

CHAPTER

26

FIRE PROTECTION



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116	May 05/2017		152	May 05/2015		26-10 TASKS		
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123	May 05/2017		159	May 05/2015		204	Jan 05/2013	
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210	Sep 05/2016		O 212	Sep 05/2017		211	Sep 05/2016	
O 211	Sep 05/2017		O 213	Sep 05/2017		212	Sep 05/2016	
O 212	Sep 05/2017		O 214	Sep 05/2017		213	Sep 05/2016	
O 213	Sep 05/2017		O 215	Sep 05/2017		214	Sep 05/2016	
O 214	Sep 05/2017		O 216	Sep 05/2017		215	Sep 05/2016	
O 215	Sep 05/2017		O 217	Sep 05/2017		216	Sep 05/2016	
O 216	Sep 05/2017		O 218	Sep 05/2017		217	Sep 05/2016	
O 217	Sep 05/2017		O 219	Sep 05/2017		218	Sep 05/2016	
O 218	Sep 05/2017		O 220	Sep 05/2017		219	Sep 05/2016	
O 219	Sep 05/2017		O 221	Sep 05/2017		220	Sep 05/2016	
O 220	Sep 05/2017		O 222	Sep 05/2017		221	Sep 05/2016	
O 221	Sep 05/2017		O 223	Sep 05/2017		222	Sep 05/2016	
O 222	Sep 05/2017		O 224	Sep 05/2017		223	Sep 05/2016	
O 223	Sep 05/2017		O 225	Sep 05/2017		224	Sep 05/2016	
O 224	Sep 05/2017		O 226	Sep 05/2017		225	Sep 05/2016	
O 225	Sep 05/2017		O 227	Sep 05/2017		226	Sep 05/2016	
O 226	Sep 05/2017		O 228	Sep 05/2017		227	Sep 05/2016	
26-14 TASKS			O 229	Sep 05/2017		228	BLANK	
201	Jan 05/2013		O 230	Sep 05/2017		26-17 TASKS		
202	Sep 05/2016		O 231	Sep 05/2017		201	Sep 05/2014	
203	Sep 05/2016		O 232	Sep 05/2017		O 202	Sep 05/2017	
204	Sep 05/2016		O 233	Sep 05/2017		O 203	Sep 05/2017	
205	Sep 05/2016		O 234	Sep 05/2017		204	Sep 05/2014	
206	BLANK		O 235	Sep 05/2017		O 205	Sep 05/2017	
26-15 TASKS			236	BLANK		206	Sep 05/2014	
201	May 05/2013		26-16 TASKS			26-17 TASK SUPPORT		
202	Sep 05/2016		201	Jan 05/2013		301	Jan 05/2013	
O 203	Sep 05/2017		202	Jan 05/2013		302	BLANK	
O 204	Sep 05/2017		203	Sep 05/2016		26-18 TASKS		
205	Sep 05/2016		204	Sep 05/2016		201	Sep 05/2013	
O 206	Sep 05/2017		205	Sep 05/2016		202	Sep 05/2016	
O 207	Sep 05/2017		206	Sep 05/2016		203	Sep 05/2016	
O 208	Sep 05/2017		207	Sep 05/2016		O 204	Sep 05/2017	
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208	Sep 05/2016		O 244	Sep 05/2017		202	Jan 05/2013	
O 209	Sep 05/2017		O 245	Sep 05/2017		R 203	Sep 05/2017	
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O 211	Sep 05/2017		O 247	Sep 05/2017		R 205	Sep 05/2017	
O 212	Sep 05/2017		O 248	Sep 05/2017		206	BLANK	
O 213	Sep 05/2017		O 249	Sep 05/2017		26-22 TASKS		
O 214	Sep 05/2017		O 250	Sep 05/2017		201	Jan 05/2013	
O 215	Sep 05/2017		O 251	Sep 05/2017		202	Jan 05/2013	
O 216	Sep 05/2017		O 252	Sep 05/2017		203	Jan 05/2013	
O 217	Sep 05/2017		O 253	Sep 05/2017		204	Jan 05/2013	
O 218	Sep 05/2017		O 254	Sep 05/2017		205	Jan 05/2013	
O 219	Sep 05/2017		O 255	Sep 05/2017		206	Jan 05/2013	
O 220	Sep 05/2017		O 256	Sep 05/2017		26-23 TASKS		
O 221	Sep 05/2017		O 257	Sep 05/2017		201	Jan 05/2013	
O 222	Sep 05/2017		O 258	Sep 05/2017		202	Jan 05/2013	
O 223	Sep 05/2017		26-18 TASK SUPPORT			203	Jan 05/2013	
O 224	Sep 05/2017		301	Jan 05/2013		204	Jan 05/2013	
O 225	Sep 05/2017		302	Jan 05/2017		205	Jan 05/2013	
O 226	Sep 05/2017		303	Jan 05/2013		206	Jan 05/2013	
O 227	Sep 05/2017		304	Jan 05/2013		207	Jan 05/2013	
O 228	Sep 05/2017		305	Jan 05/2013		208	Sep 05/2016	
O 229	Sep 05/2017		306	Jan 05/2013		209	Sep 05/2016	
O 230	Sep 05/2017		307	Jan 05/2013		210	Sep 05/2016	
O 231	Sep 05/2017		308	Jan 05/2013		211	Sep 05/2016	
O 232	Sep 05/2017		309	Jan 05/2013		212	Sep 05/2016	
O 233	Sep 05/2017		310	Jan 05/2013		213	Sep 05/2016	
O 234	Sep 05/2017		311	Jan 05/2013		214	Sep 05/2016	
O 235	Sep 05/2017		312	Jan 05/2013		215	Sep 05/2016	
O 236	Sep 05/2017		R 313	Sep 05/2017		216	Sep 05/2016	
O 237	Sep 05/2017		314	BLANK		O 217	Sep 05/2017	
O 238	Sep 05/2017		26-19 TASKS			O 218	Sep 05/2017	
O 239	Sep 05/2017		201	May 05/2013		O 219	Sep 05/2017	
O 240	Sep 05/2017		202	Sep 05/2016		O 220	Sep 05/2017	
O 241	Sep 05/2017		203	Sep 05/2016		221	Sep 05/2016	
O 242	Sep 05/2017		204	BLANK		222	Sep 05/2016	

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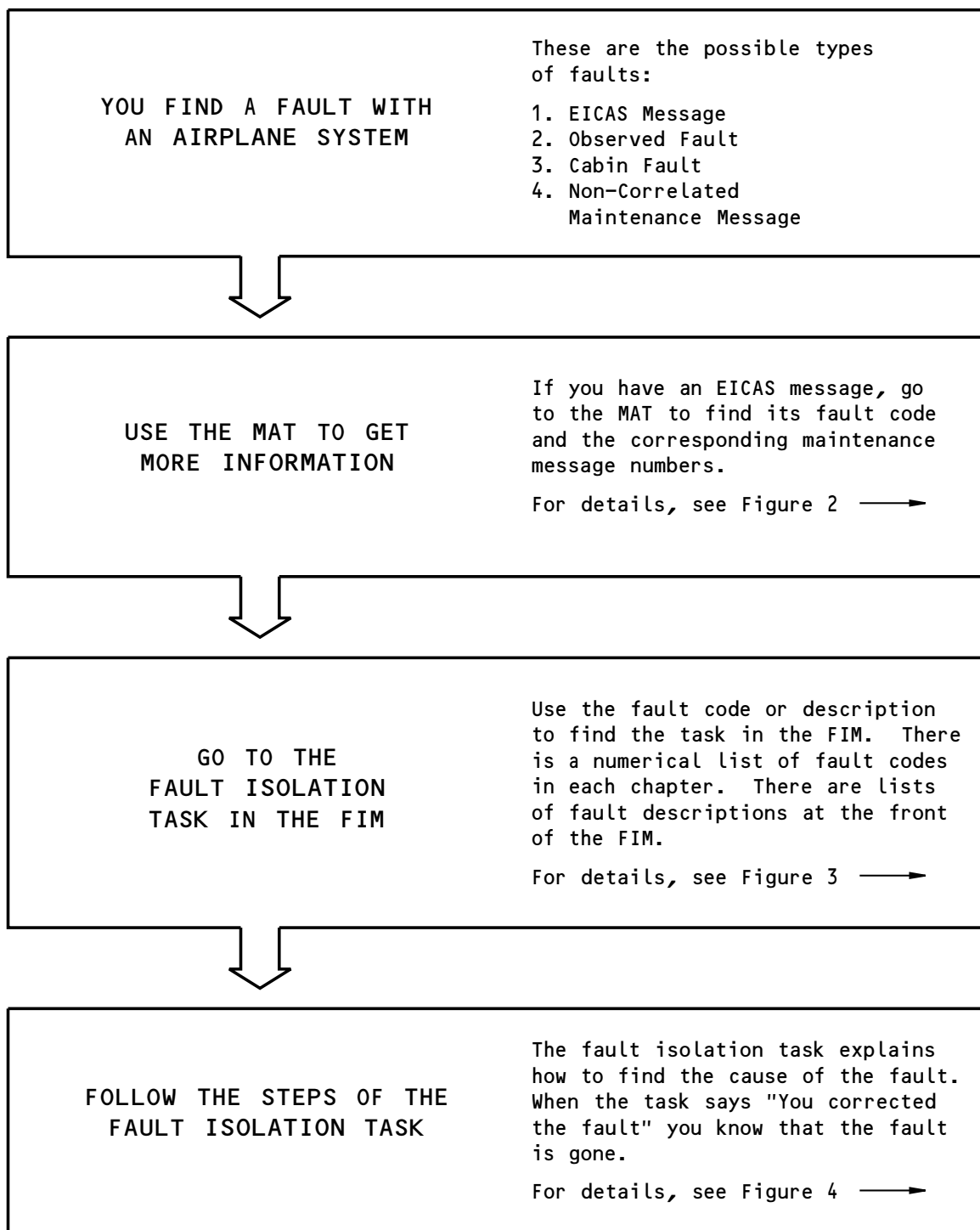
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O 225	Sep 05/2017							
O 226	Sep 05/2017							
227	Sep 05/2016							
228	Sep 05/2016							
229	Sep 05/2016							
O 230	Sep 05/2017							
O 231	Sep 05/2017							
O 232	Sep 05/2017							
O 233	Sep 05/2017							
O 234	Sep 05/2017							
O 235	Sep 05/2017							
O 236	Sep 05/2017							
O 237	Sep 05/2017							
238	Sep 05/2016							
239	Sep 05/2016							
O 240	Sep 05/2017							
241	Sep 05/2016							
O 242	Sep 05/2017							
26-98 TASKS								
201	Jan 05/2013							
202	BLANK							

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E84424 S0000132469_V1

Basic Fault Isolation Process
Figure 1

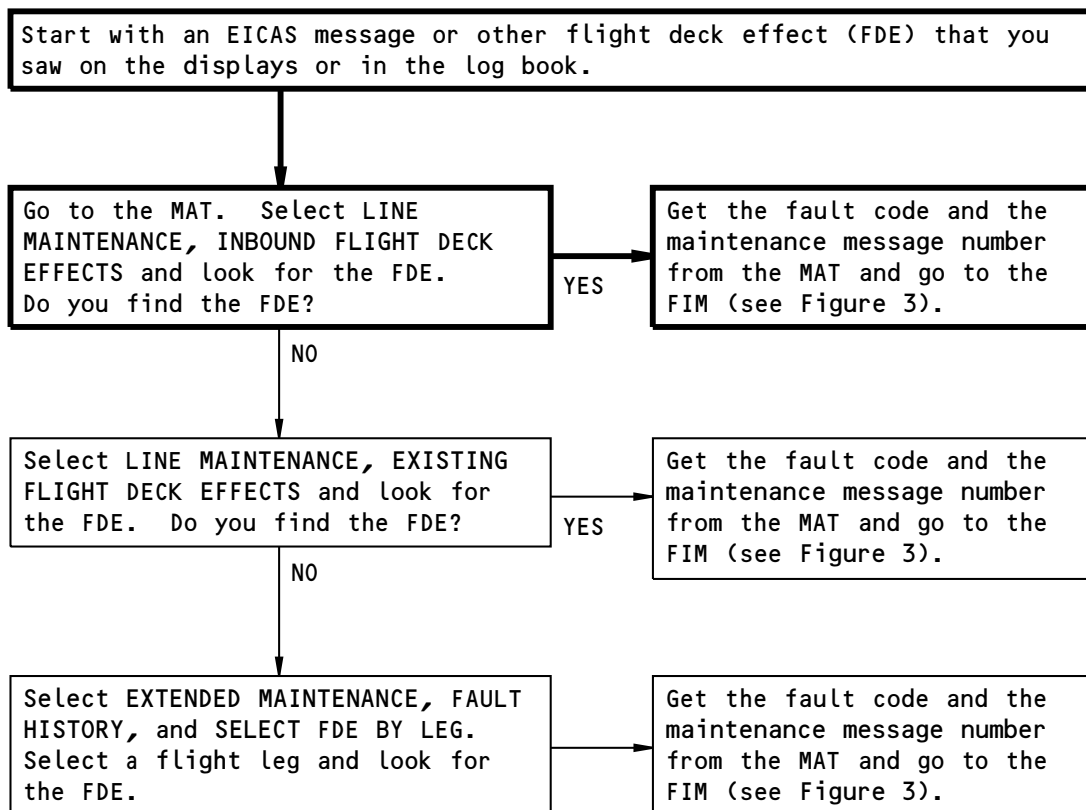
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NOTE: The bold lines show the most common path.

E84425 S0000132475_V1

Getting Fault Information from the MAT
Figure 2

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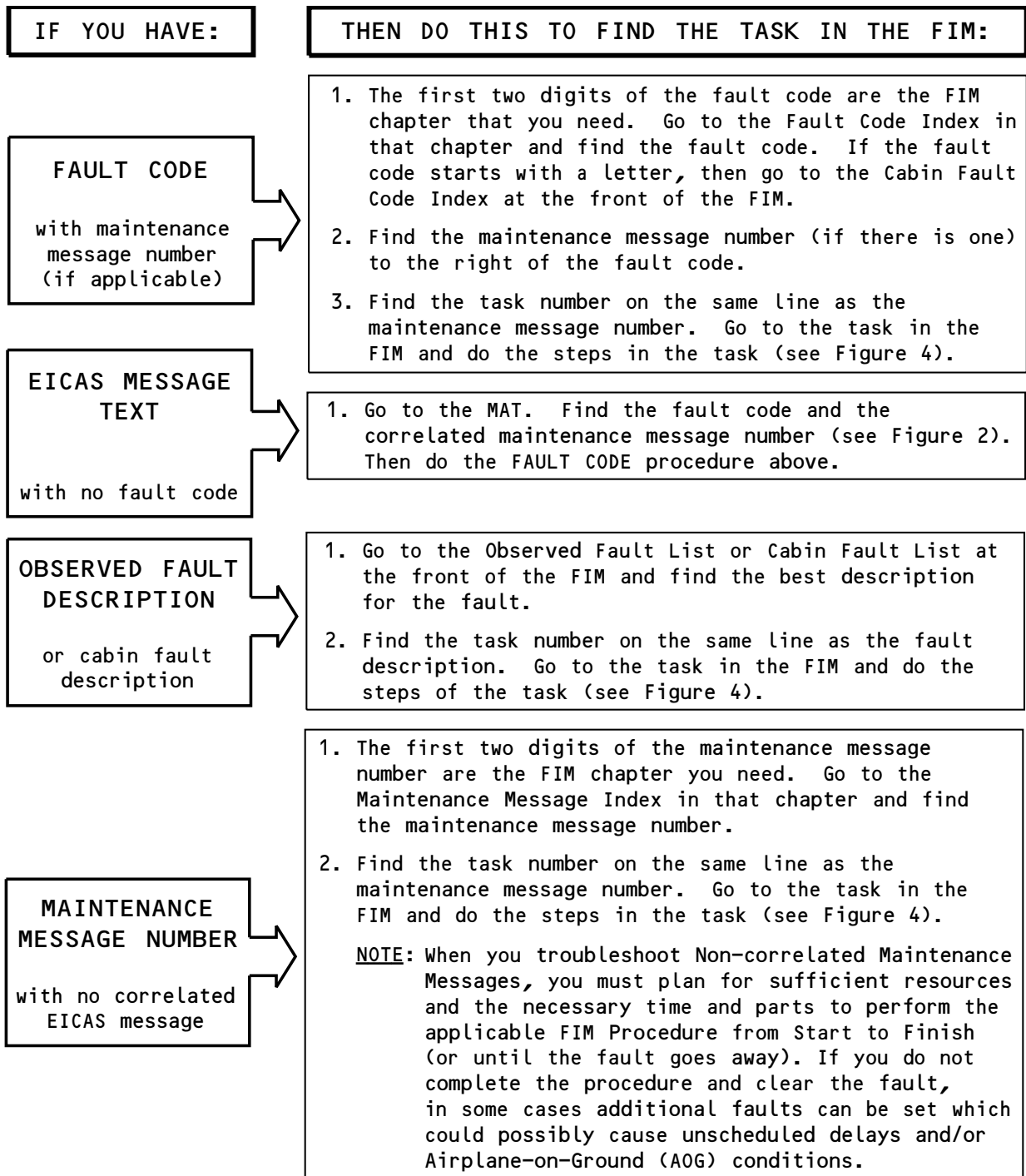
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E84427 S0000132476_V2

Finding the Fault Isolation Task in the FIM
Figure 3

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ASSUMED CONDITIONS AT START OF TASK

- External electrical power is ON
- Hydraulic power and pneumatic power are OFF
- Engines are shut down
- No equipment in the system is deactivated

INITIAL EVALUATION PARAGRAPH

- The Initial Evaluation paragraph at the start of the task helps you determine whether you can detect the fault right now.
- If you cannot detect the fault right now, then the task cannot isolate the fault and the Initial Evaluation paragraph will say that there was an intermittent fault.
- If you have an intermittent fault, you must use your judgement (and follow your airline's policy) to decide which components to replace. Then monitor the airplane to see if the fault happens again on subsequent flights.

FAULT ISOLATION STEPS

- The FIM task steps are presented in a specified order. "The If... then" statements will guide you along a logical path. But if you do not plan to follow the FIM task exactly, make sure that you read it before you start to isolate the fault. Some FIM procedures start with important steps that have an effect on the other steps in the procedure.
- When you are at the endpoint of the path, the step says "You corrected the fault." Complete the step and exit the procedure.
- The Recommended Maintenance Action that shows on the MAT for the maintenance message gives a list of possible causes in order by probability of failure. In the FIM procedure, the possible causes can be in a different order from the MAT.

WIRING CHECKS

When a step says "Do a wiring check", do these three types of electrical checks for the specified contacts (pins):

- continuity from contact to contact
- shorts between the contacts
- shorts from each contact to ground

E84428 S0000132477_V3

Doing the Fault Isolation Task
Figure 4

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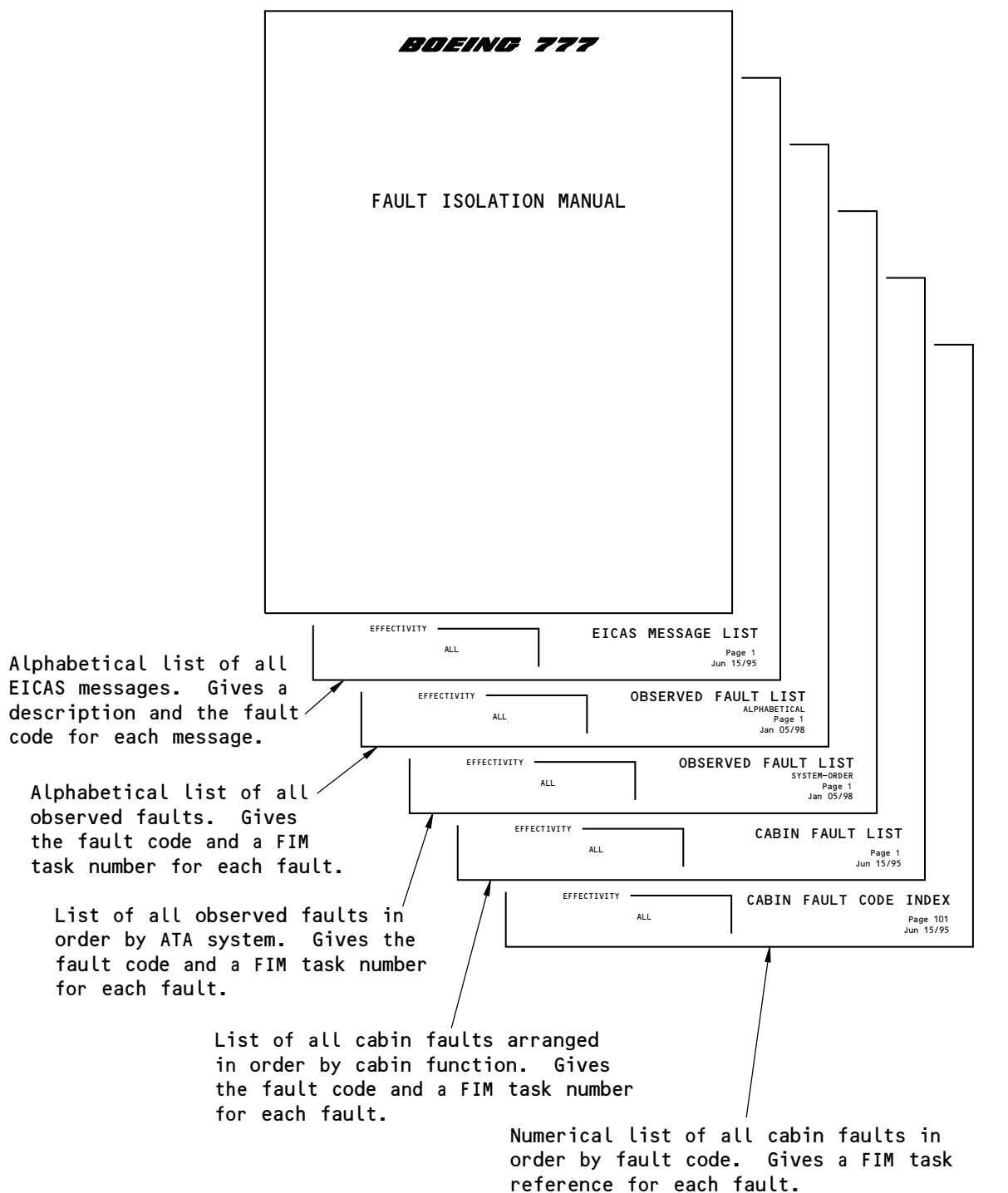
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F39750 S0000132478_V1

Subjects at Front of FIM
Figure 5

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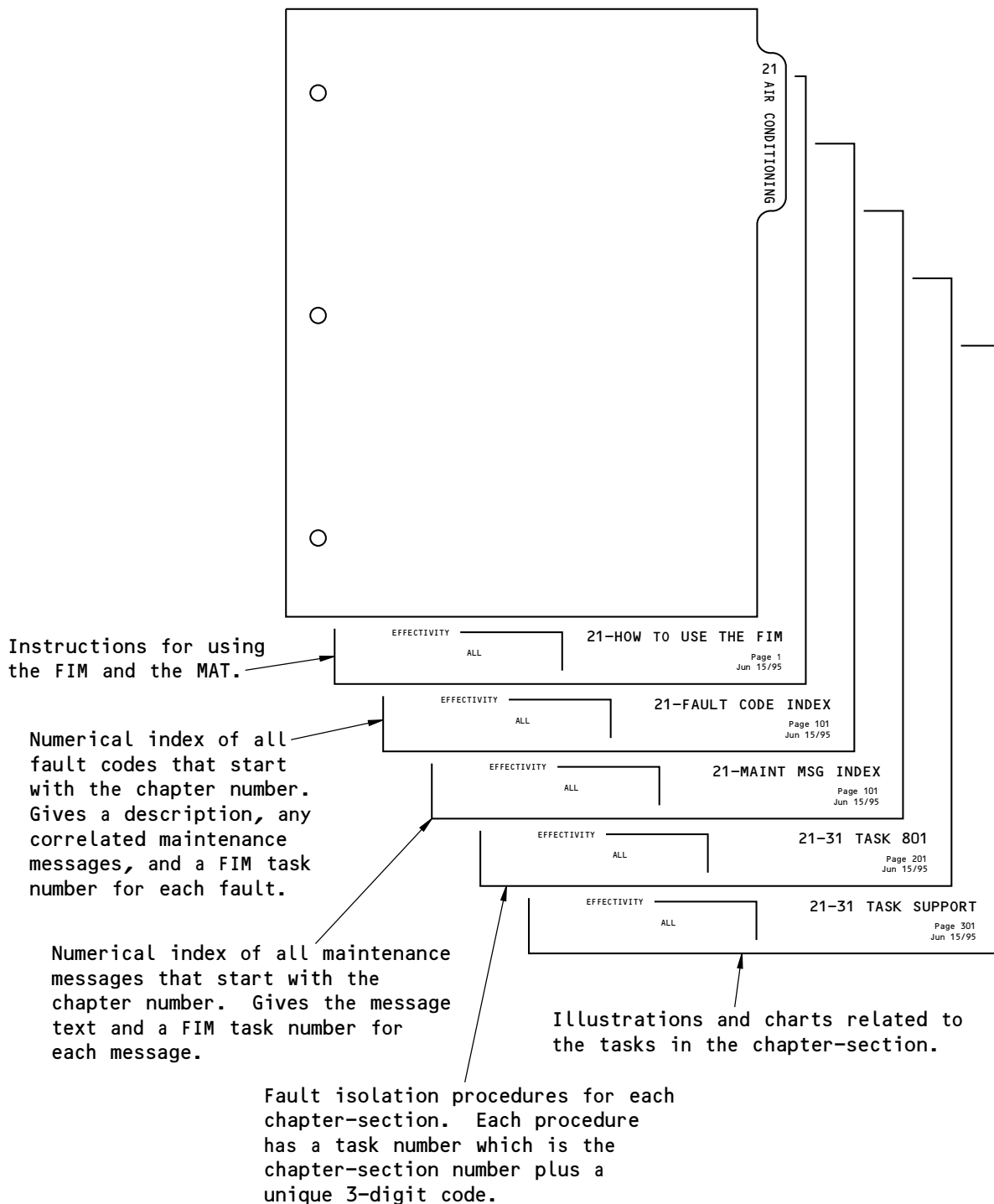
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F39837 S0000132479_V1

Subjects in Each FIM Chapter
Figure 6

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FAULT CODE	FAULT DESCRIPTION	MAINT MSG	GO TO FIM TASK
261 001 00	FIRE TEST IN PROG (EICAS WARNING)		26-10 TASK 801
261 002 00	FIRE TEST PASS (EICAS WARNING)		26-10 TASK 802
261 003 00	FIRE TEST FAIL (EICAS WARNING)	31-78190 31-78191 31-78192 31-78193 31-78194 31-78195 31-78196 31-78210 31-78211 31-78212 31-78213 31-78214 31-78215 31-78216 31-78230 31-78231 31-78232 31-78233 31-78234 31-78235 31-78236	31-51 TASK 895 31-51 TASK 918 31-51 TASK 918 31-51 TASK 919 31-51 TASK 919 31-51 TASK 920 31-51 TASK 920 31-51 TASK 896 31-51 TASK 921 31-51 TASK 921 31-51 TASK 922 31-51 TASK 922 31-51 TASK 923 31-51 TASK 923 31-51 TASK 897 31-51 TASK 924 31-51 TASK 924 31-51 TASK 925 31-51 TASK 925 31-51 TASK 926 31-51 TASK 926
261 004 00	Fire/Overheat Detection: Fire Bell sounds and Master WARNING Lights come ON, but no related EICAS message shows.		26-10 TASK 804
261 011 41	FIRE ENG L (EICAS WARNING)	31-78210 31-78211 31-78212 31-78213 31-78214 31-78215 31-78216	31-51 TASK 896 31-51 TASK 921 31-51 TASK 921 31-51 TASK 922 31-51 TASK 922 31-51 TASK 923 31-51 TASK 923
261 011 42	FIRE ENG R (EICAS WARNING)	31-78230 31-78231 31-78232	31-51 TASK 897 31-51 TASK 924 31-51 TASK 924

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261 011 42	FIRE ENG R (EICAS WARNING)	(continued)	
		31-78233	31-51 TASK 925
		31-78234	31-51 TASK 925
		31-78235	31-51 TASK 926
261 021 41	DET FIRE ENG L (EICAS ADVISORY)	31-78236	31-51 TASK 926
		26-10011	26-11 TASK 804
		26-10021	26-11 TASK 806
		26-10031	26-11 TASK 818
		26-10131	26-11 TASK 808
		26-10141	26-11 TASK 808
		26-10231	26-11 TASK 810
		26-10241	26-11 TASK 810
		26-11011	26-11 TASK 814
		26-11021	26-11 TASK 814
		26-11031	26-11 TASK 814
		26-11041	26-11 TASK 814
		26-11101	26-11 TASK 812
		26-11121	26-11 TASK 813
		26-11231	26-11 TASK 813
		26-11341	26-11 TASK 813
		26-11451	26-11 TASK 812
		26-12011	26-11 TASK 814
		26-12021	26-11 TASK 814
		26-12031	26-11 TASK 814
		26-12041	26-11 TASK 814
		26-12101	26-11 TASK 812
		26-12121	26-11 TASK 813
		26-12231	26-11 TASK 813
		26-12341	26-11 TASK 813
		26-12451	26-11 TASK 812
		31-78210	31-51 TASK 896
		31-78211	31-51 TASK 921
		31-78212	31-51 TASK 921
		31-78213	31-51 TASK 922
		31-78214	31-51 TASK 922
		31-78215	31-51 TASK 923

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261 021 41	DET FIRE ENG L (EICAS ADVISORY)	(continued) 31-78216	31-51 TASK 923
261 021 42	DET FIRE ENG R (EICAS ADVISORY)	26-10012 26-10022 26-10032 26-10132 26-10142 26-10232 26-10242 26-11012 26-11022 26-11032 26-11042 26-11102 26-11122 26-11232 26-11342 26-11452 26-12012 26-12022 26-12032 26-12042 26-12102 26-12122 26-12232 26-12342 26-12452 31-78230 31-78231 31-78232 31-78233 31-78234 31-78235 31-78236	26-11 TASK 805 26-11 TASK 807 26-11 TASK 818 26-11 TASK 809 26-11 TASK 809 26-11 TASK 811 26-11 TASK 811 26-11 TASK 814 26-11 TASK 814 26-11 TASK 814 26-11 TASK 814 26-11 TASK 812 26-11 TASK 813 26-11 TASK 813 26-11 TASK 813 26-11 TASK 812 26-11 TASK 814 26-11 TASK 814 26-11 TASK 814 26-11 TASK 814 26-11 TASK 812 26-11 TASK 813 26-11 TASK 813 26-11 TASK 813 26-11 TASK 812 31-51 TASK 897 31-51 TASK 924 31-51 TASK 924 31-51 TASK 925 31-51 TASK 925 31-51 TASK 926 31-51 TASK 926
261 031 41	FIRE LOOP 1 ENG L (EICAS STATUS)	26-10011 26-10021	26-11 TASK 804 26-11 TASK 806

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261 031 41	FIRE LOOP 1 ENG L (EICAS STATUS)	(continued)	
		26-10131	26-11 TASK 808
		26-10141	26-11 TASK 808
		26-11011	26-11 TASK 814
		26-11021	26-11 TASK 814
		26-11031	26-11 TASK 814
		26-11041	26-11 TASK 814
		26-11101	26-11 TASK 812
		26-11121	26-11 TASK 813
		26-11231	26-11 TASK 813
		26-11341	26-11 TASK 813
		26-11451	26-11 TASK 812
261 031 42	FIRE LOOP 1 ENG R (EICAS STATUS)	26-10012	26-11 TASK 805
		26-10022	26-11 TASK 807
		26-10132	26-11 TASK 809
		26-10142	26-11 TASK 809
		26-11012	26-11 TASK 814
		26-11022	26-11 TASK 814
		26-11032	26-11 TASK 814
		26-11042	26-11 TASK 814
		26-11102	26-11 TASK 812
		26-11122	26-11 TASK 813
		26-11232	26-11 TASK 813
		26-11342	26-11 TASK 813
261 032 41	FIRE LOOP 2 ENG L (EICAS STATUS)	26-10011	26-11 TASK 804
		26-10021	26-11 TASK 806
		26-10031	26-11 TASK 818
		26-10231	26-11 TASK 810
		26-10241	26-11 TASK 810
		26-12011	26-11 TASK 814
		26-12021	26-11 TASK 814
		26-12031	26-11 TASK 814
		26-12041	26-11 TASK 814
		26-12101	26-11 TASK 812
		26-12121	26-11 TASK 813

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261 032 41	FIRE LOOP 2 ENG L (EICAS STATUS)	(continued)	
		26-12231	26-11 TASK 813
		26-12341	26-11 TASK 813
		26-12451	26-11 TASK 812
261 032 42	FIRE LOOP 2 ENG R (EICAS STATUS)	26-10012	26-11 TASK 805
		26-10022	26-11 TASK 807
		26-10032	26-11 TASK 818
		26-10232	26-11 TASK 811
		26-10242	26-11 TASK 811
		26-12012	26-11 TASK 814
		26-12022	26-11 TASK 814
		26-12032	26-11 TASK 814
		26-12042	26-11 TASK 814
		26-12102	26-11 TASK 812
		26-12122	26-11 TASK 813
		26-12232	26-11 TASK 813
		26-12342	26-11 TASK 813
		26-12452	26-11 TASK 812
261 041 41	FIRE CARD ENG L (EICAS STATUS)	23-81004	23-91 TASK 804
		23-81006	23-91 TASK 806
		26-10011	26-11 TASK 804
		26-18891	26-11 TASK 801
		31-17438	31-09 TASK 836
		31-17640	31-10 TASK 815
		31-17929	31-07 TASK 819
		31-17931	31-07 TASK 821
		31-18801	31-08 TASK 810
		31-18803	31-08 TASK 812
		31-18841	31-08 TASK 814
		31-18863	31-08 TASK 816
		31-54013	31-43 TASK 868
		31-54014	31-43 TASK 869
		31-54121	31-41 TASK 838
		31-54122	31-41 TASK 839
		31-58013	31-43 TASK 872
		31-58014	31-43 TASK 873

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261 041 41	FIRE CARD ENG L (EICAS STATUS)	(continued)	
		31-58121	31-41 TASK 856
		31-58122	31-41 TASK 857
		31-69401	31-42 TASK 825
		31-69402	31-42 TASK 825
		31-69491	31-42 TASK 851
		31-69492	31-42 TASK 851
		31-69601	31-42 TASK 857
		31-69602	31-42 TASK 857
		31-69691	31-42 TASK 878
		31-69692	31-42 TASK 878
		NONE	31-09 TASK 839
261 041 42	FIRE CARD ENG R (EICAS STATUS)	23-81004	23-91 TASK 804
		23-81006	23-91 TASK 806
		26-10012	26-11 TASK 805
		26-18892	26-11 TASK 815
		31-17437	31-09 TASK 835
		31-17639	31-10 TASK 814
		31-17930	31-07 TASK 820
		31-17932	31-07 TASK 822
		31-18802	31-08 TASK 811
		31-18804	31-08 TASK 813
		31-18842	31-08 TASK 814
		31-18864	31-08 TASK 817
		31-54013	31-43 TASK 868
		31-54014	31-43 TASK 869
		31-54121	31-41 TASK 838
		31-54122	31-41 TASK 839
		31-58013	31-43 TASK 872
		31-58014	31-43 TASK 873
		31-58121	31-41 TASK 856
		31-58122	31-41 TASK 857
		31-69401	31-42 TASK 825
		31-69402	31-42 TASK 825
		31-69493	31-42 TASK 851
		31-69494	31-42 TASK 851

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FAULT CODE	FAULT DESCRIPTION	MAINT MSG	GO TO FIM TASK
261 041 42	FIRE CARD ENG R (EICAS STATUS)	(continued)	
		31-69601	31-42 TASK 857
		31-69602	31-42 TASK 857
		31-69693	31-42 TASK 878
		31-69694	31-42 TASK 878
		NONE	31-09 TASK 842
261 051 41	OVERHEAT ENG L (EICAS CAUTION)		26-11 TASK 816
261 051 42	OVERHEAT ENG R (EICAS CAUTION)		26-11 TASK 816
261 061 41	DET OVERHEAT ENG L (EICAS ADVISORY)	23-81004	23-91 TASK 804
		23-81006	23-91 TASK 806
		26-10011	26-11 TASK 804
		26-10021	26-11 TASK 806
		26-10031	26-11 TASK 818
		26-10131	26-11 TASK 808
		26-10141	26-11 TASK 808
		26-10231	26-11 TASK 810
		26-10241	26-11 TASK 810
		26-11011	26-11 TASK 814
		26-11021	26-11 TASK 814
		26-11031	26-11 TASK 814
		26-11041	26-11 TASK 814
		26-11101	26-11 TASK 812
		26-11121	26-11 TASK 813
		26-11231	26-11 TASK 813
		26-11341	26-11 TASK 813
		26-11451	26-11 TASK 812
		26-12011	26-11 TASK 814
		26-12021	26-11 TASK 814
		26-12031	26-11 TASK 814
		26-12041	26-11 TASK 814
		26-12101	26-11 TASK 812
		26-12121	26-11 TASK 813
		26-12231	26-11 TASK 813
		26-12341	26-11 TASK 813
		26-12451	26-11 TASK 812
		31-50011	31-44 TASK 801

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261 061 41	DET OVERHEAT ENG L (EICAS ADVISORY)	(continued)	
		31-50012	31-44 TASK 802
		31-50091	31-44 TASK 819
		31-50092	31-44 TASK 820
		31-51023	31-44 TASK 865
		31-51024	31-44 TASK 866
		31-51025	31-43 TASK 803
		31-51026	31-43 TASK 804
		31-51411	34-61 TASK 913
		31-51412	34-61 TASK 914
		31-51413	34-61 TASK 815
		31-51414	34-61 TASK 889
		31-51421	34-61 TASK 888
		31-51422	34-61 TASK 814
		31-51423	34-61 TASK 815
		31-51424	34-61 TASK 889
		31-54013	31-43 TASK 868
		31-54014	31-43 TASK 869
		31-54121	31-41 TASK 838
		31-54122	31-41 TASK 839
		31-58013	31-43 TASK 872
		31-58014	31-43 TASK 873
		31-58121	31-41 TASK 856
		31-58122	31-41 TASK 857
		31-69401	31-42 TASK 825
		31-69402	31-42 TASK 825
		31-69601	31-42 TASK 857
		31-69602	31-42 TASK 857
		34-71011	34-61 TASK 905
		34-71012	34-61 TASK 906
		34-71060	34-90 TASK 801
261 061 42	DET OVERHEAT ENG R (EICAS ADVISORY)	23-81004	23-91 TASK 804
		23-81006	23-91 TASK 806
		26-10012	26-11 TASK 805
		26-10022	26-11 TASK 807
		26-10032	26-11 TASK 818

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261 061 42	DET OVERHEAT ENG R (EICAS ADVISORY)	(continued)	
		26-10132	26-11 TASK 809
		26-10142	26-11 TASK 809
		26-10232	26-11 TASK 811
		26-10242	26-11 TASK 811
		26-11012	26-11 TASK 814
		26-11022	26-11 TASK 814
		26-11032	26-11 TASK 814
		26-11042	26-11 TASK 814
		26-11102	26-11 TASK 812
		26-11122	26-11 TASK 813
		26-11232	26-11 TASK 813
		26-11342	26-11 TASK 813
		26-11452	26-11 TASK 812
		26-12012	26-11 TASK 814
		26-12022	26-11 TASK 814
		26-12032	26-11 TASK 814
		26-12042	26-11 TASK 814
		26-12102	26-11 TASK 812
		26-12122	26-11 TASK 813
		26-12232	26-11 TASK 813
		26-12342	26-11 TASK 813
		26-12452	26-11 TASK 812
		31-50011	31-44 TASK 801
		31-50012	31-44 TASK 802
		31-50091	31-44 TASK 819
		31-50092	31-44 TASK 820
		31-51023	31-44 TASK 865
		31-51024	31-44 TASK 866
		31-51025	31-43 TASK 803
		31-51026	31-43 TASK 804
		31-51411	34-61 TASK 913
		31-51412	34-61 TASK 914
		31-51413	34-61 TASK 815
		31-51414	34-61 TASK 889
		31-51421	34-61 TASK 888

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FAULT CODE	FAULT DESCRIPTION	MAINT MSG	GO TO FIM TASK
261 061 42	DET OVERHEAT ENG R (EICAS ADVISORY)	(continued)	
		31-51422	34-61 TASK 814
		31-51423	34-61 TASK 815
		31-51424	34-61 TASK 889
		31-54013	31-43 TASK 868
		31-54014	31-43 TASK 869
		31-54121	31-41 TASK 838
		31-54122	31-41 TASK 839
		31-58013	31-43 TASK 872
		31-58014	31-43 TASK 873
		31-58121	31-41 TASK 856
		31-58122	31-41 TASK 857
		31-69401	31-42 TASK 825
		31-69402	31-42 TASK 825
		31-69601	31-42 TASK 857
		31-69602	31-42 TASK 857
		34-71011	34-61 TASK 905
		34-71012	34-61 TASK 906
		34-71060	34-90 TASK 801
261 071 41	OVERHEAT CIRCUIT L1 (EICAS STATUS)	23-81004	23-91 TASK 804
		23-81006	23-91 TASK 806
		26-10011	26-11 TASK 804
		26-10021	26-11 TASK 806
		26-10131	26-11 TASK 808
		26-10141	26-11 TASK 808
		26-11011	26-11 TASK 814
		26-11021	26-11 TASK 814
		26-11031	26-11 TASK 814
		26-11041	26-11 TASK 814
		26-11101	26-11 TASK 812
		26-11121	26-11 TASK 813
		26-11231	26-11 TASK 813
		26-11341	26-11 TASK 813
		26-11451	26-11 TASK 812
		31-50011	31-44 TASK 801
		31-50012	31-44 TASK 802

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FAULT CODE	FAULT DESCRIPTION	MAINT MSG	GO TO FIM TASK
261 071 41	OVERHEAT CIRCUIT L1 (EICAS STATUS)	(continued)	
		31-50091	31-44 TASK 819
		31-50092	31-44 TASK 820
		31-51023	31-44 TASK 865
		31-51024	31-44 TASK 866
		31-51025	31-43 TASK 803
		31-51026	31-43 TASK 804
		31-51411	34-61 TASK 913
		31-51412	34-61 TASK 914
		31-51413	34-61 TASK 815
		31-51414	34-61 TASK 889
		31-51421	34-61 TASK 888
		31-51422	34-61 TASK 814
		31-51423	34-61 TASK 815
		31-51424	34-61 TASK 889
		31-54013	31-43 TASK 868
		31-54014	31-43 TASK 869
		31-54121	31-41 TASK 838
		31-54122	31-41 TASK 839
		31-58013	31-43 TASK 872
		31-58014	31-43 TASK 873
		31-58121	31-41 TASK 856
		31-58122	31-41 TASK 857
		31-69401	31-42 TASK 825
		31-69402	31-42 TASK 825
		31-69601	31-42 TASK 857
		31-69602	31-42 TASK 857
		34-71011	34-61 TASK 905
		34-71012	34-61 TASK 906
		34-71060	34-90 TASK 801
261 071 42	OVERHEAT CIRCUIT R1 (EICAS STATUS)	23-81004	23-91 TASK 804
		23-81006	23-91 TASK 806
		26-10012	26-11 TASK 805
		26-10022	26-11 TASK 807
		26-10132	26-11 TASK 809
		26-10142	26-11 TASK 809

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261 071 42	OVERHEAT CIRCUIT R1 (EICAS STATUS)	(continued)	
		26-11012	26-11 TASK 814
		26-11022	26-11 TASK 814
		26-11032	26-11 TASK 814
		26-11042	26-11 TASK 814
		26-11102	26-11 TASK 812
		26-11122	26-11 TASK 813
		26-11232	26-11 TASK 813
		26-11342	26-11 TASK 813
		26-11452	26-11 TASK 812
		31-50011	31-44 TASK 801
		31-50012	31-44 TASK 802
		31-50091	31-44 TASK 819
		31-50092	31-44 TASK 820
		31-51023	31-44 TASK 865
		31-51024	31-44 TASK 866
		31-51025	31-43 TASK 803
		31-51026	31-43 TASK 804
		31-51411	34-61 TASK 913
		31-51412	34-61 TASK 914
		31-51413	34-61 TASK 815
		31-51414	34-61 TASK 889
		31-51421	34-61 TASK 888
		31-51422	34-61 TASK 814
		31-51423	34-61 TASK 815
		31-51424	34-61 TASK 889
		31-54013	31-43 TASK 868
		31-54014	31-43 TASK 869
		31-54121	31-41 TASK 838
		31-54122	31-41 TASK 839
		31-58013	31-43 TASK 872
		31-58014	31-43 TASK 873
		31-58121	31-41 TASK 856
		31-58122	31-41 TASK 857
		31-69401	31-42 TASK 825
		31-69402	31-42 TASK 825

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261 071 42	OVERHEAT CIRCUIT R1 (EICAS STATUS)	(continued)	
		31-69601	31-42 TASK 857
		31-69602	31-42 TASK 857
		34-71011	34-61 TASK 905
		34-71012	34-61 TASK 906
		34-71060	34-90 TASK 801
261 072 41	OVERHEAT CIRCUIT L2 (EICAS STATUS)	23-81004	23-91 TASK 804
		23-81006	23-91 TASK 806
		26-10011	26-11 TASK 804
		26-10021	26-11 TASK 806
		26-10031	26-11 TASK 818
		26-10231	26-11 TASK 810
		26-10241	26-11 TASK 810
		26-12011	26-11 TASK 814
		26-12021	26-11 TASK 814
		26-12031	26-11 TASK 814
		26-12041	26-11 TASK 814
		26-12101	26-11 TASK 812
		26-12121	26-11 TASK 813
		26-12231	26-11 TASK 813
		26-12341	26-11 TASK 813
		26-12451	26-11 TASK 812
		31-50011	31-44 TASK 801
		31-50012	31-44 TASK 802
		31-50091	31-44 TASK 819
		31-50092	31-44 TASK 820
		31-51023	31-44 TASK 865
		31-51024	31-44 TASK 866
		31-51025	31-43 TASK 803
		31-51026	31-43 TASK 804
		31-51411	34-61 TASK 913
		31-51412	34-61 TASK 914
		31-51413	34-61 TASK 815
		31-51414	34-61 TASK 889
		31-51421	34-61 TASK 888
		31-51422	34-61 TASK 814

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261 072 41	OVERHEAT CIRCUIT L2 (EICAS STATUS)	(continued)	
		31-51423	34-61 TASK 815
		31-51424	34-61 TASK 889
		31-54013	31-43 TASK 868
		31-54014	31-43 TASK 869
		31-54121	31-41 TASK 838
		31-54122	31-41 TASK 839
		31-58013	31-43 TASK 872
		31-58014	31-43 TASK 873
		31-58121	31-41 TASK 856
		31-58122	31-41 TASK 857
		31-69401	31-42 TASK 825
		31-69402	31-42 TASK 825
		31-69601	31-42 TASK 857
		31-69602	31-42 TASK 857
		34-71011	34-61 TASK 905
		34-71012	34-61 TASK 906
		34-71060	34-90 TASK 801
261 072 42	OVERHEAT CIRCUIT R2 (EICAS STATUS)	23-81004	23-91 TASK 804
		23-81006	23-91 TASK 806
		26-10012	26-11 TASK 805
		26-10022	26-11 TASK 807
		26-10032	26-11 TASK 818
		26-10232	26-11 TASK 811
		26-10242	26-11 TASK 811
		26-12012	26-11 TASK 814
		26-12022	26-11 TASK 814
		26-12032	26-11 TASK 814
		26-12042	26-11 TASK 814
		26-12102	26-11 TASK 812
		26-12122	26-11 TASK 813
		26-12232	26-11 TASK 813
		26-12342	26-11 TASK 813
		26-12452	26-11 TASK 812
		31-50011	31-44 TASK 801
		31-50012	31-44 TASK 802

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261 072 42	OVERHEAT CIRCUIT R2 (EICAS STATUS)	(continued)	
		31-50091	31-44 TASK 819
		31-50092	31-44 TASK 820
		31-51023	31-44 TASK 865
		31-51024	31-44 TASK 866
		31-51025	31-43 TASK 803
		31-51026	31-43 TASK 804
		31-51411	34-61 TASK 913
		31-51412	34-61 TASK 914
		31-51413	34-61 TASK 815
		31-51414	34-61 TASK 889
		31-51421	34-61 TASK 888
		31-51422	34-61 TASK 814
		31-51423	34-61 TASK 815
		31-51424	34-61 TASK 889
		31-54013	31-43 TASK 868
		31-54014	31-43 TASK 869
		31-54121	31-41 TASK 838
		31-54122	31-41 TASK 839
		31-58013	31-43 TASK 872
		31-58014	31-43 TASK 873
		31-58121	31-41 TASK 856
		31-58122	31-41 TASK 857
		31-69401	31-42 TASK 825
		31-69402	31-42 TASK 825
		31-69601	31-42 TASK 857
		31-69602	31-42 TASK 857
		34-71011	34-61 TASK 905
		34-71012	34-61 TASK 906
		34-71060	34-90 TASK 801
261 105 00	DETECTOR IFES SMOKE (EICAS STATUS)	21-16331	21-27 TASK 858
261 111 00	SMOKE CREW REST F/D (EICAS CAUTION)		26-14 TASK 806
261 141 00	FIRE APU (EICAS WARNING)	49-07930	49-10 TASK 815
261 151 00	DET FIRE APU (EICAS ADVISORY)	26-10000	26-15 TASK 809
		26-10010	26-15 TASK 810
		26-10020	26-15 TASK 801

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261 151 00	DET FIRE APU (EICAS ADVISORY)	(continued)	
		26-10030	26-15 TASK 826
		26-10100	26-15 TASK 802
		26-10130	26-15 TASK 811
		26-10140	26-15 TASK 803
		26-10220	26-15 TASK 812
		26-10240	26-15 TASK 813
		26-11110	26-15 TASK 814
		26-11120	26-15 TASK 815
		26-11210	26-15 TASK 816
		26-11230	26-15 TASK 817
		26-13100	26-15 TASK 804
		26-13110	26-15 TASK 805
		26-13120	26-15 TASK 818
		26-13130	26-15 TASK 819
		26-14200	26-15 TASK 820
		26-14210	26-15 TASK 821
		26-14220	26-15 TASK 822
		26-14230	26-15 TASK 823
		31-78190	31-51 TASK 895
		31-78191	31-51 TASK 918
		31-78192	31-51 TASK 918
		31-78193	31-51 TASK 919
		31-78194	31-51 TASK 919
		31-78195	31-51 TASK 920
		31-78196	31-51 TASK 920
261 161 01	FIRE LOOP 1 APU (EICAS STATUS)	26-10010	26-15 TASK 810
		26-10020	26-15 TASK 801
		26-10100	26-15 TASK 802
		26-10130	26-15 TASK 811
		26-10140	26-15 TASK 803
		26-11110	26-15 TASK 814
		26-11120	26-15 TASK 815
		26-13100	26-15 TASK 804
		26-13110	26-15 TASK 805
		26-13120	26-15 TASK 818

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261 161 01	FIRE LOOP 1 APU (EICAS STATUS)	(continued) 26-13130	26-15 TASK 819
261 161 02	FIRE LOOP 2 APU (EICAS STATUS)	26-10000 26-10010 26-10020 26-10030 26-10220 26-10240 26-11210 26-11230 26-14200 26-14210 26-14220 26-14230	26-15 TASK 809 26-15 TASK 810 26-15 TASK 801 26-15 TASK 826 26-15 TASK 812 26-15 TASK 813 26-15 TASK 816 26-15 TASK 817 26-15 TASK 820 26-15 TASK 821 26-15 TASK 822 26-15 TASK 823
261 171 00	FIRE CARD APU (EICAS STATUS)	23-81004 23-81006 26-10010 26-18893 31-17438 31-17640 31-17925 31-17927 31-18801 31-18803 31-18841 31-18863 31-54013 31-54014 31-54121 31-54122 31-58013 31-58014 31-58121 31-58122 31-69401 31-69402	23-91 TASK 804 23-91 TASK 806 26-15 TASK 810 26-15 TASK 806 31-09 TASK 836 31-10 TASK 815 31-07 TASK 817 31-07 TASK 818 31-08 TASK 810 31-08 TASK 812 31-08 TASK 814 31-08 TASK 816 31-43 TASK 868 31-43 TASK 869 31-41 TASK 838 31-41 TASK 839 31-43 TASK 872 31-43 TASK 873 31-41 TASK 856 31-41 TASK 857 31-42 TASK 825 31-42 TASK 825

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261 171 00	FIRE CARD APU (EICAS STATUS)	(continued)	
		31-69491	31-42 TASK 851
		31-69492	31-42 TASK 851
		31-69601	31-42 TASK 857
		31-69602	31-42 TASK 857
		31-69691	31-42 TASK 878
		31-69692	31-42 TASK 878
		NONE	31-09 TASK 837
261 201 44	FIRE CARGO FWD (EICAS WARNING)		26-16 TASK 812
261 201 45	FIRE CARGO AFT (EICAS WARNING)		26-16 TASK 812
261 211 44	DET FIRE CARGO FWD (EICAS ADVISORY)	23-81004	23-91 TASK 804
		23-81006	23-91 TASK 806
		24-11781	24-51 TASK 837
		24-11786	24-51 TASK 833
		24-12124	24-51 TASK 840
		24-12127	24-51 TASK 842
		26-20011	26-16 TASK 801
		26-20021	26-16 TASK 808
		26-21041	26-16 TASK 803
		26-21051	26-16 TASK 804
		26-21061	26-16 TASK 805
		26-22041	26-16 TASK 803
		26-22051	26-16 TASK 804
		26-22061	26-16 TASK 805
		26-23051	26-16 TASK 804
		26-23061	26-16 TASK 805
		26-23071	26-16 TASK 804
		26-23081	26-16 TASK 805
		26-28801	26-16 TASK 808
		26-28891	26-16 TASK 806
		26-28893	26-16 TASK 806
		31-17438	31-09 TASK 836
		31-17640	31-10 TASK 815
		31-17945	31-07 TASK 835
		31-17947	31-07 TASK 837
		31-17949	31-07 TASK 839

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261 211 44	DET FIRE CARGO FWD (EICAS ADVISORY)	(continued)	
		31-17951	31-07 TASK 841
		31-18801	31-08 TASK 810
		31-18803	31-08 TASK 812
		31-18841	31-08 TASK 814
		31-18863	31-08 TASK 816
		31-54013	31-43 TASK 868
		31-54014	31-43 TASK 869
		31-54121	31-41 TASK 838
		31-54122	31-41 TASK 839
		31-58013	31-43 TASK 872
		31-58014	31-43 TASK 873
		31-58121	31-41 TASK 856
		31-58122	31-41 TASK 857
		31-69401	31-42 TASK 825
		31-69402	31-42 TASK 825
		31-69491	31-42 TASK 851
		31-69492	31-42 TASK 851
		31-69601	31-42 TASK 857
		31-69602	31-42 TASK 857
		31-69691	31-42 TASK 878
		31-69692	31-42 TASK 878
261 211 45	DET FIRE CARGO AFT (EICAS ADVISORY)	23-81004	23-91 TASK 804
		23-81006	23-91 TASK 806
		24-11781	24-51 TASK 837
		24-11786	24-51 TASK 833
		24-12124	24-51 TASK 840
		24-12127	24-51 TASK 842
		26-20012	26-16 TASK 801
		26-20022	26-16 TASK 809
		26-21042	26-16 TASK 811
		26-21052	26-16 TASK 804
		26-21062	26-16 TASK 805
		26-22042	26-16 TASK 811
		26-22052	26-16 TASK 804
		26-22062	26-16 TASK 805

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FAULT CODE	FAULT DESCRIPTION	MAINT MSG	GO TO FIM TASK
261 211 45	DET FIRE CARGO AFT (EICAS ADVISORY)	(continued)	
		26-23052	26-16 TASK 804
		26-23062	26-16 TASK 805
		26-23072	26-16 TASK 804
		26-23082	26-16 TASK 805
		26-28802	26-16 TASK 809
		26-28892	26-16 TASK 806
		26-28894	26-16 TASK 806
		31-17437	31-09 TASK 835
		31-17639	31-10 TASK 814
		31-17946	31-07 TASK 836
		31-17948	31-07 TASK 838
		31-17950	31-07 TASK 840
		31-17952	31-07 TASK 842
		31-18802	31-08 TASK 811
		31-18804	31-08 TASK 813
		31-18842	31-08 TASK 814
		31-18864	31-08 TASK 817
		31-54013	31-43 TASK 868
		31-54014	31-43 TASK 869
		31-54121	31-41 TASK 838
		31-54122	31-41 TASK 839
		31-58013	31-43 TASK 872
		31-58014	31-43 TASK 873
		31-58121	31-41 TASK 856
		31-58122	31-41 TASK 857
		31-69401	31-42 TASK 825
		31-69402	31-42 TASK 825
		31-69493	31-42 TASK 851
		31-69494	31-42 TASK 851
		31-69601	31-42 TASK 857
		31-69602	31-42 TASK 857
		31-69693	31-42 TASK 878
		31-69694	31-42 TASK 878
261 221 44	DET CHAN 1 CARGO FWD (EICAS STATUS)	23-81004	23-91 TASK 804
		23-81006	23-91 TASK 806

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FAULT CODE	FAULT DESCRIPTION	MAINT MSG	GO TO FIM TASK
261 221 44	DET CHAN 1 CARGO FWD (EICAS STATUS)	(continued)	
		24-11781	24-51 TASK 837
		24-11786	24-51 TASK 833
		26-20011	26-16 TASK 801
		26-20021	26-16 TASK 808
		26-21031	26-16 TASK 802
		26-28801	26-16 TASK 808
		26-28891	26-16 TASK 806
		26-29905	26-16 TASK 807
		31-17438	31-09 TASK 836
		31-17640	31-10 TASK 815
		31-17945	31-07 TASK 835
		31-17947	31-07 TASK 837
		31-18801	31-08 TASK 810
		31-18803	31-08 TASK 812
		31-18841	31-08 TASK 814
		31-18863	31-08 TASK 816
		31-54013	31-43 TASK 868
		31-54014	31-43 TASK 869
		31-54121	31-41 TASK 838
		31-54122	31-41 TASK 839
		31-58013	31-43 TASK 872
		31-58014	31-43 TASK 873
		31-58121	31-41 TASK 856
		31-58122	31-41 TASK 857
		31-69401	31-42 TASK 825
		31-69402	31-42 TASK 825
		31-69491	31-42 TASK 851
		31-69492	31-42 TASK 851
		31-69601	31-42 TASK 857
		31-69602	31-42 TASK 857
		31-69691	31-42 TASK 878
		31-69692	31-42 TASK 878
261 221 45	DET CHAN 1 CARGO AFT (EICAS STATUS)	23-81004	23-91 TASK 804
		23-81006	23-91 TASK 806
		24-11781	24-51 TASK 837

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261 221 45	DET CHAN 1 CARGO AFT (EICAS STATUS)	(continued)	
		24-11786	24-51 TASK 833
		26-20012	26-16 TASK 801
		26-20022	26-16 TASK 809
		26-21032	26-16 TASK 810
		26-28802	26-16 TASK 809
		26-28892	26-16 TASK 806
		26-29906	26-16 TASK 807
		31-17437	31-09 TASK 835
		31-17639	31-10 TASK 814
		31-17946	31-07 TASK 836
		31-17948	31-07 TASK 838
		31-18802	31-08 TASK 811
		31-18804	31-08 TASK 813
		31-18842	31-08 TASK 814
		31-18864	31-08 TASK 817
		31-54013	31-43 TASK 868
		31-54014	31-43 TASK 869
		31-54121	31-41 TASK 838
		31-54122	31-41 TASK 839
		31-58013	31-43 TASK 872
		31-58014	31-43 TASK 873
		31-58121	31-41 TASK 856
		31-58122	31-41 TASK 857
		31-69401	31-42 TASK 825
		31-69402	31-42 TASK 825
		31-69493	31-42 TASK 851
		31-69494	31-42 TASK 851
		31-69601	31-42 TASK 857
		31-69602	31-42 TASK 857
		31-69693	31-42 TASK 878
		31-69694	31-42 TASK 878
261 222 44	DET CHAN 2 CARGO FWD (EICAS STATUS)	23-81004	23-91 TASK 804
		23-81006	23-91 TASK 806
		24-12124	24-51 TASK 840
		24-12127	24-51 TASK 842

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261 222 44	DET CHAN 2 CARGO FWD (EICAS STATUS)	(continued)	
		26-20011	26-16 TASK 801
		26-20021	26-16 TASK 808
		26-22031	26-16 TASK 802
		26-28801	26-16 TASK 808
		26-28893	26-16 TASK 806
		26-29911	26-16 TASK 807
		31-17438	31-09 TASK 836
		31-17640	31-10 TASK 815
		31-17949	31-07 TASK 839
		31-17951	31-07 TASK 841
		31-18801	31-08 TASK 810
		31-18803	31-08 TASK 812
		31-18841	31-08 TASK 814
		31-18863	31-08 TASK 816
		31-54013	31-43 TASK 868
		31-54014	31-43 TASK 869
		31-54121	31-41 TASK 838
		31-54122	31-41 TASK 839
		31-58013	31-43 TASK 872
		31-58014	31-43 TASK 873
		31-58121	31-41 TASK 856
		31-58122	31-41 TASK 857
		31-69401	31-42 TASK 825
		31-69402	31-42 TASK 825
		31-69491	31-42 TASK 851
		31-69492	31-42 TASK 851
		31-69601	31-42 TASK 857
		31-69602	31-42 TASK 857
		31-69691	31-42 TASK 878
		31-69692	31-42 TASK 878
261 222 45	DET CHAN 2 CARGO AFT (EICAS STATUS)	23-81004	23-91 TASK 804
		23-81006	23-91 TASK 806
		24-12124	24-51 TASK 840
		24-12127	24-51 TASK 842
		26-20012	26-16 TASK 801

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261 222 45	DET CHAN 2 CARGO AFT (EICAS STATUS)	(continued)	
		26-20022	26-16 TASK 809
		26-22032	26-16 TASK 810
		26-28802	26-16 TASK 809
		26-28894	26-16 TASK 806
		26-29912	26-16 TASK 807
		31-17437	31-09 TASK 835
		31-17639	31-10 TASK 814
		31-17950	31-07 TASK 840
		31-17952	31-07 TASK 842
		31-18802	31-08 TASK 811
		31-18804	31-08 TASK 813
		31-18842	31-08 TASK 814
		31-18864	31-08 TASK 817
		31-54013	31-43 TASK 868
		31-54014	31-43 TASK 869
		31-54121	31-41 TASK 838
		31-54122	31-41 TASK 839
		31-58013	31-43 TASK 872
		31-58014	31-43 TASK 873
		31-58121	31-41 TASK 856
		31-58122	31-41 TASK 857
		31-69401	31-42 TASK 825
		31-69402	31-42 TASK 825
		31-69493	31-42 TASK 851
		31-69494	31-42 TASK 851
		31-69601	31-42 TASK 857
		31-69602	31-42 TASK 857
		31-69693	31-42 TASK 878
		31-69694	31-42 TASK 878
261 231 44	DET ZONE 1 CARGO FWD (EICAS STATUS)	26-20021	26-16 TASK 808
		26-21051	26-16 TASK 804
		26-21061	26-16 TASK 805
261 231 45	DET ZONE 1 CARGO AFT (EICAS STATUS)	26-20022	26-16 TASK 809
		26-21052	26-16 TASK 804
		26-21062	26-16 TASK 805

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261 232 44	DET ZONE 2 CARGO FWD (EICAS STATUS)	26-20021	26-16 TASK 808
		26-22051	26-16 TASK 804
		26-22061	26-16 TASK 805
261 232 45	DET ZONE 2 CARGO AFT (EICAS STATUS)	26-20022	26-16 TASK 809
		26-22052	26-16 TASK 804
		26-22062	26-16 TASK 805
261 233 44	DET ZONE 3 CARGO FWD (EICAS STATUS)	26-20021	26-16 TASK 808
		26-23051	26-16 TASK 804
		26-23061	26-16 TASK 805
261 233 45	DET ZONE 3 CARGO AFT (EICAS STATUS)	26-20022	26-16 TASK 809
		26-23052	26-16 TASK 804
		26-23062	26-16 TASK 805
261 234 44	DET ZONE 4 CARGO FWD (EICAS STATUS)	26-20021	26-16 TASK 808
		26-23071	26-16 TASK 804
		26-23081	26-16 TASK 805
261 234 45	DET ZONE 4 CARGO AFT (EICAS STATUS)	26-20022	26-16 TASK 809
		26-23072	26-16 TASK 804
		26-23082	26-16 TASK 805
261 241 44	DET FAN 1 CARGO FWD (EICAS STATUS)	24-11781	24-51 TASK 837
		24-11786	24-51 TASK 833
		26-21041	26-16 TASK 803
261 241 45	DET FAN 1 CARGO AFT (EICAS STATUS)	24-11781	24-51 TASK 837
		24-11786	24-51 TASK 833
		26-21042	26-16 TASK 811
261 242 44	DET FAN 2 CARGO FWD (EICAS STATUS)	24-12124	24-51 TASK 840
		24-12127	24-51 TASK 842
		26-22041	26-16 TASK 803
261 242 45	DET FAN 2 CARGO AFT (EICAS STATUS)	24-12124	24-51 TASK 840
		24-12127	24-51 TASK 842
		26-22042	26-16 TASK 811
261 246 44	DET HTR CARGO FWD (EICAS STATUS)	24-11781	24-51 TASK 837
		24-11786	24-51 TASK 833
		26-21091	26-16 TASK 814
		26-21093	26-16 TASK 816
		26-21099	26-16 TASK 818

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261 246 45	DET HTR CARGO AFT (EICAS STATUS)	24-11781	24-51 TASK 837
		24-11786	24-51 TASK 833
		26-21092	26-16 TASK 815
		26-21094	26-16 TASK 817
		26-21100	26-16 TASK 819
261 251 00	FIRE WHEEL WELL (EICAS WARNING)	23-81004	23-91 TASK 804
		23-81006	23-91 TASK 806
		26-30001	26-18 TASK 808
		26-30002	26-18 TASK 809
		26-33422	26-17 TASK 802
		26-38891	26-18 TASK 811
		26-38892	26-18 TASK 811
		26-39011	26-17 TASK 802
		26-39111	26-17 TASK 801
		26-39122	26-17 TASK 801
		26-39904	26-18 TASK 812
		26-39911	26-18 TASK 812
		26-39913	26-18 TASK 812
		26-39920	26-18 TASK 812
		31-14011	31-09 TASK 812
		31-14012	31-09 TASK 813
		31-14013	31-09 TASK 814
		31-14014	31-09 TASK 815
		31-14015	31-09 TASK 816
		31-14016	31-09 TASK 817
		31-14017	31-09 TASK 818
		31-14018	31-09 TASK 818
		31-17909	31-07 TASK 805
		31-17910	31-07 TASK 806
		31-17911	31-07 TASK 807
		31-17912	31-07 TASK 808
		31-18801	31-08 TASK 810
		31-18802	31-08 TASK 811
		31-18803	31-08 TASK 812
		31-18804	31-08 TASK 813
		31-18841	31-08 TASK 814

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261 251 00	FIRE WHEEL WELL (EICAS WARNING)	(continued)	
		31-18842	31-08 TASK 814
		31-18863	31-08 TASK 816
		31-18864	31-08 TASK 817
		31-18891	31-08 TASK 818
		31-18892	31-08 TASK 819
		31-18893	31-08 TASK 820
		31-18894	31-08 TASK 821
		31-54013	31-43 TASK 868
		31-54014	31-43 TASK 869
		31-54121	31-41 TASK 838
		31-54122	31-41 TASK 839
		31-58013	31-43 TASK 872
		31-58014	31-43 TASK 873
		31-58121	31-41 TASK 856
		31-58122	31-41 TASK 857
		31-69401	31-42 TASK 825
		31-69402	31-42 TASK 825
		31-69491	31-42 TASK 851
		31-69492	31-42 TASK 851
		31-69493	31-42 TASK 851
		31-69494	31-42 TASK 851
		31-69601	31-42 TASK 857
		31-69602	31-42 TASK 857
		31-69691	31-42 TASK 878
		31-69692	31-42 TASK 878
		31-69693	31-42 TASK 878
		31-69694	31-42 TASK 878
261 261 00	DET FIRE WHEEL WELL (EICAS ADVISORY)	23-41001	23-93 TASK 819
		23-41002	23-93 TASK 844
		23-41240	23-93 TASK 801
		23-42001	23-93 TASK 841
		23-42002	23-93 TASK 845
		23-42240	23-93 TASK 802
		23-43240	26-23 TASK 804
		23-45010	23-93 TASK 881

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261 261 00	DET FIRE WHEEL WELL (EICAS ADVISORY)	(continued)	
		23-46010	23-93 TASK 806
		23-47010	23-93 TASK 801
		23-47020	23-93 TASK 802
		23-48801	23-93 TASK 881
		23-48802	23-93 TASK 806
		23-48841	23-93 TASK 819
		23-48842	23-93 TASK 841
		23-48861	23-93 TASK 844
		23-48862	23-93 TASK 845
		23-81004	23-91 TASK 804
		23-81006	23-91 TASK 806
		23-91010	23-93 TASK 816
		23-91020	23-93 TASK 878
		24-12056	24-32 TASK 820
		24-13815	24-61 TASK 806
		26-30001	26-18 TASK 808
		26-30002	26-18 TASK 809
		26-33422	26-17 TASK 802
		26-38011	26-23 TASK 804
		26-38891	26-18 TASK 811
		26-38892	26-18 TASK 811
		26-39011	26-17 TASK 802
		26-39111	26-17 TASK 801
		26-39122	26-17 TASK 801
		31-14011	31-09 TASK 812
		31-14012	31-09 TASK 813
		31-14013	31-09 TASK 814
		31-14014	31-09 TASK 815
		31-14015	31-09 TASK 816
		31-14016	31-09 TASK 817
		31-14017	31-09 TASK 818
		31-14018	31-09 TASK 818
		31-17477	31-10 TASK 824
		31-17478	31-10 TASK 825
		31-17481	31-10 TASK 826

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261 261 00	DET FIRE WHEEL WELL (EICAS ADVISORY)	(continued)	
		31-17482	31-10 TASK 827
		31-17679	31-10 TASK 850
		31-17680	31-10 TASK 851
		31-17683	31-10 TASK 852
		31-17684	31-10 TASK 853
		31-17909	31-07 TASK 805
		31-17910	31-07 TASK 806
		31-17911	31-07 TASK 807
		31-17912	31-07 TASK 808
		31-18801	31-08 TASK 810
		31-18802	31-08 TASK 811
		31-18803	31-08 TASK 812
		31-18804	31-08 TASK 813
		31-18841	31-08 TASK 814
		31-18842	31-08 TASK 814
		31-18863	31-08 TASK 816
		31-18864	31-08 TASK 817
		31-54013	31-43 TASK 868
		31-54014	31-43 TASK 869
		31-54121	31-41 TASK 838
		31-54122	31-41 TASK 839
		31-58013	31-43 TASK 872
		31-58014	31-43 TASK 873
		31-58121	31-41 TASK 856
		31-58122	31-41 TASK 857
		31-69401	31-42 TASK 825
		31-69402	31-42 TASK 825
		31-69491	31-42 TASK 851
		31-69492	31-42 TASK 851
		31-69493	31-42 TASK 851
		31-69494	31-42 TASK 851
		31-69601	31-42 TASK 857
		31-69602	31-42 TASK 857
		31-69691	31-42 TASK 878
		31-69692	31-42 TASK 878

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261 261 00	DET FIRE WHEEL WELL (EICAS ADVISORY)	(continued)	
		31-69693	31-42 TASK 878
		31-69694	31-42 TASK 878
261 271 00	DET FIRE WHEEL WELL (EICAS STATUS)	23-81004	23-91 TASK 804
		23-81006	23-91 TASK 806
		26-30001	26-18 TASK 808
		26-30002	26-18 TASK 809
		26-33422	26-17 TASK 802
		26-38891	26-18 TASK 811
		26-38892	26-18 TASK 811
		26-39011	26-17 TASK 802
		26-39111	26-17 TASK 801
		26-39122	26-17 TASK 801
		31-14011	31-09 TASK 812
		31-14012	31-09 TASK 813
		31-14013	31-09 TASK 814
		31-14014	31-09 TASK 815
		31-14015	31-09 TASK 816
		31-14016	31-09 TASK 817
		31-14017	31-09 TASK 818
		31-14018	31-09 TASK 818
		31-17909	31-07 TASK 805
		31-17910	31-07 TASK 806
		31-17911	31-07 TASK 807
		31-17912	31-07 TASK 808
		31-18801	31-08 TASK 810
		31-18802	31-08 TASK 811
		31-18803	31-08 TASK 812
		31-18804	31-08 TASK 813
		31-18841	31-08 TASK 814
		31-18842	31-08 TASK 814
		31-18863	31-08 TASK 816
		31-18864	31-08 TASK 817
		31-54013	31-43 TASK 868
		31-54014	31-43 TASK 869
		31-54121	31-41 TASK 838

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FAULT CODE	FAULT DESCRIPTION	MAINT MSG	GO TO FIM TASK
261 271 00	DET FIRE WHEEL WELL (EICAS STATUS)	(continued)	
		31-54122	31-41 TASK 839
		31-58013	31-43 TASK 872
		31-58014	31-43 TASK 873
		31-58121	31-41 TASK 856
		31-58122	31-41 TASK 857
		31-69401	31-42 TASK 825
		31-69402	31-42 TASK 825
		31-69491	31-42 TASK 851
		31-69492	31-42 TASK 851
		31-69493	31-42 TASK 851
		31-69494	31-42 TASK 851
		31-69601	31-42 TASK 857
		31-69602	31-42 TASK 857
		31-69691	31-42 TASK 878
		31-69692	31-42 TASK 878
		31-69693	31-42 TASK 878
		31-69694	31-42 TASK 878
261 301 01	DET CHAN 1 E/E SMOKE (EICAS STATUS)	23-81004	23-91 TASK 804
		23-81006	23-91 TASK 806
		24-11781	24-51 TASK 837
		24-11786	24-51 TASK 833
		24-12124	24-51 TASK 840
		24-12127	24-51 TASK 842
		26-20011	26-16 TASK 801
		26-20021	26-16 TASK 808
		26-20070	26-19 TASK 801
		26-28801	26-16 TASK 808
		26-28891	26-16 TASK 806
		26-28893	26-16 TASK 806
		31-17438	31-09 TASK 836
		31-17640	31-10 TASK 815
		31-17945	31-07 TASK 835
		31-17947	31-07 TASK 837
		31-17949	31-07 TASK 839
		31-17951	31-07 TASK 841

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FAULT CODE	FAULT DESCRIPTION	MAINT MSG	GO TO FIM TASK
261 301 01	DET CHAN 1 E/E SMOKE (EICAS STATUS)	(continued)	
		31-18801	31-08 TASK 810
		31-18803	31-08 TASK 812
		31-18841	31-08 TASK 814
		31-18863	31-08 TASK 816
		31-54013	31-43 TASK 868
		31-54014	31-43 TASK 869
		31-54121	31-41 TASK 838
		31-54122	31-41 TASK 839
		31-58013	31-43 TASK 872
		31-58014	31-43 TASK 873
		31-58121	31-41 TASK 856
		31-58122	31-41 TASK 857
		31-69401	31-42 TASK 825
		31-69402	31-42 TASK 825
		31-69491	31-42 TASK 851
		31-69492	31-42 TASK 851
		31-69601	31-42 TASK 857
		31-69602	31-42 TASK 857
		31-69691	31-42 TASK 878
		31-69692	31-42 TASK 878
261 301 02	DET CHAN 2 E/E SMOKE (EICAS STATUS)	23-81004	23-91 TASK 804
		23-81006	23-91 TASK 806
		24-11781	24-51 TASK 837
		24-11786	24-51 TASK 833
		24-12124	24-51 TASK 840
		24-12127	24-51 TASK 842
		26-20011	26-16 TASK 801
		26-20021	26-16 TASK 808
		26-20070	26-19 TASK 801
		26-28801	26-16 TASK 808
		26-28891	26-16 TASK 806
		26-28893	26-16 TASK 806
		31-17438	31-09 TASK 836
		31-17640	31-10 TASK 815
		31-17945	31-07 TASK 835

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FAULT CODE	FAULT DESCRIPTION	MAINT MSG	GO TO FIM TASK
261 301 02	DET CHAN 2 E/E SMOKE (EICAS STATUS)	(continued)	
		31-17947	31-07 TASK 837
		31-17949	31-07 TASK 839
		31-17951	31-07 TASK 841
		31-18801	31-08 TASK 810
		31-18803	31-08 TASK 812
		31-18841	31-08 TASK 814
		31-18863	31-08 TASK 816
		31-54013	31-43 TASK 868
		31-54014	31-43 TASK 869
		31-54121	31-41 TASK 838
		31-54122	31-41 TASK 839
		31-58013	31-43 TASK 872
		31-58014	31-43 TASK 873
		31-58121	31-41 TASK 856
		31-58122	31-41 TASK 857
		31-69401	31-42 TASK 825
		31-69402	31-42 TASK 825
		31-69491	31-42 TASK 851
		31-69492	31-42 TASK 851
		31-69601	31-42 TASK 857
		31-69602	31-42 TASK 857
		31-69691	31-42 TASK 878
		31-69692	31-42 TASK 878
261 351 00	BLEED LEAK BODY (EICAS CAUTION)	23-81004	23-91 TASK 804
		23-81006	23-91 TASK 806
		26-30001	26-18 TASK 808
		26-30002	26-18 TASK 809
		26-31001	26-18 TASK 807
		26-31002	26-18 TASK 807
		26-31011	26-18 TASK 816
		26-31012	26-18 TASK 816
		26-31021	26-18 TASK 816
		26-31022	26-18 TASK 816
		26-31031	26-18 TASK 816
		26-31032	26-18 TASK 816

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FAULT CODE	FAULT DESCRIPTION	MAINT MSG	GO TO FIM TASK
261 351 00	BLEED LEAK BODY (EICAS CAUTION)	(continued)	
		26-31041	26-18 TASK 816
		26-31042	26-18 TASK 816
		26-31051	26-18 TASK 816
		26-31052	26-18 TASK 816
		26-31061	26-18 TASK 816
		26-31062	26-18 TASK 816
		26-31071	26-18 TASK 816
		26-31072	26-18 TASK 816
		26-31081	26-18 TASK 816
		26-31082	26-18 TASK 816
		26-31091	26-18 TASK 816
		26-31092	26-18 TASK 816
		26-31101	26-18 TASK 816
		26-31102	26-18 TASK 816
		26-31111	26-18 TASK 816
		26-31112	26-18 TASK 816
		26-31121	26-18 TASK 816
		26-31122	26-18 TASK 816
		26-31131	26-18 TASK 816
		26-31132	26-18 TASK 816
		26-31141	26-18 TASK 816
		26-31142	26-18 TASK 816
		26-31151	26-18 TASK 816
		26-31152	26-18 TASK 816
		26-31161	26-18 TASK 816
		26-31162	26-18 TASK 816
		26-31171	26-18 TASK 816
		26-31172	26-18 TASK 816
		26-31181	26-18 TASK 816
		26-31182	26-18 TASK 816
		26-31191	26-18 TASK 816
		26-31192	26-18 TASK 816
		26-31201	26-18 TASK 816
		26-31202	26-18 TASK 816
		26-31211	26-18 TASK 816

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FAULT CODE	FAULT DESCRIPTION	MAINT MSG	GO TO FIM TASK
261 351 00	BLEED LEAK BODY (EICAS CAUTION)	(continued)	
		26-31212	26-18 TASK 816
		26-31221	26-18 TASK 816
		26-31222	26-18 TASK 816
		26-31231	26-18 TASK 816
		26-31232	26-18 TASK 816
		26-31241	26-18 TASK 816
		26-31242	26-18 TASK 816
		26-31251	26-18 TASK 816
		26-31252	26-18 TASK 816
		26-31261	26-18 TASK 816
		26-31262	26-18 TASK 816
		26-32001	26-18 TASK 813
		26-32002	26-18 TASK 813
		26-32011	26-18 TASK 804
		26-32012	26-18 TASK 804
		26-32021	26-18 TASK 804
		26-32022	26-18 TASK 804
		26-32031	26-18 TASK 804
		26-32032	26-18 TASK 804
		26-32041	26-18 TASK 804
		26-32042	26-18 TASK 804
		26-32051	26-18 TASK 804
		26-32052	26-18 TASK 804
		26-32061	26-18 TASK 804
		26-32062	26-18 TASK 804
		26-32071	26-18 TASK 804
		26-32072	26-18 TASK 804
		26-32081	26-18 TASK 804
		26-32082	26-18 TASK 804
		26-32091	26-18 TASK 804
		26-32092	26-18 TASK 804
		26-32101	26-18 TASK 804
		26-32102	26-18 TASK 804
		26-32111	26-18 TASK 804
		26-32112	26-18 TASK 804

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261 351 00	BLEED LEAK BODY (EICAS CAUTION)	(continued)	
		26-32121	26-18 TASK 804
		26-32122	26-18 TASK 804
		26-32131	26-18 TASK 804
		26-32132	26-18 TASK 804
		26-32141	26-18 TASK 804
		26-32142	26-18 TASK 804
		26-32151	26-18 TASK 804
		26-32152	26-18 TASK 804
		26-32161	26-18 TASK 804
		26-32162	26-18 TASK 804
		26-32171	26-18 TASK 804
		26-32172	26-18 TASK 804
		26-32181	26-18 TASK 804
		26-32182	26-18 TASK 804
		26-32191	26-18 TASK 804
		26-32192	26-18 TASK 804
		26-32201	26-18 TASK 804
		26-32202	26-18 TASK 804
		26-32211	26-18 TASK 804
		26-32212	26-18 TASK 804
		26-32221	26-18 TASK 804
		26-32222	26-18 TASK 804
		26-32231	26-18 TASK 804
		26-32232	26-18 TASK 804
		26-32241	26-18 TASK 804
		26-32242	26-18 TASK 804
		26-32251	26-18 TASK 804
		26-32252	26-18 TASK 804
		26-32261	26-18 TASK 804
		26-32262	26-18 TASK 804
		26-38891	26-18 TASK 811
		26-38892	26-18 TASK 811
		26-39904	26-18 TASK 812
		26-39911	26-18 TASK 812
		26-39913	26-18 TASK 812

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261 351 00	BLEED LEAK BODY (EICAS CAUTION)	(continued)	
		26-39920	26-18 TASK 812
		31-14011	31-09 TASK 812
		31-14012	31-09 TASK 813
		31-14013	31-09 TASK 814
		31-14014	31-09 TASK 815
		31-14015	31-09 TASK 816
		31-14016	31-09 TASK 817
		31-14017	31-09 TASK 818
		31-14018	31-09 TASK 818
		31-17909	31-07 TASK 805
		31-17910	31-07 TASK 806
		31-17911	31-07 TASK 807
		31-17912	31-07 TASK 808
		31-18801	31-08 TASK 810
		31-18802	31-08 TASK 811
		31-18803	31-08 TASK 812
		31-18804	31-08 TASK 813
		31-18841	31-08 TASK 814
		31-18842	31-08 TASK 814
		31-18863	31-08 TASK 816
		31-18864	31-08 TASK 817
		31-18891	31-08 TASK 818
		31-18892	31-08 TASK 819
		31-18893	31-08 TASK 820
		31-18894	31-08 TASK 821
		31-54013	31-43 TASK 868
		31-54014	31-43 TASK 869
		31-54121	31-41 TASK 838
		31-54122	31-41 TASK 839
		31-58013	31-43 TASK 872
		31-58014	31-43 TASK 873
		31-58121	31-41 TASK 856
		31-58122	31-41 TASK 857
		31-69401	31-42 TASK 825
		31-69402	31-42 TASK 825

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FAULT CODE	FAULT DESCRIPTION	MAINT MSG	GO TO FIM TASK
261 351 00	BLEED LEAK BODY (EICAS CAUTION)	(continued)	
		31-69491	31-42 TASK 851
		31-69492	31-42 TASK 851
		31-69493	31-42 TASK 851
		31-69494	31-42 TASK 851
		31-69601	31-42 TASK 857
		31-69602	31-42 TASK 857
		31-69691	31-42 TASK 878
		31-69692	31-42 TASK 878
		31-69693	31-42 TASK 878
		31-69694	31-42 TASK 878
261 352 41	BLEED LEAK L (EICAS CAUTION)	23-81004	23-91 TASK 804
		23-81006	23-91 TASK 806
		26-30001	26-18 TASK 808
		26-30003	26-18 TASK 810
		26-31023	26-18 TASK 802
		26-31033	26-18 TASK 802
		26-31043	26-18 TASK 802
		26-31053	26-18 TASK 802
		26-31063	26-18 TASK 802
		26-31073	26-18 TASK 802
		26-31083	26-18 TASK 802
		26-31093	26-18 TASK 802
		26-31103	26-18 TASK 802
		26-32013	26-18 TASK 802
		26-33001	26-18 TASK 807
		26-33011	26-18 TASK 801
		26-33021	26-18 TASK 801
		26-33031	26-18 TASK 801
		26-33041	26-18 TASK 801
		26-33051	26-18 TASK 801
		26-33061	26-18 TASK 801
		26-33071	26-18 TASK 801
		26-33081	26-18 TASK 801
		26-33091	26-18 TASK 801
		26-33101	26-18 TASK 801

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261 352 41	BLEED LEAK L (EICAS CAUTION)	(continued)	
		26-33111	26-18 TASK 801
		26-33121	26-18 TASK 801
		26-34003	26-18 TASK 807
		26-34011	26-18 TASK 802
		26-34021	26-18 TASK 802
		26-34031	26-18 TASK 802
		26-34041	26-18 TASK 802
		26-34051	26-18 TASK 802
		26-34061	26-18 TASK 802
		26-34071	26-18 TASK 802
		26-34081	26-18 TASK 802
		26-34091	26-18 TASK 802
		26-34101	26-18 TASK 802
		26-34103	26-18 TASK 813
		26-34111	26-18 TASK 802
		26-34121	26-18 TASK 802
		26-35013	26-18 TASK 801
		26-35023	26-18 TASK 801
		26-35033	26-18 TASK 801
		26-35043	26-18 TASK 801
		26-35053	26-18 TASK 801
		26-35063	26-18 TASK 801
		26-35073	26-18 TASK 801
		26-35083	26-18 TASK 801
		26-35093	26-18 TASK 801
		26-35103	26-18 TASK 801
		26-35113	26-18 TASK 801
		26-35123	26-18 TASK 801
		26-36113	26-18 TASK 802
		26-36123	26-18 TASK 802
		26-38891	26-18 TASK 811
		26-38893	26-18 TASK 811
		26-39101	26-18 TASK 813
		26-39904	26-18 TASK 812
		26-39909	26-18 TASK 812

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FAULT CODE	FAULT DESCRIPTION	MAINT MSG	GO TO FIM TASK
261 352 41	BLEED LEAK L (EICAS CAUTION)	(continued)	
		26-39913	26-18 TASK 812
		26-39918	26-18 TASK 812
		31-14011	31-09 TASK 812
		31-14012	31-09 TASK 813
		31-14013	31-09 TASK 814
		31-14014	31-09 TASK 815
		31-14015	31-09 TASK 816
		31-14016	31-09 TASK 817
		31-14017	31-09 TASK 818
		31-14018	31-09 TASK 818
		31-17909	31-07 TASK 805
		31-17911	31-07 TASK 807
		31-17922	31-07 TASK 815
		31-17924	31-07 TASK 816
		31-18801	31-08 TASK 810
		31-18802	31-08 TASK 811
		31-18803	31-08 TASK 812
		31-18804	31-08 TASK 813
		31-18841	31-08 TASK 814
		31-18842	31-08 TASK 814
		31-18863	31-08 TASK 816
		31-18864	31-08 TASK 817
		31-18891	31-08 TASK 818
		31-18892	31-08 TASK 819
		31-18893	31-08 TASK 820
		31-18894	31-08 TASK 821
		31-54013	31-43 TASK 868
		31-54014	31-43 TASK 869
		31-54121	31-41 TASK 838
		31-54122	31-41 TASK 839
		31-58013	31-43 TASK 872
		31-58014	31-43 TASK 873
		31-58121	31-41 TASK 856
		31-58122	31-41 TASK 857
		31-69401	31-42 TASK 825

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261 352 41	BLEED LEAK L (EICAS CAUTION)	(continued)	
		31-69402	31-42 TASK 825
		31-69491	31-42 TASK 851
		31-69492	31-42 TASK 851
		31-69493	31-42 TASK 851
		31-69494	31-42 TASK 851
		31-69601	31-42 TASK 857
		31-69602	31-42 TASK 857
		31-69691	31-42 TASK 878
		31-69692	31-42 TASK 878
		31-69693	31-42 TASK 878
		31-69694	31-42 TASK 878
261 352 42	BLEED LEAK R (EICAS CAUTION)	23-81004	23-91 TASK 804
		23-81006	23-91 TASK 806
		26-30002	26-18 TASK 809
		26-30003	26-18 TASK 810
		26-34122	26-18 TASK 802
		26-37002	26-18 TASK 807
		26-37003	26-18 TASK 807
		26-37013	26-18 TASK 802
		26-37023	26-18 TASK 802
		26-37033	26-18 TASK 802
		26-37043	26-18 TASK 802
		26-37053	26-18 TASK 802
		26-37063	26-18 TASK 802
		26-37073	26-18 TASK 802
		26-37083	26-18 TASK 802
		26-37093	26-18 TASK 802
		26-37102	26-18 TASK 813
		26-37103	26-18 TASK 802
		26-37104	26-18 TASK 813
		26-37113	26-18 TASK 802
		26-37123	26-18 TASK 802
		26-38012	26-18 TASK 801
		26-38013	26-18 TASK 801
		26-38022	26-18 TASK 801

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261 352 42	BLEED LEAK R (EICAS CAUTION)	(continued)	
		26-38023	26-18 TASK 801
		26-38032	26-18 TASK 801
		26-38033	26-18 TASK 801
		26-38042	26-18 TASK 801
		26-38043	26-18 TASK 801
		26-38052	26-18 TASK 801
		26-38053	26-18 TASK 801
		26-38062	26-18 TASK 801
		26-38063	26-18 TASK 801
		26-38072	26-18 TASK 801
		26-38073	26-18 TASK 801
		26-38082	26-18 TASK 801
		26-38083	26-18 TASK 801
		26-38092	26-18 TASK 801
		26-38093	26-18 TASK 801
		26-38102	26-18 TASK 801
		26-38103	26-18 TASK 801
		26-38112	26-18 TASK 801
		26-38113	26-18 TASK 801
		26-38122	26-18 TASK 801
		26-38123	26-18 TASK 801
		26-38892	26-18 TASK 811
		26-38893	26-18 TASK 811
		26-39012	26-18 TASK 802
		26-39022	26-18 TASK 802
		26-39032	26-18 TASK 802
		26-39042	26-18 TASK 802
		26-39052	26-18 TASK 802
		26-39062	26-18 TASK 802
		26-39072	26-18 TASK 802
		26-39082	26-18 TASK 802
		26-39092	26-18 TASK 802
		26-39102	26-18 TASK 802
		26-39112	26-18 TASK 802
		26-39909	26-18 TASK 812

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FAULT CODE	FAULT DESCRIPTION	MAINT MSG	GO TO FIM TASK
261 352 42	BLEED LEAK R (EICAS CAUTION)	(continued)	
		26-39911	26-18 TASK 812
		26-39918	26-18 TASK 812
		26-39920	26-18 TASK 812
		31-14013	31-09 TASK 814
		31-14014	31-09 TASK 815
		31-14016	31-09 TASK 817
		31-14018	31-09 TASK 818
		31-17910	31-07 TASK 806
		31-17912	31-07 TASK 808
		31-17922	31-07 TASK 815
		31-17924	31-07 TASK 816
		31-18802	31-08 TASK 811
		31-18804	31-08 TASK 813
		31-18842	31-08 TASK 814
		31-18864	31-08 TASK 817
		31-18892	31-08 TASK 819
		31-18894	31-08 TASK 821
		31-54013	31-43 TASK 868
		31-54014	31-43 TASK 869
		31-54121	31-41 TASK 838
		31-54122	31-41 TASK 839
		31-58013	31-43 TASK 872
		31-58014	31-43 TASK 873
		31-58121	31-41 TASK 856
		31-58122	31-41 TASK 857
		31-69401	31-42 TASK 825
		31-69402	31-42 TASK 825
		31-69493	31-42 TASK 851
		31-69494	31-42 TASK 851
		31-69601	31-42 TASK 857
		31-69602	31-42 TASK 857
		31-69693	31-42 TASK 878
		31-69694	31-42 TASK 878
261 353 41	BLEED LEAK STRUT L (EICAS CAUTION)	23-81004	23-91 TASK 804
		23-81006	23-91 TASK 806

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FAULT CODE	FAULT DESCRIPTION	MAINT MSG	GO TO FIM TASK
261 353 41	BLEED LEAK STRUT L (EICAS CAUTION)	(continued)	
		26-30001	26-18 TASK 808
		26-30003	26-18 TASK 810
		26-35001	26-18 TASK 814
		26-35101	26-18 TASK 813
		26-36003	26-18 TASK 813
		26-36011	26-18 TASK 806
		26-36013	26-18 TASK 806
		26-36021	26-18 TASK 806
		26-36023	26-18 TASK 806
		26-36031	26-18 TASK 806
		26-36033	26-18 TASK 806
		26-36041	26-18 TASK 806
		26-36043	26-18 TASK 806
		26-36051	26-18 TASK 806
		26-36053	26-18 TASK 806
		26-36061	26-18 TASK 806
		26-36063	26-18 TASK 806
		26-36103	26-18 TASK 814
		26-38891	26-18 TASK 811
		26-38893	26-18 TASK 811
		26-39904	26-18 TASK 812
		26-39909	26-18 TASK 812
		26-39913	26-18 TASK 812
		26-39918	26-18 TASK 812
		31-14011	31-09 TASK 812
		31-14012	31-09 TASK 813
		31-14013	31-09 TASK 814
		31-14014	31-09 TASK 815
		31-14015	31-09 TASK 816
		31-14016	31-09 TASK 817
		31-14017	31-09 TASK 818
		31-14018	31-09 TASK 818
		31-17909	31-07 TASK 805
		31-17911	31-07 TASK 807
		31-17922	31-07 TASK 815

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FAULT CODE	FAULT DESCRIPTION	MAINT MSG	GO TO FIM TASK
261 353 41	BLEED LEAK STRUT L (EICAS CAUTION)	(continued)	
		31-17924	31-07 TASK 816
		31-18801	31-08 TASK 810
		31-18802	31-08 TASK 811
		31-18803	31-08 TASK 812
		31-18804	31-08 TASK 813
		31-18841	31-08 TASK 814
		31-18842	31-08 TASK 814
		31-18863	31-08 TASK 816
		31-18864	31-08 TASK 817
		31-18891	31-08 TASK 818
		31-18892	31-08 TASK 819
		31-18893	31-08 TASK 820
		31-18894	31-08 TASK 821
		31-54013	31-43 TASK 868
		31-54014	31-43 TASK 869
		31-54121	31-41 TASK 838
		31-54122	31-41 TASK 839
		31-58013	31-43 TASK 872
		31-58014	31-43 TASK 873
		31-58121	31-41 TASK 856
		31-58122	31-41 TASK 857
		31-69401	31-42 TASK 825
		31-69402	31-42 TASK 825
		31-69491	31-42 TASK 851
		31-69492	31-42 TASK 851
		31-69493	31-42 TASK 851
		31-69494	31-42 TASK 851
		31-69601	31-42 TASK 857
		31-69602	31-42 TASK 857
		31-69691	31-42 TASK 878
		31-69692	31-42 TASK 878
		31-69693	31-42 TASK 878
		31-69694	31-42 TASK 878
261 353 42	BLEED LEAK STRUT R (EICAS CAUTION)	23-81004	23-91 TASK 804
		23-81006	23-91 TASK 806

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FAULT CODE	FAULT DESCRIPTION	MAINT MSG	GO TO FIM TASK
261 353 42	BLEED LEAK STRUT R (EICAS CAUTION)	(continued)	
		26-30002	26-18 TASK 809
		26-30003	26-18 TASK 810
		26-30302	26-18 TASK 814
		26-31302	26-18 TASK 813
		26-31312	26-18 TASK 806
		26-31322	26-18 TASK 806
		26-31332	26-18 TASK 806
		26-31342	26-18 TASK 806
		26-31352	26-18 TASK 806
		26-31362	26-18 TASK 806
		26-33013	26-18 TASK 806
		26-33023	26-18 TASK 806
		26-33033	26-18 TASK 806
		26-33043	26-18 TASK 806
		26-33053	26-18 TASK 806
		26-33063	26-18 TASK 806
		26-37114	26-18 TASK 813
		26-37303	26-18 TASK 814
		26-38892	26-18 TASK 811
		26-38893	26-18 TASK 811
		26-39909	26-18 TASK 812
		26-39911	26-18 TASK 812
		26-39918	26-18 TASK 812
		26-39920	26-18 TASK 812
		31-14013	31-09 TASK 814
		31-14014	31-09 TASK 815
		31-14016	31-09 TASK 817
		31-14018	31-09 TASK 818
		31-17910	31-07 TASK 806
		31-17912	31-07 TASK 808
		31-17922	31-07 TASK 815
		31-17924	31-07 TASK 816
		31-18802	31-08 TASK 811
		31-18804	31-08 TASK 813
		31-18842	31-08 TASK 814

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FAULT CODE	FAULT DESCRIPTION	MAINT MSG	GO TO FIM TASK
261 353 42	BLEED LEAK STRUT R (EICAS CAUTION)	(continued)	
		31-18864	31-08 TASK 817
		31-18892	31-08 TASK 819
		31-18894	31-08 TASK 821
		31-54013	31-43 TASK 868
		31-54014	31-43 TASK 869
		31-54121	31-41 TASK 838
		31-54122	31-41 TASK 839
		31-58013	31-43 TASK 872
		31-58014	31-43 TASK 873
		31-58121	31-41 TASK 856
		31-58122	31-41 TASK 857
		31-69401	31-42 TASK 825
		31-69402	31-42 TASK 825
		31-69493	31-42 TASK 851
		31-69494	31-42 TASK 851
		31-69601	31-42 TASK 857
		31-69602	31-42 TASK 857
		31-69693	31-42 TASK 878
		31-69694	31-42 TASK 878
261 361 01	BLEED LOOP 1 BODY (EICAS STATUS)	23-81004	23-91 TASK 804
		23-81006	23-91 TASK 806
		26-30001	26-18 TASK 808
		26-31001	26-18 TASK 807
		26-31011	26-18 TASK 816
		26-31021	26-18 TASK 816
		26-31031	26-18 TASK 816
		26-31041	26-18 TASK 816
		26-31051	26-18 TASK 816
		26-31061	26-18 TASK 816
		26-31071	26-18 TASK 816
		26-31081	26-18 TASK 816
		26-31091	26-18 TASK 816
		26-31101	26-18 TASK 816
		26-31111	26-18 TASK 816
		26-31121	26-18 TASK 816

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261 361 01	BLEED LOOP 1 BODY (EICAS STATUS)	(continued)	
		26-31131	26-18 TASK 816
		26-31141	26-18 TASK 816
		26-31151	26-18 TASK 816
		26-31161	26-18 TASK 816
		26-31171	26-18 TASK 816
		26-31181	26-18 TASK 816
		26-31191	26-18 TASK 816
		26-31201	26-18 TASK 816
		26-31211	26-18 TASK 816
		26-31221	26-18 TASK 816
		26-31231	26-18 TASK 816
		26-31241	26-18 TASK 816
		26-31251	26-18 TASK 816
		26-31261	26-18 TASK 816
		26-32001	26-18 TASK 813
		26-32011	26-18 TASK 804
		26-32021	26-18 TASK 804
		26-32031	26-18 TASK 804
		26-32041	26-18 TASK 804
		26-32051	26-18 TASK 804
		26-32061	26-18 TASK 804
		26-32071	26-18 TASK 804
		26-32081	26-18 TASK 804
		26-32091	26-18 TASK 804
		26-32101	26-18 TASK 804
		26-32111	26-18 TASK 804
		26-32121	26-18 TASK 804
		26-32131	26-18 TASK 804
		26-32141	26-18 TASK 804
		26-32151	26-18 TASK 804
		26-32161	26-18 TASK 804
		26-32171	26-18 TASK 804
		26-32181	26-18 TASK 804
		26-32191	26-18 TASK 804
		26-32201	26-18 TASK 804

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261 361 01	BLEED LOOP 1 BODY (EICAS STATUS)	(continued)	
		26-32211	26-18 TASK 804
		26-32221	26-18 TASK 804
		26-32231	26-18 TASK 804
		26-32241	26-18 TASK 804
		26-32251	26-18 TASK 804
		26-32261	26-18 TASK 804
		26-38891	26-18 TASK 811
		31-14011	31-09 TASK 812
		31-14012	31-09 TASK 813
		31-14015	31-09 TASK 816
		31-14017	31-09 TASK 818
		31-17909	31-07 TASK 805
		31-17911	31-07 TASK 807
		31-18801	31-08 TASK 810
		31-18803	31-08 TASK 812
		31-18841	31-08 TASK 814
		31-18863	31-08 TASK 816
		31-54013	31-43 TASK 868
		31-54014	31-43 TASK 869
		31-54121	31-41 TASK 838
		31-54122	31-41 TASK 839
		31-58013	31-43 TASK 872
		31-58014	31-43 TASK 873
		31-58121	31-41 TASK 856
		31-58122	31-41 TASK 857
		31-69401	31-42 TASK 825
		31-69402	31-42 TASK 825
		31-69491	31-42 TASK 851
		31-69492	31-42 TASK 851
		31-69601	31-42 TASK 857
		31-69602	31-42 TASK 857
		31-69691	31-42 TASK 878
		31-69692	31-42 TASK 878
		NONE	31-09 TASK 837

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261 361 02	BLEED LOOP 2 BODY (EICAS STATUS)	23-81004	23-91 TASK 804
		23-81006	23-91 TASK 806
		26-30002	26-18 TASK 809
		26-31002	26-18 TASK 807
		26-31012	26-18 TASK 816
		26-31022	26-18 TASK 816
		26-31032	26-18 TASK 816
		26-31042	26-18 TASK 816
		26-31052	26-18 TASK 816
		26-31062	26-18 TASK 816
		26-31072	26-18 TASK 816
		26-31082	26-18 TASK 816
		26-31092	26-18 TASK 816
		26-31102	26-18 TASK 816
		26-31112	26-18 TASK 816
		26-31122	26-18 TASK 816
		26-31132	26-18 TASK 816
		26-31142	26-18 TASK 816
		26-31152	26-18 TASK 816
		26-31162	26-18 TASK 816
		26-31172	26-18 TASK 816
		26-31182	26-18 TASK 816
		26-31192	26-18 TASK 816
		26-31202	26-18 TASK 816
		26-31212	26-18 TASK 816
		26-31222	26-18 TASK 816
		26-31232	26-18 TASK 816
		26-31242	26-18 TASK 816
		26-31252	26-18 TASK 816
		26-31262	26-18 TASK 816
		26-32002	26-18 TASK 813
		26-32012	26-18 TASK 804
		26-32022	26-18 TASK 804
		26-32032	26-18 TASK 804
		26-32042	26-18 TASK 804
		26-32052	26-18 TASK 804

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FAULT CODE	FAULT DESCRIPTION	MAINT MSG	GO TO FIM TASK
261 361 02	BLEED LOOP 2 BODY (EICAS STATUS)	(continued)	
		26-32062	26-18 TASK 804
		26-32072	26-18 TASK 804
		26-32082	26-18 TASK 804
		26-32092	26-18 TASK 804
		26-32102	26-18 TASK 804
		26-32112	26-18 TASK 804
		26-32122	26-18 TASK 804
		26-32132	26-18 TASK 804
		26-32142	26-18 TASK 804
		26-32152	26-18 TASK 804
		26-32162	26-18 TASK 804
		26-32172	26-18 TASK 804
		26-32182	26-18 TASK 804
		26-32192	26-18 TASK 804
		26-32202	26-18 TASK 804
		26-32212	26-18 TASK 804
		26-32222	26-18 TASK 804
		26-32232	26-18 TASK 804
		26-32242	26-18 TASK 804
		26-32252	26-18 TASK 804
		26-32262	26-18 TASK 804
		26-38892	26-18 TASK 811
		31-14013	31-09 TASK 814
		31-14014	31-09 TASK 815
		31-14016	31-09 TASK 817
		31-14018	31-09 TASK 818
		31-17910	31-07 TASK 806
		31-17912	31-07 TASK 808
		31-18802	31-08 TASK 811
		31-18804	31-08 TASK 813
		31-18842	31-08 TASK 814
		31-18864	31-08 TASK 817
		31-54013	31-43 TASK 868
		31-54014	31-43 TASK 869
		31-54121	31-41 TASK 838

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FAULT CODE	FAULT DESCRIPTION	MAINT MSG	GO TO FIM TASK
261 361 02	BLEED LOOP 2 BODY (EICAS STATUS)	(continued)	
		31-54122	31-41 TASK 839
		31-58013	31-43 TASK 872
		31-58014	31-43 TASK 873
		31-58121	31-41 TASK 856
		31-58122	31-41 TASK 857
		31-69401	31-42 TASK 825
		31-69402	31-42 TASK 825
		31-69493	31-42 TASK 851
		31-69494	31-42 TASK 851
		31-69601	31-42 TASK 857
		31-69602	31-42 TASK 857
		31-69693	31-42 TASK 878
		31-69694	31-42 TASK 878
		NONE	31-09 TASK 840
261 362 41	BLEED LOOP 1 WING L (EICAS STATUS)	23-81004	23-91 TASK 804
		23-81006	23-91 TASK 806
		26-30003	26-18 TASK 810
		26-31023	26-18 TASK 802
		26-31033	26-18 TASK 802
		26-31043	26-18 TASK 802
		26-31053	26-18 TASK 802
		26-31063	26-18 TASK 802
		26-31073	26-18 TASK 802
		26-31083	26-18 TASK 802
		26-31093	26-18 TASK 802
		26-31103	26-18 TASK 802
		26-32013	26-18 TASK 802
		26-34003	26-18 TASK 807
		26-34103	26-18 TASK 813
		26-35013	26-18 TASK 801
		26-35023	26-18 TASK 801
		26-35033	26-18 TASK 801
		26-35043	26-18 TASK 801
		26-35053	26-18 TASK 801
		26-35063	26-18 TASK 801

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261 362 41	BLEED LOOP 1 WING L (EICAS STATUS)	(continued)	
		26-35073	26-18 TASK 801
		26-35083	26-18 TASK 801
		26-35093	26-18 TASK 801
		26-35103	26-18 TASK 801
		26-35113	26-18 TASK 801
		26-35123	26-18 TASK 801
		26-36113	26-18 TASK 802
		26-36123	26-18 TASK 802
		26-38893	26-18 TASK 811
		31-14013	31-09 TASK 814
		31-14014	31-09 TASK 815
		31-14016	31-09 TASK 817
		31-14018	31-09 TASK 818
		31-17922	31-07 TASK 815
		31-17924	31-07 TASK 816
		31-18802	31-08 TASK 811
		31-18804	31-08 TASK 813
		31-18842	31-08 TASK 814
		31-18864	31-08 TASK 817
		31-54013	31-43 TASK 868
		31-54014	31-43 TASK 869
		31-54121	31-41 TASK 838
		31-54122	31-41 TASK 839
		31-58013	31-43 TASK 872
		31-58014	31-43 TASK 873
		31-58121	31-41 TASK 856
		31-58122	31-41 TASK 857
		31-69401	31-42 TASK 825
		31-69402	31-42 TASK 825
		31-69493	31-42 TASK 851
		31-69494	31-42 TASK 851
		31-69601	31-42 TASK 857
		31-69602	31-42 TASK 857
		31-69693	31-42 TASK 878
		31-69694	31-42 TASK 878

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FAULT CODE	FAULT DESCRIPTION	MAINT MSG	GO TO FIM TASK
261 362 41	BLEED LOOP 1 WING L (EICAS STATUS)	(continued) NONE	31-09 TASK 840
261 362 42	BLEED LOOP 1 WING R (EICAS STATUS)	23-81004 23-81006 26-30002 26-34122 26-37002 26-37102 26-38012 26-38022 26-38032 26-38042 26-38052 26-38062 26-38072 26-38082 26-38092 26-38102 26-38112 26-38122 26-38892 26-39012 26-39022 26-39032 26-39042 26-39052 26-39062 26-39072 26-39082 26-39092 26-39102 26-39112 31-14013 31-14014 31-14016 31-14018	23-91 TASK 804 23-91 TASK 806 26-18 TASK 809 26-18 TASK 802 26-18 TASK 807 26-18 TASK 813 26-18 TASK 801 26-18 TASK 801 26-18 TASK 801 26-18 TASK 801 26-18 TASK 801 26-18 TASK 801 26-18 TASK 801 26-18 TASK 801 26-18 TASK 801 26-18 TASK 801 26-18 TASK 801 26-18 TASK 801 26-18 TASK 801 26-18 TASK 811 26-18 TASK 802 26-18 TASK 802 26-18 TASK 802 26-18 TASK 802 26-18 TASK 802 26-18 TASK 802 26-18 TASK 802 26-18 TASK 802 26-18 TASK 802 26-18 TASK 802 26-18 TASK 802 31-09 TASK 814 31-09 TASK 815 31-09 TASK 817 31-09 TASK 818

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FAULT CODE	FAULT DESCRIPTION	MAINT MSG	GO TO FIM TASK
261 362 42	BLEED LOOP 1 WING R (EICAS STATUS)	(continued)	
		31-17910	31-07 TASK 806
		31-17912	31-07 TASK 808
		31-18802	31-08 TASK 811
		31-18804	31-08 TASK 813
		31-18842	31-08 TASK 814
		31-18864	31-08 TASK 817
		31-54013	31-43 TASK 868
		31-54014	31-43 TASK 869
		31-54121	31-41 TASK 838
		31-54122	31-41 TASK 839
		31-58013	31-43 TASK 872
		31-58014	31-43 TASK 873
		31-58121	31-41 TASK 856
		31-58122	31-41 TASK 857
		31-69401	31-42 TASK 825
		31-69402	31-42 TASK 825
		31-69493	31-42 TASK 851
		31-69494	31-42 TASK 851
		31-69601	31-42 TASK 857
		31-69602	31-42 TASK 857
		31-69693	31-42 TASK 878
		31-69694	31-42 TASK 878
		NONE	31-09 TASK 840
261 363 41	BLEED LOOP 2 WING L (EICAS STATUS)	23-81004	23-91 TASK 804
		23-81006	23-91 TASK 806
		26-30001	26-18 TASK 808
		26-33001	26-18 TASK 807
		26-33011	26-18 TASK 801
		26-33021	26-18 TASK 801
		26-33031	26-18 TASK 801
		26-33041	26-18 TASK 801
		26-33051	26-18 TASK 801
		26-33061	26-18 TASK 801
		26-33071	26-18 TASK 801
		26-33081	26-18 TASK 801

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FAULT CODE	FAULT DESCRIPTION	MAINT MSG	GO TO FIM TASK
261 363 41	BLEED LOOP 2 WING L (EICAS STATUS)	(continued)	
		26-33091	26-18 TASK 801
		26-33101	26-18 TASK 801
		26-33111	26-18 TASK 801
		26-33121	26-18 TASK 801
		26-34011	26-18 TASK 802
		26-34021	26-18 TASK 802
		26-34031	26-18 TASK 802
		26-34041	26-18 TASK 802
		26-34051	26-18 TASK 802
		26-34061	26-18 TASK 802
		26-34071	26-18 TASK 802
		26-34081	26-18 TASK 802
		26-34091	26-18 TASK 802
		26-34101	26-18 TASK 802
		26-34111	26-18 TASK 802
		26-34121	26-18 TASK 802
		26-38891	26-18 TASK 811
		26-39101	26-18 TASK 813
		31-14011	31-09 TASK 812
		31-14012	31-09 TASK 813
		31-14015	31-09 TASK 816
		31-14017	31-09 TASK 818
		31-17909	31-07 TASK 805
		31-17911	31-07 TASK 807
		31-18801	31-08 TASK 810
		31-18803	31-08 TASK 812
		31-18841	31-08 TASK 814
		31-18863	31-08 TASK 816
		31-54013	31-43 TASK 868
		31-54014	31-43 TASK 869
		31-54121	31-41 TASK 838
		31-54122	31-41 TASK 839
		31-58013	31-43 TASK 872
		31-58014	31-43 TASK 873
		31-58121	31-41 TASK 856

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FAULT CODE	FAULT DESCRIPTION	MAINT MSG	GO TO FIM TASK
261 363 41	BLEED LOOP 2 WING L (EICAS STATUS)	(continued)	
		31-58122	31-41 TASK 857
		31-69401	31-42 TASK 825
		31-69402	31-42 TASK 825
		31-69491	31-42 TASK 851
		31-69492	31-42 TASK 851
		31-69601	31-42 TASK 857
		31-69602	31-42 TASK 857
		31-69691	31-42 TASK 878
		31-69692	31-42 TASK 878
261 363 42	BLEED LOOP 2 WING R (EICAS STATUS)	NONE	31-09 TASK 837
		23-81004	23-91 TASK 804
		23-81006	23-91 TASK 806
		26-30003	26-18 TASK 810
		26-37003	26-18 TASK 807
		26-37013	26-18 TASK 802
		26-37023	26-18 TASK 802
		26-37033	26-18 TASK 802
		26-37043	26-18 TASK 802
		26-37053	26-18 TASK 802
		26-37063	26-18 TASK 802
		26-37073	26-18 TASK 802
		26-37083	26-18 TASK 802
		26-37093	26-18 TASK 802
		26-37103	26-18 TASK 802
		26-37104	26-18 TASK 813
		26-37113	26-18 TASK 802
		26-37123	26-18 TASK 802
		26-38013	26-18 TASK 801
		26-38023	26-18 TASK 801
		26-38033	26-18 TASK 801
		26-38043	26-18 TASK 801
		26-38053	26-18 TASK 801
		26-38063	26-18 TASK 801
		26-38073	26-18 TASK 801
		26-38083	26-18 TASK 801

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FAULT CODE	FAULT DESCRIPTION	MAINT MSG	GO TO FIM TASK
261 363 42	BLEED LOOP 2 WING R (EICAS STATUS)	(continued)	
		26-38093	26-18 TASK 801
		26-38103	26-18 TASK 801
		26-38113	26-18 TASK 801
		26-38123	26-18 TASK 801
		26-38893	26-18 TASK 811
		31-14013	31-09 TASK 814
		31-14014	31-09 TASK 815
		31-14016	31-09 TASK 817
		31-14018	31-09 TASK 818
		31-17922	31-07 TASK 815
		31-17924	31-07 TASK 816
		31-18802	31-08 TASK 811
		31-18804	31-08 TASK 813
		31-18842	31-08 TASK 814
		31-18864	31-08 TASK 817
		31-54013	31-43 TASK 868
		31-54014	31-43 TASK 869
		31-54121	31-41 TASK 838
		31-54122	31-41 TASK 839
		31-58013	31-43 TASK 872
		31-58014	31-43 TASK 873
		31-58121	31-41 TASK 856
		31-58122	31-41 TASK 857
		31-69401	31-42 TASK 825
		31-69402	31-42 TASK 825
		31-69493	31-42 TASK 851
		31-69494	31-42 TASK 851
		31-69601	31-42 TASK 857
		31-69602	31-42 TASK 857
		31-69693	31-42 TASK 878
		31-69694	31-42 TASK 878
		NONE	31-09 TASK 840
261 364 41	BLEED LOOP 1 STRUT L (EICAS STATUS)	23-81004	23-91 TASK 804
		23-81006	23-91 TASK 806
		26-30003	26-18 TASK 810

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FAULT CODE	FAULT DESCRIPTION	MAINT MSG	GO TO FIM TASK
261 364 41	BLEED LOOP 1 STRUT L (EICAS STATUS)	(continued)	
		26-36003	26-18 TASK 813
		26-36013	26-18 TASK 806
		26-36023	26-18 TASK 806
		26-36033	26-18 TASK 806
		26-36043	26-18 TASK 806
		26-36053	26-18 TASK 806
		26-36063	26-18 TASK 806
		26-36103	26-18 TASK 814
		26-38893	26-18 TASK 811
		31-14013	31-09 TASK 814
		31-14014	31-09 TASK 815
		31-14016	31-09 TASK 817
		31-14018	31-09 TASK 818
		31-17922	31-07 TASK 815
		31-17924	31-07 TASK 816
		31-18802	31-08 TASK 811
		31-18804	31-08 TASK 813
		31-18842	31-08 TASK 814
		31-18864	31-08 TASK 817
		31-54013	31-43 TASK 868
		31-54014	31-43 TASK 869
		31-54121	31-41 TASK 838
		31-54122	31-41 TASK 839
		31-58013	31-43 TASK 872
		31-58014	31-43 TASK 873
		31-58121	31-41 TASK 856
		31-58122	31-41 TASK 857
		31-69401	31-42 TASK 825
		31-69402	31-42 TASK 825
		31-69493	31-42 TASK 851
		31-69494	31-42 TASK 851
		31-69601	31-42 TASK 857
		31-69602	31-42 TASK 857
		31-69693	31-42 TASK 878
		31-69694	31-42 TASK 878

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FAULT CODE	FAULT DESCRIPTION	MAINT MSG	GO TO FIM TASK
261 364 41	BLEED LOOP 1 STRUT L (EICAS STATUS)	(continued) NONE	31-09 TASK 840
261 364 42	BLEED LOOP 1 STRUT R (EICAS STATUS)	23-81004 23-81006 26-30002 26-30302 26-31302 26-31312 26-31322 26-31332 26-31342 26-31352 26-31362 26-38892 31-14013 31-14014 31-14016 31-14018 31-17910 31-17912 31-18802 31-18804 31-18842 31-18864 31-54013 31-54014 31-54121 31-54122 31-58013 31-58014 31-58121 31-58122 31-69401 31-69402 31-69493 31-69494	23-91 TASK 804 23-91 TASK 806 26-18 TASK 809 26-18 TASK 814 26-18 TASK 813 26-18 TASK 806 26-18 TASK 806 26-18 TASK 806 26-18 TASK 806 26-18 TASK 806 26-18 TASK 806 26-18 TASK 811 31-09 TASK 814 31-09 TASK 815 31-09 TASK 817 31-09 TASK 818 31-07 TASK 806 31-07 TASK 808 31-08 TASK 811 31-08 TASK 813 31-08 TASK 814 31-08 TASK 817 31-43 TASK 868 31-43 TASK 869 31-41 TASK 838 31-41 TASK 839 31-43 TASK 872 31-43 TASK 873 31-41 TASK 856 31-41 TASK 857 31-42 TASK 825 31-42 TASK 825 31-42 TASK 851 31-42 TASK 851

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FAULT CODE	FAULT DESCRIPTION	MAINT MSG	GO TO FIM TASK
261 364 42	BLEED LOOP 1 STRUT R (EICAS STATUS)	(continued)	
		31-69601	31-42 TASK 857
		31-69602	31-42 TASK 857
		31-69693	31-42 TASK 878
		31-69694	31-42 TASK 878
		NONE	31-09 TASK 840
261 365 41	BLEED LOOP 2 STRUT L (EICAS STATUS)	23-81004	23-91 TASK 804
		23-81006	23-91 TASK 806
		26-30001	26-18 TASK 808
		26-35001	26-18 TASK 814
		26-35101	26-18 TASK 813
		26-36011	26-18 TASK 806
		26-36021	26-18 TASK 806
		26-36031	26-18 TASK 806
		26-36041	26-18 TASK 806
		26-36051	26-18 TASK 806
		26-36061	26-18 TASK 806
		26-38891	26-18 TASK 811
		31-14011	31-09 TASK 812
		31-14012	31-09 TASK 813
		31-14015	31-09 TASK 816
		31-14017	31-09 TASK 818
		31-17909	31-07 TASK 805
		31-17911	31-07 TASK 807
		31-18801	31-08 TASK 810
		31-18803	31-08 TASK 812
		31-18841	31-08 TASK 814
		31-18863	31-08 TASK 816
		31-54013	31-43 TASK 868
		31-54014	31-43 TASK 869
		31-54121	31-41 TASK 838
		31-54122	31-41 TASK 839
		31-58013	31-43 TASK 872
		31-58014	31-43 TASK 873
		31-58121	31-41 TASK 856
		31-58122	31-41 TASK 857

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261 365 41	BLEED LOOP 2 STRUT L (EICAS STATUS)	(continued)	
		31-69401	31-42 TASK 825
		31-69402	31-42 TASK 825
		31-69491	31-42 TASK 851
		31-69492	31-42 TASK 851
		31-69601	31-42 TASK 857
		31-69602	31-42 TASK 857
		31-69691	31-42 TASK 878
		31-69692	31-42 TASK 878
261 365 42	BLEED LOOP 2 STRUT R (EICAS STATUS)	NONE	31-09 TASK 837
		23-81004	23-91 TASK 804
		23-81006	23-91 TASK 806
		26-30003	26-18 TASK 810
		26-33013	26-18 TASK 806
		26-33023	26-18 TASK 806
		26-33033	26-18 TASK 806
		26-33043	26-18 TASK 806
		26-33053	26-18 TASK 806
		26-33063	26-18 TASK 806
		26-37114	26-18 TASK 813
		26-37303	26-18 TASK 814
		26-38893	26-18 TASK 811
		31-14013	31-09 TASK 814
		31-14014	31-09 TASK 815
		31-14016	31-09 TASK 817
		31-14018	31-09 TASK 818
		31-17922	31-07 TASK 815
		31-17924	31-07 TASK 816
		31-18802	31-08 TASK 811
		31-18804	31-08 TASK 813
		31-18842	31-08 TASK 814
		31-18864	31-08 TASK 817
		31-54013	31-43 TASK 868
		31-54014	31-43 TASK 869
		31-54121	31-41 TASK 838
		31-54122	31-41 TASK 839

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FAULT CODE	FAULT DESCRIPTION	MAINT MSG	GO TO FIM TASK
261 365 42	BLEED LOOP 2 STRUT R (EICAS STATUS)	(continued)	
		31-58013	31-43 TASK 872
		31-58014	31-43 TASK 873
		31-58121	31-41 TASK 856
		31-58122	31-41 TASK 857
		31-69401	31-42 TASK 825
		31-69402	31-42 TASK 825
		31-69493	31-42 TASK 851
		31-69494	31-42 TASK 851
		31-69601	31-42 TASK 857
		31-69602	31-42 TASK 857
		31-69693	31-42 TASK 878
		31-69694	31-42 TASK 878
		NONE	31-09 TASK 840
261 401 41	ANTI-ICE LEAK ENG L (EICAS CAUTION)	23-81004	23-91 TASK 804
		23-81006	23-91 TASK 806
		26-30001	26-18 TASK 808
		26-30003	26-18 TASK 810
		26-32003	26-18 TASK 805
		26-32103	26-18 TASK 805
		26-34001	26-18 TASK 805
		26-38101	26-18 TASK 805
		26-38891	26-18 TASK 811
		26-38893	26-18 TASK 811
		26-39904	26-18 TASK 812
		26-39909	26-18 TASK 812
		26-39913	26-18 TASK 812
		26-39918	26-18 TASK 812
		31-14011	31-09 TASK 812
		31-14012	31-09 TASK 813
		31-14013	31-09 TASK 814
		31-14014	31-09 TASK 815
		31-14015	31-09 TASK 816
		31-14016	31-09 TASK 817
		31-14017	31-09 TASK 818
		31-14018	31-09 TASK 818

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261 401 41	ANTI-ICE LEAK ENG L (EICAS CAUTION)	(continued)	
		31-17909	31-07 TASK 805
		31-17911	31-07 TASK 807
		31-17922	31-07 TASK 815
		31-17924	31-07 TASK 816
		31-18801	31-08 TASK 810
		31-18802	31-08 TASK 811
		31-18803	31-08 TASK 812
		31-18804	31-08 TASK 813
		31-18841	31-08 TASK 814
		31-18842	31-08 TASK 814
		31-18863	31-08 TASK 816
		31-18864	31-08 TASK 817
		31-18891	31-08 TASK 818
		31-18892	31-08 TASK 819
		31-18893	31-08 TASK 820
		31-18894	31-08 TASK 821
		31-54013	31-43 TASK 868
		31-54014	31-43 TASK 869
		31-54121	31-41 TASK 838
		31-54122	31-41 TASK 839
		31-58013	31-43 TASK 872
		31-58014	31-43 TASK 873
		31-58121	31-41 TASK 856
		31-58122	31-41 TASK 857
		31-69401	31-42 TASK 825
		31-69402	31-42 TASK 825
		31-69491	31-42 TASK 851
		31-69492	31-42 TASK 851
		31-69493	31-42 TASK 851
		31-69494	31-42 TASK 851
		31-69601	31-42 TASK 857
		31-69602	31-42 TASK 857
		31-69691	31-42 TASK 878
		31-69692	31-42 TASK 878
		31-69693	31-42 TASK 878

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261 401 41	ANTI-ICE LEAK ENG L (EICAS CAUTION)	(continued) 31-69694	31-42 TASK 878
261 401 42	ANTI-ICE LEAK ENG R (EICAS CAUTION)	23-81004 23-81006 26-30002 26-30003 26-31003 26-33002 26-33003 26-34102 26-38892 26-38893 26-39909 26-39911 26-39918 26-39920 31-14013 31-14014 31-14016 31-14018 31-17910 31-17912 31-17922 31-17924 31-18802 31-18804 31-18842 31-18864 31-18892 31-18894 31-54013 31-54014 31-54121 31-54122 31-58013 31-58014	23-91 TASK 804 23-91 TASK 806 26-18 TASK 809 26-18 TASK 810 26-18 TASK 805 26-18 TASK 805 26-18 TASK 805 26-18 TASK 805 26-18 TASK 811 26-18 TASK 811 26-18 TASK 812 26-18 TASK 812 26-18 TASK 812 26-18 TASK 812 31-09 TASK 814 31-09 TASK 815 31-09 TASK 817 31-09 TASK 818 31-07 TASK 806 31-07 TASK 808 31-07 TASK 815 31-07 TASK 816 31-08 TASK 811 31-08 TASK 813 31-08 TASK 814 31-08 TASK 817 31-08 TASK 819 31-08 TASK 821 31-43 TASK 868 31-43 TASK 869 31-41 TASK 838 31-41 TASK 839 31-43 TASK 872 31-43 TASK 873

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FAULT CODE	FAULT DESCRIPTION	MAINT MSG	GO TO FIM TASK
261 401 42	ANTI-ICE LEAK ENG R (EICAS CAUTION)	(continued)	
		31-58121	31-41 TASK 856
		31-58122	31-41 TASK 857
		31-69401	31-42 TASK 825
		31-69402	31-42 TASK 825
		31-69493	31-42 TASK 851
		31-69494	31-42 TASK 851
		31-69601	31-42 TASK 857
		31-69602	31-42 TASK 857
		31-69693	31-42 TASK 878
		31-69694	31-42 TASK 878
261 411 41	EAI LOOPS FAN CASE L (EICAS STATUS)	23-81004	23-91 TASK 804
		23-81006	23-91 TASK 806
		26-30001	26-18 TASK 808
		26-30003	26-18 TASK 810
		26-32003	26-18 TASK 805
		26-32103	26-18 TASK 805
		26-34001	26-18 TASK 805
		26-38101	26-18 TASK 805
		26-38891	26-18 TASK 811
		26-38893	26-18 TASK 811
		31-14011	31-09 TASK 812
		31-14012	31-09 TASK 813
		31-14013	31-09 TASK 814
		31-14014	31-09 TASK 815
		31-14015	31-09 TASK 816
		31-14016	31-09 TASK 817
		31-14017	31-09 TASK 818
		31-14018	31-09 TASK 818
		31-17909	31-07 TASK 805
		31-17911	31-07 TASK 807
		31-17922	31-07 TASK 815
		31-17924	31-07 TASK 816
		31-18801	31-08 TASK 810
		31-18802	31-08 TASK 811
		31-18803	31-08 TASK 812

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FAULT CODE	FAULT DESCRIPTION	MAINT MSG	GO TO FIM TASK
261 411 41	EAI LOOPS FANCASE L (EICAS STATUS)	(continued)	
		31-18804	31-08 TASK 813
		31-18841	31-08 TASK 814
		31-18842	31-08 TASK 814
		31-18863	31-08 TASK 816
		31-18864	31-08 TASK 817
		31-54013	31-43 TASK 868
		31-54014	31-43 TASK 869
		31-54121	31-41 TASK 838
		31-54122	31-41 TASK 839
		31-58013	31-43 TASK 872
		31-58014	31-43 TASK 873
		31-58121	31-41 TASK 856
		31-58122	31-41 TASK 857
		31-69401	31-42 TASK 825
		31-69402	31-42 TASK 825
		31-69491	31-42 TASK 851
		31-69492	31-42 TASK 851
		31-69493	31-42 TASK 851
		31-69494	31-42 TASK 851
		31-69601	31-42 TASK 857
		31-69602	31-42 TASK 857
		31-69691	31-42 TASK 878
		31-69692	31-42 TASK 878
		31-69693	31-42 TASK 878
		31-69694	31-42 TASK 878
261 411 42	EAI LOOPS FANCASE R (EICAS STATUS)	23-81004	23-91 TASK 804
		23-81006	23-91 TASK 806
		26-30002	26-18 TASK 809
		26-30003	26-18 TASK 810
		26-31003	26-18 TASK 805
		26-33002	26-18 TASK 805
		26-33003	26-18 TASK 805
		26-34102	26-18 TASK 805
		26-38892	26-18 TASK 811
		26-38893	26-18 TASK 811

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FAULT CODE	FAULT DESCRIPTION	MAINT MSG	GO TO FIM TASK
261 411 42	EAI LOOPS FANCASE R (EICAS STATUS)	(continued)	
		31-14013	31-09 TASK 814
		31-14014	31-09 TASK 815
		31-14016	31-09 TASK 817
		31-14018	31-09 TASK 818
		31-17910	31-07 TASK 806
		31-17912	31-07 TASK 808
		31-17922	31-07 TASK 815
		31-17924	31-07 TASK 816
		31-18802	31-08 TASK 811
		31-18804	31-08 TASK 813
		31-18842	31-08 TASK 814
		31-18864	31-08 TASK 817
		31-54013	31-43 TASK 868
		31-54014	31-43 TASK 869
		31-54121	31-41 TASK 838
		31-54122	31-41 TASK 839
		31-58013	31-43 TASK 872
		31-58014	31-43 TASK 873
		31-58121	31-41 TASK 856
		31-58122	31-41 TASK 857
		31-69401	31-42 TASK 825
		31-69402	31-42 TASK 825
		31-69493	31-42 TASK 851
		31-69494	31-42 TASK 851
		31-69601	31-42 TASK 857
		31-69602	31-42 TASK 857
		31-69693	31-42 TASK 878
		31-69694	31-42 TASK 878
261 481 44	Maintenance memo shows on the MAT: CSDS CH1 (LWR FWD).	26-20081	26-16 TASK 808
		26-21063	26-16 TASK 805
		26-22063	26-16 TASK 805
		26-23063	26-16 TASK 805
		26-23073	26-16 TASK 805

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FAULT CODE	FAULT DESCRIPTION	MAINT MSG	GO TO FIM TASK
261 481 45	Maintenance memo shows on the MAT: CSDS CH1 (LWR AFT).	26-20082	26-16 TASK 809
		26-21064	26-16 TASK 805
		26-22064	26-16 TASK 805
		26-23064	26-16 TASK 805
		26-23074	26-16 TASK 805
261 482 44	Maintenance memo shows on the MAT: CSDS CH2 (LWR FWD).	26-20081	26-16 TASK 808
		26-21063	26-16 TASK 805
		26-22063	26-16 TASK 805
		26-23063	26-16 TASK 805
		26-23073	26-16 TASK 805
261 482 45	Maintenance memo shows on the MAT: CSDS CH2 (LWR AFT).	26-20082	26-16 TASK 809
		26-21064	26-16 TASK 805
		26-22064	26-16 TASK 805
		26-23064	26-16 TASK 805
		26-23074	26-16 TASK 805
262 001 01	BOTTLE 1 DISCH ENG (EICAS ADVISORY)		26-21 TASK 802
262 001 02	BOTTLE 2 DISCH ENG (EICAS ADVISORY)		26-21 TASK 802
262 011 01	BOTTLE 1 ENG (EICAS STATUS)	26-50011	26-21 TASK 803
		26-50012	26-21 TASK 803
262 012 02	BOTTLE 2 ENG (EICAS STATUS)	26-50013	26-21 TASK 803
		26-50014	26-21 TASK 803
262 101 00	BOTTLE DISCH APU (EICAS ADVISORY)		26-22 TASK 803
262 201 00	BOTTLE DISCH CARGO (EICAS ADVISORY)	26-40776	26-23 TASK 818
		26-40778	26-23 TASK 818
262 211 01	BOTTLE 1A CARGO (EICAS STATUS)	26-40776	26-23 TASK 818
		26-40777	26-23 TASK 820
262 211 02	BOTTLE 1B CARGO (EICAS STATUS)	26-40778	26-23 TASK 818
		26-40779	26-23 TASK 820
262 212 01	BOTTLE 2A CARGO (EICAS STATUS)	26-40780	26-23 TASK 819
		26-40781	26-23 TASK 821
262 212 02	BOTTLE 2B CARGO (EICAS STATUS)	26-40782	26-23 TASK 819
		26-40783	26-23 TASK 821
262 212 03	BOTTLE 2C CARGO (EICAS STATUS)	26-40784	26-23 TASK 819
		26-40785	26-23 TASK 821

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262 212 04	BOTTLE 2D CARGO (EICAS STATUS)		Reference Not Currently Available
262 221 44	FLOW VALVE CARGO FWD (EICAS STATUS)	26-40786 26-40787	26-23 TASK 816 26-23 TASK 816
262 221 45	FLOW VALVE CARGO AFT (EICAS STATUS)	26-40773 26-40774	26-23 TASK 816 26-23 TASK 816
262 301 00	ENG/APU SQUIB TEST (EICAS STATUS)	26-50009	26-22 TASK 804
262 311 00	CARGO SQUIB TEST (EICAS STATUS)	26-40789	26-23 TASK 824
262 611 00	Engine fire extinguishing: incorrect signal specification bit state shows on the MAT during Thrust Reverser Isolation Valve and OPAS Check.		26-21 TASK 804

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MAINT MESSAGE	MESSAGE TEXT	GO TO FIM TASK
26-10000	APU Fire Loop 2 is shorted.	26-15 TASK 809
26-10010	APU Fire Detection Card has an internal fault.	26-15 TASK 810
26-10011	Engine Fire Detection Card (left) has an internal failure.	26-11 TASK 804
26-10012	Engine Fire Detection Card (right) has an internal failure.	26-11 TASK 805
26-10020	APU Fire Loops 1 and 2 connected incorrectly.	26-15 TASK 801
26-10021	Fire Loops 1 and 2 (left engine) are connected incorrectly.	26-11 TASK 806
26-10022	Fire Loops 1 and 2 (right engine) are connected incorrectly.	26-11 TASK 807
26-10030	LOOP 2 OF POWER CARD POWER LOSS.	26-15 TASK 826
26-10031	Power Card Loop 2 Power is lost.	26-11 TASK 818
26-10032	AIMS-2, CMCF LDI 3114-BCG-00W-16; Power Card Loop 2 Power is lost. AIMS-2, CMCF LDI 3111-BCG-00W-13; AIMS-2, CMCF LDI 3116-BCG-00W-14; AIMS-2, CMCF LDI 3117-BCG-00W-15; Power card Loop 2 Power is lost.	26-11 TASK 818
26-10100	APU Fire Loop 1 is shorted.	26-15 TASK 802
26-10130	APU Fire Detector Lwr (Loop 1) is shorted.	26-15 TASK 811
26-10131	Fire Loop 1 (left engine) is shorted.	26-11 TASK 808
26-10132	Fire Loop 1 (right engine) is shorted.	26-11 TASK 809
26-10140	APU Fire Loop 1 is open.	26-15 TASK 803
26-10141	Fire Loop 1 (left engine) is open.	26-11 TASK 808
26-10142	Fire Loop 1 (right engine) is open.	26-11 TASK 809
26-10220	APU Fire Detector UpR Aft (Loop 2) is shorted.	26-15 TASK 812
26-10231	Fire Loop 2 (left engine) is shorted.	26-11 TASK 810
26-10232	Fire Loop 2 (right engine) is shorted.	26-11 TASK 811
26-10240	APU Fire Loop 2 is open.	26-15 TASK 813
26-10241	Fire Loop 2 (left engine) is open.	26-11 TASK 810
26-10242	Fire Loop 2 (right engine) is open.	26-11 TASK 811
26-11011	Fire/Ovht Detector Aft Right (left eng Loop 1) is shorted.	26-11 TASK 814
26-11012	Fire/Ovht Detector Aft Right (right eng Loop 1) is shorted.	26-11 TASK 814
26-11021	Fire/Ovht Detector Aft Lwr (left eng Loop 1) is shorted.	26-11 TASK 814
26-11022	Fire/Ovht Detector Aft Lwr (right eng Loop 1) is shorted.	26-11 TASK 814
26-11031	Fire/Ovht Detector Aft Left (left eng Loop 1) is shorted.	26-11 TASK 814
26-11032	Fire/Ovht Detector Aft Left (right eng Loop 1) is shorted.	26-11 TASK 814
26-11041	Fire/Ovht Detector Fwd Lwr (left eng Loop 1) is shorted.	26-11 TASK 814
26-11042	Fire/Ovht Detector Fwd Lwr (right eng Loop 1) is shorted.	26-11 TASK 814

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26-11101	Fire Loop 1 (left engine) is shorted between detector and fire detection card.	26-11 TASK 812
26-11102	Fire Loop 1 (right engine) is shorted between detector and fire detection card.	26-11 TASK 812
26-11110	APU Fire Detector Up Fwd (Loop 1) is shorted.	26-15 TASK 814
26-11120	APU Fire Detector Up Aft (Loop 1) is shorted.	26-15 TASK 815
26-11121	Fire Loop 1 (left engine) is shorted between detectors.	26-11 TASK 813
26-11122	Fire Loop 1 (right engine) is shorted between detectors.	26-11 TASK 813
26-11210	APU Fire Detector Up Fwd (Loop 2) is shorted.	26-15 TASK 816
26-11230	APU Fire Detector Lwr (Loop 2) is shorted.	26-15 TASK 817
26-11231	Fire Loop 1 (left engine) is shorted between detectors.	26-11 TASK 813
26-11232	Fire Loop 1 (right engine) is shorted between detectors.	26-11 TASK 813
26-11341	Fire Loop 1 (left engine) is shorted between detectors.	26-11 TASK 813
26-11342	Fire Loop 1 (right engine) is shorted between detectors.	26-11 TASK 813
26-11451	Fire Loop 1 (left engine) is shorted between detector and fire detection card.	26-11 TASK 812
26-11452	Fire Loop 1 (right engine) is shorted between detector and fire detection card.	26-11 TASK 812
26-12011	Fire/Ovht Detector Aft Right (left eng Loop 2) is shorted.	26-11 TASK 814
26-12012	Fire/Ovht Detector Aft Right (right eng Loop 2) is shorted.	26-11 TASK 814
26-12021	Fire/Ovht Detector Aft Lwr (left eng Loop 2) is shorted.	26-11 TASK 814
26-12022	Fire/Ovht Detector Aft Lwr (right eng Loop 2) is shorted.	26-11 TASK 814
26-12031	Fire/Ovht Detector Aft Left (left eng Loop 2) is shorted.	26-11 TASK 814
26-12032	Fire/Ovht Detector Aft Left (right eng Loop 2) is shorted.	26-11 TASK 814
26-12041	Fire/Ovht Detector Fwd Lwr (left eng Loop 2) is shorted.	26-11 TASK 814
26-12042	Fire/Ovht Detector Fwd Lwr (right eng Loop 2) is shorted.	26-11 TASK 814
26-12101	Fire Loop 2 (left engine) is shorted between detector and fire detection card.	26-11 TASK 812
26-12102	Fire Loop 2 (right engine) is shorted between detector and fire detection card.	26-11 TASK 812
26-12121	Fire Loop 2 (left engine) is shorted between detectors.	26-11 TASK 813
26-12122	Fire Loop 2 (right engine) is shorted between detectors.	26-11 TASK 813
26-12231	Fire Loop 2 (left engine) is shorted between detectors.	26-11 TASK 813
26-12232	Fire Loop 2 (right engine) is shorted between detectors.	26-11 TASK 813
26-12341	Fire Loop 2 (left engine) is shorted between detectors.	26-11 TASK 813
26-12342	Fire Loop 2 (right engine) is shorted between detectors.	26-11 TASK 813

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26-12451	Fire Loop 2 (left engine) is shorted between detector and fire detection card.	26-11 TASK 812
26-12452	Fire Loop 2 (right engine) is shorted between detector and fire detection card.	26-11 TASK 812
26-13100	APU Fire Loop 1 is shorted between detectors.	26-15 TASK 804
26-13110	APU Fire Loop 1 is shorted between detector and fire detection card.	26-15 TASK 805
26-13120	APU Fire Loop 1 is shorted between detectors.	26-15 TASK 818
26-13130	APU Fire Loop 1 is shorted between detector and fire detection card.	26-15 TASK 819
26-14200	APU Fire Loop 2 is shorted between detector and fire detection card.	26-15 TASK 820
26-14210	APU Fire Loop 2 is shorted between detectors.	26-15 TASK 821
26-14220	APU Fire Loop 2 is shorted between detectors.	26-15 TASK 822
26-14230	APU Fire Loop 2 is shorted between detector and fire detection card.	26-15 TASK 823
26-18891*	Engine Fire Detection Card (left) has no output on EFDC ARINC 429 Bus.	26-11 TASK 801
26-18892*	Engine Fire Detection Card (right) has no output on EFDC ARINC 429 Bus.	26-11 TASK 815
26-18893	APU Fire Detection Card has no output on APUFDC ARINC 429 Bus.	26-15 TASK 806
26-19010*	APU Fire Detection Card signal did not indicate fire during fire overheat test.	26-15 TASK 807
26-19011*	APU Fire Detection Card signal did not indicate fire during fire overheat test.	26-15 TASK 825
26-19904	Engine Fire Detection Card (left) has no input from ARINC Signal Gateway (left), LSCF on ASG Global Bus.	26-11 TASK 802
26-19905	Engine Fire Detection Card (right) has no input from ARINC Signal Gateway (left), RSCF on ASG Global Bus.	26-11 TASK 802
26-19906	APU Fire Detection Card has no input from ARINC Signal Gateway (left), LSCF on ASG Global Bus.	26-15 TASK 808
26-19907	Engine Fire Detection Card (left) has no input from ARINC Signal Gateway (right), LSCF on ASG Global Bus.	26-11 TASK 802
26-19908	Engine Fire Detection Card (right) has no input from ARINC Signal Gateway (right), RSCF on ASG Global Bus.	26-11 TASK 802
26-19909	APU Fire Detection Card has no input from ARINC Signal Gateway (right), LSCF on ASG Global Bus.	26-15 TASK 808
26-20011	Cargo Smoke Detector (lwr fwd) has incorrect software configuration.	26-16 TASK 801

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MAINT MESSAGE	MESSAGE TEXT	GO TO FIM TASK
26-20012	Cargo Smoke Detector (lwr aft) has incorrect software configuration.	26-16 TASK 801
26-20021	Cargo Smoke Detector (lwr fwd) has an internal fault.	26-16 TASK 808
26-20022	Cargo Smoke Detector (lwr aft) has an internal fault.	26-16 TASK 809
26-20060	E/E Cooling went into override due to smoke.	26-16 TASK 813
26-20070	E/E Cooling Smoke Detector has no output or is failed.	26-19 TASK 801
26-20081	Cargo Smoke Detector (lwr fwd) optics are not clean.	26-16 TASK 808
26-20082	Cargo Smoke Detector (lwr aft) optics are not clean.	26-16 TASK 809
26-20120	E/E Cooling went into override due to smoke.	26-16 TASK 813
26-21031	AIMS-2, CMCF LDI 3114-BCG-00W-16; Cargo Smoke Detector (lwr fwd) Program Pins are incorrect. AIMS-1, CPM/Comm OPS S/W 3166-HNP-002-11; AIMS-2, CMCF LDI 3111-BCG-00W-13; AIMS-2, CMCF LDI 3116-BCG-00W-14; AIMS-2, CMCF LDI 3117-BCG-00W-15; Cargo Smoke Detector (lwr fwd) program pins are incorrect.	26-16 TASK 802
26-21032	AIMS-2, CMCF LDI 3114-BCG-00W-16; Cargo Smoke Detector (lwr aft) Program Pins are incorrect. AIMS-1, CPM/Comm OPS S/W 3166-HNP-002-11; AIMS-2, CMCF LDI 3111-BCG-00W-13; AIMS-2, CMCF LDI 3116-BCG-00W-14; AIMS-2, CMCF LDI 3117-BCG-00W-15; Cargo Smoke Detector (lwr aft) program pins are incorrect.	26-16 TASK 810
26-21041	Cargo Smoke Detector Fan 1 (lwr fwd) circuit is open or shorted.	26-16 TASK 803
26-21042	Cargo Smoke Detector Fan 1 (lwr aft) circuit is open or shorted.	26-16 TASK 811
26-21051	Cargo Smoke Detector Tube 1 (lwr fwd) airflow is high.	26-16 TASK 804
26-21052	Cargo Smoke Detector Tube 1 (lwr aft) airflow is high.	26-16 TASK 804
26-21061	Cargo Smoke Detector Tube 1 (lwr fwd) airflow is low.	26-16 TASK 805
26-21062	Cargo Smoke Detector Tube 1 (lwr aft) airflow is low.	26-16 TASK 805
26-21063	Cargo Smoke Detector Tube 1 (lwr fwd) airflow is low.	26-16 TASK 805
26-21064	Cargo Smoke Detector Tube 1 (lwr aft) airflow is low.	26-16 TASK 805
26-21091	Cargo Smoke Detect Heater Zone (1,2,3,4) Channel 1 (lwr fwd) circuit is open or shorted.	26-16 TASK 814
26-21092	Cargo Smoke Detector Heater Zone (1,2,3,4) Channel 1 (lwr aft) circuit is open or shorted.	26-16 TASK 815
26-21093	Cargo Smoke Detect Heater Zone (1,2,3,4) Channel 2 (lwr fwd) circuit is open or shorted.	26-16 TASK 816

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MAINT MESSAGE	MESSAGE TEXT	GO TO FIM TASK
26-21094	Cargo Smoke Detector Heater Zone (1,2,3,4) Channel 2 (lwr aft) circuit is open or shorted.	26-16 TASK 817
26-21099	Cargo Smoke Detector Heater Zone (1,2,3,4) (lwr fwd) circuit is open or shorted.	26-16 TASK 818
26-21100	Cargo Smoke Detector Heater Zone (1,2,3,4) (lwr aft) circuit is open or shorted.	26-16 TASK 819
26-22031	AIMS-2, CMCF LDI 3114-BCG-00W-16; Cargo Smoke Detector (lwr fwd) Program Pins are incorrect. AIMS-1, CPM/Comm OPS S/W 3166-HNP-002-11; AIMS-2, CMCF LDI 3111-BCG-00W-13; AIMS-2, CMCF LDI 3116-BCG-00W-14; AIMS-2, CMCF LDI 3117-BCG-00W-15; Cargo Smoke Detector (lwr fwd) program pins are incorrect.	26-16 TASK 802
26-22032	AIMS-2, CMCF LDI 3114-BCG-00W-16; Cargo Smoke Detector (lwr aft) Program Pins are incorrect. AIMS-1, CPM/Comm OPS S/W 3166-HNP-002-11; AIMS-2, CMCF LDI 3111-BCG-00W-13; AIMS-2, CMCF LDI 3116-BCG-00W-14; AIMS-2, CMCF LDI 3117-BCG-00W-15; Cargo Smoke Detector (lwr aft) program pins are incorrect.	26-16 TASK 810
26-22041	Cargo Smoke Detector Fan 2 (lwr fwd) circuit is open or shorted.	26-16 TASK 803
26-22042	Cargo Smoke Detector Fan 2 (lwr aft) circuit is open or shorted.	26-16 TASK 811
26-22051	Cargo Smoke Detector Tube 2 (lwr fwd) airflow is high.	26-16 TASK 804
26-22052	Cargo Smoke Detector Tube 2 (lwr aft) airflow is high.	26-16 TASK 804
26-22061	Cargo Smoke Detector Tube 2 (lwr fwd) airflow is low.	26-16 TASK 805
26-22062	Cargo Smoke Detector Tube 2 (lwr aft) airflow is low.	26-16 TASK 805
26-22063	Cargo Smoke Detector Tube 2 (lwr fwd) airflow is low.	26-16 TASK 805
26-22064	Cargo Smoke Detector Tube 2 (lwr aft) airflow is low.	26-16 TASK 805
26-23051	Cargo Smoke Detector Tube 3 (lwr fwd) airflow is high.	26-16 TASK 804
26-23052	Cargo Smoke Detector Tube 3 (lwr aft) airflow is high.	26-16 TASK 804
26-23061	Cargo Smoke Detector Tube 3 (lwr fwd) airflow is low.	26-16 TASK 805
26-23062	Cargo Smoke Detector Tube 3 (lwr aft) airflow is low.	26-16 TASK 805
26-23063	Cargo Smoke Detector Tube 3 (lwr fwd) airflow is low.	26-16 TASK 805
26-23064	Cargo Smoke Detector Tube 3 (lwr aft) airflow is low.	26-16 TASK 805
26-23071	Cargo Smoke Detector Tube 4 (lwr fwd) airflow is high.	26-16 TASK 804
26-23072	Cargo Smoke Detector Tube 4 (lwr aft) airflow is high.	26-16 TASK 804
26-23073	Cargo Smoke Detector Tube 4 (lwr fwd) airflow is low.	26-16 TASK 805
26-23074	Cargo Smoke Detector Tube 4 (lwr aft) airflow is low.	26-16 TASK 805

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26-23081	Cargo Smoke Detector Tube 4 (lwr fwd) airflow is low.	26-16 TASK 805
26-23082	Cargo Smoke Detector Tube 4 (lwr aft) airflow is low.	26-16 TASK 805
26-26004	Relay (LLAR SMOKE/ FIRE TEST) in P110 is not in commanded position.	26-14 TASK 802
26-28801	Cargo Smoke Detector (lwr fwd) has no output on any bus.	26-16 TASK 808
26-28802	Cargo Smoke Detector (lwr aft) has no output on any bus.	26-16 TASK 809
26-28891	Cargo Smoke Detector Ch 1 (lwr fwd) has no output on CSDS Channel 1 ARINC 429 Bus.	26-16 TASK 806
26-28892	Cargo Smoke Detector Ch 1 (lwr aft) has no output on CSDS Channel 1 ARINC 429 Bus.	26-16 TASK 806
26-28893	Cargo Smoke Detector Ch 2 (lwr fwd) has no output on CSDS Channel 2 ARINC 429 Bus.	26-16 TASK 806
26-28894	Cargo Smoke Detector Ch 2 (lwr aft) has no output on CSDS Channel 2 ARINC 429 Bus.	26-16 TASK 806
26-29905	Cargo Smoke Detector Ch 1 (lwr fwd) has no input from ARINC Signal Gateway (left), LSCF on ASG External Signal Bus.	26-16 TASK 807
26-29906	Cargo Smoke Detector Ch 1 (lwr aft) has no input from ARINC Signal Gateway (left), RSCF on ASG External Signal Bus.	26-16 TASK 807
26-29911	Cargo Smoke Detector Ch 2 (lwr fwd) has no input from ARINC Signal Gateway (right), LSCF on ASG External Signal Bus.	26-16 TASK 807
26-29912	Cargo Smoke Detector Ch 2 (lwr aft) has no input from ARINC Signal Gateway (right), RSCF on ASG External Signal Bus.	26-16 TASK 807
26-30001	DLODS Control Card (left) has an internal fault.	26-18 TASK 808
26-30002	DLODS Control Card (right) has an internal fault.	26-18 TASK 809
26-30003	DLODS Control Card (center) has an internal fault.	26-18 TASK 810
26-30302	Right Strut Loop 1 is open.	26-18 TASK 814
26-31001	Body Loop 1 is open.	26-18 TASK 807
26-31002	Body Loop 2 is open.	26-18 TASK 807
26-31003	Right Fancase Loop 2 is shorted.	26-18 TASK 805
26-31011	Body Loop 1 zone 1 is open.	26-18 TASK 816
26-31012	Body Loop 2 zone 1 is open.	26-18 TASK 816
26-31021	Body Loop 1 zone 2 is open.	26-18 TASK 816
26-31022	Body Loop 2 zone 2 is open.	26-18 TASK 816
26-31023	Left Wing Loop 1 zone 2 is shorted.	26-18 TASK 802
26-31031	Body Loop 1 zone 3 is open.	26-18 TASK 816
26-31032	Body Loop 2 zone 3 is open.	26-18 TASK 816
26-31033	Left Wing Loop 1 zone 3 is shorted.	26-18 TASK 802

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26-31041	Body Loop 1 zone 4 is open.	26-18 TASK 816
26-31042	Body Loop 2 zone 4 is open.	26-18 TASK 816
26-31043	Left Wing Loop 1 zone 4 is shorted.	26-18 TASK 802
26-31051	Body Loop 1 zone 5 is open.	26-18 TASK 816
26-31052	Body Loop 2 zone 5 is open.	26-18 TASK 816
26-31053	Left Wing Loop 1 zone 5 is shorted.	26-18 TASK 802
26-31061	Body Loop 1 zone 6 is open.	26-18 TASK 816
26-31062	Body Loop 2 zone 6 is open.	26-18 TASK 816
26-31063	Left Wing Loop 1 zone 6 is shorted.	26-18 TASK 802
26-31071	Body Loop 1 zone 7 is open.	26-18 TASK 816
26-31072	Body Loop 2 zone 7 is open.	26-18 TASK 816
26-31073	Left Wing Loop 1 zone 7 is shorted.	26-18 TASK 802
26-31081	Body Loop 1 zone 8 is open.	26-18 TASK 816
26-31082	Body Loop 2 zone 8 is open.	26-18 TASK 816
26-31083	Left Wing Loop 1 zone 8 is shorted.	26-18 TASK 802
26-31091	Body Loop 1 zone 9 is open.	26-18 TASK 816
26-31092	Body Loop 2 zone 9 is open.	26-18 TASK 816
26-31093	Left Wing Loop 1 zone 9 is shorted.	26-18 TASK 802
26-31101	Body Loop 1 zone 10 is open.	26-18 TASK 816
26-31102	Body Loop 2 zone 10 is open.	26-18 TASK 816
26-31103	Left Wing Loop 1 zone 10 is shorted.	26-18 TASK 802
26-31111	Body Loop 1 zone 11 is open.	26-18 TASK 816
26-31112	Body Loop 2 zone 11 is open.	26-18 TASK 816
26-31121	Body Loop 1 zone 12 is open.	26-18 TASK 816
26-31122	Body Loop 2 zone 12 is open.	26-18 TASK 816
26-31131	Body Loop 1 zone 13 is open.	26-18 TASK 816
26-31132	Body Loop 2 zone 13 is open.	26-18 TASK 816
26-31141	Body Loop 1 zone 14 is open.	26-18 TASK 816
26-31142	Body Loop 2 zone 14 is open.	26-18 TASK 816
26-31151	Body Loop 1 zone 15 is open.	26-18 TASK 816
26-31152	Body Loop 2 zone 15 is open.	26-18 TASK 816
26-31161	Body Loop 1 zone 16 is open.	26-18 TASK 816
26-31162	Body Loop 2 zone 16 is open.	26-18 TASK 816
26-31171	Body Loop 1 zone 17 is open.	26-18 TASK 816

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MAINT MESSAGE	MESSAGE TEXT	GO TO FIM TASK
26-31172	Body Loop 2 zone 17 is open.	26-18 TASK 816
26-31181	Body Loop 1 zone 18 is open.	26-18 TASK 816
26-31182	Body Loop 2 zone 18 is open.	26-18 TASK 816
26-31191	Body Loop 1 zone 19 is open.	26-18 TASK 816
26-31192	Body Loop 2 zone 19 is open.	26-18 TASK 816
26-31201	Body Loop 1 zone 20 is open.	26-18 TASK 816
26-31202	Body Loop 2 zone 20 is open.	26-18 TASK 816
26-31211	Body Loop 1 zone 21 is open.	26-18 TASK 816
26-31212	Body Loop 2 zone 21 is open.	26-18 TASK 816
26-31221	Body Loop 1 zone 22 is open.	26-18 TASK 816
26-31222	Body Loop 2 zone 22 is open.	26-18 TASK 816
26-31231	Body Loop 1 zone 23 is open.	26-18 TASK 816
26-31232	Body Loop 2 zone 23 is open.	26-18 TASK 816
26-31241	Body Loop 1 zone 24 is open.	26-18 TASK 816
26-31242	Body Loop 2 zone 24 is open.	26-18 TASK 816
26-31251	Body Loop 1 zone 25 is open.	26-18 TASK 816
26-31252	Body Loop 2 zone 25 is open.	26-18 TASK 816
26-31261	Body Loop 1 zone 26 is open.	26-18 TASK 816
26-31262	Body Loop 2 zone 26 is open.	26-18 TASK 816
26-31302	Right Strut Loop 1 is shorted.	26-18 TASK 813
26-31312	Right Strut Loop 1 zone 1 is shorted.	26-18 TASK 806
26-31322	Right Strut Loop 1 zone 2 is shorted.	26-18 TASK 806
26-31332	Right Strut Loop 1 zone 3 is shorted.	26-18 TASK 806
26-31342	Right Strut Loop 1 zone 4 is shorted.	26-18 TASK 806
26-31352	Right Strut Loop 1 zone 5 is shorted.	26-18 TASK 806
26-31362	Right Strut Loop 1 zone 6 is shorted.	26-18 TASK 806
26-32001	Body Loop 1 is shorted.	26-18 TASK 813
26-32002	Body Loop 2 is shorted.	26-18 TASK 813
26-32003	Left Fancase Loop 1 is open.	26-18 TASK 805
26-32011	Body Loop 1 zone 1 is shorted.	26-18 TASK 804
26-32012	Body Loop 2 zone 1 is shorted.	26-18 TASK 804
26-32013	Left Wing Loop 1 zone 1 is shorted.	26-18 TASK 802
26-32021	Body Loop 1 zone 2 is shorted.	26-18 TASK 804
26-32022	Body Loop 2 zone 2 is shorted.	26-18 TASK 804

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26-32031	Body Loop 1 zone 3 is shorted.	26-18 TASK 804
26-32032	Body Loop 2 zone 3 is shorted.	26-18 TASK 804
26-32041	Body Loop 1 zone 4 is shorted.	26-18 TASK 804
26-32042	Body Loop 2 zone 4 is shorted.	26-18 TASK 804
26-32051	Body Loop 1 zone 5 is shorted.	26-18 TASK 804
26-32052	Body Loop 2 zone 5 is shorted.	26-18 TASK 804
26-32061	Body Loop 1 zone 6 is shorted.	26-18 TASK 804
26-32062	Body Loop 2 zone 6 is shorted.	26-18 TASK 804
26-32071	Body Loop 1 zone 7 is shorted.	26-18 TASK 804
26-32072	Body Loop 2 zone 7 is shorted.	26-18 TASK 804
26-32081	Body Loop 1 zone 8 is shorted.	26-18 TASK 804
26-32082	Body Loop 2 zone 8 is shorted.	26-18 TASK 804
26-32091	Body Loop 1 zone 9 is shorted.	26-18 TASK 804
26-32092	Body Loop 2 zone 9 is shorted.	26-18 TASK 804
26-32101	Body Loop 1 zone 10 is shorted.	26-18 TASK 804
26-32102	Body Loop 2 zone 10 is shorted.	26-18 TASK 804
26-32103	Left Fancase Loop 1 is shorted.	26-18 TASK 805
26-32111	Body Loop 1 zone 11 is shorted.	26-18 TASK 804
26-32112	Body Loop 2 zone 11 is shorted.	26-18 TASK 804
26-32121	Body Loop 1 zone 12 is shorted.	26-18 TASK 804
26-32122	Body Loop 2 zone 12 is shorted.	26-18 TASK 804
26-32131	Body Loop 1 zone 13 is shorted.	26-18 TASK 804
26-32132	Body Loop 2 zone 13 is shorted.	26-18 TASK 804
26-32141	Body Loop 1 zone 14 is shorted.	26-18 TASK 804
26-32142	Body Loop 2 zone 14 is shorted.	26-18 TASK 804
26-32151	Body Loop 1 zone 15 is shorted.	26-18 TASK 804
26-32152	Body Loop 2 zone 15 is shorted.	26-18 TASK 804
26-32161	Body Loop 1 zone 16 is shorted.	26-18 TASK 804
26-32162	Body Loop 2 zone 16 is shorted.	26-18 TASK 804
26-32171	Body Loop 1 zone 17 is shorted.	26-18 TASK 804
26-32172	Body Loop 2 zone 17 is shorted.	26-18 TASK 804
26-32181	Body Loop 1 zone 18 is shorted.	26-18 TASK 804
26-32182	Body Loop 2 zone 18 is shorted.	26-18 TASK 804
26-32191	Body Loop 1 zone 19 is shorted.	26-18 TASK 804

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MAINT MESSAGE	MESSAGE TEXT	GO TO FIM TASK
26-32192	Body Loop 2 zone 19 is shorted.	26-18 TASK 804
26-32201	Body Loop 1 zone 20 is shorted.	26-18 TASK 804
26-32202	Body Loop 2 zone 20 is shorted.	26-18 TASK 804
26-32211	Body Loop 1 zone 21 is shorted.	26-18 TASK 804
26-32212	Body Loop 2 zone 21 is shorted.	26-18 TASK 804
26-32221	Body Loop 1 zone 22 is shorted.	26-18 TASK 804
26-32222	Body Loop 2 zone 22 is shorted.	26-18 TASK 804
26-32231	Body Loop 1 zone 23 is shorted.	26-18 TASK 804
26-32232	Body Loop 2 zone 23 is shorted.	26-18 TASK 804
26-32241	Body Loop 1 zone 24 is shorted.	26-18 TASK 804
26-32242	Body Loop 2 zone 24 is shorted.	26-18 TASK 804
26-32251	Body Loop 1 zone 25 is shorted.	26-18 TASK 804
26-32252	Body Loop 2 zone 25 is shorted.	26-18 TASK 804
26-32261	Body Loop 1 zone 26 is shorted.	26-18 TASK 804
26-32262	Body Loop 2 zone 26 is shorted.	26-18 TASK 804
26-33001	Left Wing Loop 2 is open.	26-18 TASK 807
26-33002	Right Fancase Loop 1 is open.	26-18 TASK 805
26-33003	Right Fancase Loop 2 is open.	26-18 TASK 805
26-33011	Left Wing Loop 2 zone 1 is open.	26-18 TASK 801
26-33013	Right Strut Loop 2 zone 1 is shorted.	26-18 TASK 806
26-33021	Left Wing Loop 2 zone 2 is open.	26-18 TASK 801
26-33023	Right Strut Loop 2 zone 2 is shorted.	26-18 TASK 806
26-33031	Left Wing Loop 2 zone 3 is open.	26-18 TASK 801
26-33033	Right Strut Loop 2 zone 3 is shorted.	26-18 TASK 806
26-33041	Left Wing Loop 2 zone 4 is open.	26-18 TASK 801
26-33043	Right Strut Loop 2 zone 4 is shorted.	26-18 TASK 806
26-33051	Left Wing Loop 2 zone 5 is open.	26-18 TASK 801
26-33053	Right Strut Loop 2 zone 5 is shorted.	26-18 TASK 806
26-33061	Left Wing Loop 2 zone 6 is open.	26-18 TASK 801
26-33063	Right Strut Loop 2 zone 6 is shorted.	26-18 TASK 806
26-33071	Left Wing Loop 2 zone 7 is open.	26-18 TASK 801
26-33081	Left Wing Loop 2 zone 8 is open.	26-18 TASK 801
26-33091	Left Wing Loop 2 zone 9 is open.	26-18 TASK 801
26-33101	Left Wing Loop 2 zone 10 is open.	26-18 TASK 801

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MAINT MESSAGE	MESSAGE TEXT	GO TO FIM TASK
26-33111	Left Wing Loop 2 zone 11 is open.	26-18 TASK 801
26-33121	Left Wing Loop 2 zone 12 is open.	26-18 TASK 801
26-33422	Wheel Well Loop 2 is open.	26-17 TASK 802
26-34001	Left Fancase Loop 2 is open.	26-18 TASK 805
26-34003	Left Wing Loop 1 is open.	26-18 TASK 807
26-34011	Left Wing Loop 2 zone 1 is shorted.	26-18 TASK 802
26-34021	Left Wing Loop 2 zone 2 is shorted.	26-18 TASK 802
26-34031	Left Wing Loop 2 zone 3 is shorted.	26-18 TASK 802
26-34041	Left Wing Loop 2 zone 4 is shorted.	26-18 TASK 802
26-34051	Left Wing Loop 2 zone 5 is shorted.	26-18 TASK 802
26-34061	Left Wing Loop 2 zone 6 is shorted.	26-18 TASK 802
26-34071	Left Wing Loop 2 zone 7 is shorted.	26-18 TASK 802
26-34081	Left Wing Loop 2 zone 8 is shorted.	26-18 TASK 802
26-34091	Left Wing Loop 2 zone 9 is shorted.	26-18 TASK 802
26-34101	Left Wing Loop 2 zone 10 is shorted.	26-18 TASK 802
26-34102	Right Fancase Loop 1 is shorted.	26-18 TASK 805
26-34103	Left Wing Loop 1 is shorted.	26-18 TASK 813
26-34111	Left Wing Loop 2 zone 11 is shorted.	26-18 TASK 802
26-34121	Left Wing Loop 2 zone 12 is shorted.	26-18 TASK 802
26-34122	Right Wing Loop 1 zone 12 is shorted.	26-18 TASK 802
26-35001	Left Strut Loop 2 is open.	26-18 TASK 814
26-35013	Left Wing Loop 1 zone 1 is open.	26-18 TASK 801
26-35023	Left Wing Loop 1 zone 2 is open.	26-18 TASK 801
26-35033	Left Wing Loop 1 zone 3 is open.	26-18 TASK 801
26-35043	Left Wing Loop 1 zone 4 is open.	26-18 TASK 801
26-35053	Left Wing Loop 1 zone 5 is open.	26-18 TASK 801
26-35063	Left Wing Loop 1 zone 6 is open.	26-18 TASK 801
26-35073	Left Wing Loop 1 zone 7 is open.	26-18 TASK 801
26-35083	Left Wing Loop 1 zone 8 is open.	26-18 TASK 801
26-35093	Left Wing Loop 1 zone 9 is open.	26-18 TASK 801
26-35101	Left Strut Loop 2 is shorted.	26-18 TASK 813
26-35103	Left Wing Loop 1 zone 10 is open.	26-18 TASK 801
26-35113	Left Wing Loop 1 zone 11 is open.	26-18 TASK 801
26-35123	Left Wing Loop 1 zone 12 is open.	26-18 TASK 801

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MAINT MESSAGE	MESSAGE TEXT	GO TO FIM TASK
26-36003	Left Strut Loop 1 is shorted.	26-18 TASK 813
26-36011	Left Strut Loop 2 zone 1 is shorted.	26-18 TASK 806
26-36013	Left Strut Loop 1 zone 1 is shorted.	26-18 TASK 806
26-36021	Left Strut Loop 2 zone 2 is shorted.	26-18 TASK 806
26-36023	Left Strut Loop 1 zone 2 is shorted.	26-18 TASK 806
26-36031	Left Strut Loop 2 zone 3 is shorted.	26-18 TASK 806
26-36033	Left Strut Loop 1 zone 3 is shorted.	26-18 TASK 806
26-36041	Left Strut Loop 2 zone 4 is shorted.	26-18 TASK 806
26-36043	Left Strut Loop 1 zone 4 is shorted.	26-18 TASK 806
26-36051	Left Strut Loop 2 zone 5 is shorted.	26-18 TASK 806
26-36053	Left Strut Loop 1 zone 5 is shorted.	26-18 TASK 806
26-36061	Left Strut Loop 2 zone 6 is shorted.	26-18 TASK 806
26-36063	Left Strut Loop 1 zone 6 is shorted.	26-18 TASK 806
26-36103	Left Strut Loop 1 is open.	26-18 TASK 814
26-36113	Left Wing Loop 1 zone 11 is shorted.	26-18 TASK 802
26-36123	Left Wing Loop 1 zone 12 is shorted.	26-18 TASK 802
26-37002	Right Wing Loop 1 is open.	26-18 TASK 807
26-37003	Right Wing Loop 2 is open.	26-18 TASK 807
26-37013	Right Wing Loop 2 zone 1 is shorted.	26-18 TASK 802
26-37023	Right Wing Loop 2 zone 2 is shorted.	26-18 TASK 802
26-37033	Right Wing Loop 2 zone 3 is shorted.	26-18 TASK 802
26-37043	Right Wing Loop 2 zone 4 is shorted.	26-18 TASK 802
26-37053	Right Wing Loop 2 zone 5 is shorted.	26-18 TASK 802
26-37063	Right Wing Loop 2 zone 6 is shorted.	26-18 TASK 802
26-37073	Right Wing Loop 2 zone 7 is shorted.	26-18 TASK 802
26-37083	Right Wing Loop 2 zone 8 is shorted.	26-18 TASK 802
26-37093	Right Wing Loop 2 zone 9 is shorted.	26-18 TASK 802
26-37102	Right Wing Loop 1 is shorted.	26-18 TASK 813
26-37103	Right Wing Loop 2 zone 10 is shorted.	26-18 TASK 802
26-37104	Right Wing Loop 2 is shorted.	26-18 TASK 813
26-37113	Right Wing Loop 2 zone 11 is shorted.	26-18 TASK 802
26-37114	Right Strut Loop 2 is shorted.	26-18 TASK 813
26-37123	Right Wing Loop 2 zone 12 is shorted.	26-18 TASK 802
26-37303	Right Strut Loop 2 is open.	26-18 TASK 814

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MAINT MESSAGE	MESSAGE TEXT	GO TO FIM TASK
26-38011	Overhead Panel Bus Controller (OPBC) FIRE/OVHT TEST switch signal shows switch closed for more than 1 minute.	26-23 TASK 804
26-38012	Right Wing Loop 1 zone 1 is open.	26-18 TASK 801
26-38013	Right Wing Loop 2 zone 1 is open.	26-18 TASK 801
26-38022	Right Wing Loop 1 zone 2 is open.	26-18 TASK 801
26-38023	Right Wing Loop 2 zone 2 is open.	26-18 TASK 801
26-38032	Right Wing Loop 1 zone 3 is open.	26-18 TASK 801
26-38033	Right Wing Loop 2 zone 3 is open.	26-18 TASK 801
26-38042	Right Wing Loop 1 zone 4 is open.	26-18 TASK 801
26-38043	Right Wing Loop 2 zone 4 is open.	26-18 TASK 801
26-38052	Right Wing Loop 1 zone 5 is open.	26-18 TASK 801
26-38053	Right Wing Loop 2 zone 5 is open.	26-18 TASK 801
26-38062	Right Wing Loop 1 zone 6 is open.	26-18 TASK 801
26-38063	Right Wing Loop 2 zone 6 is open.	26-18 TASK 801
26-38072	Right Wing Loop 1 zone 7 is open.	26-18 TASK 801
26-38073	Right Wing Loop 2 zone 7 is open.	26-18 TASK 801
26-38082	Right Wing Loop 1 zone 8 is open.	26-18 TASK 801
26-38083	Right Wing Loop 2 zone 8 is open.	26-18 TASK 801
26-38092	Right Wing Loop 1 zone 9 is open.	26-18 TASK 801
26-38093	Right Wing Loop 2 zone 9 is open.	26-18 TASK 801
26-38101	Left Fancase Loop 2 is shorted.	26-18 TASK 805
26-38102	Right Wing Loop 1 zone 10 is open.	26-18 TASK 801
26-38103	Right Wing Loop 2 zone 10 is open.	26-18 TASK 801
26-38112	Right Wing Loop 1 zone 11 is open.	26-18 TASK 801
26-38113	Right Wing Loop 2 zone 11 is open.	26-18 TASK 801
26-38122	Right Wing Loop 1 zone 12 is open.	26-18 TASK 801
26-38123	Right Wing Loop 2 zone 12 is open.	26-18 TASK 801
26-38891	DLODS Control Card (left) has no output on DLODS ARINC 429 Bus.	26-18 TASK 811
26-38892	DLODS Control Card (right) has no output on DLODS ARINC 429 Bus.	26-18 TASK 811
26-38893	DLODS Control Card (center) has no output on DLODS ARINC 429 Bus.	26-18 TASK 811
26-39011	Wheel Well Loop 1 is open.	26-17 TASK 802
26-39012	Right Wing Loop 1 zone 1 is shorted.	26-18 TASK 802
26-39022	Right Wing Loop 1 zone 2 is shorted.	26-18 TASK 802

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MAINT MESSAGE	MESSAGE TEXT	GO TO FIM TASK
26-39032	Right Wing Loop 1 zone 3 is shorted.	26-18 TASK 802
26-39042	Right Wing Loop 1 zone 4 is shorted.	26-18 TASK 802
26-39052	Right Wing Loop 1 zone 5 is shorted.	26-18 TASK 802
26-39062	Right Wing Loop 1 zone 6 is shorted.	26-18 TASK 802
26-39072	Right Wing Loop 1 zone 7 is shorted.	26-18 TASK 802
26-39082	Right Wing Loop 1 zone 8 is shorted.	26-18 TASK 802
26-39092	Right Wing Loop 1 zone 9 is shorted.	26-18 TASK 802
26-39101	Left Wing Loop 2 is shorted.	26-18 TASK 813
26-39102	Right Wing Loop 1 zone 10 is shorted.	26-18 TASK 802
26-39111	Wheel Well Loop 1 is shorted.	26-17 TASK 801
26-39112	Right Wing Loop 1 zone 11 is shorted.	26-18 TASK 802
26-39122	Wheel Well Loop 2 is shorted.	26-17 TASK 801
26-39904	DLODS Control Card (left) has no input from ARINC Signal Gateway (left), LSCF on ASG Global Bus.	26-18 TASK 812
26-39909	DLODS Control Card (center) has no input from ARINC Signal Gateway (left), RSCF on ASG Global Bus.	26-18 TASK 812
26-39911	DLODS Control Card (right) has no input from ARINC Signal Gateway (left), RSCF on ASG Global Bus.	26-18 TASK 812
26-39913	DLODS Control Card (left) has no input from ARINC Signal Gateway (right), LSCF on ASG Global Bus.	26-18 TASK 812
26-39918	DLODS Control Card (center) has no input from ARINC Signal Gateway (right), RSCF on ASG Global Bus.	26-18 TASK 812
26-39920	DLODS Control Card (right) has no input from ARINC Signal Gateway (right), RSCF on ASG Global Bus.	26-18 TASK 812
26-40773	Cgo Fire Ext Flw Vlv (LWR AFT) Squib 1 circuit is open.	26-23 TASK 816
26-40774	Cgo Fire Ext Flw Vlv (LWR AFT) Squib 2 circuit is open.	26-23 TASK 816
26-40775	Cgo Fire Ext In-Line Press SW (LWR AFT) is set.	26-23 TASK 817
26-40776	Cargo Fire Ext Bottle 1A has low pressure.	26-23 TASK 818
26-40777	Cargo Fire Ext Bottle 1A Squib circuit is open.	26-23 TASK 820
26-40778	Cargo Fire Ext Bottle 1B has low pressure.	26-23 TASK 818
26-40779	Cargo Fire Ext Bottle 1B Squib circuit is open.	26-23 TASK 820
26-40780	Cargo Fire Ext Bottle 2A has low pressure.	26-23 TASK 819
26-40781	Cargo Fire Ext Bottle 2A Squib circuit is open.	26-23 TASK 821
26-40782	Cargo Fire Ext Bottle 2B has low pressure.	26-23 TASK 819
26-40783	Cargo Fire Ext Bottle 2B Squib circuit is open.	26-23 TASK 821
26-40784	Cargo Fire Ext Bottle 2C has low pressure.	26-23 TASK 819

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26-40785	Cargo Fire Ext Bottle 2C Squib circuit is open.	26-23 TASK 821
26-40786	Cgo Fire Ext Flw Vlv (LWR FWD) Squib 1 circuit is open.	26-23 TASK 816
26-40787	Cgo Fire Ext Flw Vlv (LWR FWD) Squib 2 circuit is open.	26-23 TASK 816
26-40788	Cgo Fire Ext In-Line Press SW (LWR FWD) is set.	26-23 TASK 817
26-40789	Cargo Fire Ext Squib Test circuit is failed.	26-23 TASK 824
26-41010	Smoke Detector (SM) is failed. Detected by: OEU.	26-14 TASK 809
26-50009	APU & ENGINE Squib Test circuit is failed.	26-22 TASK 804
26-50010	APU BTL SQUIB circuit is open.	26-22 TASK 805
26-50011	ENGINE BTL 1 - L SQUIB circuit is open.	26-21 TASK 803
26-50012	ENGINE BTL 1 - R SQUIB circuit is open.	26-21 TASK 803
26-50013	ENGINE BTL 2 - L SQUIB circuit is open.	26-21 TASK 803
26-50014	ENGINE BTL 2 - R SQUIB circuit is open.	26-21 TASK 803
26-50015	Relay (FWD SQUIB 2A CONT) in P310 is not in commanded position.	26-23 TASK 825
26-50016	Relay (FWD SQUIB 2B & 2C CONT) in P310 is not in commanded position.	26-23 TASK 826

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801. EICAS Message FIRE TEST IN PROGRESS - Fault Isolation

A. Initial Evaluation

NOTE: This message shows the manually initiated FIRE/OVHT detection system test is in progress. Wait for the EICAS message FIRE TEST PASS or FIRE TEST FAIL to show when the test completes.

————— END OF TASK —————

802. EICAS Message FIRE TEST PASS - Fault Isolation

A. Initial Evaluation

NOTE: This message shows the manually initiated FIRE/OVHT detection system test is completed and has passed. No maintenance action is necessary.

————— END OF TASK —————

803. EICAS Message FIRE TEST FAIL - Fault Isolation

A. Initial Evaluation

NOTE: This message shows that one or more fire/overheat detection systems failed the manually initiated FIRE/OVHT detection system test.

- (1) This procedure uses the maintenance access terminal (MAT) to show the maintenance messages related to the FIRE TEST FAIL message.
- (2) A maintenance access terminal is necessary for this procedure. To get more instructions on how to use a maintenance access terminal or how to find existing faults, do this task: How to Use the Central Maintenance Computing System, AMM TASK 45-10-00-740-808.

B. Fault Isolation Procedure

NOTE: The cargo smoke detection system operates on 115 VAC power. For the smoke detection system to operate you must have external power, engine power or APU power. Battery power is not sufficient to operate the smoke detection system. If you do the FIRE/OVHT test with only battery power supplied to the airplane, the test will not pass.

- (1) Look at the Line Maintenance, Existing Flight Deck Effects display on the MAT.
 - (a) Look for EICAS messages related to these systems:
 - 1) APU Fire Detection
 - 2) Cargo Smoke Detection
 - 3) Engine Fire Detection
 - 4) Wheel Well Fire Detection.
- (2) For each applicable EICAS message, do these steps:
 - (a) Find the maintenance message(s) listed with the EICAS message on the MAT.
 - (b) Find the maintenance message in the applicable FIM Maintenance Message Index.
 - (c) Do the specified fault isolation task.
- (3) If there is no applicable EICAS message, use a maintenance access terminal (MAT) to isolate the system at fault.
 - (a) Make these selections on the MAT:
 - 1) ONBOARD MAINTENANCE
 - 2) OTHER FUNCTIONS

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- 3) INPUT MONITORING
- (b) Select GENERAL INPUT
- (c) Select CONTINUE
- (d) Put the cursor in the direct entry field.
- (e) Use the keyboard to type these signal specification into the direct entry field:
 - 1) Type this specification "L/629/SYS L/F3E/1/8-8"
 - 2) Type this specification "L/629/SYS C1/F3E/7/8-8"
 - 3) Type this specification "L/629/SYS R/F3E/2/8-8"
 - 4) Type this specification "L/629/SYS C1/F3E/4/8-8"
- (f) Select RUN ALL.
- (g) Do this task: APU Fire Detection Operational Test, AMM TASK 26-15-00-710-801.
 - 1) If any of the bits 4-9 are set to one on the MAT, determine the applicable system:
 - a) BIT 4 RIGHT ENGINE FIRE TEST FAIL
 - b) BIT 5 LEFT ENGINE FIRE TEST FAIL
 - c) BIT 6 APU ENGINE FIRE TEST FAIL
 - d) BIT 7 FWD CARGO FIRE TEST FAIL
 - e) BIT 8 AFT CARGO FIRE TEST FAIL
 - f) BIT 9 WHEEL WELL FIRE TEST FAIL
 - 2) Find the applicable fault isolation manual.
 - a) Do the applicable fault isolation procedure.

————— END OF TASK —————

804. Fire Bell and Master Warning Lights with No Other Flight Deck Effects - Fault Isolation

A. Initial Evaluation

- (1) If the Fire Bell and Master Warning Lights come on intermittently and there are no other flight deck effects, then do the Fault Isolation Procedure below.

B. Fault Isolation Procedure

- (1) To get access to the Systems Card Files,
Open this access panel:

<u>Number</u>	<u>Name/Location</u>
117AL	Main Equipment Center Access Door
- (2) Move the power switches for these DLODS Control cards to the OFF position and then to the ON position:
 - (a) Right DLODS Control Card (A05) in the Right Systems Card File (P84)
 - (b) Left DLODS Control Card (A05) in the Left Systems Card File (P85)
- (3) Close this access panel:

<u>Number</u>	<u>Name/Location</u>
117AL	Main Equipment Center Access Door

————— END OF TASK —————

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801. Eng-L Fire Detection Card No Output on EFDC 429 Bus - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 26-18891.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

NOTE: If you use a megohmmeter to do wiring checks on an ARINC 429 bus (or if you need the exact resistance of the bus wiring), first remove all the LRUs that are connected to the bus (use the WDM to tell which LRUs are on the bus). Then re-install the LRUs when you are done.

- (1) Replace the left engine fire detection card, A10, in the left systems cardfile, P85.

These are the tasks:

Engine Fire Detection Card Removal, AMM TASK 26-11-03-000-801,

Engine Fire Detection Card Installation, AMM TASK 26-11-03-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), then you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Do this check of the wiring:
 - (a) For the left engine fire detection card, A10, in the left systems cardfile, P85, do this task: Engine Fire Detection Card Removal, AMM TASK 26-11-03-000-801.
 - (b) Install an extender card, SPL-1814 in slot A10 in the left systems cardfile, P85.
 - (c) For the left ASG card, A12, in the left systems cardfile, P85, do this task: ESDS Handling for Printed Circuit Board Removal, AMM TASK 20-41-01-000-801.
 - (d) Install an extender card, SPL-1814 in slot A12 in the left systems cardfile, P85.
 - (e) Do a wiring check between these pins of connector XA10 and connector XA12 in the left systems cardfile (SSM 26-11-11, SSM 31-09-12):

XA10	XA12
pin 134	pin 69
pin 137	pin 72

- (f) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Remove the extender card, SPL-1814 from slot A10 in the left systems cardfile, P85.
 - 3) Re-install the left engine fire detection card, A10, in the left systems cardfile, P85; (AMM TASK 26-11-03-400-801).
 - 4) Remove the extender card, SPL-1814 from slot A12 in the left systems cardfile, P85.
 - 5) Re-install the left ASG card, A12, in the left systems cardfile, P85; (AMM TASK 20-41-01-400-801).

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- 6) Set the power switch for the left engine fire detection card, A10, in the left systems cardfile, P85, to the ON position.
 - 7) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - 8) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Do this check of the wiring:
- (a) For the left engine fire detection card, A10, in the left systems cardfile, P85, do this task: Engine Fire Detection Card Removal, AMM TASK 26-11-03-000-801.
 - (b) Install an extender card, SPL-1814 in slot A10 in the left systems cardfile, P85.
 - (c) For the right ASG card, A15, in the left systems cardfile, P85, do this task: ESDS Handling for Printed Circuit Board Removal, AMM TASK 20-41-01-000-801.
 - (d) Install an extender card, SPL-1814 in slot A15 in the left systems cardfile, P85.
 - (e) Do a wiring check between these pins of connector XA10 and connector XA15 in the left systems cardfile (SSM 26-11-11, SSM 31-09-12):

XA10	XA15
pin 134	pin 69
pin 137	pin 72

- (f) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Remove the extender card, SPL-1814 from slot A10 in the left systems cardfile, P85.
 - 3) Re-install the left engine fire detection card, A10, in the left systems cardfile, P85; (AMM TASK 26-11-03-400-801).
 - 4) Remove the extender card, SPL-1814 from slot A15 in the left systems cardfile, P85.
 - 5) Re-install the right ASG card, A15, in the left systems cardfile, P85; (AMM TASK 20-41-01-400-801).
 - 6) Set the power switch for the left engine fire detection card, A10, in the left systems cardfile, P85, to the ON position.
 - 7) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— **END OF TASK** —————

802. Engine Fire Detection Card No Input from ASG Card on ASG Global 429 Bus - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance messages: 26-19904, 26-19905, 26-19907, 26-19908.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

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C. Fault Isolation Procedure

NOTE: If you use a megohmmeter to do wiring checks on an ARINC 429 bus (or if you need the exact resistance of the bus wiring), first remove all the LRUs that are connected to the bus (use the WDM to tell which LRUs are on the bus). Then re-install the LRUs when you are done.

- (1) In the list below, find the applicable fire detection card, ARINC signal gateway (ASG) card, connectors, and pin numbers for the maintenance message.

Table 201/26-11-00-993-801

SYSTEMS CARD FILE	FIRE DET CARD	ASG CARD	FIRE DET CARD CONN		ASG CARD CONN
			XA10		XA15
Left (P85)	A10	Left A12	pin 115	--	pin 67
			pin 118	--	pin 70
			XA10		XA12
Left (P85)	A10	Right A15	pin 151	--	pin 67
			pin 154	--	pin 70
			XA10		XA15
Right (P84)	A10	Left A12	pin 115	--	pin 67
			pin 118	--	pin 70
			XA10		XA12
Right (P84)	A10	Right A15	pin 151	--	pin 67
			pin 154	--	pin 70

- (2) Replace the engine fire detection card, A10, in the applicable systems card file.

These are the tasks:

Engine Fire Detection Card Removal, AMM TASK 26-11-03-000-801,

Engine Fire Detection Card Installation, AMM TASK 26-11-03-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), then you corrected the fault.

- (b) If the MAT shows ACTIVE for the maintenance message, then continue.

- (3) Replace the applicable ASG card.

These are the tasks:

ESDS Handling for Printed Circuit Board Removal, AMM TASK 20-41-01-000-801,

ESDS Handling for Printed Circuit Board Installation, AMM TASK 20-41-01-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

- (b) If the MAT shows ACTIVE for the maintenance message, then continue.

- (4) Do this check of the wiring:

- (a) Remove the applicable engine fire detection card, A10. To remove it, do this task: Engine Fire Detection Card Removal, AMM TASK 26-11-03-000-801.

- (b) Install an extender card, SPL-1814 in the applicable fire detection card location.

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- (c) Remove the applicable ASG card. To remove it, do this task: ESDS Handling for Printed Circuit Board Removal, AMM TASK 20-41-01-000-801.
- (d) Install an extender card, SPL-1814 in the applicable ASG card location.
- (e) Do a wiring check between the specified pins of the applicable fire detection card connector and the applicable ASG card connector.
- (f) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Remove the extender card, SPL-1814 from the fire detection card location.
 - 3) Re-install the fire detection card. To install it, do this task: Engine Fire Detection Card Installation, AMM TASK 26-11-03-400-801.
 - 4) Remove the extender card, SPL-1814 from the ASG card location.
 - 5) Re-install the applicable ASG card. To install it, do this task: ESDS Handling for Printed Circuit Board Installation, AMM TASK 20-41-01-400-801.
 - 6) Set the power switch for the engine fire detection card to the ON position.
 - 7) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— END OF TASK —————

804. Engine Fire Detection Card Left Internal Fault - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 26-10011.

B. Fault Isolation Procedure

- (1) Replace the Engine Fire Detection Card, P85A10, for the left engine.

These are the tasks:

Engine Fire Detection Card Removal, AMM TASK 26-11-03-000-801,

Engine Fire Detection Card Installation, AMM TASK 26-11-03-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— END OF TASK —————

805. Engine Fire Detection Card Right Internal Fault - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 26-10012.

B. Fault Isolation Procedure

- (1) Replace the Engine Fire Detection Card, P84A10, for the right engine.

These are the tasks:

Engine Fire Detection Card Removal, AMM TASK 26-11-03-000-801,

Engine Fire Detection Card Installation, AMM TASK 26-11-03-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— END OF TASK —————

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806. Left Engine Fire Loops 1 and 2 Connected Incorrectly - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 26-10021.

B. General

- (1) Each engine fire detector has two elements: loop A/1 and loop B/2. To prevent cross-wiring, the ends of the elements are different sizes. Each element uses a No. 8 fastener on one end and a No. 10 fastener on the other end. The elements are installed opposite to each other so that each end of the detector assembly has a No. 8 connection and a No. 10 connection. If the elements are connected incorrectly, loop A/1 will be connected to loop B/2 somewhere in the loop.

C. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

D. Fault Isolation Procedure

- (1) Examine the wiring and elements for loops A/1 and B/2 for the fire detector elements, M26011, M26012, M26013, M26014 (WDM 26-11-11).
 - (a) Make sure the wiring and elements for loop A/1 are not connected to loop B/2.
 - (b) If the wiring or elements for loop A/1 are connected to loop B/2, do these steps:
 - 1) On the left systems card file (P85), move the power switch for the engine fire control card to the OFF position.
 - 2) Disconnect the applicable wiring or elements that were installed incorrectly (AMM TASK 26-11-01-000-809-001).
 - 3) Re-connect the applicable wiring or elements correctly (AMM TASK 26-11-01-400-809-001).
 - 4) On the left systems card file (P85), move the power switch for the engine fire control card to the ON position.
 - (c) If the maintenance message does not show on the ground test display, you corrected the fault. If the maintenance message persists, continue.
- (2) Perform the following procedure to swap the engine fire detection cards:
 - (a) Remove both engine fire detection cards. To remove, do this task: Engine Fire Detection Card Removal, AMM TASK 26-11-03-000-801.
 - (b) Install the card from the right engine into the slot for the left engine, and install the card from the left engine into the slot for the right engine. To install, do this task: Engine Fire Detection Card Installation, AMM TASK 26-11-03-400-801.
 - (c) If the problem follows the fire detection card to the opposite engine during subsequent flights, remove and replace the card. If the card is to be replaced, carefully remove the card, return the card to Kidde, and notify Boeing.
 - (d) If the maintenance message does not show on the ground test display, you corrected the fault.

————— END OF TASK —————

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807. Right Engine Fire Loops 1 and 2 Connected Incorrectly - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 26-10022.

B. General

- (1) Each engine fire detector has two elements: loop A/1 and loop B/2. To prevent cross-wiring, the ends of the elements are different sizes. Each element uses a No. 8 fastener on one end and a No. 10 fastener on the other end. The elements are installed opposite to each other so that each end of the detector assembly has a No. 8 connection and a No. 10 connection. If the elements are connected incorrectly, loop A/1 will be connected to loop B/2 somewhere in the loop.

C. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

D. Fault Isolation Procedure

- (1) Examine the wiring and elements for loops A/1 and B/2 for the fire detector elements, M26011, M26012, M26013, M26014 (WDM 26-11-21).
 - (a) Make sure the wiring and elements for loop A/1 are not connected to loop B/2.
 - (b) If the wiring or elements for loop A/1 are connected to loop B/2, do these steps:
 - 1) On the right systems card file (P84), move the power switch for the engine fire control card to the OFF position.
 - 2) Disconnect the applicable wiring or elements that were installed incorrectly (AMM TASK 26-11-01-000-809-001).
 - 3) Re-connect the applicable wiring or elements correctly (AMM TASK 26-11-01-400-809-001).
 - 4) On the right systems card file (P84), move the power switch for the engine fire control card to the ON position.
 - (c) If the maintenance message does not show on the ground test display, you corrected the fault. If the maintenance message persists, continue.
- (2) Perform the following procedure to swap the engine fire detection cards:
 - (a) Remove both engine fire detection cards. To remove, do this task: Engine Fire Detection Card Removal, AMM TASK 26-11-03-000-801.
 - (b) Install the card from the right engine into the slot for the left engine, and install the card from the left engine into the slot for the right engine. To install, do this task: Engine Fire Detection Card Installation, AMM TASK 26-11-03-400-801.
 - (c) If the problem follows the fire detection card to the opposite engine during subsequent flights, remove and replace the card. If the card is to be replaced, carefully remove the card, return the card to Kidde, and notify Boeing.
 - (d) If the maintenance message does not show on the ground test display, you corrected the fault.

————— END OF TASK —————

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808. Fire Loop 1 (left engine) Shorted or Open - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance messages: 26-10131, 26-10141.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure - Shorted or Open.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure - Shorted or Open

- (1) Examine the wiring and elements for loop A/1 for the engine fire detector elements, M26011, M26012, M26013, M26014 (WDM 26-11-11).
 - (a) Make sure there is no apparent damage to the wiring or elements.
 - (b) If you find a problem with the wiring, do these steps:
 - 1) On the left systems card file (P85), move the power switch for the engine fire control card to the OFF position.
 - 2) Repair the wiring.
 - 3) Connect the wiring between the applicable components (WDM 26-11-11).
 - 4) On the left systems card file (P85), move the power switch for the engine fire control card to the ON position.
 - (c) If you find a problem with an element, replace the applicable element. These are the tasks:
 - Engine Fire Detector Element Removal, AMM TASK 26-11-01-000-809-001
 - Engine Fire Detector Element Installation, AMM TASK 26-11-01-400-809-001
 - (d) If the maintenance message does not show on the ground test display, you corrected the fault.
 - (e) If you do not find a problem with the wiring or elements, then continue.
- (2) On the left systems card file (P85), move the power switch for the engine fire control card to the OFF position.
- (3) Do this check of the wiring:
 - (a) Do a wiring check between pins 15 and 16 of connector D71300P at the left core/strut (WDM 26-11-11).
 - (b) If you find a problem with the wiring, then the short or open is in the wiring or elements in the engine area.
 - (c) If you do not find a problem with the wiring, then the short or open is in the wiring between the engine area and the engine fire detection card.
- (4) If the short or open is in the wiring between the engine area and the engine fire detection card, do this check of the wiring:
 - (a) Do a wiring check between these pins of connector D71300J and connector DP8509 at the left systems cardfile, P85 (WDM 26-11-11):

D71300J	DP8509
pin 16	pin 40
pin 15	pin 21

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- (b) If you find a problem with the wiring, then do these steps:
- 1) Repair the wiring.
 - 2) On the left systems card file (P85), move the power switch for the engine fire control card to the ON position.
 - 3) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (5) If the short or open is in the wiring or elements in the engine area, then continue.
- (6) Do a wiring check of the wiring and elements between pins 15 and 16 of connector D71300P (WDM 26-11-11).
- NOTE:** To isolate the fault, disconnect the elements M26011, M26012, M26013, M26014 and the wiring between them if applicable.
- (7) If you find a problem with the wiring, then do these steps:
- (a) Repair the wiring.
 - (b) Connect the applicable wiring (WDM 26-11-11).
 - (c) On the left systems card file (P85), move the power switch for the engine fire control card to the ON position.
 - (d) If the maintenance message does not show on the ground test display, you corrected the fault.
- (8) If you find a problem with the elements, then do these steps:
- (a) Replace the applicable element. These are the tasks:
 - Engine Fire Detector Element Removal, AMM TASK 26-11-01-000-809-001
 - Engine Fire Detector Element Installation, AMM TASK 26-11-01-400-809-001
 - (b) If the maintenance message does not show on the ground test display, you corrected the fault.
- (9) If you do not find a problem with the elements or wiring, then continue.



DISCONNECT THE WIRE BUNDLES FROM THE TERMINAL LUGS BEFORE TESTING THE DETECTOR RESISTANCE AND MEASURING THE INSULATION RESISTANCE; OTHERWISE, DAMAGE TO OTHER DETECTORS IN THE LOOP MAY OCCUR.

- (10) With digital/analog multimeter, COM-1793, measure the resistance between the terminal lugs of the element.
- NOTE:** The temperature of the fire detector element should be stable at ambient room temperature before measuring the resistance.
- (a) Make sure the maximum resistance between each terminal lug is not greater than shown:
- NOTE:** The resistance is measured in ohms at 70° F. (21° C.)
- NOTE:** The Fire Detection Equipment Nos. are M26011, M26012, M26013, and M26014.

Table 202/26-11-00-993-830 Maximum Wire Resistance

Fire Detector Equipment No.	Maximum Wire Resistance (ohm)
M26011	7.4
M26012	5.8

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Table 202/26-11-00-993-830 Maximum Wire Resistance (Continued)

Fire Detector Equipment No.	Maximum Wire Resistance (ohm)
M26013	6.8
M26014	6.8

- (11) Replace the sensing element if the resistance is higher than the given value. These are the tasks:
- Engine Fire Detector Element Removal, AMM TASK 26-11-01-000-809-001
 - Engine Fire Detector Element Installation, AMM TASK 26-11-01-400-809-001
- (a) If the maintenance message does not show on the ground test display, you corrected the fault.
- (b) If you do not find a problem with the element resistance, then continue.
- (12) Connect the negative lead of a megohmmeter to the shell of the sensing element.
- (13) Connect the positive lead of a megohmmeter to one terminal lug of the sensing element.
- (14) Apply the applicable voltage shown in the table below to the sensing element.
- (a) Make sure the resistance value is greater than shown:
- NOTE: The resistance is in Megohms measured at 70° F. (21° C.)
- NOTE: The Fire Detection Equipment Nos. are M26011, M26012, M26013, and M26014.

Table 203/26-11-00-993-832 Minimum Wire Resistance

Fire Detector Equipment No.	Minimum Resistance at 70° F (Megohm)	Test VDC
M26011	41.33	500
M26012	2.68	250
M26013	44.82	500
M26014	45.93	500

- (15) Replace the sensing element if the resistance is less than the given value. These are the tasks:
- Engine Fire Detector Element Removal, AMM TASK 26-11-01-000-809-001
 - Engine Fire Detector Element Installation, AMM TASK 26-11-01-400-809-001
- (a) If the maintenance message does not show on the ground test display, you corrected the fault.
- (b) If you do not find a problem with the element resistance, then do these steps:
- (c) Re-connect the applicable wiring WDM 26-11-11.

————— **END OF TASK** —————

809. Fire Loop 1 (right engine) Shorted or Open - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance messages: 26-10132, 26-10142.

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B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure - Shorted or Open

- (1) Examine the wiring and elements for loop A/1 for the engine fire detector elements, M26011, M26012, M26013, M26014 (WDM 26-11-21).
 - (a) Make sure there is no apparent damage to the wiring or elements.
 - (b) If you find a problem with the wiring, do these steps:
 - 1) On the right systems card file (P84), move the power switch for the engine fire control card to the OFF position.
 - 2) Repair the wiring.
 - 3) Connect the wiring between the applicable components (WDM 26-11-21).
 - 4) On the right systems card file (P84), move the power switch for the engine fire control card to the ON position.
 - (c) If you find a problem with an element, replace the applicable element.

These are the tasks:

Engine Fire Detector Element Removal, AMM TASK 26-11-01-000-809-001,
Engine Fire Detector Element Installation, AMM TASK 26-11-01-400-809-001.
 - (d) If the maintenance message does not show on the ground test display, you corrected the fault.
 - (e) If you do not find a problem with the wiring or elements, then continue.
- (2) On the right systems card file (P84), move the power switch for the engine fire control card to the OFF position.
- (3) Do this check of the wiring:
 - (a) Do a wiring check between pins 15 and 16 of connector D71300P at the right core/strut (WDM 26-11-21).
 - (b) If you find a problem with the wiring, then the short or open is in the wiring or elements in the engine area.
 - (c) If you do not find a problem with the wiring, then the short or open is in the wiring between the engine area and the engine fire detection card.
- (4) If the short or open is in the wiring between the engine area and the engine fire detection card, do this check of the wiring:
 - (a) Do a wiring check between these pins of connector D71300J and connector DP8409 at the right systems cardfile, P84 (WDM 26-11-21):

D71300J	DP8409
pin 16	pin 40
pin 15	pin 21
 - (b) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.

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- 2) On the right systems card file (P84), move the power switch for the engine fire control card to the ON position.
- 3) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (5) If the short or open is in the wiring or elements in the engine area, then continue.
- (6) Do a wiring check of the wiring and elements between pins 15 and 16 of connector D71300P (WDM 26-11-21).
NOTE: To isolate the fault, disconnect the elements M26011, M26012, M26013, M26014 and the wiring between them if applicable.
- (7) If you find a problem with the wiring, then do these steps:
 - (a) Repair the wiring.
 - (b) Connect the applicable wiring (WDM 26-11-21).
 - (c) On the right systems card file (P84), move the power switch for the engine fire control card to the ON position.
 - (d) If the maintenance message does not show on the ground test display, you corrected the fault.
- (8) If you find a problem with the elements, then do these steps:
 - (a) Replace the applicable element.
These are the tasks:
Engine Fire Detector Element Removal, AMM TASK 26-11-01-000-809-001,
Engine Fire Detector Element Installation, AMM TASK 26-11-01-400-809-001.
 - (b) If the maintenance message does not show on the ground test display, you corrected the fault.
- (9) If you do not find a problem with the elements or wiring, then continue.



DISCONNECT THE WIRE BUNDLES FROM THE TERMINAL LUGS BEFORE TESTING THE DETECTOR RESISTANCE AND MEASURING THE INSULATION RESISTANCE; OTHERWISE, DAMAGE TO OTHER DETECTORS IN THE LOOP MAY OCCUR.

- (10) With digital/analog multimeter, COM-1793, measure the resistance between the terminal lugs of the element.
NOTE: The temperature of the fire detector element should be stable at ambient room temperature before measuring the resistance.
 - (a) Make sure the maximum resistance between each terminal lug is not greater than shown:
NOTE: The resistance is measured in ohms at 70° F. (21° C.)
NOTE: The Fire Detection Equipment Nos. are M26011, M26012, M26013, and M26014.

Table 204/26-11-00-993-846 Maximum Wire Resistance

Fire Detector Equipment No.	Maximum Wire Resistance (ohm)
M26011	7.4
M26012	5.8
M26013	6.8

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Table 204/26-11-00-993-846 Maximum Wire Resistance (Continued)

Fire Detector Equipment No.	Maximum Wire Resistance (ohm)
M26014	6.8

- (11) Replace the sensing element if the resistance is higher than the given value.

These are the tasks:

Engine Fire Detector Element Removal, AMM TASK 26-11-01-000-809-001,

Engine Fire Detector Element Installation, AMM TASK 26-11-01-400-809-001.

- (a) If the maintenance message does not show on the ground test display, you corrected the fault.
- (b) If you do not find a problem with the element resistance, then continue.
- (12) Connect the negative lead of a megohmmeter to the shell of the sensing element.
- (13) Connect the positive lead of a megohmmeter to one terminal lug of the sensing element.
- (14) Apply the applicable voltage shown in the table below to the sensing element.
- (a) Make sure the resistance value is greater than shown:

NOTE: The resistance is measured in Megohms at 70 ° F. (21° C.)

NOTE: The Fire Detection Equipment Nos. are M26011, M26012, M26013, and M26014.

Table 205/26-11-00-993-836 Minimum Wire Resistance

Fire Detector Equipment No.	Minimum Resistance at 70° F (Megohm)	Test VDC
M26011	41.33	500
M26012	2.68	250
M26013	44.82	500
M26014	45.93	500

- (15) Replace the sensing element if the resistance is less than the given value.

These are the tasks:

Engine Fire Detector Element Removal, AMM TASK 26-11-01-000-809-001,

Engine Fire Detector Element Installation, AMM TASK 26-11-01-400-809-001.

- (a) If the maintenance message does not show on the ground test display, you corrected the fault.
- (b) If you do not find a problem with the element resistance, then do these steps:
- (c) Re-connect the applicable wiring WDM 26-11-11.

————— **END OF TASK** —————

810. Fire Loop 2 (left engine) Shorted or Open - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance messages: 26-10231, 26-10241.

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B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure - Shorted or Open

- (1) Examine the wiring and elements for loop B/2 for the engine fire detector elements, M26011, M26012, M26013, M26014 (WDM 26-11-11).
 - (a) Make sure there is no apparent damage to the wiring or elements.
 - (b) If you find a problem with the wiring, do these steps:
 - 1) On the left systems card file (P85), move the power switch for the engine fire control card to the OFF position.
 - 2) Repair the wiring.
 - 3) Connect the wiring between the applicable components (WDM 26-11-11).
 - 4) On the left systems card file (P85), move the power switch for the engine fire control card to the ON position.
 - (c) If you find a problem with an element, replace the applicable element.

These are the tasks:

Engine Fire Detector Element Removal, AMM TASK 26-11-01-000-809-001,
Engine Fire Detector Element Installation, AMM TASK 26-11-01-400-809-001.
 - (d) If the maintenance message does not show on the ground test display, you corrected the fault.
 - (e) If you do not find a problem with the wiring or elements, then continue.
- (2) On the left systems card file (P85), move the power switch for the engine fire control card to the OFF position.
- (3) Do this check of the wiring:
 - (a) Do a wiring check between pins 7 and 8 of connector D71302P at the left engine firewall (WDM 26-11-11).
 - (b) If you find a problem with the wiring, then the short or open is in the wiring or elements in the engine area.
 - (c) If you do not find a problem with the wiring, then the short or open is in the wiring between the engine area and the engine fire detection card.
- (4) If the short or open is in the wiring between the engine area and the engine fire detection card, do this check of the wiring:
 - (a) Do a wiring check between these pins of connector D71302J and connector DP8508 at the left systems cardfile, P85 (WDM 26-11-11):

D71302J		DP8508
pin 7		pin 42
pin 8		pin 40
 - (b) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.

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- 2) On the left systems card file (P85), move the power switch for the engine fire control card to the ON position.
- 3) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (5) If the short or open is in the wiring or elements in the engine area, then continue.
- (6) Do a wiring check of the wiring and elements between pins 7 and 8 of connector D71302P (WDM 26-11-11).
NOTE: To isolate the fault, disconnect the elements M26011, M26012, M26013, M26014 and the wiring between them if applicable.
- (7) If you find a problem with the wiring, then do these steps:
 - (a) Repair the wiring.
 - (b) Connect the applicable wiring (WDM 26-11-11).
 - (c) On the left systems card file (P85), move the power switch for the engine fire control card to the ON position.
 - (d) If the maintenance message does not show on the ground test display, you corrected the fault.
- (8) If you find a problem with the elements, then do these steps:
 - (a) Replace the applicable element.
These are the tasks:
Engine Fire Detector Element Removal, AMM TASK 26-11-01-000-809-001,
Engine Fire Detector Element Installation, AMM TASK 26-11-01-400-809-001.
 - (b) If the maintenance message does not show on the ground test display, you corrected the fault.
- (9) If you do not find a problem with the elements or wiring, then continue.



DISCONNECT THE WIRE BUNDLES FROM THE TERMINAL LUGS BEFORE TESTING THE DETECTOR RESISTANCE AND MEASURING THE INSULATION RESISTANCE; OTHERWISE, DAMAGE TO OTHER DETECTORS IN THE LOOP MAY OCCUR.

- (10) With digital/analog multimeter, COM-1793, measure the resistance between the terminal lugs of the element.
NOTE: The temperature of the fire detector element should be stable at ambient room temperature before measuring the resistance.
 - (a) Make sure the maximum resistance between each terminal lug is not greater than shown:
NOTE: The resistance is measured in ohms at 70° F. (21° C.)
NOTE: The Fire Detection Equipment Nos. are M26011, M26012, M26013, and M26014.

Table 206/26-11-00-993-838 Maximum Wire Resistance

Fire Detector Equipment No.	Maximum Wire Resistance (ohm)
M26011	7.4
M26012	5.8
M26013	6.8

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Table 206/26-11-00-993-838 Maximum Wire Resistance (Continued)

Fire Detector Equipment No.	Maximum Wire Resistance (ohm)
M26014	6.8

- (11) Replace the sensing element if the resistance is higher than the given value.

These are the tasks:

Engine Fire Detector Element Removal, AMM TASK 26-11-01-000-809-001,

Engine Fire Detector Element Installation, AMM TASK 26-11-01-400-809-001.

- (a) If the maintenance message does not show on the ground test display, you corrected the fault.
- (b) If you do not find a problem with the element resistance, then continue.
- (12) Connect the negative lead of a megohmmeter to the shell of the sensing element.
- (13) Connect the positive lead of a megohmmeter to one terminal lug of the sensing element.
- (14) Apply the applicable voltage shown in the table below to the sensing element.

- (a) Make sure the resistance value is greater than shown:

NOTE: The resistance is measured in Megohms at 70° F. (21° C.)

NOTE: The Fire Detection Equipment Nos. are M26011, M26012, M26013, and M26014.

Table 207/26-11-00-993-840 Minimum Wire Resistance

Fire Detector Equipment No.	Minimum Resistance at 70° F (Megohm)	Test VDC
M26011	41.33	500
M26012	2.68	250
M26013	44.82	500
M26014	45.93	500

- (15) Replace the sensing element if the resistance is less than the given value.

These are the tasks:

Engine Fire Detector Element Removal, AMM TASK 26-11-01-000-809-001,

Engine Fire Detector Element Installation, AMM TASK 26-11-01-400-809-001.

- (a) If the maintenance message does not show on the ground test display, you corrected the fault.
- (b) If you do not find a problem with the element resistance, then do these steps:
- (c) Re-connect the applicable wiring (WDM 26-11-11).

————— **END OF TASK** —————

811. Fire Loop 2 (right engine) Shorted or Open - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance messages: 26-10232, 26-10242.

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B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure - Shorted or Open

- (1) Examine the wiring and elements for loop B/2 for the engine fire detector elements, M26011, M26012, M26013, M26014 (WDM 26-11-21).
 - (a) Make sure there is no apparent damage to the wiring or elements.
 - (b) If you find a problem with the wiring, do these steps:
 - 1) On the right systems card file (P84), move the power switch for the engine fire control card to the OFF position.
 - 2) Repair the wiring.
 - 3) Connect the wiring between the applicable components (WDM 26-11-21).
 - 4) On the right systems card file (P84), move the power switch for the engine fire control card to the ON position.
 - (c) If you find a problem with an element, replace the applicable element.

These are the tasks:

Engine Fire Detector Element Removal, AMM TASK 26-11-01-000-809-001,
Engine Fire Detector Element Installation, AMM TASK 26-11-01-400-809-001.
 - (d) If the maintenance message does not show on the ground test display, you corrected the fault.
 - (e) If you do not find a problem with the wiring or elements, then continue.
- (2) On the right systems card file (P84), move the power switch for the engine fire control card to the OFF position.
- (3) Do this check of the wiring:
 - (a) Do a wiring check between pins 7 and 8 of connector D71302P at the right engine firewall (WDM 26-11-21).
 - (b) If you find a problem with the wiring, then the short or open is in the wiring or elements in the engine area.
 - (c) If you do not find a problem with the wiring, then the short or open is in the wiring between the right engine area and the engine fire detection card.
- (4) If the short or open is in the wiring between the engine area and the engine fire detection card, do this check of the wiring:
 - (a) Do a wiring check between these pins of connector D71302J and connector DP8408 at the right systems cardfile, P84 (WDM 26-11-21):

D71302J	DP8408
pin 7	pin 42
pin 8	pin 40
 - (b) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.

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- 2) On the right systems card file (P84), move the power switch for the engine fire control card to the ON position.
- 3) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (5) If the short or open is in the wiring or elements in the engine area, then continue.
- (6) Do a wiring check of the wiring and elements between pins 7 and 8 of connector D71302P (WDM 26-11-21).
NOTE: To isolate the fault, disconnect the elements M26011, M26012, M26013, M26014 and the wiring between them if applicable.
- (7) If you find a problem with the wiring, then do these steps:
 - (a) Repair the wiring.
 - (b) Connect the applicable wiring (WDM 26-11-21).
 - (c) On the right systems card file (P84), move the power switch for the engine fire control card to the ON position.
 - (d) If the maintenance message does not show on the ground test display, you corrected the fault.
- (8) If you find a problem with the elements, then do these steps:
 - (a) Replace the applicable element.
These are the tasks:
Engine Fire Detector Element Removal, AMM TASK 26-11-01-000-809-001,
Engine Fire Detector Element Installation, AMM TASK 26-11-01-400-809-001.
 - (b) If the maintenance message does not show on the ground test display, you corrected the fault.
- (9) If you do not find a problem with the elements or wiring, then continue.



DISCONNECT THE WIRE BUNDLES FROM THE TERMINAL LUGS BEFORE TESTING THE DETECTOR RESISTANCE AND MEASURING THE INSULATION RESISTANCE; OTHERWISE, DAMAGE TO OTHER DETECTORS IN THE LOOP MAY OCCUR.

- (10) With digital/analog multimeter, COM-1793, measure the resistance between the terminal lugs of the element.
NOTE: The temperature of the fire detector element should be stable at ambient room temperature before measuring the resistance.
 - (a) Make sure the maximum resistance between each terminal lug is not greater than shown:
NOTE: The resistance is measured in ohms at 70° F. (21° C.)
NOTE: The Fire Detection Equipment Nos. are M26011, M26012, M26013, and M26014.

Table 208/26-11-00-993-842 Maximum Wire Resistance

Fire Detector Equipment No.	Maximum Wire Resistance (ohm)
M26011	7.4
M26012	5.8
M26013	6.8

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Table 208/26-11-00-993-842 Maximum Wire Resistance (Continued)

Fire Detector Equipment No.	Maximum Wire Resistance (ohm)
M26014	6.8

- (11) Replace the sensing element if the resistance is higher than the given value.

These are the tasks:

Engine Fire Detector Element Removal, AMM TASK 26-11-01-000-809-001,

Engine Fire Detector Element Installation, AMM TASK 26-11-01-400-809-001.

- (a) If the maintenance message does not show on the ground test display, you corrected the fault.
- (b) If you do not find a problem with the element resistance, then continue.
- (12) Connect the negative lead of a megohmmeter to the shell of the sensing element.
- (13) Connect the positive lead of a megohmmeter to one terminal lug of the sensing element.
- (14) Apply the applicable voltage shown in the table below to the sensing element.
- (a) Make sure the resistance value is greater than shown:

NOTE: The resistance is measured in Megohms at 70° F. (21° C.)

NOTE: The Fire Detection Equipment Nos. are M26011, M26012, M26013, and M26014.

Table 209/26-11-00-993-844 Minimum Wire Resistance

Fire Detector Equipment No.	Minimum Resistance at 70° F (Megohm)	Test VDC
M26011	41.33	500
M26012	2.68	250
M26013	44.82	500
M26014	45.93	500

- (15) Replace the sensing element if the resistance is less than the given value.

These are the tasks:

Engine Fire Detector Element Removal, AMM TASK 26-11-01-000-809-001,

Engine Fire Detector Element Installation, AMM TASK 26-11-01-400-809-001.

- (a) If the maintenance message does not show on the ground test display, you corrected the fault.
- (b) If you do not find a problem with the element resistance, then do these steps:
- (c) Re-connect the applicable wiring WDM 26-11-21.

————— **END OF TASK** —————

812. Eng Fire Loop Shorted Between Detector and Card - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance messages: 26-11101, 26-11102, 26-11451, 26-11452, 26-12101, 26-12102, 26-12451, 26-12452.

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B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then there was an intermittent fault. Do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure - Shorted Between Detector and Card

- (1) Find the applicable engine fire detector in the table that follows:

Table 210/26-11-00-993-802

MESSAGE NUMBER	ENGINE	LOOP	EQUIP NUMBER	CARD FILE	CONN NUMBER	PIN NUMBER
26-11101	Left	1	M26014	Left	DP8509	40
26-11102	Right	1	M26014	Right	DP8409	40
26-11451	Left	1	M26012	Left	DP8509	21
26-11452	Right	1	M26012	Right	DP8409	21
26-12101	Left	2	M26014	Left	DP8508	40
26-12102	Right	2	M26014	Right	DP8408	40
26-12451	Left	2	M26012	Left	DP8508	42
26-12452	Right	2	M26012	Right	DP8408	42

- (2) To get access to the Systems card files,
Open this access panel:

Number	Name/Location
117AL	Main Equipment Center Access Door
- (3) Set the power switch for the engine fire detection card in the applicable systems card file to the OFF position.
- (4) Disconnect the wiring from the applicable Loop of the fire detector element (WDM 26-11-11) (WDM 26-11-21).
- (5) Disconnect the applicable connector from the systems card file (WDM 26-11-11) (WDM 26-11-21).
- (6) Do a wiring check between the applicable loop of the fire detector element, and pin of the applicable connector (WDM 26-11-11) (WDM 26-11-21).
- (7) If you find a problem with the wiring, then do these steps:
 - (a) Repair the wiring.
 - (b) Re-connect the wiring to the fire detector element (WDM 26-11-11) (WDM 26-11-21).
 - (c) Re-connect the connector to the systems card file (WDM 26-11-11) (WDM 26-11-21).
 - (d) Set the power switch for the engine fire detection card to the ON position (WDM 26-11-11) (WDM 26-11-21).
 - (e) If the maintenance message does not show on the ground test display, you corrected the fault.
- (8) If you do not find a problem with the wiring, then do these steps:
 - (a) Replace the applicable fire detector element.

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These are the tasks:

Engine Fire Detector Element Removal, AMM TASK 26-11-01-000-809-001,
Engine Fire Detector Element Installation, AMM TASK 26-11-01-400-809-001.

- (b) Re-connect the wiring to the fire detector element (WDM 26-11-11) (WDM 26-11-21).
- (c) Re-connect the connector to the systems card file (WDM 26-11-11) (WDM 26-11-21).
- (d) Set the power switch for the engine fire detection card to the ON position.
- (e) If the maintenance message does not show on the ground test display, you corrected the fault.

————— **END OF TASK** —————

813. Engine Fire Loop Shorted Between Detectors - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance messages: 26-11121, 26-11122, 26-11231, 26-11232, 26-11341, 26-11342, 26-12121, 26-12122, 26-12231, 26-12232, 26-12341, 26-12342.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Do this check of the wiring:
 - (a) Find the locations, equipment numbers, and card file for the applicable engine fire detector in the table below:

Table 211/26-11-00-993-805

MESSAGE NUMBER	ENGINE	LOOP	DETECTOR LOCATION	EQUIP NUMBERS	CARD FILE
26-11121	Left	1	Aft Right Aft Lower	M26014 M26011	Left
26-11122	Right	1	Aft Right Aft Lower	M26014 M26011	Right
26-11231	Left	1	Aft Lower Aft Left	M26011 M26013	Left
26-11232	Right	1	Aft Lower Aft Left	M26011 M26013	Right
26-11341	Left	1	Aft Left Fwd Lower	M26013 M26012	Left
26-11342	Right	1	Aft Left Fwd Lower	M26013 M26012	Right
26-12121	Left	2	Aft Right Aft Lower	M26014 M26011	Left
26-12122	Right	2	Aft Right Aft Lower	M26014 M26011	Right
26-12231	Left	2	Aft Lower Aft Left	M26011 M26013	Left
26-12232	Right	2	Aft Lower Aft Left	M26011 M26013	Right
26-12341	Left	2	Aft Left Fwd Lower	M26013 M26012	Left
26-12342	Right	2	Aft Left Fwd Lower	M26013 M26012	Right

- (b) Set the power switch for the engine fire detection card in the applicable systems card file to the OFF position.

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- (c) Disconnect the wiring between the applicable fire detector elements (WDM 26-11-11) (WDM 26-11-21).
 - (d) Do a wiring check between the applicable fire detector elements.
 - (e) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-connect the wiring between the fire detector elements.
 - 3) Set the power switch for the engine fire detection card to the ON position.
 - 4) If the maintenance message does not show on the ground test display, you corrected the fault.
 - (f) If you do not find a problem with the wiring, then continue.
- (2) Replace one of the fire detector elements listed for the maintenance message.
- These are the tasks:
- Engine Fire Detector Element Removal, AMM TASK 26-11-01-000-809-001,
Engine Fire Detector Element Installation, AMM TASK 26-11-01-400-809-001.
- (a) Re-connect the wiring between the fire detector elements.
 - (b) Set the power switch for the engine fire detection card to the ON position.
 - (c) If the maintenance message does not show on the ground test display, you corrected the fault.
 - (d) If the maintenance message shows on the ground test display, then continue.
- (3) Replace the other fire detector element listed for the maintenance message.
- These are the tasks:
- Engine Fire Detector Element Removal, AMM TASK 26-11-01-000-809-001,
Engine Fire Detector Element Installation, AMM TASK 26-11-01-400-809-001.
- (a) If the maintenance message does not show on the ground test display, you corrected the fault.

————— **END OF TASK** —————

814. Engine Fire/Ovht Detector Shorted - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance messages: 26-11011, 26-11012, 26-11021, 26-11022, 26-11031, 26-11032, 26-11041, 26-11042, 26-12011, 26-12012, 26-12021, 26-12022, 26-12031, 26-12032, 26-12041, 26-12042.

B. Fault Isolation Procedure

- (1) Find the applicable engine fire detector in the table that follows:

Table 212/26-11-00-993-809

DETECTOR LOCATION	ENGINE	LOOP	DETECTOR EQUIPMENT NUMBER
Aft Right	Left	1	M26014
Aft Right	Right	1	M26014
Aft Lower	Left	1	M26011

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Table 212/26-11-00-993-809 (Continued)

DETECTOR LOCATION	ENGINE	LOOP	DETECTOR EQUIPMENT NUMBER
Aft Lower	Right	1	M26011
Aft Left	Left	1	M26013
Aft Left	Right	1	M26013
Fwd Lower	Left	1	M26012
Fwd Lower	Right	1	M26012
Aft Right	Left	2	M26014
Aft Right	Right	2	M26014
Aft Lower	Left	2	M26011
Aft Lower	Right	2	M26011
Aft Left	Left	2	M26013
Aft Left	Right	2	M26013
Fwd Lower	Left	2	M26012
Fwd Lower	Right	2	M26012

- (2) Confirm the maintenance message by doing this procedure: Engine Fire Detection Maintenance Message Check, AMM TASK 26-11-00-740-802.
- (3) If not confirmed, do this procedure for the other loops Engine Fire Detection Maintenance Message Check, AMM TASK 26-11-00-740-802..
- (4) If all loops test OK, then do these tasks: Engine Fire Detection Card Removal, AMM TASK 26-11-03-000-801, Engine Fire Detection Card Installation, AMM TASK 26-11-03-400-801.
- (5) If confirmed, replace the applicable engine fire detector element.
These are the tasks:
Engine Fire Detector Element Removal, AMM TASK 26-11-01-000-809-001,
Engine Fire Detector Element Installation, AMM TASK 26-11-01-400-809-001.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— **END OF TASK** —————

815. Eng-R Fire Detection Card No Output on EFDC 429 Bus - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 26-18892.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

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C. Fault Isolation Procedure

NOTE: If you use a megohmmeter to do wiring checks on an ARINC 429 bus (or if you need the exact resistance of the bus wiring), first remove all the LRUs that are connected to the bus (use the WDM to tell which LRUs are on the bus). Then re-install the LRUs when you are done.

- (1) Replace the right engine fire detection card, A10, in the right systems cardfile, P85.

These are the tasks:

Engine Fire Detection Card Removal, AMM TASK 26-11-03-000-801,

Engine Fire Detection Card Installation, AMM TASK 26-11-03-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), then you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Do this check of the wiring:
- (a) For the right engine fire detection card, A10, in the right systems cardfile, P84, do this task: Engine Fire Detection Card Removal, AMM TASK 26-11-03-000-801.
- (b) Install an extender card, SPL-1814 in slot A10 in the right systems cardfile, P84.
- (c) For the left ASG card, A12, in the right systems cardfile, P84, do this task: ESDS Handling for Printed Circuit Board Removal, AMM TASK 20-41-01-000-801.
- (d) Install an extender card, SPL-1814 in slot A12 in the right systems cardfile, P84.
- (e) Do a wiring check between these pins of connector XA10 and connector XA12 in the right systems cardfile (SSM 26-11-21, SSM 31-09-22):

Right Systems Cardfile P84

--	--
XA10	XA12
pin 134	pin 69
pin 137	pin 72

- (f) If you find a problem with the wiring, then do these steps:
- 1) Repair the wiring.
 - 2) Remove the extender card, SPL-1814 from slot A10 in the right systems cardfile, P84.
 - 3) Re-install the right engine fire detection card, A10, in the right systems cardfile, P84; (AMM TASK 26-11-03-400-801).
 - 4) Remove the extender card, SPL-1814 from slot A12 in the right systems cardfile, P84.
 - 5) Re-install the left ASG card, A12, in the right systems cardfile, P84; (AMM TASK 20-41-01-400-801).
 - 6) Set the power switch for the right engine fire detection card, A10, in the right systems cardfile, P84, to the ON position.
 - 7) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - 8) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Do this check of the wiring:

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- (a) For the right engine fire detection card, A10, in the right systems cardfile, P84, do this task: Engine Fire Detection Card Removal, AMM TASK 26-11-03-000-801.
- (b) Install an extender card, SPL-1814 in slot A10 in the right systems cardfile, P84.
- (c) For the right ASG card, A15, in the right systems cardfile, P84, do this task: ESDS Handling for Printed Circuit Board Removal, AMM TASK 20-41-01-000-801.
- (d) Install an extender card, SPL-1814 in slot A15 in the right systems cardfile, P84.
- (e) Do a wiring check between these pins of connector XA10 and connector XA15 in the right systems cardfile (SSM 26-11-21, SSM 31-09-22):

Right Systems Cardfile P84

--	--
XA10	XA15
pin 134	pin 69
pin 137	pin 72

- (f) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Remove the extender card, SPL-1814 from slot A10 in the right systems cardfile, P84.
 - 3) Re-install the right engine fire detection card, A10, in the right systems cardfile, P84; (AMM TASK 26-11-03-400-801).
 - 4) Remove the extender card, SPL-1814 from slot A15 in the right systems cardfile, P84.
 - 5) Re-install the right ASG card, A15, in the right systems cardfile, P84; (AMM TASK 20-41-01-400-801).
 - 6) Set the power switch for the right engine fire detection card, A10, in the right systems cardfile, P84, to the ON position.
 - 7) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— **END OF TASK** —————

816. EICAS Messages OVERHEAT ENG L (R) - Fault Isolation

A. Initial Evaluation

NOTE: This message shows when there is an engine overheat detected for the left (right) engine.

- (1) Do a check for air leakage from the pneumatic ducts at the engine.

————— **END OF TASK** —————

817. EICAS Messages DET OVERHEAT ENG L (R) - Fault Isolation

A. Initial Evaluation

NOTE: This message shows when the FIRE/OVERHEAT test indicates the L (R) engine overheat detection system is failed.

- (1) Look at the Extended Maintenance, Present Leg Faults display on the MAT for maintenance messages related to the engine overheat detection system.
 - (a) If you find maintenance messages related to the engine overheat detection system, then do these steps:

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- 1) Find each maintenance message in the applicable FIM Maintenance Message Index.
- 2) Do the specified fault isolation task.

———— **END OF TASK** ————

818. Engine Fire Detection Card Loop 2 Power Loss - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance messages: 26-10031, 26-10032.

B. Maintenance Messages

- (1) This task is for maintenance messages: 26-10031, 26-10032.

C. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

D. Fault Isolation Procedure

- (1) Check Loop 2 power supply using the list below. If the switch is in the OFF position, turn it to the ON position.

Systems Card		PSU Lin/Mon
File	Fire Det Card	Card Switch
Left (P85)	A10	A18S1
Right (P84)	A10	A18S1

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), then you have corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Replace the engine fire detection card, A10, in the applicable systems card file.
 - (a) These are the tasks: Engine Fire Detection Card Removal, AMM TASK 26-11-03-000-801
Engine Fire Detection Card Installation, AMM TASK 26-11-03-400-801
 - (b) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), then you have corrected the fault.
 - (c) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Do this check of the wiring:

In the list below, find the applicable fire detection card, PSU linear/monitor card connectors, and pin numbers for the maintenance message.

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Systems Card File

Left (P85)	Fire Det Card	PSU Lin/Mon
	A10	Card A18
	Fire Det Card	PSU Lin/Mon
	Conn	Card Conn
	pin 142	pin 18
	pin 109	pin 15
	pin 103	pin 17
Right (P84)	XA10	XA18
	pin 142	pin 18
	pin 109	pin 15
	pin 103	pin 17

- Remove the applicable engine fire detection card, A10. To remove it, do this task: Engine Fire Detection Card Removal, AMM TASK 26-11-03-000-801.
- Install an extender card, SPL-1814 in slot A10 in the applicable fire detection card location.
- Remove the applicable PSU linear/monitor card. To remove it, do this task: Card File Power Supply (CFPS) Removal, AMM TASK 31-09-01-000-801
- Install an extender card, SPL-1814 in slot A10 in the applicable PSU linear/monitor card location.
- Do a wiring check between the specified pins of the applicable fire detection card connector and the applicable PSU linear/monitor card connector.
- If you find a problem with the wiring, then do these steps:
 - Repair the wiring.
 - Remove the extender card, SPL-1814 from the PSU linear/monitor card location.
 - Re-install the applicable PSU linear/monitor card. To install it, do this task:(Card File Power Supply (CFPS) Installation, AMM TASK 31-09-01-400-801).
 - Remove the extender card, SPL-1814 from the fire detection card location.
 - Re-install the fire detection card. To install it, do this task:(Engine Fire Detection Card Installation, AMM TASK 26-11-03-400-801).
 - Make sure that all power switches to the fire detection card(s) are in the ON position.
 - If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you have corrected the fault.

———— **END OF TASK** ————

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802. Relay K26002 Fault - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 26-26004.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows LATCHED for the maintenance message, then do this ground test on the MAT: 26 Cargo Smoke Detection, SYSTEM TEST, Aft Cargo Smoke Detection System.
 - (a) If the maintenance message shows on the ground test display, then do the Fault Isolation Procedure below.
- (3) If the MAT shows LATCHED for the maintenance message, then do this ground test on the MAT: 26 Cargo Smoke Detection, SYSTEM TEST, Fwd Cargo Smoke Detection System.
 - (a) If the maintenance message shows on the ground test display, then do the Fault Isolation Procedure below.
 - (b) If the maintenance message does not show on the ground test display, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Push and hold the FIRE TEST switch on the Attendant Switch Panel for approximately fifteen seconds.
 - (a) If the maintenance message does not show on the ground test display, you corrected the fault.
 - (b) If the maintenance message shows on the ground test display, then continue.
- (2) Replace the LLAR SMK/TEST Relay, K26002, in the power management panel, P110 (WDM 26-25-11).
- (3) Push and hold the FIRE TEST switch on the Attendant Switch Panel.
 - (a) In the LLAR entrance enclosure, make sure these fire alarm indications occur:
 - 1) The fire bell comes on
 - 2) On the Attendant Switch panel, the LLAR FIRE light comes on
 - 3) On the Attendant Switch panel, the EVAC light comes on
 - 4) An amber light above the door on the outside of the entrance enclosure flashes
 - (b) In the LLAR, make sure these fire alarm indications occur:
 - 1) The fire bell comes on
 - 2) The EVAC light on the CONTROL/WARNING Panel comes on
- (4) Release the FIRE TEST switch on the Attendant Switch Panel.
- (5) Make sure the fire alarm indications stop.
 - (a) If the maintenance message does not show on the ground test display, you corrected the fault.
 - (b) If the maintenance message shows on the ground test display, then continue.
- (6) Do a check of the signal interface unit 1, M24504 in the P110 panel. This is the task:
 - Signal Interface Unit - Exchange Check, AMM TASK 24-09-00-700-801-002
 - (a) Do this ground test on the MAT: 26 Cargo Smoke Detection, SYSTEM TEST, Aft Cargo Smoke Detection System.

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- (b) If the maintenance message does not show on the ground test display, you corrected the fault.
- (c) If the maintenance message shows on the ground test display, then continue.

————— **END OF TASK** —————

806. EICAS Message SMOKE CREW REST F/D - Fault Isolation

A. Initial Evaluation

NOTE: This message shows when a smoke condition is detected in the flight crew rest. No maintenance action is necessary.

————— **END OF TASK** —————

808. EICAS Message SMOKE LAVATORY - Fault Isolation

A. Initial Evaluation

NOTE: This message shows when a smoke condition is detected in one or more of the airplane lavatories or the business communication center lavatory. No maintenance action is necessary.

————— **END OF TASK** —————

809. Lavatory Smoke Detector Failed - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 26-41010.

B. Fault Isolation Procedure

- (1) Replace the smoke detector in the applicable lavatory or business communication center lavatory.

These are the tasks:

Lavatory Smoke Detector Removal, AMM TASK 26-13-01-000-801 or Lavatory Smoke Detector Removal, AMM TASK 26-13-01-000-803,

Lavatory Smoke Detector Installation, AMM TASK 26-13-01-400-801 or Lavatory Smoke Detector Installation, AMM TASK 26-13-01-400-802.

- (a) If the lavatory or business communication center smoke detector fault does not show on the Cabin System Control Panel (CSCP) display, then you corrected the fault.
- (b) If the lavatory or business communication smoke detector fault shows on the CSCP display, then continue.
- (2) Do a wiring check between these pins of the connector for the applicable lavatory module, M25XXX, and the connector for the OEU, M23XXX (WDM 26-13-12, WDM 26-13-13, WDM 26-13-14, WDM 26-13-15).

M25XXX	M23XXX
pin 8	pin 14
pin 10	pin 15
pin 9	pin 1

- (a) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.

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- (b) Do this task: Lavatory Smoke Detection - Operational Test, AMM TASK 26-13-00-710-801.
- (c) If the lavatory smoke detector fault does not show on the CSCP display, then you corrected the fault.
- (d) If the lavatory smoke detector fault shows on the CSCP display, then continue.
- (3) Replace the applicable OEU.
These are the tasks:
Lavatory Overhead Electronics Unit Removal, AMM TASK 23-33-02-000-804,
Lavatory Overhead Electronics Unit Installation, AMM TASK 23-33-02-400-804.
- (a) Do this task: Lavatory Smoke Detection - Operational Test, AMM TASK 26-13-00-710-801.
- (b) If the lavatory smoke detector fault does not show on the CSCP display, then you corrected the fault.

————— **END OF TASK** —————

810. Smoke Detector Does not Turn Off - Fault Isolation

A. Fault Isolation Procedure

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- (1) Push the alarm interrupt switch on the smoke detector with an applicable tool.
 - (a) If the alarm indications stop, then you corrected the fault.
 - (b) If the alarm indications do not stop, then continue.

ARO ALL; AIRPLANES WITH KIDDE SMOKE DETECTORS

- (2) Push the horn cancel switch on the smoke detector with an applicable tool.
 - (a) If the alarm indications stop, then you corrected the fault.
 - (b) If the alarm indications do not stop, then continue.

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- (3) Replace the applicable lavatory smoke detector.
These are the tasks:
Lavatory Smoke Detector Removal, AMM TASK 26-13-01-000-801 or Lavatory Smoke Detector Removal, AMM TASK 26-13-01-000-803,
Lavatory Smoke Detector Installation, AMM TASK 26-13-01-400-801 or Lavatory Smoke Detector Installation, AMM TASK 26-13-01-400-802.
- (a) Do this task: Lavatory Smoke Detection - Operational Test, AMM TASK 26-13-00-710-801.
- (b) If the alarm indications stop, then you corrected the fault.

————— **END OF TASK** —————

811. Cabin System Control Panel SMOKE DETECTED message - Fault Isolation

A. Fault Isolation Procedure

- (1) Examine the applicable lavatory for signs of smoke.
 - (a) If there is smoke in the lavatory, remove the smoke.

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- (b) If the lavatory SMOKE DETECTED fault does not show on the Cabin System Control Panel (CSCP) display, then you corrected the fault.
- (c) If there are no signs of smoke in the lavatory, then continue.
- (2) Push the reset switch on the Cabin System Control Panel (CSCP).
 - (a) If the lavatory SMOKE DETECTED fault does not show on the CSCP display, then you corrected the fault.
 - (b) If the lavatory SMOKE DETECTED fault shows on the CSCP display, then continue.
- (3) Do this task: Lavatory Smoke Detection - Self Test, AMM TASK 26-13-00-740-801.
 - (a) If the lavatory smoke detector does not pass the test, replace the lavatory smoke detector.

These are the tasks:

Lavatory Smoke Detector Removal, AMM TASK 26-13-01-000-801 or Lavatory Smoke Detector Removal, AMM TASK 26-13-01-000-803,

Lavatory Smoke Detector Installation, AMM TASK 26-13-01-400-801 or Lavatory Smoke Detector Installation, AMM TASK 26-13-01-400-802.
 - (b) If the lavatory SMOKE DETECTED fault does not show on the CSCP display, then you corrected the fault.
 - (c) If the lavatory SMOKE DETECTED fault shows on the CSCP display, then continue.
- (4) Do a wiring check between these pins of the connector for the applicable lavatory module, M250445, and the connector for the OEU, M23413 (WDM 26-13-12, WDM 26-13-13, WDM 26-13-14, WDM 26-13-15).

M25045	M23413
pin 8	pin 14
pin 10	pin 15
pin 9	pin 1

- (a) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Do this task: Lavatory Smoke Detection - Self Test, AMM TASK 26-13-00-740-801.
 - 3) If the lavatory SMOKE DETECTED fault does not show on the CSCP display, then you corrected the fault.
 - 4) If the lavatory SMOKE DETECTED fault shows on the CSCP display, then continue.
- (b) If you do not find a problem with the wiring, then continue.
- (5) Replace the applicable OEU.

These are the tasks:

Lavatory Overhead Electronics Unit Removal, AMM TASK 23-33-02-000-804,

Lavatory Overhead Electronics Unit Installation, AMM TASK 23-33-02-400-804.

 - (a) Do this task: Lavatory Smoke Detection - Self Test, AMM TASK 26-13-00-740-801.
 - (b) If the lavatory SMOKE DETECTED fault does not show on the CSCP display, then you corrected the fault.

———— **END OF TASK** ————

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824. EICAS Message SMOKE COMPT UPR DR 2 - Fault Isolation

A. Fault Isolation Procedure

- (1) The message is shown when smoke is detected by the Overhead Flight Crew Rest Smoke Detection System. This causes a discrete alarm signal to be sent from the Overhead Flight Crew Rest Module to the ELMS P210 panel. The ELMS P210 panel detects the alarm signal and transmits it via ARINC 629. The message is also shown when the self test switch is pressed for any Overhead Flight Crew Rest or Flight Attendant Rest smoke detector.

———— **END OF TASK** ————

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801. APU Fire Loops 1 and 2 Connected Incorrectly - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 26-10020.

B. General

- (1) Each APU fire detector has two elements: loop A/1 and loop B/2. To prevent cross-wiring, the ends of the elements are different sizes. Each element uses a No. 8 fastener on one end and a No. 10 fastener on the other end. The elements are installed opposite to each other so that each end of the detector assembly has a No. 8 connection and a No. 10 connection. If the elements are connected incorrectly, loop A/1 will be connected to loop B/2 somewhere in the loop.

C. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

D. Fault Isolation Procedure

- (1) Examine the wiring and elements for loops A/1 and B/2 for the fire detector elements, M26008, M26009, M26010 (WDM 26-15-11).
 - (a) Make sure the wiring and elements for loop A/1 are not connected to loop B/2.
 - (b) If the wiring or elements for loop A/1 are connected to loop B/2, do these steps:
 - 1) On the left systems card file (P85), move the power switch for the APU fire control card to the OFF position.
 - 2) Disconnect the applicable wiring or elements that were installed incorrectly (AMM TASK 26-15-01-000-802).
 - 3) Re-connect the applicable wiring or elements correctly (AMM TASK 26-15-01-400-801).
 - 4) On the left systems card file (P85), move the power switch for the APU fire control card to the ON position.
 - (c) If the maintenance message does not show on the ground test display, you corrected the fault.

————— END OF TASK —————

802. APU Fire Loop 1 Shorted - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 26-10100.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

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C. Fault Isolation Procedure

- (1) In the APU compartment, examine the wiring and elements for loop A/1 for the fire detector elements, M26008, M26009, M26010 (WDM 26-15-11).
 - (a) Make sure there is no apparent damage to the wiring or elements.
 - (b) If you find a problem with the wiring, do these steps:
 - 1) On the left systems card file (P85), move the power switch for the APU fire control card to the OFF position.
 - 2) Repair the wiring.
 - 3) Connect the wiring between the applicable components (WDM 26-15-11).
 - 4) On the left systems card file (P85), move the power switch for the APU fire control card to the ON position.
 - (c) If you find a problem with an element, replace the applicable element, M26008, M26009, M26010 for Loop A/1.

These are the tasks:
APU Fire Detector Element Removal, AMM TASK 26-15-01-000-801,
APU Fire Detector Element Installation, AMM TASK 26-15-01-400-801.
 - (d) If the maintenance message does not show on the ground test display, you corrected the fault.
 - (e) If you do not find a problem with the wiring or elements, then continue.
- (2) On the left systems card file (P85), move the power switch for the APU fire control card to the OFF position.
- (3) Do this check of the wiring:
 - (a) Do a wiring check between pins 1 and 7 of connector D7963P at the APU firewall (WDM 26-15-11).
 - (b) If you find a problem with the wiring, then the short is in the wiring or elements in the APU compartment.
 - (c) If you do not find a problem with the wiring, then the short is in the wiring between the APU firewall and the APU fire detection card.
- (4) If the short is in the wiring between the APU firewall and the APU fire detection card, do this check of the wiring:
 - (a) Do a wiring check between these pins of connector D7963J and connector DP8509 at the left systems cardfile, P85 (WDM 26-15-11):

Systems Card File - Left P85

--	--
D7963J	DP8509
pin 1	pin 34
pin 7	pin 52

- (b) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) On the left systems card file (P85), move the power switch for the APU fire control card to the ON position.

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- 3) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (5) If the short is in the wiring or elements in the APU compartment, then continue.
- (6) Do a wiring check of the wiring and elements between pins 1 and 7 of connector D7963P (WDM 26-15-11).
- NOTE: To isolate the fault, disconnect the elements M26008, M26009, M26010 and the wiring between them if applicable.
- (7) If you find a problem with the wiring, then do these steps:
- (a) Repair the wiring.
 - (b) Connect the applicable wiring (WDM 26-15-11).
 - (c) On the left systems card file (P85), move the power switch for the APU fire control card to the ON position.
 - (d) If the maintenance message does not show on the ground test display, you corrected the fault.
- (8) If you find a problem with the elements, then do these steps:
- (a) Replace the applicable fire detector element, M26008, M26009, M26010 for Loop A/1.
These are the tasks:
APU Fire Detector Element Removal, AMM TASK 26-15-01-000-801,
APU Fire Detector Element Installation, AMM TASK 26-15-01-400-801.
 - (b) If the maintenance message does not show on the ground test display, you corrected the fault.
- (9) If you do not find a problem with the elements or wiring, then continue.



DISCONNECT THE WIRE BUNDLES FROM THE TERMINAL LUGS BEFORE YOU DO A TEST OF THE DETECTOR RESISTANCE, AND MEASURE THE INSULATION RESISTANCE. IF YOU DO NOT DISCONNECT THE WIRE BUNDLES, DAMAGE TO OTHER DETECTORS IN THE LOOP CAN OCCUR.

- (10) With digital/analog multimeter, COM-1793, measure the resistance between the terminal lugs of the element.
- NOTE: The temperature of the fire detector element should be stable at ambient room temperature before measuring the resistance.
- (a) Make sure the maximum resistance between each terminal lug is not greater than shown:
- NOTE: The resistance is measured in ohms at 70° F. (21° C.)
- NOTE: The Fire Detection Equipment Nos. are M26008, M26009, and M26010.

Maximum Wire Resistance

Fire Detector Equipment No.	Maximum Wire Resistance (ohm)
M26008	4.2
M26009	10.8
M26010	6.5

- (11) Replace the sensing element if the resistance is higher than the given value.
- These are the tasks:

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APU Fire Detector Element Removal, AMM TASK 26-15-01-000-801,

APU Fire Detector Element Installation, AMM TASK 26-15-01-400-801

- (a) If the maintenance message does not show on the ground test display, you corrected the fault
- (b) If you do not find a problem with the element resistance, then continue.
- (12) Connect the negative lead of a megohmmeter to the shell of the sensing element.
- (13) Connect the positive lead of a megohmmeter to one terminal lug of the sensing element.
- (14) Apply the applicable voltage shown in the table below to the sensing element.
 - (a) Make sure the resistance value is greater than shown:
NOTE: The resistance is measured in Megohms at 70° F. (21° C.)
NOTE: The Fire Detection Equipment Nos. are M26008, M26009, and M26010

Fire Detector Equipment No.	Minimum Wire Resistance	
	Minimum Resistance at 70° F (Megohm)	Test VDC
M26008	0.56	10
M26009	1.32	10
M26010	1.31	10

- (15) Replace the sensing element if the resistance is less than the given value.
These are the tasks:
APU Fire Detector Element Removal, AMM TASK 26-15-01-000-801,
APU Fire Detector Element Installation, AMM TASK 26-15-01-400-801
 - (a) If the maintenance message does not show on the ground test display, you corrected the fault.
 - (b) If you do not find a problem with the element resistance. then do these steps:
 - (c) Re-connect the applicable wiring (WDM 26-15-11)

————— **END OF TASK** —————

803. APU Fire Loop 1 Open - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 26-10140.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) In the APU compartment, examine the wiring and elements for loop A/1 for the fire detector elements, M26008, M26009, M26010 (WDM 26-15-11).
 - (a) Make sure there is no apparent damage to the wiring or elements.
 - (b) If you find a problem with the wiring, do these steps:

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- 1) On the left systems card file (P85), move the power switch for the APU fire control card to the OFF position.
 - 2) Repair the wiring.
 - 3) Connect the wiring between the applicable components (WDM 26-15-11).
 - 4) On the left systems card file (P85), move the power switch for the APU fire control card to the ON position.
- (c) If you find a problem with an element, replace the applicable element, M26008, M26009, M26010 for Loop A/1.
- These are the tasks:
- APU Fire Detector Element Removal, AMM TASK 26-15-01-000-801,
APU Fire Detector Element Installation, AMM TASK 26-15-01-400-801.
- (d) If the maintenance message does not show on the ground test display, you corrected the fault.
- (e) If you do not find a problem with the wiring or elements, then continue.
- (2) Do this continuity check for the fire/ovht test switch, S3, in the cargo fire/engine control module, P5:
- (a) Move the power switch for the APU fire-detection card in the left system cardfile, P85, to the OFF position.
 - (b) Disconnect the pin 38 from the left systems cardfile, P85.
 - (c) Do a visual check on pin 26 and 25 to make sure that the wires have a good connection.
 - (d) Move the S3 switch into the TEST mode.
 - (e) Measure the resistance between pins 26 and 25 of the S3 switch.
 - 1) If there is no continuity, then replace the S3 switch.
 - 2) If there is continuity, connect the pin 38 from the left systems cardfile, P85, then continue.
- (3) On the left systems card file (P85), move the power switch for the APU fire control card to the OFF position.
- (4) Do this check of the wiring:
- (a) Do a wiring check between pins 1 and 7 of connector D7963P at the APU firewall (WDM 26-15-11).
 - (b) If you find a problem with the wiring, then the open is in the wiring or elements in the APU compartment.
 - (c) If you do not find a problem with the wiring, then the open is in the wiring between the APU firewall and the APU fire detection card.
- (5) If the open is in the wiring between the APU firewall and the APU fire detection card, do this check of the wiring:
- (a) Do a wiring check between these pins of connector D7963J and connector DP8509 at the left systems cardfile, P85 (WDM 26-15-11):



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Systems Card File - Left P85

--	--
D7963J	DP8509
pin 1	pin 34
pin 7	pin 52

- (b) If you find a problem with the wiring, then do these steps:
- 1) Repair the wiring.
 - 2) On the left systems card file (P85), move the power switch for the APU fire control card to the ON position.
 - 3) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (6) If the open is in the wiring or elements in the APU compartment, then continue.
- (7) Do a wiring check of the wiring and elements between pins 1 and 7 of connector D7963P (WDM 26-15-11).
- NOTE:** To isolate the fault, disconnect the elements M26008, M26009, M26010 and the wiring between them if applicable.
- (8) If you find a problem with the wiring, then do these steps:
- (a) Repair the wiring.
 - (b) Connect the applicable wiring (WDM 26-15-11).
 - (c) On the left systems card file (P85), move the power switch for the APU fire control card to the ON position.
 - (d) If the maintenance message does not show on the ground test display, you corrected the fault.
- (9) If you find a problem with the elements, then do these steps:
- (a) Replace the applicable fire detector element, M26008, M26009, M26010 for Loop A/1.
These are the tasks:
APU Fire Detector Assembly Removal, AMM TASK 26-15-01-000-802,
APU Fire Detector Element Installation, AMM TASK 26-15-01-400-801.
 - (b) If the maintenance message does not show on the ground test display, you corrected the fault.
- (10) If you do not find a problem with the elements or wiring, then continue



DISCONNECT THE WIRE BUNDLES FROM THE TERMINAL LUGS BEFORE YOU DO A TEST OF THE DETECTOR RESISTANCE, AND MEASURE THE INSULATION RESISTANCE. IF YOU DO NOT DISCONNECT THE WIRE BUNDLES, DAMAGE TO OTHER DETECTORS IN THE LOOP CAN OCCUR.

- (11) With digital/analog multimeter, COM-1793, measure the resistance between the terminal lugs of the element.

NOTE: The temperature of the fire detector element should be stable at ambient room temperature before measuring the resistance.

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- (a) Make sure the maximum resistance between each terminal lug is not greater than shown:

NOTE: The resistance is measured in ohms at 70° F. (21° C.)

NOTE: The Fire Detection Equipment Nos. are M26008, M26009, and M26010.

Maximum Wire Resistance

Fire Detector Equipment No.	Maximum Wire Resistance (ohm)
M26008	4.2
M26009	10.8
M26010	6.5

- (12) Replace the sensing element if the resistance is higher than the given value.

These are the tasks:

APU Fire Detector Element Removal, AMM TASK 26-15-01-000-801,

APU Fire Detector Element Installation, AMM TASK 26-15-01-400-801

- (a) If the maintenance message does not show on the ground test display, you corrected the fault
- (b) If you do not find a problem with the element resistance, then continue.
- (13) Connect the negative lead of a megohmmeter to the shell of the sensing element.
- (14) Connect the positive lead of a megohmmeter to one terminal lug of the sensing element.
- (15) Apply the applicable voltage shown in the table below to the sensing element.

- (a) Make sure the resistance value is greater than shown:

NOTE: The resistance is measured in Megohms at 70° F. (21° C.)

NOTE: The Fire Detection Equipment Nos. are M26008, M26009, and M26010

Minimum Wire Resistance

Fire Detector Equipment No.	Minimum Resistance at 70° F (Megohm)	Test VDC
M26008	0.56	10
M26009	1.32	10
M26010	1.31	10

- (16) Replace the sensing element if the resistance is less than the given value.

These are the tasks:

APU Fire Detector Element Removal, AMM TASK 26-15-01-000-801,

APU Fire Detector Element Installation, AMM TASK 26-15-01-400-801

- (a) If the maintenance message does not show on the ground test display, you corrected the fault.
- (b) If you do not find a problem with the element resistance. then do these steps:
- (c) Re-connect the applicable wiring (WDM 26-15-11)

————— **END OF TASK** —————

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804. APU Fire Loop 1 Short Between Detectors - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 26-13100.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) On the left systems card file (P85), move the power switch for the APU fire control card to the OFF position.
- (2) Disconnect the wiring between Loop A/1 of the fire detector element, M26008, and Loop A/1 of the fire detector element, M26010, (WDM 26-15-11).
- (3) Do a wiring check between Loop A/1 of the fire detector element, M26008, and Loop A/1 of the fire detector element, M26010, (WDM 26-15-11).
- (4) If you find a problem with the wiring, then do these steps:
 - (a) Repair the wiring.
 - (b) Connect the wiring between Loop A/1 of the fire detector element, M26008, and Loop A/1 of the fire detector element, M26010, (WDM 26-15-11).
 - (c) On the left systems card file (P85), move the power switch for the APU fire control card to the ON position.
 - (d) If the maintenance message does not show on the ground test display, you corrected the fault.
- (5) If you do not find a problem with the wiring, then do these steps:
 - (a) Re-connect the wiring between Loop A/1 of the fire detector element, M26008, and Loop A/1 of the fire detector element, M26010, (WDM 26-15-11).
 - (b) Replace the fire detector element, M26008, for Loop A/1.

These are the tasks:
APU Fire Detector Assembly Removal, AMM TASK 26-15-01-000-802,
APU Fire Detector Element Installation, AMM TASK 26-15-01-400-801.
 - (c) If the maintenance message does not show on the ground test display, you corrected the fault.
- (6) If the maintenance message still shows on the ground test display, then do these steps:
 - (a) Replace the fire detector element, M26010, for Loop A/1 (WDM 26-15-11).
 - (b) If the maintenance message does not show on the ground test display, you corrected the fault.

————— END OF TASK —————

805. APU Fire Loop 1 Short Between Detector and Card - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 26-13110.

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B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) To get access to the APU Compartment,

Open these access panels:

<u>Number</u>	<u>Name/Location</u>
315AL	Auxiliary Power Unit (APU) Access Door, Left
316AR	Auxiliary Power Unit (APU) Access Door, Right

- (2) To get access to the Power Management Panels,

Open this access panel:

<u>Number</u>	<u>Name/Location</u>
117AL	Main Equipment Center Access Door

- (3) On the left systems card file (P85), move the power switch for the APU fire control card to the OFF position.
- (4) Disconnect the wiring between Loop A/1 of the fire detector element, M26008, and the APU Fire Detection Card at the Left Systems Cardfile, P85 (WDM 26-15-11).
- (5) Do a wiring check between Loop A/1 of the fire detector element, M26008, and pin 34 of connector DP8509 at the Left Systems Cardfile, P85 (WDM 26-15-11).
- (6) If you find a problem with the wiring, then do these steps:
 - (a) Repair the wiring.
 - (b) Connect the wiring between Loop A/1 of the fire detector element, M26008, and the APU Fire Detection Card at the Left Systems Cardfile, P85 (WDM 26-15-11).
 - (c) On the left systems card file (P85), move the power switch for the APU fire control card to the ON position.
 - (d) If the maintenance message does not show on the ground test display, you corrected the fault.
- (7) If you do not find a problem with the wiring, then do these steps:
 - (a) Re-connect the wiring between Loop A/1 of the fire detector element, M26008, and the APU Fire Detection Card at the Left Systems Cardfile, P85 (WDM 26-15-11).
 - (b) Replace Loop A/1 of the fire detector element, M26008.
These are the tasks:
APU Fire Detector Assembly Removal, AMM TASK 26-15-01-000-802,
APU Fire Detector Element Installation, AMM TASK 26-15-01-400-801.
- (8) Do these steps to complete the task:
 - (a) Close these access panels:

<u>Number</u>	<u>Name/Location</u>
315AL	Auxiliary Power Unit (APU) Access Door, Left
316AR	Auxiliary Power Unit (APU) Access Door, Right

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- (b) Close this access panel:

<u>Number</u>	<u>Name/Location</u>
117AL	Main Equipment Center Access Door

————— **END OF TASK** —————

806. APU Fire Detection Card No Output on APUFDC 429 Bus - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 26-18893.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

NOTE: If you use a megohmmeter to do wiring checks on an ARINC 429 bus (or if you need the exact resistance of the bus wiring), first remove all the LRUs that are connected to the bus (use the WDM to tell which LRUs are on the bus). Then re-install the LRUs when you are done.

- (1) Replace the APU fire detection card, A9, in the left systems cardfile, P85.
These are the tasks:
Engine Fire Detection Card Removal, AMM TASK 26-11-03-000-801,
Engine Fire Detection Card Installation, AMM TASK 26-11-03-400-801.
- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), then you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Replace the left ARINC signal gateway (ASG) card, A12, in the left systems cardfile, P85.
These are the tasks:
ESDS Handling for Printed Circuit Board Removal, AMM TASK 20-41-01-000-801,
ESDS Handling for Printed Circuit Board Installation, AMM TASK 20-41-01-400-801.
- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Replace the right ASG card, A15, in the left systems cardfile, P85.
These are the tasks:
ESDS Handling for Printed Circuit Board Removal, AMM TASK 20-41-01-000-801,
ESDS Handling for Printed Circuit Board Installation, AMM TASK 20-41-01-400-801.
- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (4) Do this check of the wiring:
- (a) For the APU fire detection card, A9, in the left systems cardfile, P85, do this task: APU Fire Control Card Removal, AMM TASK 26-15-03-000-801.

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- (b) Install an extender card, SPL-1658 in slot A9 in the left systems cardfile, P85.
- (c) For the left ASG card, A12, in the left systems cardfile, P85, do this task: ESDS Handling for Printed Circuit Board Removal, AMM TASK 20-41-01-000-801.
- (d) Install an extender card, SPL-1814 in slot A12 in the left systems cardfile, P85.
- (e) Do a wiring check between these pins of connector XA9 and connector XA12 in the left systems cardfile (SSM 26-15-11, SSM 31-09-12):

Systems Card File - Left P85

--	--
XA9	XA12
pin 134	pin 74
pin 137	pin 77

- (f) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Remove the extender card, SPL-1814 from slot A9 in the left systems cardfile, P85.
 - 3) Re-install the APU fire detection card, A9, in the left systems cardfile, P85; (AMM TASK 26-15-03-400-801).
 - 4) Remove the extender card, SPL-1814 from slot A12 in the left systems cardfile, P85.
 - 5) Re-install the left ASG card, A12, in the left systems cardfile, P85; (AMM TASK 20-41-01-400-801).
 - 6) Move the power switch for the APU fire detection card, A9, in the left systems cardfile, P85, to the ON position.
 - 7) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - 8) If the MAT shows ACTIVE for the maintenance message, then continue.
- (5) Do this check of the wiring:
 - (a) For the APU fire detection card, A9, in the left systems cardfile, P85, do this task: APU Fire Control Card Removal, AMM TASK 26-15-03-000-801.
 - (b) Install an extender card, SPL-1814 in slot A9 in the left systems cardfile, P85.
 - (c) For the right ASG card, A15, in the left systems cardfile, P85, do this task: ESDS Handling for Printed Circuit Board Removal, AMM TASK 20-41-01-000-801.
 - (d) Install an extender card, SPL-1814 in slot A15 in the left systems cardfile, P85.
 - (e) Do a wiring check between these pins of connector XA9 and connector XA15 in the left systems cardfile (SSM 26-15-11, SSM 31-09-12):

SYstems Card File - Left P85

--	--
XA9	XA15
pin 134	pin 74
pin 137	pin 77

- (f) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.

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- 2) Remove the extender card, SPL-1814 from slot A9 in the left systems cardfile, P85.
 - 3) Re-install the APU fire detection card, A9, in the left systems cardfile, P85; (AMM TASK 26-15-03-400-801).
 - 4) Remove the extender card, SPL-1814 from slot A15 in the left systems cardfile, P85.
 - 5) Re-install the right ASG card, A15, in the left systems cardfile, P85; (AMM TASK 20-41-01-400-801).
 - 6) Move the power switch for the APU fire detection card, A9, in the left systems cardfile, P85, to the ON position.
 - 7) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - 8) If the MAT shows ACTIVE for the maintenance message, then continue.
- (6) Do this check of the wiring:
- (a) Move the power switch for the APU fire detection card, A9, in the left systems cardfile, P85, to the OFF position.
 - (b) Do a wiring check between pin 1 of connector DP8509 on the left systems cardfile and pin 1 of connector D6714 on the right AIMS cabinet, M31201 (WDM 26-15-11).
 - (c) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Move the power switch for the APU fire detection card, A9, in the left systems cardfile, P85, to the ON position.
 - 3) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - 4) If the MAT shows ACTIVE for the maintenance message, then continue.
- (7) Do this check of the wiring:
- (a) Move the power switch for the APU fire detection card, A9, in the left systems cardfile, P85, to the OFF position.
 - (b) Do a wiring check between pin 1 of connector DP8509 on the left systems cardfile and pin 60 of connector D6610 on the left AIMS cabinet, M31101 (WDM 26-15-11).
 - (c) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Move the power switch for the APU fire detection card, A9, in the left systems cardfile, P85, to the ON position.
 - 3) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— **END OF TASK** —————

807. APU Card No Fire Indication During FIRE/OVHT Test - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 26-19010.

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B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows LATCHED for the maintenance message, then do these steps:
 - (a) Do this task: APU Fire Detection Operational Test, AMM TASK 26-15-00-710-801.
 - (b) If the MAT shows ACTIVE or LATCHED then do the Fault Isolation procedure below.
 - (c) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Replace the APU fire detection card, A9, in the left systems cardfile, P85.
These are the tasks:
Engine Fire Detection Card Removal, AMM TASK 26-11-03-000-801,
Engine Fire Detection Card Installation, AMM TASK 26-11-03-400-801.
 - (a) Do this task: APU Fire Detection Operational Test, AMM TASK 26-15-00-710-801.
 - (b) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), then you corrected the fault.
 - (c) If the MAT shows ACTIVE or LATCHED for the maintenance message, then continue.
- (2) Do a check of the signal interface unit, M24504, in the standby power management panel, P310.
This is the task:
Signal Interface Unit - Exchange Check, AMM TASK 24-09-00-700-801-002.
- (3) Do this task: APU Fire Detection Operational Test, AMM TASK 26-15-00-710-801.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), then you corrected the fault.
 - (b) If the MAT shows ACTIVE or LATCHED for the maintenance message, then continue.
- (4) Do this check of the wiring:
 - (a) Move the power switch for the APU fire detection card, A9, in the left systems cardfile, P85, to the OFF position.
 - (b) Do a wiring check between pin 1 of connector DP8509 on the left systems cardfile and pin 1 of connector D6714 on the right AIMS cabinet, M31201 (WDM 26-15-11).
 - (c) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Move the power switch for the APU fire detection card, A9, in the left systems cardfile, P85, to the ON position.
 - 3) Do this task: APU Fire Detection Operational Test, AMM TASK 26-15-00-710-801.
 - 4) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), then you corrected the fault.
 - 5) If the MAT shows ACTIVE or LATCHED for the maintenance message, then continue.
- (5) Do this check of the wiring:
 - (a) Move the power switch for the APU fire detection card, A9, in the left systems cardfile, P85, to the OFF position.

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- (b) Do a wiring check between pin 1 of connector DP8509 on the left systems cardfile and pin 60 of connector D6610 on the left AIMS cabinet, M31101 (WDM 26-15-11).
- (c) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Move the power switch for the APU fire detection card, A9, in the left systems cardfile, P85, to the ON position.
 - 3) Do this task: APU Fire Detection Operational Test, AMM TASK 26-15-00-710-801.
 - 4) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), then you corrected the fault.
 - 5) If the MAT shows ACTIVE or LATCHED for the maintenance message, then continue.
- (6) Do this check of the wiring:
 - (a) Move the power switch for the APU fire detection card, A9, in the left systems cardfile, P85, to the OFF position.
 - (b) Do a wiring check between pin 1 of connector DP8509 on the left systems cardfile and pin 43 of connector DM24411B on the signal conditioning card 2 type C, M24411 (WDM 26-15-11).
 - (c) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Move the power switch for the APU fire detection card, A9, in the left systems cardfile, P85, to the ON position.
 - 3) Do this task: APU Fire Detection Operational Test, AMM TASK 26-15-00-710-801.
 - 4) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), then you corrected the fault.
 - 5) If the MAT shows ACTIVE or LATCHED for the maintenance message, then continue.
- (7) Do this check of the wiring:
 - (a) Do a wiring check between pin 37 of connector DM24411D on the signal conditioning card 2 type C, M24411, and pin 41 of connector DP428 on the P310 electronics unit, M24406 in the standby power management panel, P310 (WDM 26-15-11).
 - (b) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Move the power switch for the APU fire detection card, A9, in the left systems cardfile, P85, to the ON position.
 - 3) Do this task: APU Fire Detection Operational Test, AMM TASK 26-15-00-710-801.
 - 4) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), then you corrected the fault.

————— END OF TASK —————

808. APU Fire Detection Card No Input from ASG Card on ASG Global 429 Bus - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance messages: 26-19906, 26-19909.

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B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

NOTE: If you use a megohmmeter to do wiring checks on an ARINC 429 bus (or if you need the exact resistance of the bus wiring), first remove all the LRUs that are connected to the bus (use the WDM to tell which LRUs are on the bus). Then re-install the LRUs when you are done.

- (1) In the list below, find the applicable ARINC signal gateway (ASG) card, connectors, and pin numbers for the maintenance message.

Table 201/26-15-00-993-801

SYSTEMS CARD		FIRE DET CARD		
FILE	ASG CARD	CONN		ASG CARD CONN
Left (P85)	Left A12	XA9	--	XA12
		pin 115	--	pin 67
		pin 118	--	pin 70
Left (P85)	Right A15	XA9	--	XA15
		pin 151	--	pin 67
		pin 154	--	pin 70

- (2) Replace the APU fire detection card, A9, in the left systems card file.

These are the tasks:

APU Fire Control Card Removal, AMM TASK 26-15-03-000-801,

APU Fire Control Card Installation, AMM TASK 26-15-03-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), then you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Replace the applicable ASG card.

These are the tasks:

ESDS Handling for Printed Circuit Board Removal, AMM TASK 20-41-01-000-801,

ESDS Handling for Printed Circuit Board Installation, AMM TASK 20-41-01-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (4) Do this check of the wiring:
 - (a) Remove the APU fire detection card, A9. To remove it, do this task: APU Fire Control Card Removal, AMM TASK 26-15-03-000-801.
 - (b) Install an extender card, SPL-1814 in the APU fire detection card location.
 - (c) Remove the applicable ASG card. To remove it, do this task: ESDS Handling for Printed Circuit Board Removal, AMM TASK 20-41-01-000-801.

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- (d) Install an extender card, SPL-1814 in the ASG card location.
- (e) Do a wiring check between the specified pins of the APU fire detection card connector and the applicable ASG card connector.
- (f) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Remove the extender card, SPL-1814 from the APU fire detection card location.
 - 3) Re-install the fire detection card. To install it, do this task: APU Fire Control Card Installation, AMM TASK 26-15-03-400-801.
 - 4) Remove the extender card, SPL-1814 from the ASG card location.
 - 5) Re-install the applicable ASG card. To install it, do this task: ESDS Handling for Printed Circuit Board Installation, AMM TASK 20-41-01-400-801.
 - 6) Set the power switch for the engine fire detection card to the ON position.
 - 7) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— **END OF TASK** —————

809. APU Fire Loop 2 Shorted - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 26-10000.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) In the APU compartment, examine the wiring and elements for loop B/2 for the fire detector elements, M26008, M26009, M26010 (WDM 26-15-11).
 - (a) Make sure there is no apparent damage to the wiring or elements.
 - (b) If you find a problem with the wiring, do these steps:
 - 1) On the left systems card file (P85), move the power switch for the APU fire control card to the OFF position.
 - 2) Repair the wiring.
 - 3) Connect the wiring between the applicable components (WDM 26-15-11).
 - 4) On the left systems card file (P85), move the power switch for the APU fire control card to the ON position.
 - (c) If you find a problem with an element, replace the applicable element, M26008, M26009, M26010 for Loop 2/B.

These are the tasks:

APU Fire Detector Element Removal, AMM TASK 26-15-01-000-801,
APU Fire Detector Element Installation, AMM TASK 26-15-01-400-801.
 - (d) If the maintenance message does not show on the ground test display, you corrected the fault.

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- (e) If you do not find a problem with the wiring or elements, then continue.
- (2) On the left systems card file (P85), move the power switch for the APU fire control card to the OFF position.
- (3) Do this check of the wiring:
 - (a) Do a wiring check between pins 1 and 7 of connector D7964P at the APU firewall (WDM 26-15-11).
 - (b) If you find a problem with the wiring, then the short is in the wiring or elements in the APU compartment.
 - (c) If you do not find a problem with the wiring, then the short is in the wiring between the APU firewall and the APU fire detection card.
- (4) If the short is in the wiring between the APU firewall and the APU fire detection card, do this check of the wiring:
 - (a) Do a wiring check between these pins of connector D7964J and connector DP8508 at the left systems cardfile, P85 (WDM 26-15-11):

Systems Card File - Left P85

--	--
D7964J	DP8508
pin 1	pin 57
pin 7	pin 34

- (b) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) On the left systems card file (P85), move the power switch for the APU fire control card to the ON position.
 - 3) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (5) If the short is in the wiring or elements in the APU compartment, then continue.
- (6) Do a wiring check of the wiring and elements between pins 1 and 7 of connector D7964P (WDM 26-15-11).

NOTE: To isolate the fault, disconnect the elements M26008, M26009, M26010 and the wiring between them if applicable.
- (7) If you find a problem with the wiring, then do these steps:
 - (a) Repair the wiring.
 - (b) Connect the applicable wiring (WDM 26-15-11).
 - (c) On the left systems card file (P85), move the power switch for the APU fire control card to the ON position.
 - (d) If the maintenance message does not show on the ground test display, you corrected the fault.
- (8) If you find a problem with the elements, then do these steps:
 - (a) Replace the applicable fire detector element, M26008, M26009, M26010 for Loop B/2.

These are the tasks:
APU Fire Detector Element Removal, AMM TASK 26-15-01-000-801,
APU Fire Detector Element Installation, AMM TASK 26-15-01-400-801.

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- (b) If the maintenance message does not show on the ground test display, you corrected the fault.
- (9) If you do not find a problem with the elements or wiring, then continue.



DISCONNECT THE WIRE BUNDLES FROM THE TERMINAL LUGS BEFORE YOU DO A TEST OF THE DETECTOR RESISTANCE, AND MEASURE THE INSULATION RESISTANCE. IF YOU DO NOT DISCONNECT THE WIRE BUNDLES, DAMAGE TO OTHER DETECTORS IN THE LOOP CAN OCCUR.

- (10) With digital/analog multimeter, COM-1793, measure the resistance between the terminal lugs of the element.

NOTE: The temperature of the fire detector element should be stable at ambient room temperature before measuring the resistance.

- (a) Make sure the maximum resistance between each terminal lug is not greater than shown:

NOTE: The resistance is measured in ohms at 70° F. (21° C.)

NOTE: The Fire Detection Equipment Nos. are M26008, M26009, and M26010.

Maximum Wire Resistance

Fire Detector Equipment No.	Maximum Wire Resistance (ohm)
M26008	4.2
M26009	10.8
M26010	6.5

- (11) Replace the sensing element if the resistance is higher than the given value.

These are the tasks:

APU Fire Detector Element Removal, AMM TASK 26-15-01-000-801,

APU Fire Detector Element Installation, AMM TASK 26-15-01-400-801

- (a) If the maintenance message does not show on the ground test display, you corrected the fault
- (b) If you do not find a problem with the element resistance, then continue.
- (12) Connect the negative lead of a megohmmeter to the shell of the sensing element.
- (13) Connect the positive lead of a megohmmeter to one terminal lug of the sensing element.
- (14) Apply the applicable voltage shown in the table below to the sensing element.

- (a) Make sure the resistance value is greater than shown:

NOTE: The resistance is measured in Megohms at 70° F. (21° C.)

NOTE: The Fire Detection Equipment Nos. are M26008, M26009, and M26010

Minimum Wire Resistance

Fire Detector Equipment No.	Minimum Resistance at 70° F (Megohm)	Test VDC
M26008	0.56	10
M26009	1.32	10
M26010	1.31	10

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- (15) Replace the sensing element if the resistance is less than the given value.

These are the tasks:

APU Fire Detector Element Removal, AMM TASK 26-15-01-000-801,

APU Fire Detector Element Installation, AMM TASK 26-15-01-400-801

- (a) If the maintenance message does not show on the ground test display, you corrected the fault.
- (b) If you do not find a problem with the element resistance. then do these steps:
- (c) Re-connect the applicable wiring (WDM 26-15-11)

————— **END OF TASK** —————

810. APU Fire Detection Card Internal Fault - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 26-10010.

B. Fault Isolation Procedure

- (1) Replace the APU Fire Detection Card, P85A09.

These are the tasks:

APU Fire Control Card Removal, AMM TASK 26-15-03-000-801,

APU Fire Control Card Installation, AMM TASK 26-15-03-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— **END OF TASK** —————

811. APU Fire Detector Lower Loop 1 Shorted - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 26-10130.

B. Fault Isolation Procedure

- (1) Replace the lower APU fire detector element for loop A/1, M26009.

These are the tasks:

APU Fire Detector Assembly Removal, AMM TASK 26-15-01-000-802,

APU Fire Detector Element Installation, AMM TASK 26-15-01-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— **END OF TASK** —————

812. APU Fire Detector Upper Aft Loop 2 Shorted - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 26-10220.

B. Fault Isolation Procedure

- (1) Replace the upper aft APU fire detector element for loop B/2, M26010.

These are the tasks:

APU Fire Detector Assembly Removal, AMM TASK 26-15-01-000-802,

APU Fire Detector Element Installation, AMM TASK 26-15-01-400-801.

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- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— END OF TASK —————

813. APU Fire Loop 2 Open - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 26-10240.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) In the APU compartment, examine the wiring and elements for loop B/2 for the fire detector elements, M26008, M26009, M26010 (WDM 26-15-11).
- (a) Make sure there is no apparent damage to the wiring or elements.
- (b) If you find a problem with the wiring, do these steps:
- 1) On the left systems card file (P85), move the power switch for the APU fire control card to the OFF position.
 - 2) Repair the wiring.
 - 3) Connect the wiring between the applicable components (WDM 26-15-11).
 - 4) On the left systems card file (P85), move the power switch for the APU fire control card to the ON position.
- (c) If you find a problem with an element, replace the applicable element, M26008, M26009, M26010 for Loop B/2.
- These are the tasks:
- APU Fire Detector Element Removal, AMM TASK 26-15-01-000-801,
APU Fire Detector Element Installation, AMM TASK 26-15-01-400-801.
- (d) If the maintenance message does not show on the ground test display, you corrected the fault.
- (e) If you do not find a problem with the wiring or elements, then continue.
- (2) Do this continuity check for the fire/ovht test switch, S3, in the cargo fire/engine control module, P5:
- (a) Move the power switch for the APU fire-detection card in the left system cardfile, P85, to the OFF position.
- (b) Disconnect the pin 38 from the left systems cardfile, P85.
- (c) Do a visual check on pin 26 and 25 to make sure that the wires have a good connection.
- (d) Move the S3 switch into the TEST mode.
- (e) Measure the resistance between pins 26 and 25 of the S3 switch.
- 1) If there is no continuity, then replace the S3 switch.
 - 2) If there is continuity, connect the pin 38 from the left systems cardfile, P85, then continue.

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- (3) On the left systems card file (P85), move the power switch for the APU fire control card to the OFF position.
- (4) Do this check of the wiring:
 - (a) Do a wiring check between pins 1 and 7 of connector D7964P at the APU firewall (WDM 26-15-11).
 - (b) If you find a problem with the wiring, then the open is in the wiring or elements in the APU compartment.
 - (c) If you do not find a problem with the wiring, then the open is in the wiring between the APU firewall and the APU fire detection card.
- (5) If the open is in the wiring between the APU firewall and the APU fire detection card, do this check of the wiring:
 - (a) Do a wiring check between these pins of connector D7964J and connector DP8509 at the left systems cardfile, P85 (WDM 26-15-11):

Systems Card File - Left P85

--	--
D7964J	DP8508
pin 1	pin 57
pin 7	pin 34

- (b) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) On the left systems card file (P85), move the power switch for the APU fire control card to the ON position.
 - 3) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (6) If the open is in the wiring or elements in the APU compartment, then continue.
- (7) Do a wiring check of the wiring and elements between pins 1 and 7 of connector D7964P (WDM 26-15-11).

NOTE: To isolate the fault, disconnect the elements M26008, M26009, M26010 and the wiring between them if applicable.
- (8) If you find a problem with the wiring, then do these steps:
 - (a) Repair the wiring.
 - (b) Connect the applicable wiring (WDM 26-15-11).
 - (c) On the left systems card file (P85), move the power switch for the APU fire control card to the ON position.
 - (d) If the maintenance message does not show on the ground test display, you corrected the fault.
- (9) If you find a problem with the elements, then do these steps:
 - (a) Replace the applicable fire detector element, M26008, M26009, M26010 for Loop B/2.

These are the tasks:
APU Fire Detector Element Removal, AMM TASK 26-15-01-000-801,
APU Fire Detector Element Installation, AMM TASK 26-15-01-400-801.

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- (b) If the maintenance message does not show on the ground test display, you corrected the fault.
- (10) If you do not find a problem with the elements or wiring, then continue.



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- (11) With digital/analog multimeter, COM-1793, measure the resistance between the terminal lugs of the element.

NOTE: The temperature of the fire detector element should be stable at ambient room temperature before measuring the resistance.

- (a) Make sure the maximum resistance between each terminal lug is not greater than shown:

NOTE: The resistance is measured in ohms at 70° F. (21° C.)

NOTE: The Fire Detection Equipment Nos. are M26008, M26009, and M26010.

Maximum Wire Resistance

Fire Detector Equipment No.	Maximum Wire Resistance (ohm)
M26008	4.2
M26009	10.8
M26010	6.5

- (12) Replace the sensing element if the resistance is higher than the given value.

These are the tasks:

APU Fire Detector Element Removal, AMM TASK 26-15-01-000-801,

APU Fire Detector Element Installation, AMM TASK 26-15-01-400-801

- (a) If the maintenance message does not show on the ground test display, you corrected the fault
- (b) If you do not find a problem with the element resistance, then continue.
- (13) Connect the negative lead of a megohmmeter to the shell of the sensing element.
- (14) Connect the positive lead of a megohmmeter to one terminal lug of the sensing element.
- (15) Apply the applicable voltage shown in the table below to the sensing element.

- (a) Make sure the resistance value is greater than shown:

NOTE: The resistance is measured in Megohms at 70° F. (21° C.)

NOTE: The Fire Detection Equipment Nos. are M26008, M26009, and M26010

Minimum Wire Resistance

Fire Detector Equipment No.	Minimum Resistance at 70° F (Megohm)	Test VDC
M26008	0.56	10
M26009	1.32	10
M26010	1.31	10

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- (16) Replace the sensing element if the resistance is less than the given value.

These are the tasks:

APU Fire Detector Element Removal, AMM TASK 26-15-01-000-801,

APU Fire Detector Element Installation, AMM TASK 26-15-01-400-801

- (a) If the maintenance message does not show on the ground test display, you corrected the fault.
- (b) If you do not find a problem with the element resistance. then do these steps:
- (c) Re-connect the applicable wiring (WDM 26-15-11)

————— **END OF TASK** —————

814. APU Fire Detector Upper Forward Loop 1 Shorted - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 26-11110.

B. Fault Isolation Procedure

- (1) Replace the upper forward APU fire detector element for loop A/1, M26008.

These are the tasks:

APU Fire Detector Assembly Removal, AMM TASK 26-15-01-000-802,

APU Fire Detector Element Installation, AMM TASK 26-15-01-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— **END OF TASK** —————

815. APU Fire Detector Upper Aft Loop 1 Shorted - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 26-11120.

B. Fault Isolation Procedure

- (1) Replace the upper aft APU fire detector element for loop A/1, M26010.

These are the tasks:

APU Fire Detector Assembly Removal, AMM TASK 26-15-01-000-802,

APU Fire Detector Element Installation, AMM TASK 26-15-01-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— **END OF TASK** —————

816. APU Fire Detector Upper Forward Loop 2 Shorted - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 26-11210.

B. Fault Isolation Procedure

- (1) Replace the upper forward APU fire detector element for loop B/2, M26008.

These are the tasks:

APU Fire Detector Assembly Removal, AMM TASK 26-15-01-000-802,

APU Fire Detector Element Installation, AMM TASK 26-15-01-400-801.

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- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— END OF TASK —————

817. APU Fire Detector Lower Loop 2 Shorted - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 26-11230.

B. Fault Isolation Procedure

- (1) Replace the lower APU fire detector element for loop B/2, M26009.

These are the tasks:

APU Fire Detector Assembly Removal, AMM TASK 26-15-01-000-802,

APU Fire Detector Element Installation, AMM TASK 26-15-01-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— END OF TASK —————

818. APU Fire Loop 1 Short Between Detectors - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 26-13120.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) On the left systems card file (P85), move the power switch for the APU fire control card to the OFF position.
- (2) Disconnect the wiring between Loop A/1 of the fire detector element, M26009, and Loop A/1 of the fire detector element, M26010, (WDM 26-15-11).
- (3) Do a wiring check between Loop A/1 of the fire detector element, M26009, and Loop A/1 of the fire detector element, M26010, (WDM 26-15-11).
- (4) If you find a problem with the wiring, then do these steps:
- (a) Repair the wiring.
 - (b) Connect the wiring between Loop A/1 of the fire detector element, M26009, and Loop A/1 of the fire detector element, M26010, (WDM 26-15-11).
 - (c) On the left systems card file (P85), move the power switch for the APU fire control card to the ON position.
 - (d) If the maintenance message does not show on the ground test display, you corrected the fault.
- (5) If you do not find a problem with the wiring, then do these steps:
- (a) Re-connect the wiring between Loop A/1 of the fire detector element, M26009, and Loop A/1 of the fire detector element, M26010, (WDM 26-15-11).
 - (b) Replace the fire detector element, M26009, for Loop A/1.

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These are the tasks:

APU Fire Detector Assembly Removal, AMM TASK 26-15-01-000-802,

APU Fire Detector Element Installation, AMM TASK 26-15-01-400-801.

- (c) If the maintenance message does not show on the ground test display, you corrected the fault.
- (6) If the maintenance message still shows on the ground test display, then do these steps:
 - (a) Replace the fire detector element, M26010, for Loop A/1 (WDM 26-15-11).
 - (b) If the maintenance message does not show on the ground test display, you corrected the fault.

————— END OF TASK —————

819. APU Fire Loop 1 Short Between Detector and Card - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 26-13130.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) To get access to the APU Compartment,

Open these access panels:

<u>Number</u>	<u>Name/Location</u>
315AL	Auxiliary Power Unit (APU) Access Door, Left
316AR	Auxiliary Power Unit (APU) Access Door, Right

- (2) To get access to the Power Management Panels,

Open this access panel:

<u>Number</u>	<u>Name/Location</u>
117AL	Main Equipment Center Access Door

- (3) On the left systems card file (P85), move the power switch for the APU fire control card to the OFF position.
- (4) Disconnect the wiring between Loop A/1 of the fire detector element, M26009, and the APU Fire Detection Card at the Left Systems Cardfile, P85 (WDM 26-15-11).
- (5) Do a wiring check between Loop A/1 of the fire detector element, M26009, and pin 52 of connector DP8509 at the Left Systems Cardfile, P85 (WDM 26-15-11).
- (6) If you find a problem with the wiring, then do these steps:
 - (a) Repair the wiring.
 - (b) Connect the wiring between Loop A/1 of the fire detector element, M26009, and the APU Fire Detection Card at the Left Systems Cardfile, P85 (WDM 26-15-11).
 - (c) On the left systems card file (P85), move the power switch for the APU fire control card to the ON position.

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- (d) If the maintenance message does not show on the ground test display, you corrected the fault.
- (7) If you do not find a problem with the wiring, then do these steps:
 - (a) Re-connect the wiring between Loop A/1 of the fire detector element, M26009, and the APU Fire Detection Card at the Left Systems Cardfile, P85 (WDM 26-15-11).
 - (b) Replace Loop A/1 of the fire detector element, M26009.
These are the tasks:
APU Fire Detector Assembly Removal, AMM TASK 26-15-01-000-802,
APU Fire Detector Element Installation, AMM TASK 26-15-01-400-801.
- (8) Do these steps to complete the task:
 - (a) Close these access panels:

<u>Number</u>	<u>Name/Location</u>
315AL	Auxiliary Power Unit (APU) Access Door, Left
316AR	Auxiliary Power Unit (APU) Access Door, Right
 - (b) Close this access panel:

<u>Number</u>	<u>Name/Location</u>
117AL	Main Equipment Center Access Door

————— END OF TASK —————

820. APU Fire Loop 2 Short Between Detector and Card - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 26-14200.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) To get access to the APU Compartment,

Open these access panels:

<u>Number</u>	<u>Name/Location</u>
315AL	Auxiliary Power Unit (APU) Access Door, Left
316AR	Auxiliary Power Unit (APU) Access Door, Right

- (2) To get access to the Power Management Panels,

Open this access panel:

<u>Number</u>	<u>Name/Location</u>
117AL	Main Equipment Center Access Door

- (3) On the left systems card file (P85), move the power switch for the APU fire control card to the OFF position.

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- (4) Disconnect the wiring between Loop B/2 of the fire detector element, M26008, and the APU Fire Detection Card at the Left Systems Cardfile, P85 (WDM 26-15-11).
- (5) Do a wiring check between Loop B/2 of the fire detector element, M26008, and pin 34 of connector DP8508 at the Left Systems Cardfile, P85 (WDM 26-15-11).
- (6) If you find a problem with the wiring, then do these steps:
 - (a) Repair the wiring.
 - (b) Connect the wiring between Loop B/2 of the fire detector element, M26008, and the APU Fire Detection Card at the Left Systems Cardfile, P85 (WDM 26-15-11).
 - (c) On the left systems card file (P85), move the power switch for the APU fire control card to the ON position.
 - (d) If the maintenance message does not show on the ground test display, you corrected the fault.
- (7) If you do not find a problem with the wiring, then do these steps:
 - (a) Re-connect the wiring between Loop B/2 of the fire detector element, M26008, and the APU Fire Detection Card at the Left Systems Cardfile, P85 (WDM 26-15-11).
 - (b) Replace Loop B/2 of the fire detector element, M26008.

These are the tasks:
APU Fire Detector Assembly Removal, AMM TASK 26-15-01-000-802,
APU Fire Detector Element Installation, AMM TASK 26-15-01-400-801.
- (8) Do these steps to complete the task:
 - (a) Close these access panels:

<u>Number</u>	<u>Name/Location</u>
315AL	Auxiliary Power Unit (APU) Access Door, Left
316AR	Auxiliary Power Unit (APU) Access Door, Right
 - (b) Close this access panel:

<u>Number</u>	<u>Name/Location</u>
117AL	Main Equipment Center Access Door

————— END OF TASK —————

821. APU Fire Loop 2 Short Between Detectors - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 26-14210.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) On the left systems card file (P85), move the power switch for the APU fire control card to the OFF position.
- (2) Disconnect the wiring between Loop B/2 of the fire detector element, M26008, and Loop B/2 of the fire detector element, M26010, (WDM 26-15-11).

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- (3) Do a wiring check between Loop B/2 of the fire detector element, M26008, and Loop B/2 of the fire detector element, M26010, (WDM 26-15-11).
- (4) If you find a problem with the wiring, then do these steps:
 - (a) Repair the wiring.
 - (b) Connect the wiring between Loop B/2 of the fire detector element, M26008, and Loop B/2 of the fire detector element, M26010, (WDM 26-15-11).
 - (c) On the left systems card file (P85), move the power switch for the APU fire control card to the ON position.
 - (d) If the maintenance message does not show on the ground test display, you corrected the fault.
- (5) If you do not find a problem with the wiring, then do these steps:
 - (a) Re-connect the wiring between Loop B/2 of the fire detector element, M26008, and Loop B/2 of the fire detector element, M26010, (WDM 26-15-11).
 - (b) Replace the fire detector element, M26008, for Loop B/2.

These are the tasks:
APU Fire Detector Assembly Removal, AMM TASK 26-15-01-000-802,
APU Fire Detector Element Installation, AMM TASK 26-15-01-400-801.
 - (c) If the maintenance message does not show on the ground test display, you corrected the fault.
- (6) If the maintenance message still shows on the ground test display, then do these steps:
 - (a) Replace the fire detector element, M26010, for Loop B/2 (WDM 26-15-11).
 - (b) If the maintenance message does not show on the ground test display, you corrected the fault.

————— END OF TASK —————

822. APU Fire Loop 2 Short Between Detectors - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 26-14220.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) On the left systems card file (P85), move the power switch for the APU fire control card to the OFF position.
- (2) Disconnect the wiring between Loop B/2 of the fire detector element, M26009, and Loop B/2 of the fire detector element, M26010, (WDM 26-15-11).
- (3) Do a wiring check between Loop B/2 of the fire detector element, M26009, and Loop B/2 of the fire detector element, M26010, (WDM 26-15-11).
- (4) If you find a problem with the wiring, then do these steps:
 - (a) Repair the wiring.

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- (b) Connect the wiring between Loop B/2 of the fire detector element, M26009, and Loop B/2 of the fire detector element, M26010, (WDM 26-15-11).
- (c) On the left systems card file (P85), move the power switch for the APU fire control card to the ON position.
- (d) If the maintenance message does not show on the ground test display, you corrected the fault.
- (5) If you do not find a problem with the wiring, then do these steps:
 - (a) Re-connect the wiring between Loop B/2 of the fire detector element, M26009, and Loop B/2 of the fire detector element, M26010, (WDM 26-15-11).
 - (b) Replace the fire detector element, M26009, for Loop B/2.

These are the tasks:
APU Fire Detector Assembly Removal, AMM TASK 26-15-01-000-802,
APU Fire Detector Element Installation, AMM TASK 26-15-01-400-801.
- (c) If the maintenance message does not show on the ground test display, you corrected the fault.
- (6) If the maintenance message still shows on the ground test display, then do these steps:
 - (a) Replace the fire detector element, M26010, for Loop B/2 (WDM 26-15-11).
 - (b) If the maintenance message does not show on the ground test display, you corrected the fault.

————— END OF TASK —————

823. APU Fire Loop 2 Short Between Detector and Card - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 26-14230.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) To get access to the APU Compartment,

Open these access panels:

<u>Number</u>	<u>Name/Location</u>
315AL	Auxiliary Power Unit (APU) Access Door, Left
316AR	Auxiliary Power Unit (APU) Access Door, Right

- (2) To get access to the Power Management Panels,

Open this access panel:

<u>Number</u>	<u>Name/Location</u>
117AL	Main Equipment Center Access Door

- (3) On the left systems card file (P85), move the power switch for the APU fire control card to the OFF position.

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- (4) Disconnect the wiring between Loop B/2 of the fire detector element, M26009, and the APU Fire Detection Card at the Left Systems Cardfile, P85 (WDM 26-15-11).
- (5) Do a wiring check between Loop B/2 of the fire detector element, M26009, and pin 57 of connector DP8508 at the Left Systems Cardfile, P85 (WDM 26-15-11).
- (6) If you find a problem with the wiring, then do these steps:
 - (a) Repair the wiring.
 - (b) Connect the wiring between Loop B/2 of the fire detector element, M26009, and the APU Fire Detection Card at the Left Systems Cardfile, P85 (WDM 26-15-11).
 - (c) On the left systems card file (P85), move the power switch for the APU fire control card to the ON position.
 - (d) If the maintenance message does not show on the ground test display, you corrected the fault.
- (7) If you do not find a problem with the wiring, then do these steps:
 - (a) Re-connect the wiring between Loop B/2 of the fire detector element, M26009, and the APU Fire Detection Card at the Left Systems Cardfile, P85 (WDM 26-15-11).
 - (b) Replace Loop B/2 of the fire detector element, M26009.

These are the tasks:
APU Fire Detector Assembly Removal, AMM TASK 26-15-01-000-802,
APU Fire Detector Element Installation, AMM TASK 26-15-01-400-801.
- (8) Do these steps to complete the task:
 - (a) Close these access panels:

<u>Number</u>	<u>Name/Location</u>
315AL	Auxiliary Power Unit (APU) Access Door, Left
316AR	Auxiliary Power Unit (APU) Access Door, Right
 - (b) Close this access panel:

<u>Number</u>	<u>Name/Location</u>
117AL	Main Equipment Center Access Door

————— END OF TASK —————

824. APU Card No Fire Indication During FIRE/OVHT Test - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 49-07970.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows LATCHED for the maintenance message, then do these steps:
 - (a) Do this task: APU Fire Detection Operational Test, AMM TASK 26-15-00-710-801.
 - (b) If the MAT shows ACTIVE or LATCHED then do the Fault Isolation procedure below.
 - (c) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

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C. Fault Isolation Procedure

- (1) Replace the APU fire detection card, A9, in the left systems cardfile, P85.
These are the tasks:
Engine Fire Detection Card Removal, AMM TASK 26-11-03-000-801,
Engine Fire Detection Card Installation, AMM TASK 26-11-03-400-801.
 - (a) Do this task: APU Fire Detection Operational Test, AMM TASK 26-15-00-710-801.
 - (b) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), then you corrected the fault.
 - (c) If the MAT shows ACTIVE or LATCHED for the maintenance message, then continue.
- (2) Do this check of the wiring:
 - (a) Move the power switch for the APU fire detection card, A9, in the left systems cardfile, P85, to the OFF position.
 - (b) Do a wiring check between pin 1 of connector DP8509 on the left systems cardfile and pin 1 of connector D6714 on the right AIMS cabinet, M31201 (WDM 26-15-11).
 - (c) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Move the power switch for the APU fire detection card, A9, in the left systems cardfile, P85, to the ON position.
 - 3) Do this task: APU Fire Detection Operational Test, AMM TASK 26-15-00-710-801.
 - 4) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), then you corrected the fault.
 - 5) If the MAT shows ACTIVE or LATCHED for the maintenance message, then continue.
- (3) Do this check of the wiring:
 - (a) Move the power switch for the APU fire detection card, A9, in the left systems cardfile, P85, to the OFF position.
 - (b) Do a wiring check between pin 1 of connector DP8509 on the left systems cardfile and pin 60 of connector D6610 on the left AIMS cabinet, M31101 (WDM 26-15-11).
 - (c) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Move the power switch for the APU fire detection card, A9, in the left systems cardfile, P85, to the ON position.
 - 3) Do this task: APU Fire Detection Operational Test, AMM TASK 26-15-00-710-801.
 - 4) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), then you corrected the fault.
 - 5) If the MAT shows ACTIVE or LATCHED for the maintenance message, then continue.
- (4) Do this check of the wiring:
 - (a) Move the power switch for the APU fire detection card, A9, in the left systems cardfile, P85, to the OFF position.
 - (b) Do a wiring check between pin 1 of connector DP8509 on the left systems cardfile and pin C10 of connector DM49002A on the APU Controller, M49002 (WDM 26-15-11).

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- (c) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Move the power switch for the APU fire detection card, A9, in the left systems cardfile, P85, to the ON position.
 - 3) Do this task: APU Fire Detection Operational Test, AMM TASK 26-15-00-710-801.
 - 4) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), then you corrected the fault.
 - 5) If the MAT shows ACTIVE or LATCHED for the maintenance message, then continue.
- (5) Replace the APU Controller, M49002.

These are the tasks:

APU Controller (APUC) Removal, AMM TASK 49-61-05-000-801,

APU Controller (APUC) Installation, AMM TASK 49-61-05-400-801.

 - (a) Do this task: APU Fire Detection Operational Test, AMM TASK 26-15-00-710-801.
 - (b) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), then you corrected the fault.

————— **END OF TASK** —————

825. APU Fire Test Fault

A. Maintenance Messages

- (1) This task is for maintenance message: 26-19011.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows LATCHED for the maintenance message, then do these steps:
 - (a) Do this task: APU Fire Detection Operational Test, AMM TASK 26-15-00-710-801.
 - (b) If the MAT shows ACTIVE or LATCHED then do the Fault Isolation procedure below.
 - (c) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Do this continuity check for the fire/ovht test switch, S3, in the cargo fire/engine control module, P5:
 - (a) Move the power switch for the APU fire-detection card in the left system cardfile, P85, to the OFF position.
 - (b) Disconnect the pin 38 from the left systems cardfile, P85.
 - (c) Do a visual check on pin 26 and 25 to make sure that the wires have a good connection.
 - (d) Move the S3 switch into the TEST mode.
 - (e) Measure the resistance between pins 26 and 25 of the S3 switch.
 - 1) If there is no continuity, then replace the S3 switch.
 - 2) If there is continuity, connect the pin 38 from the left systems cardfile, P85, then continue.
- (2) Replace the APU fire detection card, A9, in the left systems cardfile, P85.

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These are the tasks:

Engine Fire Detection Card Removal, AMM TASK 26-11-03-000-801,

Engine Fire Detection Card Installation, AMM TASK 26-11-03-400-801.

- (a) Do this task: APU Fire Detection Operational Test, AMM TASK 26-15-00-710-801.
 - (b) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), then you corrected the fault.
 - (c) If the MAT shows ACTIVE or LATCHED for the maintenance message, then continue.
- (3) Do a check of the signal interface unit No. 1 M24512 in the P310 panel.

This is the task:

Signal Interface Unit - Exchange Check, AMM TASK 24-09-00-700-801-002.

- (a) Do this task: APU Fire Detection Operational Test, AMM TASK 26-15-00-710-801.
 - (b) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), then you corrected the fault.
 - (c) If the MAT shows ACTIVE or LATCHED for the maintenance message, then continue.
- (4) Do this check of the wiring:
- (a) Move the power switch for the APU fire detection card, A9, in the left systems cardfile, P85, to the OFF position.
 - (b) Do a wiring check between pin 16 of connector DP8508 on the left systems cardfile and pin A20 of connector D4901P on the left integration panel P105 (WDM 26-15-11).
 - (c) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Move the power switch for the APU fire detection card, A9, in the left systems cardfile, P85, to the ON position.
 - 3) Do this task: APU Fire Detection Operational Test, AMM TASK 26-15-00-710-801.
 - 4) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), then you corrected the fault.
 - 5) If the MAT shows ACTIVE or LATCHED for the maintenance message, then continue.
- (5) Do this check of the wiring:
- (a) Move the power switch for the APU fire detection card, A9, in the left systems cardfile, P85, to the OFF position.
 - (b) Do a wiring check between pin 1 of connector DP8509 on the left systems cardfile and pin A20 of connector D4901P on the left integration panel P105 (WDM 26-15-11).
 - (c) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Move the power switch for the APU fire detection card, A9, in the left systems cardfile, P85, to the ON position.
 - 3) Do this task: APU Fire Detection Operational Test, AMM TASK 26-15-00-710-801.
 - 4) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), then you corrected the fault.
 - 5) If the MAT shows ACTIVE or LATCHED for the maintenance message, then continue.

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- (6) Do this check of the wiring:
- (a) Move the power switch for the APU fire detection card, A9, in the left systems cardfile, P85, to the OFF position.
 - (b) Do a wiring check between pin 7 of connector D31033 on the standby power management panel and pin 16 of connector DM24313C on the signal interface unit 2 M24313 (WDM 26-15-11).
 - (c) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Move the power switch for the APU fire detection card, A9, in the left systems cardfile, P85, to the ON position.
 - 3) Do this task: APU Fire Detection Operational Test, AMM TASK 26-15-00-710-801.
 - 4) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), then you corrected the fault.
 - 5) If the MAT shows ACTIVE or LATCHED for the maintenance message, then continue.

————— END OF TASK —————

826. APU Fire Detection Card Loop 2 Power Loss - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 26-10030.

B. Maintenance Message

- (1) This task is for maintenance message 26-10030.

C. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

D. Fault Isolation Procedure

- (1) Check Loop 2 power supply using the list below. If the switch is in the OFF position, turn it to the ON position.

Systems Card File	Fire Det Card	PSU Lin/Mon Card Switch
Left (P85)	A9	A3S7

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), then you have corrected the fault.
 - (b) If the MAT shows ACTIVE or LATCHED for the maintenance message, then continue.
- (2) Replace the APU fire detection card, A9, in the left systems card file:
- (a) These are the tasks: APU Fire Control Card Removal, AMM TASK 26-15-03-000-801
APU Fire Control Card Installation, AMM TASK 26-15-03-400-801
 - (b) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), then you corrected the fault.
 - (c) If the MAT shows ACTIVE for the maintenance message, then continue.

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- (3) Do this check of the wiring:
- (a) In the list below, find the applicable fire detection card, PSU Linear/Monitor card, connectors, and pin numbers for the maintenance message..

Systems Card File

	Fire Det Card A9	PSU Lin/Mon Card A3
Left (P85)	XA9	XA3
	pin 142	pin 146
	pin 109	pin 142
	pin 103	pin 143

- (b) Remove the APU fire detection card, A9. To remove it, do this task: APU Fire Control Card Removal, AMM TASK 26-15-03-000-801
- (c) Install an extender card, SPL-1814 in the APU fire detection card location.
- (d) Remove the applicable PSU linear/monitor card. to remove it,do this task: Card File Power Supply (CFPS) Removal, AMM TASK 31-09-01-000-801.
- (e) Install an extender card, SPL-1814 in the PSU linear/monitor card location.
- (f) Do a wiring check between the specified pins of the applicable fire detection card connector and the applicable PSU linear/monitor card connector.
- (g) If you find a problem with the wiring, then do these steps:
- 1) Repair the wiring.
 - 2) Remove the extender card, SPL-1814 from the PSU linear/monitor card location.
 - 3) Re-install the applicable PSU linear/monitor card. To install it, do this task: Card File Power Supply (CFPS) Installation, AMM TASK 31-09-01-400-801
 - 4) Remove the extender card, SPL-1814 from the fire detection card location
 - 5) Re-install the fire detection card. To install it, do this task: Card File Power Supply (CFPS) Installation, AMM TASK 31-09-01-400-801.
 - 6) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), then you have corrected the fault.

———— **END OF TASK** ————

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801. Cargo Smoke Detector (lwr fwd) Incorrect Software - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance messages: 26-20011, 26-20012.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows LATCHED for the maintenance message, then do the applicable ground test on the MAT:
 - (a) 26 Cargo Smoke Detection, SYSTEM TEST, Fwd Cargo Smoke Detection System
 - (b) 26 Cargo Smoke Detection, SYSTEM TEST, Aft Cargo Smoke Detection System.
 - (c) If the maintenance message shows on the ground test display, then do the Fault Isolation Procedure below.
 - (d) If the maintenance message does not show on the ground test display, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Do a check of the system configuration for the applicable smoke detector on the MAT:
 - (a) 26 Cargo Smoke Detection, Cargo Smoke Detector (lwr fwd)
 - (b) 26 Cargo Smoke Detection, Cargo Smoke Detector (lwr aft).
 - (c) Find these components on the display and make sure that the software part numbers are correct:
 - 1) Lower Cargo Smoke Detector - Forward (M26060)
 - 2) Lower Cargo Smoke Detector - Aft (M26061)
 - (d) If the software part numbers are incorrect, for the applicable component, do this task: Cargo Smoke Detectors Software Installation, AMM TASK 26-16-01-400-802.
 - (e) Do the applicable ground test on the MAT:
 - 1) 26 Cargo Smoke Detection, SYSTEM TEST, Fwd Cargo Smoke Detection System
 - 2) 26 Cargo Smoke Detection, SYSTEM TEST, Aft Cargo Smoke Detection System
 - (f) If the maintenance message does not show on the ground test display, you corrected the fault.
 - (g) If the maintenance message shows on the ground test display, then continue.
- (2) Replace the applicable cargo smoke detector, M26060 or M26061.

These are the tasks:

Lower Cargo Smoke Detector Removal, AMM TASK 26-16-01-000-801,
Lower Cargo Smoke Detector Installation, AMM TASK 26-16-01-400-801.

- (a) Do the applicable ground test on the MAT:
 - 1) 26 Cargo Smoke Detection, SYSTEM TEST, Fwd Cargo Smoke Detection System
 - 2) 26 Cargo Smoke Detection, SYSTEM TEST, Aft Cargo Smoke Detection System
- (b) If the maintenance message does not show on the ground test display, you corrected the fault.

————— END OF TASK —————

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802. Cargo Smoke Detector (lwr fwd) Incorrect Program Pins - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance messages: 26-21031, 26-22031.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows LATCHED for the maintenance message, then do this ground test on the MAT: 26 Cargo Smoke Detection, SYSTEM TEST, Fwd Cargo Smoke Detection System.
 - (a) If the maintenance message shows on the ground test display, then do the Fault Isolation Procedure below.
 - (b) If the maintenance message does not show on the ground test display, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Do a check of the system configuration for the lower forward smoke detector on the MAT: 26 Cargo Smoke Detection, Cargo Smoke Detector (lwr fwd).
 - (a) Find these components on the display and make sure that the software part numbers are correct:
 - 1) Lower Cargo Smoke Detector - Forward (M26060)
 - (b) If the software part numbers are incorrect, for the applicable component, do this task: Cargo Smoke Detectors Software Installation, AMM TASK 26-16-01-400-802.
 - (c) Do this ground test on the MAT: 26 Cargo Smoke Detection, SYSTEM TEST, Fwd Cargo Smoke Detection System.
 - (d) If the maintenance message does not show on the ground test display, you corrected the fault.
 - (e) If the maintenance message shows on the ground test display, then continue.
- (2) Replace the forward cargo smoke detector, M26060.

These are the tasks:

Lower Cargo Smoke Detector Removal, AMM TASK 26-16-01-000-801,
Lower Cargo Smoke Detector Installation, AMM TASK 26-16-01-400-801.

 - (a) Do this ground test on the MAT: 26 Cargo Smoke Detection, SYSTEM TEST, Fwd Cargo Smoke Detection System.
 - (b) If the maintenance message does not show on the ground test display, you corrected the fault.
 - (c) If the maintenance message shows on the ground test display, then continue.
- (3) Remove the sidewall lining to get access to the forward cargo smoke detector (AMM TASK 25-52-06-000-801).
- (4) Open these circuit breakers and install safety tags:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
C	28	C26413	FWD CGO SMOKE CTRL CHAN 1

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Right Power Management Panel, P210

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
E	2	C26415	FWD CGO SMOKE CTRL CHAN 2

- (5) Disconnect connector, DM26060A, from the forward cargo smoke detector, M26060.
- (6) Do a wiring check between pin 1 and pin 21 of connector, DM26060A (WDM 26-16-21).
 - (a) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-connect the connector, DM26060A, to the forward cargo smoke detector, M26060.
 - 3) Remove the safety tags and close these circuit breakers:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
C	28	C26413	FWD CGO SMOKE CTRL CHAN 1

Right Power Management Panel, P210

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
E	2	C26415	FWD CGO SMOKE CTRL CHAN 2

- 4) Do this ground test on the MAT: 26 Cargo Smoke Detection, SYSTEM TEST, Fwd Cargo Smoke Detection System.
- 5) If the maintenance message does not show on the ground test display, you corrected the fault.
- 6) If the maintenance message shows on the ground test display, then continue.
- (b) If you do not find a problem with the wiring, then re-connect the connector, DM26060A, to the forward cargo smoke detector, M26060, and continue.
- (7) Disconnect connector, DM26060B, from the forward cargo smoke detector, M26060 (WDM 26-16-21).
- (8) Do a wiring check between pin 1 and pin 21 of connector, DM26060B (WDM 26-16-21).
 - (a) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-connect the connector, DM26060B, to the forward cargo smoke detector, M26060.
 - 3) Remove the safety tags and close these circuit breakers:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
C	28	C26413	FWD CGO SMOKE CTRL CHAN 1

Right Power Management Panel, P210

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
E	2	C26415	FWD CGO SMOKE CTRL CHAN 2

- 4) Do this ground test on the MAT: 26 Cargo Smoke Detection, SYSTEM TEST, Fwd Cargo Smoke Detection System.

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- 5) If the maintenance message does not show on the ground test display, you corrected the fault.
- (b) If you do not find a problem with the wiring, then re-connect the connector, DM26060B, to the forward cargo smoke detector, M26060, and continue.
- (9) Do these steps to complete the task:
 - (a) Remove the safety tags and close these circuit breakers:
Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
C	28	C26413	FWD CGO SMOKE CTRL CHAN 1

Right Power Management Panel, P210

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
E	2	C26415	FWD CGO SMOKE CTRL CHAN 2
 - (b) Install the sidewall lining adjacent to the forward cargo smoke detector (AMM TASK 25-52-06-400-801).

————— END OF TASK —————

803. Cargo Smoke Detector Fan (lwr fwd) Circuit Open or Shorted - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance messages: 26-21041, 26-22041.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows LATCHED for the maintenance message, then do this ground test on the MAT: 26 Cargo Smoke Detection, SYSTEM TEST, Fwd Cargo Smoke Detection System.
 - (a) If the maintenance message shows on the ground test display, then do the Fault Isolation Procedure below.
 - (b) If the maintenance message does not show on the ground test display, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Cycle these circuit breakers:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
C	27	C26414	AFT CGO SMOKE CTRL CHAN 1
C	28	C26413	FWD CGO SMOKE CTRL CHAN 1

Right Power Management Panel, P210

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
E	2	C26415	FWD CGO SMOKE CTRL CHAN 2
E	3	C26416	AFT CGO SMOKE CTRL CHAN 2

- (a) Do this ground test on the MAT: 26 Cargo Smoke Detection, SYSTEM TEST, Fwd Cargo Smoke Detection System.

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- (b) If the maintenance message does not show on the ground test display, you corrected the fault.
- (c) If the maintenance message shows on the ground test display, then continue.
- (2) Remove the sidewall lining to get access to the forward cargo smoke detector. To remove it, (AMM TASK 25-52-06-000-801).
- (3) Replace the applicable fan for the forward cargo smoke detector, M26060.
These are the tasks:
Lower Cargo Smoke Detector Fans Removal, AMM TASK 26-16-02-000-801,
Lower Cargo Smoke Detector Fans Installation, AMM TASK 26-16-02-400-801.
 - (a) Do this ground test on the MAT: 26 Cargo Smoke Detection, SYSTEM TEST, Fwd Cargo Smoke Detection System.
 - (b) If the maintenance message does not show on the ground test display, you corrected the fault.
 - (c) If the maintenance message shows on the ground test display, then continue.
- (4) Replace the forward cargo smoke detector, M26060.
These are the tasks:
Lower Cargo Smoke Detector Removal, AMM TASK 26-16-01-000-801,
Lower Cargo Smoke Detector Installation, AMM TASK 26-16-01-400-801.
 - (a) Do this ground test on the MAT: 26 Cargo Smoke Detection, SYSTEM TEST, Fwd Cargo Smoke Detection System.
 - (b) If the maintenance message does not show on the ground test display, you corrected the fault.

————— **END OF TASK** —————

804. Cargo Smoke Detector Tube Airflow High - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance messages: 26-21051, 26-21052, 26-22051, 26-22052, 26-23051, 26-23052, 26-23071, 26-23072.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Examine the sampling ports in the ceiling of the applicable cargo compartment.
 - (a) Make sure that there is not excessive opening in the tubing.
 - (b) Make sure that the sampling ports are not loose or missing.
 - (c) If the MAT shows NOT ACTIVE for the maintenance message, then you corrected the fault.
 - (d) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) Remove the sidewall lining to get access to the applicable cargo smoke detector. To remove it, (AMM TASK 25-52-06-000-801).

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- (3) Make sure the tubing is installed correctly to the smoke detector.
 - (a) If the tubing is not installed correctly, re-install the tubing.
 - (b) If the MAT shows NOT ACTIVE for the maintenance message, then you corrected the fault.
 - (c) If the MAT shows ACTIVE for the maintenance message, then continue.
- (4) Examine the applicable tubing from the smoke detector to the sampling ports for damage.
 - (a) If there is damage to the tubing, replace the tubing.
 - (b) If the MAT shows NOT ACTIVE for the maintenance message, then you corrected the fault.
 - (c) If the MAT shows ACTIVE for the maintenance message, then continue.
- (5) Replace the applicable cargo smoke detector, M26060 or M26061.

These are the tasks:

Lower Cargo Smoke Detector Removal, AMM TASK 26-16-01-000-801,
Lower Cargo Smoke Detector Installation, AMM TASK 26-16-01-400-801.

 - (a) If the MAT shows NOT ACTIVE for the maintenance message, then you corrected the fault.

————— **END OF TASK** —————

805. Cargo Smoke Detector Tube Airflow Low - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance messages: 26-21061, 26-21062, 26-21063, 26-21064, 26-22061, 26-22062, 26-22063, 26-22064, 26-23061, 26-23062, 26-23063, 26-23064, 26-23073, 26-23074, 26-23081, 26-23082.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Examine the sampling ports in the ceiling of the applicable cargo compartment.
 - (a) Make sure the sampling ports are not clogged.
 - (b) If the sampling ports are clogged, remove the unwanted material from them with your fingers or with compressed air.

NOTE: Squeeze the ends of the sampling ports between your fingers to remove the unwanted material.
 - (c) If the MAT shows NOT ACTIVE for the maintenance message, then you corrected the fault.
 - (d) If the MAT shows ACTIVE for the maintenance message, then continue.
 - (e) Make sure that the cargo smoke detector diaphragm down stream from the fan is not restricting airflow.
 - (f) If the MAT shows NOT ACTIVE for the maintenance message, then you corrected the fault.
 - (g) If the MAT shows ACTIVE for the maintenance message, then continue.

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- (2) Remove the sidewall lining to get access to the applicable cargo smoke detector. To remove it, (AMM TASK 25-52-06-000-801).
- (3) Examine the tubing from the smoke detector to the sampling ports for damage.
 - (a) If there is damage to the tubing, replace the tubing.
 - (b) If the MAT shows NOT ACTIVE for the maintenance message, then you corrected the fault.
 - (c) If the MAT shows ACTIVE for the maintenance message, then continue.
- (4) Replace the applicable cargo smoke detector, M26060 or M26061.

These are the tasks:

Lower Cargo Smoke Detector Removal, AMM TASK 26-16-01-000-801,

Lower Cargo Smoke Detector Installation, AMM TASK 26-16-01-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message, then you corrected the fault.

————— **END OF TASK** —————

806. Cargo Smoke Detector Channel No Output on ARINC 429 Bus - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance messages: 26-28891, 26-28892, 26-28893, 26-28894.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

NOTE: If you use a megohmmeter to do wiring checks on an ARINC 429 bus (or if you need the exact resistance of the bus wiring), first remove all the LRUs that are connected to the bus (use the WDM to tell which LRUs are on the bus). Then re-install the LRUs when you are done.

- (1) In the list below, find the applicable smoke detector, channel, ARINC signal gateway (ASG) card, connectors, and pin numbers for the maintenance message.

Table 201/26-16-00-993-802

SYSTEMS CARD FILE	SMOKE DETECTOR	SMOKE DETECTOR CHANNEL	ASG CARD	SMOKE DETECTOR CONN	ASG CARD CONN
Left (P85)	Forward M26060	1	Left A12	DM26060A pin 32 pin 33	XA12 pin 38 pin 41
Left (P85)	Forward M26060	2	Right A15	DM26060B pin 32 pin 33	XA15 pin 44 pin 47

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Table 201/26-16-00-993-802 (Continued)

SYSTEMS CARD FILE	SMOKE DETECTOR	SMOKE DETECTOR CHANNEL	ASG CARD	SMOKE DETECTOR CONN	ASG CARD CONN
Right (P84)	Aft M26061	1	Left A12	DM26061A pin 32 pin 33	XA12 pin 38 pin 41
Right (P84)	Aft M26061	2	Right A15	DM26061B pin 32 pin 33	XA15 pin 44 pin 47

- (2) Open these circuit breakers and install safety tags:

Left Power Management Panel, P110

Row	Col	Number	Name
C	27	C26414	AFT CGO SMOKE CTRL CHAN 1
C	28	C26413	FWD CGO SMOKE CTRL CHAN 1

Right Power Management Panel, P210

Row	Col	Number	Name
E	2	C26415	FWD CGO SMOKE CTRL CHAN 2
E	3	C26416	AFT CGO SMOKE CTRL CHAN 2

- (3) Remove the sidewall lining adjacent to the applicable cargo smoke detector (AMM TASK 25-52-06-000-801).
- (4) Disconnect the applicable connector from the cargo smoke detector.
- (5) Examine the pins on the connector for damage or contamination.
- (a) If there is damage or contamination, repair or clean the connector.
- (b) Re-connect the connector to the cargo smoke detector.
- (c) Remove the safety tags and close these circuit breakers:

Left Power Management Panel, P110

Row	Col	Number	Name
C	27	C26414	AFT CGO SMOKE CTRL CHAN 1
C	28	C26413	FWD CGO SMOKE CTRL CHAN 1

Right Power Management Panel, P210

Row	Col	Number	Name
E	2	C26415	FWD CGO SMOKE CTRL CHAN 2
E	3	C26416	AFT CGO SMOKE CTRL CHAN 2

- (d) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (e) If the MAT shows ACTIVE for the maintenance message, then continue.
- (6) Do this check of the wiring:

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

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
C	27	C26414	AFT CGO SMOKE CTRL CHAN 1
C	28	C26413	FWD CGO SMOKE CTRL CHAN 1

Right Power Management Panel, P210

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
E	2	C26415	FWD CGO SMOKE CTRL CHAN 2
E	3	C26416	AFT CGO SMOKE CTRL CHAN 2

- (b) Disconnect the connector on the applicable cargo smoke detector.
- (c) Remove the applicable ASG card. To remove it, do this task: ESDS Handling for Printed Circuit Board Removal, AMM TASK 20-41-01-000-801.
- (d) Do a wiring check between the specified pins of the applicable smoke detector connector and the applicable ASG card connector.
- (e) If you find a problem with the wiring, then do these steps:
- 1) Repair the wiring.
 - 2) Re-connect the smoke detector connector.
 - 3) Re-install the ASG card. To install it, do this task: ESDS Handling for Printed Circuit Board Installation, AMM TASK 20-41-01-400-801.
 - 4) Remove the safety tags and close these circuit breakers:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
C	27	C26414	AFT CGO SMOKE CTRL CHAN 1
C	28	C26413	FWD CGO SMOKE CTRL CHAN 1

Right Power Management Panel, P210

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
E	2	C26415	FWD CGO SMOKE CTRL CHAN 2
E	3	C26416	AFT CGO SMOKE CTRL CHAN 2

- 5) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - 6) If the MAT shows ACTIVE for the maintenance message, then continue.
- (7) Replace the applicable cargo smoke detector.
- These are the tasks:
- Lower Cargo Smoke Detector Removal, AMM TASK 26-16-01-000-801,
- Lower Cargo Smoke Detector Installation, AMM TASK 26-16-01-400-801.
- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), then you corrected the fault.
- (8) Do these steps to complete the task:

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- (a) Install the sidewall lining adjacent to the applicable cargo smoke detector (AMM TASK 25-52-06-400-801).

————— END OF TASK —————

807. Cargo Smoke Detector Channel 1,2 No Input from ASG Card on ASG External Signal 429 Bus - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance messages: 26-29905, 26-29906, 26-29911, 26-29912.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

NOTE: If you use a megohmmeter to do wiring checks on an ARINC 429 bus (or if you need the exact resistance of the bus wiring), first remove all the LRUs that are connected to the bus (use the WDM to tell which LRUs are on the bus). Then re-install the LRUs when you are done.

- (1) In the list below, find the applicable smoke detector, channel, ARINC signal gateway (ASG) card, connectors, and pin numbers for the maintenance message.

Table 202/26-16-00-993-801

SYSTEMS CARD FILE	SMOKE DETECTOR	SMOKE DETECTOR CHANNEL	ASG CARD	SMOKE DETECTOR CONN	ASG CARD CONN
Left (P85)	Forward M26060	1	Left A12	DM26060A	XA12
				pin 30	pin 22
				pin 31	pin 25
Left (P85)	Forward M26060	2	Right A15	DM26060B	XA15
				pin 30	pin 22
				pin 31	pin 25
Right (P84)	Aft M26061	1	Left A12	DM26061A	XA12
				pin 30	pin 22
				pin 31	pin 25
Right (P84)	Aft M26061	2	Right A15	DM26061B	XA15
				pin 30	pin 22
				pin 31	pin 25

- (2) Open these circuit breakers and install safety tags:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
C	27	C26414	AFT CGO SMOKE CTRL CHAN 1

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Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
C	28	C26413	FWD CGO SMOKE CTRL CHAN 1

Right Power Management Panel, P210

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
E	2	C26415	FWD CGO SMOKE CTRL CHAN 2
E	3	C26416	AFT CGO SMOKE CTRL CHAN 2

- (3) Remove the sidewall lining adjacent to the applicable cargo smoke detector (AMM TASK 25-52-06-000-801).
- (4) Disconnect the applicable connector from the cargo smoke detector.
- (5) Examine the pins on the connector for damage or contamination.
 - (a) If there is damage or contamination, repair or clean the connector.
 - (b) Re-connect the connector to the cargo smoke detector.
 - (c) Remove the safety tags and close these circuit breakers:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
C	27	C26414	AFT CGO SMOKE CTRL CHAN 1
C	28	C26413	FWD CGO SMOKE CTRL CHAN 1

Right Power Management Panel, P210

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
E	2	C26415	FWD CGO SMOKE CTRL CHAN 2
E	3	C26416	AFT CGO SMOKE CTRL CHAN 2

- (d) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (e) If the MAT shows ACTIVE for the maintenance message, then continue.
- (6) Replace the applicable ASG card.

These are the tasks:

ESDS Handling for Printed Circuit Board Removal, AMM TASK 20-41-01-000-801,

ESDS Handling for Printed Circuit Board Installation, AMM TASK 20-41-01-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (7) Do this check of the wiring:
 - (a) Open these circuit breakers and install safety tags:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
C	27	C26414	AFT CGO SMOKE CTRL CHAN 1
C	28	C26413	FWD CGO SMOKE CTRL CHAN 1

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Right Power Management Panel, P210

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
E	2	C26415	FWD CGO SMOKE CTRL CHAN 2
E	3	C26416	AFT CGO SMOKE CTRL CHAN 2

- (b) Disconnect the connector on the applicable cargo smoke detector.
- (c) Remove the applicable ASG card. To remove it, do this task: ESDS Handling for Printed Circuit Board Removal, AMM TASK 20-41-01-000-801.
- (d) Do a wiring check between the specified pins of the applicable smoke detector connector and the applicable ASG card connector.
- (e) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-connect the smoke detector connector.
 - 3) Re-install the applicable ASG card. To install it, do this task: ESDS Handling for Printed Circuit Board Installation, AMM TASK 20-41-01-400-801.
 - 4) Remove the safety tags and close these circuit breakers:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
C	27	C26414	AFT CGO SMOKE CTRL CHAN 1
C	28	C26413	FWD CGO SMOKE CTRL CHAN 1

Right Power Management Panel, P210

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
E	2	C26415	FWD CGO SMOKE CTRL CHAN 2
E	3	C26416	AFT CGO SMOKE CTRL CHAN 2

- 5) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- 6) If the MAT shows ACTIVE for the maintenance message, then continue.
- (8) Replace the applicable cargo smoke detector.

These are the tasks:

Lower Cargo Smoke Detector Removal, AMM TASK 26-16-01-000-801,
Lower Cargo Smoke Detector Installation, AMM TASK 26-16-01-400-801.

 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), then you corrected the fault.
- (9) Do these steps to complete the task:
 - (a) Install the sidewall lining adjacent to the applicable cargo smoke detector (AMM TASK 25-52-06-400-801).

————— END OF TASK —————

808. Cargo Smoke Detector (lwr fwd) Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance messages: 26-20021, 26-20081, 26-28801.

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B. Fault Isolation Procedure

- (1) Do the ground test on the MAT:
 - (a) 26 Cargo Smoke Detection SYSTEM TEST, Fwd Cargo Smoke Detection System
- (2) If the maintenance message does not show on the ground test display, then there was an intermittent fault.
- (3) If the maintenance message shows on the ground test display or if the intermittent fault continues to occur, then continue.
- (4) Replace the cargo smoke detector in the forward cargo compartment, M26060.

These are the tasks:

Lower Cargo Smoke Detector Removal, AMM TASK 26-16-01-000-801,
Lower Cargo Smoke Detector Installation, AMM TASK 26-16-01-400-801.

 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show) or if the intermittent fault does not continue to occur, you corrected the fault.

————— END OF TASK —————

809. Cargo Smoke Detector (lwr aft) Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance messages: 26-20022, 26-20082, 26-28802.

B. Fault Isolation Procedure

- (1) Do the ground test on the MAT:
 - (a) 26 Cargo Smoke Detection SYSTEM TEST, Aft Cargo Smoke Detection System
- (2) If the maintenance message does not show on the ground test display, then there was an intermittent fault.
- (3) If the maintenance message shows on the ground test display or if the intermittent fault continues to occur, then continue.
- (4) Replace the cargo smoke detector in the aft cargo compartment, M26061.

These are the tasks:

Lower Cargo Smoke Detector Removal, AMM TASK 26-16-01-000-801,
Lower Cargo Smoke Detector Installation, AMM TASK 26-16-01-400-801.

 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show) or if the intermittent fault does not continue to occur, you corrected the fault.

————— END OF TASK —————

810. Cargo Smoke Detector (lwr aft) Incorrect Program Pins - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance messages: 26-21032, 26-22032.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows LATCHED for the maintenance message, then do this ground test on the MAT: 26 Cargo Smoke Detection, SYSTEM TEST, Aft Cargo Smoke Detection System.
 - (a) If the maintenance message shows on the ground test display, then do the Fault Isolation Procedure below.

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- (b) If the maintenance message does not show on the ground test display, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Do a check of the system configuration for the lower aft smoke detector on the MAT: 26 Cargo Smoke Detection, Cargo Smoke Detector (lwr aft).
- (a) Find these components on the display and make sure that the software part numbers are correct:
- 1) Lower Cargo Smoke Detector - Aft (M26061)
- (b) If the software part numbers are incorrect, for the applicable component, do this task: Cargo Smoke Detectors Software Installation, AMM TASK 26-16-01-400-802.
- (c) Do this ground test on the MAT: 26 Cargo Smoke Detection, SYSTEM TEST, Aft Cargo Smoke Detection System.
- (d) If the maintenance message does not show on the ground test display, you corrected the fault.
- (e) If the maintenance message shows on the ground test display, then continue.
- (2) Replace the aft cargo smoke detector, M26061.
- These are the tasks:
- Lower Cargo Smoke Detector Removal, AMM TASK 26-16-01-000-801,
Lower Cargo Smoke Detector Installation, AMM TASK 26-16-01-400-801.
- (a) Do this ground test on the MAT: 26 Cargo Smoke Detection, SYSTEM TEST, Aft Cargo Smoke Detection System.
- (b) If the maintenance message does not show on the ground test display, you corrected the fault.
- (c) If the maintenance message shows on the ground test display, then continue.
- (3) Remove the sidewall lining to get access to the aft cargo smoke detector (AMM TASK 25-52-06-000-801).
- (4) Open these circuit breakers and install safety tags:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
C	27	C26414	AFT CGO SMOKE CTRL CHAN 1

Right Power Management Panel, P210

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
E	3	C26416	AFT CGO SMOKE CTRL CHAN 2

- (5) Disconnect connector, DM26061A, from the aft cargo smoke detector, M26061.
- (6) Do a wiring check between these pairs of pins of connector DM26061A (WDM 26-16-21):

DM26061A	DM26061A
pin 11	pin 24
pin 21	pin 1
pin 22	pin 2

- (a) If you find a problem with the wiring, then do these steps:

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- 1) Repair the wiring.
- 2) Re-connect the connector, DM26061A, to the aft cargo smoke detector, M26061.
- 3) Remove the safety tags and close these circuit breakers:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
C	27	C26414	AFT CGO SMOKE CTRL CHAN 1

Right Power Management Panel, P210

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
E	3	C26416	AFT CGO SMOKE CTRL CHAN 2

- 4) Do this ground test on the MAT: 26 Cargo Smoke Detection, SYSTEM TEST, Aft Cargo Smoke Detection System.
- 5) If the maintenance message does not show on the ground test display, you corrected the fault.
- 6) If the maintenance message shows on the ground test display, then continue.
- (b) If you do not find a problem with the wiring, then re-connect the connector, DM26061A, to the aft cargo smoke detector, M26061, and continue.
- (7) Disconnect connector, DM26061B, from the aft cargo smoke detector, M26061 (WDM 26-16-21).
- (8) Do a wiring check between these pairs of pins of connector, DM26061B (WDM 26-16-21 and WDM 26-14-11):

DM26061B	DM26061B
pin 11	pin 24
pin 21	pin 1
pin 22	pin 2
pin 3	pin 9
pin 4	pin 15

- (a) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-connect the connector, DM26061B, to the aft cargo smoke detector, M26061.
 - 3) Remove the safety tags and close these circuit breakers:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
C	27	C26414	AFT CGO SMOKE CTRL CHAN 1

Right Power Management Panel, P210

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
E	3	C26416	AFT CGO SMOKE CTRL CHAN 2

- 4) Do this ground test on the MAT: 26 Cargo Smoke Detection, SYSTEM TEST, Aft Cargo Smoke Detection System.
- 5) If the maintenance message does not show on the ground test display, you corrected the fault.

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- (b) If you do not find a problem with the wiring, then re-connect the connector, DM26061B, to the aft cargo smoke detector, M26061, and continue.
- (9) Do these steps to complete the task:
 - (a) Remove the safety tags and close these circuit breakers:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
C	27	C26414	AFT CGO SMOKE CTRL CHAN 1

Right Power Management Panel, P210

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
E	3	C26416	AFT CGO SMOKE CTRL CHAN 2

- (b) Install the sidewall lining adjacent to the aft cargo smoke detector (AMM TASK 25-52-06-400-801).

————— END OF TASK —————

811. Cargo Smoke Detector Fan (lwr aft) Circuit Open or Shorted - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance messages: 26-21042, 26-22042.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows LATCHED for the maintenance message, then do this ground test on the MAT: 26 Cargo Smoke Detection, SYSTEM TEST, Aft Cargo Smoke Detection System.
 - (a) If the maintenance message shows on the ground test display, then do the Fault Isolation Procedure below.
 - (b) If the maintenance message does not show on the ground test display, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Cycle these circuit breakers:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
C	27	C26414	AFT CGO SMOKE CTRL CHAN 1
C	28	C26413	FWD CGO SMOKE CTRL CHAN 1

Right Power Management Panel, P210

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
E	2	C26415	FWD CGO SMOKE CTRL CHAN 2
E	3	C26416	AFT CGO SMOKE CTRL CHAN 2

- (a) Do this ground test on the MAT: 26 Cargo Smoke Detection, SYSTEM TEST, Aft Cargo Smoke Detection System.
- (b) If the maintenance message does not show on the ground test display, you corrected the fault.
- (c) If the maintenance message shows on the ground test display, then continue.

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- (2) Remove the sidewall lining to get access to the aft cargo smoke detector. To remove it, (AMM TASK 25-52-06-000-801).
- (3) Replace the applicable fan for the aft cargo smoke detector, M26061.

These are the tasks:

Lower Cargo Smoke Detector Fans Removal, AMM TASK 26-16-02-000-801,

Lower Cargo Smoke Detector Fans Installation, AMM TASK 26-16-02-400-801.

- (a) Do this ground test on the MAT: 26 Cargo Smoke Detection, SYSTEM TEST, Aft Cargo Smoke Detection System.
 - (b) If the maintenance message does not show on the ground test display, you corrected the fault.
 - (c) If the maintenance message shows on the ground test display, then continue.
- (4) Replace the aft cargo smoke detector, M26061.

These are the tasks:

Lower Cargo Smoke Detector Removal, AMM TASK 26-16-01-000-801,

Lower Cargo Smoke Detector Installation, AMM TASK 26-16-01-400-801.

- (a) Do this ground test on the MAT: 26 Cargo Smoke Detection, SYSTEM TEST, Aft Cargo Smoke Detection System.
- (b) If the maintenance message does not show on the ground test display, you corrected the fault.

————— END OF TASK —————

812. EICAS Messages FIRE CARGO FWD (AFT) - Fault Isolation

A. Initial Evaluation

NOTE: This message shows when there is a fire detected in the forward (aft) cargo compartment.

————— END OF TASK —————

813. E/E Cooling Smoke Detected - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance messages: 26-20060, 26-20120.

B. Initial Evaluation

- (1) Remove the source of the smoke.
- (2) If there is no smoke, then do the Fault Isolation Procedure below.

C. Fault Isolation Procedure

- (1) Push and hold the FIRE/OVHT TEST switch on the P5 panel.
- (2) Release the FIRE/OVHT TEST switch after one of the following EICAS Warning messages shows on the center top display unit:
 - (a) FIRE TEST PASS
 - (b) FIRE TEST FAIL

NOTE: One of these messages will appear after approximately five seconds.

- (3) Check the MAT.
 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), then you corrected the fault.

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- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (4) Replace the E/E Cooling smoke detector, M6231.
These are the tasks:
E/E Cooling Smoke Detector Removal, AMM TASK 26-19-01-000-801,
E/E Cooling Smoke Detector Installation, AMM TASK 26-19-01-400-801.
- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— END OF TASK —————

814. Cargo Smoke Detection Heater Zone (1,2,3,4) Channel 1 (lwr fwd) circuit is open or shorted.

A. Maintenance Messages

- (1) This task is for maintenance message: 26-21091.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows LATCHED for the maintenance message, then do the applicable ground test on the MAT:
 - (a) 26 Cargo Smoke Detection, SYSTEM TEST, Fwd Cargo Smoke Detection System
 - (b) If the maintenance message shows on the ground test display, then do the Fault Isolation Procedure below.
 - (c) If the maintenance message does not show on the ground test display, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Disconnect the DB26018 connector from the heater, B26018.
- (2) Measure the resistance between pins 2 and 5 on the heater receptacle.
 - (a) If the resistance value is less than 300 ohms or more than 360 ohms, replace the cargo heater, B26018.
These are the tasks:
Lower Cargo Heater Removal, AMM TASK 26-16-06-000-801,
Lower Cargo Heater Installation, AMM TASK 26-16-06-400-801.
- (3) Connect the DB26018 connector back to the heater.
- (4) Do this ground test on the MAT:
 - (a) 26 Cargo Smoke Detection, SYSTEM TEST, Fwd Cargo Smoke Detection System
- (5) If the maintenance message does not show on the ground test display, you corrected the fault.
- (6) If the maintenance message shows on the ground test display, then continue.
- (7) Repeat this subtask for the other heaters below. If all heaters have been tested, then continue.
 - (a) B26019
 - (b) B26020
 - (c) B26021
- (8) Disconnect the connector, DM26060A, from the forward cargo smoke detector, M26060.
- (9) Measure the resistance between pins 38 and 39 on the connector DM26060A (not the port).

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- (a) If the resistance value is less than 64 ohms or more than 135 ohms, then do the following:
 - 1) Do a wiring check and repair as needed.
 - 2) Connect the DM26060A connector to the forward cargo smoke detector, M26060.
 - 3) Do the applicable ground test on the MAT:
 - a) 26 Cargo Smoke Detection, SYSTEM TEST, Fwd Cargo Smoke Detection System
 - 4) If the maintenance message does not show on the ground test display, you corrected the fault.
 - 5) If the maintenance message shows on the ground test display, then continue.
- (10) Replace the cargo smoke detector fan, B2.
These are the tasks:
Lower Cargo Smoke Detector Fans Removal, AMM TASK 26-16-02-000-801,
Lower Cargo Smoke Detector Fans Installation, AMM TASK 26-16-02-400-801.
 - (a) Do the applicable ground test on the MAT:
 - 1) 26 Cargo Smoke Detection, SYSTEM TEST, Fwd Cargo Smoke Detection System
 - (b) If the maintenance message does not show on the ground test display, you corrected the fault.
 - (c) If the maintenance message shows on the ground test display, then continue.
- (11) Replace the cargo smoke detector, M26060.
These are the tasks:
Lower Cargo Smoke Detector Removal, AMM TASK 26-16-01-000-801,
Lower Cargo Smoke Detector Installation, AMM TASK 26-16-01-400-801.
- (12) Do this ground test on the MAT:
 - (a) 26 Cargo Smoke Detection, SYSTEM TEST, Fwd Cargo Smoke Detection System
- (13) If the maintenance message does not show on the ground test display, you corrected the fault.

————— **END OF TASK** —————

815. Cargo Smoke Detection Heater Zone (1,2,3,4) Channel 1 (lwr aft) circuit is open or shorted.

A. Maintenance Messages

- (1) This task is for maintenance message: 26-21092.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows LATCHED for the maintenance message, then do this ground test on the MAT:
 - (a) 26 Cargo Smoke Detection, SYSTEM TEST, Aft Cargo Smoke Detection System
 - (b) If the maintenance message shows on the ground test display, then do the Fault Isolation Procedure below.
 - (c) If the maintenance message does not show on the ground test display, then there was an intermittent fault.

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C. Fault Isolation Procedure

- (1) Disconnect the DB26022 connector from the heater, B26022.
- (2) Measure the resistance between pins 2 and 5 on the heater receptacle.
 - (a) If the resistance value is less than 300 ohms or more than 360 ohms, replace the cargo heater, B26022.

These are the tasks:
Lower Cargo Heater Removal, AMM TASK 26-16-06-000-801,
Lower Cargo Heater Installation, AMM TASK 26-16-06-400-801.
- (3) Connect the DB26022 connector to the heater.
- (4) Do this ground test on the MAT:
 - (a) 26 Cargo Smoke Detection, SYSTEM TEST, Aft Cargo Smoke Detection System
- (5) If the maintenance message does not show on the ground test display, you corrected the fault.
- (6) If the maintenance message shows on the ground test display, then continue.
- (7) Repeat this subtask for the other heaters below. If all heaters have been tested, then continue.
 - (a) B26023
 - (b) B26024
 - (c) B26025
- (8) Disconnect the connector, DM26061A, from the aft cargo smoke detector, M26061.
- (9) Measure the resistance between pins 38 and 39 on the connector DM26061A (not the port).
 - (a) If the resistance value is less than 64 ohms or more than 135 ohms, then do the following:
 - 1) Do a wiring check and repair as needed.
 - 2) Connect the DM26061A connector to the aft cargo smoke detector, M26061.
 - 3) Do the applicable ground test on the MAT:
 - a) 26 Cargo Smoke Detection, SYSTEM TEST, Aft Cargo Smoke Detection System
 - 4) If the maintenance message does not show on the ground test display, you corrected the fault.
 - 5) If the maintenance message shows on the ground test display, then continue.
- (10) Replace the cargo smoke detector fan, B2.

These are the tasks:
Lower Cargo Smoke Detector Fans Removal, AMM TASK 26-16-02-000-801,
Lower Cargo Smoke Detector Fans Installation, AMM TASK 26-16-02-400-801.

 - (a) Do the applicable ground test on the MAT:
 - 1) 26 Cargo Smoke Detection, SYSTEM TEST, Fwd Cargo Smoke Detection System
 - (b) If the maintenance message does not show on the ground test display, you corrected the fault.
 - (c) If the maintenance message shows on the ground test display, then continue.
- (11) Replace the cargo smoke detector, M26061.

These are the tasks:

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Lower Cargo Smoke Detector Removal, AMM TASK 26-16-01-000-801,
Lower Cargo Smoke Detector Installation, AMM TASK 26-16-01-400-801.

- (12) Do the applicable ground test on the MAT:
 - (a) 26 Cargo Smoke Detection, SYSTEM TEST, Aft Cargo Smoke Detection System
- (13) If the maintenance message does not show on the ground test display, you corrected the fault.

— END OF TASK —

816. Cargo Smoke Detection Heater Zone (1,2,3,4) Channel 2 (lwr fwd) Circuit Is Open or Shorted

A. Maintenance Messages

- (1) This task is for maintenance message: 26-21093.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows LATCHED for the maintenance message, then do the applicable ground test on the MAT:
 - (a) 26 Cargo Smoke Detection, SYSTEM TEST, Fwd Cargo Smoke Detection System
 - (b) If the maintenance message shows on the ground test display, then do the Fault Isolation Procedure below.
 - (c) If the maintenance message does not show on the ground test display, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Disconnect the DB26018 connector from the heater, B26018.
- (2) Measure the resistance between pins 3 and 7 on the heater receptacle.
 - (a) If the resistance value is less than 300 ohms or more than 360 ohms, replace the cargo heater, B26018.

These are the tasks:
Lower Cargo Heater Removal, AMM TASK 26-16-06-000-801,
Lower Cargo Heater Installation, AMM TASK 26-16-06-400-801.
- (3) Connect the DB26018 connector to the heater.
- (4) Do this ground test on the MAT:
 - (a) 26 Cargo Smoke Detection, SYSTEM TEST, Fwd Cargo Smoke Detection System
- (5) If the maintenance message does not show on the ground test display, you corrected the fault.
- (6) If the maintenance message shows on the ground test display, then continue.
- (7) Repeat this subtask for the other heaters below. If all heaters have been tested, then continue.
 - (a) B26019
 - (b) B26020
 - (c) B26021
- (8) Disconnect the connector, DM26060B, from the forward cargo smoke detector, M26060.
- (9) Measure the resistance between pins 38 and 39 on the connector DM26060B (not the port).
 - (a) If the resistance value is less than 64 ohms or more than 135 ohms, then do the following:

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- 1) Do a wiring check and repair as needed.
 - 2) Connect the DM26060B connector to the forward cargo smoke detector, M26060.
 - 3) Do the applicable ground test on the MAT:
 - a) 26 Cargo Smoke Detection, SYSTEM TEST, Fwd Cargo Smoke Detection System
 - 4) If the maintenance message does not show on the ground test display, you corrected the fault.
 - 5) If the maintenance message shows on the ground test display, then continue.
- (10) Replace the cargo smoke detector fan, B1.
These are the tasks:
Lower Cargo Smoke Detector Fans Removal, AMM TASK 26-16-02-000-801,
Lower Cargo Smoke Detector Fans Installation, AMM TASK 26-16-02-400-801.
- (a) Do the applicable ground test on the MAT:
 - 1) 26 Cargo Smoke Detection, SYSTEM TEST, Fwd Cargo Smoke Detection System
 - (b) If the maintenance message does not show on the ground test display, you corrected the fault.
 - (c) If the maintenance message shows on the ground test display, then continue.
- (11) Replace the cargo smoke detector, M26060.
These are the tasks:
Lower Cargo Smoke Detector Removal, AMM TASK 26-16-01-000-801,
Lower Cargo Smoke Detector Installation, AMM TASK 26-16-01-400-801.
- (12) Do the applicable ground test on the MAT:
 - (a) 26 Cargo Smoke Detection, SYSTEM TEST, Fwd Cargo Smoke Detection System
- (13) If the maintenance message does not show on the ground test display, you corrected the fault.

————— **END OF TASK** —————

817. Cargo Smoke Detection Heater Zone (1,2,3,4) Channel 2 (lwr aft) circuit is open or shorted.

A. Maintenance Messages

- (1) This task is for maintenance message: 26-21094.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows LATCHED for the maintenance message, then do the applicable ground test on the MAT:
 - (a) 26 Cargo Smoke Detection, SYSTEM TEST, Aft Cargo Smoke Detection System
 - (b) If the maintenance message shows on the ground test display, then do the Fault Isolation Procedure below.
 - (c) If the maintenance message does not show on the ground test display, then there was an intermittent fault.

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C. Fault Isolation Procedure

- (1) Disconnect the DB26022 connector from the heater, B26022.
- (2) Measure the resistance between pins 3 and 7 on the heater receptacle.
 - (a) If the resistance value is less than 300 ohms or more than 360 ohms, replace the cargo heater, B26022.

These are the tasks:
Lower Cargo Heater Removal, AMM TASK 26-16-06-000-801,
Lower Cargo Heater Installation, AMM TASK 26-16-06-400-801.
- (3) Connect the DB26022 connector to the heater.
- (4) Do this ground test on the MAT:
 - (a) 26 Cargo Smoke Detection, SYSTEM TEST, Aft Cargo Smoke Detection System
- (5) If the maintenance message does not show on the ground test display, you corrected the fault.
- (6) If the maintenance message shows on the ground test display, then continue.
- (7) Repeat this subtask for the other heaters below. If all heaters have been tested, then continue.
 - (a) B26023
 - (b) B26024
 - (c) B26025
- (8) Disconnect the connector, DM26061B, from the aft cargo smoke detector, M26061.
- (9) Measure the resistance between pins 38 and 39 on the connector DM26061B (not the port).
 - (a) If the resistance value is less than 64 ohms or greater than 135 ohms, then do the following:
 - 1) Do a wiring check and repair as needed.
 - 2) Connect the DM26061B connector to the aft cargo smoke detector, M26061.
 - 3) Do the applicable ground test on the MAT:
 - a) 26 Cargo Smoke Detection, SYSTEM TEST, Aft Cargo Smoke Detection System
 - 4) If the maintenance message does not show on the ground test display, you corrected the fault.
 - 5) If the maintenance message shows on the ground test display, then continue.
- (10) Replace the cargo smoke detector fan, B1.

These are the tasks:
Lower Cargo Smoke Detector Fans Removal, AMM TASK 26-16-02-000-801,
Lower Cargo Smoke Detector Fans Installation, AMM TASK 26-16-02-400-801.

 - (a) Do the applicable ground test on the MAT:
 - 1) 26 Cargo Smoke Detection, SYSTEM TEST, Fwd Cargo Smoke Detection System
 - (b) If the maintenance message does not show on the ground test display, you corrected the fault.
 - (c) If the maintenance message shows on the ground test display, then continue.
- (11) Replace the cargo smoke detector, M26061.

These are the tasks:

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Lower Cargo Smoke Detector Removal, AMM TASK 26-16-01-000-801,
Lower Cargo Smoke Detector Installation, AMM TASK 26-16-01-400-801.

- (12) Do the applicable ground test on the MAT:
 - (a) 26 Cargo Smoke Detection, SYSTEM TEST, Aft Cargo Smoke Detection System
- (13) If the maintenance message does not show on the ground test display, you corrected the fault.

— END OF TASK —

818. Cargo Smoke Detection Heater Zone (1,2,3,4) (lwr fwd) circuit is open or shorted.

A. Maintenance Messages

- (1) This task is for maintenance message: 26-21099.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows LATCHED for the maintenance message, then do the applicable ground test on the MAT:
 - (a) 26 Cargo Smoke Detection, SYSTEM TEST, Fwd Cargo Smoke Detection System
 - (b) If the maintenance message shows on the ground test display, then do the Fault Isolation Procedure below.
 - (c) If the maintenance message does not show on the ground test display, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Disconnect the DB26018 connector from the heater, B26018.
- (2) Measure the resistance between pins 2 and 5 on the heater receptacle.
- (3) Measure the resistance between pins 3 and 7 on the heater receptacle.
 - (a) If any of the resistance values are less than 300 ohms or more than 360 ohms, replace the cargo heater, B26018.

These are the tasks:
Lower Cargo Heater Removal, AMM TASK 26-16-06-000-801,
Lower Cargo Heater Installation, AMM TASK 26-16-06-400-801.
- (4) Connect the DB26018 connector back to the heater.
- (5) Do this ground test on the MAT:
 - (a) 26 Cargo Smoke Detection, SYSTEM TEST, Fwd Cargo Smoke Detection System
- (6) If the maintenance message does not show on the ground test display, you corrected the fault.
- (7) If the maintenance message shows on the ground test display, then continue.
- (8) Repeat this subtask for the other heaters below. If all heaters have been tested, then continue.
 - (a) B26019
 - (b) B26020
 - (c) B26021
- (9) Disconnect the connectors, DM26060A and DM26060B, from the forward cargo smoke detector, M26060.
- (10) Measure the resistance between pins 38 and 39 on the connector DM26060A (not the port).

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- (11) Measure the resistance between pins 38 and 39 on the connector DM26060B (not the port).
 - (a) If any of the resistance values is less than 64 ohms or more than 135 ohms, then do the following:
 - 1) Do a wiring check and repair as needed.
 - 2) Connect the DM26060A and DM26060B connector to the forward cargo smoke detector, M26060.
 - 3) Do the applicable ground test on the MAT:
 - a) 26 Cargo Smoke Detection, SYSTEM TEST, Fwd Cargo Smoke Detection System
 - 4) If the maintenance message does not show on the ground test display, you corrected the fault.
 - 5) If the maintenance message shows on the ground test display, then continue.
- (12) Replace the cargo smoke detector fans, B1 and B2.

These are the tasks:

Lower Cargo Smoke Detector Fans Removal, AMM TASK 26-16-02-000-801,
Lower Cargo Smoke Detector Fans Installation, AMM TASK 26-16-02-400-801.

 - (a) Do the applicable ground test on the MAT:
 - 1) 26 Cargo Smoke Detection, SYSTEM TEST, Fwd Cargo Smoke Detection System
 - (b) If the maintenance message does not show on the ground test display, you corrected the fault.
 - (c) If the maintenance message shows on the ground test display, then continue.
- (13) Replace the cargo smoke detector, M26060.

These are the tasks:

Lower Cargo Smoke Detector Removal, AMM TASK 26-16-01-000-801,
Lower Cargo Smoke Detector Installation, AMM TASK 26-16-01-400-801.
- (14) Do the applicable ground test on the MAT:
 - (a) 26 Cargo Smoke Detection, SYSTEM TEST, Fwd Cargo Smoke Detection System
- (15) If the maintenance message does not show on the ground test display, you corrected the fault.

— END OF TASK —

819. Cargo Smoke Detection Heater Zone (1,2,3,4) (lwr aft) circuit is open or shorted.

A. Maintenance Messages

- (1) This task is for maintenance message: 26-21100.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows LATCHED for the maintenance message, then do the applicable ground test on the MAT:
 - (a) 26 Cargo Smoke Detection, SYSTEM TEST, Aft Cargo Smoke Detection System
 - (b) If the maintenance message shows on the ground test display, then do the Fault Isolation Procedure below.

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- (c) If the maintenance message does not show on the ground test display, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Disconnect the DB26022 connector from the heater, B26022.
- (2) Measure the resistance between pins 2 and 5 on the heater receptacle.
- (3) Measure the resistance between pins 3 and 7 on the heater receptacle.
 - (a) If any of the resistance values are less than 300 ohms or more than 360 ohms, replace the cargo heater, B26022.

These are the tasks:
Lower Cargo Heater Removal, AMM TASK 26-16-06-000-801,
Lower Cargo Heater Installation, AMM TASK 26-16-06-400-801.
- (4) Connect the DB26022 connector to the heater.
- (5) Do this ground test on the MAT:
 - (a) 26 Cargo Smoke Detection, SYSTEM TEST, Aft Cargo Smoke Detection System
- (6) If the maintenance message does not show on the ground test display, you corrected the fault.
- (7) If the maintenance message shows on the ground test display, then continue.
- (8) Repeat this subtask for the other heaters below. If all heaters have been tested, then continue.
 - (a) B26023
 - (b) B26024
 - (c) B26025
- (9) Disconnect the connectors, DM26061A and DM26061B, from the aft cargo smoke detector, M26061.
- (10) Measure the resistance between pins 38 and 39 on the connector DM26061A (not the port).
- (11) Measure the resistance between pins 38 and 39 on the connector DM26061B (not the port).
 - (a) If any of the resistance values is less than 64 ohms or more than 135 ohms, then do the following:
 - 1) Do a wiring check and repair as needed.
 - 2) Connect the DM26061A and DM26061B connector to the aft cargo smoke detector, M26061.
 - 3) Do the applicable ground test on the MAT:
 - a) 26 Cargo Smoke Detection, SYSTEM TEST, Aft Cargo Smoke Detection System
 - 4) If the maintenance message does not show on the ground test display, you corrected the fault.
 - 5) If the maintenance message shows on the ground test display, then continue.
- (12) Replace the cargo smoke detector fans, B1 and B2.

These are the tasks:
Lower Cargo Smoke Detector Fans Removal, AMM TASK 26-16-02-000-801,
Lower Cargo Smoke Detector Fans Installation, AMM TASK 26-16-02-400-801.

 - (a) Do the applicable ground test on the MAT:
 - 1) 26 Cargo Smoke Detection, SYSTEM TEST, Fwd Cargo Smoke Detection System

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- (b) If the maintenance message does not show on the ground test display, you corrected the fault.
- (c) If the maintenance message shows on the ground test display, then continue.
- (13) Replace the cargo smoke detector, M26061.
These are the tasks:
Lower Cargo Smoke Detector Removal, AMM TASK 26-16-01-000-801,
Lower Cargo Smoke Detector Installation, AMM TASK 26-16-01-400-801.
- (14) Do the applicable ground test on the MAT:
 - (a) 26 Cargo Smoke Detection, SYSTEM TEST, Aft Cargo Smoke Detection System
- (15) If the maintenance message does not show on the ground test display, you corrected the fault.

————— **END OF TASK** —————

820. EICAS Messages DET FIRE CARGO FWD (AFT) - Fault Isolation

A. Initial Evaluation

NOTE: This message shows when the communications to forward (aft) compartment have failed or all the detection zones in the forward (aft) cargo compartment have failed.

————— **END OF TASK** —————

879. EICAS Messages DET ZONE (1,2,3) CARGO FWD (AFT) - Fault Isolation

A. Initial Evaluation

NOTE: This message shows when any single detector in fwd (aft) cargo compartment zone (1, 2, 3) fails both its channels due to contamination, loss of communications with cargo smoke detection system controller, loss of power, or wiring problem.

————— **END OF TASK** —————

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801. Wheel Well Fire Loop Shorted - Fault Isolation Figure 301

A. Maintenance Messages

- (1) This task is for maintenance messages: 26-39111, 26-39122.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault or a wheel well fire condition. To find out if there was a fire condition, do the steps that follow:
 - (a) Do a check of the present leg faults for the EICAS message FIRE WHEEL WELL.
 - (b) If the EICAS message exists, examine the wheel well area for damage.
 - 1) If there is damage to the area from a wheel well fire condition, do the necessary repairs.
 - (c) If the EICAS message does not exist, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) In the list below, find the applicable connectors and pin numbers for the maintenance message.

NOTE: The loop number is shown on or near each side of the bracket where the element is connected to wiring or to another element.

Table 201/26-17-00-993-803

LOOP	DLODS CARD	SYSTEMS CARD FILE	CARD FILE CONNECTOR	FIRE DETECTOR ELEMENTS
1	Left (A5)	Left (P85)	DP8503 pin 44 pin 45	M26030, M26031
2	Right (A5)	Right (P84)	DP8402 pin 41 pin 42	M26032, M26033

- (2) In the main wheel well, examine the wiring and elements for the applicable fire detector elements (WDM 26-17-11).
 - (a) Make sure there is no apparent damage to the wiring or elements.
 - (b) If you find a problem with the wiring, do these steps:
 - 1) Set the power switch for the applicable DLODS control card, A5, to the OFF position.
 - 2) Repair the wiring.
 - 3) Connect the wiring between the applicable components (WDM 26-17-11).
 - 4) Set the power switch for the DLODS control card, A5, to the ON position.
 - 5) After approximately 60 seconds, if the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (c) If you find a problem with an element, replace the applicable element.

These are the tasks:

Wheel Well Fire Detectors Removal, AMM TASK 26-17-01-000-801,

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Wheel Well Fire Detectors Installation, AMM TASK 26-17-01-400-801.

- 1) After approximately 60 seconds, if the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (d) If there is no apparent damage to the wiring or elements, then disconnect the elements from the loop (AMM TASK 26-17-01-000-801).
 - 1) At each element connection, make sure there is a ceramic insulator attached to the center conductor of the female connector end.
 - 2) If the ceramic insulator is not attached, replace the applicable element.

These are the tasks:

Wheel Well Fire Detectors Removal, AMM TASK 26-17-01-000-801,
Wheel Well Fire Detectors Installation, AMM TASK 26-17-01-400-801.
 - 3) After approximately 60 seconds, if the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (e) Examine the connector ends for damage or unwanted material.
 - 1) If there is unwanted material in the connector ends, clean the connector ends and re-connect the element (AMM TASK 26-17-01-400-801).
 - 2) After approximately 60 seconds, if the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (f) If you do not find a problem with the wiring or elements, then continue.
- (3) Set the power switch for the applicable DLODS control card, A5, to the OFF position.



USE ONLY A METER WHICH APPLIES AC CURRENT TO MEASURE THE RESISTANCE OF THE ELEMENT (RCL METER). IF YOU DO NOT USE A METER WHICH APPLIES AC CURRENT, YOU WILL CAUSE DAMAGE TO THE DETECTION ELEMENT.

- (4) Do a wiring check between the specified pins of the card file connector and ground, (WDM 26-17-11).

NOTE: To isolate the fault, disconnect the elements and the wiring between them if applicable. For the elements, do the wiring check between the center conductor of the element and ground.

 - (a) Make sure the resistance is at least 1000 ohms.
 - (b) If the resistance is less than 1000 ohms, do these steps:
 - 1) Repair the wiring.
 - 2) Connect the applicable wiring (WDM 26-17-11).
 - 3) Set the power switch for the DLODS control card, A5, to the ON position.
 - 4) After approximately 60 seconds, if the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - 5) If the MAT shows ACTIVE for the maintenance message, then continue.
 - (c) If you find a problem with the elements, then do these steps:
 - 1) Replace the applicable element.

These are the tasks:

Wheel Well Fire Detectors Removal, AMM TASK 26-17-01-000-801,

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Wheel Well Fire Detectors Installation, AMM TASK 26-17-01-400-801.

- 2) After approximately 60 seconds, if the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - 3) If the MAT shows ACTIVE for the maintenance message, then continue.
- (5) Replace the applicable DLODS control card.
- These are the tasks:
- DLODS Control Card Removal, AMM TASK 26-18-05-000-801,
DLODS Control Card Installation, AMM TASK 26-18-05-400-801.
- (a) After approximately 60 seconds, if the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (6) Do these steps to do a check of the backplane wiring between the DLODS control card and the card file connector:
- (a) Remove the applicable DLODS control card; do this task: DLODS Control Card Removal, AMM TASK 26-18-05-000-801.
 - (b) Install an extender card, SPL-1658 in the applicable DLODS control card location.
 - (c) At the connector attached to the extender card, do a wiring check between the pins and ground for the applicable DLODS control card SSM 26-17-11, and the following table:

RIGHT P84 - RIGHT A5

CARD FILE CONNECTOR	DLODS CARD CONNECTOR
DP8402	XA5
pin 41	pins 40, 41, 42
pin 42	pins 34, 35, 36

LEFT P85 - LEFT A5

CARD FILE CONNECTOR	DLODS CARD CONNECTOR
DP8503	XA5
pin 44	pins 52, 53, 54
pin 45	pins 46, 47, 48

- (d) Make sure the resistance is at least 50,000 ohms.
 - (e) If the resistance is less than 50,000 ohms, repair the wiring.
 - (f) Remove the extender card, SPL-1814 from the DLODS control card location.
 - (g) Re-install the applicable DLODS control card; do this task: DLODS Control Card Installation, AMM TASK 26-18-05-400-801.
 - (h) After approximately 60 seconds, if the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (7) If you do not find a problem with the elements or wiring, then re-connect the applicable wiring (WDM 26-17-11).

————— **END OF TASK** —————

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802. Wheel Well Fire Loop Open - Fault Isolation(Figure 301)

A. Maintenance Messages

- (1) This task is for maintenance messages: 26-33422, 26-39011.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) In the list below, find the applicable connectors and pin numbers for the maintenance message.

NOTE: The loop number is shown on or near each side of the bracket where the element is connected to wiring or to another element.

Table 202/26-17-00-993-801

LOOP	DLODS CARD	SYSTEMS CARD FILE	CARD FILE CONNECTOR	FIRE DET ELEMENTS
1	Left (A5)	Left (P85)	DP8503 pin 44 pin 45	M26030 M26031
2	Right (A5)	Right (P84)	DP8402 pin 41 pin 42	M26032 M26033

- (2) In the main wheel well, examine the wiring and elements for the applicable fire detector elements (WDM 26-17-11).
 - (a) Make sure there is no apparent damage to the wiring or elements.
 - (b) If you find a problem with the wiring, do these steps:
 - 1) Set the power switch for the applicable DLODS control card, A5, to the OFF position.
 - 2) Repair the wiring.
 - 3) Connect the wiring between the applicable components (WDM 26-17-11).
 - 4) Set the power switch for the DLODS control card, A5, to the ON position.
 - 5) After approximately 60 seconds, if the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (c) If you find a problem with an element, replace the applicable element.

These are the tasks:

Wheel Well Fire Detectors Removal, AMM TASK 26-17-01-000-801,

Wheel Well Fire Detectors Installation, AMM TASK 26-17-01-400-801.

 - 1) After approximately 60 seconds, if the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (d) If there is no apparent damage to the wiring or elements, then disconnect the elements from the loop (AMM TASK 26-17-01-000-801).

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- 1) At each element connection, make sure there is a ceramic insulator attached to the center conductor of the female connector end.
- 2) If the ceramic insulator is not attached, replace the applicable element.
These are the tasks:
Wheel Well Fire Detectors Removal, AMM TASK 26-17-01-000-801,
Wheel Well Fire Detectors Installation, AMM TASK 26-17-01-400-801.
- 3) After approximately 60 seconds, if the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (e) Examine the connector ends for damage or unwanted material.
 - 1) If there is unwanted material in the connector ends, clean the connector ends and re-connect the element (AMM TASK 26-17-01-400-801).
 - 2) After approximately 60 seconds, if the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (f) If you do not find a problem with the wiring or elements, then continue.
- (3) Set the power switch for the applicable DLODS control card, A5, to the OFF position.



USE ONLY A METER WHICH APPLIES AC CURRENT TO MEASURE THE RESISTANCE OF THE ELEMENT (RCL METER). IF YOU DO NOT USE A METER WHICH APPLIES AC CURRENT, YOU WILL CAUSE DAMAGE TO THE DETECTION ELEMENT.

- (4) Do a resistance check between the specified pins of the card file connector, (WDM 26-17-11).
 - (a) If the resistance is more than 150 ohms, then do these steps:
NOTE: To isolate the fault, disconnect the elements and the wiring between them if applicable. For the elements, do the wiring check between the center conductor of the element.
 - 1) If you find a problem with the wiring, repair the wiring.
 - 2) If you find a problem with an element, replace the applicable element.
These are the tasks:
Wheel Well Fire Detectors Removal, AMM TASK 26-17-01-000-801,
Wheel Well Fire Detectors Installation, AMM TASK 26-17-01-400-801.
 - 3) Connect the applicable wiring (WDM 26-17-11).
 - (b) If the resistance is 150 ohms or less, then do these steps:
 - 1) Replace the applicable DLODS control card.
These are the tasks:
DLODS Control Card Removal, AMM TASK 26-18-05-000-801,
DLODS Control Card Installation, AMM TASK 26-18-05-400-801.
 - (c) Set the power switch for the applicable DLODS control card, A5, to the ON position.
 - (d) After approximately 60 seconds, if the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (e) If the MAT shows ACTIVE for the maintenance message, then continue.
- (5) Do these steps to do a check of the backplane wiring between the DLODS control card and the card file connector:

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- (a) Remove the applicable DLODS control card; do this task: DLODS Control Card Removal, AMM TASK 26-18-05-000-801.
- (b) Install an extender card, SPL-1814 in the applicable DLODS control card location.
- (c) Do a wiring check between these pins for the applicable DLODS control card (SSM 26-17-11):

RIGHT P84 - RIGHT A5

CARD FILE CONNECTOR	DLODS CARD CONNECTOR
DP8402	XA5
pin 41	pins 40, 41, 42
pin 42	pins 34, 35, 36

LEFT P85 - LEFT A5

CARD FILE CONNECTOR	DLODS CARD CONNECTOR
DP8503	XA5
pin 44	pins 52, 53, 54
pin 45	pins 46, 47, 48

- (d) If you find a problem with the wiring, repair it.
- (e) Remove the extender card, SPL-1814 from the DLODS control card location.
- (f) Re-install the applicable DLODS control card; do this task: DLODS Control Card Installation, AMM TASK 26-18-05-400-801.
- (g) After approximately 60 seconds, if the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

———— **END OF TASK** ————

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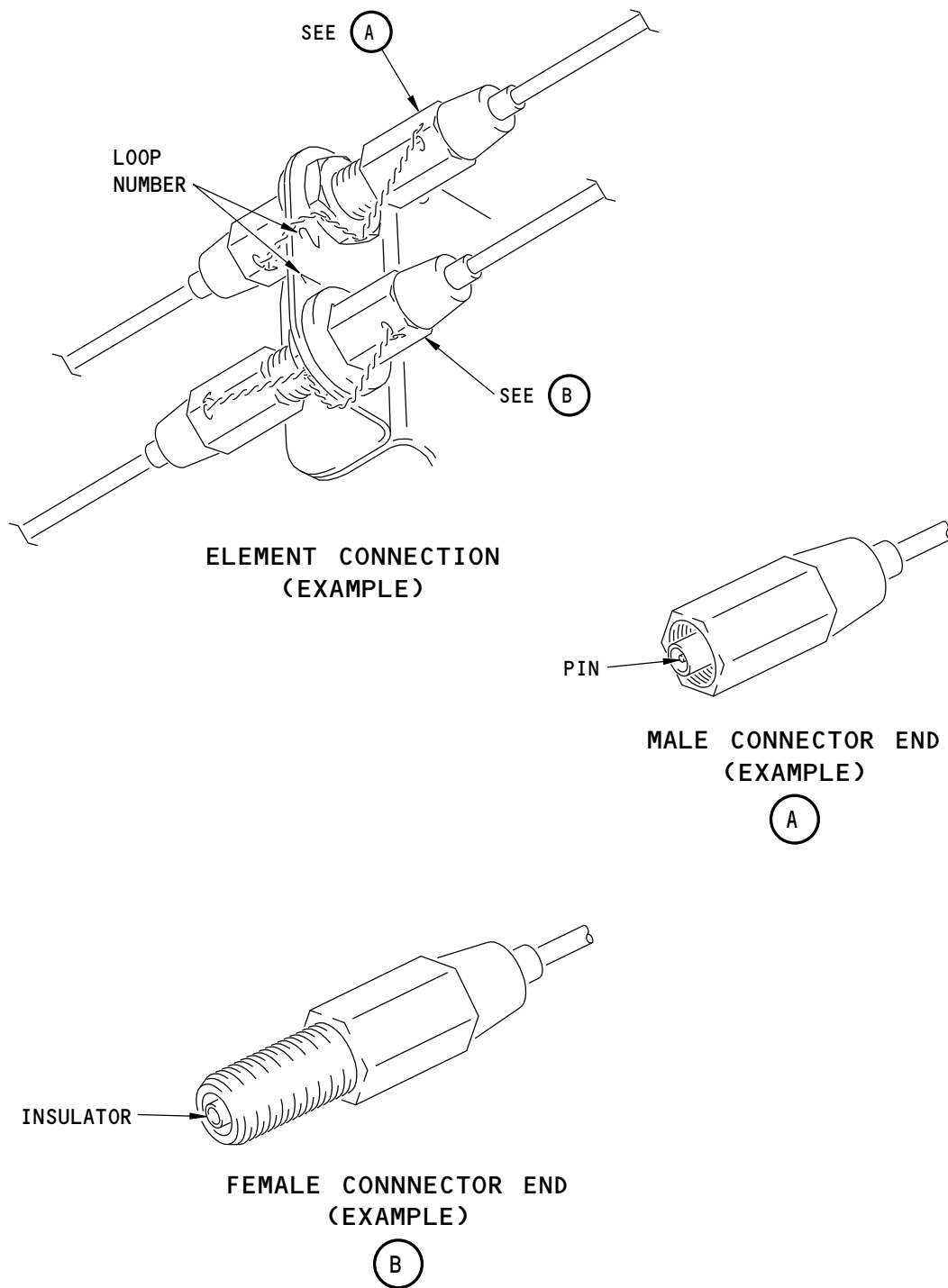
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Wheel Well Fire Detector Connection
Figure 301/26-17-00-990-801

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801. Wing Duct Leak Detector Zone Open Problems - Fault Isolation(Figure 301, Table 301)

A. Maintenance Messages

- (1) This task is for maintenance messages: 26-33011, 26-33021, 26-33031, 26-33041, 26-33051, 26-33061, 26-33071, 26-33081, 26-33091, 26-33101, 26-33111, 26-33121, 26-35013, 26-35023, 26-35033, 26-35043, 26-35053, 26-35063, 26-35073, 26-35083, 26-35093, 26-35103, 26-35113, 26-35123, 26-38012, 26-38013, 26-38022, 26-38023, 26-38032, 26-38033, 26-38042, 26-38043, 26-38052, 26-38053, 26-38062, 26-38063, 26-38072, 26-38073, 26-38082, 26-38083, 26-38092, 26-38093, 26-38102, 26-38103, 26-38112, 26-38113, 26-38122, 26-38123.

B. General

- (1) Each wing duct leak detection loop is divided into 12 zones for open zone detection. When an open loop failure is detected, the DLODS control card gives the location of the failure to the OMS. The OMS then shows the maintenance message. Because of electrical tolerances of the wiring and elements in the loop, there is some probability that the zone with the actual failure is adjacent to the zone shown by the message. When you troubleshoot the failure, always do the procedure for the zone shown by the OMS message first. If you do not find the failure in that zone, do the procedure again for the zones adjacent to the original zone. Continue this process until you find the failure.
- (2) 777-300ER airplanes with DLODS software version 267B-FEN-003-01 installed;
Use the "Actual Fault Zone" data shown in the applicable table in 26-18 TASK SUPPORT, PAGEBLOCK 26-18-00/301:
Table 305 (Left Wing Loop 1 Open Circuit Location)
Table 306 (Left Wing Loop 2 Open Circuit Location)
Table 307 (Right Wing Loop 1 Open Circuit Location)
Table 308 (Right Wing Loop 2 Open Circuit Location)
NOTE: DLODS software version 267B-FEN-003-01 does not recognize airframe data for the 777-300ER. Thus, the zone data provided by DLODS does not reflect the correct zonal locations for troubleshooting. This problem will be resolved when new software is released for the 777-300ER airframe.

C. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

D. Fault Isolation Procedure

- (1) From the Fault Zone tables that follow, find the applicable DLODS control card, elements and wiring for the zone shown in the maintenance message:

NOTE: The loop number is shown on or near each side of the bracket where the element is connected to wiring or to another element.

NOTE: Use the System Schematic Manual (SSM 26-18-04, WDM 26-18-15, WDM 26-18-16) to find the applicable components in the zone.

Left Wing Loop 1 Zone Open

Zone	Description
1	Center DLODS control card, P84-A8; wiring between DP8409, pin 49, and D7115J, pin 6

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Left Wing Loop 1 Zone Open (Continued)

Zone	Description
2	Wiring between DP8409, pin 49, and D7115J, pin 6
3	Wiring between DP8409, pin 49, and D7115J, pin 6; wiring between D7115P, pin 6 and DM26110
4	Element M26110; wiring between D7115P, pin 6 and DM26110
5	Element M26110; Element M26111
6	Element M26111; Element M26112
7	Element M26112; Element M26113
8	Element M26113; Element M26114
9	Element M26114; wiring between DM26114 and D7107P, pin 17
10	Wiring between DM26114 and D7107P, pin 17; wiring between D7107J, pin 17, and DP8409, pin 48
11	Wiring between D7107J, pin 17, and DP8409, pin 48
12	Center DLODS control card, P84-A8; wiring between D7107J, pin 17, and DP8409, pin 48

Left Wing Loop 2 Zone Open

Zone	Description
1	Left DLODS control card, P85-A5; wiring between DP8502, pin 46, and D7120P, pin 24
2	Wiring between DP8502, pin 46, and D7120P, pin 24
3	Wiring between DP8502, pin 46, and D7120P, pin 24; wiring between D7120J, pin 24 and DM26115
4	Element M26115; wiring between D7120J, pin 24 and DM26115
5	Element M26115; Element M26116
6	Element M26116; Element M26117
7	Element M26117; Element M26118
8	Element M26118; Element M26119
9	Element M26119; wiring between DM26119 and D7106P, pin 1
10	Wiring between DM26119 and D7106P, pin 1; wiring between D7106J, pin 1, and DP8502, pin 45
11	Wiring between D7106J, pin 1, and DP8502, pin 45
12	Left DLODS control card, P85-A5; wiring between D7106J, pin 1, and DP8502, pin 45

Right Wing Loop 1 Zone Open

Zone	Description
1	Right DLODS control card, P84-A5; wiring between DP8403, pin 43, and D7215J, pin 6
2	Wiring between DP8403, pin 43, and D7215J, pin 6
3	Wiring between DP8403, pin 43, and D7215J, pin 6; wiring between D7215P, pin 6 and DM26210
4	Element M26210; wiring between D7215P, pin 6 and DM26210
5	Element M26210; Element M26211
6	Element M26211; Element M26212

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Right Wing Loop 1 Zone Open (Continued)

Zone	Description
7	Element M26212; Element M26213
8	Element M26213; Element M26214
9	Element M26214; wiring between DM26214 and D7207P, pin 17
10	Wiring between DM26214 and D7207P, pin 17; wiring between D7207J, pin 17, and DP8403, pin 42
11	Wiring between D7207J, pin 17, and DP8403, pin 42
12	Right DLODS control card, P84-A5; wiring between D7207J, pin 17, and DP8403, pin 42

Right Wing Loop 2 Zone Open

Zone	Description
1	Center DLODS control card, P84-A8; wiring between DP8408, pin 48, and D7220P, pin 24
2	Wiring between DP8408, pin 48, and D7220P, pin 24
3	Wiring between DP8408, pin 48, and D7220P, pin 24; wiring between D7220J, pin 24 and DM26215
4	Element M26215; wiring between D7220J, pin 24 and DM26215
5	Element M26215; Element M26216
6	Element M26216; Element M26217
7	Element M26217; Element M26218
8	Element M26218; Element M26219
9	Element M26219; wiring between DM26219 and D7206P, pin 1
10	Wiring between DM26219 and D7206P, pin 1; wiring between D7206J, pin 1, and DP8408, pin 47
11	Wiring between D7206J, pin 1, and DP8408, pin 47
12	Center DLODS control card, P84-A8; wiring between D7206J, pin 1, and DP8408, pin 47

- (2) If there is an element in the zone, examine the element for damage.
- (a) If there is damage to the element, replace the element.
These are the tasks:
Wing Duct Leak Detectors Removal, AMM TASK 26-18-03-000-801,
Wing Duct Leak Detectors Installation, AMM TASK 26-18-03-400-801.
 - 1) After approximately 60 seconds, if the maintenance message does not show on the MAT, you corrected the fault.
 - (b) If there is no apparent damage to the element, disconnect the element from the loop (AMM TASK 26-18-03-000-801).
 - (c) At each element connection, make sure the ceramic insulator is attached to the center conductor of the female connector end.
 - (d) If the ceramic insulator is not attached, replace the element or wiring connector.
These are the tasks:
Wing Duct Leak Detectors Removal, AMM TASK 26-18-03-000-801,
Wing Duct Leak Detectors Installation, AMM TASK 26-18-03-400-801.

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- 1) After approximately 60 seconds, if the maintenance message does not show on the MAT, you corrected the fault.
- (e) Examine the connector ends for damage or unwanted material.
- (f) If there is unwanted material in the connector ends, clean the connector ends and re-install the element (AMM TASK 26-18-03-400-801).
 - 1) After approximately 60 seconds, if the maintenance message does not show on the MAT, you corrected the fault.
- (g) If you do not find a problem with the element, then continue.



CAUTION

DISCONNECT THE WIRE BUNDLES FROM THE TERMINAL LUGS BEFORE TESTING THE DETECTOR RESISTANCE AND MEASURING THE INSULATION RESISTANCE; OTHERWISE, DAMAGE TO OTHER DETECTORS IN THE LOOP MAY OCCUR.

- (h) Do this resistance check of the element using LCR meter (Inductance, Capacitance, Resistance), COM-1741.:

NOTE: Do the resistance check from the center conductor of one end of the element to the center conductor of the other end of the element.

 - 1) Make sure the resistance is less than 15 ohms.
 - 2) If the resistance is greater than 15 ohms, then replace the element.

These are the tasks:

Wing Duct Leak Detectors Removal, AMM TASK 26-18-03-000-801,
Wing Duct Leak Detectors Installation, AMM TASK 26-18-03-400-801.
 - 3) After approximately 60 seconds, if the maintenance message does not show on the MAT, you corrected the fault.
 - (i) If you do not find a problem with the element, then re-install the element and continue (AMM TASK 26-18-03-400-801).
 - (j) If there is a different element in the zone, do the same fault isolation procedure for that element as you did for the other element.
- (3) If there is a DLODS control card in the zone, replace the DLODS control card.

These are the tasks:

DLODS Control Card Removal, AMM TASK 26-18-05-000-801,
DLODS Control Card Installation, AMM TASK 26-18-05-400-801.

 - (a) After approximately 90 seconds, if the maintenance message does not show on the MAT, you corrected the fault.
 - (b) If the maintenance message shows on the MAT, then continue.
 - (4) If there is wiring in the zone, do these steps:
 - (a) Do these steps to remove power from the wing duct leak detectors:
 - 1) To get access to the Systems Card Files,
Open this access panel:

<u>Number</u>	<u>Name/Location</u>
117AL	Main Equipment Center Access Door
 - 2) Move the power switch for the applicable DLODS control card to the OFF position:

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- a) Right DLODS control card (A5) in the right systems cardfile (P84)
 - b) Center DLODS control card (A8) in the right systems cardfile (P84)
 - c) Left DLODS control card (A5) in the left systems cardfile (P85).
- (b) Do a continuity check of the wiring between the components shown in the zone (WDM 26-18-15) (WDM 26-18-16).
 - 1) Make sure the resistance is less than 10 ohms.
- (c) If you find a problem with the wiring, do these steps:
 - 1) Repair the wiring.
 - 2) Connect the wiring between the components (WDM 26-18-15) (WDM 26-18-16).
 - 3) Move the power switch for the applicable DLODS control card to the ON position:
 - a) Right DLODS control card (A5) in the right systems cardfile (P84)
 - b) Center DLODS control card (A8) in the right systems cardfile (P84)
 - c) Left DLODS control card (A5) in the left systems cardfile (P85).
 - 4) After approximately 90 seconds, if the maintenance message does not show on the MAT, you corrected the fault.
 - 5) If the maintenance message shows on the MAT, then continue.
- (5) If there is a DLODS control card in the zone, do these steps to do a check of the backplane circuit between the DLODS control card and the cardfile connector:
 - (a) Remove the applicable DLODS control card; do this task: DLODS Control Card Removal, AMM TASK 26-18-05-000-801.
 - (b) Install an extender card, SPL-1658 in the applicable DLODS control card location.
 - (c) Do a continuity check between these pins for the applicable DLODS control card (SSM 26-18-15) (SSM 26-18-16):

Table 201/26-18-00-993-819

LOOP	CARDFILE	DLODS CARD	CARDFILE CONNECTOR		DLODS CARD CONNECTOR
L Wing Loop 1	Right P84	Center A8	DP8409		XA8
			pin 48	--	pins 28,29,30
			pin 49	--	pins 22,23,24
L Wing Loop 2	Left P85	Left A5	DP8502		XA5
			pin 45	--	pins 28,29,30
			pin 46	--	pins 22,23,24
R Wing Loop 1	Right P84	Right A5	DP8403		XA5
			pin 42	--	pins 64,65,66
			pin 43	--	pins 58,59,60
R Wing Loop 2	Right P84	Center A8	DP8408		XA8
			pin 47	--	pins 64,65,66
			pin 48	--	pins 58,59,60

- (d) Remove the extender card, SPL-1658 from the DLODS control card location.

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- (e) If you do not have continuity, then replace the Systems Card File Assembly (AMM PAGEBLOCK 31-09-00/401). Otherwise, continue.
- (f) Re-install the applicable DLODS control card; do this task: DLODS Control Card Installation, AMM TASK 26-18-05-400-801.
 - 1) After approximately 90 seconds, if the maintenance message does not show on the MAT, you corrected the fault.
 - 2) If the maintenance message shows on the MAT, then continue.
- (6) If the fault is not corrected, do the same fault isolation procedure for the zones adjacent to the zone shown in the maintenance message.

NOTE: For example, if the maintenance message shows zone 5 is at fault, do the fault isolation procedure for zone 4. If you do not find the problem in zone 4, do the fault isolation procedure for zone 6.

————— **END OF TASK** —————

802. Wing Duct Leak Detector Zone Shorted Problems - Fault Isolation(Figure 301, Table 301)

A. Maintenance Messages

- (1) This task is for maintenance messages: 26-31023, 26-31033, 26-31043, 26-31053, 26-31063, 26-31073, 26-31083, 26-31093, 26-31103, 26-32013, 26-34011, 26-34021, 26-34031, 26-34041, 26-34051, 26-34061, 26-34071, 26-34081, 26-34091, 26-34101, 26-34111, 26-34121, 26-34122, 26-36113, 26-36123, 26-37013, 26-37023, 26-37033, 26-37043, 26-37053, 26-37063, 26-37073, 26-37083, 26-37093, 26-37103, 26-37113, 26-37123, 26-39012, 26-39022, 26-39032, 26-39042, 26-39052, 26-39062, 26-39072, 26-39082, 26-39092, 26-39102, 26-39112.

B. General

- (1) Each wing duct leak detection loop is divided into 11 zones for shorted zone detection. When a shorted loop failure is detected, the DLODS control card gives the location of the failure to the Onboard Maintenance System (OMS). The OMS then shows the maintenance message. Because of electrical tolerances of the wiring and elements in the loop, there is some probability that the zone with the actual failure is adjacent to the zone shown by the message. When you troubleshoot the failure, always do the procedure for the zone shown by the OMS message first. If you do not find the failure in that zone, do the procedure again for the zones adjacent to the original zone. Continue this process until you find the failure.

C. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows that the maintenance message occurred during the present flight leg or previous flight leg but is currently NOT ACTIVE, then there was a duct leak or an intermittent fault.
- (3) If there is a duct leak indication on EICAS related to the maintenance message, do these steps:
 - (a) Examine the area specified by the maintenance message for possible causes of the duct leak (AMM TASK 36-11-01-200-801).
 - 1) Make sure the detection elements are at least two inches away from the duct.

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- (b) For maintenance messages 26-37073, 26-37083, and 26-39072 that are inactive, inspect the Fan Inlet Diffuser Housing (FIDH) flexible connector for leaks.

NOTE: You need to be inside the pack bay (instead of just looking at it from the ground) to fully inspect the flexible connector.

- 1) If a leak is found do one of these tasks: Fan Inlet and Diffuser Housing (FIDH) Seal Repair, AMM TASK 21-52-06-300-801 or AMM PAGEBLOCK 21-52-06/401.
- (4) If there is not a duct leak indication on EICAS related to the maintenance message, then there was an intermittent fault.

D. Fault Isolation Procedure

- (1) From the Fault Zone tables that follow, find the applicable DLODS control card, elements and wiring related to the maintenance message:

NOTE: The loop number is shown on or near each side of the bracket where the element is connected to wiring or to another element.

NOTE: Use the System Schematic Manual (SSM 26-18-02, WDM 26-18-15, WDM 26-18-16) to find the applicable components in the zone.

Left Wing Loop 1 Zone Shorted

Zone	Description
1	Center DLODS control card, P84-A8; wiring between DP8409, pin 49, and DM26110
2	Element M26110; wiring between DP8409, pin 49, and DM26110
3	Element M26110; Element M26111
4	Element M26111
5	Element M26111; Element M26112
6	Element M26112
7	Element M26112; Element M26113
8	Element M26113
9	Element M26113; Element M26114
10	Element M26114; wiring between DM26114 and DP8409, pin 48
11	Center DLODS control card, P84-A8; wiring between DM26114 and DP8409, pin 48

Left Wing Loop 2 Zone Shorted

Zone	Description
1	Left DLODS control card, P85-A5; wiring between DP8502, pin 46, and DM26115
2	Element M26115; wiring between DP8502, pin 46, and DM26115
3	Element M26115; Element M26116
4	Element M26116
5	Element M26116; Element M26117
6	Element M26117
7	Element M26117; Element M26118
8	Element M26118

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Left Wing Loop 2 Zone Shorted (Continued)

Zone	Description
9	Element M26118; Element M26119
10	Element M26119; wiring between DM26119 and DP8502, pin 45
11	Left DLODS control card, P85-A5; wiring between DM26119 and DP8502, pin 45

Right Wing Loop 1 Zone Shorted

Zone	Description
1	Right DLODS control card, P84-A5; wiring between DP8403, pin 43, and DM26210
2	Element M26210; wiring between DP8403, pin 43, and DM26210
3	Element M26210; Element M26211
4	Element M26211
5	Element M26211; Element M26212
6	Element M26212
7	Element M26212; Element M26213
8	Element M26213
9	Element M26213; Element M26214
10	Element M26214; wiring between DM26214 and DP8403, pin 42
11	Right DLODS control card, P84-A5; wiring between DM26214 and DP8403, pin 42

Right Wing Loop 2 Zone Shorted

Zone	Description
1	Center DLODS control card, P84-A8; wiring between DP8408, pin 48, and DM26215
2	Element M26215; wiring between DP8408, pin 48, and DM26215
3	Element M26215; Element M26216
4	Element M26216
5	Element M26216; Element M26217
6	Element M26217
7	Element M26217; Element M26218
8	Element M26218
9	Element M26218; Element M26219
10	Element M26219; wiring between DM26219 and DP8408, pin 47
11	Center DLODS control card, P84-A8; wiring between DM26219 and DP8408, pin 47

(2) If there is an element in the zone, examine the element for damage.

(a) If there is damage to the element, replace the element.

These are the tasks:

Wing Duct Leak Detectors Removal, AMM TASK 26-18-03-000-801,

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Wing Duct Leak Detectors Installation, AMM TASK 26-18-03-400-801.

- 1) After approximately 60 seconds, if the maintenance message does not show on the MAT, you corrected the fault.
- (b) If there is no apparent damage to the element, disconnect the element from the loop (AMM TASK 26-18-03-000-801).
- (c) At each element connection, make sure the ceramic insulator is attached to the center conductor of the female connector end.
- (d) If the ceramic insulator is not attached, replace the element or wiring connector.

These are the tasks:

Wing Duct Leak Detectors Removal, AMM TASK 26-18-03-000-801,

Wing Duct Leak Detectors Installation, AMM TASK 26-18-03-400-801.

- 1) After approximately 60 seconds, if the maintenance message does not show on the MAT, you corrected the fault.
- (e) Examine the connector ends for damage or unwanted material.
- (f) If there is unwanted material in the connector ends, clean the connector ends and re-install the element. To install it, do this task: Wing Duct Leak Detectors Installation, AMM TASK 26-18-03-400-801.
 - 1) After approximately 60 seconds, if the maintenance message does not show on the MAT, you corrected the fault.
- (g) If you do not find a problem with the element or connector ends, then continue.



CAUTION

DO NOT USE INSULATION RESISTANCE "MEGGER" TESTERS OR DIELECTRIC VOLTAGE "HYPOT" TESTERS TO TEST THE SENSING ELEMENTS.

DISCONNECT THE WIRE BUNDLES FROM THE TERMINAL LUGS BEFORE TESTING THE DETECTOR RESISTANCE AND MEASURING THE INSULATION RESISTANCE; OTHERWISE, DAMAGE TO OTHER DETECTORS IN THE LOOP MAY OCCUR.

DO NOT TEST SENSING ELEMENTS HEATED TO WITHIN 100 DEGREES F (55 DEGREES C) OF THEIR ALARM TEMPERATURE SETPOINT.

IMPROPER TESTING CAN CAUSE DAMAGE TO THE HEAT SENSING ELEMENT.



CAUTION

USE A FSS TEST PIN P/N 06-134724-000 OR EQUIVALENT 0.0595 INCH (1.511 MM) TO 0.0615 INCH (1.588 MM) DIAMETER PIN INSERTED INTO THE RECEPTACLE TO SUPPLY A TEST POINT FOR MEASUREMENTS. SOCKET TYPE CONNECTORS (FEMALE) CAN BE DAMAGED BY METER LEADS.

- (h) Measure the resistance between the center conductor and the outer sheath of the element using an LCR meter (Inductance, Capacitance, Resistance), COM-1741.
 - 1) Make sure the resistance is at least 1000 ohms.
 - 2) If the resistance is less than 1000 ohms, replace the element.

These are the tasks:

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Wing Duct Leak Detectors Removal, AMM TASK 26-18-03-000-801,
Wing Duct Leak Detectors Installation, AMM TASK 26-18-03-400-801.

- 3) After approximately 60 seconds, if the maintenance message does not show on the MAT, you corrected the fault.
- (i) If you do not find a problem with the element, then re-install the element and continue. To install it, do this task: Wing Duct Leak Detectors Installation, AMM TASK 26-18-03-400-801.
- (j) If there is a different element in the zone, do the same fault isolation procedure for that element as you did for the other element.
- (3) If there is a DLODS control card in the zone, replace the DLODS control card.

These are the tasks:

DLODS Control Card Removal, AMM TASK 26-18-05-000-801,
DLODS Control Card Installation, AMM TASK 26-18-05-400-801.

- (a) After approximately 90 seconds, if the maintenance message does not show on the MAT, you corrected the fault.
- (b) If the maintenance message shows on the MAT, then continue.
- (4) If there is wiring in the zone, do these steps:
 - (a) To get access to the Systems Card Files,
Open this access panel:

<u>Number</u>	<u>Name/Location</u>
117AL	Main Equipment Center Access Door
 - (b) Move the power switch for the applicable DLODS control card to the OFF position:
 - 1) Right DLODS control card (A5) in the right systems cardfile (P84)
 - 2) Center DLODS control card (A8) in the right systems cardfile (P84)
 - 3) Left DLODS control card (A5) in the left systems cardfile (P85).
 - (c) Do a resistance check of the wiring between the component shown in the zone and ground using an LCR meter (Inductance, Capacitance, Resistance), COM-1741 (WDM 26-18-15) (WDM 26-18-16).
 - 1) Make sure the resistance is at least 1000 ohms.
 - 2) If the resistance is less than 1000 ohms, do these steps:
 - a) Repair the wiring.
 - b) Connect the wiring between the components (WDM 26-18-15) (WDM 26-18-16).
 - 3) Move the power switch for the applicable DLODS control card to the ON position:
 - a) Right DLODS control card (A5) in the right systems cardfile (P84)
 - b) Center DLODS control card (A8) in the right systems cardfile (P84)
 - c) Left DLODS control card (A5) in the left systems cardfile (P85).
 - 4) After approximately 90 seconds, if the maintenance message does not show on the MAT, you corrected the fault.
 - 5) If the maintenance message shows on the MAT, then continue.

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- (5) If there is a DLODS control card in the zone, do these steps to do a check of the backplane circuit between the DLODS control card and the cardfile connector:
- (a) Remove the applicable DLODS control card. To remove it, do this task: DLODS Control Card Removal, AMM TASK 26-18-05-000-801.
 - (b) Install an extender card, SPL-1658 in the applicable DLODS control card location.
 - (c) Do a continuity check between these pins and ground for the applicable DLODS control card using an LCR meter (Inductance, Capacitance, Resistance), COM-1741 (SSM 26-18-15) (SSM 26-18-16):

Table 202/26-18-00-993-818

LOOP	CARDFILE	DLODS CARD	DLODS CARD CONNECTOR
L Wing Loop 1	Right P84	Center A8	XA8 pins 28, 29, 30 pins 22, 23, 24
L Wing Loop 2	Left P85	Left A5	XA5 pins 28, 29, 30 pins 22, 23, 24
R Wing Loop 1	Right P84	Right A5	XA5 pins 64, 65, 66 pins 58, 59, 60
R Wing Loop 2	Right P84	Center A8	XA8 pins 64, 65, 66 pins 58, 59, 60

- (d) Make sure the resistance is at least 1000 ohms.
- (e) Remove the extender card, SPL-1658 from the DLODS control card location.
- (f) If the resistance is less than 1000 ohms, then replace the Systems Card File Assembly (AMM PAGEBLOCK 31-09-00/401). Otherwise, continue.
- (g) Re-install the applicable DLODS control card. To install it, do this task: DLODS Control Card Installation, AMM TASK 26-18-05-400-801.
 - 1) After approximately 90 seconds, if the maintenance message does not show on the MAT, you corrected the fault.
 - 2) If the maintenance message shows on the MAT, then continue.
- (6) If the fault is not corrected, do the same fault isolation procedure for the zones adjacent to the zone shown in the maintenance message.

NOTE: For example, if the maintenance message shows zone 5 is at fault, do the fault isolation procedure for zone 4. If you do not find the problem in zone 4, do the fault isolation procedure for zone 6.

————— **END OF TASK** —————

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816. **Body Duct Leak Detector Zone Open Problems - Fault Isolation**(Figure 301, Table 301, Figure 303 or Figure 304)

A. Maintenance Messages

- (1) This task is for maintenance messages: 26-31011, 26-31012, 26-31021, 26-31022, 26-31031, 26-31032, 26-31041, 26-31042, 26-31051, 26-31052, 26-31061, 26-31062, 26-31071, 26-31072, 26-31081, 26-31082, 26-31091, 26-31092, 26-31101, 26-31102, 26-31111, 26-31112, 26-31121, 26-31122, 26-31131, 26-31132, 26-31141, 26-31142, 26-31151, 26-31152, 26-31161, 26-31162, 26-31171, 26-31172, 26-31181, 26-31182, 26-31191, 26-31192, 26-31201, 26-31202, 26-31211, 26-31212, 26-31221, 26-31222, 26-31231, 26-31232, 26-31241, 26-31242, 26-31251, 26-31252, 26-31261, 26-31262.

B. General

- (1) Each body duct leak detection loop is divided into up to 26 zones for open zone detection. When an open loop failure is detected, the DLODS control card gives the location of the failure to the OMS. The OMS then shows the maintenance message. Because of electrical tolerances of the wiring and elements in the loop, the location zone shown is only approximate. There is some probability that the zone with the actual failure is adjacent to the zone shown by the message. When you troubleshoot an active fault, always do the procedure for the zone shown by the OMS message first. If you do not find the failure in that zone, do the procedure again for the zones adjacent to the original zone. Continue this process until you find the failure.

- (2) 777-300ER airplanes with DLODS software version 267B-FEN-003-01 installed;
Use the "Actual Fault Zone" data shown in the applicable table in 26-18 TASK SUPPORT, PAGEBLOCK 26-18-00/301:

Table 303 (Body Loop 1 Open Circuit Location)

Table 304 (Body Loop 2 Open Circuit Location)

NOTE: DLODS software version 267B-FEN-003-01 does not recognize airframe data for the 777-300ER. Thus, the zone data provided by DLODS does not reflect the correct zonal locations for troubleshooting.

C. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below for Active Fault in Subtask D.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault and do the Fault Isolation Procedure below for Intermittent Fault in Subtask E.

D. Fault Isolation Procedure - Active Fault

- (1) From the Fault Zone tables that follow, find the applicable DLODS control card, elements and wiring related to the maintenance message:

NOTE: The loop number is shown on or near each side of the bracket where the element is connected to wiring or to another element.

NOTE: Use the System Schematic Manual (SSM 26-18-10, WDM 26-18-17, WDM 26-18-18) to find the applicable components in the zone.

Table 203/26-18-00-993-840 Body Loop 1 Zone Open

Zone	Description
1	Left DLODS control card, P85-A5; wiring between DP8503, pin 43, and D7641J, pin 1
2	Wiring between DP8503, pin 43, and D7641J, pin 1

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Table 203/26-18-00-993-840 Body Loop 1 Zone Open (Continued)

Zone	Description
3	Wiring between DP8503, pin 43, and DM26136A
4	Element M26136; wiring between D7641P, pin 1 and DM26136A
5	Element M26136; wiring between DM26136B and DM26137
6	Element M26137; wiring between DM26136B and DM26137
7	Element M26137; Element M26138
8	Element M26138; Element M26139; Resistor R26110
9	Element M26139; wiring between DM26139 and DM26148
10	Element M26148; wiring between DM26148 and DM26139
11	Element M26148; Element M26149
12	Element M26140
13	Element M26140; Element M26141
14	Element M26141; Element M26142
15	Element M26142; Element M26143
16	Element M26143; Element M26144; Resistor R26111
17	Element M26144; Element M26145
18	Element M26145; Element M26146
19	Element M26146; wiring between DR26112 and DM26147A; Resistor R26112
20	Wiring between DR26112 and DM26147A
21	Element M26147; wiring between DR26112 and DM26147A
22	Element M26147; wiring between DM26147B and D7010J, pin 4
23	Wiring between DM26147B and DP8503, pin 42
24	Wiring between D7010P and DP8503, pin 42
25	Left DLODS control card, P85-A5; wiring between D7010P and DP8503, pin 42

Table 204/26-18-00-993-843 Body Loop 2 Zone Open

Zone	Description
1	Right DLODS control card, P84-A5; wiring between DP8402, pin 46, and D7631J, pin 1
2	Wiring between DP8402, pin 46, and D7631J, pin 1
3	Wiring between DP8402, pin 46, and DM26236B
4	Element M26236; wiring between D7631P, pin 1 and DM26236B
5	Element M26236; wiring between DM26236A and DM26237
6	Element M26237; wiring between DM26236A and DM26237
7	Element M26237; Element M26238
8	Element M26238; Element M26239; Resistor R26210
9	Element M26239; wiring between DM26239 and DM26240

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Table 204/26-18-00-993-843 Body Loop 2 Zone Open (Continued)

Zone	Description
10	Element M26248; wiring between DM26248 and DM26239
11	Element M26248; Element 26249
12	Element M26240;
13	Element M26240; Element M26241
14	Element M26241; Element M26242
15	Element M26242; Element M26243
16	Element M26243; Element M26244; Resistor R26211
17	Element M26244; Element M26245
18	Element M26245; Element M26246
19	Element M26246; wiring between DR26212 and DM26247B; Resistor R26212
20	Wiring between DR26212 and DM26247B
21	Element M26247; wiring between DR26212 and DM26247B
22	Element M26247; wiring between DM26247A and D7012J, pin 4
23	Wiring between DM26247A and DP8402, pin 45
24	Wiring between D7012P and DP8402, pin 45
25	Right DLODS control card, P84-A5; wiring between D7012P and DP8402, pin 45

- (2) If there is an element in the zone, examine if the elements are installed correctly.
- (a) Make sure that the elements are not loose.
 - (b) Make sure that there is no missing clips, clamps, or grommets.
 - (c) If the element is loose due to the missing parts then re-install the element; do this task:
Body Duct Leak Detectors Installation, AMM TASK 26-18-04-400-801.
 - (d) After approximately 60 seconds, if the maintenance message does not show on the MAT, you corrected the fault.
 - (e) Examine the element for damage.
 - 1) If there is damage to the element replace the element. These are the tasks:
Body Duct Leak Detectors Removal, AMM TASK 26-18-04-000-801
Body Duct Leak Detectors Installation, AMM TASK 26-18-04-400-801
 - 2) After approximately 60 seconds, if the maintenance message does not show on the MAT, you corrected the fault.
 - (f) Examine the connectors for loose connection.
 - 1) If there is any loose connection then tighten the connection; do this task: Body Duct Leak Detectors Installation, AMM TASK 26-18-04-400-801.
 - 2) After approximately 60 seconds, if the maintenance message does not show on the MAT, you corrected the fault.
 - (g) If there is no apparent damage to the element, or if there is no loose connection continue troubleshooting the affected loop.

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- (h) Do this resistance check of the loop, WDM 26-18-17WDM 26-18-18, Figure 303 or Figure 304:

NOTE: This procedure starts at the easiest accessible location closest to the zone location identified by the MAT, and systematically checks the loop for continuity. Once the first test is performed, the test continues toward the location of the increased resistance (forward toward the cardfile or aft toward the rear of the aircraft) until the affected element or connection is identified.

NOTE: At any time during this troubleshooting loop 1 can be compared to loop 2 for verification of the resistance values obtained during testing.

- 1) If loop 1 is being examined, then disconnect DP8503 from the P85 left systems cardfile (Figure 303 or Figure 304)
 - a) Measure the loop continuity from pin 42 to pin 43 of DP8503.
 - b) Compare the measured resistance to the largest cumulative resistance value listed in the Loop Resistance Table (Table 205).
 - c) If the resistance is out of tolerance, then continue at step (i) and troubleshoot loop 1.
- 2) If loop 2 is being examined, then disconnect DP8402 from the P84 right systems cardfile (Figure 303 or Figure 304).
 - a) Measure the loop continuity from pin 45 to pin 46 of DP8402.
 - b) Compare the measured resistance to the largest cumulative resistance value listed in the Loop Resistance Table (Table 205).
 - c) If the resistance is out of tolerance, continue to step (i) and troubleshoot loop 2.
- (i) install jumpers from the loop start (+) to ground, and from the loop end (-) to ground at the location below (Figure 303 or Figure 304)
 - Loop 1: DP8503 Pin 43 (+), Pin 42 (-)
 - Loop 2: DP8402 Pin 46 (+), Pin 45 (-)
- (j) Select an easily accessible connection for the correct loop nearest to the zone identified by the MAT, the connection may be forward or aft of the affected zone.
- (k) Before you break the connection, inspect the connection for signs of corrosion, contamination, and looseness.
 - 1) If there is contamination, or corrosion in the connector ends, clean the connector ends and re-install the element; do this task: Body Duct Leak Detectors Installation, AMM TASK 26-18-04-400-801.
 - 2) After approximately 60 seconds, if the maintenance message does not show on the MAT, you corrected the fault.
- (l) Open the connection for the correct loop (loop 1 or loop 2) and inspect the connector for signs of corrosion, and contamination.
- (m) In the female end of each element connection, make sure the shell-and-insert assembly is attached to the center conductor.
 - 1) If the shell-and-insert assembly is missing, replace the shell-and-insert assembly. These are the tasks:
Shell-and-Insert Assembly Removal, AMM TASK 26-18-06-000-801
Shell-and-Insert Assembly Installation, AMM TASK 26-18-06-400-801



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- 2) After approximately 60 seconds, if the maintenance message does not show on the MAT, you corrected the fault.
- (n) Remove the shell-and-insert assembly and examine the shell-and-insert assembly for signs of corrosion or cracks.
 - 1) If the shell-and-insert assembly is damaged or corroded, replace the shell-and-insert assembly. These are the tasks:
 Shell-and-Insert Assembly Removal, AMM TASK 26-18-06-000-801
 Shell-and-Insert Assembly Installation, AMM TASK 26-18-06-400-801
 - 2) Re-install the connectors (Body Duct Leak Detectors Installation, AMM TASK 26-18-04-400-801).
 - 3) After approximately 60 seconds, if the maintenance message does not show on the MAT, you corrected the fault.
- (o) Measure and record resistance from the center pin of the loop elements connected to the (+) side of the DLODS control card (step h. 1) to ground. This is the FWD measurement.
- (p) Measure and record resistance from the center pin of the loop elements connected to the (-) side of the DLODS control card (step h.1) to ground. This is the AFT measurement.
- (q) Compare the resistance from step (o) to the cumulative loop resistance value of Table 205 for the zone containing the broken connections.
- (r) Subtract the cumulative resistance value for the zone containing the broken connections from the maximum cumulative loop resistance value listed in Table 205. Compare this value to the value obtained in step (p).

Table 205/26-18-00-993-846 Loop Resistance Table 777-300

Zone Number	Description (Loop 1)	Description (loop 2)	Nominal Length (inches)	Nominal Cumulative Loop Resistance (Ohms)
1 or 2	Wires from DP8503 to D7641J	Wires from DP8402 to D7631J	1,748	1.4 (±0.1)
1 or 2	Wires from D7641P to DM26136A	Wires from D7631P to DM26236B	123	1.5 (±0.2)
2 or 3	M26136	M26236	137	9.0 (±0.3)
3 or 4	Wires from DM26136B to DM26137	Wires from DM26236A to DM26237	125	9.1(±0.3)
3 or 4 or 5	M26137	M26237	188	19.3 (±0.4)
5 or 6	M26138	M26238	180	29.2 (±0.6)
6 or 7	R26110	R26210	3	36.7(±0.9)
8 or 9	M26139	M26239	188	47.0 (±1.1)
9 or 10	Wires from DM26139 to DM26148	Wires from DM26239 to DM26248	55	47.0 (±1.1)
9 or 10 or 11	M26148	M26248	98	52.3 (±1.2)
10 or 11	M26149	M26249	98	57.7 (±1.2)
12	M26140	M26240	123	64.4(±1.3)
13	M26141	M26241	177	74.1 (±1.5)

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Table 205/26-18-00-993-846 Loop Resistance Table 777-300 (Continued)

Zone Number	Description (Loop 1)	Description (loop 2)	Nominal Length (inches)	Nominal Cumulative Loop Resistance (Ohms)
14 or 15	M26142	M26242	177	83.7 (±1.6)
15 or 16	M26143	M26243	134	91.1 (±1.7)
16 or 17	R26111	R26211	3	98.6 (±2.1)
16 or 17	M26144	M26244	106	104.4 (±2.2)
17 or 18	M26145	M26245	177	114.1 (±2.3)
18 or 19	M26146	M26246	137	121.5 (±2.4)
19 or 20	R26112	R26212	3	129.1 (±2.8)
20	Wires from DR26112 to DM26147A	Wires from DR26212 to DM26247B	1,619	130.0 (±2.9)
20 or 21	M26147	M26247	138	137.5 (±3.0)
22 or 23	Wires from DM26147B to D7010J	Wires from DM247A to D7012J	269	137.7 (±3.0)
24 or 25	Wires from D7010P to DP8503	Wires from D7012P to DP8402	1,767	139.1 (±3.2)

- (s) If the resistance value obtained in step (o) is out of tolerance, the OPEN condition exists forward of the broken connection. If the resistance value obtained in step (p) is out of tolerance, the OPEN condition exists aft of the broken connection.
 - (t) Examine the connector ends for damage, contamination, or corrosion.
 - (u) Ensure that the shell-and-insert assembly is in place and in good condition.
 - (v) If there is contamination, or corrosion in the connector ends, clean the connector ends and re-install the element; do this task: Body Duct Leak Detectors Installation, AMM TASK 26-18-04-400-801.
 - 1) After approximately 60 seconds, if the maintenance message does not show on the MAT, you corrected the fault.
 - (w) Based on the results of step (s), repeat steps (i) through (v) forward or aft of the previously broken connection as necessary until the fault is isolated to a sensing element, in-line resistor, or connection.
- (3) If there is a DLODS control card in the zone, replace the DLODS control card.
- These are the tasks:
- DLODS Control Card Removal, AMM TASK 26-18-05-000-801,
DLODS Control Card Installation, AMM TASK 26-18-05-400-801.
- (a) After approximately 90 seconds, if the maintenance message does not show on the MAT, you corrected the fault.
 - (b) If the maintenance message shows on the MAT, then continue.
- (4) If there is wiring in the zone, do these steps:
- (a) Do these steps to remove power from the body duct leak detectors:
 - 1) To get access to the Systems Card Files:

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Open this access panel:

<u>Number</u>	<u>Name/Location</u>
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117AL	Main Equipment Center Access Door
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- 2) Move the power switch for the applicable DLODS control card to the OFF position:
 - a) Right DLODS control card (A5) in the right systems cardfile (P84)
 - b) Center DLODS control card (A8) in the right systems cardfile (P84)
 - c) Left DLODS control card (A5) in the left systems cardfile (P85).
- (b) Do a continuity check of the wiring between the components shown in the zone (WDM 26-18-17, WDM 26-18-18, Figure 303 or Figure 304).
 - 1) Make sure the resistance is less than 10 ohms.
- (c) If you find a problem with the wiring, do these steps:
 - 1) Repair the wiring.
 - 2) Connect the wiring between the components (WDM 26-18-17, WDM 26-18-18, Figure 303 or Figure 304).
 - 3) Move the power switch for the applicable DLODS control card to the ON position:
 - a) Right DLODS control card (A5) in the right systems cardfile (P84)
 - b) Center DLODS control card (A8) in the right systems cardfile (P84)
 - c) Left DLODS control card (A5) in the left systems cardfile (P85).
 - 4) After approximately 90 seconds, if the maintenance message does not show on the MAT, you corrected the fault.
 - 5) If the maintenance message shows on the MAT, then continue.
- (5) If there is a resistor in the zone, do these steps:
 - (a) Do these steps to remove power from the body duct leak detectors:
 - 1) To get access to the Systems Card Files:

Open this access panel:

<u>Number</u>	<u>Name/Location</u>
117AL	Main Equipment Center Access Door
 - 2) Move the power switch for the applicable DLODS control card to the OFF position:
 - a) Right DLODS control card (A5) in the right systems cardfile (P84)
 - b) Center DLODS control card (A8) in the right systems cardfile (P84)
 - c) Left DLODS control card (A5) in the left systems cardfile (P85).
 - (b) Disconnect the applicable elements from the resistor; do this task: Body Duct Leak Detectors Removal, AMM TASK 26-18-04-000-801.
 - (c) Do a continuity check of the resistor (WDM 26-18-17, WDM 26-18-18, Figure 303 or Figure 304).
 - 1) Make sure the resistance is less than 10 ohms.
 - (d) If you find a problem with the resistor, replace it.

These are the tasks:

Body Duct Leak Detectors Removal, AMM TASK 26-18-04-000-801,

Body Duct Leak Detectors Installation, AMM TASK 26-18-04-400-801.

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- (e) Re-connect the applicable elements to the resistor; do this task: Body Duct Leak Detectors Installation, AMM TASK 26-18-04-400-801.
 - 1) Move the power switch for the applicable DLODS control card to the ON position:
 - a) Right DLODS control card (A5) in the right systems cardfile (P84)
 - b) Center DLODS control card (A8) in the right systems cardfile (P84)
 - c) Left DLODS control card (A5) in the left systems cardfile (P85).
 - 2) After approximately 90 seconds, if the maintenance message does not show on the MAT, you corrected the fault.
 - 3) If the maintenance message shows on the MAT, then continue.
- (6) If there is a DLODS control card in the zone, do these steps to do a check of the backplane circuit between the DLODS control card and the cardfile connector:
 - (a) Remove the applicable DLODS control card; do this task: DLODS Control Card Removal, AMM TASK 26-18-05-000-801.
 - (b) Install an extender card, SPL-1658 applicable DLODS control card location.
 - (c) Do a continuity check between these pins for the applicable DLODS control card using digital/analog multimeter, COM-1793, a B & K meter, or equivalent meter,(SSM 26-18-17) (SSM 26-18-18):

LOOP 1 - LEFT P85 - LEFT A5

CARDFILE CONNECTOR	DLODS CARD CONNECTOR
DP8503	XA5
pin 42	pin 64, 65, 66
pin 43	pins 58, 59, 60

LOOP 2 - RIGHT P84 - RIGHT A5

CARDFILE CONNECTOR	DLODS CARD CONNECTOR
DP8402	XA5
pin 45	pin 28, 29, 30
pin 46	pins 22, 23, 24

- (d) Remove the extender card, SPL-1658 from the DLODS control card location.
- (e) If there is no continuity, then replace the Systems Card File Assembly (AMM PAGEBLOCK 31-09-00/401). Otherwise, continue.
- (f) Re-install the applicable DLODS control card; do this task: DLODS Control Card Installation, AMM TASK 26-18-05-400-801.
 - 1) After approximately 90 seconds, if the maintenance message does not show on the MAT, you corrected the fault.
 - 2) If the maintenance message shows on the MAT, then continue.
- (7) If the fault is not corrected, do the same fault isolation procedure for the zones adjacent to the zone shown in the maintenance message.

NOTE: For example, if the maintenance message shows zone 5 is at fault, do the fault isolation procedure for zone 4. If you do not find the problem in zone 4, do the fault isolation procedure for zone 6.

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E. Fault Isolation Procedure – Intermittent Fault

(Figure 303 or Figure 304)

NOTE: This procedure will assist in troubleshooting the DLODS BODY LOOP(S) in the unpressurized areas of the aircraft (Wheel Well, Tail section and Left Wing / Body Fairing - ADP area). You isolate the faulty element/connector by moving toward the increased resistance and comparing measured values at these locations to the values listed in Table 205 above. Throughout the procedure below the value for Loop 1 and Loop 2 is given as Loop 1 (Loop2).

NOTE: Ensure that connectors are clean and dry before restoring the connection and moving on to the next connection.

(1) Initial Checks

Table 206/26-18-00-993-851 Loop Tolerances

Aircraft	Nominal Loop Resistance	Max. Loop Resistance
777-300 (incl. ER, LR)	139.1 Ohms	142.3 Ohms

- Gain access to the Electronics Equipment (EE) Bay.
- Disconnect DP8503 (P3) from the P85 Panel (Loop 1) (WDM 26-18-17).
- Measure and record the resistance from pin 43(+) to pin 42(-) of DP8503.
- Disconnect DP8402 (P2) from the P84 Panel (Loop 2) (WDM 26-18-18).
- Measure and record the resistance from pin 46(+) to pin 45(-) of DP8402.
- Compare the recorded loop values to the values listed in Table 206.
- If either loop exceeds the maximum loop resistance from Table 206 then install jumpers from the loop start (+) to ground, and from the loop end (-) to ground at the location below
 - Loop 1: DP8503 Pin 43 (+), Pin 42 (-)
 - Loop 2: DP8402 Pin 46 (+), Pin 45 (-)

(2) Troubleshooting the Tail Section (Figure 303 or Figure 304)

NOTE: Always clean the connectors before reconnecting and moving on to the next connection (AMM PAGEBLOCK 26-18-04/701).

- Open the connection between element connector M26144 (M26244) and resistor R26111 (R26211) (Body Duct Leak Detectors Removal, AMM TASK 26-18-04-000-801).
- Inspect the shell-and-insert assembly and make sure that it is not damaged. If it is damaged then replace it (AMM PAGEBLOCK 26-18-06/401).
- Measure and record resistance from the center pin of the resistor, R26111 (R26211), to ground. This is the FWD measurement.
- Measure and record resistance from the center pin of the element connector, M26144 (M26244), to ground. This is the AFT measurement.
- Add the FWD and AFT measurements together and compare the total loop resistance to the values listed in Table 206.
- Restore the connection by connecting element connector M26144 (M26244) and resistor R26111 (R26211) (Body Duct Leak Detectors Installation, AMM TASK 26-18-04-400-801).
- For a high FWD measurement, proceed to troubleshoot at the Wheel Well Section (Table 205).

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- (h) For a high AFT measurement, do these steps (Table 205):
- 1) Open the connection between wire connector DR26112 (DR26212) and resistor R26112 (R26212) (Body Duct Leak Detectors Removal, AMM TASK 26-18-04-000-801).
 - 2) Inspect the shell-and-insert assembly and make sure that it is not damaged. If it is damaged then replace it (AMM PAGEBLOCK 26-18-06/401)
 - 3) Measure and record resistance from the center pin of the resistor, R26112 (R26212), to ground. This is the FWD measurement.
 - 4) Measure and record resistance from the center pin of the wire connector, DR26112 (DR26212), to ground. This is the AFT measurement.
 - 5) Add the FWD and AFT measurements together and compare the loop resistances to the values listed in Table 206.
 - 6) Restore the connection by connecting wire connector DR26112 (DR26212) and resistor R26112 (R26212) (Body Duct Leak Detectors Installation, AMM TASK 26-18-04-400-801).
 - 7) For a high AFT measurement, proceed to troubleshoot Wing / Body Fairing Section, ADP area.
 - 8) For a high FWD measurement, check the remaining connections in the Tail section until the problem is located.
 - a) Open the connection between R26112 (R26212) and M26146 (M26246) (Body Duct Leak Detectors Removal, AMM TASK 26-18-04-000-801).
 - b) Inspect the shell-and-insert assembly and make sure that it is not damaged. If it is damaged then replace it (AMM PAGEBLOCK 26-18-06/401)
 - c) Measure and record resistance from the center pin of M26146 (M26246), to ground. This is the FWD measurement.
 - d) Measure and record resistance from the center pin of R26112 (R26212), to ground. This is the AFT measurement.
 - e) Add the FWD and AFT measurements together and compare the loop resistances to the values listed in Table 206.
 - f) Restore the connection by connecting R26112 (R26212) and M26146 (M26246) (Body Duct Leak Detectors Installation, AMM TASK 26-18-04-400-801).
 - g) Open the connection between M26146 (M26246) and M26145 (M26245) (Body Duct Leak Detectors Removal, AMM TASK 26-18-04-000-801).
 - h) Inspect the shell-and-insert assembly and make sure that it is not damaged. If it is damaged then replace it (AMM PAGEBLOCK 26-18-06/401).
 - i) Measure and record resistance from the center pin of M26146 (M26246), to ground. This is the FWD measurement.
 - j) Measure and record resistance from the center pin of M26145 (M26245), to ground. This is the AFT measurement.
 - k) Add the FWD and AFT measurements together and compare the loop resistances to the values listed in Table 206.
 - l) Restore the connection by connecting M26146 (M26246) and M26145 (M26245) (Body Duct Leak Detectors Installation, AMM TASK 26-18-04-400-801).

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- m) Open the connection between M26145 (M26245) and M26144 (M26244) (Body Duct Leak Detectors Removal, AMM TASK 26-18-04-000-801).
 - n) Inspect the shell-and-insert assembly and make sure that it is not damaged. If it is damaged then replace it (AMM PAGEBLOCK 26-18-06/401).
 - o) Measure and record resistance from the center pin of M26145 (M26245), to ground. This is the FWD measurement.
 - p) Measure and record resistance from the center pin of M26144 (M26244), to ground. This is the AFT measurement.
 - q) Add the FWD and AFT measurements together and compare the loop resistances to the values listed in Table 206.
 - r) Restore the connection by connecting M26145 (M26245) and M26144 (M26244) (Body Duct Leak Detectors Installation, AMM TASK 26-18-04-400-801).
- 9) When the resistance measurements are within the limits of Table 206, restore the connections and proceed to the corresponding loop connector in the EE Bay.
- 10) Measure the total loop resistance to the corresponding connector in the EE Bay.
- 11) If the measured values are within the limits of Table 206, there is no need to troubleshoot the aircraft any further at this time.
- 12) If the measured value is not within the limits of Table 206, replace the faulty element/connector at the last connection tested (AMM PAGEBLOCK 26-18-04/401).
- (3) Troubleshooting the Wheel Well (Figure 303 or Figure 304)
- NOTE:** Always clean the connectors before reconnecting and moving on to the next connection (AMM PAGEBLOCK 26-18-04/701).
- (a) Open the connection between the wire connector DM26136A (DM26236B) and element connector M26136 (M26236) (Body Duct Leak Detectors Removal, AMM TASK 26-18-04-000-801).
 - (b) Inspect the shell-and-insert assembly and make sure that it is not damaged. If it is damaged then replace it (AMM PAGEBLOCK 26-18-06/401)
 - (c) Measure and record resistance from the center pin of the wire connector, DM26136A (DM26236B), to ground. This is the FWD measurement
 - (d) Measure and record resistance from the center pin of the element connector, M26136 (M26236), to ground. This is the AFT measurement.
 - (e) Add the FWD and AFT measurements together and compare the total loop resistance to the values listed in Table 206.
 - (f) Restore the connection by connecting the wire connector DM26136A (DM26236B) and element connector M26136 (M26236) (Body Duct Leak Detectors Installation, AMM TASK 26-18-04-400-801).
 - (g) For a high FWD measurement, check the wire connections forward to the Systems Cardfile, until the problem is located.
 - (h) For a high AFT measurement, proceed to the Wheel Well Area and do these steps:
 - 1) Open the connection by disconnecting the element connector M26138 (M26238) and resistor R26110 (R26210) (Body Duct Leak Detectors Removal, AMM TASK 26-18-04-000-801).
 - 2) Inspect the shell-and-insert assembly and make sure that it is not damaged. If it is damaged then replace it (AMM PAGEBLOCK 26-18-06/401).

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- 3) Measure and record resistance from the center pin of the element connector, M26138 (M26238), to ground. This is the FWD measurement
- 4) Measure and record resistance from the center pin of the resistor connector, R26110 (R26210), to ground. This is the AFT measurement.
- 5) Add the FWD and AFT measurements together and compare the total loop resistance to the values listed in Table 206.
- 6) Restore the connection by connecting the element connector M26138 (M26238) and resistor R26110 (R26210) (Body Duct Leak Detectors Installation, AMM TASK 26-18-04-400-801).
- 7) For a high AFT measurement, troubleshoot the wiring and remaining elements in the Aft Cargo Compartment, until the problem is located.
- 8) For a high FWD measurement, check the remaining connections in this area, until the problem is located.
 - a) Open the connection between M26137 (M26237) and M26138 (M26238) (Body Duct Leak Detectors Removal, AMM TASK 26-18-04-000-801).
 - b) Inspect the shell-and-insert assembly and make sure that it is not damaged. If it is damaged then replace it (AMM PAGEBLOCK 26-18-06/401).
 - c) Measure and record resistance from the center pin of M26137 (M26237), to ground. This is the FWD measurement.
 - d) Measure and record resistance from the center pin of M26138 (M26238), to ground. This is the AFT measurement.
 - e) Add the FWD and AFT measurements together and compare the loop resistances to the values listed in Table 206.
 - f) Restore the connection by connecting M26137 (M26237) and M26138 (M26238) (Body Duct Leak Detectors Installation, AMM TASK 26-18-04-400-801).
 - g) Open the connection between M26137 (M26237) and DM26136B (DM26236B) (Body Duct Leak Detectors Removal, AMM TASK 26-18-04-000-801).
 - h) Inspect the shell-and-insert assembly and make sure that it is not damaged. If it is damaged then replace it (AMM PAGEBLOCK 26-18-06/401).
 - i) Measure and record resistance from the center pin of M26137 (M26237), to ground. This is the FWD measurement.
 - j) Measure and record resistance from the center pin of DM26136B (DM26236B), to ground. This is the AFT measurement.
 - k) Add the FWD and AFT measurements together and compare the loop resistances to the values listed in Table 206.
 - l) Restore the connection by connecting M26137 (M26237) and DM26136B (DM26236B) (Body Duct Leak Detectors Installation, AMM TASK 26-18-04-400-801).
- 9) When the resistance measurements are within the limits of Table 206, restore the connections and proceed to the corresponding loop connector in the EE Bay.
- 10) Measure the total loop resistance to the corresponding connector in the EE Bay.
- 11) If the measured values are within the limits of Table 206, there is no need to troubleshoot the aircraft any further at this time.

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- 12) If the measured value is not within the limits of Table 206, replace the faulty element/connector at the last connection (AMM PAGEBLOCK 26-18-04/401).
- (4) Troubleshooting the Wing / Body Fairing Section (ADP area) (Figure 303 or Figure 304)
- NOTE:** Always clean the connectors before reconnecting and moving on to the next connection (AMM PAGEBLOCK 26-18-04/701).
- (a) Open the connection between wire connector DM26147B (DM26247A) and element connector M26147 (M26247) (Body Duct Leak Detectors Removal, AMM TASK 26-18-04-000-801).
 - (b) Inspect the shell-and-insert assembly and make sure that it is not damaged. If it is damaged then replace it (AMM PAGEBLOCK 26-18-06/401)
 - (c) Measure and record resistance from the center pin of the element connector, M26147 (M26247), to ground. This is the FWD measurement.
 - (d) Measure and record resistance from the center pin of the wire connector, DM26147B (DM26247A), to ground. This is the AFT measurement.
 - (e) Add the FWD and AFT measurements together and compare the total loop resistance to the values listed in Table 206.
 - (f) Restore the connection by connecting wire connector DM26147B (DM26247A) and element connector M26147 (M26247) (Body Duct Leak Detectors Installation, AMM TASK 26-18-04-400-801).
 - (g) For a high AFT measurement, troubleshoot the remaining wire connections toward the Systems Cardfile, until the problem is located.
 - (h) For a high FWD measurement, do these steps:
 - 1) Open the connection by disconnecting the wire connector DM26147A (DM26247A) and element connector M26147 (M26247) (Body Duct Leak Detectors Removal, AMM TASK 26-18-04-000-801).
 - 2) Inspect the shell-and-insert assembly and make sure that it is not damaged. If it is damaged then replace it (AMM PAGEBLOCK 26-18-06/401)
 - 3) Measure and record resistance from the center pin of the wire connector, DM26147A (DM26247A), to ground. This is the FWD measurement.
 - 4) Measure and record resistance from the center pin of the element connector, M26147 (M26247), to ground. This is the AFT measurement.
 - 5) Add the FWD and AFT measurements together and compare the total loop resistance to the values listed in Table 206.
 - 6) Restore the connection by connecting the wire connector DM26147A (DM26247A) and element connector M26147 (M26247) (Body Duct Leak Detectors Installation, AMM TASK 26-18-04-400-801).
 - 7) For a high FWD measurement, troubleshoot the wiring and connections in the Tail Section.
 - 8) For a high AFT measurement, check the remaining connections in this area, until the problem is located.
 - a) Open the connection by disconnecting M26147 (M26247) and DM26147B (DM26247B) (Body Duct Leak Detectors Removal, AMM TASK 26-18-04-000-801).
 - b) Inspect the shell-and-insert assembly and make sure that it is not damaged. If it is damaged then replace it (AMM PAGEBLOCK 26-18-06/401).

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- c) Measure and record resistance from the center pin of M26147 (M26247), to ground. This is the FWD measurement.
 - d) Measure and record resistance from the center pin of DM26147B (DM26247B) to ground. This is the AFT measurement.
 - e) Add the FWD and AFT measurements together and compare the total loop resistance to the values listed in Table 206.
 - f) Restore the connection by connecting DM26147B (DM26247B) and M26147 (M26247) (Body Duct Leak Detectors Installation, AMM TASK 26-18-04-400-801).
- 9) When the resistance measurements are within the limits of Table 206, restore the connections and proceed to the corresponding loop connector in the EE Bay.
 - 10) Measure the total loop resistance to the corresponding connector in the EE Bay.
 - 11) If the measured values are within the limits of Table 206, there is no need to troubleshoot the aircraft any further at this time.
 - 12) If the measured value is not within the limits of Table 206, replace the faulty element/connector at the last connection (AMM PAGEBLOCK 26-18-04/401).

— END OF TASK —

804. Body Duct Leak Detector Zone Shorted Problems - Fault Isolation(Figure 301, Table 301)

A. Maintenance Messages

- (1) This task is for maintenance messages: 26-32011, 26-32012, 26-32021, 26-32022, 26-32031, 26-32032, 26-32041, 26-32042, 26-32051, 26-32052, 26-32061, 26-32062, 26-32071, 26-32072, 26-32081, 26-32082, 26-32091, 26-32092, 26-32101, 26-32102, 26-32111, 26-32112, 26-32121, 26-32122, 26-32131, 26-32132, 26-32141, 26-32142, 26-32151, 26-32152, 26-32161, 26-32162, 26-32171, 26-32172, 26-32181, 26-32182, 26-32191, 26-32192, 26-32201, 26-32202, 26-32211, 26-32212, 26-32221, 26-32222, 26-32231, 26-32232, 26-32241, 26-32242, 26-32251, 26-32252, 26-32261, 26-32262.

B. General

- (1) Each body duct leak detection loop is divided into up to 26 zones for shorted zone detection. When a shorted loop failure is detected, the DLODS control card gives the location of the failure to the OMS. The OMS then shows the maintenance message. Because of the electrical tolerances of the wiring and elements in the loop, there is some probability that the zone with the actual failure is adjacent to the zone shown by the message. When you troubleshoot the failure, always do the procedure for the zone shown by the OMS message first. If you do not find the failure in that zone, do the procedure again for the zones adjacent to the original zone. Continue this process until you find the failure.
- (2) 777-300ER airplanes with DLODS software version 267B-FEN-003-01 installed;
Use the "Actual Fault Zone" data shown in this table in 26-18 TASK SUPPORT, PAGEBLOCK 26-18-00/301:

Table 302 (Body Loop Short Circuit Location)

NOTE: DLODS software version 267B-FEN-003-01 does not recognize airframe data for the 777-300ER. Thus, the zone data provided by DLODS does not reflect the correct zonal locations for troubleshooting. This problem will be resolved when new software is released for the 777-300ER airframe.

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C. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows that the maintenance message occurred during the present flight leg or previous flight leg but is currently NOT ACTIVE, then there was a duct leak or an intermittent fault.
- (3) If there is a duct leak indication on EICAS related to the maintenance message, do these steps to make sure there was not a duct leak:
 - (a) Examine the area specified by the maintenance message for possible causes of the duct leak (AMM TASK 36-11-01-200-801).
 - (b) Make sure the detection elements are at least two inches away from the duct.
- (4) If there is not a duct leak indication on EICAS related to the maintenance message, then there was an intermittent fault.

D. Fault Isolation Procedure

- (1) From the Fault Zone tables that follow, find the applicable DLODS control card, elements and wiring related to the maintenance message:

NOTE: The loop number is shown on or near each side of the bracket where the element is connected to wiring or to another element.

NOTE: Use the System Schematic Manual (SSM 26-18-08, WDM 26-18-17, WDM 26-18-18) to find the applicable components in the zone.

Table 207/26-18-00-993-811 Body Loop 1 Zone Shorted

Zone	Description
1	Left DLODS control card, P85-A5; wiring between DP8503, pin 43, and DM26136A
2	Element M26136; wiring between DP8503, pin 43, and DM26136A
3	Element M26136; Element M26137; wiring between DM26136B and DM26137
4	Element M26137; wiring between DM26136B and DM26137
5	Element M26137; Element M26138
6	Element M26138; Resistor R26110
7	Element M26139; Resistor R26110
8	Element M26139; Element M26148; wiring between DM26139 and DM26148
9	Element M26148; Element M26149; wiring between DM26139 and DM26148
10	Element M26148; Element M26149;
11	Element M26148; Element M26149; Element M26140
12	Element M26149; Element M26140
13	Element M26149; Element M26140; Element M26141
14	Element M26140; Element M26141
15	Element M26141; Element M26142
16	Element M26142
17	Element M26142; Element M26143

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Table 207/26-18-00-993-811 Body Loop 1 Zone Shorted (Continued)

Zone	Description
18	Element M26143; Resistor R26111
19	Element M26144; Resistor R26111
20	Element M26144; Element M26145
21	Element M26145
22	Element M26145; Element M26146
23	Element M26146; Resistor R26112
24	Element M26147; wiring between DR26112 and DM26147A; Resistor R26112
25	Element M26147; wiring between DM26147B and DP8503, pin 42
26	Left DLODS control card, P85-A5; wiring between DM26147B and DP8503, pin 42

Table 208/26-18-00-993-813 Body Loop 2 Zone Shorted

Zone	Description
1	Right DLODS control card, P84-A5; wiring between DP8402, pin 46, and DM26236B
2	Element M26236; wiring between DP8402, pin 46, and DM26236B
3	Element M26236; Element M26237; wiring between DM26236A and DM26237
4	Element M26237; wiring between DM26236A and DM26237
5	Element M26237; Element M26238
6	Element M26238; Resistor R26210
7	Element M26239; Resistor R26210
8	Element M26239; Element M26248; wiring between DM26239 and DM26248
9	Element M26239 & Element M26248; Element M26248; Element M26249
10	Element M26248 & Element M26249;
11	Element M26248 & Element M26249; Element M26240
12	Element M26249; Element M26240
13	Element M26249; Element M26240; Element M26241
14	Element M26240; Element M26241
15	Element M26241
15	Element M26241; Element M26242
16	Element M26242
17	Element M26242; Element M26243
18	Element M26243; Resistor R26211
19	Element M26244; Resistor R26211
20	Element M26244; Element M26245
21	Element M26245
22	Element M26245; Element M26246

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Table 208/26-18-00-993-813 Body Loop 2 Zone Shorted (Continued)

Zone	Description
23	Element M26246; Resistor R26212
24	Element M26247; wiring between DR26212 and DM26247B; Resistor R26212
25	Element M26247; wiring between DM26247A and DP8402, pin 45
26	Right DLODS control card, P84-A5; wiring between DM26247A and DP8402, pin 45

(2) If there is an element in the zone, examine the element for damage.

(a) If there is damage to the element, replace the element.

These are the tasks:

Body Duct Leak Detectors Removal, AMM TASK 26-18-04-000-801,
Body Duct Leak Detectors Installation, AMM TASK 26-18-04-400-801.

1) After approximately 60 seconds, if the maintenance message does not show on the MAT, you corrected the fault.

(b) If there is no apparent damage to the element, disconnect the element from the loop (AMM TASK 26-18-04-000-801).

(c) At each element connection, make sure the ceramic insulator is attached to the center conductor of the female connector end.

(d) If the ceramic insulator is not attached, replace the element or wiring connector.

These are the tasks:

Body Duct Leak Detectors Removal, AMM TASK 26-18-04-000-801,
Body Duct Leak Detectors Installation, AMM TASK 26-18-04-400-801.

1) After approximately 60 seconds, if the maintenance message does not show on the MAT, you corrected the fault.

(e) Examine the connector ends for damage or unwanted material.

(f) If there is unwanted material in the connector ends, clean the connector ends and re-install the element; do this task: Body Duct Leak Detectors Installation, AMM TASK 26-18-04-400-801.

1) After approximately 60 seconds, if the maintenance message does not show on the MAT, you corrected the fault.

(g) If you do not find a problem with the element or connector ends, then continue.

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DO NOT USE INSULATION RESISTANCE "MEGGER" TESTERS OR DIELECTRIC VOLTAGE "HYPO" TESTERS TO TEST THE SENSING ELEMENTS.

DISCONNECT THE WIRE BUNDLES FROM THE TERMINAL LUGS BEFORE TESTING THE DETECTOR RESISTANCE AND MEASURING THE INSULATION RESISTANCE; OTHERWISE, DAMAGE TO OTHER DETECTORS IN THE LOOP MAY OCCUR.

DO NOT TEST SENSING ELEMENTS HEATED TO WITHIN 100 DEGREES F (55 DEGREES C) OF THEIR ALARM TEMPERATURE SETPOINT.

IMPROPER TESTING CAN CAUSE DAMAGE TO THE HEAT SENSING ELEMENT.



USE A FSS TEST PIN P/N 06-134724-000 OR EQUIVALENT 0.0595 INCH (1.511 MM) TO 0.0615 INCH (1.588 MM) DIAMETER PIN INSERTED INTO THE RECEPTACLE TO SUPPLY A TEST POINT FOR MEASUREMENTS. SOCKET TYPE CONNECTORS (FEMALE) CAN BE DAMAGED BY METER LEADS.

- (h) Measure the resistance between the center conductor and the outer sheath of the element using an LCR meter (Inductance, Capacitance, Resistance), COM-1741.
 - 1) Make sure the resistance is at least 1000 ohms.
 - (i) If the resistance is less than 1000 ohms, replace the element.

These are the tasks:

Body Duct Leak Detectors Removal, AMM TASK 26-18-04-000-801,

Body Duct Leak Detectors Installation, AMM TASK 26-18-04-400-801.

 - 1) After approximately 60 seconds, if the maintenance message does not show on the MAT, you corrected the fault.
 - (j) If you do not find a problem with the element, then re-install the element and continue; do this task: Body Duct Leak Detectors Installation, AMM TASK 26-18-04-400-801.
 - (k) If there is a different element in the zone, do the same fault isolation procedure for that element as you did for the other element.
- (3) If there is a DLODS control card in the zone, replace the DLODS control card.
- These are the tasks:
- DLODS Control Card Removal, AMM TASK 26-18-05-000-801,
- DLODS Control Card Installation, AMM TASK 26-18-05-400-801.
- (a) After approximately 90 seconds, if the maintenance message does not show on the MAT, you corrected the fault.
 - (b) If the maintenance message shows on the MAT, then continue.
- (4) If there is wiring in the zone, do these steps:
- (a) To get access to the Systems Card Files:

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Open this access panel:

<u>Number</u>	<u>Name/Location</u>
117AL	Main Equipment Center Access Door

- (b) Move the power switch for the applicable DLODS control card to the OFF position:
 - 1) Right DLODS control card (A5) in the right systems cardfile (P84)
 - 2) Center DLODS control card (A8) in the right systems cardfile (P84)
 - 3) Left DLODS control card (A5) in the left systems cardfile (P85).
- (c) Do a resistance check of the wiring between the component shown in the zone and ground using an LCR meter (Inductance, Capacitance, Resistance), COM-1741 (WDM 26-18-17) (WDM 26-18-18).
 - 1) Make sure the resistance is at least 1000 ohms.
 - 2) If the resistance is less than 1000 ohms, do these steps:
 - a) Repair the wiring.
 - b) Connect the wiring between the components (WDM 26-18-17) (WDM 26-18-18).
 - 3) Move the power switch for the applicable DLODS control card to the ON position:
 - a) Right DLODS control card (A5) in the right systems cardfile (P84)
 - b) Center DLODS control card (A8) in the right systems cardfile (P84)
 - c) Left DLODS control card (A5) in the left systems cardfile (P85).
 - 4) After approximately 90 seconds, if the maintenance message does not show on the MAT, you corrected the fault.
 - 5) If the maintenance message shows on the MAT, then continue.
- (5) If there is a resistor in the zone, do these steps:
 - (a) Do these steps to remove power from the body duct leak detectors:
 - 1) To get access to the Systems Card Files:

Open this access panel:

<u>Number</u>	<u>Name/Location</u>
117AL	Main Equipment Center Access Door
 - 2) Move the power switch for the applicable DLODS control card to the OFF position:
 - a) Right DLODS control card (A5) in the right systems cardfile (P84)
 - b) Center DLODS control card (A8) in the right systems cardfile (P84)
 - c) Left DLODS control card (A5) in the left systems cardfile (P85).
 - (b) Disconnect the applicable elements from the resistor; do this task: Body Duct Leak Detectors Removal, AMM TASK 26-18-04-000-801.
 - (c) Measure the resistance between the center conductor and the outer sheath of the resistor using an LCR meter (Inductance, Capacitance, Resistance), COM-1741 (WDM 26-18-17) (WDM 26-18-18).
 - 1) Make sure the resistance is at least 1000 ohms.
 - (d) If you find a problem with the resistor, replace it.

These are the tasks:

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Body Duct Leak Detectors Removal, AMM TASK 26-18-04-000-801,
Body Duct Leak Detectors Installation, AMM TASK 26-18-04-400-801.

- (e) Re-connect the applicable elements to the resistor; do this task: Body Duct Leak Detectors Installation, AMM TASK 26-18-04-400-801.
 - 1) Move the power switch for the applicable DLODS control card to the ON position:
 - a) Right DLODS control card (A5) in the right systems cardfile (P84)
 - b) Center DLODS control card (A8) in the right systems cardfile (P84)
 - c) Left DLODS control card (A5) in the left systems cardfile (P85).
 - 2) After approximately 90 seconds, if the maintenance message does not show on the MAT, you corrected the fault.
 - 3) If the maintenance message shows on the MAT, then continue.
- (6) If there is a DLODS control card in the zone, do these steps to do a check of the backplane circuit between the DLODS control card and the cardfile connector:
 - (a) Remove the applicable DLODS control card; do this task: DLODS Control Card Removal, AMM TASK 26-18-05-000-801.
 - (b) Install an extender card, SPL-1658 in the applicable DLODS control card location.
 - (c) Do a continuity check between these pins and ground for the applicable DLODS control card (SSM 26-18-17) (SSM 26-18-18):

Table 209/26-18-00-993-820

LOOP	CARDFILE	DLODS CARD	DLODS CARD CONNECTOR
1	Left P85	Left A5	XA5 pin 64, 65, 66 pin 58, 59, 60
2	Right P84	Right A5	XA5 pin 28, 29, 30 pin 22, 23, 24

- (d) Make sure the resistance is at least 1000 ohms.
- (e) Remove the extender card, SPL-1658 from the DLODS control card location.
- (f) If the resistance is less than 1000 ohms, then replace the Systems Card File Assembly (AMM PAGEBLOCK 31-09-00/401). Otherwise, continue.
- (g) Re-install the applicable DLODS control card; do this task: DLODS Control Card Installation, AMM TASK 26-18-05-400-801.
 - 1) After approximately 90 seconds, if the maintenance message does not show on the MAT, you corrected the fault.
 - 2) If the maintenance message shows on the MAT, then continue.
- (7) If the fault is not corrected, do the same fault isolation procedure for the zones adjacent to the zone shown in the maintenance message.

NOTE: For example, if the maintenance message shows zone 5 is at fault, do the fault isolation procedure for zone 4. If you do not find the problem in zone 4, do the fault isolation procedure for zone 6.

————— **END OF TASK** —————

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805. Fan Case Loop 1,2 Overheat Detection Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance messages: 26-31003, 26-32003, 26-32103, 26-33002, 26-33003, 26-34001, 26-34102, 26-38101.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) For the loop shorted messages, do these steps:
 - (a) If the MAT shows that the maintenance message occurred during the present flight leg or previous flight leg but is currently NOT ACTIVE, then there was an overheat or an intermittent fault.
 - (b) If there is an overheat indication on EICAS related to the maintenance message, do these steps:
 - 1) Examine the area specified by the maintenance message for possible causes of the overheat.
 - (c) If there is not an overheat indication on EICAS related to a loop shorted maintenance message, then there was an intermittent fault.
- (3) For the loop open messages, if the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Move the power switches for these Duct Leak and Overheat Detection System (DLODS) Cards to the OFF position:
 - (a) Right DLODS Control Card (A5) in the Right Systems Cardfile (P84)
 - (b) Center DLODS Control Card (A8) in the Right Systems Cardfile (P84)
 - (c) Left DLODS Control Card (A5) in the Left Systems Cardfile (P85)
- (2) For the right fan cowl panels on the applicable engine, do this task:
Open the Fan Cowl Panel (Selection), AMM TASK 71-11-04-010-814-H00

<u>Number</u>	<u>Name/Location</u>
---------------	----------------------

414AR	Right Fan Cowl Panel, Left Engine
424AR	Right Fan Cowl Panel, Right Engine

- (3) Examine the wiring and elements for the applicable fan case overheat detector, M26100 (WDM 26-18-11) (WDM 26-18-12).
 - (a) Make sure there is no apparent damage to the wiring or element.
 - (b) Make sure the wiring connection at the element is clean.
 - (c) If you find a problem with the wiring, do these steps:
 - 1) Repair the wiring.
 - 2) Connect the wiring between the applicable components.
 - (d) If you find a problem with an element, replace the fan case overheat detector, M26100.
These are the tasks:
Fan Case Overheat Detectors Removal, AMM TASK 26-18-01-000-807-001,
Fan Case Overheat Detectors Installation, AMM TASK 26-18-01-400-807-001.

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- (e) Move the power switches for these Duct Leak and Overheat Detection System (DLODS) Cards to the ON position:
 - 1) Right DLODS Control Card (A5) in the Right Systems Cardfile (P84)
 - 2) Center DLODS Control Card (A8) in the Right Systems Cardfile (P84)
 - 3) Left DLODS Control Card (A5) in the Left Systems Cardfile (P85)
- (f) After approximately 60 seconds, if the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (g) If you do not find a problem with the wiring or elements, then continue.
- (4) Move the power switches for these DLODS Control Cards to the OFF position:
 - (a) Right DLODS Control Card (A5) in the Right Systems Cardfile (P84)
 - (b) Center DLODS Control Card (A8) in the Right Systems Cardfile (P84)
 - (c) Left DLODS Control Card (A5) in the Left Systems Cardfile (P85)
- (5) In the list below, find the applicable connectors and pin numbers for the maintenance message.

NOTE: Use the Wiring Diagram Manual (WDM 26-18-11, WDM 26-18-12) to find the applicable components in the zone.

Table 210/26-18-00-993-805

ENGINE	LOOP	DLODS CARD	SYSTEMS CARD FILE	CARD FILE CONNECTOR	OVERHEAT DET PINS
Left	1	Center (A8)	Right (P84)	DP8409	
				pin 47	-- pin I
				pin 46	-- pin O
Left	2	Left (A5)	Left (P85)	DP8502	
				pin 44	-- pin I
				pin 43	-- pin O
Right	1	Right (A5)	Right (P84)	DP8403	
				pin 47	-- pin I
				pin 46	-- pin O
Right	2	Center (A8)	Right (P84)	DP8408	
				pin 52	-- pin I
				pin 51	-- pin O



CAUTION

DISCONNECT THE WIRE BUNDLES FROM THE TERMINAL LUGS BEFORE TESTING THE DETECTOR RESISTANCE AND MEASURING THE INSULATION RESISTANCE; OTHERWISE, DAMAGE TO OTHER DETECTORS IN THE LOOP MAY OCCUR.

- (6) Do a wiring check between the specified pins of the card file connector and the overheat detector (WDM 26-18-11) (WDM 26-18-12).
 - (a) For a loop open maintenance message, make sure the resistance is less than 150 ohms using an LCR meter (Inductance, Capacitance, Resistance), COM-1741.

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- (b) For a loop shorted maintenance message, make sure the resistance is greater than 1000 ohms using an LCR meter (Inductance, Capacitance, Resistance), COM-1741.

NOTE: For the loop shorted maintenance message, measure the resistance between the pins and ground.

- (c) If you find a problem with the wiring, then do these steps:
- 1) Repair the wiring.
 - 2) Move the power switches for these DLODS cards to the ON position:
 - a) Right DLODS Control Card (A5) in the Right Systems Card File (P84)
 - b) Center DLODS Control Card (A8) in the Right Systems Card File (P84)
 - c) Left DLODS Control Card (A5) in the Left Systems Card File (P85)
 - 3) After approximately 90 seconds, if the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (d) If you do not find a problem with the wiring, then continue.

- (7) Replace the fan case overheat detector, M26100.

These are the tasks:

Fan Case Overheat Detectors Removal, AMM TASK 26-18-01-000-807-001,

Fan Case Overheat Detectors Installation, AMM TASK 26-18-01-400-807-001.

- (a) After approximately 60 seconds, if the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

- (b) If the MAT shows ACTIVE for the maintenance message, then continue.

- (8) Replace the applicable DLODS control card.

These are the tasks:

DLODS Control Card Removal, AMM TASK 26-18-05-000-801,

DLODS Control Card Installation, AMM TASK 26-18-05-400-801.

- (a) After approximately 60 seconds, if the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

- (9) Do these steps to do a check of the backplane circuit between the DLODS control card and the card file connector:

NOTE: For the loop shorted maintenance messages, measure the resistance between the pins and ground.

- (a) Remove the applicable DLODS control card (DLODS Control Card Removal, AMM TASK 26-18-05-000-801).
- (b) Install an extender card, SPL-1658, in the applicable DLODS control card location.
- (c) Do a continuity check between these pins for the applicable DLODS control card (SSM 26-18-11) (SSM 26-18-12):

Table 211/26-18-00-993-806

CARDFILE	DLODS CARD	CARDFILE CONNECTOR		DLODS CARD CONNECTOR
Right P84	Center A8	DP8409		XA8
		pin 46	--	pins 31,32,33
		pin 47	--	pins 25,26,27

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Table 211/26-18-00-993-806 (Continued)

CARDFILE	DLODS CARD	CARDFILE CONNECTOR		DLODS CARD CONNECTOR
Left P85	Left A5	DP8502		XA5
		pin 43	--	pins 31,32,33
		pin 44	--	pins 25,26,27
Right P84	Right A5	DP8403		XA5
		pin 46	--	pins 43,44,45
		pin 47	--	pins 37,38,39
Right P84	Center A8	DP8408		XA8
		pin 51	--	pins 43,44,45
		pin 52	--	pins 37,38,39

- (d) Remove the extender card, SPL-1658, from the DLODS control card location.
- (e) If you do not have continuity, then replace the Systems Card File Assembly (AMM PAGEBLOCK 31-09-00/401). Otherwise, continue.
- (f) Re-install the applicable DLODS control card; do this task: DLODS Control Card Installation, AMM TASK 26-18-05-400-801.
- (g) After approximately 90 seconds, if the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

END OF TASK

806. Strut Overheat Detector Zone Shorted Problems - Fault Isolation(Figure 301, Table 301)

A. Maintenance Messages

- (1) This task is for maintenance messages: 26-31312, 26-31322, 26-31332, 26-31342, 26-31352, 26-31362, 26-33013, 26-33023, 26-33033, 26-33043, 26-33053, 26-33063, 26-36011, 26-36013, 26-36021, 26-36023, 26-36031, 26-36033, 26-36041, 26-36043, 26-36051, 26-36053, 26-36061, 26-36063.

B. General

- (1) Each strut duct leak detection loop is divided into 6 zones for shorted zone detection. When a shorted loop failure is detected, the DLODS control card gives the location of the failure to the Onboard Maintenance System (OMS). The OMS then shows the maintenance message. Because of electrical tolerances of the wiring and elements in the loop, there is some probability that the zone with the actual failure is adjacent to the zone shown by the message. When you troubleshoot the failure, always do the procedure for the zone shown by the OMS message first. If you do not find the failure in that zone, do the procedure again for the zones adjacent to the original zone.

C. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows that the maintenance message occurred during the present flight leg or previous flight leg but is currently NOT ACTIVE, then there was an overheat or an intermittent fault.

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- (3) If there is an overheat indication on EICAS related to the maintenance message, do these steps:
 - (a) Examine the area specified by the maintenance message for possible causes of the overheat (AMM TASK 36-11-01-200-801).
 - (b) Make sure the detection elements are at least two inches away from the duct.
- (4) If there is not an overheat indication on EICAS related to the maintenance message, then there was an intermittent fault.

D. Fault Isolation Procedure

- (1) From the Fault Zone tables below, find the applicable DLODS control card, elements and wiring related to the maintenance message:

NOTE: The loop number is shown on or near each side of the bracket where the element is connected to wiring or to another element.

NOTE: Use the System Schematic Manual (SSM 26-18-06, WDM 26-18-13, WDM 26-18-14) to find the applicable components in the zone.

Table 212/26-18-00-993-852 Left Strut Loop 1 Zone Shorted

Zone	Description
1	Center DLODS control card, P84-A8; wiring between DP8409, pin 45, and DM26101B
2	Element M26101; wiring between DP8409, pin 45, and DM26101B
3	Element M26101
4	Element M26101; Element M26102 loop 1; wiring between DM26101A and M26102 loop 1 (I)
5	Element M26102 loop 1; wiring between DM26101A and M26102 loop 1 (I); wiring between M26102 loop 1 (O) and DP8409, pin 44
6	Center DLODS control card, P84-A8; wiring between DP8409, pin 44, and M26102 loop 1 (O)

Table 213/26-18-00-993-853 Left Strut Loop 2 Zone Shorted

Zone	Description
1	Left DLODS control card, P85-A5; wiring between DP8502, pin 42, and DM26104A
2	Element M26104; wiring between DP8502, pin 42, and DM26104A
3	Element M26104
4	Element M26104; Element M26102 loop 2; wiring between DM26104B and M26102 loop 2 (I)
5	Element M26102 loop 2; wiring between DM26104B and M26102 loop 2 (I); wiring between M26102 loop 2 (O) and DP8502, pin 41
6	Left DLODS control card, P85-A5; wiring between DP8502, pin 41, and M26102 loop 2 (O)

Table 214/26-18-00-993-854 Right Strut Loop 1 Zone Shorted

Zone	Description
1	Right DLODS control card, P84-A5; wiring between DP8403, pin 45, and DM26201A
2	Element M26201; wiring between DP8403, pin 45, and DM26201A
3	Element M26201
4	Element M26201; Element M26202 loop 1; wiring between DM26201B and M26202 loop 1 (I)

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Table 214/26-18-00-993-854 Right Strut Loop 1 Zone Shorted (Continued)

Zone	Description
5	Element M26202 loop 1; wiring between DM26201B and M26202 loop 1 (I); wiring between M26202 loop 1 (O) and DP8403, pin 44
6	Right DLODS control card, P84-A5; wiring between DP8403, pin 44, and M26202 loop 1 (O)

Table 215/26-18-00-993-855 Right Strut Loop 2 Zone Shorted

Zone	Description
1	Center DLODS control card, P84-A8; wiring between DP8408, pin 50, and DM26204B
2	Element M26204; wiring between DP8408, pin 50, and DM26204B
3	Element M26204
4	Element M26204; Element M26202 loop 2; wiring between DM26204A and M26202 loop 2 (I)
5	Element M26202 loop 2; wiring between DM26204A and M26202 loop 2(I); wiring between M26202 loop 2 (O) and DP8408, pin 49
6	Center DLODS control card, P84-A8; wiring between DP8408, pin 49, and M26202 loop 2 (O)

- (2) If there is an element in the zone, examine the element for damage.
- (a) If there is damage to the element, replace the element or detector.
- These are the tasks:
- Strut Overheat Detectors Removal, AMM TASK 26-18-02-000-804-001,
Strut Overheat Detectors Installation, AMM TASK 26-18-02-400-804-001.
- 1) After approximately 60 seconds, if the maintenance message does not show on the MAT, you corrected the fault.
- (b) If there is no apparent damage to the element, disconnect the element from the loop (AMM TASK 26-18-02-000-804-001).
- (c) For the long-element type detector, do these steps:
- 1) At each element connection, make sure there is a ceramic insulator attached to the center conductor of the female connector end.
- 2) If the ceramic insulator is not attached, replace the element or wiring connector.
- These are the tasks:
- Strut Overheat Detectors Removal, AMM TASK 26-18-02-000-804-001,
Strut Overheat Detectors Installation, AMM TASK 26-18-02-400-804-001.
- a) After approximately 60 seconds, if the maintenance message does not show on the MAT, you corrected the fault.
- 3) Examine the connector ends for damage or unwanted material.
- 4) If there is unwanted material in the connector ends, clean the connector ends and re-connect the element (AMM TASK 26-18-02-400-804-001).
- a) After approximately 60 seconds, if the maintenance message does not show on the MAT, you corrected the fault.
- (d) For the compact-module type detector, do these steps:
- 1) Make sure the wiring connections at each end of the element are clean.

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- 2) If the wiring connections are not clean, clean them and re-connect the wiring (AMM TASK 26-18-02-400-804-001).
 - a) After approximately 60 seconds, if the maintenance message does not show on the MAT, you corrected the fault.
- (e) If you do not find a problem with the element, then continue.



CAUTION

DO NOT USE INSULATION RESISTANCE "MEGGER" TESTERS OR DIELECTRIC VOLTAGE "HYPO" TESTERS TO TEST THE SENSING ELEMENTS.

DISCONNECT THE WIRE BUNDLES FROM THE TERMINAL LUGS BEFORE TESTING THE DETECTOR RESISTANCE AND MEASURING THE INSULATION RESISTANCE; OTHERWISE, DAMAGE TO OTHER DETECTORS IN THE LOOP MAY OCCUR.

DO NOT TEST SENSING ELEMENTS HEATED TO WITHIN 100 DEGREES F (55 DEGREES C) OF THEIR ALARM TEMPERATURE SETPOINT.

IMPROPER TESTING CAN CAUSE DAMAGE TO THE HEAT SENSING ELEMENT.



CAUTION

USE THE FSS TEST P/N 06-134724 OR EQUIVALENT 0.0595 INCH (1.511 MM) TO 0.0615 INCH (1.588 MM) DIAMETER PIN INSERTED INTO THE RECEPTACLE TO SUPPLY A TEST POINT. THE SOCKET TYPE CONNECTORS (FEMALE) CAN BE DAMAGED BY METER LEADS.

- (f) Do this wiring check of the element:

NOTE: For the long-element type detector, measure the resistance between the center conductor of the element and ground. For the compact-module type detector, measure the resistance from the terminal lug stud to ground.

- 1) Measure the resistance between the center conductor and the outer sheath of the element using an LCR meter (Inductance, Capacitance, Resistance), COM-1741.
- 2) Make sure the resistance is at least 1000 ohms.
- 3) If the resistance is less than 1000 ohms, replace the element or detector.

These are the tasks:

Strut Overheat Detectors Removal, AMM TASK 26-18-02-000-804-001,

Strut Overheat Detectors Installation, AMM TASK 26-18-02-400-804-001.

- a) After approximately 60 seconds, if the maintenance message does not show on the MAT, you corrected the fault.
- 4) If you do not find a problem with the element, then re-connect the element and continue (AMM TASK 26-18-02-400-804-001).

- (g) If there is a different element in the zone, do the same fault isolation procedure for that element as you did for the other element.

- (3) If there is a DLODS control card in the zone, replace the DLODS control card.

These are the tasks:

DLODS Control Card Removal, AMM TASK 26-18-05-000-801,

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DLODS Control Card Installation, AMM TASK 26-18-05-400-801.

- (a) After approximately 60 seconds, if the maintenance message does not show on the MAT, you corrected the fault.
- (b) If the maintenance message shows on the MAT, then continue.
- (4) If there is wiring in the zone, do the steps that follow:
 - (a) Do these steps to remove power from the strut overheat detectors:
 - 1) To get access to the Systems Card Files,
Open this access panel:

<u>Number</u>	<u>Name/Location</u>
117AL	Main Equipment Center Access Door
 - 2) Move the power switch for the applicable DLODS control card to the OFF position:
 - a) Right DLODS control card (A5) in the right systems cardfile (P84)
 - b) Center DLODS control card (A8) in the right systems cardfile (P84)
 - c) Left DLODS control card (A5) in the left systems cardfile (P85).
 - (b) Do a resistance check of the wiring between the component shown in the zone and ground:
 - 1) Make sure the resistance is at least 1000 ohms.
 - 2) If the resistance is less than 1000 ohms, do these steps:
 - a) Repair the wiring.
 - b) Connect the wiring between the components (WDM 26-18-13) (WDM 26-18-14).
 - c) Move the power switch for the applicable DLODS control card to the ON position:
 - d) Right DLODS control card (A5) in the right systems cardfile (P84)
 - e) Center DLODS control card (A8) in the right systems cardfile (P84)
 - f) Left DLODS control card (A5) in the left systems cardfile (P85).
 - g) After approximately 90 seconds, if the maintenance message does not show on the MAT, you corrected the fault.
 - h) If the maintenance message shows on the MAT, then continue.
- (5) If there is a DLODS control card in the zone, do these steps to do a check of the backplane circuit between the DLODS control card and the cardfile connector:
 - (a) Remove the applicable DLODS control card; do this task: DLODS Control Card Removal, AMM TASK 26-18-05-000-801.
 - (b) Install an extender card, SPL-1658, in the applicable DLODS control card location.
 - (c) At the connector attached to the cardfile, do a continuity check between these pins and ground for the applicable DLODS control card (SSM 26-18-13) (SSM 26-18-14):

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Table 216/26-18-00-993-802

LOOP	CARDFILE	DLODS CARD	DLODS CARD CONNECTOR
L Strut Loop 1	Right P84	Center A8	XA8 pin 40, 41, 42 pin 34, 35, 36
L Strut Loop 2	Left P85	Left A5	XA5 pin 40, 41, 42 pin 34, 35, 36
R Strut Loop 1	Right P84	Right A5	XA5 pin 52, 53, 54 pin 46, 47, 48
R Strut Loop 2	Right P84	Center A8	XA8 pin 52, 53, 54 pin 46, 47, 48

- (d) Remove the extender card, SPL-1658, from the DLODS control card location.
- (e) If you do not have continuity, then replace the Systems Card File Assembly (AMM PAGEBLOCK 31-09-00/401). Otherwise, continue.
- (f) Re-install the applicable DLODS control card (DLODS Control Card Installation, AMM TASK 26-18-05-400-801).
 - 1) After approximately 90 seconds, if the maintenance message does not show on the MAT, you corrected the fault.
 - 2) If the maintenance message shows on the MAT, then continue.
- (6) If the fault is not corrected, do the same fault isolation procedure for the zones adjacent to the zone shown in the maintenance message.

NOTE: For example, if the maintenance message shows zone 5 is at fault, do the fault isolation procedure for zone 4. If you do not find the problem in zone 4, do the fault isolation procedure for zone 6.

————— **END OF TASK** —————

807. Body/Wing Loop 1/2 Open Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance messages: 26-31001, 26-31002, 26-33001, 26-34003, 26-37002, 26-37003.

B. General

- (1) These maintenance messages are caused by two failures (or a failure and a duct leak/overheat) detected by the same loop. When the first failure occurs, a maintenance message with a specific zone number will show. If the first message is still active when the second failure or a duct leak or overheat occurs, a maintenance message will show but without a specific zone number. The first message will then show as NOT ACTIVE, even though there could still be a failure at that location.

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C. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows the maintenance message occurred during the present leg or a previous flight leg but is currently NOT ACTIVE, then there was an intermittent fault.

D. Fault Isolation Procedure

- (1) Do a check of the MAT for one of these DLODS control card maintenance messages: 26-30001, 26-30002, 26-30003.
 - (a) If one of these maintenance messages exists, then do the fault isolation procedure for that message.
 - (b) After approximately 90 seconds, examine the MAT for the maintenance message.
 - 1) If the MAT shows a loop shorted maintenance message with a specific zone number, do the fault isolation procedure for that message.
 - 2) If the MAT shows a loop open maintenance message with a specific zone number, do the fault isolation procedure for that message.
 - 3) If the maintenance message does not show on the MAT, you corrected the fault.
 - 4) If the maintenance message still shows on the MAT, then continue.
- (2) Do a check of the MAT present leg faults or earlier faults for maintenance messages of the same loop.
 - (a) If there are other maintenance messages (ACTIVE or NOT ACTIVE) for the same loop, do the Fault Isolation Procedure for those maintenance messages as if the messages were ACTIVE.
 - (b) If there are no other maintenance messages for the same loop, then continue.
- (3) From the tables that follow, find the DLODS control card related to the maintenance message:

Loop Open DLODS Control Card

Maintenance Message	DLODS Control Card
Left Wing Loop 1 is open	Center control card, P84-A8
Left Wing Loop 2 is open	Left control card, P85-A5
Right Wing Loop 1 is open	Right control card, P84-A5
Right Wing Loop 2 is open	Center control card, P84-A8
Body Loop 1 is open	Left control card, P85-A5
Body Loop 2 is open	Right control card, P84-A5

- (4) To get access to the Systems Card Files,
Open this access panel:

<u>Number</u>	<u>Name/Location</u>
117AL	Main Equipment Center Access Door
- (5) Move the power switch for the DLODS control card related to the maintenance message to the OFF position.
- (6) Move the power switch for the DLODS control card related to the maintenance message to the ON position.

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- (7) After approximately 90 seconds, examine the MAT for the maintenance message.
 - (a) If the MAT shows a loop shorted maintenance message with a specific zone number, do the fault isolation procedure for that message.
 - (b) If the MAT shows a loop open maintenance message with a specific zone number, do the fault isolation procedure for that message.
 - (c) If the maintenance message does not show on the MAT, you corrected the fault.
 - (d) If the maintenance message still shows on the MAT, then there are multiple failures in the system. This requires the replacement of multiple components, airplane wiring and detection elements.

————— END OF TASK —————

808. Left DLODS Control Card Internal Fault - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 26-30001.

B. Fault Isolation Procedure

- (1) Replace the left DLODS control card, P85-A5, in the left systems card file, P85.

These are the tasks:

DLODS Control Card Removal, AMM TASK 26-18-05-000-801,

DLODS Control Card Installation, AMM TASK 26-18-05-400-801.

- (a) After approximately 90 seconds, if the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— END OF TASK —————

809. Right DLODS Control Card Internal Fault - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 26-30002.

B. Fault Isolation Procedure

- (1) Replace the right DLODS control card, P84-A5, in the right systems card file, P84.

These are the tasks:

DLODS Control Card Removal, AMM TASK 26-18-05-000-801,

DLODS Control Card Installation, AMM TASK 26-18-05-400-801.

- (a) After approximately 90 seconds, if the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— END OF TASK —————

810. Center DLODS Control Card Internal Fault - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 26-30003.

B. Fault Isolation Procedure

- (1) Replace the center DLODS control card, P84-A8, in the right systems card file, P84.

These are the tasks:

DLODS Control Card Removal, AMM TASK 26-18-05-000-801,

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DLODS Control Card Installation, AMM TASK 26-18-05-400-801.

- (a) After approximately 90 seconds, if the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

END OF TASK

811. DLODS Control Card No Output on ARINC 429 Bus - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance messages: 26-38891, 26-38892, 26-38893.

B. Fault Isolation Procedure

NOTE: If you use a megohmmeter to do wiring checks on an ARINC 429 bus (or if you need the exact resistance of the bus wiring), first remove all the LRUs that are connected to the bus (use the WDM to tell which LRUs are on the bus). Then re-install the LRUs when you are done.

- (1) In the list below, find the applicable DLODS control card, ARINC signal gateway (ASG) card, connectors, and pin numbers for the maintenance message.

Table 217/26-18-00-993-808

SYSTEMS CARD FILE	DLODS CTRL CARD	ASG CARD	DLODS CARD CONN	ASG CARD CONN
Left (P85)	Left A5	Left A12	XA5 pin 134 pin 137	XA12 pin 90 pin 93
Left (P85)	Left A5	Right A15	XA5 pin 134 pin 137	XA15 pin 90 pin 93
Right (P84)	Right A5	Left A12	XA5 pin 134 pin 137	XA12 pin 90 pin 93
Right (P84)	Right A5	Right A15	XA5 pin 134 pin 137	XA15 pin 90 pin 93
Right (P84)	Center A8	Left A12	XA8 pin 134 pin 137	XA12 pin 68 pin 71
Right (P84)	Center A8	Right A15	XA8 pin 134 pin 137	XA15 pin 68 pin 71

- (2) Replace the applicable DLODS control card.

These are the tasks:

DLODS Control Card Removal, AMM TASK 26-18-05-000-801,

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DLODS Control Card Installation, AMM TASK 26-18-05-400-801.

- (a) After approximately 90 seconds, if the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), then you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Check the backplane circuit:
 - (a) Remove the applicable DLODS control card (DLODS Control Card Removal, AMM TASK 26-18-05-000-801).
 - (b) Install an extender card, SPL-1658, in the applicable DLODS control card location.
 - (c) Remove the applicable ASG card (ESDS Handling for Printed Circuit Board Removal, AMM TASK 20-41-01-000-801).
 - (d) Install an extender card, SPL-1658, in the applicable ASG card location.
 - (e) Do a continuity check between the specified pins of the applicable DLODS control card connector and the applicable ASG card connector.
 - (f) Remove the extender card, SPL-1658, from the ASG card location.
 - (g) Remove the extender card, SPL-1658, from the DLODS control card location.
 - (h) If there is no continuity, then replace the Systems Card File Assembly (AMM PAGEBLOCK 31-09-00/401). Otherwise, continue.
 - (i) Re-install the ASG card (ESDS Handling for Printed Circuit Board Installation, AMM TASK 20-41-01-400-801).
 - (j) Re-install the DLODS control card (DLODS Control Card Installation, AMM TASK 26-18-05-400-801).
 - (k) Set the power switch for the DLODS control card to the ON position.
 - (l) After approximately 90 seconds, if the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

— END OF TASK —

812. DLODS Control Card No Input from ASG Card on ASG Global 429 Bus - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance messages: 26-39904, 26-39909, 26-39911, 26-39913, 26-39918, 26-39920.

B. Initial Evaluation

- (1) If the Fire Bell and Master Warning Lights come on intermittently and there are no other flight deck effects, then do the Fault Isolation Procedure below.
- (2) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (3) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

NOTE: If you use a megohmmeter to do wiring checks on an ARINC 429 bus (or if you need the exact resistance of the bus wiring), first remove all the LRUs that are connected to the bus (use the WDM to tell which LRUs are on the bus). Then re-install the LRUs when you are done.

- (1) If the Fire Bell and Master Warning Lights come on intermittently and there are no other flight deck effects, then do these steps:

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- (a) To get access to the Systems Card Files,
Open this access panel:
- | <u>Number</u> | <u>Name/Location</u> |
|---------------|-----------------------------------|
| 117AL | Main Equipment Center Access Door |
- (b) Move the power switches for these DLODS Control cards to the OFF position and then to the ON position:
- 1) Right DLODS Control Card (A05) in the Right Systems Card File (P84)
 - 2) Left DLODS Control Card (A05) in the Left Systems Card File (P85)
- (c) Close this access panel:
- | <u>Number</u> | <u>Name/Location</u> |
|---------------|-----------------------------------|
| 117AL | Main Equipment Center Access Door |
- (d) After approximately 90 seconds, if the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), then you corrected the fault.
- (e) If the MAT shows ACTIVE for the maintenance message, then continue.
- (2) In the list below, find the applicable DLODS control card, ARINC signal gateway (ASG) card, connectors, and pin numbers for the maintenance message.

Table 218/26-18-00-993-807

SYSTEMS CARD FILE	DLODS CTRL CARD	ASG CARD	DLODS CARD CONN		ASG CARD CONN
Left (P85)	Left A5	Left A12	XA5		XA12
			pin 151	--	pin 67
			pin 154	--	pin 70
Left (P85)	Left A5	Right A15	XA5		XA15
			pin 115	--	pin 67
			pin 118	--	pin 70
Right (P84)	Center A8	Left A12	XA8		XA12
			pin 151	--	pin 67
			pin 154	--	pin 70
Right (P84)	Center A8	Right A15	XA8		XA15
			pin 115	--	pin 67
			pin 118	--	pin 70
Right (P84)	Right A5	Left A12	XA5		XA12
			pin 151	--	pin 67
			pin 154	--	pin 70
Right (P84)	Right A5	Right A15	XA5		XA15
			pin 115	--	pin 67
			pin 118	--	pin 70

- (3) Replace the applicable DLODS control card.

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These are the tasks:

DLODS Control Card Removal, AMM TASK 26-18-05-000-801,

DLODS Control Card Installation, AMM TASK 26-18-05-400-801.

- (a) After approximately 90 seconds, if the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), then you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (4) Replace the applicable ASG card.

These are the tasks:

ESDS Handling for Printed Circuit Board Removal, AMM TASK 20-41-01-000-801,

ESDS Handling for Printed Circuit Board Installation, AMM TASK 20-41-01-400-801.

- (a) After approximately 60 seconds, if the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), then you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (5) Check the backplane circuit:
- (a) Remove the applicable DLODS control card (DLODS Control Card Removal, AMM TASK 26-18-05-000-801).
 - (b) Install an extender card, SPL-1658, in the applicable DLODS control card location.
 - (c) Remove the applicable ASG card. To remove it, do this task: ESDS Handling for Printed Circuit Board Removal, AMM TASK 20-41-01-000-801.
 - (d) Install an extender card, SPL-1658, in the applicable ASG card location.
 - (e) Do a continuity check between the specified pins of the applicable DLODS control card connector and the applicable ASG card connector.
 - (f) Remove the extender card, SPL-1658, from the DLODS control card location.
 - (g) Remove the extender card, SPL-1658, from the ASG card location.
 - (h) If there is no continuity, then Replace the Systems Card File Assembly (AMM PAGEBLOCK 31-09-00/401). Otherwise, continue.
 - (i) Re-install the applicable DLODS control card (DLODS Control Card Installation, AMM TASK 26-18-05-400-801).
 - (j) Re-install the applicable ASG card (ESDS Handling for Printed Circuit Board Installation, AMM TASK 20-41-01-400-801).
 - (k) Set the power switch for the DLODS control card to the ON position.
 - (l) After approximately 90 seconds, if the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— END OF TASK —————

813. Body/Strut/Wing Loop 1/2 Shorted Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance messages: 26-31302, 26-32001, 26-32002, 26-34103, 26-35101, 26-36003, 26-37102, 26-37104, 26-37114, 26-39101.

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B. General

- (1) These maintenance messages are caused by two failures (or a failure and a duct leak/overheat) detected by the same loop. When the first failure occurs, a maintenance message with a specific zone number will show. If the first message is still active when the second failure or a duct leak or overheat occurs, a maintenance message will show but without a specific zone number. The first message will then show as NOT ACTIVE, even though there could still be a failure at that location.

C. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows the maintenance message occurred during the present leg or previous flight leg but is currently NOT ACTIVE, then there was a duct leak/overheat or an intermittent fault. To verify that there was a duct leak/overheat, do the steps that follow:

- (a) For the applicable maintenance message, do a check of the present leg faults for correlated EICAS messages.
- (b) If an EICAS message is correlated to a maintenance message, then a duct leak/overheat occurred.

NOTE: A maintenance message for the other loop may show you in what zone the duct leak/overheat occurred.

- 1) Examine the area specified by the maintenance message for possible causes of the duct leak (AMM TASK 36-11-01-200-801).
- 2) Make sure the detection elements are at least two inches away from the duct.
- (c) If one of these maintenance messages is not correlated to the EICAS message, then there was an intermittent fault.

D. Fault Isolation Procedure

- (1) Do a check of the MAT for one of these DLODS control card maintenance messages: 26-30001, 26-30002, 26-30003.
 - (a) If one of these maintenance messages exists, then do the fault isolation procedure for that message.
 - (b) After approximately 90 seconds, examine the MAT for the maintenance message.
 - 1) If the MAT shows a loop shorted maintenance message for the same loop with a specific zone number, do the fault isolation procedure for that message.
 - 2) If the MAT shows a loop open maintenance message for the same loop with a specific zone number, do the fault isolation procedure for that message.
 - 3) If the maintenance message does not show on the MAT, you corrected the fault.
 - 4) If the maintenance message still shows on the MAT, then continue.
- (2) Do a check of the MAT present leg faults and fault history for maintenance messages of the same loop.
 - (a) If there are other maintenance messages (ACTIVE or NOT ACTIVE) for the same loop, do the Fault Isolation Procedure for those maintenance messages as if the messages were ACTIVE.
 - (b) If there are no other maintenance messages for the same loop, then continue.
- (3) From the tables that follow, find the DLODS control card related to the maintenance message:

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Loop Shorted DLODS Control Card

Maintenance Message

Left Wing Loop 1 is shorted
Left Wing Loop 2 is shorted
Right Wing Loop 1 is shorted
Right Wing Loop 2 is shorted
Body Loop 1 is shorted
Body Loop 2 is shorted
Left Strut Loop 1 is shorted
Left Strut Loop 2 is shorted
Right Strut Loop 1 is shorted
Right Strut Loop 2 is shorted

DLODS Control Card

Center control card, P84-A8
Left control card, P85-A5
Right control card, P84-A5
Center control card, P84-A8
Left control card, P85-A5
Right control card, P84-A5
Center control card, P84-A8
Left control card, P85-A5
Right control card, P84-A5
Center control card, P84-A8

- (4) To get access to the Systems Card Files,
Open this access panel:

<u>Number</u>	<u>Name/Location</u>
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- (5) Move the power switch for the DLODS control card related to the maintenance message to the OFF position.
- (6) Move the power switch for the DLODS control card related to the maintenance message to the ON position.
- (7) After approximately 90 seconds, examine the MAT for the maintenance message.
- (a) If the MAT shows a loop shorted maintenance message with a specific zone number, do the fault isolation procedure for that message.
 - (b) If the MAT shows a loop open maintenance message with a specific zone number, do the fault isolation procedure for that message.
 - (c) If the maintenance message does not show on the MAT, you corrected the fault.
 - (d) If the maintenance message still shows on the MAT, then there are multiple failures in the system. This requires the replacement of multiple components, airplane wiring and detection elements.

————— **END OF TASK** —————

814. Strut Loop 1,2 Open Problems - Fault Isolation(Figure 301, Table 301)

A. Maintenance Messages

- (1) This task is for maintenance messages: 26-30302, 26-35001, 26-36103, 26-37303.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

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C. Fault Isolation Procedure

- (1) In the list below, find the applicable connectors and pin numbers for the maintenance message.

Table 219/26-18-00-993-803

STRUT	LOOP	DLODS CARD	SYSTEMS CARD FILE	CARD FILE CONNECTOR	OVHT DET ELEMENTS
Left	1	Center (A8)	Right (P84)	DP8409 pin 44 pin 45	M26101, M26102
Left	2	Left (A5)	Left (P85)	DP8502 pin 41 pin 42	M26102, M26104
Right	1	Right (A5)	Right (P84)	DP8403 pin 44 pin 45	M26201, M26202
Right	2	Center (A8)	Right (P84)	DP8408 pin 49 pin 50	M26202, M26204

- (2) Move the power switches for these Duct Leak and Overheat Detection System (DLODS) Cards to the OFF position:
- (a) Right DLODS Control Card (A5) in the Right Systems Cardfile (P84)
 - (b) Center DLODS Control Card (A8) in the Right Systems Cardfile (P84)
 - (c) Left DLODS Control Card (A5) in the Left Systems Cardfile (P85)
- (3) Examine the wiring and elements for the applicable strut overhear detectors (WDM 26-18-13, WDM 26-18-14).
- (a) Make sure there is no apparent damage to the wiring or elements.
 - (b) If you find a problem with the wiring, do these steps:
 - 1) Repair the wiring.
 - 2) Connect the wiring between the applicable components.
 - (c) If you find a problem with an element, replace the applicable overhear detector or element.
These are the tasks:
Strut Overheat Detectors Removal, AMM TASK 26-18-02-000-804-001,
Strut Overheat Detectors Installation, AMM TASK 26-18-02-400-804-001.
 - (d) Move the power switches for these Duct Leak and Overheat Detection System (DLODS) Cards to the ON position:
 - 1) Right DLODS Control Card (A5) in the Right Systems Cardfile (P84)
 - 2) Center DLODS Control Card (A8) in the Right Systems Card File (P84)
 - 3) Left DLODS Control Card (A5) in the Left Systems Card File (P85)
 - (e) After approximately 90 seconds, if the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

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- (f) If you do not find a problem with the wiring or elements, then disconnect the elements from the loop (AMM TASK 26-18-02-000-804-001).
- (g) For the long-element type detectors, do these steps:
 - 1) Examine the connector ends for damage or unwanted material.
 - a) If there is unwanted material in the connector ends, clean the connector ends and re-connect the elements; do this task: Strut Overheat Detectors Installation, AMM TASK 26-18-02-400-804-001.
 - b) After approximately 90 seconds, if the maintenance message does not show on the MAT, you corrected the fault.
 - 2) At each element connection, make sure the ceramic insulator is attached to the center conductor of the female connector end.
 - a) If the ceramic insulator is not attached, replace the element or wiring connector.

These are the tasks:
Strut Overheat Detectors Removal, AMM TASK 26-18-02-000-804-001,
Strut Overheat Detectors Installation, AMM TASK 26-18-02-400-804-001.
 - b) After approximately 90 seconds, if the maintenance message does not show on the MAT, you corrected the fault.
- (h) If you do not find a problem with the element or connector ends, then re-connect the elements and continue, do this task: Strut Overheat Detectors Installation, AMM TASK 26-18-02-400-804-001.
- (4) Move the power switches for these DLODS Control Cards to the OFF position:
 - (a) Right DLODS Control Card (A5) in the Right Systems Card File (P84)
 - (b) Center DLODS Control Card (A8) in the Right Systems Card File (P84)
 - (c) Left DLODS Control Card (A5) in the Left Systems Card File (P85)



DISCONNECT THE WIRE BUNDLES FROM THE TERMINAL LUGS BEFORE TESTING THE DETECTOR RESISTANCE AND MEASURING THE INSULATION RESISTANCE; OTHERWISE, DAMAGE TO OTHER DETECTORS IN THE LOOP MAY OCCUR.

- (5) Do a resistance check between the specified pins of the card file connector (WDM 26-18-13, WDM 26-18-14) .
 - (a) If the resistance is more than 150 ohms, then do these steps:

NOTE: To isolate the fault, disconnect the elements and the wiring between them if applicable. For the elements, do the wiring check between the center conductor at each end of the element.

 - 1) If you find a problem with the wiring, repair the wiring.
 - 2) If you find a problem with an element, replace the applicable overheat detector or element.

These are the tasks:
Strut Overheat Detectors Removal, AMM TASK 26-18-02-000-804-001,
Strut Overheat Detectors Installation, AMM TASK 26-18-02-400-804-001.
 - 3) Connect the applicable wiring (WDM 26-18-13) (WDM 26-18-14).

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- (b) If the resistance is 150 ohms or less, then do these steps:
- 1) Replace the applicable DLODS control card.
These are the tasks:
DLODS Control Card Removal, AMM TASK 26-18-05-000-801,
DLODS Control Card Installation, AMM TASK 26-18-05-400-801.
- (c) Move the power switches for these Duct Leak and Overheat Detection System (DLODS) Cards to the ON position:
- 1) Right DLODS Control Card (A5) in the Right Systems Card File (P84)
 - 2) Center DLODS Control Card (A8) in the Right Systems Card File (P84)
 - 3) Left DLODS Control Card (A5) in the Left Systems Card File (P85)
- (d) After approximately 90 seconds, if the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (e) If the MAT shows ACTIVE for the maintenance message, then continue.
- (6) Do these steps to do a check of the backplane circuit between the DLODS control card and the cardfile connector:
- (a) Remove the applicable DLODS control card; do this task: DLODS Control Card Removal, AMM TASK 26-18-05-000-801.
 - (b) Install an extender card, SPL-1658, in the applicable DLODS control card location.
 - (c) Do a continuity check between these pins for the applicable DLODS control card (SSM 26-18-13) (SSM 26-18-14):

Table 220/26-18-00-993-804

LOOP	CARD FILE	DLODS CARD	CARD FILE CONNECTOR		DLODS CARD CONNECTOR
L Strut Loop 1	Right P84	Center A8	DP8409		XA8
			pin 44	--	pins 40,41,42
			pin 45	--	pins 34,35,36
L Strut Loop 2	Left P85	Left A5	DP8502		XA5
			pin 41	--	pins 40,41,42
			pin 42	--	pins 34,35,36
R Strut Loop 1	Right P84	Right A5	DP8403		XA5
			pin 44	--	pins 52,53,54
			pin 45	--	pins 46,47,48
R Strut Loop 2	Right P84	Center A8	DP8408		XA8
			pin 49	--	pins 52,53,54
			pin 50	--	pins 46,47,48

- (d) Remove the extender card, SPL-1658 from the DLODS control card location.
- (e) If you do not have continuity, then replace the Systems Card File Assembly (AMM PAGEBLOCK 31-09-00/401). Otherwise, continue.
- (f) Re-install the applicable DLODS control card (DLODS Control Card Installation, AMM TASK 26-18-05-400-801).

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- (g) After approximately 90 seconds, if the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— **END OF TASK** —————

815. Fire Bell and Master Warning Lights with No Other Flight Deck Effects - Fault Isolation

A. Initial Evaluation

- (1) If the Fire Bell and Master Warning Lights come on intermittently and there are no other flight deck effects, then do the Fault Isolation Procedure below.

B. Fault Isolation Procedure

- (1) To get access to the Systems Card Files,

Open this access panel:

<u>Number</u>	<u>Name/Location</u>
117AL	Main Equipment Center Access Door

- (2) Move the power switches for these DLODS Control cards to the OFF position and then to the ON position:

- (a) Right DLODS Control Card (A05) in the Right Systems Card File (P84)
- (b) Left DLODS Control Card (A05) in the Left Systems Card File (P85)

- (3) Close this access panel:

<u>Number</u>	<u>Name/Location</u>
117AL	Main Equipment Center Access Door

————— **END OF TASK** —————

818. Wetting Current Procedure - Fault Isolation

A. Description

- (1) This task is for DLODS maintenance messages that are caused by two failures (or a failure and a Duct Leak/Overheat) detected by the same loop.
- (a) When the first failure occurs, a maintenance message with a specific zone number will show.
 - (b) If the first message is still active when the second failure or a Duct Leak or Overheat occurs, a maintenance message will show but without a specific zone number. The first message will then show as NOT ACTIVE, even though there could still be a failure at that location.
- (2) This procedure shows how to remove oxidation film from the connectors that can show intermittent opens and also identifies detectors with an OPEN issue.

B. General

- (1) The objective of this test is to apply a Wetting Current to the Airplane Overheat Detection System (OHDS) Loops that show high Center Wire Resistance and decrease the Loop CWR to the correct levels.
- (a) Connector contact oxidation or other contamination can cause High Impedance layers in the OHDS Loop connection path.
 - (b) The High Wetting Current can remove these High Impedance layers and correct the contact Impedance values.

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- (2) This procedure uses the handheld function generator, COM-14954 to apply the Wetting Current of 9 - 45 mA RMS to the two ends of the loop for approximately 5 - 60 seconds.

C. Related Data

- (1) Figure 305
- (2) SSM 26-18-11
- (3) SSM 26-18-12
- (4) SSM 26-18-13
- (5) SSM 26-18-14
- (6) SSM 26-18-15
- (7) SSM 26-18-16
- (8) SSM 26-18-17
- (9) SSM 26-18-18

D. Initial Evaluation

- (1) If the Maintenance Access Terminal (MAT) shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows that the maintenance message occurred during the present leg or a previous flight leg, but is currently NOT ACTIVE, then there was an intermittent fault.

E. Fault Isolation Procedure

- (1) Do a check of the MAT for one of these DLODS Control Card maintenance messages:
 - (a) If one of these maintenance messages shows, then do the Fault Isolation Procedure for that message.
 - (b) After approximately 90 seconds, examine the MAT for the maintenance message.
 - 1) If the MAT shows a LOOP SHORTED maintenance message with a specific zone number, do the Fault Isolation Procedure for that message.
NOTE: Refer to the 26-MAINT MSG INDEX to find the applicable Fault Isolation Manual (FIM) Tasks.
 - 2) If the MAT shows a LOOP OPEN maintenance message with a specific zone number, do the Fault Isolation Procedure for that message.
NOTE: Refer to the 26-MAINT MSG INDEX to find the applicable FIM Tasks.
 - 3) If the maintenance message does not show on the MAT, you corrected the fault.
 - 4) If the maintenance message still shows on the MAT, then continue.
- (2) Do a check of the MAT PRESENT LEG FAULTS or earlier leg faults in FAULT HISTORY for maintenance messages of the same loop.
 - (a) If there are other maintenance messages (ACTIVE or NOT ACTIVE) for the same loop, do the Fault Isolation Procedure for those maintenance messages as if the messages were ACTIVE.
NOTE: Refer to the 26-MAINT MSG INDEX to find the applicable FIM Tasks.
 - (b) If there are no other maintenance messages for the same loop, then continue.
- (3) Refer to the table that follows to find the DLODS Control Card related to the maintenance message:

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Table 221/26-18-00-993-860 Loop Open DLODS Control Card/Maintenance Message Association

MAINTENANCE MESSAGE	SYSTEM DESCRIPTION	MESSAGE DESCRIPTION	DLODS CONTROL CARD	DETECTORS IN LOOP
26-39011 26-33422	Wheel Well Fire Detection	Wheel Well Loop 1 is open Wheel Well Loop 2 is open	Right Control Card, P84-A5 Left Control Card, P85-A5	1 per loop
26-32003 26-34001	Left Fancase Overheat Detector	Left Fancase Loop 1 is open Left Fancase Loop 2 is open	Center Control Card, P84-A8 Left Control Card, P85-A5	1 per loop
26-33002 26-33003	Right Fancase Overheat Detector	Right Fancase Loop 1 is open Right Fancase Loop 2 is open	Right Control Card, P84-A5 Center Control Card, P84-A8	1 per loop
26-36103 26-35001	Left Strut Overheat Detector	Left Strut Loop 1 is open Left Strut Loop 2 is open	Center Control Card, P84-A8 Left Control Card, P85-A5	3 per loop
26-30302 26-37303	Right Strut Overheat Detector	Right Strut Loop 1 is open Right Strut Loop 2 is open	Right Control Card, P84-A5 Center Control Card, P84-A8	3 per loop
26-34003 26-35013, 26-35023, 26-35033, 26-35043, 26-35053, 26-35063, 26-35073, 26-35083, 26-35093, 26-35103, 26-35113, 26-35123	Left Wing Loop 1 Overheat Detector	Left Wing Loop 1 is open Left Wing Loop 1 zone X is open (X = 1 - 12)	Center Control Card, P84-A8	5
26-33001 26-33011, 26-33021, 26-33031, 26-33041, 26-33051, 26-33061, 26-33071, 26-33081, 26-33091, 26-33101, 26-33111, 26-33121	Left Wing Loop 2 Overheat Detector	Left Wing Loop 2 is open Left Wing Loop 2 zone X is open (X = 1 - 12)	Left Control Card, P85-A5	5
26-37002 26-38012, 26-38022, 26-38032, 26-38042, 26-38052, 26-38062, 26-38072, 26-38082, 26-38092, 26-38102, 26-38112, 26-38122	Right Wing Loop 1 Overheat Detector	Right Wing Loop 1 is open Right Wing Loop 1 zone X is open (X = 1 - 12)	Right Control Card, P84-A5	5

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**Table 221/26-18-00-993-860 Loop Open DLODS Control Card/Maintenance Message Association
(Continued)**

MAINTENANCE MESSAGE	SYSTEM DESCRIPTION	MESSAGE DESCRIPTION	DLODS CONTROL CARD	DETECTORS IN LOOP
26-37003 26-38013, 26-38023, 26-38033, 26-38043, 26-38053, 26-38063, 26-38073, 26-38083, 26-38093, 26-38103, 26-38113, 26-38123	Right Wing Loop 2 Overheat Detector	Right Wing Loop 2 is open Right Wing Loop 2 zone X is open (X = 1 - 12)	Center Control Card, P84-A8	5
26-31001, 26-31011, 26-31021, 26-31031, 26-31041, 26-31051, 26-31061, 26-31071, 26-31081, 26-31091, 26-31101, 26-31111, 26-31121, 26-31131, 26-31141, 26-31151, 26-31161, 26-31171, 26-31181, 26-31191, 26-31201, 26-31211, 26-31221, 26-31231, 26-31241, 26-31251, 26-31261	Body Loop 1 Duct Leak Detector	Body Loop 1 is open Body Loop 1 zone X is open (X = 1 - 26)	Left Control Card, P85-A5	12 +3 Resistors
26-31002 26-31012, 26-31022, 26-31032, 26-31042, 26-31052, 26-31062, 26-31072, 26-31082, 26-31092, 26-31102, 26-31112, 26-31122, 26-31132, 26-31142, 26-31152, 26-31162, 26-31172, 26-31182, 26-31192, 26-31202, 26-31212, 26-31222, 26-31232, 26-31242, 26-31252, 26-31262	Body Loop 2 Duct Leak Detector	Body Loop 2 is open Body Loop 2 zone X is open (X = 1 - 26)	Right Control Card, P84-A5	12 +3 Resistors

- (4) Open this access panel:

<u>Number</u>	<u>Name/Location</u>
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117AL	Main Equipment Center Access Door
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- (5) Move the POWER ON/OFF Switch for the DLODS Control Card related to the maintenance message to the OFF position.

NOTE: Refer to the Table 221 above to find the applicable DLODS Control Card.

- (6) Remove the applicable DLODS Control Card. This is the task: DLODS Control Card Removal, AMM TASK 26-18-05-000-801.
- (7) Install an Extender Card, card, SPL-1658 or card, SPL-1814 (for the Fire Detector Wheel Well), in the applicable DLODS Control Card location(s).

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MAKE SURE THAT YOU USE AN LCR METER TO MEASURE THE LOOP RESISTANCE. IF YOU USE A DMM, YOU CAN CAUSE DAMAGE TO THE OVERHEAT DETECTOR(S).

- (8) Use an LCR meter (Inductance, Capacitance, Resistance), COM-1741 (or equivalent) and measure the Resistance between the applicable pins indicated in the Table 222 below on the DLODS Extended Card.

Table 222/26-18-00-993-861 OVHT Detector Loop Resistance Reference

LOOP	CARD FILE	DLODS CONTROL CARD	DLODS CARD CONNECTOR, PINS	SSM REF	MAX R VALUE
Wheel Well Fire Detection Loop 1	Right P84	Right Control Card, P84-A5	XA5, pins 52 (+) and 46 (-)	SSM 26-18-11	40 Ω
Wheel Well Fire Detection Loop 2	Left P85	Left Control Card, P85-A5	XA5, pins 34 (+) and 40 (-)	SSM 26-18-11	40 Ω
Left Fancase Loop 1	Right P84	Center Control Card, P84-A8	XA8, pins 25 (+) and 31 (-)	SSM 26-18-11	20 Ω
Left Fancase Loop 2	Left P85	Left Control Card, P85-A5	XA5, pins 25 (+) and 31 (-)	SSM 26-18-11	20 Ω
Right Fancase Loop 1	Right P84	Right Control Card, P84-A5	XA5, pins 39 (+) and 43 (-)	SSM 26-18-12	20 Ω
Right Fancase Loop 2	Right P84	Center Control Card, P84-A8	XA8, pins 39 (+) and 43 (-)	SSM 26-18-12	20 Ω
Left Strut Loop 1	Right P84	Center Control Card, P84-A8	XA8, pins 34 (+) and 40 (-)	SSM 26-18-13	50 Ω
Left Strut Loop 2	Left P85	Left Control Card, P85-A5	XA5, pins 34 (+) and 40 (-)	SSM 26-18-13	50 Ω
Right Strut Loop 1	Right P84	Right Control Card, P84-A5	XA5, pins 46 (+) and 52 (-)	SSM 26-18-14	50 Ω
Right Strut Loop 2	Right P84	Center Control Card, P84-A8	XA8, pins 46 (+) and 52 (-)	SSM 26-18-14	50 Ω
Left Wing Loop 1	Right P84	Center Control Card, P84-A8	XA8, pins 22 (+) and 28 (-)	SSM 26-18-15	50 Ω
Left Wing Loop 2	Left P85	Left Control Card, P85-A5	XA5, pins 22 (+) and 28 (-)	SSM 26-18-15	50 Ω
Right Wing Loop 1	Right P84	Right Control Card, P84-A5	XA5, pins 58 (+) and 64 (-)	SSM 26-18-16	50 Ω
Right Wing Loop 2	Right P84	Center Control Card, P84-A8	XA8, pins 58 (+) and 64 (-)	SSM 26-18-16	50 Ω
Body Loop 1	Left P85	Left Control Card, P85-A5	XA5, pins 58 (+) and 64 (-)	SSM 26-18-17	150 Ω
Body Loop 2	Right P84	Right Control Card, P84-A5	XA5, pins 22 (+) and 28 (-)	SSM 26-18-18	150 Ω

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- (a) If the measured Resistance is less than the indicated maximum value in the table above, do the applicable FIM Procedure for the maintenance message.
- NOTE: Refer to the 26-MAINT MSG INDEX to find the applicable FIM Task.
- (b) If the measured Resistance is more than the indicated maximum value in the table above, continue.
- (9) Make the 10 μ F AC Coupling Capacitor as follows:
- (a) Use a Capacitor Decade Box or a fixed value Capacitor.
 - (b) Set the Capacitor Decade Box to 10 μ F.
 - 1) Use an LCR meter (Inductance, Capacitance, Resistance), COM-1741 (or equivalent) to make sure that the Capacitance is correct.
 - (c) Set the LCR Meter in C Mode.
 - (d) Set the LCR Meter to 1 KHz.
 - (e) Make sure that the AC Coupling Capacitor Capacitance is correct.



MAKE SURE THAT THE MAXIMUM VOLTAGE AMPLITUDE TO THE SENSING ELEMENTS IS $\leq$ 15V RMS (10 HZ - 100 KHZ).



MAKE SURE THAT THE MAXIMUM CURRENT TO THE SENSING ELEMENTS IS $\leq$ 100 MILLIAMPERES RMS (10 HZ - 100 KHZ).



DO NOT LET THE SENSING ELEMENTS TOUCH DC VOLTAGE OR CURRENT.

(10) Function Generator Setup

NOTE: If necessary, add an in-line Resistor in series with the Coupling Capacitor to keep the Current in the specified limits.

- (a) Set the handheld function generator, COM-14954 Amplitude to Minimum.
- (b) Set the Frequency to 1 KHz $\pm$ 10%.

NOTE: Use an Oscilloscope or Digital Multi Meter (DMM) with Frequency capability (digital multimeter, COM-6088) to verify the correct frequency.

(11) Center Wire Resistance (CWR) Load Wetting Current Verification (Figure 305)

- (a) Use test leads to attach the 10 μ F Coupling Capacitor to the loop as follows:
 - 1) Connect the 10 μ F Coupling Capacitor to the applicable (+) side pin of the Extender Card.
 - 2) Connect the (-) side pin of the Extender Card to Ground.
- (b) Set the handheld function generator, COM-14954 Amplitude to 8V peak-to-peak.

NOTE: If necessary, add an in-line Resistor in series with the Coupling Capacitor to keep the Current in the specified limits.



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- (c) Attach the Function Generator positive output to the 10 μ F Coupling Capacitor and the Function Generator negative output to Ground for 5 seconds to apply the Wetting Current.
- (d) Reverse the connections for the Loop pins.
 - 1) Connect the 10 μ F Coupling Capacitor to the applicable (-) side pin of the Extender Card.
 - 2) Connect the (+) side pin of the Extender Card to Ground.
- (e) Attach the Signal Generator positive output to the 10 μ F Coupling Capacitor for 5 seconds to apply the Wetting Current, then quickly disconnect it.



CAUTION

MAKE SURE THAT YOU USE AN LCR METER TO MEASURE THE LOOP RESISTANCE. IF YOU USE A DMM, YOU CAN CAUSE DAMAGE TO THE OVERHEAT DETECTOR(S).

- (12) Use an LCR meter (Inductance, Capacitance, Resistance), COM-1741 (or equivalent) and measure the Resistance between the applicable pins indicated in the Table 222 above on the Extender Card.
 - (a) If the Resistance is in the specified range, no further action is necessary.
 - (b) If the Resistance is not in the specified range, repeat step (11) above for 10 seconds.
 - (c) If the Resistance is still not in the specified range, repeat steps (11) above for 60 seconds.

————— **END OF TASK** —————

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1. DUCT LEAK/OVERHEAT DETECTORS

Table 301/26-18-00-993-830 OVERHEAT DETECTOR ELEMENT RESISTANCE VALUES

EQUIPMENT NUMBER	VENDOR PART NUMBER	MINIMUM RESISTANCE CORE-TO-CORE GROUND (MEGOHMS)	MAXIMUM RESISTANCE CORE-TO-CORE (MILLIOHMS)
M26110	35798-200-255	1.020	5467.24
M26111	35794-200-255	1.064	5245.72
M26112	35844-200-255	0.901	8014.72
M26113	35838-200-255	0.725	7682.44
M26114	35838-200-255	0.725	7682.44
M26115	35798-200-255	1.020	5467.24
M26116	35794-200-255	1.064	5245.72
M26117	35844-200-255	0.901	8014.72
M26118	35838-200-255	0.725	7682.44
M26119	35838-200-255	0.725	7682.44
M26210	35798-200-255	1.020	5467.24
M26211	35794-200-255	1.064	5245.72
M26212	35844-200-255	0.901	8014.72
M26213	35838-200-255	0.725	7682.44
M26214	35838-200-255	0.725	7682.44
M26215	35798-200-255	1.020	5467.24
M26216	35794-200-255	1.064	5245.72
M26217	35844-200-255	0.901	8014.72
M26218	35838-200-255	0.725	7682.44
M26219	35838-200-255	0.725	7682.44
M26101	35744-200-310	0.455	2476.72
M26102	04-100000-702	1.667	820
M26104	35744-200-310	0.455	2476.72
M26201	35744-200-310	0.455	2476.72
M26202	04-100000-702	1.667	820
M26204	35744-200-310	0.455	2476.72
M26136	35837-200-255	0.730	7627.06
	04-90012-137A	0.730	7627.06
M26137	35888-200-255	0.532	10451.44
	04-90012-188A	0.532	10451.44

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Table 301/26-18-00-993-830 OVERHEAT DETECTOR ELEMENT RESISTANCE VALUES (Continued)

EQUIPMENT NUMBER	VENDOR PART NUMBER	MINIMUM RESISTANCE CORE-TO-CORE GROUND (MEGOHMS)	MAXIMUM RESISTANCE CORE-TO-CORE (MILLIOHMS)
M26138	04-90012-180A	0.556	10008.40
	35880-200-255	0.556	10008.40
M26139	35888-200-255	0.532	10451.44
M26140	35823-200-255	0.813	6851.74
M26141	35877-200-255	0.565	9842.26
M26142	35877-200-255	0.565	9842.26
M26143	35834-200-255	0.746	7460.92
M26144	35806-200-255	0.943	5910.28
M26145	35877-200-255	0.565	9842.26
M26146	35837-200-255	0.565	7627.06
M26147	35838-200-255	0.725	7682.44
M26148	35798-200-255	1.020	5467.24
M26149	35798-200-255	1.020	5467.24
M26236	35837-200-255	0.730	7626.06
	04-90012-137A	0.730	7626.06
M26237	35888-200-255	0.532	10451.44
	04-90012-188A	0.532	10451.44
M26238	04-90012-188A	0.556	10008.40
	35880-200-255	0.556	10008.40
M26239	35888-200-255	0.532	10451.44
M26240	35823-200-255	0.813	6851.74
M26241	35877-200-255	0.565	9842.26
M26242	35877-200-255	0.565	9842.26
M26243	35834-200-255	0.746	7460.92
M26244	35806-200-255	0.943	5910.28
M26245	35877-200-255	0.565	9842.26
M26246	35837-200-255	0.565	7627.06
M26247	35838-200-255	0.725	7682.44
M26248	35798-200-255	1.020	5467.24
M26249	35798-200-255	1.020	5467.24

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2. DLODS ZONE DATA FOR 777-300ER

Table 302/26-18-00-993-831 Body Loop Short Circuit Location (777-300ER)

Fault Zone Output	Actual Fault Zone
1	1
2	2,3
3	3,4
4	4,5
5	5
6	5,6,7
7	7,8
8	8,9,10,11
9	11,12,13,14
10	14
11	14,15
12	15
13	15, 16, 17
14	17, 18
15	18, 19
16	19, 20
17	20
18	20, 21, 22, 23
19	23
20	23, 24
21	24, 25
22	26

Table 303/26-18-00-993-832 Body Loop 1 Open Circuit Location (777-300ER)

Fault Zone Output	Actual Fault Zone
1	1
2	2
3	2, 3, 4
4	4
5	4, 5
6	5, 6, 7
7	7, 8
8	8, 9
9	9, 10

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Table 303/26-18-00-993-832 Body Loop 1 Open Circuit Location (777-300ER) (Continued)

Fault Zone Output	Actual Fault Zone
10	10, 11
11	11, 12, 13
12	13, 14
13	14, 15
14	15, 16
15	16, 17
16	17, 18
17	18, 19
18	19, 20
19	20, 21
20	21, 22, 23
21	23, 24
22	24
23	25

Table 304/26-18-00-993-833 Body Loop 2 Open Circuit Location (777-300ER)

Fault Zone Output	Actual Fault Zone
1	1
2	2, 3
3	3, 4
4	4, 5
5	5, 6
6	6, 7
7	7, 8
8	8, 9
9	9, 10
10	10, 11
11	11, 12, 13
12	13, 14
13	14, 15
14	15, 16
15	16, 17
16	17, 18
17	18, 19
18	19, 20

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Table 304/26-18-00-993-833 Body Loop 2 Open Circuit Location (777-300ER) (Continued)

Fault Zone Output	Actual Fault Zone
19	20, 21
20	21, 22
21	22, 23
22	23, 24
23	25

Table 305/26-18-00-993-834 Left Wing Loop 1 Open Circuit Location (777-300ER)

Fault Zone Output	Actual Fault Zone
1	1
2	2
3	2, 3
4	3, 4
5	4, 5
6	5, 6
7	6, 7, 8
8	8, 9
9	9, 10
10	10, 11
11	11
12	12

Table 306/26-18-00-993-835 Left Wing Loop 2 Open Circuit Location (777-300ER)

Fault Zone Output	Actual Fault Zone
1	1
2	2
3	2, 3
4	3, 4
5	4, 5, 6
6	6, 7
7	7, 8
8	8, 9
9	9, 10
10	10, 11
11	11
12	12

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Table 307/26-18-00-993-836 Right Wing Loop 1 Open Circuit Location (777-300ER)

Fault Zone Output	Actual Fault Zone
1	1
2	2
3	2, 3
4	3, 4
5	4, 5
6	5, 6
7	6, 7
8	7, 8, 9
9	9, 10
10	10, 11
11	11
12	12

Table 308/26-18-00-993-837 Right Wing Loop 2 Open Circuit Location (777-300ER)

Fault Zone Output	Actual Fault Zone
1	1
2	2
3	2, 3
4	3, 4
5	4, 5
6	5, 6, 7
7	7, 8
8	8, 9
9	9, 10
10	10, 11
11	11
12	12

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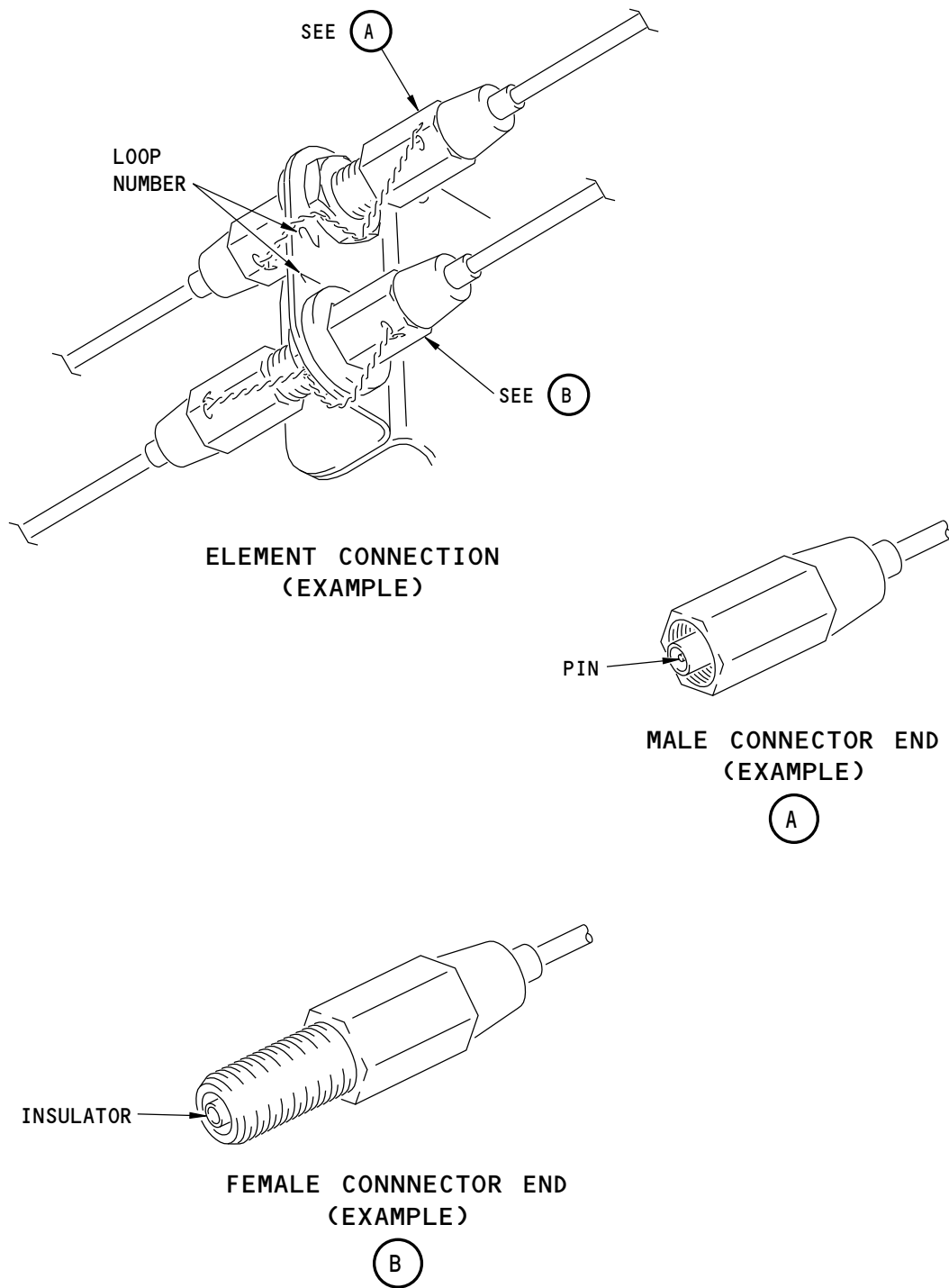
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E72042 S0006696631_V2

Duct Leak/Overheat Detector Connection
Figure 301/26-18-00-990-801

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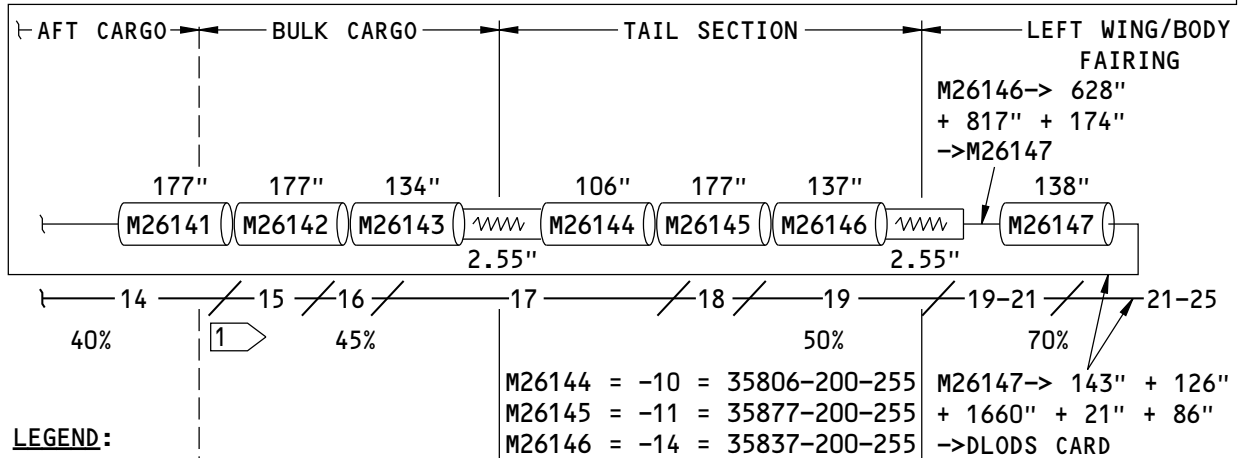
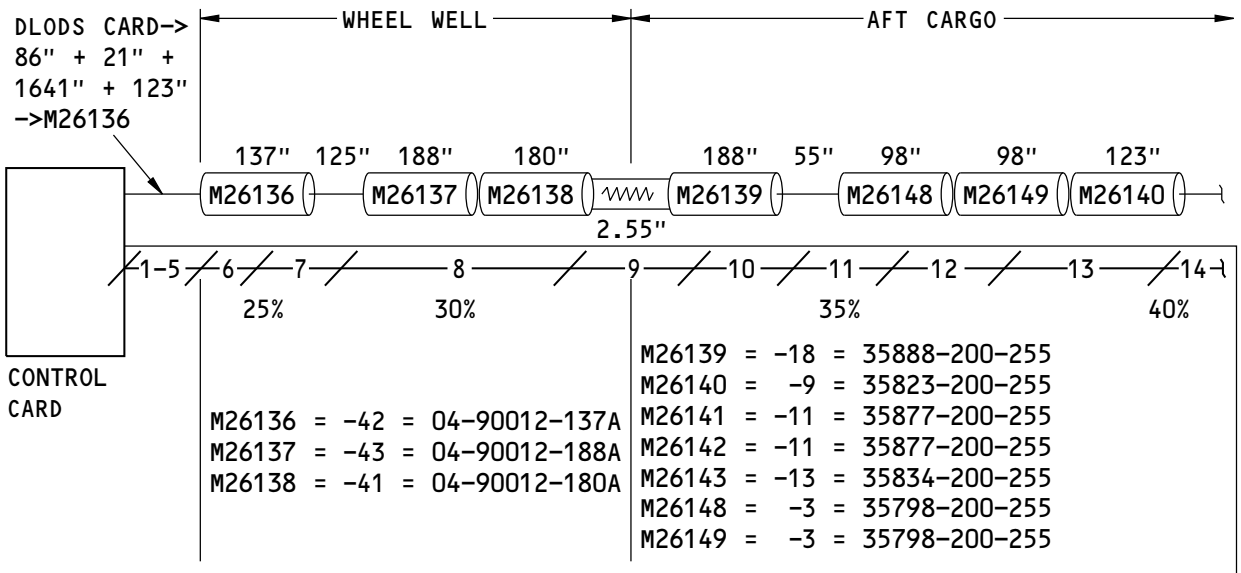
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LEGEND:

FROM EQUIPMENT → WIRE SEGMENT LENGTH + WIRE
SEGMENT LENGTH → TO EQUIPMENT

+ WIRING PRODUCTION BREAK

REFDES = BOEING SCD DASH NUMBER = KIDDIE P/N

INLINE RESISTOR

ZONE

DETECTOR ELEMENT

" = INCHES

- 1 THE 300ER IS REPORTING ZONES 12, 13
AND 14, WHICH ARE ACTUALLY ZONES
14-16 USING TABLE 302 FROM THE FIM.

REFERENCE DESIGNATOR BREAKDOWN

M AA L NN
EQUIPMENT DESIGNATOR
M = LRU
ATA CHAPTER 26
LOOP NUMBER 1 OR 2
NUMERICAL IDENTIFIER

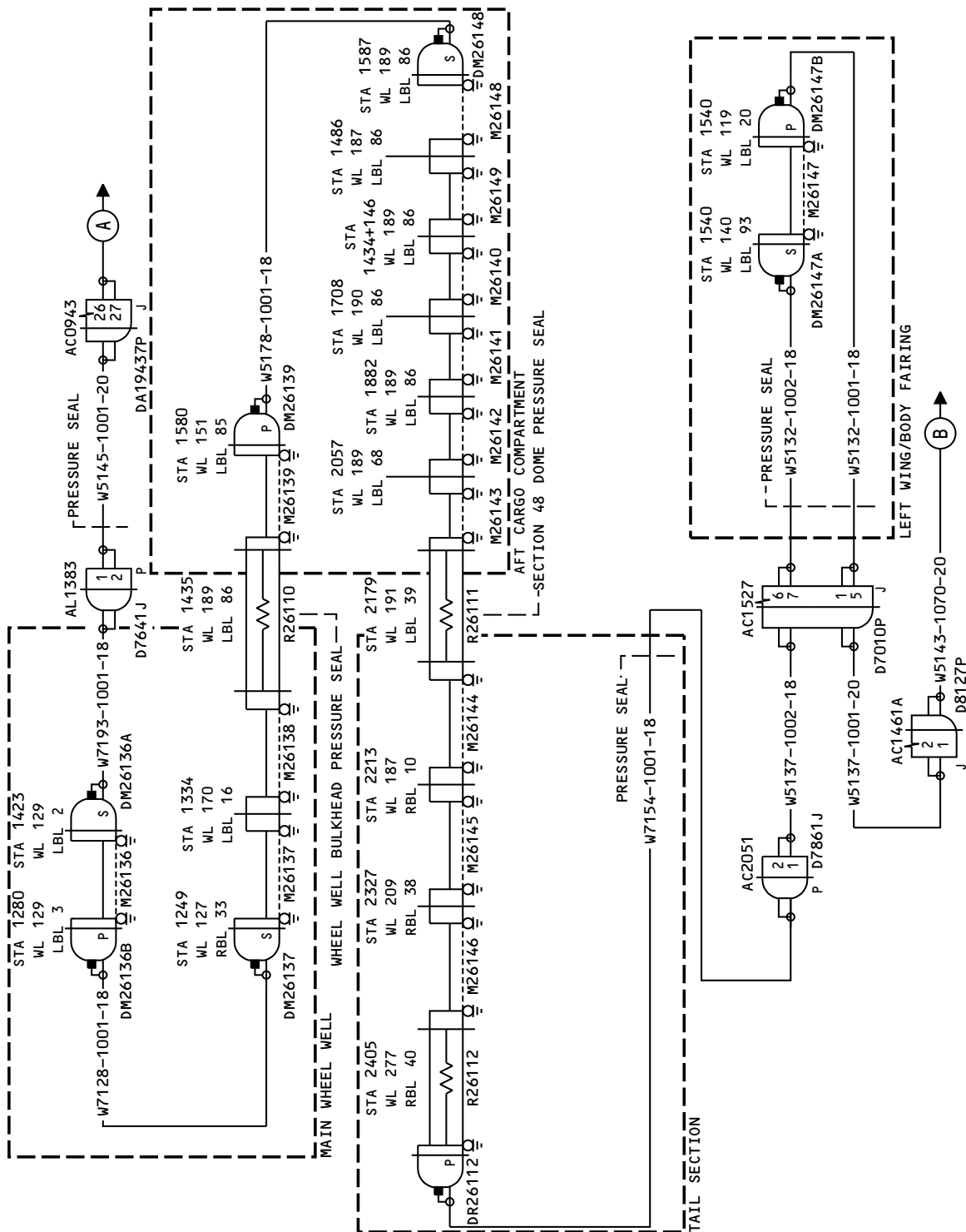
DLODS P/N AND LAYOUT SCHEMATIC
Figure 302/26-18-00-990-802

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Body Loop 1 Overheat Detection System
Figure 303/26-18-00-990-803 (Sheet 1 of 2)

2063763 S0000427129_V1

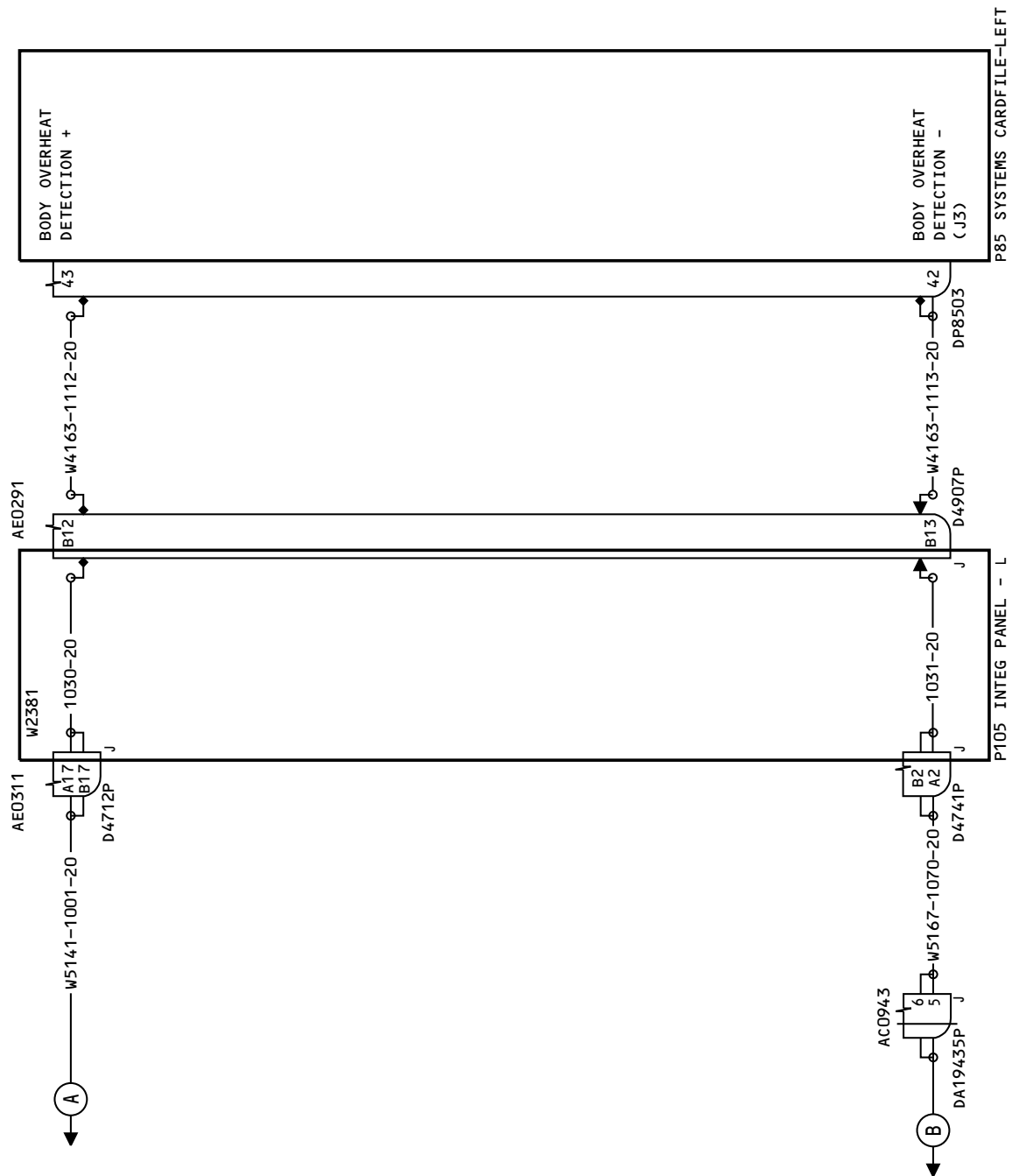
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Body Loop 1 Overheat Detection System
Figure 303/26-18-00-990-803 (Sheet 2 of 2)

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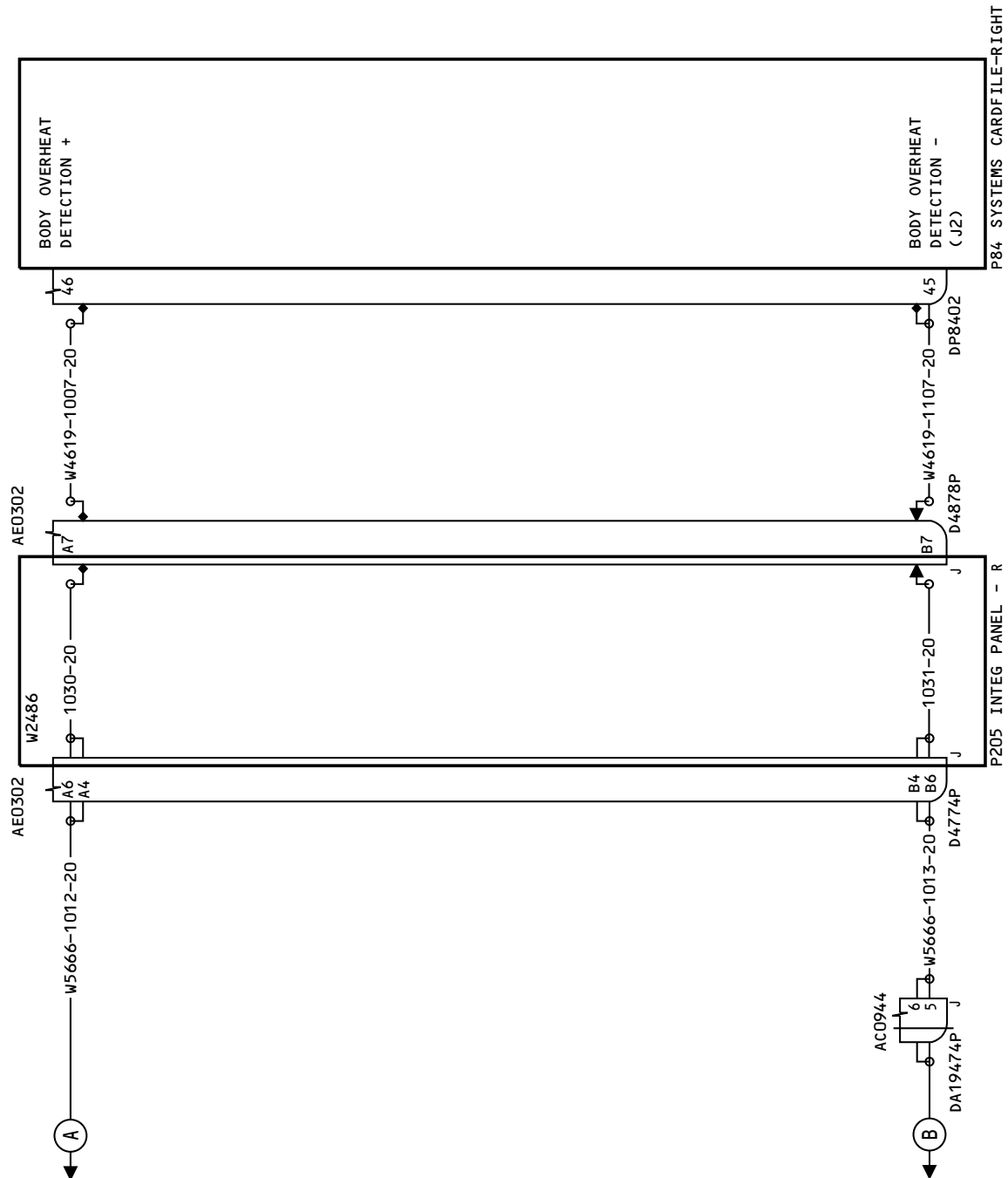


2063795 S0000427134_V1

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Body Loop 2 Overheat Detection System
Figure 304/26-18-00-990-804 (Sheet 2 of 2)

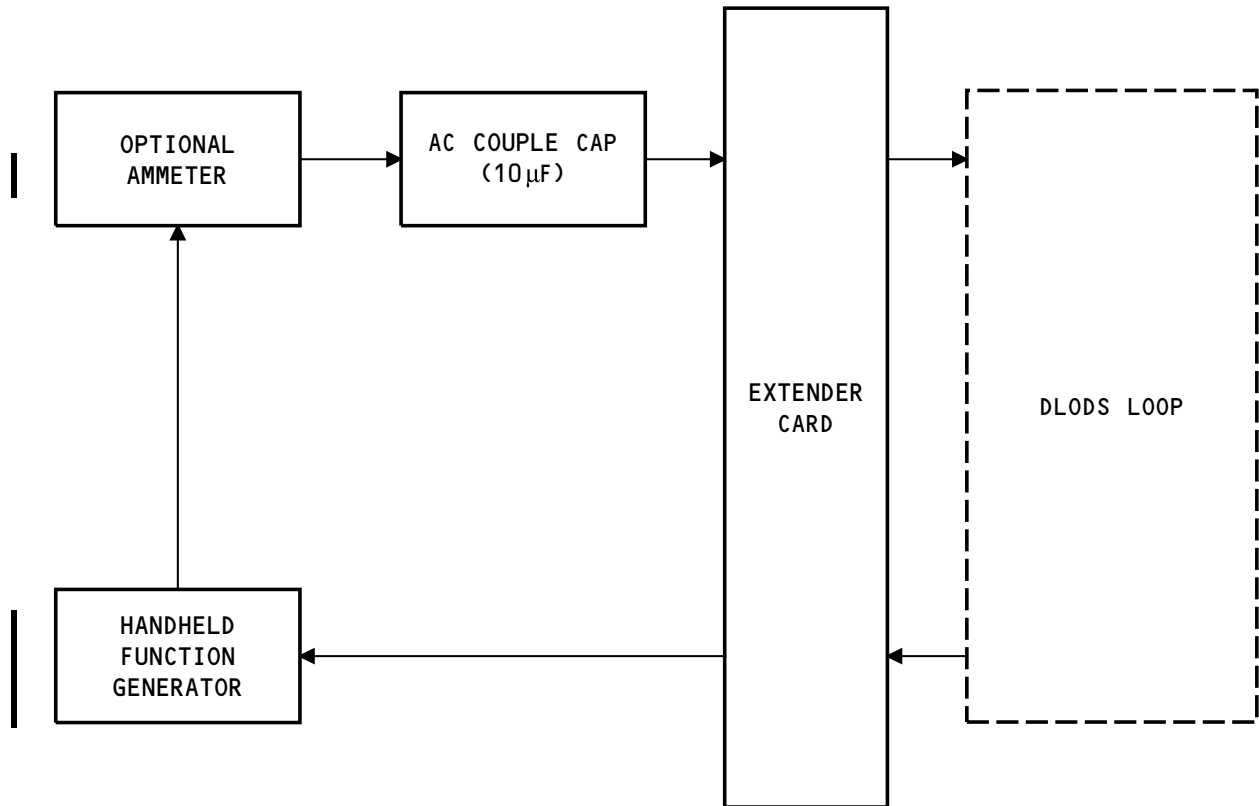
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2553198 S0000608590_V2

Wetting Current Test Diagram
Figure 305/26-18-00-990-805

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801. E/E Cooling Smoke Detector has No Output or is Failed - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 26-20070.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

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

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
C	28	C26413	FWD CGO SMOKE CTRL CHAN 1

Right Power Management Panel, P210

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
E	2	C26415	FWD CGO SMOKE CTRL CHAN 2

- (2) Disconnect the electrical connector, DM26231A, from the E/E Cooling Smoke Detector (WDM 26-19-11).
- (3) Disconnect the electrical connector, DM26060A from the Forward Cargo Compartment Smoke Detector (WDM 26-19-11).
- (4) Do a continuity check between these pins of connector DM26060A at the forward cargo smoke detector and connector DM26231A at the E/E Cooling smoke detector (WDM 26-19-11):

DM26060A	DM26231A
pin 26	pin 4
pin 27	pin 6
pin 12	pin 5
pin 6	pin 2
pin 18	pin 8
pin 36	pin 9
pin 37	pin 10

- (a) If you find a problem with the wiring, then do these steps:
- 1) Repair the wiring.
 - 2) Re-connect connector DM26060A.
 - 3) Re-connect connector DM26231A.
 - 4) Remove the safety tags and close these circuit breakers:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
C	28	C26413	FWD CGO SMOKE CTRL CHAN 1

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Right Power Management Panel, P210

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
E	2	C26415	FWD CGO SMOKE CTRL CHAN 2

- 5) If the maintenance message does not show on the ground test display, you corrected the fault.
- 6) If the maintenance message still shows on the ground test display, then continue.
- (b) If you do not find a problem with the wiring, then continue.
- (5) Open these circuit breakers and install safety tags:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
C	28	C26413	FWD CGO SMOKE CTRL CHAN 1

Right Power Management Panel, P210

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
E	2	C26415	FWD CGO SMOKE CTRL CHAN 2

- (6) Disconnect the electrical connector, DM26231B, from the E/E Cooling Smoke Detector (WDM 26-19-11).
- (7) Disconnect the electrical connector, DM26060B from the Forward Cargo Compartment Smoke Detector (WDM 26-19-11).
- (8) Do a continuity check between these pins of connector DM26060B at the forward cargo smoke detector and connector DM26231B at the E/E Cooling smoke detector (WDM 26-19-11):

DM26060B	DM26231B
pin 26	pin 4
pin 27	pin 6
pin 12	pin 5
pin 6	pin 2
pin 18	pin 8
pin 36	pin 9
pin 37	pin 10

- (a) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-connect connector DM26060B.
 - 3) Re-connect connector DM26231B.
 - 4) Remove the safety tags and close these circuit breakers:

Left Power Management Panel, P110

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
C	28	C26413	FWD CGO SMOKE CTRL CHAN 1

Right Power Management Panel, P210

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
E	2	C26415	FWD CGO SMOKE CTRL CHAN 2

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- 5) If the maintenance message does not show on the ground test display, you corrected the fault.
- 6) If the maintenance message still shows on the ground test display, then continue.
- (b) If you do not find a problem with the wiring, then continue.
- (9) Replace the E/E Cooling Smoke Detector, M26231.
These are the tasks:
E/E Cooling Smoke Detector Removal, AMM TASK 26-19-01-000-801,
E/E Cooling Smoke Detector Installation, AMM TASK 26-19-01-400-801.
 - (a) If the maintenance message does not show on the ground test display, you corrected the fault.
 - (b) If the maintenance message still shows on the ground test display, then continue.
- (10) Replace the forward cargo smoke detector, M26060.
These are the tasks:
Lower Cargo Smoke Detector Removal, AMM TASK 26-16-01-000-801,
Lower Cargo Smoke Detector Installation, AMM TASK 26-16-01-400-801.
 - (a) If the maintenance message does not show on the ground test display, you corrected the fault.

————— **END OF TASK** —————

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802. EICAS Messages BOTTLE 1 (2) DISCH ENG - Fault Isolation

A. Initial Evaluation

NOTE: This message shows that engine bottle 1 (2) has low pressure. If the engine fire extinguishing bottle was discharged this message will show on the EICAS display.

- (1) Replace the applicable fire extinguishing bottle.

These are the tasks:

Engine Fire Extinguishing Bottle Removal, AMM TASK 26-21-01-000-801,

Engine Fire Extinguishing Bottle Installation, AMM TASK 26-21-01-400-801.

————— **END OF TASK** —————

803. Engine Bottle 1, 2 Left, Right Squib Fault - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance messages: 26-50011, 26-50012, 26-50013, 26-50014.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows LATCHED for the maintenance message, then do this ground test on the MAT: 26 Fire Extinguishing System, OPERATIONAL TEST, Engine and APU Squibs.
 - (a) If the maintenance message shows on the ground test display, then do the Fault Isolation Procedure below.
 - (b) If the maintenance message does not show on the ground test display, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) If one of the EICAS advisory messages, BOTTLE 1 DISCH ENG or BOTTLE 2 DISCH ENG, shows on the EICAS display, then, do this task: EICAS Messages BOTTLE 1 (2) DISCH ENG - Fault Isolation, 26-21 TASK 802.
- (2) If one of the EICAS advisory messages, BOTTLE 1 DISCH ENG or BOTTLE 2 DISCH ENG, does not show on the EICAS display, then continue.
- (3) In the list below, find the fire extinguishing bottle, squib, connectors and pin numbers for the maintenance message.

Standby Power Mgt Panel P310

	--	--
L Eng B1 Bottle 1	DB26001A	D31012P
	pin 1	pin 23

Standby Power Mgt Panel P310

	--	--
R Eng B2 Bottle 1	DB26001B	D31031P
	pin 1	pin 59

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Standby Power Mgt Panel P310

-- --

L Eng B1
Bottle 2 **DB26002A** **D31031P**
pin 1 pin 3

Standby Power Mgt Panel P310

-- --

R Eng B2
Bottle 2 **DB26002B** **D31031P**
pin 1 pin 57

- (4) Replace the applicable squib on the fire extinguishing bottle.
These are the tasks:
Engine Fire Extinguishing Bottle Squib Removal, AMM TASK 26-21-02-000-801,
Engine Fire Extinguishing Bottle Squib Installation, AMM TASK 26-21-02-400-801.
- (a) Do this ground test on the MAT: 26 Fire Extinguishing System, OPERATIONAL TEST, Engine and APU Squibs.
- 1) If the maintenance message does not show on the ground test display, you corrected the fault.
 - 2) If the maintenance message shows on the ground test display, then continue.
- (5) Open these circuit breakers and install safety tags:

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
L	1	C26632	FIRE EXT R ENG BTL 1
L	2	C26633	FIRE EXT L ENG BTL 1
L	3	C26634	FIRE EXT R ENG BTL 2
L	4	C26635	FIRE EXT L ENG BTL 2

- (6) Remove the sidewall lining adjacent to the applicable engine fire extinguishing bottle. To remove it, do this task: Sidewall Liner Removal, AMM TASK 25-52-06-000-801.
- (7) Disconnect the connector from the applicable squib.
- (8) Examine the pins on the connector for damage or contamination.
- (a) If there is damage or contamination, repair or clean the connector.
- (b) Re-connect the connector to the squib.
- (c) Remove the safety tags and close these circuit breakers:

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
L	1	C26632	FIRE EXT R ENG BTL 1
L	2	C26633	FIRE EXT L ENG BTL 1
L	3	C26634	FIRE EXT R ENG BTL 2
L	4	C26635	FIRE EXT L ENG BTL 2

- (d) Do this ground test on the MAT: 26 Fire Extinguishing System, OPERATIONAL TEST, Engine and APU Squibs.

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- 1) If the maintenance message does not show on the ground test display, you corrected the fault.
 - 2) If the maintenance message shows on the ground test display, then continue.
- (9) Do this check of the wiring:
- (a) Open these circuit breakers and install safety tags:

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
L	1	C26632	FIRE EXT R ENG BTL 1
L	2	C26633	FIRE EXT L ENG BTL 1
L	3	C26634	FIRE EXT R ENG BTL 2
L	4	C26635	FIRE EXT L ENG BTL 2

- (b) Disconnect the connector on the applicable squib.
- (c) Do a wiring check between the specified pins of the applicable squib connector and the P310 panel connector.
- (d) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-connect the squib connector.
 - 3) Remove the safety tags and close these circuit breakers:

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
L	1	C26632	FIRE EXT R ENG BTL 1
L	2	C26633	FIRE EXT L ENG BTL 1
L	3	C26634	FIRE EXT R ENG BTL 2
L	4	C26635	FIRE EXT L ENG BTL 2

- 4) Do this ground test on the MAT: 26 Fire Extinguishing System, OPERATIONAL TEST, Engine and APU Squibs.
 - 5) If the maintenance message does not show on the ground test display, you corrected the fault.
- (e) If you do not find a problem with the wiring, then continue.
- (10) Do this check of the wiring between the applicable P310 panel connector and the ELMS electronic unit, M24406 (WDM 26-23-11):
- (a) Open these circuit breakers and install safety tags:

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
L	1	C26632	FIRE EXT R ENG BTL 1
L	2	C26633	FIRE EXT L ENG BTL 1
L	3	C26634	FIRE EXT R ENG BTL 2
L	4	C26635	FIRE EXT L ENG BTL 2

- (b) Remove the monitor card, M24520. To remove it, do this task: Monitor Card - Removal, AMM TASK 24-09-00-000-826.
- (c) Disconnect connector DM24513C from the ELMS 2 SIU 2, M24513.

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- (d) For the applicable squib, do a wiring check between these pins of connector DM24520 and the P310 panel connector:

Standby Power Mgt Panel P310

	--	--
BTL 1, L Squib	D31012J	DM24520
	pin 23	pin 61

Standby Power Mgt Panel P310

	--	--
BTL 1, R Squib	D31031J	DM24520
	pin 59	pin 26

Standby Power Mgt Panel P310

	--	--
BTL 2, L Squib	D31031J	DM24520
	pin 3	pin 18

Standby Power Mgt Panel P310

	--	--
BTL 2, R Squib	D31031J	DM24520
	pin 57	pin 16

- (e) For the applicable squib, do a wiring check between these pins of connector DM24520 and connector DM24513C.

Standby Power Mgt Panel P310

	--	--
BTL 1, L Squib	DM24513C	DM24520
	pin 93	pin 62

Standby Power Mgt Panel P310

	--	--
BTL 1, R Squib	DM24513C	DM24520
	pin 101	pin 27

Standby Power Mgt Panel P310

	--	--
BTL 2, L Squib	DM24513C	DM24520
	pin 81	pin 25

Standby Power Mgt Panel P310

	--	--
BTL 2, RSquib	DM24513C	DM24520
	pin 89	pin17

- (f) If you find a problem with the wiring, then do these steps:
1) Repair the wiring.

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- 2) Re-install the monitor card, M24520. To install it, do this task: Monitor Card - Installation, AMM TASK 24-09-00-400-824.
- 3) Re-connect connector DM24513C to the ELMS 2 SIU 2, M24513.
- 4) Remove the safety tags and close these circuit breakers:

Standby Power Management Panel, P310

Row	Col	Number	Name
L	1	C26632	FIRE EXT R ENG BTL 1
L	2	C26633	FIRE EXT L ENG BTL 1
L	3	C26634	FIRE EXT R ENG BTL 2
L	4	C26635	FIRE EXT L ENG BTL 2

- 5) Do this ground test on the MAT: 26 Fire Extinguishing System, OPERATIONAL TEST, Engine and APU Squibs.
- 6) If the maintenance message does not show on the ground test display, you corrected the fault.
- (g) If you do not find a problem with the wiring, then continue.
 - 1) Re-install the Monitor card, M24520. To install it, do this task: Monitor Card - Installation, AMM TASK 24-09-00-400-824.
 - 2) Re-connect connector DM24513C to the ELMS 2 SIU 2, M24406.
- (11) Do a check of the ELMS 2 SIU 2, M24513 in the P310 panel.

This is the task:

Signal Interface Unit - Exchange Check, AMM TASK 24-09-00-700-801-002

 - (a) Do this ground test on the MAT: 26 Fire Extinguishing System, OPERATIONAL TEST, Engine and APU Squibs.
 - 1) If the maintenance message does not show on the ground test display, you corrected the fault.
- (12) Install the sidewall lining adjacent to the applicable fire extinguishing bottle. To install it, do this task: Sidewall Liner Installation, AMM TASK 25-52-06-400-801.

————— END OF TASK —————

804. Failed Input Monitoring of Engine Fire Switch Circuit

A. Procedure

- (1) Remove and replace the applicable engine fire switch
These are the tasks:
Engine Fire Switch Removal, AMM TASK 26-21-03-000-801,
Engine Fire Switch Installation, AMM TASK 26-21-03-400-801.
- (2) Remove and replace the PDCU
These are the tasks:
Panel Data Concentrator Unit (PDCU) Removal, AMM TASK 23-93-03-000-801,
Panel Data Concentrator Unit (PDCU) Installation, AMM TASK 23-93-03-400-801.
- (3) If the 20 in-lb (2.26 N·m) problem is not corrected, check the wiring between the engine fire switch and the PDCU (SSM 23-93-41, SSM 23-93-42, SSM 23-93-43).

————— END OF TASK —————

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801. APU Fire Switch Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-43050.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Disconnect connector DS26401 from the APU fire switch, S26401 (WDM 26-20-12).
- (2) Examine the pins on connector DS26401 for damage or contamination.
 - (a) If there is damage or contamination, repair or clean the connector (WDM 26-20-12).
 - (b) Re-connect connector DS26401 to the APU fire switch, S26401.
 - (c) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (d) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Disconnect connector DM23117K from the Left Overhead Cardfile, M23117 (WDM 26-20-12).
- (4) Examine the pins on connector DM23117K for damage or contamination.
 - (a) If there is damage or contamination, repair or clean the connector (WDM 26-20-12).
 - (b) Re-connect connector DM23117K to the Left Overhead Cardfile, M23117.
 - (c) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (d) If the MAT shows ACTIVE for the maintenance message, then continue.
- (5) Replace the APU Fire Switch, S26401.

These are the tasks:

APU Fire Switch Removal, AMM TASK 26-22-03-000-801,

APU Fire Switch Installation, AMM TASK 26-22-03-400-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), then you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (6) Replace the Overhead Panel Card File, M23117, in the Maintenance Panel, P61.

These are the tasks:

Overhead Panel Card File (OPCF) Removal, AMM TASK 23-93-02-000-802,

Overhead Panel Card File (OPCF) Installation, AMM TASK 23-93-02-400-802.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (7) Disconnect connector DS26401 from the APU fire switch, S26401 (WDM 26-20-12).
- (8) Disconnect connector DM23117K from the Left Overhead Cardfile, M23117 (WDM 26-20-12).
- (9) Do a wiring check between these pins of connector DS26401 and connector DM23117K (WDM 26-20-12).

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DS26401	DM23117K
pin 5	pin B4
pin 4	pin B5
pin 15	pin B6

- (a) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-connect connector DS26401 to the APU fire switch, S26401.
 - 3) Re-connect connector DM23117K to the Left Overhead Cardfile, M23117.
- (b) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— **END OF TASK** —————

803. EICAS Message BOTTLE DISCH APU - Fault Isolation

A. Initial Evaluation

NOTE: This message shows that the APU fire extinguishing bottle has low pressure. If the APU fire extinguishing bottle was discharged this message will show on the EICAS display.

- (1) Replace the APU fire extinguishing bottle.

These are the tasks:

APU Fire Extinguishing Bottle Removal, AMM TASK 26-22-01-000-801,
APU Fire Extinguishing Bottle Installation, AMM TASK 26-22-01-400-801.

————— **END OF TASK** —————

804. APU and Engine Squib Test Equipment - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 26-50009.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows LATCHED for the maintenance message, then do these ground tests on the MAT:
 - (a) 26 Fire Extinguishing System, OPERATIONAL TEST, Cargo Squibs
 - (b) 26 Fire Extinguishing System, OPERATIONAL TEST, Engine and APU Squibs
- (3) If the maintenance message shows on the ground test display, then do the Fault Isolation Procedure below.
- (4) If the maintenance message does not show on the ground test display, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Replace the Squib Test Control relay, K26010 (WDM 26-23-11).
- (2) Do these ground tests on the MAT:
 - (a) 26 Fire Extinguishing System, OPERATIONAL TEST, Cargo Squibs
 - (b) 26 Fire Extinguishing System, OPERATIONAL TEST, Engine and APU Squibs

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- (3) If the maintenance message does not show on the ground test display, you corrected the fault.
- (4) If the maintenance message shows on the ground test display, then continue.
- (5) Do a wiring check between pin X2 of connector DK26010 on the Squib Test Control relay, K26010, and pin 81 of connector DP424 on the P310 Electronics Unit, M24406 (WDM 26-23-11).
 - (a) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Do these ground tests on the MAT:
 - a) 26 Fire Extinguishing System, OPERATIONAL TEST, Cargo Squibs
 - b) 26 Fire Extinguishing System, OPERATIONAL TEST, Engine and APU Squibs
 - 3) If the maintenance message does not show on the ground test display, you corrected the fault.
 - 4) If the maintenance message shows on the ground test display, then continue.
 - (b) If you do not find a problem with the wiring, then continue.
- (6) Do a wiring check between pin A1 of connector DK26010 on the Squib Test Control relay, K26010, and pin 60 of connector DM24412B on the Signal Conditioning Card, M24412 (WDM 26-23-11).
 - (a) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Do these ground tests on the MAT:
 - a) 26 Fire Extinguishing System, OPERATIONAL TEST, Cargo Squibs
 - b) 26 Fire Extinguishing System, OPERATIONAL TEST, Engine and APU Squibs
 - 3) If the maintenance message does not show on the ground test display, you corrected the fault.
 - 4) If the maintenance message shows on the ground test display, then continue.
 - (b) If you do not find a problem with the wiring, then continue.
- (7) Do a wiring check between pin A1 of connector DK26010 on the Squib Test Control relay, K26010, and pin 27 of connector DM24410A on the Signal Conditioning Card, M24410 (WDM 26-23-11).
 - (a) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Do these ground tests on the MAT:
 - a) 26 Fire Extinguishing System, OPERATIONAL TEST, Cargo Squibs
 - b) 26 Fire Extinguishing System, OPERATIONAL TEST, Engine and APU Squibs
 - 3) If the maintenance message does not show on the ground test display, you corrected the fault.
 - 4) If the maintenance message shows on the ground test display, then continue.
 - (b) If you do not find a problem with the wiring, then continue.
- (8) Do a wiring check between pin 73 of connector DM24412D on the Signal Conditioning Card, M24412, and pin 24 of connector DP424 on the P310 ELMS Electronic Unit, M24406 (WDM 26-23-11).
 - (a) If you find a problem with the wiring, then do these steps:



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- 1) Repair the wiring.
 - 2) Do these ground tests on the MAT:
 - a) 26 Fire Extinguishing System, OPERATIONAL TEST, Cargo Squibs
 - b) 26 Fire Extinguishing System, OPERATIONAL TEST, Engine and APU Squibs
 - 3) If the maintenance message does not show on the ground test display, you corrected the fault.
 - 4) If the maintenance message shows on the ground test display, then continue.
- (b) If you do not find a problem with the wiring, then continue.
- (9) Do a wiring check between pin B1 of connector DK26010 on the Squib Test Control relay, K26010, and pin 27 of connector DM24411A on the Signal Conditioning Card, M24411 (WDM 26-22-11).
- (a) If you find a problem with the wiring, then do these steps:
- 1) Repair the wiring.
 - 2) Do these ground tests on the MAT:
 - a) 26 Fire Extinguishing System, OPERATIONAL TEST, Cargo Squibs
 - b) 26 Fire Extinguishing System, OPERATIONAL TEST, Engine and APU Squibs
 - 3) If the maintenance message does not show on the ground test display, you corrected the fault.

———— END OF TASK ————

805. APU Bottle Squib Circuit is Open - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 26-50010.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then continue with this Fault Isolation Procedure.
- (2) If the MAT shows LATCHED for the maintenance message, then do this ground test on the MAT: 26 Fire Extinguishing System, OPERATIONAL TEST, Engine and APU Squibs.
 - (a) If the maintenance message shows on the ground test display, then continue with this Fault Isolation Procedure.
 - (b) If the maintenance message does not show on the ground test display, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) If the EICAS display shows the EICAS advisory message — BOTTLE DISCH APU, then do this task: EICAS Message BOTTLE DISCH APU - Fault Isolation, 26-22 TASK 803.
- (2) If the EICAS display does not show the EICAS advisory message, BOTTLE DISCH APU, then continue.
- (3) Do a check of the SIU-1, M24512, in the standby power management panel, P310.

This is the task:

Signal Interface Unit - Exchange Check, AMM TASK 24-09-00-700-801-002.

 - (a) Do this ground test on the MAT: 26 Fire Extinguishing System, OPERATIONAL TEST, Engine and APU Squibs.

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- 1) If the maintenance message does not show on the ground test display, you corrected the fault.
- 2) If the maintenance message shows on the ground test display, then continue.
- (4) Do a check of the SIU-2, M24513, in the standby power management panel, P310.
This is the task:
Signal Interface Unit - Exchange Check, AMM TASK 24-09-00-700-801-002.
 - (a) Do this ground test on the MAT: 26 Fire Extinguishing System, OPERATIONAL TEST, Engine and APU Squibs.
 - 1) If the maintenance message does not show on the ground test display, you corrected the fault.
 - 2) If the maintenance message shows on the ground test display, then continue.
- (5) Do a wire check between pin 80 of the connector DM24513C (that is on the P310 SIU-2, M24513), and pin 12 of the connector DM24520 (that is on the P310 monitor card, M24520). (WDM 26-22-11)
 - (a) If you find a problem with the wires, then do these steps:
 - 1) Repair the wires.
 - 2) Do this ground test on the MAT: 26 Fire Extinguishing System, OPERATIONAL TEST, Engine and APU Squibs.
 - 3) If the maintenance message does not show on the ground test display, you corrected the fault.
 - 4) If the maintenance message shows on the ground test display, then continue.
- (6) Do a wire check between pin 1 of connector DB26003A (that is on the APU fire extinguishing bottle, B26003), and pin 11 of connector DM24520 (that is on the P310 monitor card, M24520). (WDM 26-22-11)
 - (a) If you find a problem with the wires, then do these steps:
 - 1) Repair the wires.
 - 2) Do this ground test on the MAT: 26 Fire Extinguishing System, OPERATIONAL TEST, Engine and APU Squibs.
 - 3) If the maintenance message does not show on the ground test display, you corrected the fault.
 - 4) If the maintenance message shows on the ground test display, then continue.
- (7) Replace the Current Monitor Card, M24520, in the standby power management panel, P310.
These are the tasks:
Current Monitor Card - Removal, AMM TASK 24-09-00-000-817-002,
Current Monitor Card - Installation, AMM TASK 24-09-00-400-813-002.
 - (a) Do this ground test on the MAT: 26 Fire Extinguishing System, OPERATIONAL TEST, Engine and APU Squibs.
 - 1) If the maintenance message does not show on the ground test display, you corrected the fault.
 - 2) If the maintenance message shows on the ground test display, then continue.
- (8) These are the tasks:
APU Fire Extinguishing Bottle Squib Removal, AMM TASK 26-22-02-000-801,

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APU Fire Extinguishing Bottle Squib Installation, AMM TASK 26-22-02-400-801.

- (a) Do this ground test on the MAT: 26 Fire Extinguishing System, OPERATIONAL TEST, Engine and APU Squibs.
 - 1) If the maintenance message does not show on the ground test display, you corrected the fault.

———— **END OF TASK** ————

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801. Aft Cargo Fire Arm Switch Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-43150.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Disconnect connector DM80001B from the Cargo Fire/Engine Control Module, M80001, on the Overhead Panel, P5 (WDM 26-23-51).
- (2) Examine the pins on connector DM80001B for damage or contamination.
 - (a) If there is damage or contamination, repair or clean the connector (WDM 26-23-51).
 - (b) Re-connect connector DM80001B to the Cargo Fire/Engine Control Module, M80001.
 - (c) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (d) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Disconnect connector DM23217J from the Right Overhead Cardfile, M23217 (WDM 26-23-51).
- (4) Examine the pins on connector DM23217J for damage or contamination.
 - (a) If there is damage or contamination, repair or clean the connector (WDM 26-23-51).
 - (b) Re-connect connector DM23217J to the Right Overhead Cardfile, M23217.
 - (c) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (d) If the MAT shows ACTIVE for the maintenance message, then continue.
- (5) Replace the Aft Cargo Fire Armed Switch, M80001S2 (Integral Panel Light - Pushbutton Switch Replacement, AMM TASK 33-13-00-960-802).
 - (a) Do this task: Cargo Fire Arm and Discharge Switch Installation Test, AMM TASK 26-23-00-730-804.
 - (b) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), then you corrected the fault.
 - (c) If the MAT shows ACTIVE for the maintenance message, then continue.
- (6) Replace the Overhead Panel Card File, M23217, in the Maintenance Panel, P61.

These are the tasks:

Overhead Panel Card File (OPCF) Removal, AMM TASK 23-93-02-000-802,
Overhead Panel Card File (OPCF) Installation, AMM TASK 23-93-02-400-802.

 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (7) Disconnect connector DM80001B from the Cargo Fire/Engine Control Module, M80001, on the Overhead Panel, P5 (WDM 26-23-51).
- (8) Disconnect connector DM23217J from the Right Overhead Cardfile, M23217 (WDM 26-23-51).

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- (9) Do a wiring check between these pins of connector DM80001B and connector DM23217J (WDM 26-23-51).

DM80001B	DM23217J
pin 11	pin B5
pin 12	pin B7
pin 13	pin B6
pin 14	pin B8

- (a) If you find a problem with the wiring, then do these steps:
- 1) Repair the wiring.
 - 2) Re-connect connector DM80001B to the Cargo Fire/Engine Control Module, M80001.
 - 3) Re-connect connector DM23217J to the Right Overhead Cardfile, M23217.
 - 4) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

— END OF TASK —

802. Cargo Fire Discharge Switch Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-43160.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Disconnect connector DM80001A from the Cargo Fire/Engine Control Module, M80001, on the Overhead Panel, P5 (WDM 26-23-51).
- (2) Examine the pins on connector DM80001A for damage or contamination.
- (a) If there is damage or contamination, repair or clean the connector (WDM 26-23-51).
- (b) Re-connect connector DM80001A to the Cargo Fire/Engine Control Module, M80001.
- (c) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (d) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Disconnect connector DM23117K from the Left Overhead Cardfile, M23117 (WDM 26-23-51).
- (4) Examine the pins on connector DM23117K for damage or contamination.
- (a) If there is damage or contamination, repair or clean the connector (WDM 26-23-51).
- (b) Re-connect connector DM23117K to the Left Overhead Cardfile, M23117.
- (c) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (d) If the MAT shows ACTIVE for the maintenance message, then continue.
- (5) Replace the Cargo Fire Discharge Switch, M80001S4 (Integral Panel Light - Pushbutton Switch Replacement, AMM TASK 33-13-00-960-802).

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- (a) Do this task: Cargo Fire Arm and Discharge Switch Installation Test, AMM TASK 26-23-00-730-804.
- (b) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), then you corrected the fault.
- (c) If the MAT shows ACTIVE for the maintenance message, then continue.
- (6) Replace the Overhead Panel Card File, M23117, in the Maintenance Panel, P61.
These are the tasks:
Overhead Panel Card File (OPCF) Removal, AMM TASK 23-93-02-000-802,
Overhead Panel Card File (OPCF) Installation, AMM TASK 23-93-02-400-802.
- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (7) Disconnect connector DM80001A from the Cargo Fire/Engine Control Module, M80001, on the Overhead Panel, P5 (WDM 26-23-51).
- (8) Disconnect connector DM23117K from the Left Overhead Cardfile, M23117 (WDM 26-23-51).
- (9) Do a wiring check between these pins of connector DM80001A and connector DM23117K (WDM 26-23-51).

DM80001A	DM23117K
pin 21	pin A10
pin 20	pin A11
pin 19	pin A9

- (a) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-connect connector DM80001A to the Cargo Fire/Engine Control Module, M80001.
 - 3) Re-connect connector DM23117K to the Left Overhead Cardfile, M23117.
- (b) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— **END OF TASK** —————

803. Forward Cargo Fire Arm Switch Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-43170.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Disconnect connector DM80001A from the Cargo Fire/Engine Control Module, M80001, on the Overhead Panel, P5 (WDM 26-23-51).
- (2) Examine the pins on connector DM80001A for damage or contamination.

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- (a) If there is damage or contamination, repair or clean the connector (WDM 26-23-51).
- (b) Re-connect connector DM80001A to the Cargo Fire/Engine Control Module, M80001.
- (c) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (d) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Disconnect connector DM23117K from the Left Overhead Card File, M23117 (WDM 26-23-51).
- (4) Examine the pins on connector DM23117K for damage or contamination.
 - (a) If there is damage or contamination, repair or clean the connector (WDM 26-23-51).
 - (b) Re-connect connector DM23117K to the Left Overhead Card fFile, M23117.
 - (c) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (d) If the MAT shows ACTIVE for the maintenance message, then continue.
- (5) Replace the Forward Cargo Fire Arm Switch, M80001S1 (WDM 26-23-51).
 - (a) Do this task: Lower Cargo Compartment Smoke Detection Operational Test, AMM TASK 26-16-00-710-801.
 - (b) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), then you corrected the fault.
 - (c) If the MAT shows ACTIVE for the maintenance message, then continue.
- (6) Replace the Overhead Panel Card File, M23117, in the Maintenance Panel, P61.

These are the tasks:

Overhead Panel Card File (OPCF) Removal, AMM TASK 23-93-02-000-802,
Overhead Panel Card File (OPCF) Installation, AMM TASK 23-93-02-400-802.

 - (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (7) Disconnect connector DM80001A from the Cargo Fire/Engine Control Module, M80001, on the Overhead Panel, P5 (WDM 26-23-51).
- (8) Disconnect connector DM23117K from the Left Overhead Card File, M23117 (WDM 26-23-51).
- (9) Do a wiring check between these pins of connector DM80001A and connector DM23117K (WDM 26-23-51).

DM80001A	DM23117K
pin 15	pin A15
pin 16	pin A17
pin 17	pin A16
pin 18	pin B7

- (a) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-connect connector DM80001A to the Cargo Fire/Engine Control Module, M80001.
 - 3) Re-connect connector DM23117K to the Left Overhead Card File, M23117.

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- (b) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— **END OF TASK** —————

804. **FIRE/OVHT TEST Switch Problems - Fault Isolation**

A. Maintenance Messages

- (1) This task is for maintenance messages: 23-43240, 26-38011.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Disconnect connector DM80001A from the Cargo Fire/Engine Control Module, M80001, on the Overhead Panel, P5 (WDM 26-23-51).
- (2) Examine the pins on connector DM80001A for damage or contamination.
- (a) If there is damage or contamination, repair or clean the connector (WDM 26-23-51).
- (b) Re-connect connector DM80001A to the Cargo Fire/Engine Control Module, M80001.
- (c) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (d) If the MAT shows ACTIVE for the maintenance message, then continue.
- (3) Disconnect connector DM23117K from the Left Overhead Cardfile, M23117 (WDM 26-23-51).
- (4) Examine the pins on connector DM23117K for damage or contamination.
- (a) If there is damage or contamination, repair or clean the connector (WDM 26-23-51).
- (b) Re-connect connector DM23117K to the Left Overhead Cardfile, M23117.
- (c) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (d) If the MAT shows ACTIVE for the maintenance message, then continue.
- (5) Replace the FIRE/OVHT TEST Switch, M80001S3 (WDM 26-23-51).
- (a) Do this task: Lower Cargo Compartment Smoke Detection Operational Test, AMM TASK 26-16-00-710-801.
- (b) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), then you corrected the fault.
- (c) If the MAT shows ACTIVE for the maintenance message, then continue.
- (6) Replace the Overhead Panel Card File, M23117, in the Maintenance Panel, P61.
- These are the tasks:
- Overhead Panel Card File (OPCF) Removal, AMM TASK 23-93-02-000-802,
- Overhead Panel Card File (OPCF) Installation, AMM TASK 23-93-02-400-802.
- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.

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- (7) Disconnect connector DM80001A from the Cargo Fire/Engine Control Module, M80001, on the Overhead Panel, P5 (WDM 26-23-51).
- (8) Disconnect connector DM23117K from the Left Overhead Cardfile, M23117 (WDM 26-23-51).
- (9) Do a wiring check between these pins of connector DM80001A and connector DM23117K (WDM 26-23-51).

DM80001A	DM23117K
pin 22	pin A18
pin 23	pin A20
pin 24	pin A19

- (a) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-connect connector DM80001A to the Cargo Fire/Engine Control Module, M80001.
 - 3) Re-connect connector DM23117K to the Left Overhead Cardfile, M23117.
- (b) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

————— **END OF TASK** —————

813. EICAS Message BOTTLE DISCH CARGO - Fault Isolation

A. Initial Evaluation

NOTE: This message shows that the cargo fire extinguishing bottles 1A and 1B both have low pressure. If the cargo fire extinguishing bottles were discharged this message will show on the EICAS display.

- (1) Replace the applicable cargo fire extinguishing bottles.

These are the tasks:

Lower Cargo Fire Extinguishing Bottle Removal, AMM TASK 26-23-01-020-801,

Lower Cargo Fire Extinguishing Bottle Installation, AMM TASK 26-23-01-420-801.

NOTE: If the cargo fire extinguishing bottles were discharged, you must replace the cargo fire extinguishing bottles, the squibs, the applicable flow valves and the filter/regulator.

- (2) Do this task: Fire Extinguishing Tubing Leakage and Blockage - Functional Test, AMM TASK 26-23-00-730-802.

————— **END OF TASK** —————

816. Cargo Fire Extinguishing Flow Valve Squib Circuit Open - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance messages: 26-40773, 26-40774, 26-40786, 26-40787.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows LATCHED for the maintenance message, then do this ground test on the MAT: 26 Cargo Extinguishing System, OPERATIONAL TEST, Cargo Squibs.
 - (a) If the maintenance message shows on the ground test display, then do the Fault Isolation Procedure below.

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- (b) If the maintenance message does not show on the ground test display, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) If the EICAS advisory message, BOTTLE DISCH CARGO, shows on the EICAS display, then, do this task: EICAS Message BOTTLE DISCH CARGO - Fault Isolation, 26-23 TASK 813.
- (2) If the EICAS advisory message, BOTTLE DISCH CARGO, does not show on the EICAS display, then continue.
- (3) In the list below, find the applicable flow valve, squib, connectors and pin numbers for the maintenance message.

Table 201/26-23-00-993-816

STBY POWER MGT PANEL	FLOW VALVE	SQUIB	SQUIB CONNECTOR	P310 PANEL CONN
P310	Forward V26201	1	DV26201A pin 1	D31031P pin 5
P310	Forward V26201	2	DV26201B pin 1	D31031P pin 53
P310	Aft V26202	1	DV26202A pin 1	D31031P pin 7
P310	Aft V26202	2	DV26202B pin 1	D31031P pin 17

- (4) Open these circuit breakers and install safety tags:

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Row	Col	Number	Name
L	6	C26638	FIRE EXT CGO BTL 1A & VLV SQB
L	7	C26639	FIRE EXT CGO BTL 2A,2B & 2C
L	8	C26640	FIRE EXT CGO BTL 1B & VLV SQB

- (5) Remove the sidewall lining adjacent to the applicable flow valve. To remove it, do this task: Sidewall Liner Removal, AMM TASK 25-52-06-000-801.
- (6) Disconnect the connectors from the squibs on the applicable flow valve.
- (7) Examine the pins on the connectors for damage or contamination.
 - (a) If there is damage or contamination, repair or clean the connector.
 - (b) Re-connect the connectors to the flow valve.
 - (c) Remove the safety tags and close these circuit breakers:

Standby Power Management Panel, P310

Row	Col	Number	Name
L	6	C26638	FIRE EXT CGO BTL 1A & VLV SQB
L	7	C26639	FIRE EXT CGO BTL 2A,2B & 2C
L	8	C26640	FIRE EXT CGO BTL 1B & VLV SQB

- (d) Do this ground test on the MAT: 26 Fire Extinguishing System, OPERATIONAL TEST, Cargo Squibs.

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- (e) If the maintenance message does not show on the ground test display, you corrected the fault.
- (f) If the maintenance message shows on the ground test display, then continue.
- (8) For Squib 1 fault, do a check of the signal interface unit No. 2, M24513 in the P310 panel.
This is the task:
Signal Interface Unit - Exchange Check, AMM TASK 24-09-00-700-801-002.
 - (a) Do this ground test on the MAT: 26 Fire Extinguishing System, OPERATIONAL TEST, Cargo Squibs.
 - (b) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), then you corrected the fault.
 - (c) If the MAT shows ACTIVE or LATCHED for the maintenance message, then continue.
- (9) For Squib 2 fault, do a check of the signal interface unit No. 2, M24513 in the P310 panel.
This is the task:
Signal Interface Unit - Exchange Check, AMM TASK 24-09-00-700-801-002.
 - (a) Do this ground test on the MAT: 26 Fire Extinguishing System, OPERATIONAL TEST, Cargo Squibs.
 - (b) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), then you corrected the fault.
 - (c) If the MAT shows ACTIVE or LATCHED for the maintenance message, then continue.
- (10) Do this check of the wiring:
 - (a) Open these circuit breakers and install safety tags:

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
L	6	C26638	FIRE EXT CGO BTL 1A & VLV SQB
L	7	C26639	FIRE EXT CGO BTL 2A,2B & 2C
L	8	C26640	FIRE EXT CGO BTL 1B & VLV SQB

- (b) Disconnect the connectors from the squibs on the applicable flow valve.
- (c) Do a wiring check between the specified pins of the applicable flow valve connectors and the P310 panel connector.
- (d) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-connect the flow valve connectors.
 - 3) Remove the safety tags and close these circuit breakers:

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
L	6	C26638	FIRE EXT CGO BTL 1A & VLV SQB
L	7	C26639	FIRE EXT CGO BTL 2A,2B & 2C
L	8	C26640	FIRE EXT CGO BTL 1B & VLV SQB

- 4) Do this ground test on the MAT: 26 Fire Extinguishing System, OPERATIONAL TEST, Cargo Squibs.



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- 5) If the maintenance message does not show on the ground test display, you corrected the fault.
- 6) If the maintenance message shows on the ground test display, then continue.
- (e) If you do not find a problem with the wiring, then continue.
- (11) Replace the applicable flow valve.
These are the tasks:
Lower Cargo Fire Extinguishing Flow Valve Removal, AMM TASK 26-23-05-000-801,
Lower Cargo Fire Extinguishing Flow Valve Installation, AMM TASK 26-23-05-400-801.
 - (a) Do this ground test on the MAT: 26 Fire Extinguishing System, OPERATIONAL TEST, Cargo Squibs.
 - (b) If the maintenance message does not show on the ground test display, you corrected the fault.
 - (c) If the maintenance message shows on the ground test display, then continue.
- (12) Do this check of the wiring between the signal interface unit 2, M24513 and the monitor card, M24520 (WDM 26-23-11):
 - (a) Open these circuit breakers and install safety tags:

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<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
L	6	C26638	FIRE EXT CGO BTL 1A & VLV SQB
L	7	C26639	FIRE EXT CGO BTL 2A,2B & 2C
L	8	C26640	FIRE EXT CGO BTL 1B & VLV SQB

- (b) Remove the signal interface unit 2, M24513. To remove it,
These are the tasks:
Signal Interface Unit - Removal, AMM TASK 24-09-00-000-814-002,
Signal Interface Unit - Installation, AMM TASK 24-09-00-400-810-002.
- (c) Disconnect the applicable connector from the monitor card, M24520.
- (d) For the applicable flow valve squib, do a wiring check between these pins of connector DM24513C and the connector on M24520:

Table 202/26-23-00-993-815

SQUIB CONNECTOR	M24520 CONNECTOR		DM24513C
DV26201A	DM24520		
	pin 87	--	pin 79
DV26201B	DM24520		
	pin 79	--	pin 69
DV26202A	DM24520		
	pin 81	--	pin 66
DV26202B	DM24520		
	pin 83	--	pin 67

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- (e) If you find a problem with the wiring, then do these steps:
- 1) Repair the wiring.
 - 2) Re-install the signal interface unit 2, M24513. To install it,

These are the tasks:

Signal Interface Unit - Removal, AMM TASK 24-09-00-000-814-002,

Signal Interface Unit - Installation, AMM TASK 24-09-00-400-810-002.

- 3) Re-connect the applicable connector to the monitor card, M24520.
- 4) Remove the safety tags and close these circuit breakers:

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
L	6	C26638	FIRE EXT CGO BTL 1A & VLV SQB
L	7	C26639	FIRE EXT CGO BTL 2A,2B & 2C
L	8	C26640	FIRE EXT CGO BTL 1B & VLV SQB

- 5) Do this ground test on the MAT: 26 Fire Extinguishing System, OPERATIONAL TEST, Cargo Squibs.
 - 6) If the maintenance message does not show on the ground test display, you corrected the fault.
 - 7) If the maintenance message shows on the ground test display, then continue.
- (f) If you do not find a problem with the wiring, then continue.
- 1) Re-connect the applicable connector to the monitor card, M24520.
 - 2) Remove the safety tags and close these circuit breakers:

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
L	6	C26638	FIRE EXT CGO BTL 1A & VLV SQB
L	7	C26639	FIRE EXT CGO BTL 2A,2B & 2C
L	8	C26640	FIRE EXT CGO BTL 1B & VLV SQB

- (13) If the maintenance message is for the forward flow valve, do a check of the signal interface unit 2, M24513, in the P310 panel.

This is the task:

Signal Interface Unit - Exchange Check, AMM TASK 24-09-00-700-801-002.

- (a) Do this ground test on the MAT: 26 Fire Extinguishing System, OPERATIONAL TEST, Cargo Squibs.
 - (b) If the maintenance message does not show on the ground test display, you corrected the fault.
 - (c) If the maintenance message shows on the ground test display, then continue.
- (14) If the maintenance message is for the aft flow valve, do a check of the signal interface unit 2, M24513 in the P310 panel.

This is the task:

Signal Interface Unit - Exchange Check, AMM TASK 24-09-00-700-801-002.

- (a) Do this ground test on the MAT: 26 Fire Extinguishing System, OPERATIONAL TEST, Cargo Squibs.

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- (b) If the maintenance message does not show on the ground test display, you corrected the fault.
- (c) If the maintenance message shows on the ground test display, then continue.
- (15) Replace the monitor card, M24520.
These are the tasks:
Current Monitor Card - Removal, AMM TASK 24-09-00-000-817-002,
Current Monitor Card - Installation, AMM TASK 24-09-00-400-813-002.
 - (a) Do this ground test on the MAT: 26 Fire Extinguishing System, OPERATIONAL TEST, Cargo Squibs.
 - (b) If the maintenance message does not show on the ground test display, you corrected the fault.
 - (c) If the maintenance message shows on the ground test display, then continue.
- (16) Do a check of the signal interface unit 2, M24513 in the P310 panel.
This is the task:
Signal Interface Unit - Exchange Check, AMM TASK 24-09-00-700-801-002.
 - (a) Do this ground test on the MAT: 26 Fire Extinguishing System, OPERATIONAL TEST, Cargo Squibs.
 - (b) If the maintenance message does not show on the ground test display, you corrected the fault.
 - (c) If the maintenance message shows on the ground test display, then continue.
- (17) Install the sidewall lining adjacent to the applicable flow valve. To install it, do this task:
Sidewall Liner Installation, AMM TASK 25-52-06-400-801.

————— **END OF TASK** —————

817. Cargo Fire Extinguishing EXT In-Line Pressure Switch Set - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance messages: 26-40775, 26-40788.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) If the EICAS advisory message, BOTTLE DISCH CARGO, shows on the EICAS display, then, do this task: EICAS Message BOTTLE DISCH CARGO - Fault Isolation, 26-23 TASK 813.
- (2) If the EICAS advisory message, BOTTLE DISCH CARGO, does not show on the EICAS display, then continue.
- (3) In the list below, find the applicable in-line pressure switch, connectors, pin numbers, signal interface unit and monitor card for the maintenance message.

NOTE: Table 203 shows the components related to message 26-40788. Table 204 shows the components related to message 26-40775.

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Table 203/26-23-00-993-814 Maintenance Message 26-40788

PRESSURE SWITCH	PRESS SW CONNECTOR	P310 PANEL CONNECTOR	P310 PANEL SIU CARD	P310 PANEL MONITOR CARD
Forward S26002	DS26002 pin 2	DM24513C pin 12	SIGNAL INTERFACE UNIT 2 M24513	MONITOR CARD M24520

Table 204/26-23-00-993-826 Maintenance Message 26-40775

PRESSURE SWITCH	PRESS SW CONNECTOR	P310 PANEL CONNECTOR	P310 PANEL SIU CARD	P310 PANEL MONITOR CARD
Aft S26003	DS26003 pin 2	DM24512C pin 23	SIGNAL INTERFACE UNIT 1 M24512	MONITOR CARD M24520

- (4) Remove the sidewall lining adjacent to the applicable flow valve. To remove it, do this task: Sidewall Liner Removal, AMM TASK 25-52-06-000-801.

- (5) Push the reset button on the in-line pressure switch.

NOTE: If the cargo fire extinguishing bottles were discharged, you must replace the applicable fire extinguishing bottles and then reset the pressure switch.

- (a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (6) Replace the applicable in-line pressure switch.

These are the tasks:

Lower Cargo Fire Extinguishing In-Line Pressure Switch Removal, AMM TASK 26-23-03-000-801,

Lower Cargo Fire Extinguishing In-Line Pressure Switch Installation, AMM TASK 26-23-03-400-801.

- (a) Push the reset button on the in-line pressure switch.
- (b) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (c) If the MAT shows ACTIVE for the maintenance message, then continue.
- (7) Disconnect the connector from the in-line pressure switch.
- (8) Disconnect connector D31037P from the Standby Power Management Panel, P310.
- (9) Do this check of the wiring:
- (a) Do a wiring check between the specified pins of the applicable in-line pressure switch connector and the P310 panel connector.
- (b) If you find a problem with the wiring, then do these steps:
- 1) Repair the wiring.
 - 2) Re-connect the connector to the in-line pressure switch.
 - 3) Re-connect connector D31037P to the Standby Power Management Panel, P310.
 - 4) Push the reset button on the in-line pressure switch.
 - 5) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

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- 6) If the MAT shows ACTIVE for the maintenance message, then continue.
- (c) If you do not find a problem with the wiring, then continue.
- (10) Do a check of the wiring between the signal interface unit 1, M24512 (message 26-40775) or signal interface unit 2, M24513 (message 26-40788) and the monitor card, M24520 (WDM 26-23-51):
 - (a) For the applicable in-line pressure switch, do a wiring check between these pins of connector DM24512C (Table 206) or DM24513C (Table 205) and M24520:

Table 205/26-23-00-993-813 M24520 to DM24513C

PRESSURE SWITCH	M24520		DM24513C
FWD, S26002	pin 51	-----	pin 12

Table 206/26-23-00-993-812 M24520 to DM24512C

PRESSURE SWITCH	M24520		DM24512C
AFT, S26003	pin 14	-----	pin 23

- (b) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-install the signal interface unit 1, M24512 or signal interface unit 2, M24513, as applicable. To install it,
These are the tasks:
Signal Interface Unit - Removal, AMM TASK 24-09-00-000-814-002,
Signal Interface Unit - Installation, AMM TASK 24-09-00-400-810-002.
 - 3) Push the reset button on the in-line pressure switch.
 - 4) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (c) If you do not find a problem with the wiring, then continue.
- (11) Do a check of the applicable signal interface unit card in the P310 panel.
This is the task:
Signal Interface Unit - Exchange Check, AMM TASK 24-09-00-700-801-002.
 - (a) Push the reset button on the in-line pressure switch.
 - (b) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (c) If the MAT shows ACTIVE for the maintenance message, then continue.
- (12) Replace the monitor card, M24520 in the P310 panel.
These are the tasks:
Current Monitor Card - Removal, AMM TASK 24-09-00-000-817-002,
Current Monitor Card - Installation, AMM TASK 24-09-00-400-813-002.
 - (a) Push the reset button on the in-line pressure switch.
 - (b) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.

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- (c) If the MAT shows ACTIVE for the maintenance message, then continue.
- (13) Do a check of the signal interface unit 1, M24512 or signal interface unit 2, M24513 in the P310 panel.
- This is the task:
- Signal Interface Unit - Exchange Check, AMM TASK 24-09-00-700-801-002.
- (a) Push the reset button on the in-line pressure switch.
- (b) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (14) Install the sidewall lining adjacent to the in-line pressure switch. To install it, do this task: Sidewall Liner Installation, AMM TASK 25-52-06-400-801.

END OF TASK

818. Cargo Fire Extinguishing Bottle 1A, 1B Pressure Low - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance messages: 26-40776, 26-40778.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) If the EICAS advisory message, BOTTLE DISCH CARGO, shows on the EICAS display, then, do this task: EICAS Message BOTTLE DISCH CARGO - Fault Isolation, 26-23 TASK 813.
- (2) If the EICAS advisory message, BOTTLE DISCH CARGO, does not show on the EICAS display, then continue.
- (3) In the list below, find the applicable fire extinguishing bottle, connectors, pin numbers, and signal interface unit for the maintenance message.

Table 207/26-23-00-993-811

STBY POWER MGT PANEL	FIRE EXT BOTTLE	FIRE EXT BTL CONN	P310 PANEL CONN	P310 PANEL SIU CARD
P310	Bottle 1A B26013	DB26013B pin 3	D31031P pin 25	SIGNAL INTERFACE UNIT 1 M24512
P310	Bottle 1B B26014	DB26014B pin 3	D31031P pin 26	SIGNAL INTERFACE UNIT M24512

- (4) Open these circuit breakers and install safety tags:

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Row	Col	Number	Name
L	6	C26638	FIRE EXT CGO BTL 1A & VLV SQB
L	8	C26640	FIRE EXT CGO BTL 1B & VLV SQB

- (5) Disconnect the connector from the pressure switch on the applicable fire extinguishing bottle.
- (6) Examine the pins on the connector for damage or contamination.

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- (a) If there is damage or contamination, repair or clean the connector.
- (b) Re-connect the connector to the cargo fire extinguishing bottle.
- (c) Remove the safety tags and close these circuit breakers:

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<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
L	6	C26638	FIRE EXT CGO BTL 1A & VLV SQB
L	8	C26640	FIRE EXT CGO BTL 1B & VLV SQB

- (d) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (e) If the MAT shows ACTIVE for the maintenance message, then continue.
- (7) Replace the applicable cargo fire extinguishing bottle.

These are the tasks:

Lower Cargo Fire Extinguishing Bottle Removal, AMM TASK 26-23-01-020-801,
Lower Cargo Fire Extinguishing Bottle Installation, AMM TASK 26-23-01-420-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message, then you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (8) Do a check of the signal interface unit No. 1, M24512 in the P310 panel.

This is the task:

Signal Interface Unit - Exchange Check, AMM TASK 24-09-00-700-801-002.

- (a) Do this ground test on the MAT: 26 Fire Extinguishing System, OPERATIONAL TEST, Cargo Squibs.
 - (b) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), then you corrected the fault.
 - (c) If the MAT shows ACTIVE or LATCHED for the maintenance message, then continue.
- (9) Do this check of the wiring:
- (a) Open these circuit breakers and install safety tags:

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<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
L	6	C26638	FIRE EXT CGO BTL 1A & VLV SQB
L	8	C26640	FIRE EXT CGO BTL 1B & VLV SQB

- (b) Disconnect the connector on the applicable fire extinguishing bottle.
- (c) Do a wiring check between the specified pins of the applicable fire extinguishing bottle connector and the P310 panel connector.
- (d) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-connect the fire extinguishing bottle connector.

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- 3) Remove the safety tags and close these circuit breakers:

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<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
L	6	C26638	FIRE EXT CGO BTL 1A & VLV SQB
L	7	C26639	FIRE EXT CGO BTL 2A,2B & 2C
L	8	C26640	FIRE EXT CGO BTL 1B & VLV SQB

- 4) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- 5) If the MAT shows ACTIVE for the maintenance message, then continue.
- (e) If you do not find a problem with the wiring, then continue.
- (10) Do this check of the wiring between the signal interface unit 1, M24512 and connector D31031 of the P310 panel (WDM 26-23-11) (WDM 26-23-51):
- (a) Open these circuit breakers and install safety tags:

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
L	6	C26638	FIRE EXT CGO BTL 1A & VLV SQB
L	8	C26640	FIRE EXT CGO BTL 1B & VLV SQB

- (b) Remove the signal interface unit 1. To remove it,
These are the tasks:
Signal Interface Unit - Removal, AMM TASK 24-09-00-000-814-002,
Signal Interface Unit - Installation, AMM TASK 24-09-00-400-810-002.
- (c) For the applicable fire extinguishing bottle, do a wiring check between these pins of connector DM24512C and connector D31031:

Table 208/26-23-00-993-810

BOTTLE	DM24512C		D31031
1A, B26013	pin 29	-----	pin 25
1B, B26014	pin 30	-----	pin 26

- (d) If you find a problem with the wiring, then do these steps:
- 1) Repair the wiring.
- 2) Re-install the signal interface unit 1, M24512. To install it,
These are the tasks:
Signal Interface Unit - Removal, AMM TASK 24-09-00-000-814-002,
Signal Interface Unit - Installation, AMM TASK 24-09-00-400-810-002.
- 3) Remove the safety tags and close these circuit breakers:

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
L	6	C26638	FIRE EXT CGO BTL 1A & VLV SQB
L	8	C26640	FIRE EXT CGO BTL 1B & VLV SQB

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- 4) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (e) If you do not find a problem with the wiring, then continue.
 - 1) Re-connect connector DP426 to the ELMS electronic unit, M24406.
- (11) Do a check of the applicable signal interface unit in the P310 panel.

This is the task:
Signal Interface Unit - Exchange Check, AMM TASK 24-09-00-700-801-002.

 - (a) If the MAT shows NOT ACTIVE for the maintenance message, then you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (12) Do these steps to complete the task:
 - (a) Install the sidewall lining adjacent to the applicable fire extinguishing bottle. To install it, do this task: Sidewall Liner Installation, AMM TASK 25-52-06-400-801.

— END OF TASK —

819. Cargo Fire Extinguishing Bottle 2A, 2B, 2C Pressure Low - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance messages: 26-40780, 26-40782, 26-40784.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) If the EICAS advisory message, BOTTLE DISCH CARGO, shows on the EICAS display, then, do this task: EICAS Message BOTTLE DISCH CARGO - Fault Isolation, 26-23 TASK 813.



WARNING

IF THE "BOTTLE 2A CARGO, BOTTLE 2B CARGO, BOTTLE 2C CARGO, BOTTLE 2D CARGO" EICAS STATUS MESSAGES SHOW WITHOUT THE "BOTTLE DISCH CARGO" EICAS ADVISORY MESSAGE, AN ACCIDENTAL DISCHARGE OF THE HALON BOTTLES POSSIBLY OCCURRED AND THE TUBING MANIFOLD BETWEEN THE BOTTLES AND THE FLOW VALVES MAY BE PRESSURIZED. YOU MUST TAKE PRECAUTIONS TO RECOVER AND PREVENT HALON FROM DISCHARGING INTO THE CARGO COMPARTMENT.

- (2) If the EICAS advisory message, BOTTLE DISCH CARGO, does not show on the EICAS display, then continue.
- (3) In the list below, find the applicable fire extinguishing bottle, connectors, pin numbers, and signal interface unit for the maintenance message.

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Table 209/26-23-00-993-802

STBY POWER MGT PANEL	FIRE EXT BOTTLE	FIRE EXT BTL CONN		P310 PANEL CONN	P310 PANEL I/O CARD
P310	Bottle 2A B26015	DB26015B		D31031P	SIGNAL INTERFACE UNIT 1 M24512
		pin 3	-----	pin 27	
P310	Bottle 2B B26016	DB26016B		D31031P	SIGNAL INTERFACE UNIT 1 M24512
		pin 3	-----	pin 28	
P310	Bottle 2C B26017	DB26017B		D31031P	SIGNAL INTERFACE UNIT 1 M24512
		pin 3	-----	pin 29	

- (4) Open this circuit breaker and install safety tag:

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Row	Col	Number	Name
L	7	C26639	FIRE EXT CGO BTL 2A,2B & 2C

- (5) Disconnect the connector from the pressure switch on the applicable fire extinguishing bottle.
- (6) Examine the pins on the connector for damage or contamination.
- (a) If there is damage or contamination, repair or clean the connector.
- (b) Re-connect the connector to the cargo fire extinguishing bottle.
- (c) Remove the safety tags and close these circuit breakers:

Standby Power Management Panel, P310

Row	Col	Number	Name
L	6	C26638	FIRE EXT CGO BTL 1A & VLV SQB
L	7	C26639	FIRE EXT CGO BTL 2A,2B & 2C
L	8	C26640	FIRE EXT CGO BTL 1B & VLV SQB

- (d) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
- (e) If the MAT shows ACTIVE for the maintenance message, then continue.
- (7) Replace the applicable cargo fire extinguishing bottle.

These are the tasks:

Lower Cargo Fire Extinguishing Bottle Removal, AMM TASK 26-23-01-020-801,

Lower Cargo Fire Extinguishing Bottle Installation, AMM TASK 26-23-01-420-801.

- (a) If the MAT shows NOT ACTIVE for the maintenance message, then you corrected the fault.
- (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (8) Do this check of the wiring:
- (a) Open this circuit breaker and install safety tag:

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Row	Col	Number	Name
L	7	C26639	FIRE EXT CGO BTL 2A,2B & 2C

- (b) Disconnect the connector on the applicable fire extinguishing bottle.

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- (c) Do a wiring check between the specified pins of the applicable fire extinguishing bottle connector and the P310 panel connector.
- (d) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-connect the fire extinguishing bottle connector.
 - 3) Remove the safety tag and close this circuit breaker:

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
L	7	C26639	FIRE EXT CGO BTL 2A,2B & 2C

- 4) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - 5) If the MAT shows ACTIVE for the maintenance message, then continue.
- (e) If you do not find a problem with the wiring, then continue.
- (9) Do this check of the wiring between the signal interface unit 1, M24512 and the p310 panel (WDM 26-23-11) (WDM 26-23-51):
 - (a) Open this circuit breaker and install safety tag:

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
L	7	C26639	FIRE EXT CGO BTL 2A,2B & 2C

- (b) Remove the signal interface unit 1, M24512. To remove it,
These are the tasks:
Signal Interface Unit - Removal, AMM TASK 24-09-00-000-814-002,
Signal Interface Unit - Installation, AMM TASK 24-09-00-400-810-002.
- (c) For the applicable fire extinguishing bottle, do a wiring check between these pins of connector DM24512C and connector D31031:

**BOTTLE 2A,
B26015**

DM24512C	D31031
pin 26	pin 27

**BOTTLE 2B,
B26016**

DM24512C	D31031
pin 27	pin 28

**BOTTLE 2C,
B26017**

DM24512C	D31031
pin 28	pin 29

- (d) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-install the signal interface unit 1, M24512. To install it,
These are the tasks:

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Signal Interface Unit - Removal, AMM TASK 24-09-00-000-814-002,
Signal Interface Unit - Installation, AMM TASK 24-09-00-400-810-002.

- 3) Remove the safety tag and close this circuit breaker:

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
L	7	C26639	FIRE EXT CGO BTL 2A,2B & 2C

- 4) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), you corrected the fault.
 - (e) If you do not find a problem with the wiring, then continue.
- (10) Do a check of the signal interface unit 1, M24512 in the P310 panel.

This is the task:
Signal Interface Unit - Exchange Check, AMM TASK 24-09-00-700-801-002.

 - (a) If the MAT shows NOT ACTIVE for the maintenance message, then you corrected the fault.
 - (b) If the MAT shows ACTIVE for the maintenance message, then continue.
- (11) Do these steps to complete the task:
 - (a) Install the sidewall lining adjacent to the applicable fire extinguishing bottle. To install it, do this task: Sidewall Liner Installation, AMM TASK 25-52-06-400-801.

————— END OF TASK —————

820. Cargo Fire Extinguishing Bottle 1A, 1B Squib Circuit Open - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance messages: 26-40777, 26-40779.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows LATCHED for the maintenance message, then do this ground test on the MAT: 26 Fire Extinguishing System, OPERATIONAL TEST, Cargo Squibs.
 - (a) If the maintenance message shows on the ground test display, then do the Fault Isolation Procedure below.
 - (b) If the maintenance message does not show on the ground test display, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) If the EICAS advisory message, BOTTLE DISCH CARGO, shows on the EICAS display, then, do this task: EICAS Message BOTTLE DISCH CARGO - Fault Isolation, 26-23 TASK 813.
- (2) If the EICAS advisory message, BOTTLE DISCH CARGO, does not show on the EICAS display, then continue.
- (3) In the list below, find the applicable fire extinguishing bottle, squib, connectors, pin numbers and signal interface unit for the maintenance message.

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Table 210/26-23-00-993-804

STBY POWER MGT PANEL	FIRE EXT BOTTLE	SQUIB CONNECTOR	P310 PANEL CONN	P310 PANEL SIU CARD
P310	Bottle 1A B26013	DB26013A pin 1	D31023P pin 3	SIGNAL INTERFACE UNIT 2 M24513
P310	Bottle 1B B26014	DB26014A pin 1	D31023P pin 58	SIGNAL INTERFACE UNIT 2 M24513

- (4) Replace the squib for the applicable cargo fire extinguishing bottle.
- These are the tasks:
- Lower Cargo Fire Extinguishing Bottle Squib Removal, AMM TASK 26-23-02-000-801,
Lower Cargo Fire Extinguishing Bottle Squib Installation, AMM TASK 26-23-02-400-801.
- (a) Do this ground test on the MAT: 26 Fire Extinguishing System, OPERATIONAL TEST, Cargo Squibs.
- (b) If the maintenance message does not show on the ground test display, you corrected the fault.
- (c) If the maintenance message shows on the ground test display, then continue.
- (5) Open these circuit breakers and install safety tags:

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Row	Col	Number	Name
L	6	C26638	FIRE EXT CGO BTL 1A & VLV SQB
L	8	C26640	FIRE EXT CGO BTL 1B & VLV SQB

- (6) Disconnect the connector from the squib on the applicable fire extinguishing bottle.
- (7) Examine the pins on the connector for damage or contamination.
- (a) If there is damage or contamination, repair or clean the connector.
- (b) Re-connect the connector to the cargo fire extinguishing bottle.
- (c) Remove the safety tags and close these circuit breakers:

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Row	Col	Number	Name
L	6	C26638	FIRE EXT CGO BTL 1A & VLV SQB
L	7	C26639	FIRE EXT CGO BTL 2A,2B & 2C
L	8	C26640	FIRE EXT CGO BTL 1B & VLV SQB

- (d) Do this ground test on the MAT: 26 Fire Extinguishing System, OPERATIONAL TEST, Cargo Squibs.
- (e) If the maintenance message does not show on the ground test display, you corrected the fault.
- (f) If the maintenance message shows on the ground test display, then continue.
- (8) Do this check of the wiring:

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

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Row	Col	Number	Name
L	6	C26638	FIRE EXT CGO BTL 1A & VLV SQB
L	8	C26640	FIRE EXT CGO BTL 1B & VLV SQB

- (b) Disconnect the connector on the applicable fire extinguishing bottle.
- (c) Do a wiring check between the specified pins of the applicable fire extinguishing bottle connector and the P310 panel connector.
- (d) If you find a problem with the wiring, then do these steps:
- 1) Repair the wiring.
 - 2) Re-connect the fire extinguishing bottle connector.
 - 3) Remove the safety tags and close these circuit breakers:

Standby Power Management Panel, P310

Row	Col	Number	Name
L	6	C26638	FIRE EXT CGO BTL 1A & VLV SQB
L	8	C26640	FIRE EXT CGO BTL 1B & VLV SQB

- 4) Do this ground test on the MAT: 26 Fire Extinguishing System, OPERATIONAL TEST, Cargo Squibs.
 - 5) If the maintenance message does not show on the ground test display, you corrected the fault.
 - 6) If the maintenance message shows on the ground test display, then continue.
- (e) If you do not find a problem with the wiring, then continue.
- (9) Do this check of the wiring between the signal interface unit 2, M24513, and the monitor card, M24520 (WDM 26-23-11) (WDM 26-23-51):
- (a) Open these circuit breakers and install safety tags:

Standby Power Management Panel, P310

Row	Col	Number	Name
L	6	C26638	FIRE EXT CGO BTL 1A & VLV SQB
L	7	C26639	FIRE EXT CGO BTL 2A,2B & 2C
L	8	C26640	FIRE EXT CGO BTL 1B & VLV SQB

- (b) Remove the signal interface unit 2. M24513. To remove it, These are the tasks:
- Signal Interface Unit - Removal, AMM TASK 24-09-00-000-814-002,
Signal Interface Unit - Installation, AMM TASK 24-09-00-400-810-002.
- (c) Disconnect connector DM24520 from the monitor card, M24520.
- (d) For the applicable fire extinguishing bottle, do a wiring check between these pins of connector DM24513C and the connector on M24520:

**BOTTLE 1A,
B26013**

DM24513C
pin 70

DM24520
pin 91

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**BOTTLE 1B,
B26014**

DM24513C

DM24520

pin 78 pin 89

(e) If you find a problem with the wiring, then do these steps:

- 1) Repair the wiring.
- 2) Re-install the signal interface unit 2, M24513. To install it,
These are the tasks:
Signal Interface Unit - Removal, AMM TASK 24-09-00-000-814-002,
Signal Interface Unit - Installation, AMM TASK 24-09-00-400-810-002.
- 3) Re-connect the connector DM24520 to the monitor card, M24406.
- 4) Remove the safety tags and close these circuit breakers:

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
L	6	C26638	FIRE EXT CGO BTL 1A & VLV SQB
L	8	C26640	FIRE EXT CGO BTL 1B & VLV SQB

- 5) Do this ground test on the MAT: 26 Fire Extinguishing System, OPERATIONAL TEST, Cargo Squibs.
 - 6) If the maintenance message does not show on the ground test display, you corrected the fault.
 - 7) If the maintenance message shows on the ground test display, then continue.
- (f) If you do not find a problem with the wiring, then continue.
- 1) Re-connect the connector DM24520 to the monitor card, M24520.
 - 2) Remove the safety tags and close these circuit breakers:

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
L	6	C26638	FIRE EXT CGO BTL 1A & VLV SQB
L	8	C26640	FIRE EXT CGO BTL 1B & VLV SQB

- (10) Do a check of the signal interface unit No. 2, M24513 in the P310 panel.

This is the task:

Signal Interface Unit - Exchange Check, AMM TASK 24-09-00-700-801-002.

- (a) Do this ground test on the MAT: 26 Fire Extinguishing System, OPERATIONAL TEST, Cargo Squibs.
 - (b) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), then you corrected the fault.
 - (c) If the MAT shows ACTIVE or LATCHED for the maintenance message, then continue.
- (11) Install the sidewall lining adjacent to the applicable fire extinguishing bottle. To install it, do this task: Sidewall Liner Installation, AMM TASK 25-52-06-400-801.

———— **END OF TASK** ————

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821. Cargo Fire Extinguishing Bottle 2A, 2B, 2C Squib Circuit Open - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance messages: 26-40781, 26-40783, 26-40785.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows LATCHED for the maintenance message, then do this ground test on the MAT: 26 Fire Extinguishing System, OPERATIONAL TEST, Cargo Squibs.
- (a) If the maintenance message shows on the ground test display, then do the Fault Isolation Procedure below.
- (b) If the maintenance message does not show on the ground test display, then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) If the EICAS advisory message, BOTTLE DISCH CARGO, shows on the EICAS display, then, do this task: EICAS Message BOTTLE DISCH CARGO - Fault Isolation, 26-23 TASK 813.



WARNING

IF THE "BOTTLE 2A CARGO, BOTTLE 2B CARGO, BOTTLE 2C CARGO, BOTTLE 2D CARGO" EICAS STATUS MESSAGES SHOW WITHOUT THE "BOTTLE DISCH CARGO" EICAS ADVISORY MESSAGE, AN ACCIDENTAL DISCHARGE OF THE HALON BOTTLES POSSIBLY OCCURRED AND THE TUBING MANIFOLD BETWEEN THE BOTTLES AND THE FLOW VALVES MAY BE PRESSURIZED. YOU MUST TAKE PRECAUTIONS TO RECOVER AND PREVENT HALON FROM DISCHARGING INTO THE CARGO COMPARTMENT.

- (2) If the EICAS advisory message, BOTTLE DISCH CARGO, does not show on the EICAS display, then continue.
- (3) In the list below, find the applicable fire extinguishing bottle, squib, connectors, pin numbers and signal interface unit for the maintenance message.

Table 211/26-23-00-993-808

STBY POWER MGT PANEL	FIRE EXT BOTTLE	SQUIB CONNECTOR	P310 PANEL CONN	P310 PANEL SIU CARD
P310	Bottle 2A B26015	DB26015A pin 1	-- pin 8	SIGNAL INTERFACE UNIT 2 M24513
P310	Bottle 2B B26016	DB26016A pin 1	-- pin 56	SIGNAL INTERFACE UNIT 2 M24513
P310	Bottle 2C B26017	DB26017A pin 1	-- pin 10	SIGNAL INTERFACE UNIT 2 M24513

- (4) Replace the squib for the applicable cargo fire extinguishing bottle.

These are the tasks:

Lower Cargo Fire Extinguishing Bottle Squib Removal, AMM TASK 26-23-02-000-801,

Lower Cargo Fire Extinguishing Bottle Squib Installation, AMM TASK 26-23-02-400-801.

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- (a) Do this ground test on the MAT: 26 Fire Extinguishing System, OPERATIONAL TEST, Cargo Squibs.
 - (b) If the maintenance message does not show on the ground test display, you corrected the fault.
 - (c) If the maintenance message shows on the ground test display, then continue.
- (5) Open this circuit breaker and install safety tag:

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
L	7	C26639	FIRE EXT CGO BTL 2A,2B & 2C

- (6) Disconnect the connector from the squib on the applicable fire extinguishing bottle.
- (7) Examine the pins on the connector for damage or contamination.
 - (a) If there is damage or contamination, repair or clean the connector.
 - (b) Re-connect the connector to the cargo fire extinguishing bottle.
 - (c) Remove the safety tags and close these circuit breakers:

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
L	6	C26638	FIRE EXT CGO BTL 1A & VLV SQB
L	7	C26639	FIRE EXT CGO BTL 2A,2B & 2C
L	8	C26640	FIRE EXT CGO BTL 1B & VLV SQB

- (d) Do this ground test on the MAT: 26 Fire Extinguishing System, OPERATIONAL TEST, Cargo Squibs.
 - (e) If the maintenance message does not show on the ground test display, you corrected the fault.
 - (f) If the maintenance message shows on the ground test display, then continue.
- (8) Do this check of the wiring:
- (a) Open these circuit breakers and install safety tags:

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
L	6	C26638	FIRE EXT CGO BTL 1A & VLV SQB
L	7	C26639	FIRE EXT CGO BTL 2A,2B & 2C
L	8	C26640	FIRE EXT CGO BTL 1B & VLV SQB

- (b) Disconnect the connector on the applicable fire extinguishing bottle.
- (c) Do a wiring check between the specified pins of the applicable fire extinguishing bottle connector and the P310 panel connector.
- (d) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-connect the fire extinguishing bottle connector.



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- 3) Remove the safety tags and close these circuit breakers:

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
L	6	C26638	FIRE EXT CGO BTL 1A & VLV SQB
L	7	C26639	FIRE EXT CGO BTL 2A,2B & 2C
L	8	C26640	FIRE EXT CGO BTL 1B & VLV SQB

- 4) Do this ground test on the MAT: 26 Fire Extinguishing System, OPERATIONAL TEST, Cargo Squibs.
- 5) If the maintenance message does not show on the ground test display, you corrected the fault.
- 6) If the maintenance message shows on the ground test display, then continue.
- (e) If you do not find a problem with the wiring, then continue.
- (9) Do this check of the wiring between the signal interface unit 2, M24513 and the monitor card, M24520. (WDM 26-23-11) (WDM 26-23-51):
- (a) Open this circuit breaker and install safety tag:

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
L	7	C26639	FIRE EXT CGO BTL 2A,2B & 2C

- (b) Remove the signal interface unit 2. M24513. To remove it, These are the tasks:
Signal Interface Unit - Removal, AMM TASK 24-09-00-000-814-002,
Signal Interface Unit - Installation, AMM TASK 24-09-00-400-810-002.
- (c) For the applicable fire extinguishing bottle, do a wiring check between these pins of connector DM24513C and the connector on M24520 or M24521:

Table 212/26-23-00-993-809

BOTTLE	DM24513C		MONITOR CARD
2A, B26015	pin 91	--	M24520, pin 63
2B, B26016	pin 90	--	M24521, pin 63
2C, B26017	pin 92	--	M24521, pin 90

- (d) If you find a problem with the wiring, then do these steps:
- 1) Repair the wiring.
 - 2) Re-install the signal interface unit 2, M24513. To install it, These are the tasks:
Signal Interface Unit - Removal, AMM TASK 24-09-00-000-814-002,
Signal Interface Unit - Installation, AMM TASK 24-09-00-400-810-002.
 - 3) Re-connect the connector to the monitor card, M24520 or M24521.

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- 4) Remove the safety tag and close this circuit breaker:

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
L	7	C26639	FIRE EXT CGO BTL 2A,2B & 2C

- 5) Do this ground test on the MAT: 26 Fire Extinguishing System, OPERATIONAL TEST, Cargo Squibs.
- 6) If the maintenance message does not show on the ground test display, you corrected the fault.
- 7) If the maintenance message shows on the ground test display, then continue.
- (e) If you do not find a problem with the wiring, then continue.
- 1) Re-connect the connector DP427 to the ELMS electronic unit, M24406.
- 2) Remove the safety tag and close this circuit breaker:

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
L	7	C26639	FIRE EXT CGO BTL 2A,2B & 2C

- (10) Do a check of the signal interface unit No. 2, M24513 in the P310 panel.

This is the task:

Signal Interface Unit - Exchange Check, AMM TASK 24-09-00-700-801-002.

- (a) Do this ground test on the MAT: 26 Fire Extinguishing System, OPERATIONAL TEST, Cargo Squibs.
- (b) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), then you corrected the fault.
- (c) If the MAT shows ACTIVE or LATCHED for the maintenance message, then continue.
- (11) Install the sidewall lining adjacent to the applicable fire extinguishing bottle. To install it, do this task: Sidewall Liner Installation, AMM TASK 25-52-06-400-801.

————— END OF TASK —————

824. Cargo Fire Extinguishing Squib Test Equipment - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 26-40789.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows LATCHED for the maintenance message, then do these ground tests on the MAT:
- (a) 26 Fire Extinguishing System, OPERATIONAL TEST, Cargo Squibs
- (b) 26 Fire Extinguishing System, OPERATIONAL TEST, Engine and APU Squibs
- (3) If the maintenance message shows on the ground test display, then do the Fault Isolation Procedure below.
- (4) If the maintenance message does not show on the ground test display, then there was an intermittent fault.

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C. Fault Isolation Procedure

- (1) Replace the Squib Test Control relay, K26010 (WDM 26-23-11).
- (2) Do these ground tests on the MAT:
 - (a) 26 Fire Extinguishing System, OPERATIONAL TEST, Cargo Squibs
 - (b) 26 Fire Extinguishing System, OPERATIONAL TEST, Engine and APU Squibs
- (3) If the maintenance message does not show on the ground test display, you corrected the fault.
- (4) If the maintenance message shows on the ground test display, then continue.
- (5) Do a wiring check between pin X2 of connector DK26010 on the Squib Test Control relay, K26010, and pin 1 of connector DM24513B on the signal interface unit 2, M24513 (WDM 26-23-11).
 - (a) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Do these ground tests on the MAT:
 - a) 26 Fire Extinguishing System, OPERATIONAL TEST, Cargo Squibs
 - b) 26 Fire Extinguishing System, OPERATIONAL TEST, Engine and APU Squibs
 - 3) If the maintenance message does not show on the ground test display, you corrected the fault.
 - 4) If the maintenance message shows on the ground test display, then continue.
 - (b) If you do not find a problem with the wiring, then continue.
- (6) Do a wiring check between pin A1 of connector DK26010 on the Squib Test Control relay, K26010, and pin 40 of connector DM24521 on the monitor card M24521 (WDM 26-23-11).
 - (a) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Do these ground tests on the MAT:
 - a) 26 Fire Extinguishing System, OPERATIONAL TEST, Cargo Squibs
 - b) 26 Fire Extinguishing System, OPERATIONAL TEST, Engine and APU Squibs
 - 3) If the maintenance message does not show on the ground test display, you corrected the fault.
 - 4) If the maintenance message shows on the ground test display, then continue.
 - (b) If you do not find a problem with the wiring, then continue.
- (7) Do a wiring check between pin A1 of connector DK26010 on the Squib Test Control relay, K26010, and pin 40 of connector DM24520 on the monitor card, M24520 (WDM 26-23-11).
 - (a) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Do these ground tests on the MAT:
 - a) 26 Fire Extinguishing System, OPERATIONAL TEST, Cargo Squibs
 - b) 26 Fire Extinguishing System, OPERATIONAL TEST, Engine and APU Squibs
 - 3) If the maintenance message does not show on the ground test display, you corrected the fault.
 - 4) If the maintenance message shows on the ground test display, then continue.
 - (b) If you do not find a problem with the wiring, then continue.

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- (8) Do a wiring check between pin B1 of connector DK26010 on the Squib Test Control relay, K26010, and pin 32 of connector DM24520 on the monitor card, M24520 (WDM 26-22-11).
 - (a) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Do these ground tests on the MAT:
 - a) 26 Fire Extinguishing System, OPERATIONAL TEST, Cargo Squibs
 - b) 26 Fire Extinguishing System, OPERATIONAL TEST, Engine and APU Squibs
 - 3) If the maintenance message does not show on the ground test display, you corrected the fault.
- (9) Do a wiring check between pin A1 of connector DK26010 on the Squib Test Control relay, K26010, and pin 32 of connector DM24521 on the monitor card, M24521 (WDM 26-23-11).
 - (a) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring
 - 2) Do these ground tests on the MAT:
 - a) 26 Fire Extinguishing System, OPERATIONAL TEST, Cargo Squibs
 - b) 26 Fire Extinguishing System, OPERATIONAL TEST, Engine and APU Squibs
 - 3) If the maintenance message does not show on the ground test display, you corrected the fault.
- (10) Replace the monitor card M24520
 - (a) Do these ground tests on the MAT:
 - 1) 26 Fire Extinguishing System, OPERATIONAL TEST, Cargo Squibs
 - 2) 26 Fire Extinguishing System, OPERATIONAL TEST, Engine and APU Squibs
 - (b) If the maintenance message does not show on the ground test display, you corrected the fault.
- (11) Replace the monitor card M24521
 - (a) Do these ground tests on the MAT:
 - 1) 26 Fire Extinguishing System, OPERATIONAL TEST, Cargo Squibs
 - 2) 26 Fire Extinguishing System, OPERATIONAL TEST, Engine and APU Squibs
 - (b) If the maintenance message does not show on the ground test display, you corrected the fault.

————— **END OF TASK** —————

825. Relay (FWD SQUIB 2A CONT) Not in Commanded Position - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 26-50015.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows LATCHED for the maintenance message, then do these steps:

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

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<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
L	6	C26638	FIRE EXT CGO BTL 1A & VLV SQB
L	7	C26639	FIRE EXT CGO BTL 2A,2B & 2C
L	8	C26640	FIRE EXT CGO BTL 1B & VLV SQB

- (b) Disconnect these squib electrical connectors from the fire extinguishing bottles and flow valves (WDM 26-23-11) (WDM 26-23-51):

- 1) DB26013A
- 2) DB26014A
- 3) DB26015A
- 4) DB26016A
- 5) DB26017A
- 6) DV26201A
- 7) DV26201B
- 8) DV26202A
- 9) DV26202B



PUT A PROTECTIVE COVER ON THE SQUIB. IF YOU DO NOT PUT A PROTECTIVE COVER ON THE SQUIB, THE FIRE EXTINGUISHING BOTTLE CAN RELEASE ITS CONTENTS SUDDENLY AND CAUSE INJURY TO PERSONS.



DO NOT PUT A SHUNT PLUG ON THE SQUIB. THE SHUNT PLUG CAN CAUSE DAMAGE TO THE SQUIB PINS.

- (c) Put the protective cover, attached to the bottles and flow valves, on the squib.

NOTE: The protective covers are attached to the fire extinguishing bottles and flow valves. These protective covers, sometimes called faraday caps, have electrically conductive surfaces to shield the squib from possible activation due to static discharge.

- (d) Remove the safety tag and close this circuit breaker:

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
L	7	C26639	FIRE EXT CGO BTL 2A,2B & 2C

- (e) Push the AFT ARM switch on the Cargo Fire/Engine Control Module, M80001, on the P5 panel.
- 1) Make sure that the ARMED indicator on the AFT ARM switch is in view.
- (f) Push and release the DISCH switch on the Cargo Fire/Engine Control Module.
- (g) After approximately 20 minutes, do these steps:

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- 1) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.
 - a) Push the AFT ARM switch on the Cargo Fire/Engine Control Module, M80001, on the P5 panel.
 - <1> Make sure that the ARMED indicator on the AFT ARM switch is not in view.
- 2) If the MAT shows ACTIVE or LATCHED for the maintenance message, then push the AFT ARM switch on the Cargo Fire/Engine Control Module, M80001, on the P5 panel.
 - a) Make sure that the ARMED indicator on the AFT ARM switch is not in view.
 - b) Perform the Fault Isolation Procedure below.

C. Fault Isolation Procedure

- (1) Do these steps to replace the squib control relay, K26007, in the standby power management panel, P310 (WDM 26-23-51):

- (a) Open this circuit breaker and install safety tag:

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
L	7	C26639	FIRE EXT CGO BTL 2A,2B & 2C

- - (b) Replace the squib control relay, K26007 in the standby power management panel, P310 (WDM 26-23-51).
 - (c) Remove the safety tag and close this circuit breaker:

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
L	7	C26639	FIRE EXT CGO BTL 2A,2B & 2C

- -
 -
 - (d) Push the AFT ARM switch on the Cargo Fire/Engine Control Module, M80001, on the P5 panel.
 - 1) Make sure the ARMED indicator on the AFT ARM switch is in view.
 - (e) Push and release the DISCH switch on the Cargo Fire/Engine Control Module.
 - (f) After approximately 20 minutes, do these steps:
 - 1) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), then push the AFT ARM switch on the Cargo Fire/Engine Control Module, M80001, on the P5 panel.
 - a) Make sure that the ARMED indicator on the AFT ARM switch is not in view.
 - b) You have corrected the fault.
 - 2) If the MAT shows ACTIVE or LATCHED for the maintenance message, then push the AFT ARM switch on the Cargo Fire/Engine Control Module, M80001, on the P5 panel.
 - a) Make sure that the ARMED indicator on the AFT ARM switch is not in view.
 - b) Continue the procedure below.

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MAKE SURE YOU REMOVE ELECTRICAL POWER FROM THE ELMS PANELS BEFORE YOU REMOVE COMPONENTS OF THE PANELS. IF YOU DO NOT REMOVE ELECTRICAL POWER, DAMAGE TO EQUIPMENT CAN OCCUR.

- (2) Do a check of the signal interface unit (SIU) 1, M24512, in the P310 panel.
- This is the task:
- Signal Interface Unit - Exchange Check, AMM TASK 24-09-00-700-801-002
- (a) Push the AFT ARM switch on the Cargo Fire/Engine Control Module, M80001, on the P5 panel.
- 1) Make sure the ARMED indicator on the AFT ARM switch is in view.
- (b) Push and release the DISCH switch on the Cargo Fire/Engine Control Module.
- (c) After approximately 20 minutes, do these steps:
- 1) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), then push the AFT ARM switch on the Cargo Fire/Engine Control Module, M80001, on the P5 panel.
- a) Make sure that the ARMED indicator on the AFT ARM switch is not in view.
- b) You have corrected the fault.
- 2) If the MAT shows ACTIVE or LATCHED for the maintenance message, then push the AFT ARM switch on the Cargo Fire/Engine Control Module, M80001, on the P5 panel.
- a) Make sure that the ARMED indicator on the AFT ARM switch is not in view.
- b) Continue the procedure below.
- (3) Replace the monitor card, M24520 in the P310 panel.
- These are the tasks:
- Current Monitor Card - Removal, AMM TASK 24-09-00-000-817-002,
Current Monitor Card - Installation, AMM TASK 24-09-00-400-813-002.
- (a) Push the AFT ARM switch on the Cargo Fire/Engine Control Module, M80001, on the P5 panel.
- 1) Make sure the ARMED indicator on the AFT ARM switch is in view.
- (b) Push and release the DISCH switch on the Cargo Fire/Engine Control Module.
- (c) After approximately 20 minutes, do these steps:
- 1) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), then push the AFT ARM switch on the Cargo Fire/Engine Control Module, M80001, on the P5 panel.
- a) Make sure that the ARMED indicator on the AFT ARM switch is not in view.
- b) You have corrected the fault.
- 2) If the MAT shows ACTIVE or LATCHED for the maintenance message, then push the AFT ARM switch on the Cargo Fire/Engine Control Module, M80001, on the P5 panel.
- a) Make sure that the ARMED indicator on the AFT ARM switch is not in view.
- b) Continue the procedure below.

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- (4) Do this check of the wiring between the signal interface unit (SIU) 2, M24513 and the monitor card, M24520 (WDM 26-23-51):

- (a) Open this circuit breaker and install safety tag:

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
L	7	C26639	FIRE EXT CGO BTL 2A,2B & 2C

- (b) Remove the SIU 2, M24513. To remove it, do this task: Signal Interface Unit - Removal, AMM TASK 24-09-00-000-814-002.
- (c) Disconnect connector DM24513C from the SIU 2, M24513.
- (d) Disconnect connector DM24520 from the monitor card, M24520.
- (e) Do a wiring check between these pins of connector DM24513C and connector DM24520.

DM24520	DM24513C
pin 63	pin 91

- (f) If you find a problem with the wiring, then do these steps:
- 1) Repair the wiring.
 - 2) Re-connect connector DM24513C to the SIU 2, M24513.
 - 3) Re-install the SIU 2, M24513. To install it, do this task: Signal Interface Unit - Installation, AMM TASK 24-09-00-400-810-002.
 - 4) Re-connect connector DM24520 to the monitor card, M24520.
 - 5) Remove the safety tag and close this circuit breaker:

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
L	7	C26639	FIRE EXT CGO BTL 2A,2B & 2C

- 6) Push the AFT ARM switch on the Cargo Fire/Engine Control Module, M80001, on the P5 panel.
- 7) Make sure the ARMED indicator on the AFT ARM switch is in view.
- 8) Push and release the DISCH switch on the Cargo Fire/Engine Control Module.
- 9) After approximately 20 minutes, do these steps:
 - a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), then push the AFT ARM switch on the Cargo Fire/Engine Control Module, M80001, on the P5 panel.
 - <1> Make sure that the ARMED indicator on the AFT ARM switch is not in view.
 - <2> You have corrected the fault.
 - b) If the MAT shows ACTIVE or LATCHED for the maintenance message, then push the AFT ARM switch on the Cargo Fire/Engine Control Module, M80001, on the P5 panel.
 - <1> Make sure that the ARMED indicator on the AFT ARM switch is not in view.
 - <2> Continue the procedure below.

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- (g) If you do not find a problem with the wiring, then continue.
- 1) Re-connect connector DM24513C to the SIU 2, M24513.
 - 2) Re-install the SIU 2, M24513. To install it, do this task: Signal Interface Unit - Installation, AMM TASK 24-09-00-400-810-002.
 - 3) Re-connect connector DM24520 to the monitor card, M24520.
- (5) Do this check of the wiring between the monitor card, M24520 and the Squib 2A relay, K26007 (WDM 26-23-51):
- (a) Open this circuit breaker and install safety tag:

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
L	7	C26639	FIRE EXT CGO BTL 2A,2B & 2C

- (b) Remove the monitor card, M24520. To remove it, do this task: Current Monitor Card - Removal, AMM TASK 24-09-00-000-817-002.
- (c) Disconnect connector DM24520 from the monitor card, M24520.
- (d) Disconnect connector DK26007 from the Squib 2A relay, K26007.
- (e) Do a wiring check between these pins of connector DM24520 and connector DK26007.

DK26007	DM24520
pin A1	pin 106

- (f) If you find a problem with the wiring, then do these steps:
- 1) Repair the wiring.
 - 2) Re-connect connector DM24520 to the monitor card, M24520.
 - 3) Re-install the monitor card, M24520. To install it, do this task: Current Monitor Card - Installation, AMM TASK 24-09-00-400-813-002.
 - 4) Re-connect connector DK26007 to the Squib 2A relay, K26007.
 - 5) Remove the safety tag and close this circuit breaker:

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
L	7	C26639	FIRE EXT CGO BTL 2A,2B & 2C

- 6) Push the AFT ARM switch on the Cargo Fire/Engine Control Module, M80001, on the P5 panel.
- 7) Make sure the ARMED indicator on the AFT ARM switch is in view.
- 8) Push and release the DISCH switch on the Cargo Fire/Engine Control Module.
- 9) After approximately 20 minutes, do these steps:
 - a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), then push the AFT ARM switch on the Cargo Fire/Engine Control Module, M80001, on the P5 panel.
 - <1> Make sure that the ARMED indicator on the AFT ARM switch is not in view.
 - <2> You have corrected the fault.

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- b) If the MAT shows ACTIVE or LATCHED for the maintenance message, then push the AFT ARM switch on the Cargo Fire/Engine Control Module, M80001, on the P5 panel.

<1> Make sure that the ARMED indicator on the AFT ARM switch is not in view.

<2> Continue the procedure below.

- (g) If you do not find a problem with the wiring, then continue.

- 1) Re-connect connector DM24520 to the monitor card, M24520.
- 2) Re-install the monitor card, M24520. To install it, do this task: Current Monitor Card - Installation, AMM TASK 24-09-00-400-813-002.
- 3) Re-connect connector DK26007 to the Squib 2A relay, K26007.
- 4) Remove the safety lock and close this circuit breaker:

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
L	7	C26639	FIRE EXT CGO BTL 2A,2B & 2C

- (6) Do these steps to complete the task:

- (a) Open this circuit breaker and install safety lock:

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
L	7	C26639	FIRE EXT CGO BTL 2A,2B & 2C

- (b) Remove the protective covers from the squibs for these connectors for the fire extinguishing bottles and flow valves (WDM 26-23-11) (WDM 26-23-51):

- 1) DB26013A
- 2) DB26014A
- 3) DB26015A
- 4) DB26016A
- 5) DB26017A
- 6) DV26201A
- 7) DV26201B
- 8) DV26202A
- 9) DV26202B



WARNING

MAKE SURE THERE IS NO VOLTAGE AT THE ELECTRICAL CONNECTOR. IF THERE IS VOLTAGE AT THE ELECTRICAL CONNECTOR, THE SQUIB CAN RELEASE ITS CONTENTS AND CAUSE INJURY TO PERSONS.

- (c) Make sure there is no voltage between pins 1 and 2 of the electrical connector.
- (d) If there is voltage between pins 1 and 2, do these steps:
- 1) Connect a voltmeter, COM-4355 across pins 1 and 2.
 - 2) Connect a resistor, STD-1079 across the voltmeter, COM-4355 pins to remove any stray voltage from the electrical connector.

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- 3) Disconnect the voltmeter, COM-4355.
 - (e) Make sure the squib electrical pins are not bent or damaged.
 - (f) Make sure the electrical connector is not damaged.
- NOTE:** The squib pins can cause damage to the electrical connector if the pins do not correctly engage the electrical connector.
- (g) Connect the electrical connector to the squib.
 - (h) Remove the safety tags and close these circuit breakers:

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Row	Col	Number	Name
L	6	C26638	FIRE EXT CGO BTL 1A & VLV SQB
L	7	C26639	FIRE EXT CGO BTL 2A,2B & 2C
L	8	C26640	FIRE EXT CGO BTL 1B & VLV SQB

————— END OF TASK —————

826. Relay FWD SQUIB 2B and 2C CONT Not in Commanded Position - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 26-50016.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows LATCHED for the maintenance message, then do these steps:
 - (a) Open these circuit breakers and install safety tags:

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Row	Col	Number	Name
L	6	C26638	FIRE EXT CGO BTL 1A & VLV SQB
L	7	C26639	FIRE EXT CGO BTL 2A,2B & 2C
L	8	C26640	FIRE EXT CGO BTL 1B & VLV SQB

- (b) Put the airplane in the air mode; do this task: Air/Ground Mode Simulation, AMM TASK 32-09-00-860-801.
- (c) Disconnect these squib electrical connectors from the fire extinguishing bottles and flow valves (WDM 26-23-11) (WDM 26-23-51):
 - 1) DB26013A
 - 2) DB26014A
 - 3) DB26015A
 - 4) DB26016A
 - 5) DB26017A
 - 6) DV26201A
 - 7) DV26201B
 - 8) DV26202A
 - 9) DV26202B

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PUT A PROTECTIVE COVER ON THE SQUIB. IF YOU DO NOT PUT A PROTECTIVE COVER ON THE SQUIB, THE FIRE EXTINGUISHING BOTTLE CAN RELEASE ITS CONTENTS SUDDENLY AND CAUSE INJURY TO PERSONS.



DO NOT PUT A SHUNT PLUG ON THE SQUIB. THE SHUNT PLUG CAN CAUSE DAMAGE TO THE SQUIB PINS.

- (d) Put the protective cover, attached to the bottles and flow valves, on the squib.

NOTE: The protective covers are attached to the fire extinguishing bottles and flow valves. These protective covers, sometimes called faraday caps, have electrically conductive surfaces to shield the squib from possible activation due to static discharge.

- (e) Remove the safety tag and close this circuit breaker:

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
L	7	C26639	FIRE EXT CGO BTL 2A,2B & 2C

- (f) Push the AFT ARM switch on the Cargo Fire/Engine Control Module, M80001, on the P5 panel.
- 1) Make sure the ARMED indicator on the AFT ARM switch is in view.
- (g) Push and release the DISCH switch on the Cargo Fire/Engine Control Module.
- (h) After approximately 20 minutes, do these steps:
- 1) If the MAT shows NOT ACTIVE for the maintenance message, then there was an intermittent fault.
 - a) Push the AFT ARM switch on the Cargo Fire/Engine Control Module, M80001, on the P5 panel.

<1> Make sure that the ARMED indicator on the AFT ARM switch is not in view.
 - 2) If the MAT shows ACTIVE or LATCHED for the maintenance message push the AFT ARM switch on the Cargo Fire/Engine Control Module, M80001, on the P5 panel.
 - a) Make sure that the ARMED indicator on the AFT ARM switch is not in view.
 - b) Perform the Fault Isolation Procedure below.

C. Fault Isolation Procedure

- (1) Do these steps to replace the squib 2B & 2C control relay, K26008, in the standby power management panel, P310 (WDM 26-23-51):

- (a) Open this circuit breaker and install safety tag:

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
L	7	C26639	FIRE EXT CGO BTL 2A,2B & 2C

- (b) Replace the squib 2B & 2C control relay, K26008, in the standby power management panel, P310 (WDM 26-23-51).

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- (c) Remove the safety tag and close this circuit breaker:

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<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
L	7	C26639	FIRE EXT CGO BTL 2A,2B & 2C

- (d) Push the AFT ARM switch on the Cargo Fire/Engine Control Module, M80001, on the P5 panel.

1) Make sure the ARMED indicator on the AFT ARM switch is in view.

- (e) Push and release the DISCH switch on the Cargo Fire/Engine Control Module.

- (f) After approximately 20 minutes, do these steps:

1) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), then push the AFT ARM switch on the Cargo Fire/Engine Control Module, M80001, on the P5 panel.

a) Make sure that the ARMED indicator on the AFT ARM switch is not in view.

b) You have corrected the fault.

2) If the MAT shows ACTIVE or LATCHED for the maintenance message, then push the AFT ARM switch on the Cargo Fire/Engine Control Module, M80001, on the P5 panel.

a) Make sure that the ARMED indicator on the AFT ARM switch is not in view.

b) Continue the procedure below.

- (2) Do this check of the wiring between the signal interface unit (SIU) 2, M24513 and the monitor card, M24521 (WDM 26-23-51):

- (a) Open this circuit breaker and install safety tag:

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
L	7	C26639	FIRE EXT CGO BTL 2A,2B & 2C

- (b) Remove the SIU 2, M24513. To remove it, do this task: Signal Interface Unit - Removal, AMM TASK 24-09-00-000-814-002.

- (c) Disconnect connector DM24513C from the SIU 2, M24513.

- (d) Do a wiring check between these pins of connector DM24513C and monitor card, M24521:

DM24513C	M24521
pin 90	pin 63
pin 92	pin 90

- (e) If you find a problem with the wiring, then do these steps:

1) Repair the wiring.

2) Re-connect connector DM24513C to the SIU 2, M24513.

3) Re-install the SIU 2, M24513. To install it, do this task: Signal Interface Unit - Installation, AMM TASK 24-09-00-400-810-002.

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- 4) Remove the safety tag and close this circuit breaker:

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<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
L	7	C26639	FIRE EXT CGO BTL 2A,2B & 2C

- 5) Push the AFT ARM switch on the Cargo Fire/Engine Control Module, M80001, on the P5 panel.
- 6) Make sure the ARMED indicator on the AFT ARM switch is in view.
- 7) Push and release the DISCH switch on the Cargo Fire/Engine Control Module.
- 8) After approximately 20 minutes, do these steps:
- a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), then push the AFT ARM switch on the Cargo Fire/Engine Control Module, M80001, on the P5 panel.
 - <1> Make sure that the ARMED indicator on the AFT ARM switch is not in view.
 - <2> You have corrected the fault.
 - b) If the MAT shows ACTIVE or LATCHED for the maintenance message, then push the AFT ARM switch on the Cargo Fire/Engine Control Module, M80001, on the P5 panel.
 - <1> Make sure that the ARMED indicator on the AFT ARM switch is not in view.
 - <2> Continue the procedure below.
- (f) If you do not find a problem with the wiring, then continue.
- 1) Re-connect connector DM24513C to the SIU 2, M24513.
 - 2) Re-install the SIU 2, M24513. To install it, do this task: Signal Interface Unit - Installation, AMM TASK 24-09-00-400-810-002.
- (3) Do this check of the wiring between the monitor card, M24521 and the Squib 2B & 2C relay, K26008 (WDM 26-23-11):

- (a) Open this circuit breaker and install safety tag:

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
L	7	C26639	FIRE EXT CGO BTL 2A,2B & 2C

- (b) Remove the monitor card, M24521. To remove it, do this task: Current Monitor Card - Removal, AMM TASK 24-09-00-000-817-002.
- (c) Disconnect connector DM24521 from the monitor card, M24520.
- (d) Disconnect connector DK26008 from the Squib 2B & 2C relay, K26008.
- (e) Do a wiring check between these pins of connector DM24521 and connector DK26008:

DK26008	DM24521
pin B1	pin 106

- (f) If you find a problem with the wiring, then do these steps:
- 1) Repair the wiring.

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- 2) Re-connect connector DM24521 to the monitor card, M24521.
- 3) Re-install the monitor card. To install it, do this task: Current Monitor Card - Installation, AMM TASK 24-09-00-400-813-002.
- 4) Re-connect connector DK26008 to the Squib 2B & 2C relay, K26008.
- 5) Remove the safety tag and close this circuit breaker:

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
L	7	C26639	FIRE EXT CGO BTL 2A,2B & 2C

- 6) Push the AFT ARM switch on the Cargo Fire/Engine Control Module, M80001, on the P5 panel.
- 7) Make sure the ARMED indicator on the AFT ARM switch is in view.
- 8) Push and release the DISCH switch on the Cargo Fire/Engine Control Module.
- 9) After approximately 20 minutes, do these steps:
 - a) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), then push the AFT ARM switch on the Cargo Fire/Engine Control Module, M80001, on the P5 panel.
 - <1> Make sure that the ARMED indicator on the AFT ARM switch is not in view.
 - <2> You have corrected the fault.
 - b) If the MAT shows ACTIVE or LATCHED for the maintenance message, then push the AFT ARM switch on the Cargo Fire/Engine Control Module, M80001, on the P5 panel.
 - <1> Make sure that the ARMED indicator on the AFT ARM switch is not in view.
 - <2> Continue the procedure below.
- (g) If you do not find a problem with the wiring, then continue.
 - 1) Re-connect connector DM24521 to the monitor card, M24521.
 - 2) Re-install the SIU 2, M24513. To install it, do this task: Signal Interface Unit - Installation, AMM TASK 24-09-00-400-810-002.
 - 3) Re-connect connector DK26008 to the Squib 2B & 2C relay, K26008.
 - 4) Remove the safety tag and close this circuit breaker:

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
L	7	C26639	FIRE EXT CGO BTL 2A,2B & 2C



MAKE SURE YOU REMOVE ELECTRICAL POWER FROM THE ELMS PANELS BEFORE YOU REMOVE COMPONENTS OF THE PANELS. IF YOU DO NOT REMOVE ELECTRICAL POWER, DAMAGE TO EQUIPMENT CAN OCCUR.

- (4) Do a check of the signal interface unit (SIU) 1, M24512, in the P310 panel.

This is the task:

Signal Interface Unit - Exchange Check, AMM TASK 24-09-00-700-801-002.

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- (a) Push the AFT ARM switch on the Cargo Fire/Engine Control Module, M80001, on the P5 panel.
 - 1) Make sure the ARMED indicator on the AFT ARM switch is in view.
- (b) Push and release the DISCH switch on the Cargo Fire/Engine Control Module.
- (c) After approximately 20 minutes, do these steps:
 - 1) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), then push the AFT ARM switch on the Cargo Fire/Engine Control Module, M80001, on the P5 panel.
 - a) Make sure that the ARMED indicator on the AFT ARM switch is not in view.
 - b) You have corrected the fault.
 - 2) If the MAT shows ACTIVE or LATCHED for the maintenance message, then push the AFT ARM switch on the Cargo Fire/Engine Control Module, M80001, on the P5 panel.
 - a) Make sure that the ARMED indicator on the AFT ARM switch is not in view.
 - b) Continue the procedure below.
- (5) Replace the monitor card, M24521 in the P310 panel.

These are the tasks:

Current Monitor Card - Removal, AMM TASK 24-09-00-000-817-002,

Current Monitor Card - Installation, AMM TASK 24-09-00-400-813-002.

 - (a) Push the AFT ARM switch on the Cargo Fire/Engine Control Module, M80001, on the P5 panel.
 - 1) Make sure the ARMED indicator on the AFT ARM switch is in view.
 - (b) Push and release the DISCH switch on the Cargo Fire/Engine Control Module.
 - (c) After approximately 20 minutes, do these steps:
 - 1) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), then push the AFT ARM switch on the Cargo Fire/Engine Control Module, M80001, on the P5 panel.
 - a) Make sure that the ARMED indicator on the AFT ARM switch is not in view.
 - b) You have corrected the fault.
 - (6) Do these steps to complete the task:
 - (a) Push the AFT ARM switch on the Cargo Fire/Engine Control Module.
 - 1) Make sure the Armed indicator on the AFT ARM switch is not in view.
 - (b) Put the airplane in the ground mode; do this task: Air/Ground Mode Simulation, AMM TASK 32-09-00-860-801.
 - (c) Open this circuit breaker and install safety lock:

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
L	7	C26639	FIRE EXT CGO BTL 2A,2B & 2C
 - (d) Remove the protective covers from the squibs for these connectors for the fire extinguishing bottles and flow valves (WDM 26-23-11) (WDM 26-23-51):
 - 1) DB26013A

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- 2) DB26014A
- 3) DB26015A
- 4) DB26016A
- 5) DB26017A
- 6) DV26201A
- 7) DV26201B
- 8) DV26202A
- 9) DV26202B



WARNING

MAKE SURE THERE IS NO VOLTAGE AT THE ELECTRICAL CONNECTOR. IF THERE IS VOLTAGE AT THE ELECTRICAL CONNECTOR, THE SQUIB CAN RELEASE ITS CONTENTS AND CAUSE INJURY TO PERSONS.

- (e) Make sure there is no voltage between pins 1 and 2 of the electrical connector.
- (f) If there is voltage between pins 1 and 2, do these steps:
 - 1) Connect a voltmeter, COM-4355 across pins 1 and 2.
 - 2) Connect a resistor, STD-1079 across the voltmeter, COM-4355 pins to remove any stray voltage from the electrical connector.
 - 3) Disconnect the voltmeter, COM-4355.
- (g) Make sure the squib electrical pins are not bent or damaged.
- (h) Make sure the electrical connector is not damaged.

NOTE: The squib pins can cause damage to the electrical connector if the pins do not correctly engage the electrical connector.
- (i) Connect the electrical connector to the squib.
- (j) Remove the safety tags and close these circuit breakers:

Standby Power Management Panel, P310

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
L	6	C26638	FIRE EXT CGO BTL 1A & VLV SQB
L	7	C26639	FIRE EXT CGO BTL 2A,2B & 2C
L	8	C26640	FIRE EXT CGO BTL 1B & VLV SQB

————— **END OF TASK** —————

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802. Observed Fault with Correlated Maintenance Messages - Fault Isolation

A. Initial Evaluation

- (1) Find the fault code to the right of the fault description in the Observed Faults List (at the front of the FIM).
 - (a) The first two digits of the fault code are the FIM chapter that you need. Go to the Fault Code Index in that chapter and find the fault code.
 - (b) Find the maintenance message to the right of the fault code.
 - (c) Find the task number on the same line as the maintenance message number.
 - (d) Go to the task in the FIM and do the steps in the task.

———— **END OF TASK** ————

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