



FAULT ISOLATION MANUAL

**ON A/C ALL

TASK 27-33-00-810-813

#1 STALL SYST FAIL (Caution) – Fault Isolation

1. General

- A. This fault isolation procedure is for when the #1 STALL SYST FAIL caution light on the Caution And Warning Panel (CAWP) is on.

NOTE: The #1 STALL SYST FAIL caution light can come on immediately or 30 seconds after the aircraft is sensed on the ground.

- B. The CAWP #1 STALL SYST FAIL caution light comes on for the malfunction conditions that follow:

- Stall Protection Module (SPM) 1 is defective
- SPM1 does not receive valid data from SPM2
- The No. 1 stick shaker is defective
- Angle of Attack (AOA) 1 is defective or not heated
- AOA2 is defective or not heated
- Icing discrete input is defective
- Operational test (STALL WARN TEST 1) has sensed a caution light or stick shaker discrepancy
- Flap Position Indicator Unit (FPIU) left and right flap position inputs are defective.
- Air Data Unit (ADU) 1 and ADU2 mach inputs are defective
- Full Authority Digital Electronic Control (FADEC) 1 and FADEC2 engine torque inputs are defective
- Stick shaker and opposite SPM are defective.

- C. The Central Diagnostic System (CDS) can show the related messages that follow:

- SPM1
- NO DATA FROM SPM2
- STICK SHAKER 1
- AOA1
- AOA2
- L VANE HEATER
- SPM1/IOP1
- SPM1/IOP2

NOTE: The Ice and Rain Protection System (IRPS) MAINTENANCE page can show the related messages that follow:

- LEFT AOA FAIL
- MONITOR 1 FAIL.



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2. Job Set-Up Information

Subtask 27-33-00-946-013

A. Reference Information

REFERENCE	DESIGNATION
AMM24-00-00-861-801	Energize the Electrical System
AMM24-00-00-861-802	De-energize the Electrical System
AMM 27-33-00-730-801	System Test of the Elevator Control Stick Pusher System
AMM45-00-30-742-802	Retrieval of Data from the Central Diagnostic System (CDS) – Ice Protection System (ICE PROTECTION)
AMM45-00-30-743-802	Erase the Data from the Central Diagnostic System (CDS) – Ice Protection System (ICE PROTECTION)
AMM45-00-34-742-801	Retrieval of Data from the Central Diagnostic System (CDS) – Avionics (AVIONICS)
FIM27-33-00-810-808	AOA 1 (Status) – Fault Isolation
FIM27-33-00-810-809	AOA 2 (Status) – Fault Isolation
FIM27-33-00-810-810	L VANE HEATER (Status) – Fault Isolation
FIM27-33-00-810-816	SPM1 (Status) – Fault Isolation
FIM27-33-00-810-823	STICK SHAKER 1 (Status) – Fault Isolation
FIM27-33-00-810-836	NO DATA FROM SPM2 (Status) – Fault Isolation
FIM27-33-01-810-801	SPM1/IOP1 (Status) – Fault Isolation
FIM27-33-01-810-802	SPM1/IOP2 (Status) – Fault Isolation
FIM30-00-00-810-801	MONITOR 1 FAIL (Status) – Fault Isolation
FIM30-30-00-810-803	LEFT AOA FAIL (Status) – Fault Isolation

3. Job Set-Up

Subtask 27-33-00-861-031

- A. Energize the aircraft electrical system (Refer to AMM24-00-00-861-801).

4. Fault Confirmation

Subtask 27-33-00-810-037

- A. Confirm the fault as follows:

- (1) On the Audio and Radio Control Display Unit (ARCDU), do the CDS fault indication retrieval from the AVIONICS STATUS, LAST LEG REPORT or the PREVIOUS LEGS REPORT pages related to the flight when the #1 STALL SYST FAIL caution light comes on (Refer to



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AMM45-00-34-742-801).

NOTE: The flight leg number in the PREVIOUS LEGS REPORT will increase by one when the airspeed increases to more than 50 knots for the take-off.

NOTE: The time and date information is in GMT.

- (2) Do the SYSTEM TEST for the SPM1 (Refer to AMM45-00-34-742-801).

NOTE: At this step, do not pull the circuit breaker shown on the ARCDU. If you reset the circuit breaker, it can clear the codes from intermittent faults.

- (3) Do the fault indication retrieval for the IRPS (Refer to AMM45-00-30-742-802).
- (4) Erase the IRPS data from the CDS (Refer to AMM45-00-30-743-802).
- (5) Do the system test of the elevator control stick pusher system (Refer to AMM 27-33-00-730-801).
- (6) On the ARCDU, do the CDS fault indication retrieval from the AVIONICS STATUS page again (Refer to AMM45-00-34-742-801).
- (7) Do the SYSTEM TEST again for the SPM1 (Refer to AMM45-00-34-742-801).
- (8) Do the fault indication retrieval for the IRPS (Refer to AMM45-00-30-742-802).
- (9) If there are no related CDS messages, no maintenance procedure is required. Do the Close Out.
- (10) If there is any related CDS message, do the Fault Isolation.
- (11) De-energize the aircraft electrical system (Refer to AMM24-00-00-861-802).

5. Fault Isolation

Subtask 27-33-00-810-038

A. Isolate the fault as follows:

- (1) If the message is SPM1, do the fault isolation for SPM1 (Refer to FIM27-33-00-810-816). Do the Close Out.
- (2) If the message is NO DATA FROM SPM2, do the fault isolation for NO DATA FROM SPM2 (Refer to FIM27-33-00-810-836). Do the Close Out
- (3) If the message is STICK SHAKER 1, do the fault isolation for STICK SHAKER 1 (Refer to FIM27-33-00-810-823). Do the Close Out.
- (4) If the message is AOA1, do the fault isolation for AOA1 (Refer to FIM27-33-00-810-808). Do the Close Out.
- (5) If the message is AOA2 do the fault isolation for AOA2 (Refer to FIM27-33-00-810-809). Do the Close Out.
- (6) If the message is L VANE HEATER, do the fault isolation for L VANE HEATER (Refer to FIM27-33-00-810-810). Do the Close Out.
- (7) If the message is SPM1/IOP1, do the fault isolation for SPM1/IOP1 (Refer to FIM27-33-01-810-801). Do the Close Out.

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- (8) If the message is SPM1/IOP2, do the fault isolation for SPM1/IOP2 (Refer to FIM27-33-01-810-802). Do the Close Out.
- (9) If the message is LEFT AOA FAIL do the fault isolation for LEFT AOA FAIL (Refer to FIM30-30-00-810-803). Do the Close Out.
- (10) If the message is MONITOR 1 FAIL, do the fault isolation for MONITOR 1 FAIL (Refer to FIM30-00-00-810-801). Do the Close Out.

6. Close Out

Subtask 27-33-00-941-013

- A. Make sure that the #1 STALL SYST FAIL caution light on the CAWP is not on.
- B. Remove all tools, equipment, and unwanted materials from the work area.