SB-GA8-2019-187

Issue 1

OPTIONAL

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Service Bulletin

Subject

Electrical Cover Assembly Sealing

Applicability

This Service Bulletin is applicable to the aircraft serial numbers identified in Table 1.

Table 1: Applicability

AIRCRAFT MODEL	AIRCRAFT SERIAL NUMBERS	
GA8	-	
GA8-TC 320	GA8-TC-320-13-198, GA8-TC-320-15-218, GA8-TC-320-15-224, GA8-TC-320-16-229, GA8-TC-320-16-232, GA8-TC-320-16-234, GA8-TC-320-18-246	

Amendments

Issue 1: Initial Issue.

Background

Two of the main electrical bays of the GA8 are located within the floor structure of the aircraft between the pilot's seat and the control column. These are known as the "Solenoid Box" and "Battery Box" and, for the aircraft included by this Service Bulletin, they are share a single cover – the P/No. GA8-246013-011 "Electrical Cover Assembly".

One operator has reported that fluid may enter these bays in the case of fluid spillage within pilot's footwell area of the cabin. This OPTIONAL Service Bulletin provides a means for sealing the compartment via installation of gaskets, preventing such leakage.

Two different methods are allowed by this Service Bulletin. The first moulds the gasket in-situ using RTV sealant while the second uses vinyl foam tape; these are detailed as "Option A" and "Option B" respectively of the Accomplishment Instructions detailed below. Operators may select their preferred method.

Compliance

This modification may be installed at the owner's discretion.

Weight and Balance

There is no effect to the weight and balance of the aircraft as a result of this Service Bulletin.

Approval

This Service Bulletin has been approved in accordance with the requirements of Australian Civil Aviation Safety Regulation 21.095 (1998). GippsAero Reference GAE11#2420.

Parts

The materials required to complete this Bulletin are detailed in Table 2.

Table 2: Materials Required

Item	Part Number	Description	Quantity Per Aircraft	Notes
01	-	General purpose, non-acidic silicone sealant such as Dow Corning 747 RTV.	As Required	Option A OnlyDo not mix products of different brands.Colour: Grey
02	DEC1806 1IN	Self-Adhesive Vinyl Foam Tape 1/16 in Thick x 1 in Wide	As Required	Option B OnlySupplied by Textron Aviation.

Parts Availability:

Parts can be sourced locally by operators or obtained directly from GippsAero.

Tel: +61 (0)3 5172 1200 Fax: +61 (0)3 5172 1201

Email: aircraft.parts@mahindraaerospace.com

Labour

- 2 man hours should be allocated for completing the work detailed in this Service Bulletin.

These estimates <u>do not</u> include drying time, nor time required to do normal maintenance preparation or to set up equipment.

Continuing Airworthiness

There are no new or additional continuing airworthiness requirements introduced by this Service Bulletin.

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Accomplishment Instructions - Option A.

WARNING:

IT IS THE RESPONSIBILITY OF ALL PERSONNEL TO ENSURE WORK HEALTH AND SAFETY REQUIREMENTS ARE MET AT ALL TIMES. ALL PERSONNEL MUST COMPLY WITH ALL WORK HEALTH AND SAFETY REQUIREMENTS AS DEFINED OR RECOMMENDED BY:

- AIRCRAFT MAINTENANCE AND OPERATION MANUALS;
- RELEVANT NAA REGULATIONS AND ADVISORY DOCUMENTATION;
- ORGANISATION MANUALS, INCLUDING NAA ENDORSED OPERATIONAL AND MAINTENANCE MANUALS; AND
- RELEVANT LOCAL, STATE AND FEDERAL GOVERNMENT REQUIREMENTS.

WARNING:

READ THE APPLICABLE MATERIAL SAFETY DATA SHEET (MSDS) FOR ANY CONSUMABLE USED DURING THE ACCOMPLISHMENT OF THIS SERVICE BULLETIN AND EMPLOY ANY RECOMMENDED PERSONAL PROTECTIVE EQUIPMENT (PPE) CONTAINED THEREIN.

NOTE:

Unless otherwise specified, reference to the GA8 or GA8-TC 320 Service Manual and FAA Advisory Circular (AC) 43.13-1B & -2B should be made when carrying out the procedures prescribed in this Service Bulletin. In case of a discrepancy between the Service Manual and the AC, the Service Manual takes precedence.

- 1. The following process creates gaskets on the aircraft floor to seal the P/No. GA8-246013-011 "Electrical Cover Assembly". Option A moulds the gasket in-situ using RTV sealant.
- 2. Remove the pilot's seat and the floor covering from the pilot's footwell area in accordance with the aircraft's Service Manual.
- 3. Mask the floor surrounding the Electrical Cover Assembly using suitable painter's masking tape.
- 4. Remove the Electrical Cover Assembly.
- 5. Disconnect and remove the aircraft's battery in accordance with Chapter 24-00-10 of the applicable GA8-TC 320 Service Manual.
- 6. Discharge the internal capacitor in accordance with Chapter 24-00-00 of the applicable GA8-TC 320 Service Manual.
- 7. Inspect and verify that the ventilation / drainage openings in the bottom of the electrical equipment bays are unobstructed.
- 8. In 5 locations the Electrical Cover Assembly rests on screw heads used as a part of the Solenoid Box and Battery Box structure; these screws are not used to retain the Electrical Cover Assembly. Inspect each of the fasteners and, if required, use a small round file to enlarge the clearance holes in the Electrical Cover Assembly. This ensures that the fastener heads do not prevent the Electrical Cover Assembly from contacting the floor.
- 9. Clean the floor under the Electrical Cover Assembly using a suitable nil-residue cleaner, such as MEK or Prepsol.
- 10. Mask the inner border of the equipment bay and apply a suitable masking cover over the bay itself to prevent sealant from dropping into the bay. Masking paper or a thin piece of non-conductive material such as Perspex or cardboard may be used.
- 11. Apply a sufficient amount of sealant (Item 01, Table 2) to the un-masked portion of the floor.
- 12. Spray a strong detergent / water mix onto the Electrical Cover Assembly. Undiluted detergent, applied by hand, may also be used.
- 13. Place the Electrical Cover Assembly in position and secure using the normal fasteners. The fasteners should be tightened sufficiently to hold the cover in position but not so tightly that all sealant is squeezed out or the edges of the cover are excessively distorted.

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- 14. Using a gloved finger dipped in detergent, wipe off excess sealant from the perimeter of the equipment bay cover.
- 15. Wipe off any sealant in undesired locations such as atop the Electrical Cover Assembly or on the floor surrounding the job before it fully cures.
- 16. Allow the sealant to fully cure.
- 17. Unscrew and remove the Electrical Cover Assembly. A thin spatula, knife blade or similar may be used to ensure that the cover lifts cleanly from the sealant bed.
- 18. If necessary, the process detailed above may be used to create additional gaskets between other laminates in this area to ensure proper sealing.
- 19. Remove all masking materials.
- 20. Inspect the resulting gasket to ensure it is properly bonded to the floor and continuous around the complete Electrical Cover Assembly. Small blemishes or gaps may be touched-up using additional sealant (Item 01, Table 2).
- 21. Clean residual detergent and sealant from the Electrical Cover Assembly.
- 22. Re-install the battery, Electrical Cover Assembly, cockpit floor covering and pilot's seat in accordance with the aircraft's Service Manual.
- 23. Proceed to the documentation section of this Service Bulletin.

Accomplishment Instructions - Option B.

WARNING:

IT IS THE RESPONSIBILITY OF ALL PERSONNEL TO ENSURE WORK HEALTH AND SAFETY REQUIREMENTS ARE MET AT ALL TIMES. ALL PERSONNEL MUST COMPLY WITH ALL WORK HEALTH AND SAFETY REQUIREMENTS AS DEFINED OR RECOMMENDED BY:

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- 1. The following process creates gaskets on the aircraft floor to seal the underside of the P/No. GA8-246013-011 "Electrical Cover Assembly". Option B seals the cover using vinyl foam tape.
- 2. Remove the pilot's seat, floor covering and the Electrical Cover Assembly from the pilot's footwell area in accordance with the aircraft's Service Manual.
- 3. Disconnect and remove the aircraft's battery in accordance with Chapter 24-00-10 of the applicable GA8-TC 320 Service Manual.
- 4. Discharge the internal capacitor in accordance with Chapter 24-00-00 of the applicable GA8-TC 320 Service Manual.
- 5. Inspect and verify that the ventilation / drainage openings in the bottom of the electrical equipment bays are unobstructed.
- 6. In 5 locations the Electrical Cover Assembly rests on screw heads used as a part of the Solenoid Box and Battery Box structure; these screws are not used to retain the Electrical Cover Assembly. Inspect each of the fasteners and, if required, use a small round file to enlarge the clearance holes in the Electrical Cover Assembly. This ensures that the fastener heads do not prevent the Electrical Cover Assembly from contacting the floor.
- 7. Clean the underside of the Electrical Cover Assembly using a suitable nil-residue cleaner, such as MEK or Prepsol.
- 8. Apply the Vinyl Foam Tape (Item 01, Table 2) to the underside of the Electrical Cover Assembly as shown by the hatched areas of Figure 1.
- 9. Using a sharp knife, drill or similar, cut the Vinyl Foam Tape away from the fastening screw holes.
- 10. If necessary, the process detailed above may be used to create additional gaskets between other laminates in this area to ensure proper sealing.
- 11. Re-install the battery, Electrical Cover Assembly, cockpit floor covering and pilot's seat in accordance with the aircraft's Service Manual.
- 12. Proceed to the documentation section of this Service Bulletin.

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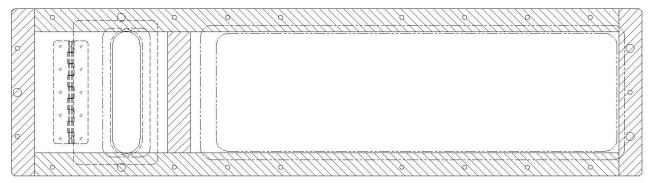


Figure 1: Vinyl Tape Application (View looking at the underside the Electrical Cover Assembly)

Documentation

Update aircraft log book to reflect incorporation of this Service Bulletin.

Compliance Notice

Complete the Document Compliance Notice and return to GippsAero by mail, fax or email.

DOCUMENT COMPLIANCE NOTICE



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Document:

SB-GA8-2019-187

Issue 1

Aircraft Serial Number:	GA8
Service Bulletin SB-GA8-2019-187	Issue 1 has been incorporated in the above aircraft.
Date of Incorporation:	
Signed	
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