



FAULT ISOLATION MANUAL

MAINTENANCE PRACTICES

**ON A/C ALL

TASK 30-80-00-810-801

ICE DETECT FAIL (Caution) – Fault Isolation

1. General

- A. This fault isolation procedure is for when the ICE DETECT FAIL caution light on the Caution and Warning Panel (CAWP) comes on.
- B. The ICE DETECT FAIL caution light on the CAWP comes on when the two ice detector probes have failed.
- C. The Engine Display (ED) and the MFD ENGINE system page ICE DETECTED message can incorrectly not come into view.
- D. The Central Diagnostic System (CDS) can show the related messages that follow:
 - L ICE DETECTOR FAIL
 - R ICE DETECTOR FAIL.

2. Job Set-Up Information

Subtask 30-80-00-946-003

A. Reference Information

REFERENCE	DESIGNATION
AMM 30-80-00-710-801	Operational Test of the Ice Detection System
AMM 31-51-01-000-801	Removal of the Caution and Warning Panel
AMM 31-51-01-400-801	Installation of the Caution and Warning Panel
AMM 45-00-30-742-802	Retrieval of Data from the Central Diagnostic System (CDS) – Ice Protection System (ICE PROTECTION)
AMM 45-00-30-743-802	Erase the Data from the Central Diagnostic System (CDS) – Ice Protection System (ICE PROTECTION)
FIM 30-80-00-810-802	L ICE DETECTOR FAIL (Status) – Fault Isolation
FIM 30-80-00-810-803	R ICE DETECTOR FAIL (Status) – Fault Isolation
WM 30-80-00	Ice Detection

3. Fault Confirmation

Subtask 30-80-00-810-001

- A. Confirm the fault as follows:

PSM 1-84-23
EFFECTIVITY:
See First Effectivity on Page 201 of 30-80-00



FAULT ISOLATION MANUAL

- (1) Do the CDS fault indication retrieval (Refer to AMM 45-00-30-742-802).
- (2) Erase the data from the CDS (Refer to AMM 45-00-30-743-802).
- (3) Do the operational test of the ice detection system (Refer to AMM 30-80-00-710-801).
 - (a) If the ICE DETECT FAIL caution light does not come on, no maintenance procedure is necessary. Do the Close Out.
 - (b) If the ICE DETECT FAIL caution light does come on, do the CDS fault indication retrieval again (Refer to AMM 45-00-30-742-802). Do the Fault Isolation.

4. Fault Isolation

Subtask 30-80-00-810-002

A. Isolate the fault as follows:

- (1) If the message is L ICE DETECTOR FAIL, do the Fault Isolation for L ICE DETECTOR FAIL (Refer to FIM 30-80-00-810-802). Do the Close Out.
- (2) If the message is R ICE DETECTOR FAIL, do the Fault Isolation for R ICE DETECTOR FAIL (Refer to FIM 30-80-00-810-803). Do the Close Out.
- (3) If the fault continues, do a test of the wiring between the Left Ice Detector Probe (LIDP) and the CAWP (Refer to WM 30-80-00):

3000-P33 (LIDP)	3312-P3 (CAWP)
4	1

- (4) If the wiring is unserviceable, repair the wiring. Do the Close Out.
- (5) If the fault continues, do a test of the wiring between the LIDP and the 115V AC variable frequency panel (Refer to WM 30-80-00):

3000-P33 (LIDP)	(115V AC Variable Frequency Panel)
1	LEFT ICE DET (Phase A Left Bus)

- (6) If the wiring is unserviceable, repair the wiring. Do the Close Out.
- (7) If the fault continues, do a test of the wiring between the LIDP and the Timer and Monitor Unit (TMU) (Refer to WM 30-80-00):

3000-P33 (LIDP)	3000-P3 (TMU)
4	V-

- (8) If the wiring is unserviceable, repair the wiring. Do the Close Out.



FAULT ISOLATION MANUAL

- (9) If the fault continues, do a test of the wiring between the Right Ice Detection Probe (RIDP) and the CAWP (Refer to WM 30-80-00):

3000-P34 (RIDP)	3312-P3 (CAWP)
4	2

- (10) If the wiring is unserviceable, repair the wiring. Do the Close Out.
- (11) If the fault continues, do a test of the wiring between the RIDP and the 115V AC variable frequency panel (Refer to WM 30-80-00):

3000-P34 (RIDP)	(115V AC Variable Frequency Panel)
1	RIGHT ICE DET (Phase A Right Bus)

- (12) If the wiring is unserviceable, repair the wiring. Do the Close Out.
- (13) If the fault continues, do a test of the wiring between the RIDP and the TMU (Refer to WM 30-80-00):

3000-P34 (RIDP)	3000-P3 (TMU)
4	EE

- (14) If the wiring is unserviceable, repair the wiring. Do the Close Out.
- (15) If the fault continues, replace the CAWP (Refer to AMM 31-51-01-000-801 and AMM 31-51-01-400-801). Do the Close Out.

5. Close Out

Subtask 30-80-00-941-001

- A. Make sure that the ICE DETECT FAIL caution light on the CAWP is not on.
- B. Remove all tools, equipment, and unwanted materials from the work area.