

CLEANING AND OVERPRESSURE TIGHTNESS CHECK OF ELECTROPNEUMATIC AND PNEUMATIC VALVES

Operation codes :

- Operation Code: 213166 - Cleaning of valve seat of main electropneumatic outflow valve
- Operation Code: 213196 - Cleaning of valve seat of emergency pneumatic outflow valve
- Operation Code: 213167 - Check of overpressure tightness of main electropneumatic outflow valve
- Operation Code: 213197 - Check of overpressure tightness of emergency pneumatic outflow valve
- Operation Code: **213081** - **Check of overpressure relief valve vacuum supply lines**

Logistics

1. Refer also to maintenance procedures
 - **21-301, 21-302**
2. Tools and equipment
 - **TOOL BOX**
 - ◆
 - Chronometer **SPECIAL TOOLS**
3. Additional spare parts: (if necessary)
 - Pipe P/N: [FGFB722404180](#)
 - OR
 - Pipe P/N: [FGFB722404190](#)
4. Ingredients and consumable products
 - **aliphatic naphtha**
 - ◆
 - **mineral vaseline**
5. Miscellaneous
 - **PRESSURE GAUGE CAPABLE OF 3 PSI MAX. (Local procurement) Qty:2**
 - HOSE (Local procurement)
 - LOW-PRESSURE SOURCE OF AIR (Local procurement)
 - OR
 - NITROGEN SOURCE (Local procurement)
 - PRESSURE REDUCER (Local procurement)
 - ◆
6. Energy
 - PNEUMATIC
7. Access
 - **850AL**

Overview of the procedure

This procedure is used independently to:

- clean the valve seat of main electropneumatic or emergency pneumatic outflow valves (**4HP**)/(**5HP**),



FALCON 900 MAINTENANCE MANUAL

- check the tightness of the overpressure protection capsule in the manometric box of main electropneumatic or emergency pneumatic outflow valves (4HP)/(5HP),
- check the overpressure relief valve vacuum supply lines.

NOTE: To check the tightness of the overpressure protection capsule, an air data bench connected to the manometric box can be used instead of a low-pressure source of air equipped with a pressure gauge capable of 3 psi max. and a pressure reducer.

Cleaning of main electropneumatic or emergency pneumatic outflow valves (4HP)/(5HP)

1. Remove main electropneumatic outflow valve (4HP) (refer to procedure 21-302) or emergency pneumatic outflow valve (5HP) (refer to procedure 21-301).

NOTE: When a regulation valve is removed, if there is a large nicotine deposit, also clean the valve seat of the other regulation valve.

WARNING: THE CLEANER MUST BE HANDLED WITH CARE. IT IS RECOMMENDED TO AVOID CONTACT WITH SKIN AND TO REMOVE POISONOUS VAPORS BY SUCTION AT THE SOURCE.

CAUTION: DO NOT SPILL CLEANER ON ELECTRICAL PARTS.

2. Clean the metal parts with **aliphatic naphtha**.
3. Dry with clean and dry source of air.
4. Visually check the condition of the "EXT" static pressure line.
5. If a crack is detected on the line, replace the line.
6. Install main electropneumatic outflow valve (4HP) (refer to procedure 21-302) or emergency pneumatic outflow valve (5HP) (refer to procedure 21-301).

Check of overpressure tightness of main electropneumatic or emergency pneumatic outflow valves (4HP)/(5HP)

REF. FIG. 1

1. Remove the ceiling trim panel of the rear lavatory compartment to gain access to the outflow valves at the upper part of frame 25 above the baggage compartment door.

CAUTION: WHEN DISCONNECTING THE "EXT" STATIC PRESSURE LINE, HOLD THE COUPLINGS WITH A SUITABLE 19-MM WRENCH.

2. Remove the "EXT" static pressure line from the manometric box.
3. Visually check the condition of the "EXT" static pressure line.
4. If a crack is detected on the line, replace the line.
5. Connect a pressure gauge capable of 3 psi max. to the "EXT" static pressure inlet (see figure 1).

CAUTION: IT IS STRICTLY PROHIBITED TO CONNECT A SOURCE OF AIR DIRECTLY TO THE MANOMETRIC BOX INLET. THE SOURCE OF AIR MUST BE FITTED WITH A PRESSURE GAUGE AND A PRESSURE REDUCER.

6. Connect the hose of the low-pressure source of air equipped with a pressure gauge capable of 3 psi max. and a pressure reducer to the manometric box inlet (refer to figure 1).

NOTE: As low pressure is used, the hose can be held by hand during this check.

CAUTION: DO NOT EXCEED A MAXIMUM PRESSURE OF 52 HPA (0.75 PSI).

7. Slowly open the low-pressure source of air and increase the pressure to 50 ± 2 hPa (0.72 ± 0.03 psi).
8. Start the chronometer.
9. After 1 minute, check that the pressure read on the pressure gauge connected to the "EXT" static pressure inlet is less than 40 hPa (0.58 psi).

NOTE: If the pressure is less than 40 hPa (0.58 psi), the overpressure protection capsule is in good condition. In this case, perform the steps 10 to 16.
If the pressure is greater than or equal to 40 hPa (0.58 psi), the overpressure protection capsule is leaking. In this case, perform the step 17 alone.

10. Disconnect the pressure gauge from the "EXT" static pressure inlet.
11. Disconnect the hose from the manometric box inlet.
12. Before installing the "EXT" static pressure line, coat its threads and flared hole with **mineral vaseline** ♦.
13. Install the "EXT" static pressure line on the manometric box.

CAUTION: WHEN CONNECTING THE "EXT" STATIC PRESSURE LINE, HOLD THE COUPLINGS WITH A SUITABLE 19-MM WRENCH AND TIGHTEN THE LINES NUTS.

14. Tighten the line nut by hand until it comes into contact with the flared hole.
15. Tighten the line nut by 1/6 turn with a wrench.
16. Install the ceiling trim panel of the rear lavatory compartment.
17. If the overpressure protection capsule is leaking:
 - A. Disconnect the pressure gauge from the "EXT" static pressure inlet.
 - B. Disconnect the hose of the low-pressure source of air from the manometric box inlet.
 - C. Remove main electropneumatic outflow valve (4HP) (refer to procedure 21-302) or emergency pneumatic outflow valve (5HP) (refer to procedure 21-301) and send the failed regulation valve for repair to an approved repair center.
 - D. Before installing the regulation valve, repeat the test (steps 5 to 9).
 - E. Install main electropneumatic outflow valve (4HP) (refer to procedure 21-302) or emergency pneumatic outflow



FALCON 900 MAINTENANCE MANUAL

valve (5HP) (refer to procedure 21-301).

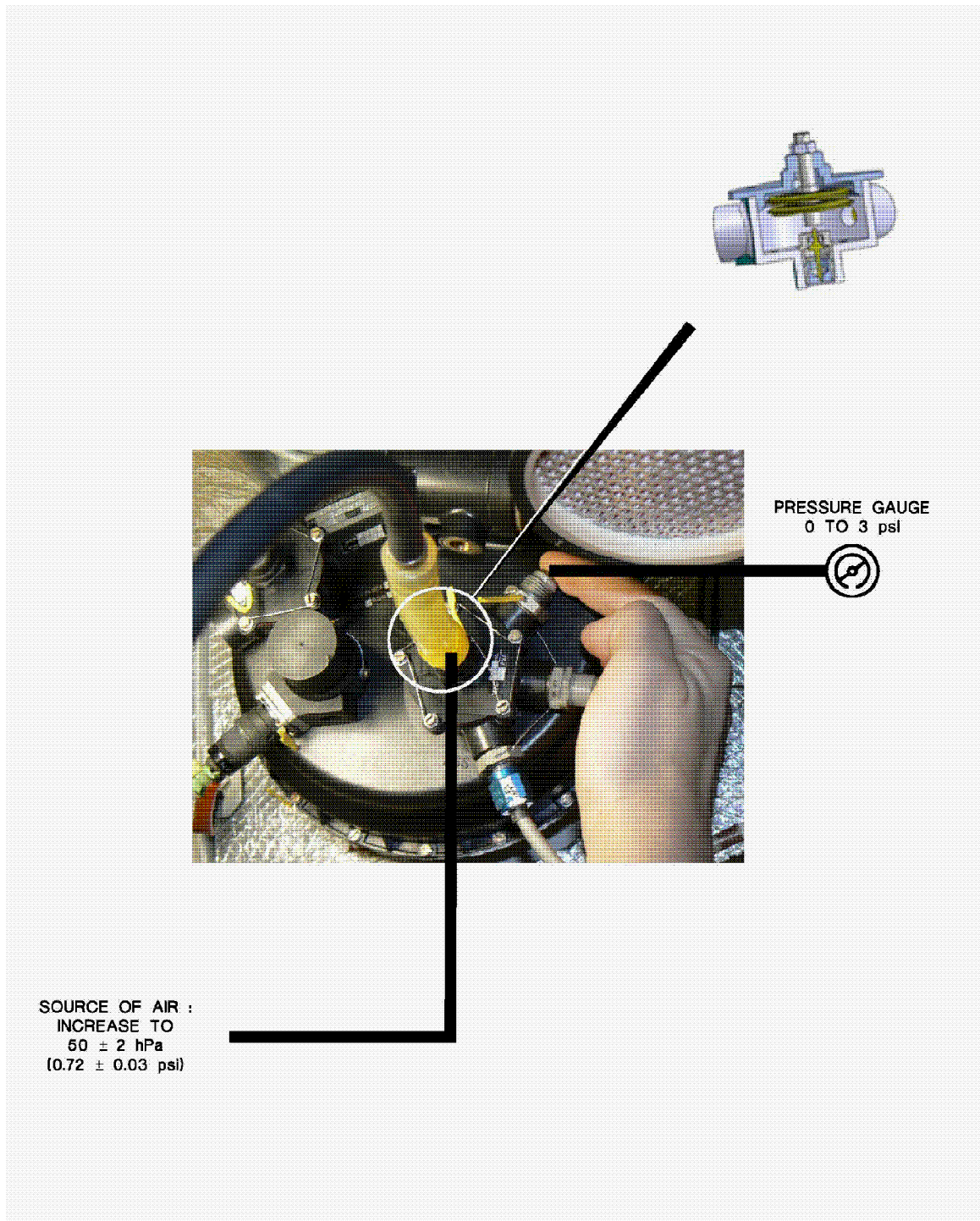
Check of overpressure relief valve vacuum supply lines

1. Remove the ceiling trim panel of the rear lavatory compartment to gain access to the outflow valves at the upper part of frame 25 above the baggage compartment door.

CAUTION: WHEN DISCONNECTING THE "EXT" STATIC PRESSURE LINE, HOLD THE COUPLINGS WITH A SUITABLE 19-MM WRENCH.

2. Remove the "EXT" static pressure lines.
3. Visually check the condition of the "EXT" static pressure lines.
4. If a crack is detected on a line, replace the line.
5. Install the "EXT" static pressure lines.
6. Install the ceiling trim panel of the rear lavatory compartment.

FALCON 900 MAINTENANCE MANUAL



Effectivity: ALL
Figure 1 Location of Manometric Box