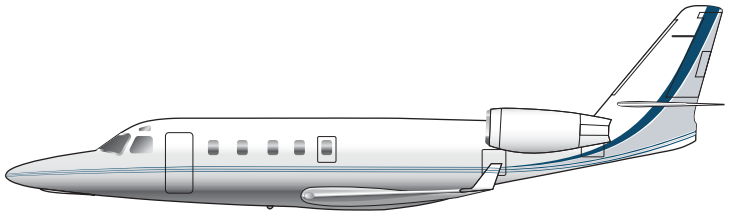
Gulfstream G100



SERVICE BULLETIN

NUMBER 100-52-312

SUBJECT

DOORS (ATA 52) – MAIN ENTRY DOOR (MED) – AIRSTAIR – INTERNAL MICROSWITCH ADJUSTMENT

JANUARY 15, 2016

Gulfstream®
AEROSPACE LP

SERVICE BULLETIN

DOORS - MAIN ENTRANCE DOOR (MED) - AIRSTAIR - INTERNAL MICROSWITCH ADJUSTMENT

PLANNING INFORMATION

1. Effectivity

Aircraft serial numbers 004, 011 through 158

2. Concurrent Requirement

None

3. Reason

Subsequent to a recent event in which the Main Entrance Door (MED) of an Astra aircraft opened during flight, a detailed review of the door rigging and operation determined that, in certain instances, the CABIN DOOR warning light on the annunciator panel may extinguish before the handle latch pin is fully engaged. We have identified an improved switch adjustment that will extinguish the warning light only after the handle latch pin is fully engaged.

4. Description

This Service Bulletin provides instructions to adjust the MED internal microswitch in accordance with improved procedures.

5. Compliance

Compliance with this Service Bulletin is mandatory at the next suitable planned maintenance period within the next 24 months from the original release date of January 15, 2016.

6. Approval

This Service Bulletin has been reviewed by the Civil Aviation Authority of Israel (CAAI). The design content herein complies with the applicable Civil Aviation Regulations and is CAAI approved.

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7. Manpower

The following information is for planning purposes only:

Estimated labor-hours: 6

8. Weight and Balance

Negligible

9. Weight and Balance

Negligible

10. Electrical Load Data

No change

11. Software Accomplishment Summary

None

12. References

G100 Aircraft Maintenance Manual (AMM), Chapters 20 and 24
Gulfstream Aerospace LP G100 TC design change MOD G1-10047

NOTE: This Service Bulletin incorporates design data approved under G100 TC design change and MOD G1-10047 for installation on the standard type certificated aircraft. Approval for any deviation from the instructions contained in this service bulletin should be obtained, if required, from the local regulatory authority in accordance with the local relevant regulations.

13. Other Publications Affected

G100 AMM, Chapter 52
G100 Illustrated Parts Catalog (IPC), Chapter 52

NOTE: Data concerning this Service Bulletin will be published in a future revision of the affected manual(s). This Service Bulletin will provide technical data until the revisions are published.

14. Interchangeability or Intermixability of Parts

None

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MATERIAL INFORMATION

1. Material - Price and Availability

The parts required to accomplish this Service Bulletin are available by contacting Spare Parts Sales at 800-810-GULF (4853) or 912-965-4178.

2. Warranty Coverage - Component

None

3. Material Necessary for Each Aircraft

A. Material to be Procured:

New P/N	Keyword	Old P/N	Qty
NAS1149G0832P	Washer (0.032 inch thick)		3 or (A/R)
NAS1149G0816P	Washer (0.016 inch thick)		2 or (A/R)

B. Materials Supplied by Operator:

New P/N	Keyword	Old P/N	Qty
MS20995C32	Safety Wire		A/R

None

4. Reidentified Parts

None

5. Special Tooling

None

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ACCOMPLISHMENT INSTRUCTIONS

CAUTION: PROTECT WIRE BUNDLES, CONNECTORS AND SURROUNDING STRUCTURE DURING ANY MAINTENANCE PROCEDURES FROM SHAVINGS, DEBRIS AND CONTAMINATION. MAINTAIN A PROPERLY CLEANED WORK AREA THROUGHOUT THE PROCEDURE TO ENSURE THE INTEGRITY OF THE AFFECTED COMPONENT/SYSTEM. VISUALLY INSPECT WORK AREA USING ADDITIONAL LIGHT AS NECESSARY TO VERIFY ABSENCE OF ANY DEBRIS PRIOR TO COMPLETION OF PROCEDURE. FAILURE TO COMPLY MAY RESULT IN DAMAGE TO COMPONENTS AND/OR SYSTEMS.

1. Prepare aircraft for safe maintenance. Refer to AMM, Safe Ground Maintenance Procedure, Chapter 20.

2. Connect electrical power to aircraft. Refer to AMM, Chapter 24.

3. Perform door airstair inner microswitch (3) updated rigging adjustment procedure as follows (refer to Figure 1):

   A. Open door and remove access panel 118 from door to access the inner door microswitch (3). Refer to Figure 1, Sheet 1 and 2.

   B. Pull, tag and install safety clip on Circuit Breaker (CB) 6L on left DC power box in equipment compartment. Refer to AMM, Chapter 24.

   C. Remove safety wire from jam nut (2). Refer to Figure 1, Sheet 2.

   D. Hold microswitch (3) securely and remove jam nut (2) at bracket (4). Refer to Figure 1, Sheet 2.

      NOTE: Depress lever on aft side of door and rotate in order to actuate handle without closing the door.

      NOTE: CABIN DOOR warning circuit requires both switches be depressed to indicate. Door switch on airframe must be manually depressed to simulate complete circuit.

      NOTE: Additional washers, P/N NAS1149G0832P and P/N NAS1149G0816P between microswitch, 276H, and bracket are installed in addition to existing washers.

   E. Add washers (1), P/N NAS1149G0832P and NAS1149G0816P between microswitch (3) and bracket (4), so that when the door handle is rotated to the locked position the CABIN DOOR UNLOCK light on EICAS should be illuminated. Tighten jam nut (2) after each installation of additional washer. Refer to Figure 1, Sheet 2.

F. Remove washers, P/N NAS1149G0816P, one by one until a combination is obtained that, when the door is closed and the handle latch pin is fully engaged within the stirrup channel, the CABIN DOOR warning light on the annunciator panel is extinguished. Refer to Figure 1, Sheet 2, Detail D.

CAUTION: THE OVERRIDE TOGGLE LEVER ON AFT SIDE OF DOOR MUST BE DEPRESSED IN ORDER TO MOVE HANDLE TO LOCKED POSITION WITHOUT CLOSING DOOR. FORCING HANDLE MOVEMENT WITHOUT CLOSING DOOR OR DEPRESSING OVERRIDE TOGGLE LEVER MAY RESULT IN DAMAGE TO DOOR.

NOTE: After each removal, make sure that the microswitch is firmly placed and tightened.

NOTE: An equivalent to removing a P/N NAS1149G0816P, 0.016 inch thick, may be removal of one washer P/N NAS1149G0832P, 0.032 inch thick washer, and adding back one P/N NAS1149G0816P, 0.016 inch thick.

G. Depress lever on aft side of door and rotate the handle towards the unlocked position until it contacts the stirrup. Ensure the CABIN DOOR warning light on annunciator panel is not illuminated. Refer to Figure 1, Sheet 3.

H. Remove one more additional washer (1), P/N NAS1149G0816P, 0.016 inch thick.

I. Verify the CABIN DOOR warning light on annunciator panel extinguishes only after the stirrup has come up and the handle latch pin is fully engaged in the stirrup channel. Refer to Figure 1, Sheet 2.

(1) If CABIN DOOR warning light is illuminated, add back the washer (1), P/N NAS1149G0816P that was removed in Step 3.H. above.

J. Depress lever on aft side of door an rotate the handle towards the unlocked position until it contacts the stirrup. Ensure the CABIN DOOR warning annunciator is not illuminated. Refer to Figure 1, Sheet 3.

K. Remove safety clip, tag and depress CB 6L that was pulled in Step 3.B.

L. Verify that the inner handle is rotated back to UNLOCKED position. Rotate handle to locked position and verify that handle is locked at the end of travel.

M. Ensure CABIN DOOR warning light on annunciator panel is extinguished.

N. Secure jam nut (2) with safety wire, P/N MS20995C32. Refer to Figure 1, Sheet 2.

O. Disconnect electrical power from aircraft, Refer to AMM, Chapter 24.

4. Ensure all work areas are clean and clear of foreign objects (FOD).

5. Reinstall access panel 118 on MED previously removed in Step 3.A.

6. Record compliance with this Service Bulletin in the aircraft's permanent maintenance records and return aircraft to flight status.

7. Report compliance with this service bulletin to Gulfstream Computerized Maintenance Program (CMP) by uploading the attached service reply card, along with the CMP task card(s) sign-off using MyGulfstream, MyCMP Document Upload or e-mail to cmp.docproc@gulfstream.com or fax to Gulfstream CMP at 800-944-1775 or 912-963-0265.

   If technical assistance is required, contact your area Gulfstream Field Service Representative or call Gulfstream Customer Support at 800-810-GULF (4853) or 912-965-4178 (fax 912-965-4184).

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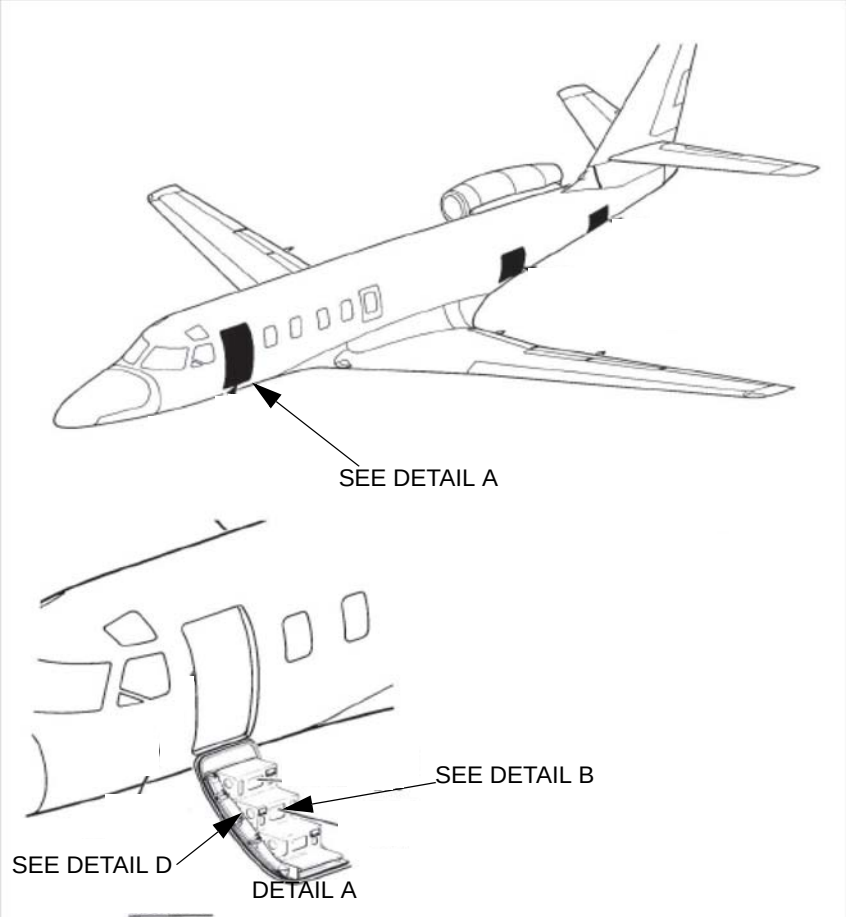
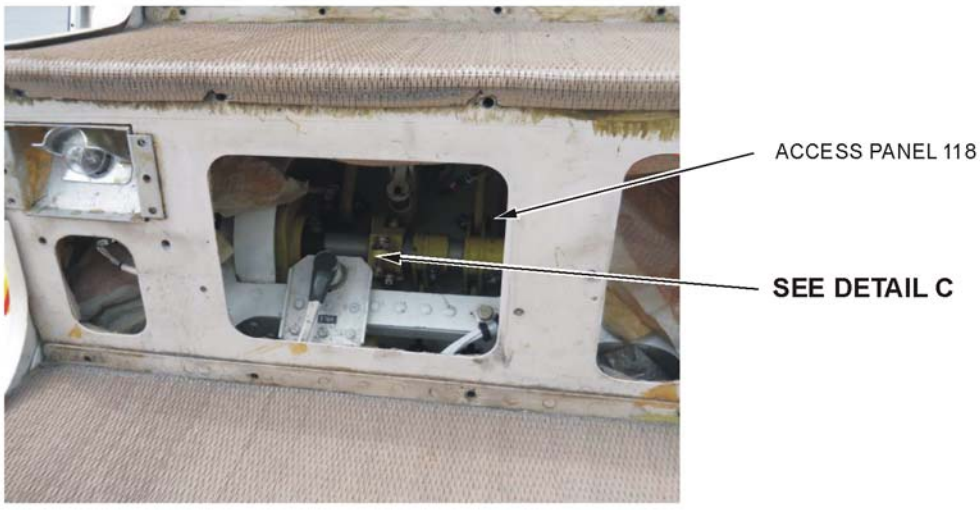
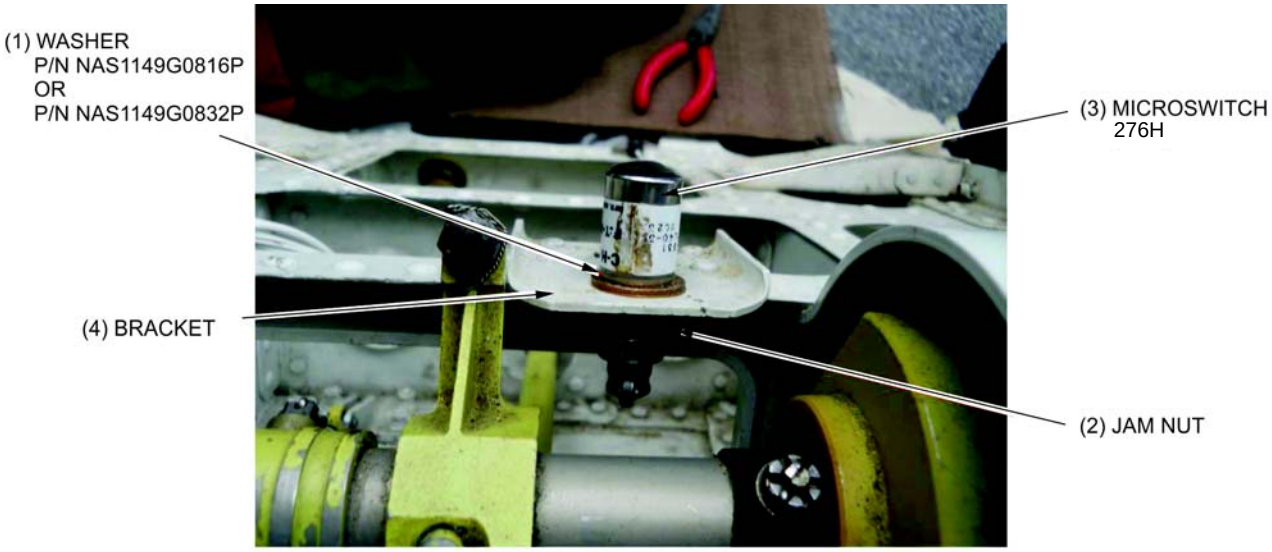




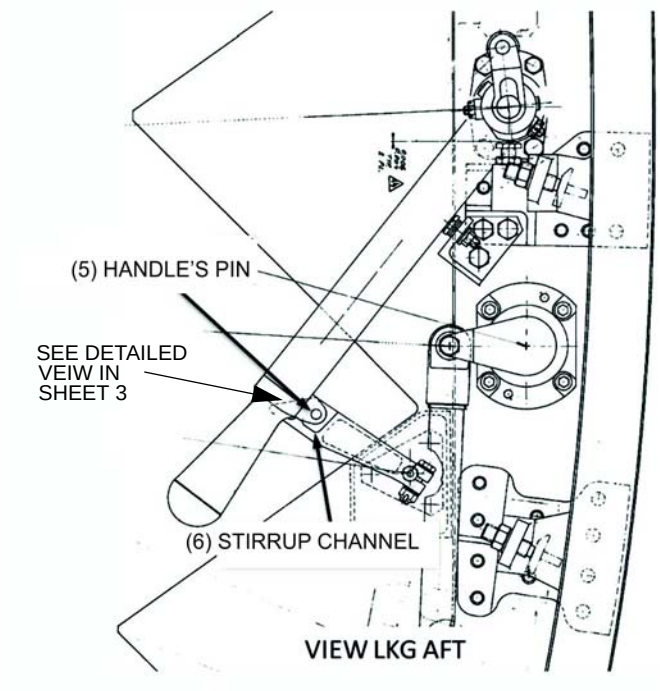
DETAIL B

Door Airstair Internal Microswitch (276H) - Adjustment
Figure 1 (Sheet 1)

SERVICE BULLETIN



DETAIL C

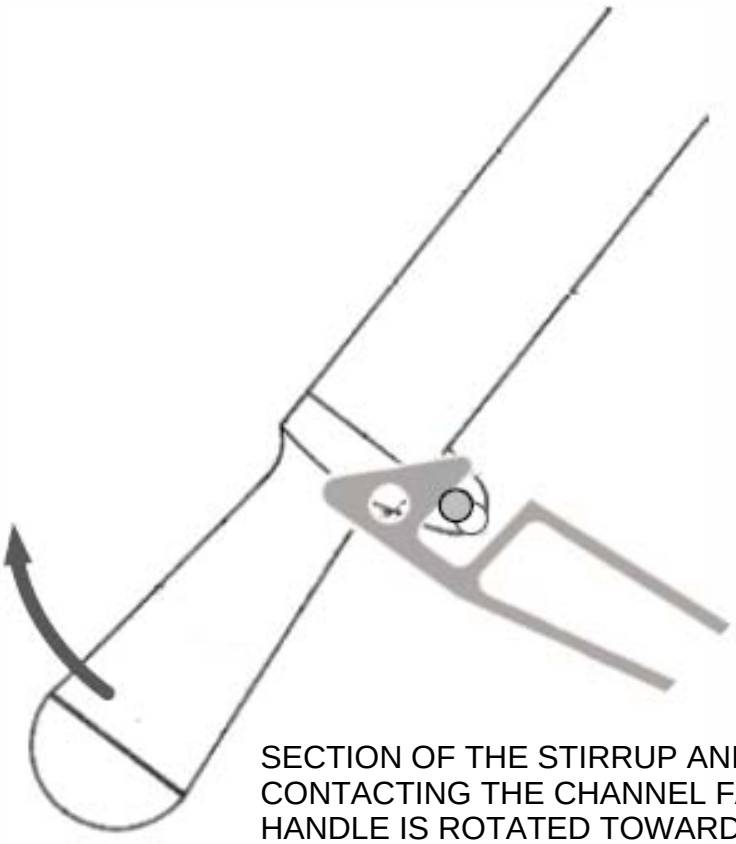


DETAIL D
HANDLE'S PIN LOCATED IN THE STIRRUP CHANNEL

SB150-52-188-001-S02

Airstair Door Internal Microswitch (276H) - Adjustment
Figure 1 (Sheet 2)

SERVICE BULLETIN



SECTION OF THE STIRRUP AND PIN CONTACTING THE CHANNEL FACE WHEN HANDLE IS ROTATED TOWARDS THE UNLOCKING POSITION

Airstair Door Internal Microswitch (276H) - Adjustment
Figure 1 (Sheet 3)

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SERVICE REPLY CARD

Please upload this page, along with the CMP task card(s) sign-off using MyGulfstream, MyCMP Document Upload, or e-mail to cmp.docproc@gulfstream.com or fax to Gulfstream CMP at 800-944-1775 or 912-963-0265.

The following Service Bulletin (SB) has been addressed:

SB CMP NUMBER	A/C	AIRCRAFT TYPE	COMPLIANCE DATE
983120		Gulfstream G100	

Aircraft Hours _____
Aircraft Landings_____

This Service Bulletin is not applicable because:

_____Serial Number not affected
_____Equipment not installed
_____Previously complied with (annotate method of compliance below)
_____Other (explain reason below)

SIGNATURE	TITLE / CERTIFICATE NUMBER	COMPANY

COMMENTS / SUGGESTIONS / ACTIONS TAKEN:

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