



THE GLIDING FEDERATION OF AUSTRALIA

GFA AD 410
(ISSUE 1)

GFA AIRWORTHINESS DIRECTIVE

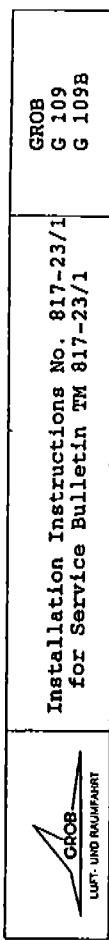
- TYPE AFFECTED:** Grob G 109 and G 109B all serial numbers.
- SUBJECT:** Replacement of the sealing piston in the fuel shut-off valve and inspection of the exhaust system.
- DOCUMENTATION:** Service Bulletin's TM 817-23/1 and TM 817-32 and Installation Instruction No. 817-23/1 which form part of this AD.
- ACTION REQUIRED:**
1. Before 31 January, 1995 the sealing piston in the fuel shut-off valve must be replaced in accordance with service bulletin TM 817-23/1.
 2. Within the next 25 flight hours or before 31 January, 1995 and at each annual inspection thereafter the exhaust system must be inspected in accordance with service bulletin TM 817-32.
- WEIGHT AND BALANCE:** Not affected
- IMPLEMENTATION:** Replacement of the sealing piston and inspection of the exhaust system must be done by persons rated "Inspection for issue of Maintenance Release" Grob G 109 or G 109B.
- COMPLIANCE:** The requirements of this GFA Airworthiness Directive are mandatory. This Directive is issued pursuant to the Rules and Regulations of the Gliding Federation of Australia.

SIGNED:

For and on behalf of:

**THE GLIDING FEDERATION
OF AUSTRALIA**

CHIEF TECHNICAL OFFICER AIRWORTHINESS



Service Bulletin
TM 817-23/1

G 109
G 109B

The Service Bulletin TM 817-23/1 is a new issue of the Service Bulletin TM 817-23 dated July 10, 1987.

Subject: Exchange of the sealing piston in the fire cock

Concerning: G 109 all S/N's
G 109B all S/N's

Urgency: 31 December 1992 at the latest

Procedure: The Service Bulletin TM 817-23 already details the exchange of the sealing piston in the fire cock. Based on further improvements of the sealing material, a new sealing piston will be sent to all G 109 / G 109B customers. The exchange is mandatory as a precautionary action.

Actions: The exchange of the sealing piston must be performed according to the Installation Instructions No. 817-23/1

Material: The sealing piston including the Installation Instructions will be sent with the Service Bulletin free of charge.

Weight and Balance:

1. The action must be carried out by a competent person or an authorized aviation workshop and has to be certified in the logbook by an authorized inspector.
2. If you have sold your aircraft in the meantime, we kindly ask you, to pass this information immediately to the new owner and forward his address and aircraft s/n to us.

Mattsies, 01 September 1992

LBA APPROVED

The German original of this Service Bulletin has been approved by the LBA on the 17. September 1992 and is signed by Mr. U. Kopp.
The translation has been accomplished to our best knowledge and judgement. In case of doubt, the German original is authoritative.

Dipl.Ing. J. Altmann
(Airworthiness engineer
Certification staff)

The Installation Instruction No. 817-23/1 is part of Service Bulletin TM 817-23/1 and contains the exchange of the sealing piston in the fire cock.

Material: - 1 complete sealing piston

Tools: - Standard set of tools

Procedure:

Caution! Pay attention, that during the exchange the maximum fuel content is below 1/3 to prevent the fuel running out. If required, drain the fuel tank!

1. Close fire cock.
2. Remove hexagon cap from the fire cock handle.
3. Remove locking nut from the fire cock handle, remove fire cock handle.
4. Remove housing insert. Remove sealing piston and the spring of the fire cock.
5. Install new sealing piston.

Notes:

- a. Reassemble in reverse sequence.
- b. During reassembling the housing insert must be pushed downwards against the spring force.
- c. Apply a yellow spot of paint on the fire cock housing, so it can be checked during later inspections, whether the new sealing piston is installed.

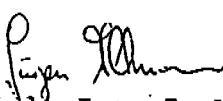
6. Perform an engine ground test and check tightness and function of the fire cock.

The correct exchange of the sealing piston must be certified in the log book by an authorized inspector.

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 LUFT- UND RAUMFAHRT	Service Bulletin TM 817-32	GROB G 109 G 109B		
<p>Subject: Inspection of the exhaust system</p> <p>Concerned: G 109 / G 109B all S/N's</p> <p>Urgency: Within the next 25 flight hours or by 31.12.1992</p> <p>Procedure: After long service, some isolated leakage has been detected on G 109 / G 109B exhaust systems.</p> <p>Actions: To prevent exhaust fumes leaking into the cockpit through the heating system an inspection is mandatory:</p> <ol style="list-style-type: none"> 1. The exhaust system must be carefully checked and inspected visually, with the heat exchanger removed, for obvious leakage (cracks, corrosion, especially in the area of the welds, connections and fastenings) according to the above urgency. 2. The inspection will become part of the "Periodic Inspections" and has to be repeated during each 100 flight hours inspection. If leaks caused are detected, the exhaust system must be replaced immediately. For possible repairs of minor corrosion damage contact GROB. 3. The concerned pages of the Maintenance Manual will be corrected during the next revision. <p>Weight and Balance: not affected</p> <p>Remarks:</p> <ol style="list-style-type: none"> 1. In general the installation of a carbon monoxide detector (e.g. DEAD STOP order no. 45.146, Friebe Flugbedarf company) in the cockpit is recommended. 2. The first inspection must be carried out by a competent person or an authorized aviation work shop and certified in the log book by an authorized inspector. 3. If you have sold your motorglider in the meantime, would you kindly pass this information on to the new owner and forward his name and address and aircraft s/n to us. <p>Mattsies, 18 September 1992 <u>LBA approved</u>  Dipl.-Ing. J. Altmann (Airworthiness engineer certification staff)</p> <p>This Service Bulletin was originally written in German and approved by the German LBA on the 29 September 1992 and is signed by Mr. U. Kopp. The translation has been accomplished to best of our knowledge and judgement. In case of doubt, the German original is authoritative.</p>				
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