



**FAULT ISOLATION MANUAL**

**MAINTENANCE PRACTICES**

**\*\*ON A/C ALL**

**TASK 21-30-00-810-801**

**Unable to Pressurize the Cabin After Take-Off (CABIN PRESS warning may also be reported) – Fault Isolation**

**1. General**

- A. This fault isolation procedure is for when the cabin cannot be pressurized after the take-off, which may also be accompanied with the CABIN PRESS warning on the Caution and Warning Panel (CAWP).
- B. The CAWP shows the CABIN PRESS warning when the cabin altitude is more than 9800  $\pm$ 200 ft. (3048 m).

**NOTE:** This fault isolation procedure is not applicable when the take-off or landing elevation is more than 8000 ft. (2438.40 m).

**NOTE:** For take-off or landing elevations more than 8000 ft. (2438.40 m), the CABIN PRESS warning indication will come on in one of the two conditions that follow:

- The aircraft take-off altitude plus 1000 ft. (304.80 m)
- The landing altitude plus 1000 ft. (304.80 m).

- C. The Audio and Radio Control Display Unit (ARCDU) can also show one or more of the related Centralized Diagnostics System (CDS) status messages that follow:
  - AFT OUTFLOW VALVE FAIL
  - CPC/OF VALVE DATA FAIL
  - CPC/ADU ARINC FAIL
  - CPC/CIM ARINC FAIL
  - CIM/ADU ARINC FAIL
  - CP/CONTROL PANEL FAIL
  - CP CONTROLLER FAIL
  - INDICATION MODULE FAIL.

**2. Job Set-Up Information**

**Subtask 21-30-00-946-001**

**A. Reference Information**

REFERENCE	DESIGNATION
AMM TASK 12-10-52-863-801	Pressurization of the Reservoir Tank for the Door Seal System
AMM TASK 21-31-00-720-801	Functional Test of the Pressurization Control

PSM 1-84-23  
EFFECTIVITY:  
See First Effectivity on Page 201 of 21-30-00



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REFERENCE	DESIGNATION
AMM TASK 45-00-21-742-802	Retrieval of Data from the Centralized Diagnostics System (CDS) – Cabin Pressure Control System (CABIN PRESS CONTROL)
AMM TASK 45-00-21-743-802	Erase the Data from the Centralized Diagnostics System (CDS) – Cabin Pressure Control System (CABIN PRESS CONTROL)
FIM TASK 21-30-00-810-803	AFT OUTFLOW VALVE FAIL (Status) – Fault Isolation
FIM TASK 21-30-00-810-804	CPC/OV VALVE DATA FAIL (Status) – Fault Isolation
FIM TASK 21-30-00-810-805	CPC/ADU ARINC FAIL (Status) – Fault Isolation
FIM TASK 21-30-00-810-806	CPC/CIM ARINC FAIL (Status) – Fault Isolation
FIM TASK 21-30-00-810-807	CIM/ADU ARINC FAIL (Status) – Fault Isolation
FIM TASK 21-30-00-810-808	CP CONTROL PANEL FAIL (Status) – Fault Isolation
FIM TASK 21-30-00-810-809	CP CONTROLLER FAIL (Status) – Fault Isolation
FIM TASK 21-30-00-810-813	INDICATION MODULE FAIL (Status) – Fault Isolation
FIM TASK 52-70-00-810-801	FUSELAGE DOORS (Warning) – Fault Isolation

### 3. Fault Confirmation

#### Subtask 21-30-00-810-001

##### A. Do the fault confirmation as follows:

- (1) If the fault occurred during the take-off/climb, do the fault isolation for the FUSELAGE DOORS warning (Refer to FIM TASK 52-70-00-810-801).
  - (2) If the aircraft experienced a sudden loss of pressure or did not pressurize after the take-off or did not respond to the cabin pressure controller inputs, do the inspection of the aft cargo bay blow out panel.
    - (a) Before you open the AFT Baggage door, check the baggage door handle to make sure that it was correctly stowed.
    - (b) If the panel is dislodged, do the inspection of the aft cargo door seal for the damage or unseated condition.
    - (c) If the panel is not dislodged, do the inspection of all door seals for the condition and security.
- NOTE:** If necessary, do the leak check of the forward passenger door and aft cargo door seal (Refer to AMM TASK 12-10-52-863-801).
- (3) Do a check of the ECS bay area for air leaks from ruptured/damaged ducts or loose clamps.
  - (4) On the CDS, retrieve and record the current fault messages for the Environmental Control System (ECS). If any fault messages retrieved, refer to the appropriate section(s) of the FIM



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for troubleshooting.

**NOTE:** As an example, a single failure of Pack Flow Control and Shutoff Valve can potentially cause cabin not to pressurize during climb, or depressurize in flight.

- (5) Check the ground air connection and ram air check-valve to make sure that they are serviceable.
- (6) On the CDS, retrieve and record the data from the CDS for the Cabin Pressure Controller system (CPCS) (Refer to AMM TASK 45-00-21-742-802).

**NOTE:** CPC\_OFV\_DATA\_FAIL can potentially be a nuisance fault code. If this message is retrieved, refer to SL 84-21-018.

- (7) On the CDS, erase the data from the CDS for the CPC (Refer to AMM TASK 45-00-21-743-802).
- (8) Do the functional test of the AUTO pressurization control (Refer to AMM TASK 21-31-00-720-801, Subtask 21-31-00-720-023).
- (9) On the CDS, once again, retrieve the data from the CDS for the CPC (Refer to AMM TASK 45-00-21-742-802).
- (10) If the functional test is carried out satisfactory and the CDS shows no related status messages, then no maintenance procedure is necessary. Do the Close Out.
- (11) If the CDS shows any related status messages, then do the Fault Isolation procedure.

### 4. Fault Isolation

#### Subtask 21-30-00-810-002

##### A. Do the fault isolation as follows:

- (1) If the CDS has confirmed the AFT OUTFLOW VALVE FAIL status message, do the fault isolation for AFT OUTFLOW VALVE FAIL (Refer to FIM TASK 21-30-00-810-803). Do the Close Out.
- (2) If the CDS has confirmed the CPC/OF VALVE DATA FAIL status message, do the fault isolation for CPC/OF VALVE DATA FAIL (Refer to FIM TASK 21-30-00-810-804). Do the Close Out.

**NOTE:** CPC\_OFV\_DATA\_FAIL can potentially be a nuisance fault code. If this message is retrieved, refer to SL 84-21-018.

- (3) If the CDS has confirmed the CPC/ADU ARINC FAIL status message, do the fault isolation for CPC/ADU ARINC FAIL (Refer to FIM TASK 21-30-00-810-805). Do the Close Out.
- (4) If the CDS has confirmed the CPC/CIM ARINC FAIL status message, do the fault isolation for CPC/CIM ARINC FAIL (Refer to FIM TASK 21-30-00-810-806). Do the Close Out.
- (5) If the CDS has confirmed the CIM/ADU ARINC FAIL status message, do the fault isolation for CIM/ADU ARINC FAIL (Refer to FIM TASK 21-30-00-810-807). Do the Close Out.
- (6) If the CDS has confirmed the CP CONTROL PANEL FAIL status message, do the fault isolation for CP CONTROL PANEL FAIL (Refer to FIM TASK 21-30-00-810-808). Do the Close Out.



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- (7) If the CDS has confirmed the CP CONTROLLER FAIL status message, do the fault isolation for CP CONTROLLER FAIL (Refer to FIM TASK 21-30-00-810-809). Do the Close Out.
- (8) If the CDS has confirmed the INDICATION MODULE FAIL status message, do the fault isolation for INDICATION MODULE FAIL (Refer to FIM TASK 21-30-00-810-813). Do the Close Out.

### 5. Close Out

#### Subtask 21-30-00-941-001

- A. Make sure that the CAWP CABIN PRESS warning light is not on.
- B. Remove all tools, equipment and unwanted materials from the work area.