CABIN PRESSURE FAULT-FINDING PROCEDURE

Purpose

This procedure is designed to assist technicians in diagnosing cabin pressure problems where the cabin has **low pressure or no measurable pressure**.

Always work through the checks in the order shown below. Start with the simplest and most common causes before progressing to component-level diagnostics.

FAULT 1 — LOW CABIN PRESSURE

If the cabin is achieving some positive pressure but the pressure is lower than expected, carry out the following checks:

1. Check Cabin Doors and Windows

- Confirm all cabin doors are fully closed.
- Check that all windows are fully closed and correctly latched.
- Check door and window seals for damage, gaps or deterioration.

2. Check Cabin Sealing

Inspect the cabin for excessive air leakage, including:

- Door and window seals
- Access panels
- Floor penetrations
- Cable entries
- HVAC openings
- Other openings or damaged seals

Note: Excessive cabin leakage can prevent the pressuriser from maintaining the required positive pressure.

3. Check Pressuriser Filters

Inspect both:

- Main/pre-filter

- HEPA filter

Check for excessive contamination, blockage or damage.

A blocked filter can significantly reduce airflow into the cabin and result in low cabin pressure.

4. Check Pressuriser Pipework

Inspect the pipework between the pressuriser and the cabin.

Check for:

- Disconnected hoses
- Crushed or restricted pipework
- Splits or holes
- Loose fittings
- Incorrect connections

5. Check the Pressure Sensor Filter

Inspect the sensor filter.

- Clean the filter if appropriate.
- Replace the filter if it is blocked, damaged or cannot be adequately cleaned.

A restricted sensor filter can cause an incorrect pressure reading.

6. Check the Pressure Sensor Tube

Inspect the sensor tube for:

- Kinks
- Crushing
- Splits or damage
- Disconnection
- Restrictions

Ensure the tube is correctly connected and able to transmit cabin pressure to the sensor.

FAULT 2 — NO CABIN PRESSURE

If the cabin is showing **no pressure**, carry out the following checks.

7. Check That the Pressuriser Is Operating

Confirm that the pressuriser is operating.

Check for:

- Fan/motor noise
- Airflow from the pressuriser
- Any obvious signs of mechanical failure

If required, **remove the main filter and carry out a visual inspection of the fan/motor assembly.**

If the pressuriser is not operating, proceed with the applicable **pressuriser diagnostic procedure**.

Technician caution: Isolate power before removing components or carrying out work inside the pressuriser where required.

8. Check the Pressure Sensor Filter

Inspect the sensor filter.

- Clean if required.
- Replace if blocked or damaged.

9. Check the Pressure Sensor Tube

Inspect the sensor tube for:

- Kinks
- Damage
- Disconnection
- Restrictions

Ensure the tube is correctly connected at both ends.

10. Carry Out the Quick Door-Closure Test

With the pressuriser operating:

1. Open the cabin door.
2. Close the door quickly and securely.
3. Observe the cabin pressure reading.

The pressure should show an increase as the cabin becomes sealed.

If the pressure does NOT increase:

Check the pressure sensor tube connection at the **sensor box**.

Inspect both:

- The connection on the outside of the sensor box
- The connection/connection point inside the sensor box remove the 4 2m allen key screws to access the inside tube.

Ensure the fittings are secure and the tube is correctly connected.

CLEANCAB FILTER MONITOR

If a Cleancab Filter Monitor is fitted

The Cleancab Filter Monitor is a valuable diagnostic tool and should be used as part of the fault-finding process.

The monitor can assist the technician in identifying potential problems with:

- Filter restriction
- Airflow
- Cabin pressure
- Pressuriser operation
- Filter condition

Always follow the applicable Cleancab Filter Monitor fault-diagnostic procedure when a filter monitor is fitted.

TECHNICIAN SAFETY CAUTION

Before removing filters, opening the pressuriser, inspecting electrical components or working on the system:

- Follow the machine manufacturer's isolation and lock-out procedures.
- Isolate electrical power where required.
- Take appropriate precautions when handling contaminated filters.
- Wear the required PPE for the contaminants that may be present on the machine or within the filters.
- Do not operate the machine or pressuriser with protective components removed unless the applicable diagnostic procedure specifically requires it and it is safe to do so.

If the fault cannot be identified using this procedure, refer to the applicable Cleancab diagnostic procedure or contact Cleancab technical support before replacing components unnecessarily.