I. TECHNICAL DETAILS

1.1 Category:
Optional

1.2 Aircraft affected:
TCDS: 817 FAA TCDS: G34EU
G 109B S/N 6501 – 6575 (ÄM817-11, military version “Vigilant” use only)

1.3 Time of Compliance:
On holders discretion

1.4 Subject:
ATA - Code: 23-50 Audio Integrating

1.5 Reason:
On customer request the optional installation of Mute Switch P/N 115E-9902E into the centre instrument panel is approved. The installation is approved only for the use in combination with the BECKER AR3201 radio.
Revision 1 alters the connection to the module rail.

1.6 Concurrent documents:
Wiring diagram : - 109B-LP-93116 rev. a Instrument Lights
- 109B-LP-93500 rev. b COM (BECKER) AR 3201
- 109B-LP-93131 rev. b Module rail VV1

1.7 Approval Note:
These information or instructions relate to change no. OÄM817-15a which has been approved under the authority of EASA Design Organisation Approval No. EASA.21J.030.
The technical information contained in this document has been approved under the authority of OÄM817-15a.
1.8 Accomplishment / Instructions

1.8.1. Ensure that the aircraft is safe for parking I.A.W. AP 101G-1101-1 Chap. 8.

1.8.2. Remove the panel P/N 109B-7000.16E including ignition switch and all other toggle switches and plastic angle P/N 109B-9017 from the centre instrument panel.

1.8.3. Remove ignition switch and all other toggle switches from the plate. They are needed for re-installation. Discard plate 109B-7000.16E and plastic angle P/N 109B-9017 (between top row of toggle switches and transponder unit).

1.8.4. Unscrew ring tongue terminal from pin 1 (LG 1F20) of Instrument Light Switch 2LD and reassemble the ring tongue terminal together with the new ring tongue terminal (RZ 3F20) from the new Mute Switch harness back to the Instrument Light Switch 2LD.

1.8.5. Install all toggle switches together with plastic angle P/N 109B-7000.32 (to achieve the necessary insulation between toggle switch connection and transponder unit) and the ignition switch into the new plate P/N 109B-7045E in the correct arrangement i.a.w. figure below. In case, the Landing Light switch has 6 tongues, remove the bottom 2 tongues. Rework the hole for the fuel pump of plastic angle 109B-7000.32 to fit with hole in plate 109B-7045E.
1.8.6. Install mute switch P/N 115E-9902E with yellow lens cover fitted to the plate. Replace filament by tail nav filament.

1.8.7. Remove RH instrument panel.

1.8.8. Disconnect transceiver BECKER AR 3201 (2RV-a). Therefore remove radio and transponder for access, if required.

1.8.9. Connect the coloured housing of the new preassembled wire harness for the MUTE SWITCH in accordance with wiring diagram 109B-LP-93500 to the new MUTE SWITCH.
- black housing to Pin 1
- white housing to Pin 2 and Pin 4
- yellow housing to Pin on the lamp holder
Correct arrangement i.a.w. figures below.

Route the wire harness along existing harness to:
- The Module Rail VV1. Fit bullet contact to pin 2B of VV1 (RZ 2F20N) from the new Mute Switch harness.
- The Radio connector 2RV-a. Open backshell of 2RV-a (parts are needed for reinstallation) and fit cable RZ 1F20 into pin 8 of the connector 2RV-a.
- Reassemble the backshell of 2RV-a.

G 109B Vigilant

Grob Aircraft AG; Lettenbachstrasse 9; 86874 Tussenhausen-Mattsies
1.8.10 Fasten wire harness along the existing cable routing with tie-raps. Wire to 2RV-a should be installed inside existing loom sheathing.

1.8.11 Reconnect 2RV-a to the BECKER RADIO AR 3201. Reinstall radio and transponder.

1.8.12 Reinstall RH instrument panel.

1.8.13 Install plate P/N 109B-7045E to the centre instrument panel.

1.8.14 Restore electrical power.

1.8.15 Perform a functional check of all disconnected systems, including transponder and transceiver BECKER AR3201 (AP101G-1101-126)

1.8.16 Perform a special functional check of the mute switch after embodiment and inspection:

- The radio reception shall be tested with both Mute Switch settings. The reception of radio calls shall be unimpaired with the Mute Switch in OFF position (Mute Switch light off). With the Mute Switch in ON position (Mute Switch light on), the reception radio calls shall be inaudible. The Mute Switch setting shall not take effect on the transmission quality or the intercom function.

NOTE: A flight trial is not required to prove satisfactory installation.

1.9 Repetitive Actions

None.

1.10 Mass (Weight) and CG:

The additional weight is approx. 100 g.
II. PLANNING INFORMATION

2.1 Material & Availability:

<table>
<thead>
<tr>
<th>Item</th>
<th>P/N</th>
<th>Description</th>
<th>Qty.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>109B-7045E</td>
<td>Plate</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>115E-9902E</td>
<td>Mute Switch</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>109B-7000.32</td>
<td>Angle</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>109B-41VB</td>
<td>Mute Switch harness</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>M39029/63-368</td>
<td>Female contact</td>
<td>1</td>
</tr>
</tbody>
</table>

2.2 Special Tools:

N/A

2.3 Labour costs:

Modification: approx. 8 hours

2.4 Reference documents:

N/A

2.5 Credit:

N/A

III. REMARKS

3.1 The execution of the instructions has to be performed by an authorized aviation workshop and has to be certified in the logbook by an authorised inspector.

3.2 The Maintenance Manual and Illustrated Parts Catalogue will be amended with the next revision to reflect the changes.

3.3 If you have sold your aircraft in the meantime, would you kindly pass this information on to the new owner and forward his address and aircraft S/N to us.

3.4 For questions and assistance please contact:

Rudolf Vodermeier, Head of Customer Service & Support
Tel.: +49 8268 998139
Fax: +49 8268 998200
e-mail: productsupport@grob-aircraft.com
website: www.grob-aircraft.com