



FAULT ISOLATION MANUAL

**ON A/C ALL

TASK 27-30-00-810-803

PITCH TRIM (Caution) – Fault Isolation

1. General

- A. This fault isolation procedure is for when the Caution And Warning Panel (CAWP) PITCH TRIM caution light is on.
- B. The CAWP PITCH TRIM caution light comes on when the Flight Control Electronic Control Unit (FCECU) has sensed the conditions that follow:
 - Internal failure of the FCECU
 - Left pitch trim actuator malfunction
 - Right pitch trim actuator malfunction
 - ADC1 or ADC2 malfunction or mismatch
 - Pilot and co-pilot commands are different.
- C. The CAWP ELEVATOR FEEL, RUD CTRL and SPLR OUTBD caution lights can also come on.
- D. The Central Diagnostic System (CDS) can show the related messages that follow:
 - FCECU FAILURE 62
 - FCECU FAILURE 63
 - FCECU FAILURE 64
 - FCECU FAILURE 65
 - FCECU FAILURE 66
 - FCECU FAILURE 74
 - FCECU FAILURE 75
 - FCECU FAILURE E2
 - FCECU FAILURE E3
 - FCECU FAILURE E4
 - FCECU FAILURE E5
 - FCECU FAILURE E6
 - FCECU FAILURE F4
 - FCECU FAILURE F5
 - LT PTRIM FAIL
 - RT PTRIM FAIL
 - CPIL TRIM SW FAILURE
 - PILTRIM SW FAILURE
 - APU FAILURE
 - IFC FAILURE



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– ADC FAILURE.

2. Job Set-Up Information

Subtask 27-30-00-946-003

A. Reference Information

REFERENCE	DESIGNATION
AMM27-32-00-710-802	Operational Test of the Elevator Pitch Trim System
AMM45-00-27-742-801	Retrieval of Data from the Central Diagnostic System (CDS) – Flight Control System (FCS)
FIM27-00-00-810-804	FCECU FAILURE ## (Status) – Fault Isolation
FIM27-32-00-810-801	CPILTRIM SW FAILURE (Status) – Fault Isolation
FIM27-32-00-810-802	PILTRIM SW FAILURE (Status) – Fault Isolation
FIM27-32-00-810-804	FCECU FAILURE 62 (Status) – Fault Isolation
FIM27-32-00-810-805	FCECU FAILURE E2 (Status) – Fault Isolation
FIM27-32-06-810-801	LT PRIM ACT FAIL (Status) – Fault Isolation
FIM27-32-06-810-802	RT PRIM ACT FAIL (Status) – Fault Isolation
FIM27-32-06-810-803	FCECU FAILURE 63 (Status) – Fault Isolation
FIM27-32-06-810-804	FCECU FAILURE 64 (Status) – Fault Isolation
FIM27-32-06-810-805	FCECU FAILURE 65 (Status) – Fault Isolation
FIM27-32-06-810-806	FCECU FAILURE 66 (Status) – Fault Isolation
FIM27-32-06-810-808	FCECU FAILURE E3 (Status) – Fault Isolation
FIM27-32-06-810-809	FCECU FAILURE E4 (Status) – Fault Isolation
FIM27-32-06-810-810	FCECU FAILURE E5 (Status) – Fault Isolation
FIM27-32-06-810-811	FCECU FAILURE E6 (Status) – Fault Isolation
FIM31-41-00-810-887	IFC FAILURE 60, 61 (Status) – Fault Isolation
FIM34-11-00-810-873	ADC FAILURE 5E, 5F (Status) – Fault Isolation

3. Fault Confirmation

Subtask 27-30-00-810-005

A. Confirm the fault as follows:

- (1) Do the retrieval of the data from the CDS – Flight Control System (FCS) (Refer to AMM45-00-27-742-801).
- (2) Do the operational test of the elevator pitch trim system (Refer to AMM27-32-00-710-802).

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- (3) Do the retrieval of the data from the CDS – FCS again (Refer to AMM45–00–27–742–801).
- (4) If there are no related CDS messages and the PITCH TRIM, ELEVATOR FEEL, RUD CTRL and SPLR OUTBD caution lights do not come on, no maintenance procedure is necessary. Do the Close Out.
- (5) If there are related CDS messages or the PITCH TRIM, ELEVATOR FEEL, RUD CTRL or SPLR OUTBD caution lights come on, do the Fault Isolation.

4. Fault Isolation

Subtask 27–30–00–810–006

A. Isolate the fault as follows:

- (1) If the CDS message is FCECU FAILURE 62, do the fault isolation (Refer to FIM27–32–00–810–804). Do the Close Out.
- (2) If the CDS message is FCECU FAILURE 63, do the fault isolation (Refer to FIM27–32–06–810–803). Do the Close Out.
- (3) If the CDS message is FCECU FAILURE 64, do the fault isolation (Refer to FIM27–32–06–810–804). Do the Close Out.
- (4) If the CDS message is FCECU FAILURE 65, do the fault isolation (Refer to FIM27–32–06–810–805). Do the Close Out.
- (5) If the CDS message is FCECU FAILURE 66, do the fault isolation (Refer to FIM27–32–06–810–806). Do the Close Out.
- (6) If the CDS message is FCECU FAILURE E3, do the fault isolation (Refer to FIM27–32–06–810–808). Do the Close Out.
- (7) If the CDS message is FCECU FAILURE E6, do the fault isolation (Refer to FIM27–32–06–810–811). Do the Close Out.
- (8) If the CDS message is FCECU FAILURE E4, do the fault isolation (Refer to FIM27–32–06–810–809). Do the Close Out.
- (9) If the CDS message is FCECU FAILURE 75, do the fault isolation (Refer to FIM27–00–00–810–804). Do the Close Out.
- (10) If the CDS message is FCECU FAILURE 74, do the fault isolation (Refer to FIM27–00–00–810–804). Do the Close Out.
- (11) If the CDS message is FCECU FAILURE E2, do the fault isolation (Refer to FIM27–32–00–810–805). Do the Close Out.
- (12) If the CDS message is FCECU FAILURE E5, do the fault isolation (Refer to FIM27–32–06–810–810). Do the Close Out.
- (13) If the CDS message is FCECU FAILURE F4, do the fault isolation (Refer to FIM27–00–00–810–804). Do the Close Out.
- (14) If the CDS message is FCECU FAILURE F5, do the fault isolation (Refer to FIM27–00–00–810–804). Do the Close Out.



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- (15) If the CDS message is LT PTRIM ACT FAIL, do the fault isolation (Refer to FIM27-32-06-810-801). Do the Close Out.
- (16) If the CDS message is RT PTRIM ACT FAIL, do the fault isolation (Refer to FIM27-32-06-810-802). Do the Close Out.
- (17) If the CDS message is CPILPTRIM SW FAILURE, do the fault isolation (Refer to FIM27-32-00-810-801). Do the Close Out.
- (18) If the CDS message is PILPTRIM SW FAILURE, do the fault isolation (Refer to FIM27-32-00-810-802). Do the Close Out.
- (19) If the CDS message is ADC FAILURE 5E, 5F, do the fault isolation (Refer to FIM34-11-00-810-873). Do the Close Out.
- (20) If the CDS message is IFC FAILURE 60, 61, do the fault isolation (Refer to FIM31-41-00-810-887). Do the Close Out.
- (21) If the CDS message is FCECU FAILURE FA, do the fault isolation (Refer to FIM27-00-00-810-804). Do the Close Out.
- (22) If the CDS message is FCECU FAILURE FB, do the fault isolation (Refer to FIM27-00-00-810-804). Do the Close Out.
- (23) If the CDS message is FCECU FAILURE FC, do the fault isolation (Refer to FIM27-00-00-810-804). Do the Close Out.
- (24) If the CDS message is FCECU FAILURE FD, do the fault isolation (Refer to FIM27-00-00-810-804). Do the Close Out.
- (25) If the CDS message is FCECU FAILURE FE, do the fault isolation (Refer to FIM27-00-00-810-804). Do the Close Out.
- (26) If the CDS message is FCECU FAILURE FF, do the fault isolation (Refer to FIM27-00-00-810-804). Do the Close Out.

5. Close Out

Subtask 27-30-00-942-001

- A. Make sure that the PITCH TRIM, ELEVATOR FEEL, RUD CTRL and SPLR OUTBD caution lights on the CAWP are not on.
- B. Remove all tools, equipment and unwanted materials from the work area.