MAINTENIANICE DDA CTICEC
07-11-01 P/B 201	JACKING AIRPLANE - MAINTENANCE PRACTICES
12-21-09-640-803	Inboard Flap, Inboard Support Mechanism Lubrication (P/B 301)
12-21-14-640-806-002	Lower Main Landing Gear and Actuating Mechanisms Lubrication (P/B 301)
20-10-02-900-801	Bearing and Bushings Removal and Installation (P/B 401)
27-51-11 P/B 401	INBOARD TRAILING EDGE FLAP - REMOVAL/INSTALLATION
27-51-11-400-801	Inboard Trailing Edge Flap Installation (P/B 401)
27-51-11-820-801	Inboard Trailing Edge Flap Adjustment (P/B 501)
27-51-13 P/B 401	INBOARD FLAP, INBOARD SUPPORT MECHANISM - REMOVAL/INSTALLATION
27-51-15 P/B 401	INBOARD FLAP TRANSMISSION - MAINTENANCE PRACTICES
27-51-15-400-801	Inboard Flap Inboard Transmission Installation (P/B 401)
29-11-00-730-803	Hydraulic Reservoir Pressurization System - System Test (P/B 501)
29-11-00-860-801	Main Hydraulic System Pressurization (P/B 201)
32-11-01 P/B 401	MAIN LANDING GEAR - REMOVAL/INSTALLATION
32-11-01-420-803	Main Landing Gear Installation, Using an Overhead Crane (P/B 401)
57-54-01-400-801	Hangar Link Hinge Pin Installation (P/B 201)
57-54-02-400-801	Main Landing Gear Support Beam Distribution Plates - Installation (P/B 401)
57-54-02-400-802	Prepare for the Installation of the Main Landing Gear Support Beam Distribution Plates (P/B 401)
SWPM 20-20-00	Standard Wiring Practices Manual

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C. Consumable Materials

Reference	Description	Specification
A01076	Adhesive - Synthetic Rubber	BAC5010 Type 93 (BMS5-95 Class B)
D00013	Grease - Aircraft And Instrument Grease	MIL-PRF-23827 (NATO G-354) (Supersedes MIL-G-23827)
D00015	Grease - Aircraft Bearing (Use BMS 3-24 until existing stocks are depleted, BMS 3-33 supersedes BMS 3-24)	BMS3-24 (Superseded by BMS3-33)

D. Location Zones

Zone	Area
100	Lower Half of Fuselage
117	Main Equipment Center, Left
l18	Main Equipment Center, Right
143	Main Landing Gear Wheel Well, Left
144	Main Landing Gear Wheel Well, Right
197	Aft Wing-to-Body Fairings, Left
211	Flight Compartment, Left
212	Flight Compartment, Right
134	Aft Strut Fairing - Left Nacelle Strut
144	Aft Strut Fairing - Right Nacelle Strut
551	Rear Spar to Landing Gear Support Beam - Left Wing
552	Landing Gear Support Beam & Rear Spar to Wing Trailing Edge - Left Wing
555	Left Wing Inboard Main Flap
556	Left Wing Inboard Aft Flap
571	Flap Support Fairing No. 4
572	Inboard Flap Center Track Fairing - Left Wing
573	Flap Support Fairing No. 3
651	Rear Spar to Landing Gear Support Beam - Right Wing
552	Landing Gear Support Beam & Rear Spar to Wing Trailing Edge - Right Wing
655	Right Wing Inboard Main Flap
656	Right Wing Inboard Aft Flap
671	Flap Support Fairing No. 5
672	Inboard Flap Center Track Fairing - Right Wing
673	Flap Support Fairing No. 6
700	Landing Gear and Landing Gear Doors
731	Left Main Landing Gear
732	Left Main Landing Gear Body Door
733	Left Main Landing Gear Shock Struct Door
734	Left Main Landing Gear Drag Strut Door
735	Left Main Landing Gear Trunnion Door
741	Right Main Landing Gear
742	Right Main Landing Gear Body Door
743	Right Main Landing Gear Shock Strut Door

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(Continued)

Zone	Area
744	Right Main Landing Gear Drag Strut Door
745	Right Main Landing Gear Trunnion Door

E. Access Panels

7.00000 7 4.11010			
Number	Name/Location		
193JL	Overwing Fairing Torque Tube Door		
194JR	Overwing Fairing Torque Tube Door		
551BB	Inboard Fixed Trailing Edge Panel		
551DB	Inboard Fixed Trailing Edge Panel		
551DT	Left Main Landing Gear Upper Wing Panel		
551EB	Inboard Fixed Trailing Edge Panel		
551FB	Inboard Fixed Trailing Edge Panel		
552BB	Inboard Fixed Trailing Edge Panel		
552DB	Inboard Fixed Trailing Edge Panel		
552EB	Inboard Fixed Trailing Edge Panel		
552FB	Inboard Fixed Trailing Edge Panel		
555EL	Inboard Main Flap Panel		
651BB	Inboard Fixed Trailing Edge Panel		
651DB	Inboard Fixed Trailing Edge Panel		
651DT	Right Main Landing Gear Upper Wing Panel		
651EB	Inboard Fixed Trailing Edge Panel		
651FB	Inboard Fixed Trailing Edge Panel		
652BB	Inboard Fixed Trailing Edge Panel		
652CB	Inboard Fixed Trailing Edge Panel		
652DB	Inboard Fixed Trailing Edge Panel		
655ER	Inboard Main Flap Panel		

F. Prepare for the Installation of the MLG Support Beam

SUBTASK 57-54-04-400-004



GET SUFFICIENT AID FROM OTHER PERSONNEL AND EQUIPMENT TO HOLD THE COMPONENT DURING THE REMOVAL, AND INSTALLATION. THE COMPONENT IS HEAVY. THIS WILL PREVENT INJURIES TO PERSONNEL, AND DAMAGE TO EQUIPMENT.

(1) Hold the MLG support beam [1] with support structure.

NOTE: The MLG support beam [1] weighs about 668 pounds (303 KG). To support it safely and effectively, use a crane, spreader bar, and two slings. Hydraulic jacks with a cradle can also be used. Use pads to protect the equipment from the support beam.

- (2) Position the MLG support beam [1] into place.
- (3) Attach the crane, spreader bar, and two slings to the MLG Support Beam.
 - (a) Carefully lift the beam into place.

G. MLG Support Beam Installation

SUBTASK 57-54-04-600-002

(1) Install all fuse pins with grease, D00013 (Bearing and Bushings Removal and Installation, TASK 20-10-02-900-801).

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SUBTASK 57-54-04-400-001

- (2) Install the MLG support beam [1] distribution plates.
 - (a) Do this task: Prepare for the Installation of the Main Landing Gear Support Beam Distribution Plates, TASK 57-54-02-400-802.
 - (b) Do this task: Main Landing Gear Support Beam Distribution Plates Installation, TASK 57-54-02-400-801.

SUBTASK 57-54-04-400-002

- (3) Install the MLG support beam [1] hangar link.
 - (a) Do this task: Hangar Link Hinge Pin Installation, TASK 57-54-01-400-801.

SUBTASK 57-54-04-400-017

- (4) Initial MLG support beam upper brace installation.
 - (a) Carefully fit the MLG support beam upper stabilizer brace [6] in position between the MLG support beam [1] and the wing rear spar assembly without damage to the installed Spherical Bearing [66] and bushing surfaces.
 - (b) Temporarily install the two attach fittings [65] to the MLG support beam upper stabilizer brace [6] using a 1 1/8 inch diameter bolt.
 - (c) Use special care to maintain 0.010" (0.254mm) nominal gap between the attach fitting [65] and Spherical Bearing [66] installed in the MLG support beam upper stabilizer brace [6].
 - NOTE: The attach fitting [65] can be clamped tight to the Spherical Bearing [66] if two temporary 0.010" (0.254mm) shims are used in the initial installation to establish and maintain the required gaps.
 - (d) Temporarily install the fuse pin [54], four washers [64], retainer cap [53], and nut [52] to attach the MLG support beam upper stabilizer brace [6] and the MLG support beam [1].
 - (e) Remove the 1 1/8" diameter bolt and temporarily install the fuse pin [63], washer [62] and nut [61].
 - 1) Maintain 0.010" (0.254mm) nominal gap between the attach fitting [65] and Spherical Bearing [66] installed in the MLG support beam upper stabilizer brace [6].
 - (f) Adjust the position of the MLG support beam [1] and the MLG support beam upper stabilizer brace [6] Gap "A" and "B" are 0.000 0.030" (0.762mm) equal within 0.030" (0.762mm).
 - (g) Make sure you do not preload the clevis of the MLG support beam upper stabilizer brace [6].

SUBTASK 57-54-04-400-018

- (5) Complete the MLG support beam upper stabilizer brace [6] to the attach fittings [65] on the wing rear spar assembly.
 - (a) Tighten the fuse pin [63], washer [62], and nut [61] assembly to 350 ±50 in-lb (40 ±6 N⋅m).
 - (b) If used, remove the clamps that held the attach fittings [65].
 - (c) If used, remove the two temporary 0.010" (0.254mm) shims used in the initial installation to establish and maintain the required gaps between the attach fittings [65] and the Spherical Bearing [66].
 - (d) Check that the nominal gap between the attach fittings [65] and Spherical Bearing [66] has been maintain at 0.010" (0.254mm).
 - (e) Install the retainer cap [60], bolt [59], retainer cap [58], and nut [57].

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- 1) Tighten the bolt [59].
- (f) Install the cap plate [55] to the attach fittings [65] with six fasteners [56].
 - 1) Do this task: Make sure the gap between the cap plate [55] and the attach fittings [65] is less than 0.005 in. (0.127 mm).

SUBTASK 57-54-04-400-005

- (6) Complete the MLG support beam upper stabilizer brace [6] to the MLG support beam [1] installation.
 - (a) Make sure you do not preload the clevis of the MLG support beam upper stabilizer brace [6].
 - (b) Make sure that Gap "A" and Gap "B" are 0.000 0.030 inches (0.762 mm) is equal within 0.030 inches (0.762 mm).
 - 1) Install additional washers [64] to fill Gaps "A" and Gap "B" larger than 0.030 inches (0.0762 mm).
 - 2) Tighten the nut [52] to 350 \pm 50 in-lb (40 \pm 6 N·m).
 - (c) Install the retainer cap [51], bolt [50], retainer cap [49], and nut [48].
 - 1) Tighten the bolt [50].

SUBTASK 57-54-04-400-006

- (7) Install the MLG support beam lower stabilizer brace [4] to the MLG support beam [1].
 - (a) Carefully fit the MLG support beam lower stabilizer brace [4] in position between the MLG support beam [1] and the wing rear spar assembly.
 - (b) On the MLG support beam [1] end of the MLG support beam lower stabilizer brace [4] install the fuse pin [40], retainer cap [39], and nut [38].
 - 1) Tighten the nut [52] to 350 ±50 in-lb (40 ±6 N·m).
 - (c) Install the retainer cap [37], bolt [36], retainer cap [35], and nut [34].
 - 1) Tighten the bolt [36].

SUBTASK 57-54-04-400-012

- (8) Install the MLG support beam lower stabilizer brace [4] to the wing rear spar assembly.
 - (a) Position the MLG support beam lower stabilizer brace [4] between the MLG support beam [1] and the wing rear spar assembly.
 - (b) On the wing rear spar assembly end of the MLG support beam lower stabilizer brace [4] install the fuse pin [47], washer [46], and nut [45].
 - 1) Tighten the fuse pin [47] to 350 \pm 50 in-lb (40 \pm 6 N·m).
 - (c) Install the retainer cap [44], bolt [43], retainer cap [42], and nut [41].
 - 1) Tighten the bolt [43].

SUBTASK 57-54-04-400-013

- Install the lower end of the two MLG support beam diagonal stabilizer braces [5].
 - (a) Install the bolt [20], washer [19], washer [18], and nut [17].
 - 1) Tighten the bolt [20] to 350 \pm 50 in-lb (40 \pm 6 N·m).

SUBTASK 57-54-04-400-007

- (10) Install the upper end of the two MLG support beam diagonal stabilizer braces [5].
 - (a) Install the bolt [24], washer [23], washer [22] and nut [21].
 - 1) Tighten the bolt [24] to 350 \pm 50 in-lb (40 \pm 6 N·m).



SUBTASK 57-54-04-400-014

- (11) Install the lower end of the two MLG support beam diagonal stabilizer braces [5].
 - NOTE: This information is for the substitute stabilizer brace. The substitute two MLG support beam diagonal stabilizer braces [5] are installed attached to the stabilizer brace
 - NOTE: It is critical that the two MLG support beam diagonal stabilizer braces [5] are installed as shown with the bow up.
 - (a) Install the fuse pin [29], two washer (non-metallic)s [28] (one on each side of the bushing), washer [27], and castellation nut [26].
 - 1) Tighten the fuse pin [29] to 250 \pm 50 in-lb (28 \pm 6 N·m).
 - 2) Loosen the castellation nut [26] (Maximum of 60 degrees of rotation) until the cotter pin hole in the fuse pin [29] aligns with the castellation nut [26].
 - 3) Install the cotter pin [30].

SUBTASK 57-54-04-400-015

- (12) Install the upper end of the two MLG support beam diagonal stabilizer braces [5].
 - <u>NOTE</u>: This information is for the substitute stabilizer brace. The substitute two MLG support beam diagonal stabilizer braces [5] are installed attached to the stabilizer brace.
 - NOTE: It is critical that the two MLG support beam diagonal stabilizer braces [5] are installed as shown with the bow up.
 - (a) Install the fuse pin [33], washer [32], and castellation nut [31].
 - 1) Tighten the fuse pin [33] to 250 ±50 in-lb (28 ±6 N·m).
 - 2) Loosen the castellation nut [31] (Maximum of 60 degrees of rotation) until the cotter pin hole in the fuse pin [33] aligns with the castellation nut [31].
 - 3) Install the cotter pin [30].

SUBTASK 57-54-04-400-009

- (13) Install the two panel support assemblies [2].
 - (a) On each of the panel support assembly [2] ends that attaches to the MLG support beam [1], install, but do not tighten: bolt [11], washer [10], two washers [9], and castellated nut [8].
 - 1) Make sure that the bolt [11] head direction is as shown in the figure.
 - 2) Finger tighten the castellated nut [8].
 - a) Tighten an additional quarter turn (maximum) until the cotter pin hole in the bolt [11] aligns with the castellated nut [8].
 - 3) Install the cotter pin [7].
 - (b) On each of the panel support assembly [2] ends that attaches to the spoiler beam assembly, install, but do not tighten: bolt [16], washer [15], washer [14], and castellated nut [13].
 - 1) Make sure that the bolt [16] head direction is as shown in the figure.
 - 2) Finger tighten the castellated nut [13].
 - a) Tighten an additional quarter turn (maximum) until the cotter pin hole in the bolt [16] aligns with the castellated nut [13].
 - 3) Install the cotter pin [12].

SUBTASK 57-54-04-400-003

(14) Install the main landing gear.

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(a) Do this task: Main Landing Gear Installation, Using an Overhead Crane, TASK 32-11-01-420-803.

SUBTASK 57-54-04-420-003

- (15) Install the Inboard TE Flap, inboard support mechanism.
 - (a) Do the installation tasks in: INBOARD FLAP, INBOARD SUPPORT MECHANISM REMOVAL/INSTALLATION, PAGEBLOCK 27-51-13/401.

SUBTASK 57-54-04-400-019

- (16) Install the Inboard TE Flap Transmission.
 - (a) Do this task: Inboard Flap Inboard Transmission Installation, TASK 27-51-15-400-801.

SUBTASK 57-54-04-420-004

- (17) Install the Inboard TE Flaps.
 - (a) Do this task: Inboard Trailing Edge Flap Installation, TASK 27-51-11-400-801.

SUBTASK 57-54-04-400-020

- (18) Reconnect the hydraulic lines that were disconnected.
 - (a) Remove the tags to the hydraulic lines.
 - (b) Remove the cap on each of the hydraulic ports.
 - (c) Remove the plug on each of the hydraulic lines.
 - (d) Connect the hydraulic lines.
 - 1) Do this task: Hydraulic Reservoir Pressurization System System Test, TASK 29-11-00-730-803.

SUBTASK 57-54-04-400-021

(19) Install all wire systems and wire bundles that were removed.

SUBTASK 57-54-04-600-003

(20) Lube the four grease fittings in the MLG support beam lower stabilizer brace [4] with grease, D00015.

SUBTASK 57-54-04-400-022

- (21) Do a Fay Surface Seal of exposed surfaces and hardware (bolts, nuts and washers):
 - (a) Do this task: Use SWPM 20-20-00 Category 2, Fay Sealed Fay Surface Bond to apply adhesive, A01076.

SUBTASK 57-54-04-410-002

- (22) Install the left wing access panels (WINGS (MAJOR ZONES 500 AND 600) ACCESS DOORS AND PANELS MAINTENANCE PRACTICES, PAGEBLOCK 06-44-00/201, INBOARD TRAILING EDGE FLAP REMOVAL/INSTALLATION, PAGEBLOCK 27-51-11/401, INBOARD FLAP, INBOARD SUPPORT MECHANISM REMOVAL/INSTALLATION, PAGEBLOCK 27-51-13/401, INBOARD FLAP TRANSMISSION MAINTENANCE PRACTICES, PAGEBLOCK 27-51-15/401, MAIN LANDING GEAR REMOVAL/INSTALLATION, PAGEBLOCK 32-11-01/401).
 - (a) Close these access panels:

<u>Number</u>	Name/Location
193JL	Overwing Fairing Torque Tube Door
551BB	Inboard Fixed Trailing Edge Panel
551DB	Inboard Fixed Trailing Edge Panel
551DT	Left Main Landing Gear Upper Wing Panel

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(Continued)

<u>Number</u>	Name/Location
551EB	Inboard Fixed Trailing Edge Panel
551FB	Inboard Fixed Trailing Edge Panel
552BB	Inboard Fixed Trailing Edge Panel
552DB	Inboard Fixed Trailing Edge Panel
552EB	Inboard Fixed Trailing Edge Panel
552FB	Inboard Fixed Trailing Edge Panel
555EL	Inboard Main Flap Panel

SUBTASK 57-54-04-410-003

- (23) Install the right wing access panels (WINGS (MAJOR ZONES 500 AND 600) ACCESS DOORS AND PANELS MAINTENANCE PRACTICES, PAGEBLOCK 06-44-00/201, INBOARD TRAILING EDGE FLAP REMOVAL/INSTALLATION, PAGEBLOCK 27-51-11/401, INBOARD FLAP, INBOARD SUPPORT MECHANISM REMOVAL/INSTALLATION, PAGEBLOCK 27-51-13/401, INBOARD FLAP TRANSMISSION MAINTENANCE PRACTICES, PAGEBLOCK 27-51-15/401, MAIN LANDING GEAR REMOVAL/INSTALLATION, PAGEBLOCK 32-11-01/401).
 - (a) Close these access panels:

<u>Number</u>	Name/Location
194JR	Overwing Fairing Torque Tube Door
651BB	Inboard Fixed Trailing Edge Panel
651DB	Inboard Fixed Trailing Edge Panel
651DT	Right Main Landing Gear Upper Wing Panel
651EB	Inboard Fixed Trailing Edge Panel
651FB	Inboard Fixed Trailing Edge Panel
652BB	Inboard Fixed Trailing Edge Panel
652CB	Inboard Fixed Trailing Edge Panel
652DB	Inboard Fixed Trailing Edge Panel
655ER	Inboard Main Flap Panel

H. Put the Airplane Back to Its Usual Condition

SUBTASK 57-54-04-840-002

- (1) Lower the airplane and remove the jacks.
 - (a) Do this task: JACKING AIRPLANE MAINTENANCE PRACTICES, PAGEBLOCK 07-11-01/201.

SUBTASK 57-54-04-440-001

(2) Close the circuit breakers to put the airplane in its usual condition.

Remove the safety tags and close these circuit breakers:

Left Power Management Panel, P110

Row	<u>Col</u>	<u>Number</u>	<u>Name</u>
Н	26	C32600	PSEU 1 PRI PWR
K	17	C27631	FLAPS ELEC CTRL RLY PWR
M	19	C32617	LG TIRE PRESSURE INDICATOR
M	21	C32610	LG ANTISKID 2,6,10/4,8,12 CB 1
Ν	27	C32619	LG MAIN GEAR STEERING
N	28	C32618	LG BRAKE TEMP MONITOR

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Left Power Panel, P100

Row	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	2	C27301	FLAPS ELEC MOT PWR

Right Power Management Panel, P210

Row	<u>Col</u>	<u>Number</u>	<u>Name</u>
K	9	C27632	FLAPS PRI DR CTRL 2
L	13	C32601	PSEU 2 PRI PWR
M	1	C32611	LG ANTISKID 1,5,9/3,7,11 CB 2

Standby Power Management Panel, P310

Row	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	1	C32603	PSEU 1 ALTN PWR
D	2	C32624	PSEU 2 ALTN PWR
G	11	C27604	FLAPS PRI DR CTRL 1
Н	1	C32609	LG ANTISKID 1,5,9/3,7,11 CB 1
Н	2	C32612	LG ANTISKID 2,6,10/4,8,12 CB 2

SUBTASK 57-54-04-710-001

- (3) Pressurize the left, center, and right hydraulic systems.
 - (a) Do this task: Main Hydraulic System Pressurization, TASK 29-11-00-860-801.

SUBTASK 57-54-04-820-001

- (4) Adjust the INBD trailing edge Flaps:
 - (a) Do this task: Inboard Trailing Edge Flap Adjustment, TASK 27-51-11-820-801.

SUBTASK 57-54-04-640-001

- (5) Lubricate the INBD trailing edge flaps:
 - (a) Do this task: Inboard Flap, Inboard Support Mechanism Lubrication, TASK 12-21-09-640-803.

SUBTASK 57-54-04-600-001

(6) Lubricate the hanger link assembly at the grease fittings, do this task: Lower Main Landing Gear and Actuating Mechanisms Lubrication, TASK 12-21-14-640-806-002.

SUBTASK 57-54-04-840-001

(7) Do the "Put the Airplane Back to Its Usual Condition" subtask in: Main Landing Gear Installation, Using an Overhead Crane, TASK 32-11-01-420-803.

----- END OF TASK -----

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EFFECTIVITY -



AILERON HINGE FITTINGS - REMOVAL/INSTALLATION

1. General

- A. This procedure has these tasks:
 - (1) Removal of the aileron hinge fittings

NOTE: You can remove hinge fittings without the removal of the aileron.

(2) Installation of the aileron hinge fittings.

NOTE: The washer stack-up can cause galvanic corrosion on the aluminum structures to which the electrical jumper is attached.

TASK 57-61-00-000-801

2. Aileron Hinge Fitting Removal

(Figure 401)

A. General

(1) The aileron hinge fitting [2] and fitting [5] are called fittings in this procedure.

B. References

Reference	Title
20-10-27-400-801	Attach Flight Control and Nacelle Surfaces Personnel Equipment Shock Absorbing Lanyard (P/B 201)
27-11-13-000-801	Aileron - Removal (P/B 401)
29-11-00-860-808	Main Hydraulic System Power Removal (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-1713	Lock - Power Control, Outboard Aileron
	Part #: J27033-1 Supplier: 81205
STD-1177	Harness - Body

D. Location Zones

Zone	Area	
568	Left Wing Aileron	
668	Right Wing Aileron	

E. Prepare for the Removal

SUBTASK 57-61-00-010-001

(1) If you will remove the aileron [4], do this task: Aileron - Removal, TASK 27-11-13-000-801.

SUBTASK 57-61-00-860-001



YOU MUST PREVENT ALL POSSIBLE OPERATION OF THE AILERON WHEN YOU WORK ON OR NEAR IT. THE AILERON MOVES QUICKLY AND WITH FORCE. IF THE AILERON MOVES WHEN PERSONS ARE NEAR IT, YOU CAN CAUSE INJURY TO THEM.

- (2) If you will not remove the aileron [4], prevent all possible operation of the aileron [4] as follows:
 - (a) Move the control in the flight compartment to get full aileron travel upward.

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- (b) Move these FLT CONTROL HYD VALVE POWER switches on the pilot's overhead panel to the SHUT OFF position:
 - 1) WING, L
 - 2) WING, C
 - 3) WING, R
- (c) Make sure the amber VALVE CLOSED lights come on.
- (d) Release the control column.
- (e) Install outboard aileron power control lock, SPL-1713 on the aileron actuators to prevent all aileron movement.
- (f) Remove hydraulic power, do this task: Main Hydraulic System Power Removal, TASK 29-11-00-860-808

SUBTASK 57-61-00-940-001



ATTACH A SAFETY HARNESS WHEN YOU DO WORK ON TOP OF THE WING. FAILURE TO DO THIS CAN CAUSE INJURY OR DAMAGE.

(3) Attach a safety body harness, STD-1177, do this task: Attach Flight Control and Nacelle Surfaces Personnel Equipment Shock Absorbing Lanyard, TASK 20-10-27-400-801

SUBTASK 57-61-00-010-002

(4) Open the applicable trailing edge access doors to get access to the aileron hinge fitting [2] and fitting [5].

F. Removal

SUBTASK 57-61-00-020-001

- (1) Remove fitting [2] and fitting [5], as follows:
 - (a) If the aileron is not removed, do this task: Aileron Removal, TASK 27-11-13-000-801 to remove the aileron hinge bolt from the applicable fitting [2] and fitting [5].
 - (b) If you remove the fitting [2], remove the side brace [3]:
 - Remove the nut [14], washer [13], bolt [11], and washer [12].
 - 2) Move the side brace [3] from the fitting [2].
 - (c) Remove the nut [10], washer [9], bolt [7], and washer [8] from the two locations on the fitting [2] and fitting [5].
 - (d) Remove the fitting [2] and fitting [5].



TASK 57-61-00-400-801

3. Aileron Hinge Fitting Installation

(Figure 401)

A. General

(1) The aileron hinge fitting [2] and fitting [5] are called fittings in this procedure.

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B. References

Reference	Title
20-10-27-400-801 Attach Flight Control and Nacelle Surfaces Personnel	
	Equipment Shock Absorbing Lanyard (P/B 201)
27-11-13-400-801	Aileron - Installation (P/B 401)
29-11-00-860-801	Main Hydraulic System Pressurization (P/B 201)
29-11-00-860-808	Main Hydraulic System Power Removal (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-1713	Lock - Power Control, Outboard Aileron
	Part #: J27033-1 Supplier: 81205
STD-1177	Harness - Body

D. Consumable Materials

Reference	Description	Specification
A00247	Sealant - Pressure And Environmental -	BMS5-95
	Chromate Type	
C00033	Coating - Protective Enamel, Flexibility Use	BMS10-60 Type II
C00175	Primer - Urethane Compatible, Corrosion Resistant (Less Than 1% Aromatic Amines)	BMS10-79 Type III

E. Expendables/Parts

AMM Item	Description	AIPC Reference	AIPC Effectivity
2	Fitting	Not Specified	
5	Fitting	Not Specified	

F. Location Zones

Zone	Area
568	Left Wing Aileron
668	Right Wing Aileron

G. Installation

SUBTASK 57-61-00-420-001

- (1) Install the fitting [2] and fitting [5] that you removed, as follows:
 - (a) Put the fitting [2] and fitting [5] in its correct position at the end of the hinge rib [1].
 - (b) Install the washer [8], bolt [7], washer [9], and nut [10] in the two locations.
 - (c) Tighten the bolts [7] at these locations as follows:
 - 1) fitting [2] with a side brace, 150 in-lb (17 N·m) to 200 in-lb (23 N·m).
 - 2) fitting [5] without a side brace, 50 in-lb (6 N·m) to 80 in-lb (9 N·m).
 - (d) On fitting [2], attach the side brace [3] as follows:
 - 1) Move the side brace [3] to its correct position.
 - 2) Install the bolt [11], washer [12], washer [13], and nut [14].
 - 3) Tighten the bolt [11] to 160 in-lb (18 N·m) to 240 in-lb (27 N·m).

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SUBTASK 57-61-00-910-001

- (2) Apply sealant, A00247 to the assembly, as follows:
 - (a) Apply a fillet of sealant, A00247 to washer [8] and washer [9].
 - (b) Paint the fillet seals with primer, C00175 and allow it to dry.
 - (c) Paint the fillet seals with enamel coating, C00033.

H. Put the Airplane Back to Its Usual Condition

SUBTASK 57-61-00-410-001

- (1) If you removed the aileron [4], do this step:
 - (a) Do this task: Aileron Installation, TASK 27-11-13-400-801.

SUBTASK 57-61-00-420-002

- (2) If you did not remove the aileron [4], do these steps:
 - (a) Do this task: Aileron Installation, TASK 27-11-13-400-801 to install the aileron hinge bolt [6] in the applicable fitting [2] and fitting [5].
 - (b) Remove the outboard aileron power control lock, SPL-1713 from the aileron actuator.

SUBTASK 57-61-00-940-002

(3) Remove the body harness, STD-1177, do this task: Attach Flight Control and Nacelle Surfaces Personnel Equipment Shock Absorbing Lanyard, TASK 20-10-27-400-801.

SUBTASK 57-61-00-910-002

- (4) Make the aileron operable as follows:
 - (a) Apply hydraulic power, do this task: Main Hydraulic System Pressurization, TASK 29-11-00-860-801.
 - (b) Move these FLT CONTROL HYD VALVE POWER switches on the pilot's overhead panel to the NORM position:
 - 1) WING, L
 - 2) WING, C
 - 3) WING, R
 - (c) Make sure the amber VALVE CLOSED lights go off.
 - (d) Do this task: Main Hydraulic System Power Removal, TASK 29-11-00-860-808.

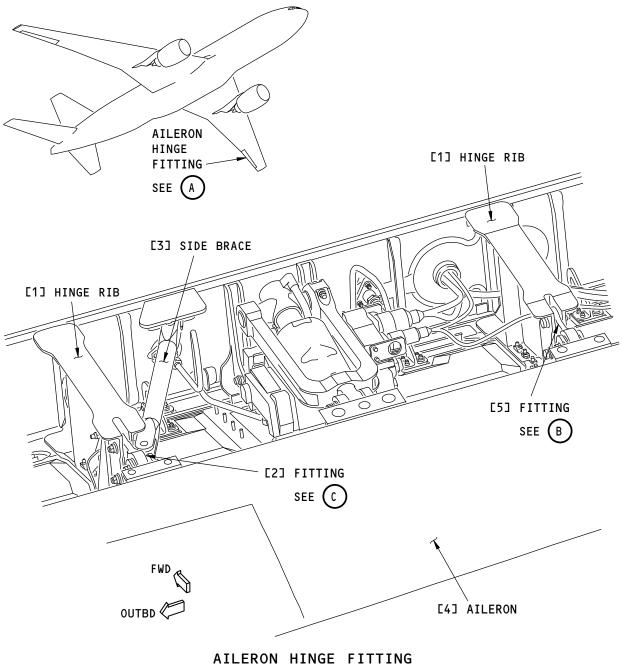
------ END OF TASK ------

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EFFECTIVITY

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AILERON HINGE FITTING (LEFT WING IS SHOWN, RIGHT WING IS ALMOST THE SAME)



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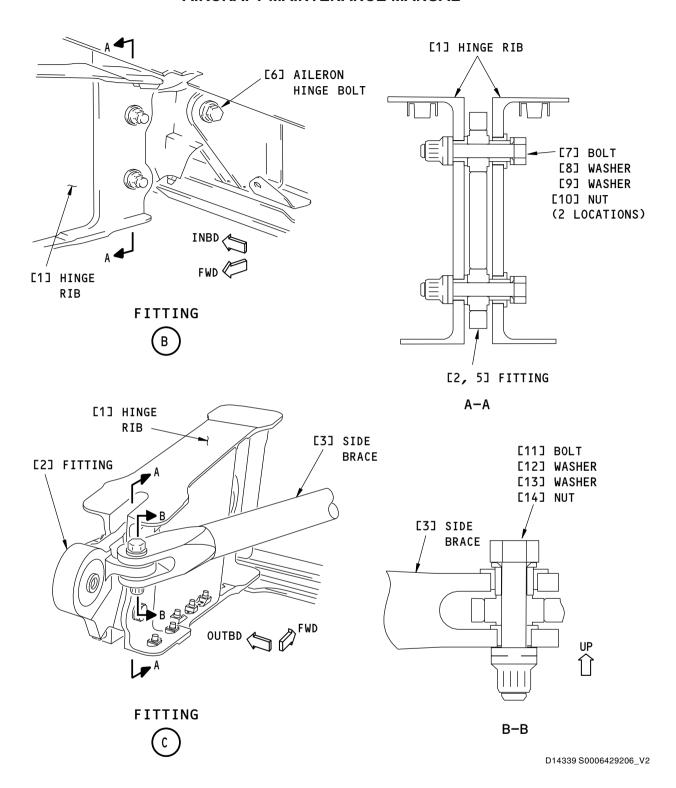
Aileron Hinge Fitting Installation Figure 401/57-61-00-990-801 (Sheet 1 of 2)

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Aileron Hinge Fitting Installation Figure 401/57-61-00-990-801 (Sheet 2 of 2)





SPOILER HINGE FITTINGS - REMOVAL/INSTALLATION

1. General

- A. This procedure has these tasks:
 - (1) Removal of the spoiler hinge fittings
 - (2) Installation of the spoiler hinge fittings.

TASK 57-71-00-000-801

2. Spoiler Hinge Fitting Removal

(Figure 401)

A. General

(1) The spoiler attach fitting [1] is called fitting in this procedure.

B. References

Reference	Title
20-10-27-400-801 Attach Flight Control and Nacelle Surfaces Personnel	
	Equipment Shock Absorbing Lanyard (P/B 201)
27-61-00-040-803	Spoiler Deactivation (With the Spoilers Down) (P/B 201)
27-61-10-000-801	Inboard Spoiler Removal (P/B 401)
27-61-11-000-801	Outboard Spoiler Removal (P/B 401)

C. Tools/Equipment

Reference	Description	
STD-1177	Harness - Body	

D. Location Zones

Zone	Area
553	Spoiler No. 7
554	Spoiler No. 6
562	Spoiler No. 5
563	Spoiler No. 4
564	Spoiler No. 3
565	Spoiler No. 2
566	Spoiler No. 1
653	Spoiler No. 8
654	Spoiler No. 9
662	Spoiler No. 10
663	Spoiler No. 11
664	Spoiler No. 12
665	Spoiler No. 13
666	Spoiler No. 14

E. Prepare for the Removal

SUBTASK 57-71-00-010-001

- (1) If you will remove all of the fittings [2], do the task to remove the applicable spoiler [1]:
 - (a) Do this task: Inboard Spoiler Removal, TASK 27-61-10-000-801.
 - (b) Do this task: Outboard Spoiler Removal, TASK 27-61-11-000-801.

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SUBTASK 57-71-00-860-001



YOU MUST PREVENT ALL POSSIBLE OPERATION OF THE SPOILER WHEN YOU WORK ON OR NEAR IT. THE SPOILER MOVES QUICKLY AND WITH FORCE. IF THE SPOILER MOVES WHEN PERSONS ARE NEAR IT, YOU CAN CAUSE INJURY.

(2) If you will not remove the spoiler [1], prevent all possible operation of the spoiler [1], (do this task: Spoiler Deactivation (With the Spoilers Down), TASK 27-61-00-040-803).

SUBTASK 57-71-00-940-001



ATTACH A SAFETY HARNESS WHEN YOU DO WORK ON TOP OF THE WING. FAILURE TO OBEY CAN CAUSE INJURY OR DAMAGE.

(3) Attach a safety body harness, STD-1177, (do this task: Attach Flight Control and Nacelle Surfaces Personnel Equipment Shock Absorbing Lanyard, TASK 20-10-27-400-801).

F. Removal

SUBTASK 57-71-00-020-001

- (1) Remove the fitting [2]:
 - (a) If the spoiler [1] is not removed, disconnect the spoiler [1]:
 - 1) Remove the cotter pin, nut [10], washer [9], washer [8], and bolt [7].
 - (b) Remove the cotter pin, nut [6], washer [5], washer [4], and bolt [3] from the fitting [2].
 - (c) Remove the fitting [2].



TASK 57-71-00-400-801

3. Spoiler Hinge Fitting Installation

(Figure 401)

A. General

(1) The spoiler hinge fitting [2] is called fitting in this procedure.

B. References

Reference	Title
20-10-27-400-801 Attach Flight Control and Nacelle Surfaces Personnel	
	Equipment Shock Absorbing Lanyard (P/B 201)
27-61-00-440-801	Spoiler Activation (P/B 201)
27-61-10-400-801	Inboard Spoiler Installation (P/B 401)
27-61-11-400-801	Outboard Spoilers Installation (P/B 401)

C. Tools/Equipment

Reference	Description
STD-1177	Harness - Body

D. Location Zones

Zone	Area	
553	Spoiler No. 7	
554	Spoiler No. 6	

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57-71-00



(Continued)

Zone	Area		
562	Spoiler No. 5		
563	Spoiler No. 4		
564	Spoiler No. 3		
565	Spoiler No. 2		
566	Spoiler No. 1		
653	Spoiler No. 8		
654	Spoiler No. 9		
662	Spoiler No. 10		
663	Spoiler No. 11		
664	Spoiler No. 12		
665	Spoiler No. 13		
666	Spoiler No. 14		

E. Installation

SUBTASK 57-71-00-420-001

- (1) Install the fitting [2] that you removed:
 - (a) Put the fitting [2] in its correct position.
 - (b) Install the bolt [3], washer [4], washer [5], and nut [6] to attach the fitting [2] to the wing structure [11].
 - NOTE: The bolt [3] in the inboard fitting [2] on spoiler No. 13 is installed in the opposite direction.
 - (c) If the spoiler is installed, install the bolt [7], washer [8], washer [9], and nut [10] to attach the spoiler [1] to the fitting [2].
 - (d) Tighten the nuts [6][10].

F. Put the airplane back in its usual condition.

SUBTASK 57-71-00-410-001

- (1) If you removed the spoiler [1], do the task to install the spoiler [1]:
 - (a) Do this task: Inboard Spoiler Installation, TASK 27-61-10-400-801.
 - (b) Do this task: Outboard Spoilers Installation, TASK 27-61-11-400-801.

SUBTASK 57-71-00-420-002

(2) If you did not remove the spoiler [1], make the spoiler [1] operable , do this task: Spoiler Activation, TASK 27-61-00-440-801

SUBTASK 57-71-00-940-002

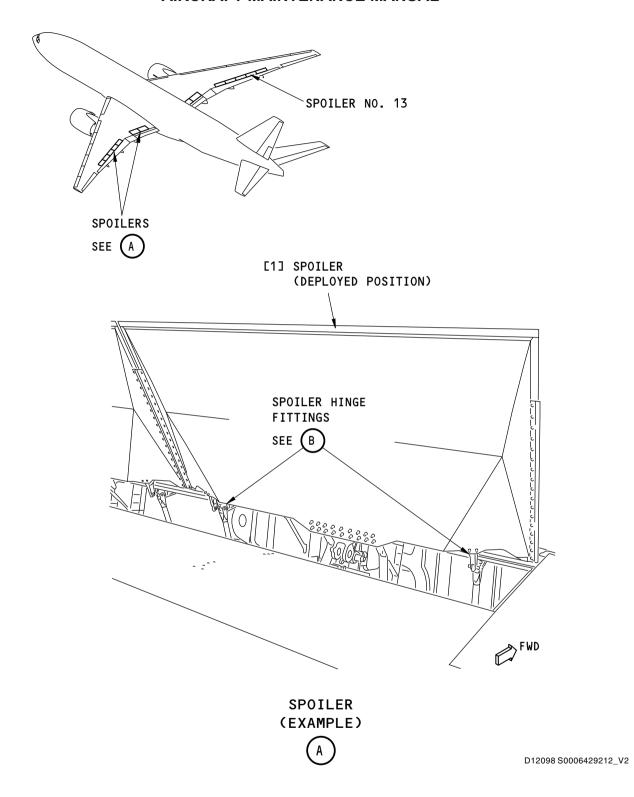
(3) Remove the safety body harness, STD-1177, do this task: Attach Flight Control and Nacelle Surfaces Personnel Equipment Shock Absorbing Lanyard, TASK 20-10-27-400-801

——— END OF TASK ———

57-71-00

EFFECTIVITY -





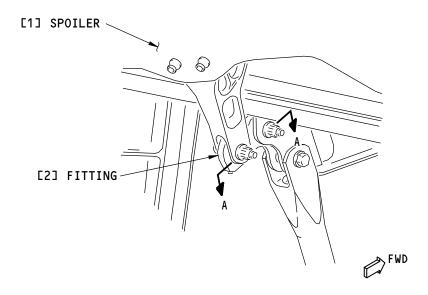
Spoiler Hinge Fitting Installation Figure 401/57-71-00-990-801 (Sheet 1 of 2)

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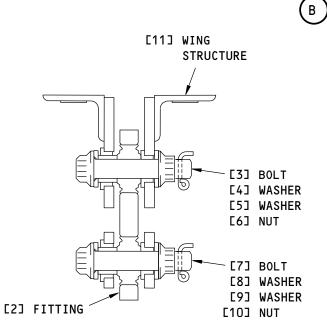
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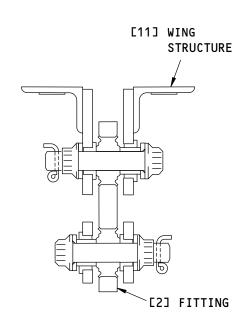




SPOILER HINGE FITTING (SPOILER IN THE UP POSITION)



ALL FITTINGS EXCEPT THE INBOARD FITTING ON SPOILER NO. 13



INBOARD FITTING ON SPOILER NO. 13 ONLY A-A

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Spoiler Hinge Fitting Installation Figure 401/57-71-00-990-801 (Sheet 2 of 2)

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