

SERVICE BULLETIN NO. MSB 817-76

I. TECHNICAL DETAILS

1.1 Category:

Mandatory

Note: GROB issues Service Bulletins of category Mandatory (MSBs), if the information or instructions have a precautionary or safety intent either related to design or conformity and to publish revisions of manuals (AFM, AMM, IPC).

1.2 Airplanes affected:

G 109A / B S/N all

1.3 Time of Compliance:

This Service Bulletin becomes effective on 01 December 2025.

Part A: At next scheduled inspection

Part B: If damage to the Fuel Shut-off Valve Handle is found

1.4 Subject:

ATA-Code: 28-20 Fuel Distribution

Special Inspection and Replacement of Fuel Shut-off Valve

1.5 Reason:

This Service Bulletin is issued in response to a reported fuel supply interruption caused by the failure of the fuel shut-off valve handle. Investigation determined that the plastic handle cracked at the attachment point due to material degradation over time, resulting in a loss of fuel supply to the engine.

To mitigate the risk of in-flight engine power loss, this Service Bulletin mandates a Special Inspection of the installed fuel shut-off valve handle and provides instructions for replacing the valve assy with the latest design, which features an aluminium handle.

The configuration of the aircraft is affected by this Service Bulletin.

1.6 Concurrent documents:

Corresponding AMM and IPC

1.7 Approval Note:

The technical content of this document is approved under the authority of the DOA ref.

EASA.21J.030.

These information or instructions relate to change no. MCN817-087, which is approved under the authority of the DOA ref. EASA.21J.030.

1.8 Accomplishment/ Instructions

PART A Special Inspection of Fuel Shut-off Valve Handle

- 1.8.1 Make the aircraft safe for maintenance.
- 1.8.2 Remove the hexagon-shaped plastic cap from the fuel shut-off valve handle, refer to Figure 1. Keep the plastic cap.
- 1.8.3 Remove the nut, toothed washer and valve handle, refer to Figure 1. Keep all removed parts.

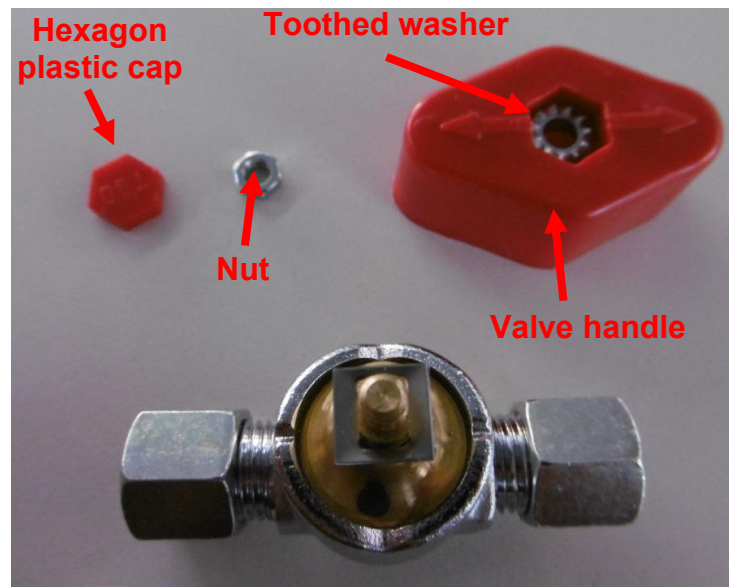


Figure 1

- 1.8.4 Inspect the valve handle for cracks at the attachment point.
 - If cracks are found, do PART B of this Service Bulletin.
 - If no cracks are found, continue with step 1.8.5.
- 1.8.5 Reinstall the valve handle using the previously removed toothed washer, nut and plastic cap. Apply thread-locking adhesive (item 2 of List 2.2) to the nut before installation.
- 1.8.6 Release the aircraft to service in accordance with national regulations.

PART B Replacement of Fuel Shut-off Valve

WARNING: DO NOT ALLOW AVIATION FUEL TO CONTACT SKIN. IT CAN CAUSE SKIN IRRITATION OR DISEASE

WARNING: KEEP OPEN FLAMES AND NON-FLAMEPROOF ELECTRICAL EQUIPMENT AWAY UNTIL ALL FUEL AND VAPORS HAVE FULLY DISPERSED

Caution: The centre console cover is made from ABS plastic, which is easily damaged by fuel. Clean any spilled fuel immediately.

Removal of fuel shut-off valve

1.8.1 Make the aircraft safe for maintenance.

Note: If a maintenance fuel shut-off valve is installed at the fuel tank, defueling is not required. In this case, unlock the valve and close it.

1.8.2 Defuel the aircraft.

1.8.3 Remove the nut, washer, knobs and bolt from the throttle control lever on the centre console.

1.8.4 Remove the trim lever grip.

1.8.5 Remove the hexagon-shaped plastic cap from the fuel shut-off valve handle.

1.8.6 Remove the nut, toothed washer and fuel shut-off valve handle. Discard all these parts.

1.8.7 Remove the screws retaining the plate below the handle and remove the plate.

1.8.8 Remove the LH and RH seats.

1.8.9 Unfasten the lap straps next to the console cover.

1.8.10 Remove the screws attaching the centre console cover and remove the cover.

1.8.11 Remove the screws on the centre console which hold the fuel shut-off valve bracket

1.8.12 Remove the fuel shut-off valve bracket.

1.8.13 Disconnect the fuel pipes from the fuel shut-off valve.

1.8.14 Remove the fuel shut-off valve and discard it.

Installation of fuel shut-off valve

1.8.15 Prepare the new fuel shut-off valve (item 1 of List 2.2):

- Make sure the handle arrows are 90° degrees (closed position) to the valve's inlet and outlet port.
- Remove the nut, the toothed washer and the handle from the valve. Keep these parts.

1.8.16 Connect the fuel pipes to the new valve body.

1.8.17 Install the valve body, the bracket and the screws to the centre console.

1.8.18 Temporarily install the handle and the nut to the fuel shut-off valve body. Set the handle to the **ON** position (arrows pointing in direction of the inlet and outlet port).

1.8.19 Refuel the aircraft or, if applicable, open the maintenance fuel shut-off valve.

1.8.20 Perform a fuel leak check by running the electrical fuel pump for 2 minutes.

1.8.21 Turn the handle to the **OFF** position (arrows pointing 90° to the inlet and outlet port).

1.8.22 Remove the handle and the nut again. Keep them.

1.8.23 Install the centre console cover, plate and screws.

1.8.24 Install the lap straps.

1.8.25 Install the LH and RH seats.

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| Caution: | To prevent the nut from loosening, apply thread-locking adhesive to the nut before installation. |
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1.8.26 Install the valve handle, toothed washer and nut using thread-locking adhesive (item 2 of List 2.2).

1.8.27 Install the trim lever grip.

1.8.28 Install the knobs, bolt, washer and nut to the throttle control lever on the centre console.

1.8.29 If installed, wire lock the maintenance shut-off valve in the **OPEN** position.

1.8.30 Perform an engine run and check that the fuel shut-off valve operates correctly:

- Verify normal fuel flow when the valve is in the **ON** position
- Verify the engine stops when the valve is in the **OFF** position

1.8.31 Release the aircraft to service according to national regulations.

1.9 Repetitive Actions

Part A of this Service Bulletin must be performed at every annual inspection until completion of Part B.

II. PLANNING INFORMATION

2.1 Weight and CG

N/A

2.2 Material and Availability

| Item | P/N | Description | Qty. / A/C |
|-------------|--|--------------------------------------|-------------------|
| 1 | 109-6249-1 | Fuel shut-off valve | 1 |
| 2 | GS513009 (Loctite 222 or Loctite 221) | Screw Locking Adhesive, low strength | AR |

2.3 Special Tools

N/A

2.4 Labor costs

N/A

2.5 Reference documents

N/A

2.6 Credit

N/A

III. REMARKS

The instructions in paragraph 1.8 have to be accomplished and certified in the logbook by authorized staff:

- in EASA countries according to EASA Part 66.
- in non-EASA countries according to national regulations with respect to maintenance.

If you have sold your aircraft in the meantime, we kindly ask you to forward this information to the new owner and to provide us with the name and address of the new owner as well as with the respective serial number.

For questions and assistance or in case of occurrence please contact:

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