



A Mahindra Aerospace Company

PO Box 881, Morwell, Victoria 3840, Australia
Ph + 61 (0) 3 5172 1200
Fax + 61 (0) 3 5172 1201
www.mahindraaerospace.com

SB-GA8-2018-184

Issue 2

OPTIONAL

Service Bulletin

Subject:

Improved dust filtration with installation of desert filter element in the primary engine air intake.

Applicability:

Table 1 – Applicability

AIRCRAFT	SERIAL NUMBER(s)
GA8	All GA8 Serial Numbers

Amendments:

Issue 1: Initial issue. GippsAero Reference GAE11#2343.

Issue 2: Detailed supplementary sealing instructions added. GippsAero Reference GAE11#2366.

Background:

This optional Service Bulletin approves the installation of a primary intake air filter element with improved filtration. GippsAero recommends aircraft operating in dusty environments or any operators that experience a higher than normal frequency of filter replacement incorporates this Service Bulletin.

Compliance:

The accomplishment instructions contained within this Service Bulletin are optional and maybe incorporated at the Owner's discretion.

The installer shall verify the suitability of this option in conjunction with existing modifications/repairs to the aircraft. Contact GippsAero if clarification is required.

Weight and Balance:

This modification has negligible effect to weight and balance.

Approval:

The modification described in this Service Bulletin has been approved pursuant to Aircraft Civil Aviation Safety Regulation 21.095 (1998).

Labour:

For Part A, approximately 75 minutes should be allocated for completing the work detailed in this Service Bulletin. For Part B, approximately 15 minutes should be allocated for completing the work detailed in this Service Bulletin.

Warranty:

This is an optional modification. Warranty is not applicable.

Parts and Materials:

Kit number SB-GA8-2018-184-01

Table 2 – Main Parts List

Item No.	PART No.	DESCRIPTION	QTY
21	BA-448E	GA8 DESERT FILTER	1

Table 3 – Consumables List

Item No.	PART No.	DESCRIPTION	QTY
31	PR-1422	SEALANT	A/R

Parts Availability:

Parts can be obtained directly from GippsAero.

Tel: +61 (0)3 5172 1200

Fax: +61 (0)3 5172 1201

Email: aircraft.parts@mahindraaerospace.com

Accomplishment Instructions:

GENERAL NOTES:

Ensure the aircraft is prepared for maintenance and that appropriate safety precautions are taken when performing work outlined in this Service Bulletin.

Unless otherwise specified, reference to the GA8 Service manual as well as FAA AC43.13-1B & FAA AC43.13-2B should be made when carrying out the procedure prescribed in this Service Bulletin. In case of discrepancy between the Service Manual and the AC, the Service Manual takes precedence.

When carrying out work outlined by this Service Bulletin, care is to be taken to ensure damage to surrounding structure and installations does not occur.

Torque all fasteners in accordance with the GA8 Service Manual unless stated otherwise. Values are for dry (unlubricated) threads unless shown otherwise.

WARNING:

ALWAYS TREAT PROPELLERS AS LIVE UNLESS SPARK PLUG LEADS ARE REMOVED. IGNITION SYSTEM AND STARTER SYSTEM DEFECT CAN CAUSE THE PROPELLER TO TURN AND THE ENGINE TO FIRE CAUSING INJURY AND/OR DEATH EVEN IF THE ENGINE IS SWITCHED OFF AND IS EITHER HOT OR COLD.

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:

- EQUIPMENT OEM INSTALLATION AND OPERATION MANUALS;
- AIRCRAFT MAINTENANCE AND OPERATION MANUALS;
- ASSOCIATED AIRCRAFT MODIFICATION INSTRUCTIONS;
- 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 MATERIAL/CONSUMABLE USED DURING THE ACCOMPLISHMENT OF THIS SERVICE BULLETIN AND EMPLOY ANY RECOMMENDED PERSONAL PROTECTIVE EQUIPMENT (PPE) CONTAINED THEREIN.

PART A – SUPPLEMENTARY SEALING

NOTE:

PART A is only applicable when Supplementary Seal has not been previously applied.

1. Remove two screws that secure the air inlet filter grid and stow, refer to Figure 1.
2. Remove the air inlet filter grid and stow, refer to Figure 1.
3. Remove the BA-7 standard filter element, refer to Figure 1.
4. Remove Cowls IAW GA8 Service Manual.
5. Disconnect the Scat hose at the rear of the inlet duct, refer to Figure 2.
6. Disconnect screws and remove the LH Baffle Plate, refer to Figures 3 and 4.

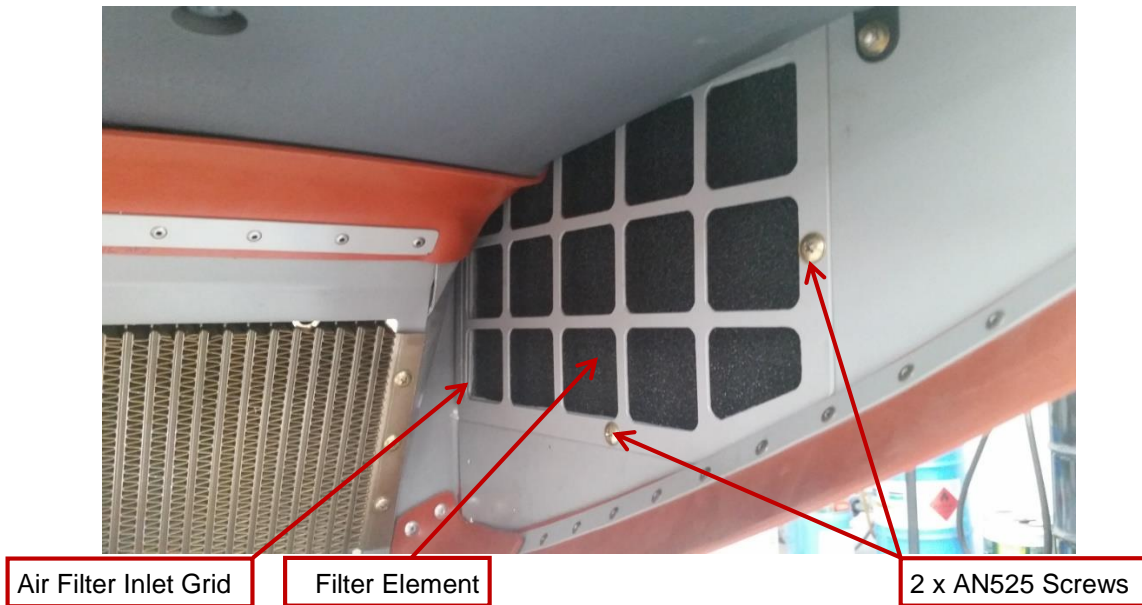


Figure 1 – GA8 Primary Air Filter

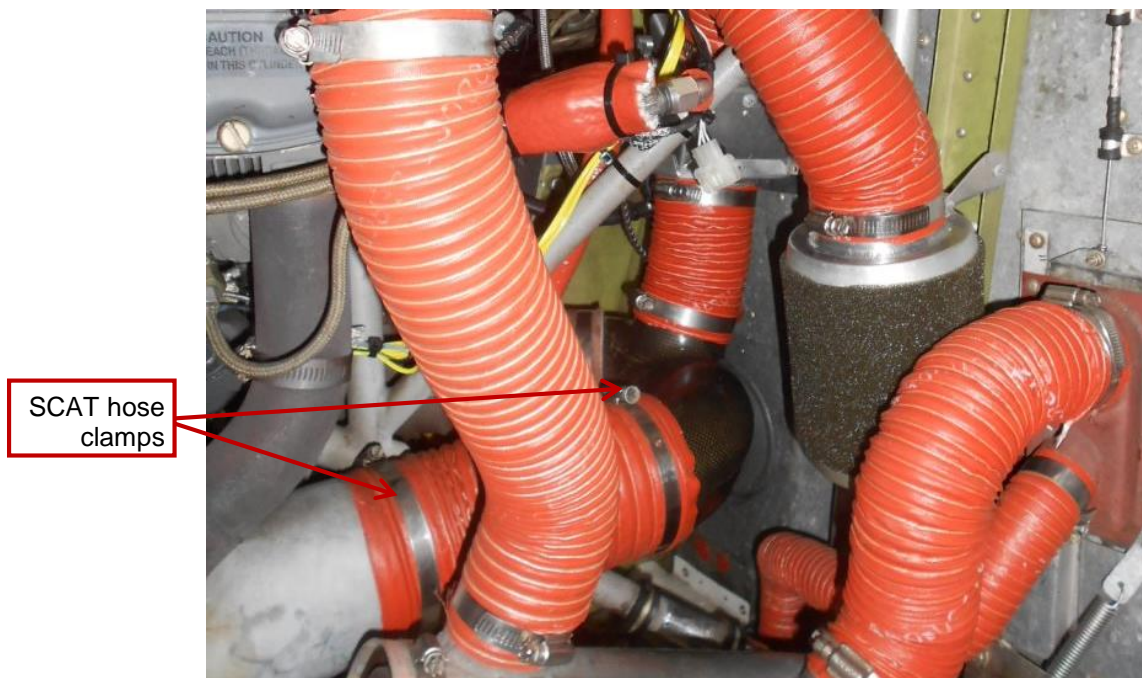


Figure 2 – Primary Air Duct SCAT hose (Filtered Alternate Air System Installed)



2 x Screws, Nuts & Washers

2 x Screws, Nuts & Washers

Figure 3 – Baffle Plate / Inlet housing Installation – Forward Fasteners

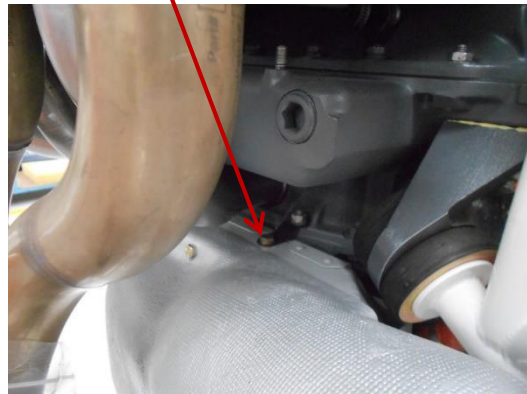
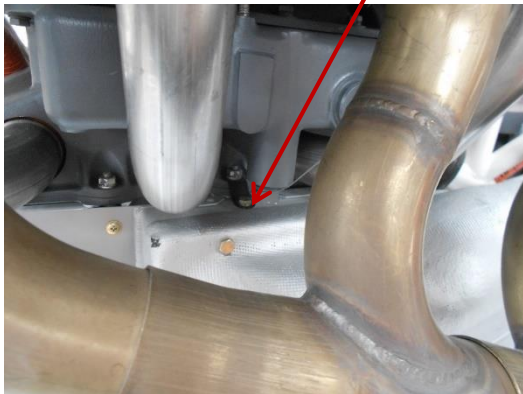
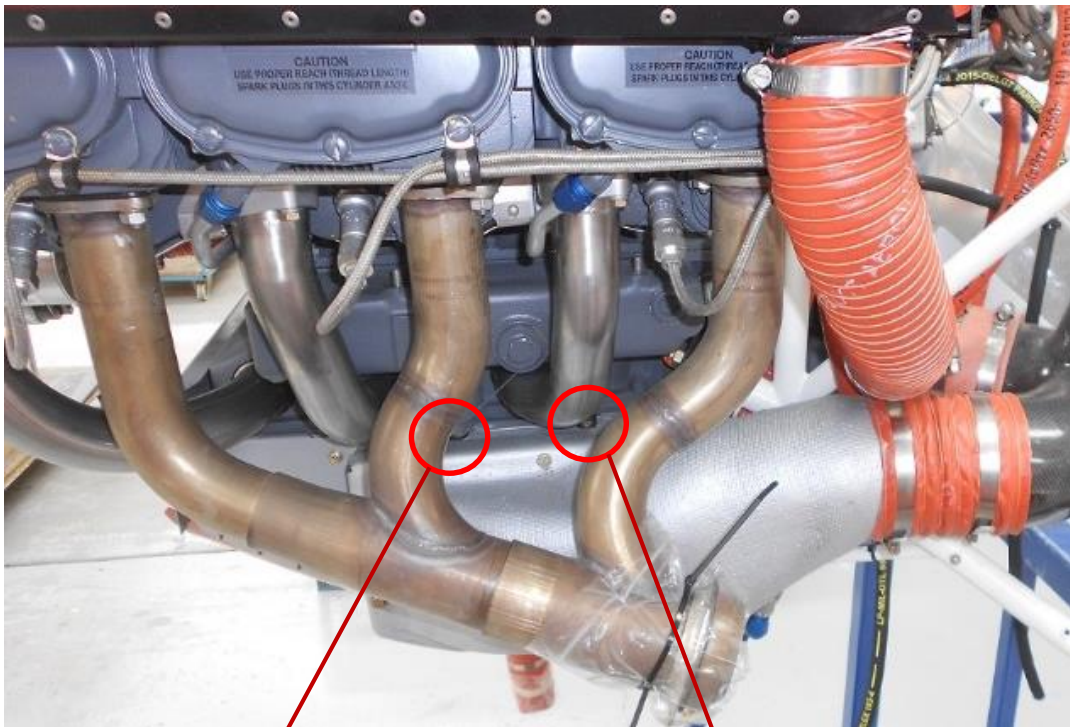


Figure 4 – Baffle Plate / Inlet housing Installation – Side Fasteners

7. Thoroughly clean all internal and external surfaces of the intake system, including internal surfaces of the intake housing, in accordance with the GA8 Service Manual Section 12-20-50 on Engine Compartment.

NOTE:

*If required disassemble the FRP duct from the baffle plate to clean flange interface.
Reassemble when clean.*

8. Apply supplementary seal around the flanges of the intake duct by running a bead of PR-1422 (item 31 from table 3) around all edges, refer to Figure 5. Refer to GA8 Service Manual Section **28-10-11**, **28-10-12**, and **28-10-16** for information on specifications, mixing, and curing. Ensure any sealant on the inside is properly filleted/faired.

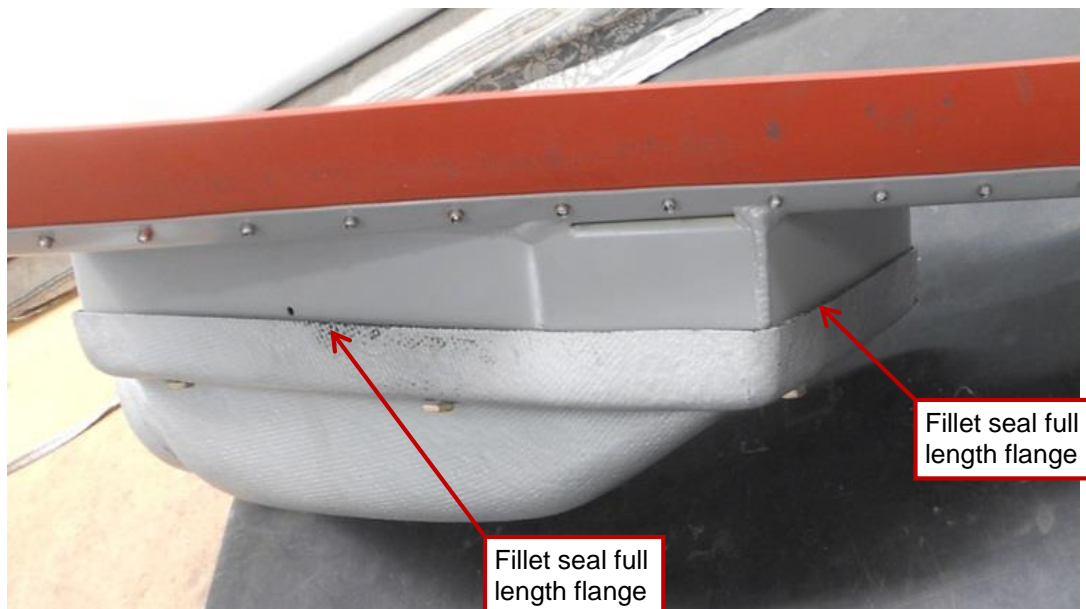
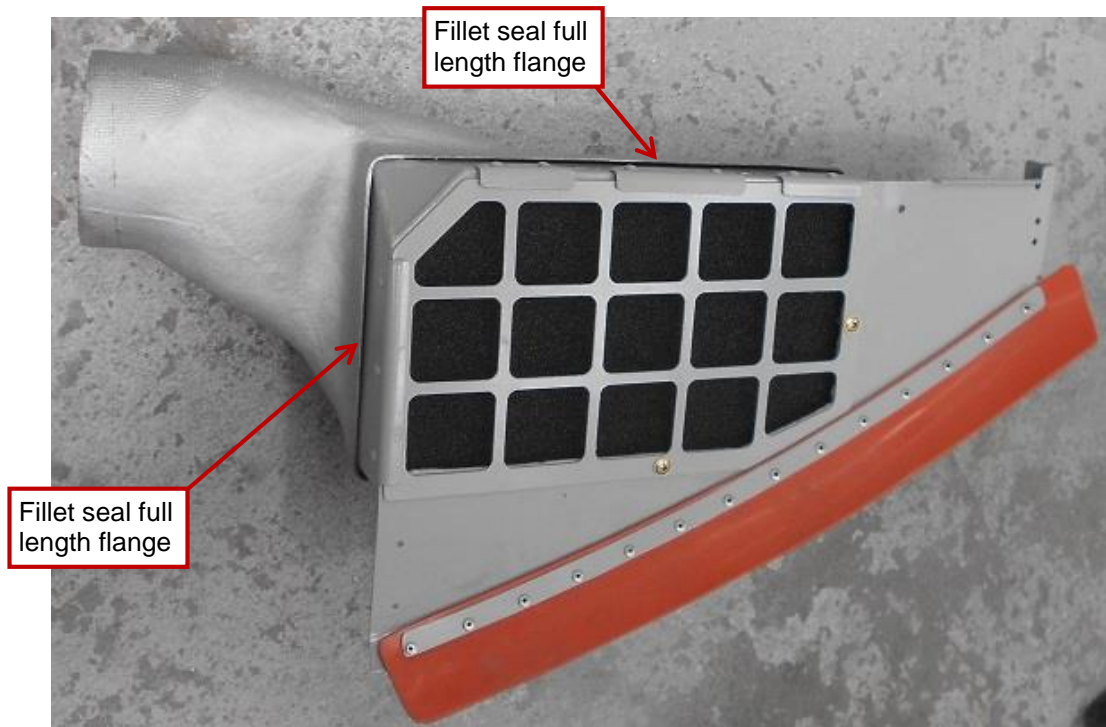


Figure 5 – Filter Housing – Supplementary Sealing

9. Reinstall LH Baffle / filter housing by reversing the steps 5 and 6.

WARNING:

ENSURE NO LOOSE HARDWARE OR TOOLS ARE LEFT IN THE ENGINE BAY AT THE COMPLETION OF THIS INSTALLATION

NOTE:

Step 10 only applies when BA-448E filter is not to be installed.

10. Install new BA-7 filter element and air inlet filter grid with two screws removed in Step 1.
11. Reinstall Cowls IAW GA8 Service Manual.

PART B – INSTALLATION OF BA-448E FILTER

NOTE:

Supplementary Seal (either as Part A of this SB or factory applied) must be applied prior to installation of BA-448E Filter.

12. Unfasten two screws and remove the air inlet filter grid, refer to Figure 1.
13. Remove the BA-7 standard filter element, refer to Figure 1
14. Thoroughly clean the intake housing and air inlet grid in accordance with the GA8 Service Manual Section **12-20-50** on Engine Compartment.
15. Install BA-448E filter element (Item 21 in Table 2) and re-install air inlet filter grid with two screws removed in Step 12.

Documentation:

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

Continuing Airworthiness:

There are no additional continuing airworthiness requirements due to the implementation of this service bulletin. Refer to the GA8 Service Manual for maintenance instructions concerning the intake filter. Note that under dusty conditions the filter will require more frequent replacement intervals than 100 hourly.

Compliance Notice:

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

DOCUMENT COMPLIANCE NOTICE



A Mahindra Aerospace Company

Document:

SB-GA8-2018-184

Issue 2

Aircraft Serial Number: GA8-_____

The following parts of Service Bulletin SB-GA8-2018-184 Issue 2 have been incorporated in the above aircraft (tick as appropriate)

PART A

PART B

Date of Incorporation: _____

Signed

Print Name: _____

Please post, email or fax this compliance notice to:

GippsAero

Attn: Technical Publications

Email: aircraft.techpubs@mahindraaerospace.com

P.O. Box 881

Morwell Victoria 3840

Australia

Fax: +61 03 5172 1201