

Service Bulletin

Subject:

Forward Fresh Air Ventilation System Retrofit

Applicability:

All GA8 serial numbers GA8-00-004 through GA8-04-054.

Amendments:

Nil (initial issue).

Background:

To improve the efficiency of the fresh air vent system in the cockpit, extra ducts with individual spigots have been incorporated into production.

Compliance:

For applicable aircraft this optional Service Bulletin may be incorporated if increased performance from the forward fresh air ventilation system is desired.

Weight and Balance:

Negligible effect on weight and balance.

Approval:

This modification has been approved pursuant to Regulation 35 of CAR1988.

Parts:

Item	Part Number	Description	Qty
1	GA8-521021-123	Fwd. Inboard Bump Stop Mounting Block	4
2	GA8-521021-125	Fwd. Outboard Bump Stop Mounting Block	4
3	GA8-534023-63	Filter Mesh	4
4	GA8-534028-21	Air Scoop (LH)	1
5	GA8-534028-22	Air Scoop (RH)	1
6	GA8-713022-59	Demister Heat Spigot	4
8	AN525-832-R16	Screw	4
9	AN960-8	Plain Washer	4
10	AN960-10	Plain Washer	A/R
11	CCR264CS-3-4	Cherry Pull-Through Rivet	14
12	CR3213-4-3	CherryMAX Rivet	14
13	DINITROL 410 UV	Tube Silastic	A/R
14	HAS024P	Hose Clamp	4
15	MS21042-08	Stop Nut	4
16	J-7444-14	Lord Door Catch Mount (LHS)	1
17	J-7444-14	Lord Door Catch Mount (RHS) - Modified	1
18	SCAT/SCEET-6	Air Duct	A/R

NOTES:

Left hand and right hand Lord door catch mounts are supplied, with the right hand mount modified to work with opposite rotation of door handle. New door handles may be required for door open catch, as early models did not have Dzus fitted to them.

Left and right air scoops are identical except for the location of the water drain hole. Ensure that the air scoop water drain holes are at the bottom of the air scoop when fitted or water may enter the ventilation system.

SCAT6 ducting may need to be replaced if the existing length is insufficient or there is excessive corrosion of the internal spring. If used in tropical or coastal areas, SCEET6 may be used as a substitute. All SCAT6 connections are to be made using a hose clamp, P/N HAS024P.

Rivet lengths specified are to be used as a guide only and shall be determined on installation.

Parts Availability:

New parts can be obtained directly from Gippsland Aeronautics.

Tel.: +61 03 5172 1200

Fax.: +61 03 5172 1201

Email: spares@gippsaero.com

Instructions:

1. Installation

1. This procedure will describe how to perform the modification on the right side. The procedure should be repeated respectively for the left side.
2. If applicable, remove the forward screw securing the system control mount, P/N GA8-534023-41 on the LHS.
3. Disconnect existing SCAT6 ducts from their respective forward side vent assemblies, P/N GA8-534017-11.
4. Two spigots are to be attached to each of the left and right forward side skin, P/N GA8-534023- as per figure 1. Trim the forward spigot such that it will abut the horizontal stiffener, P/N GA8-534023-61(R)/-39(L) and the diagonal brace, GA8-534023-35 (from S/N GA8-00-004 up to and including S/N GA8-04-048) or P/N GA8-534023-83 (S/N GA8-04-049 and subsequent). Refer to figure 1 for key dimensions regarding spigot installation.
5. Drill 3/32" (#40 or 2.5mm) clearance holes approximately 0.25" in from each of the flange corners of the spigots, except for the trimmed corner of the forward spigot.
6. Abut the trimmed forward spigot against the diagonal brace and the inside of the horizontal stiffener and back drill through the forward side skin, P/N GA8-534023-83. If necessary, file a notch to fit around any existing rivets attaching the horizontal stiffener. Cut a 1.5"±0.063" (38.100mm±1.588mm) hole through the skin at the centre of the spigot. Countersink and rivet with heads on the outside of the aircraft with CCR264CS-3-4 Cherry pull-through rivets.
7. Abut the aft spigot 0.50"±0.063" (12.700mm±1.588mm) back from the forward spigot and against the inside of the horizontal stiffener. Cut a 1.5"±0.063" (38.100mm±1.588mm) hole through the skin at the centre of the spigot. Back drill the skin, countersink and rivet from outside with Cherry pull-throughs.
8. Attach filter mesh into the spigots with DINITROL 410 UV Silastic or equivalent.
9. Drill out the fourth rivet inline from the forward rivet attaching the horizontal stiffener, and drill out to a 1/8" (#30 or 3.3mm) clearance hole.
10. Locate the air scoop to the drilled out hole to the middle hole at the aft end of the air scoop.
11. Ensuring that the air scoop is level, drill 1/8" (#30 or 3.3mm) clearance holes through the air scoop and side skin as per figure 1. Temporarily secure the air scoop to the side skin.
12. Open the respective pilot or co-pilot's door and mark where the Dsuz lines up with the air scoop.

13. Cut a 1.000"±0.063" (25.400mm±1.588mm) hole in the air scoop centred on the point where the Dzus lines up.
14. Fit the Lord door catch mount into the air scoop with the "LORD" label upright and the holes in the base aligned vertically between the two spigot openings.
15. Mark and drill 5/32" (#21 or 4.0mm) clearance holes in the side skin and install the Lord door catch mount in accordance with figures 1 and 2. Lord door catch mount may be further spaced with AN960-10 washers as required for flush finish with the air scoop.
16. Install air scoop using CR3213-4-3 (1/8") CherryMAX rivets with the middle hole at the aft end of the air scoop aligned with the drilled out fourth rivet hole inline from the forward rivet attaching the horizontal stiffener.
17. Repeat procedure for the left hand side.
18. On RHS connect the SCAT6 duct used for avionics cooling to the forward spigot. Connect the original side vent assembly to the outboard vent. Connect the aft spigot to the inboard vent.
19. On LHS connect SCAT6 from the original side vent and forward spigot via the original T junction to the inboard vent as per figure 6. Connect SCAT6 from the LHS aft spigot to the outboard vent.
20. Trim insulation panels, P/N GA8-258012-45 to fit, and reinstall insulation panels.
21. Refer to figures 3 through 6 showing various aspects of the completed installation.

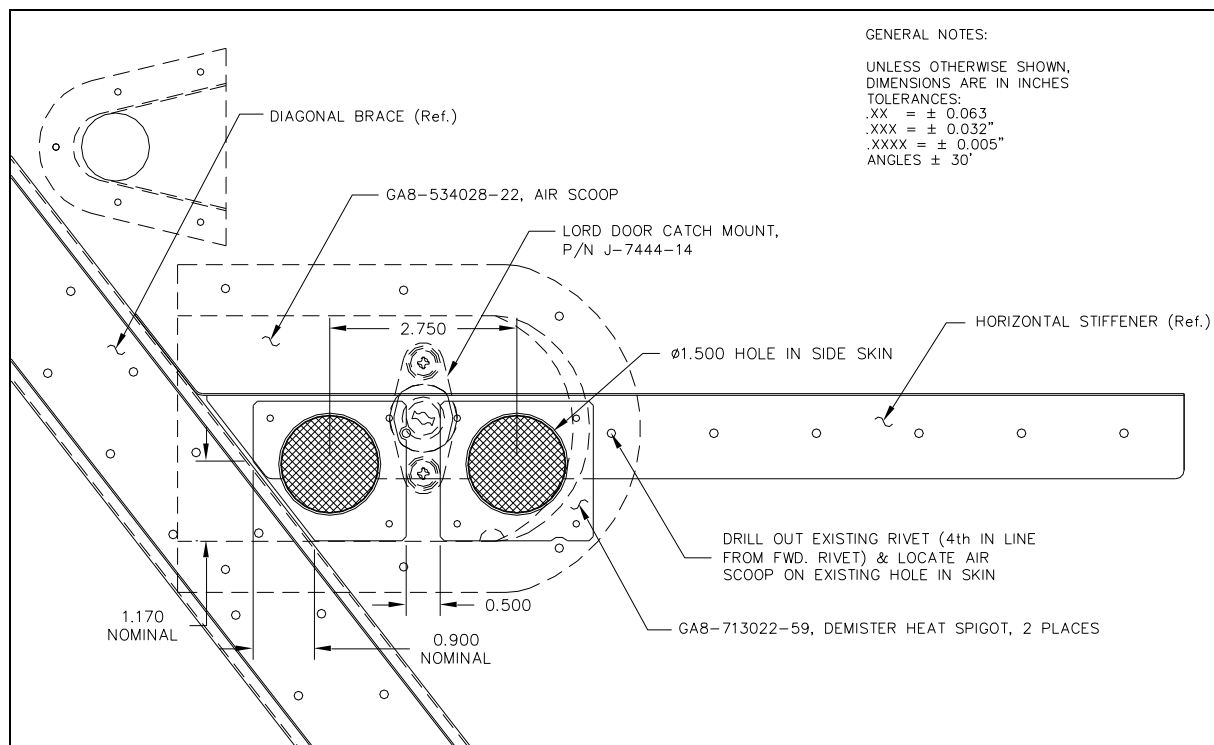


Figure 1: Installation drawing showing the right forward side skin from inside the aircraft.

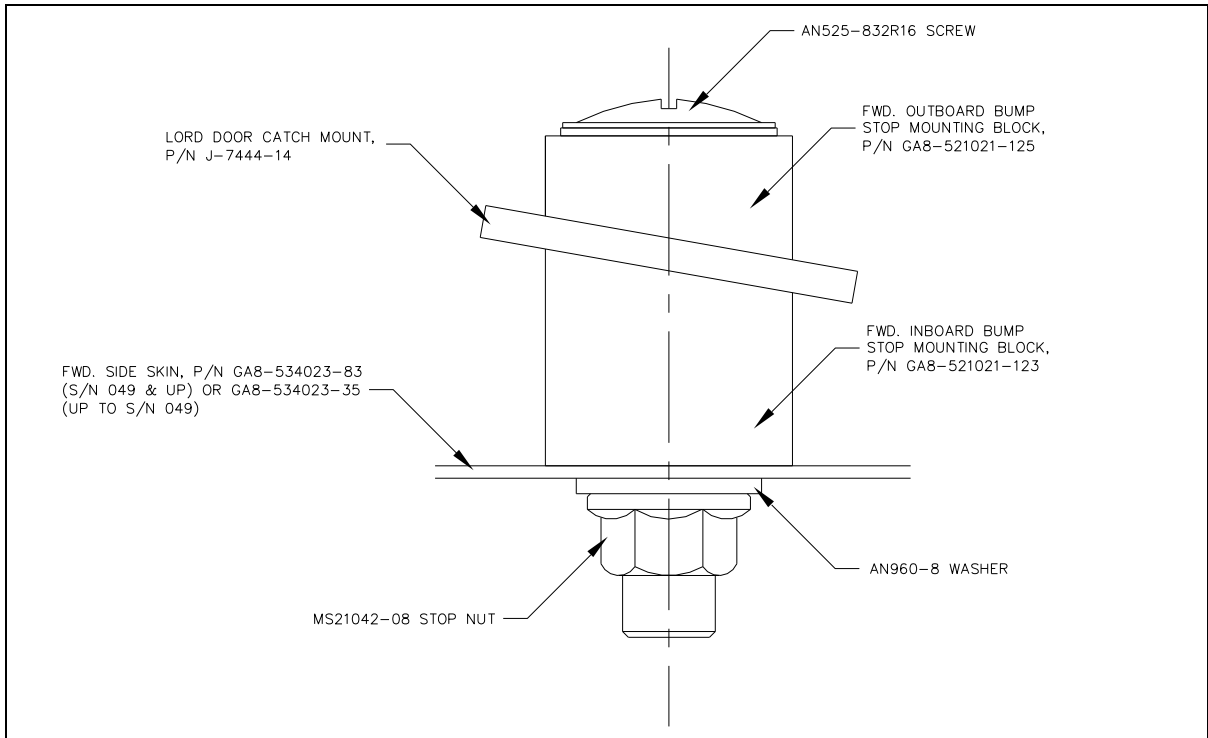


Figure 2: Installation of Lord door catch mount.



Figure 3: Completed RHS modification viewed from inside the aircraft.



Figure 4: Completed RHS modification.



Figure 5: Completed RHS modification viewed from inside the aircraft.



Figure 6: Completed LHS modification viewed from inside the aircraft.

Documentation:

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

Compliance Notice:

Complete the Document Compliance Notice and return to Gippsland Aeronautics by fax or mail.

DOCUMENT COMPLIANCE NOTICE



Document: Service Bulletin SB-GA8-2005-19

Aircraft Serial Number: GA8-_____

Service Bulletin SB-GA8-2005-19 has been incorporated for the above aircraft.

Signed

Print Name _____

Please post or fax this compliance notice to:

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