



FAULT ISOLATION MANUAL

**ON A/C ALL

TASK 30-00-00-810-804

HEATER DRIVER FAIL (Status) – Fault Isolation

1. General

- A. This fault isolation procedure is for when the central diagnostic system (CDS) shows the HEATER DRIVER FAIL message.
- B. The CDS shows this message when the timer and monitor unit (TMU) senses a component heater failure.
- C. There are no related caution and warning panel (CAWP) indications.

2. Job Set-Up Information

Subtask 30-00-00-946-025

REFERENCE	DESIGNATION
WM30-10-00-1	Airframe Deicing System
AMM30-11-01-000-801	Removal of the Timer and Monitor Unit
AMM30-11-01-400-801	Installation of the Timer and Monitor Unit
AMM30-11-16-000-801	Removal of the Dual Distributing Valves
AMM30-11-16-400-801	Installation of the Dual Distributing Valves
AMM30-11-36-000-801	Removal of the Automatic Drain Valves
AMM 30-11-36-400-801	Installation of the Automatic Drain Valves
AMM30-11-46-000-801	Removal of the Heated Check Valves
AMM30-11-46-400-801	Installation of the Heated Check Valves
AMM45-00-30-742-802	Retrieval of Data from the Central Diagnostic System – Ice Protection System (ICE PROTECTION)
AMM52-13-11-000-801	Removal of the Heated Check Valve
AMM52-13-11-400-801	Installation of the Heated Check Valve

3. Fault Confirmation

Subtask 30-00-00-810-007

- A. Confirm the fault as follows:
 - (1) Do the CDS fault retrieval (Refer to AMM45-00-30-742-802).
 - (a) If the HEATER DRIVER FAIL message does not show, no maintenance procedure is necessary. Do the Close Out.
 - (b) If the HEATER DRIVER FAIL message does show, do the Fault Isolation.



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4. Fault Isolation

Subtask 30-00-00-810-008

A. Isolate the fault as follows:

- (1) Do an impedance check between the TMU and the different components (Refer to WM30-10-00-1). Disconnect the TMU P2 connector and access 28VDC C/BKR Panel LH for connector J158 and 28VDC C/BKR Panel RH for connector J161

TMU 3000-P2	9811-J158	Ω	Component
B	N	≥ 20 Ohms	Heated Check Valve 1
C	N	≥ 20 Ohms	Heater Drain 1
D	N	≥ 20 Ohms	Heater Drain 2
W	G-	≥ 20 Ohms	Distributing Valve 2
X	G-	≥ 20 Ohms	Distributing Valve 4
Z	H-	≥ 20 Ohms	Distributing Valve 6
TMU 3000-P2	9811-J161	Ω	
E	A	≥ 20 Ohms	Heated Check Valve 2
F	A	≥ 20 Ohms	Heater Drain 3
G	A	≥ 20 Ohms	Heater Drain 4
A	A-	≥ 20 Ohms	Distributing Valve 1
V	A-	≥ 20 Ohms	Distributing Valve 3
H	C-	≥ 20 Ohms	Heated Check Valve 3
J	C-	≥ 20 Ohms	Heater restrictor 1
Y	Z	≥ 20 Ohms	Distributing Valve 5
TMU 3000-P2	GND	Ω	
F-	Local GND	≤ 2 Ohms	TMU Heater RTN 1
G-	Local GND	≤ 2 Ohms	TMU Heater RTN 2
H-	Local GND	≤ 2 Ohms	TMU Heater RTN 3

- (2) If impedance is not inside the criteria repair as follows:

- Remove and replace the door seal pressurization system heated check valve – HCV3 (Refer to AMM52-13-11-000-801 and AMM52-13-11-400-801).
- If the fault still continues, remove and replace the left automatic drain valve – ADV 1 (Refer to AMM30-11-36-000-801 and AMM30-11-36-400-801).
- If the fault still continues, remove and replace the right automatic drain valve – ADV 2 (Refer to AMM30-11-36-000-801 and AMM30-11-36-400-801).
- If the fault still continues, remove and replace the rear heated check valve – HCV 1 or HCV 2 (Refer to AMM30-11-46-000-801 and AMM30-11-46-400-801)



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- (e) If the fault still continues, remove and replace the rear automatic drain valve – ADV 3 or ADV 4 (Refer to AMM30-11-36-000-801 and AMM30-11-36-400-801).
- (f) If the fault still continues, remove and replace the dual distributing valve #1 (DDV #1) (Refer to AMM30-11-16-000-801 and AMM30-11-16-400-801)
- (g) If the fault still continues, remove and replace the DDV #3 (Refer to AMM30-11-16-000-801 and AMM30-11-16-400-801)
- (h) If the fault still continues, remove and replace the DDV #2 (Refer to AMM30-11-16-000-801 and AMM30-11-16-400-801).
- (i) If the fault still continues, remove and replace the DDV #4 (Refer to AMM30-11-16-000-801 and AMM30-11-16-400-801).
- (j) If the fault still continues, remove and replace the DDV #5 (Refer to AMM30-11-16-000-801 and AMM30-11-16-400-801).
- (k) If the fault still continues, remove and replace the DDV #6 (Refer to AMM30-11-16-000-801 and AMM30-11-16-400-801).
- (l) If the fault still continues, remove and replace the TMU (Refer to AMM30-11-01-000-801 and AMM30-11-01-400-801).

5. Close Out

Subtask 30-00-00-941-008

- A. Make sure that the CDS does not show the HEATER DRIVER FAIL or the TIMER/MONITOR 3 FAIL message.
Make sure that the CDS does not show the HEATER DRIVER FAIL message.
- B. Remove all tools, equipment, and unwanted materials from the work area.