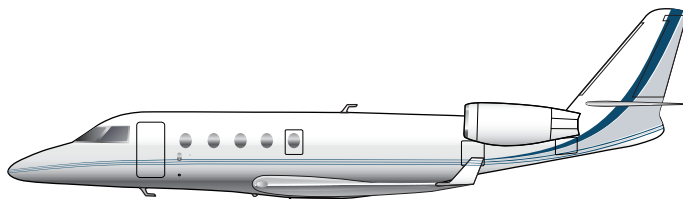


Gulfstream G150



ALERT **SERVICE BULLETIN**

NUMBER 150-28A-146

SUBJECT

FUEL (ATA 28) - INSPECTION OF LEFT AND
RIGHT WING INBOARD VENT HOLES

JUNE 22, 2012

ALERT SERVICE BULLETIN

FUEL - INSPECTION OF LEFT AND RIGHT WING INBOARD VENT HOLES

PLANNING INFORMATION

1. Effectivity

Aircraft serial numbers 201-290

2. Concurrent Requirement

None

3. Reason

Recent inspection of a G150 aircraft following flight revealed several fasteners protruding from the lower wing surface. Initial investigation of the wing interior revealed several structural rib assemblies damaged and separated from the wing plank. Further investigation has revealed the wing vent tube covered with sealant, essentially blocking the path for air to exit the wing during fueling operations and thermal expansion. Continued operation in this condition has the potential to compromise the integrity of the wing structure. The potential exists for this condition to be present on other aircraft.

4. Description

This alert service bulletin provides instructions to inspect the 3/8 inch vent holes outboard of rib zero for debris or obstructions. Method 1 requires defueling of the wing and internal inspection, Method 2 may be performed only if the aircraft has 3000 pounds or less total fuel on board.

5. Compliance

Compliance with this alert service bulletin is mandatory before further flight.

6. Approval

This service bulletin contains no modification information that revises the approved configuration and therefore does not require regulatory agency approval.

7. Manpower

The following information is for planning purposes only:

Estimated man-hours (Method 1): 12

Estimated man-hours (Method 2): 16

ALERT SERVICE BULLETIN

8. Weight and Balance

None

9. Electrical Load Data

No Change

10. Software Accomplishment Summary

None

11. References

G150 Aircraft Maintenance Manual (AMM) Chapters 06, 12, 20 and 28

12. Other Publications Affected

None

13. Interchangeability or Intermixability of Parts

None

ALERT SERVICE BULLETIN

MATERIAL INFORMATION

1. Material - Price and Availability

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

2. Opportunity for No Charge Compliance

This alert service bulletin will be accomplished at no charge if performed at a Gulfstream G150 Authorized Warranty Repair Facility within the recommended compliance time stated in this document. If this alert service bulletin is performed at other than a Gulfstream G150 Authorized Warranty Repair Facility, the labor will be an owner responsibility.

3. Material Necessary for Each Aircraft

A. Material to be Procured:

None

B. Materials Supplied by the Operator:

None

4. Reidentified Parts

None

5. Special Tooling

Borescope

Lockwire, P/N MS20995C.032

Flash light (Strong light)

Mirror

Petroleum jelly

Torque wrench 0.0 to 50 inch-lbs.

ALERT SERVICE BULLETIN

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 Aircraft Maintenance Manual, Chapter 20.

CAUTION: MAKE SURE ELECTRICAL POWER IS DISCONNECTED FROM AIRCRAFT. FAILURE TO COMPLY MAY RESULT IN INJURY TO PERSONNEL AND/OR DAMAGE TO AIRCRAFT.

2. Disconnect external electrical power from aircraft. Refer to Aircraft Maintenance Manual, Chapter 12.
3. Perform Inspection in accordance with method 1 or method 2 below.
4. Inspection Method 1 (refer to Figure 1, Sheets 1, 2 and Figure 4, Sheets 1 and 2):
 - A. Defuel aircraft. Refer to AMM, Chapter 12.
 - B. Remove left wing access panel 521AB. Refer to Figure 1, Sheet 1 and AMM, Chapter 06.
 - C. Remove right wing access panel 621AB. Refer to Figure 1, Sheet 2 and AMM, Chapter 06.
 - D. Perform a detailed visual inspection (using a strong flash light and mirror) of the 3/8 inch vent holes for debris or obstruction located outboard of rib zero, internal-wing upper surface in the left and right wing. Refer to Figure 3, Sheets 1 and 2.
 - E. The wing vent holes should be clear and free of any debris or obstructions. Refer to Figure 3, Sheets 1 and 2.
 - F. If no defects or other anomalies are noted and vent holes are clear and free of debris or sealant, no further action is required. Proceed to Step 4.H. below.

ALERT SERVICE BULLETIN

- G. If any defects or any other anomalies are present, or vent openings are covered/sealed, contact Gulfstream Customer Support at 800-810-4853 or 912-965-4178 for further instructions.
- H. Reinstall left wing access panels 521AB. Refer to Figure 1, Sheet 1 and AMM, Chapter 06.
- I. Reinstall right wing access panel 621AB. Refer to Figure 1, Sheet 2 and AMM, Chapter 06.
- J. If aircraft was defueled for inspection, refuel aircraft. Refer to AMM, Chapter 12.

5. Inspection Method 2 (refer to Figure 2 and Figure 3, Sheets 1 and 2):

CAUTION: INSPECTION METHOD 2 MAY ONLY BE PERFORMED WITH TOTAL AIRCRAFT FUEL LEVEL BELOW 3000 POUNDS.

- A. Remove the left and right wing - to - fuselage fairings, P/N 25G3621110-503/-504. Refer to Figure 2.
- B. Cut lockwire and disconnect B-nut fittings from union. Refer to Figure 3, Sheets 1 and 2.
- C. Remove as necessary clamps, screws and washers securing wing vent relief tube to the support structure.
- D. Using a borescope, inspect vent hole by inserting boroscope through fitting tube assembly, P/N 25G6537225-501. Inspect for debris/sealant blockage at wing vent orifice.
- E. If no defects or other anomalies are noted and vent hole is clear and free of debris or sealant, no further action is required.
- F. If any defects or any other anomalies are present, or vent opening is covered/sealed, contact Gulfstream Customer Support at 800-810-4853 or 912-965-4178 for further instructions.
- G. Repeat Steps 5.A. through 5.F. for right side vent tube.
- H. Connect B-nut fittings to left and right unions. Refer to Figure 3, Sheets 1 and 2.
- I. Tighten B-nut fittings to left and right unions and secure with lockwire, P/N MS20995C.032

6. Ensure work area is clean and clear of foreign objects (FOD).

ALERT SERVICE BULLETIN

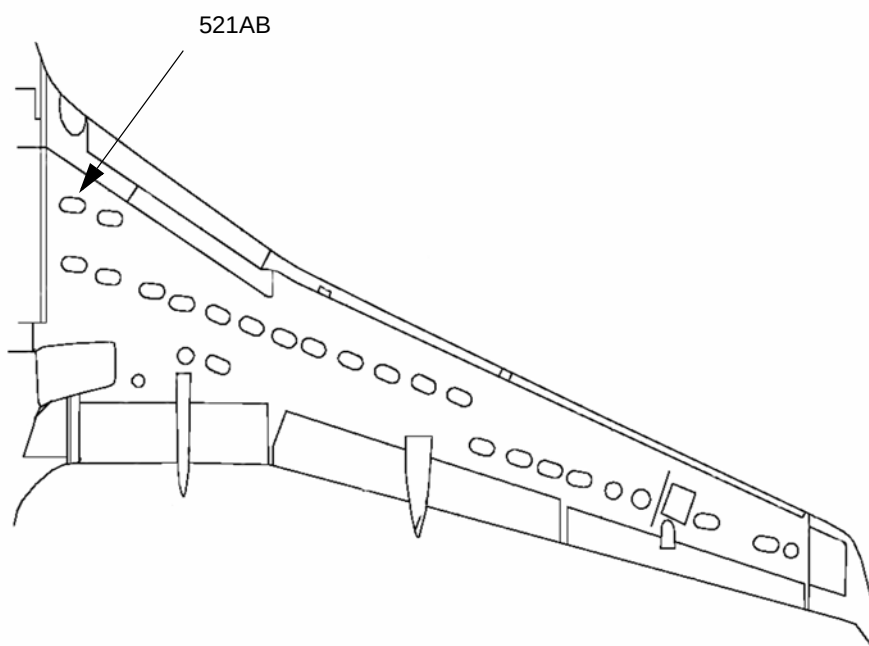
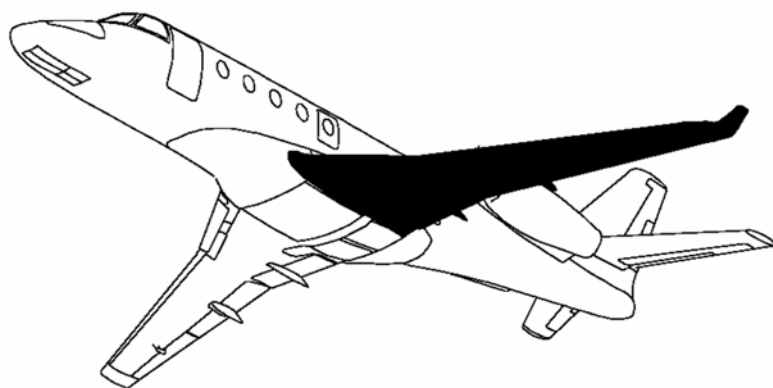
7. Reinstall the left and right wing - to - fuselage fairings, P/N 25G3621110-503/-504. Refer to Figure 2 and Figure 5, Sheets 1 and 2.

NOTE: In order to allow correct and smooth installation of the fairing, it is critical to secure holding bolts in a sequence beginning with all horizontal central holes and then in an up and down horizontal sequence. Refer to Figure 5, Sheets 1 and 2.

8. Dip all bolt threads in petroleum jelly and secure fairing using bolts (1, 3, 5 and 7), per the locations depicted in Figure 5, Sheet 1. Torque bolts to 20-25 inch-lb. (refer to Figure 5, Sheet 2 for torque sequence).
9. Record compliance with this alert service bulletin in the aircraft's permanent maintenance record.
10. Report compliance with this alert service bulletin to Gulfstream CMP via electronic transmittal or fill out and fax the attached service reply card.

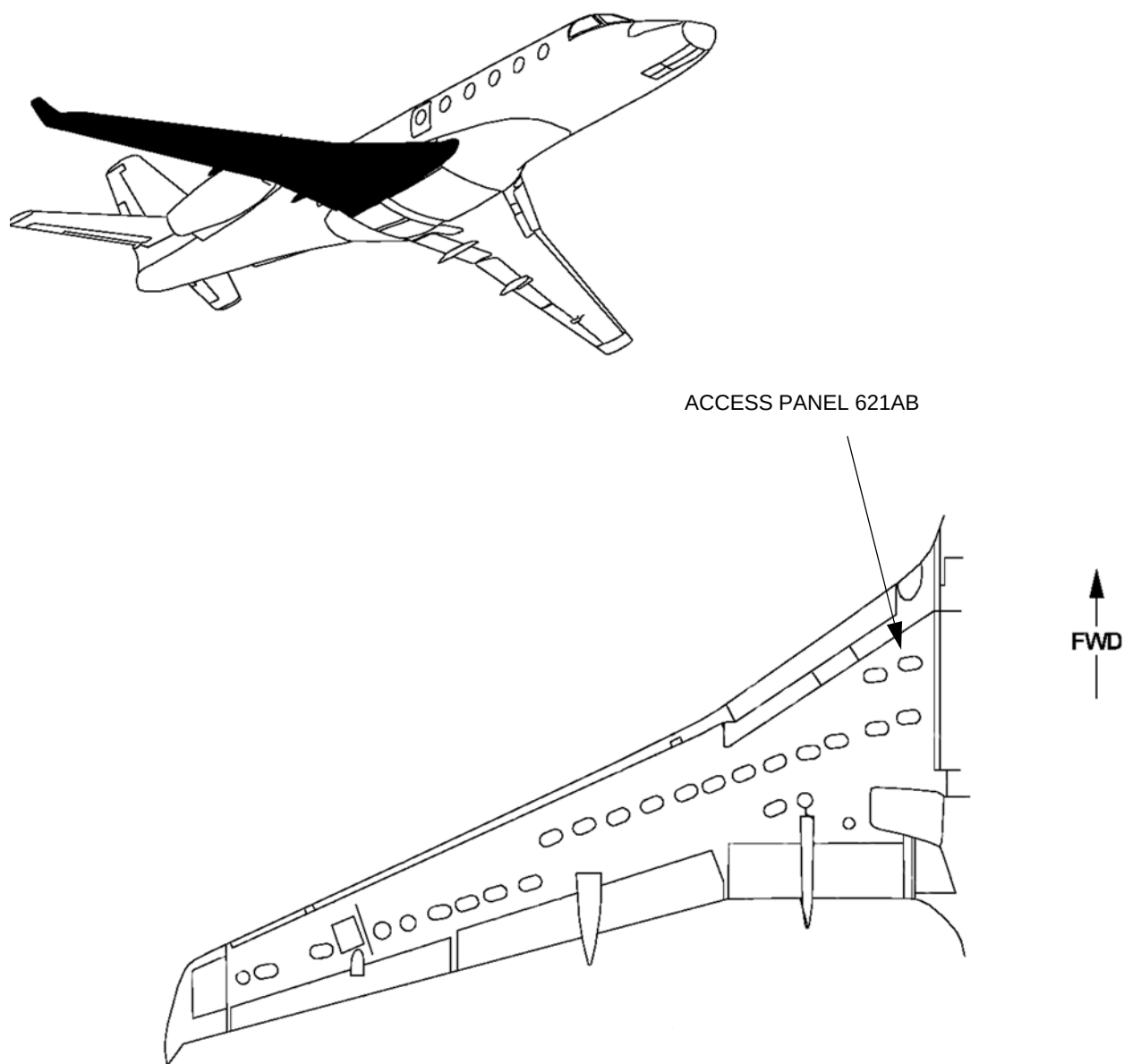
If technical assistance is required, contact your area Gulfstream Field Service Representative or call Gulfstream Customer Support at 800-810-GULF (4853) or 912-965-4178 (fax 912-965-4184).

ALERT SERVICE BULLETIN



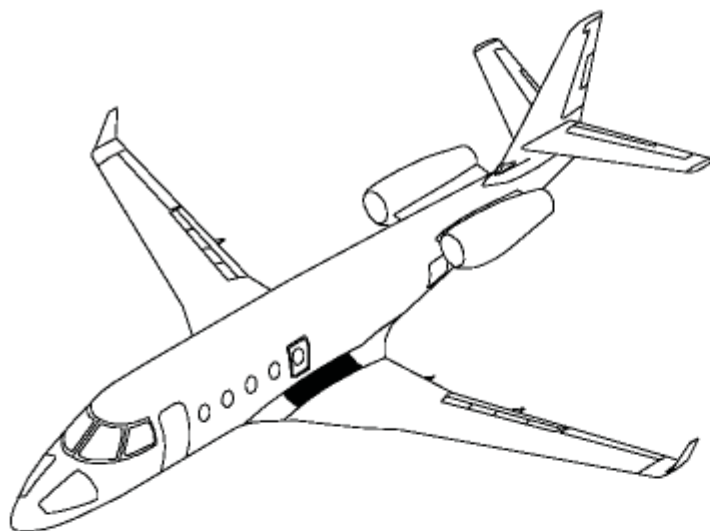
Left Wing Access Panel 521AB
Figure 1, Sheet 1

ALERT SERVICE BULLETIN

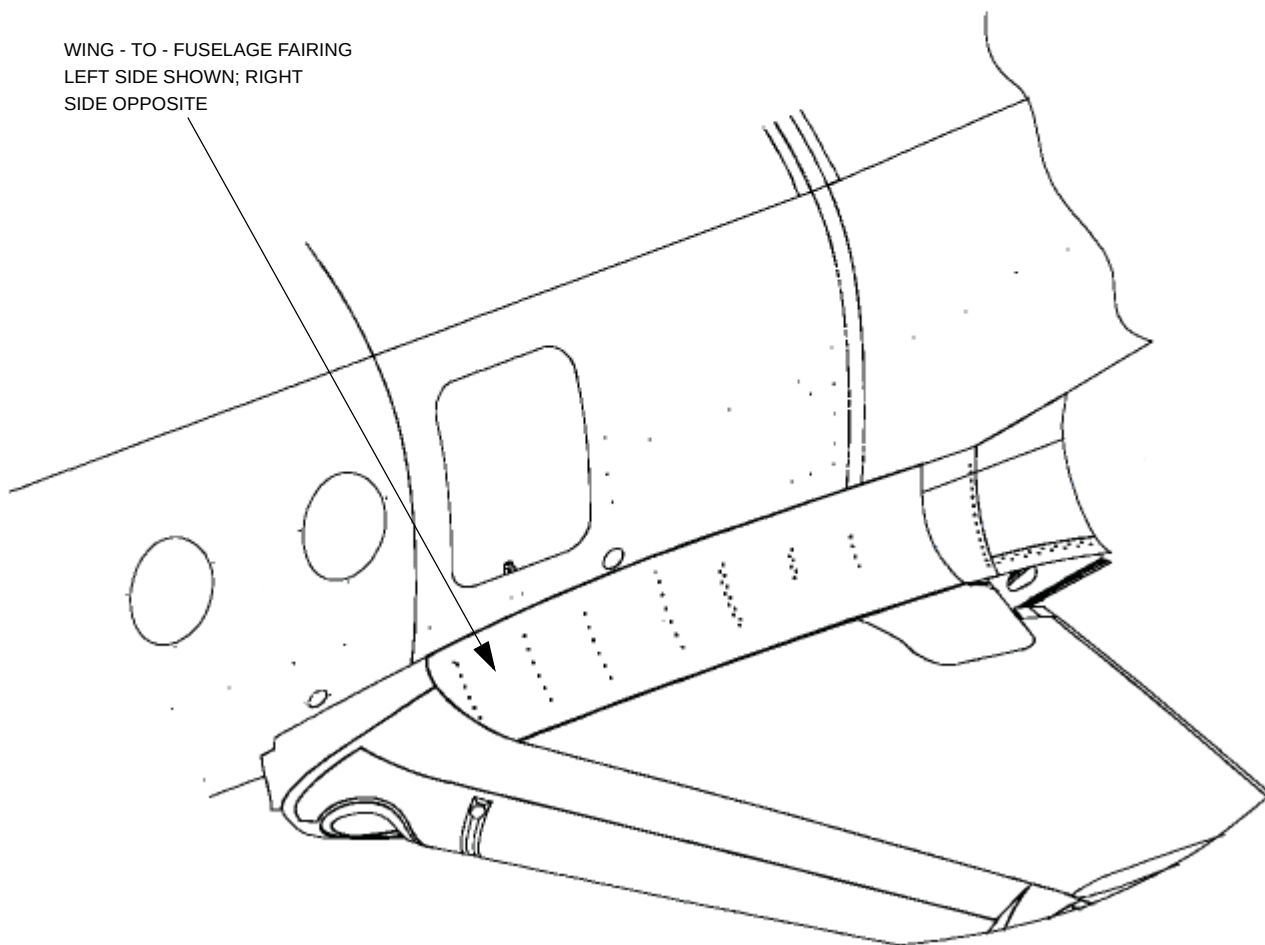


Right Wing Access Panel 621AB
Figure 1, Sheet 2

ALERT SERVICE BULLETIN

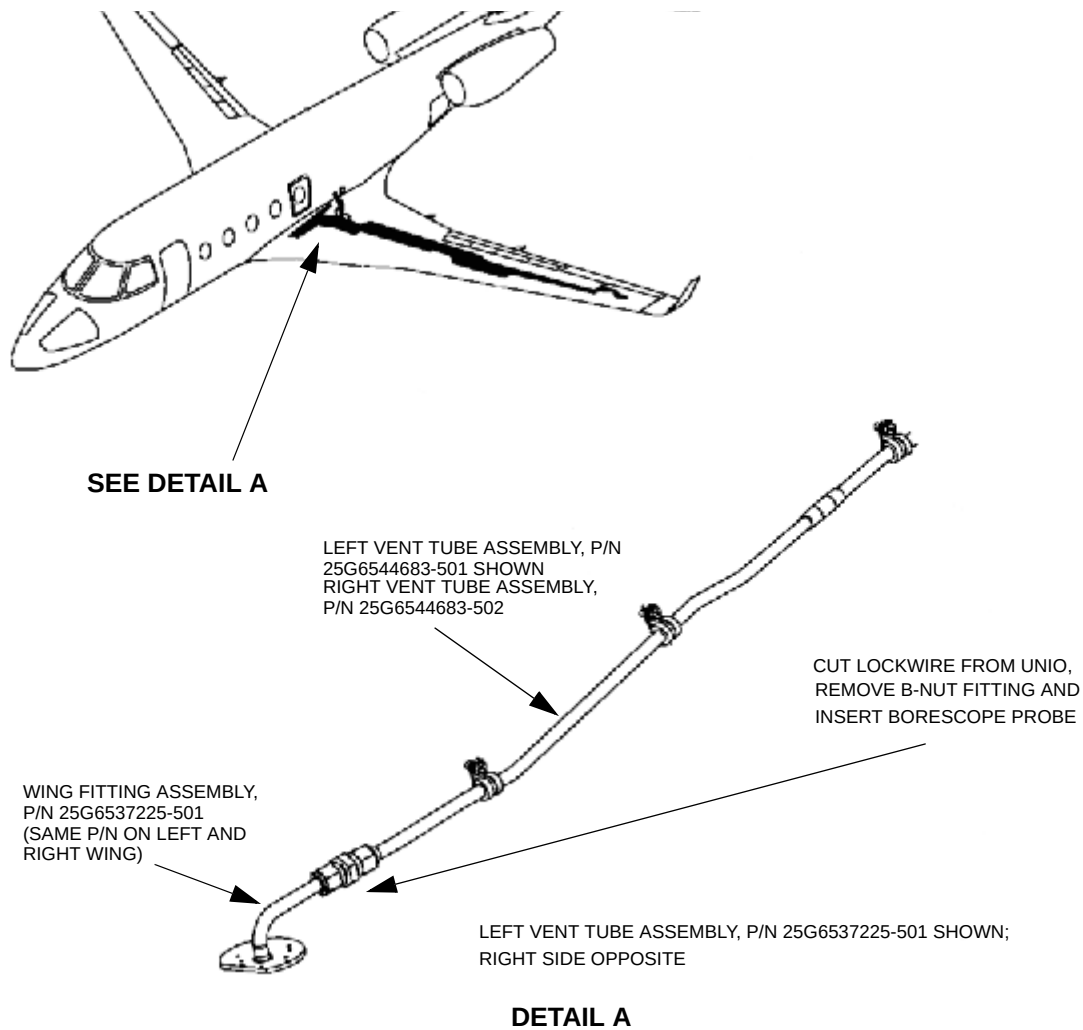


WING - TO - FUSELAGE FAIRING
LEFT SIDE SHOWN; RIGHT
SIDE OPPOSITE



Left Wing - to - Fuselage Fairing; Right Side Opposite
Figure 2

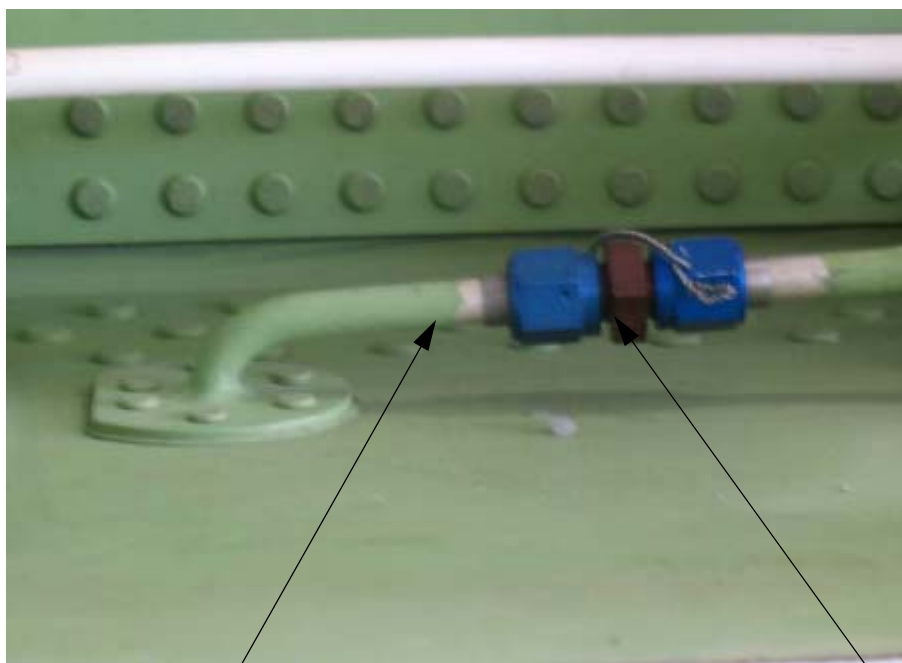
ALERT SERVICE BULLETIN



Left Wing Vent Fitting; Right Side Opposite
Figure 3, Sheet 1

ALERT SERVICE BULLETIN

SEE DETAIL B



LEFT VENT TUBE ASSEMBLY, P/N 25G6537225-501 SHOWN,
RIGHT SIDE OPPOSITE

DETAIL B

CUT LOCKWIRE FROM UNION,
REMOVE B-NUT FITTING AND
INSERT BORESCOPE PROBE
HERE

Left Wing Vent Fitting; Right Side Opposite
Figure 3, Sheet 2

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RIGHT SIDE SHOWN; LEFT SIDE OPPOSITE

Example of Vent Shown with no Sealant (Correct)
Figure 4, Sheet 1

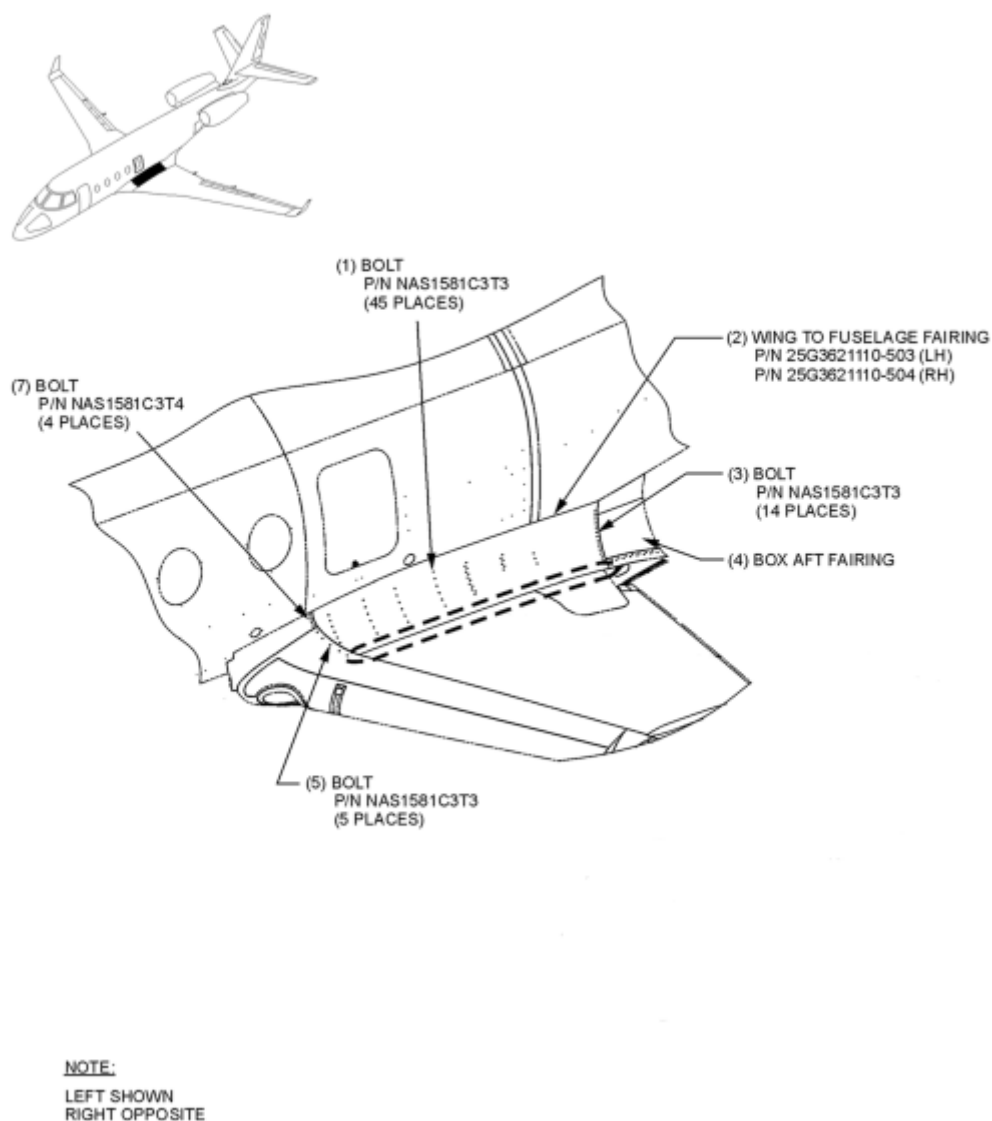
ALERT SERVICE BULLETIN



LEFT SIDE SHOWN; RIGHT SIDE OPPOSITE

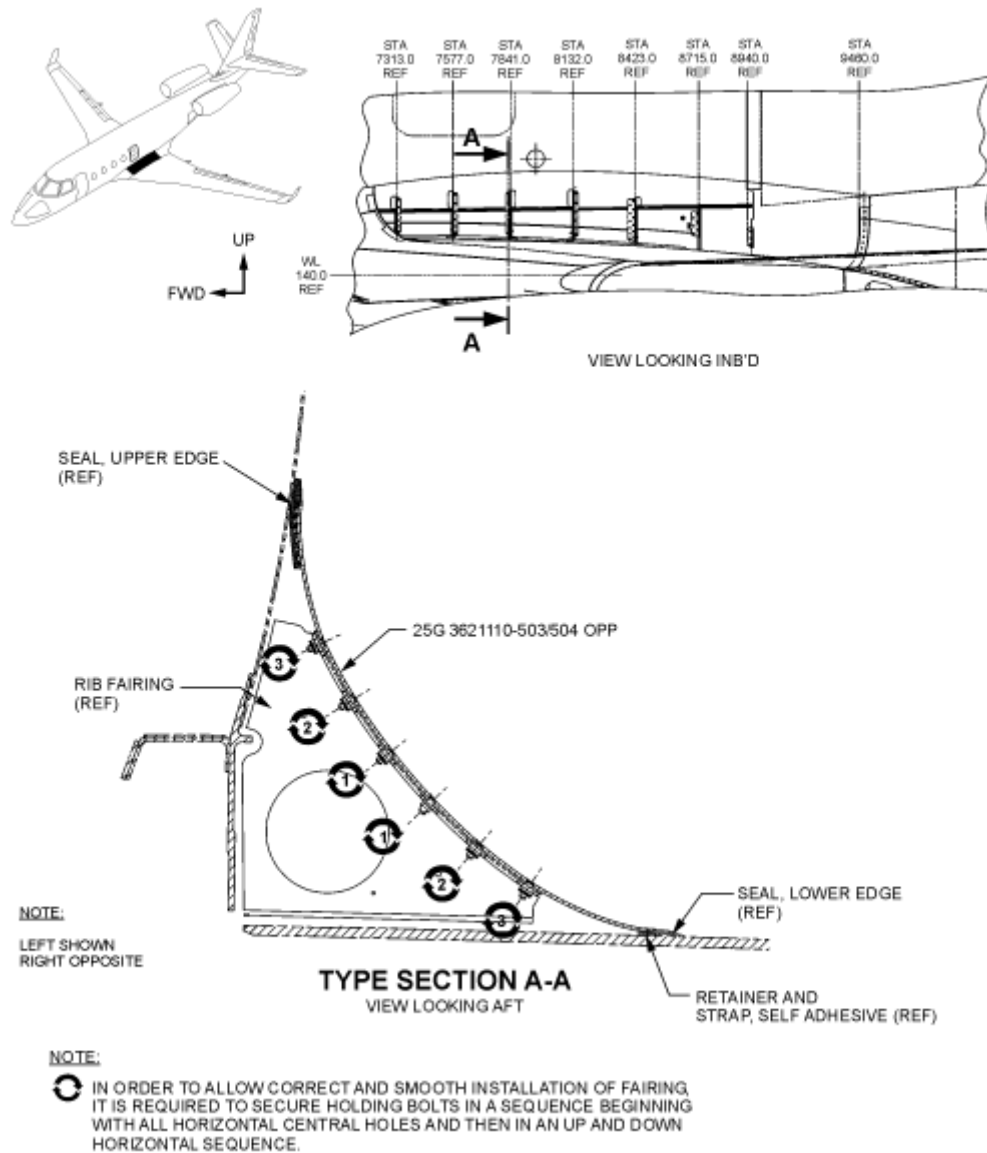
Example of Vent Shown Covered with Sealant (Incorrect)
Figure 4, Sheet 2

ALERT SERVICE BULLETIN



Fuselage Fairing Bolt Locations
Figure 5, Sheet 1

ALERT SERVICE BULLETIN



Fuselage Fairing Bolt Torque Sequence
Figure 5, Sheet 2

GULFSTREAM G150
ALERT SERVICE BULLETIN NO. 150-28A-146
SERVICE REPLY CARD

PLEASE FAX THIS PAGE TO GULFSTREAM AEROSPACE CMP
FAX # 800-944-1775 or 912-963-0265.

THE FOLLOWING SERVICE BULLETIN HAS BEEN COMPLIED WITH:

SB CMP NUMBER	A/C	AIRCRAFT TYPE	COMPLIANCE DATE
981460		Gulfstream G150	

AIRCRAFT HOURS: _____ **AIRCRAFT LANDINGS:** _____

PREVIOUSLY COMPLIED
WITH: _____ **DATE:** _____

NOT APPLICABLE: _____ **DATE:** _____

SIGNATURE	TITLE / CERTIFICATE NUMBER	COMPANY
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COMMENTS / SUGGESTIONS / ACTIONS TAKEN:
