

Service Bulletin

S.B. No: 169

Title: INSPECTION OF ENGINE AIR INTAKE DUCT MESH AND ALTERNATE AIR DOOR

Classification: This Service Bulletin has been classified by SAL as Essential

Compliance: At next 50 flying hour check

Applicability: **Part A:** Post Mod M595; Pre and Post Mod M760 T67M and T67M-MkII.

Part B: T67M260 (Pre Mod. M818) and T67M260-T3A (Post Mod M696, Pre Mod M830).
 Note: not applicable to Works Numbers 2261, 2266 and subsequent.

This Issue 2 has been revised to include: i. the inspection of the mesh's metal support angle on Post Mod M760 aircraft, ii. to include the T67M260 and T67M260-T3A aircraft and iii. to add Mod M933.

INTRODUCTION:

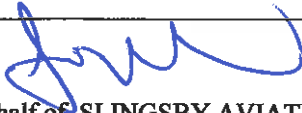
Cases have been reported of the engine air intake duct mesh cracking or where fitted, the mesh's metal support angle cracking. Additionally on T67M, T67M-MkII aircraft it has been reported that the alternate air door retaining rivets have become loose thus causing the alternate air door not to operate correctly. Rectification is achieved by incorporation of the following modifications:

- Mod M759B Introduction of Modified Pre-Preg Injector Air-Intake Box – In Build Repair – T67M260 and T67M260-T3A.
- Mod M760B Introduction of Strengthened Pre-Preg Air Intake box In Build Repair – T67M and T67M-MkII.
- Mod M933 Introduction of Improved Mesh Mounting Angle Engine Air Intake – T67M, T67M-MkII, T67M260 and T67M260-T3A.

The Service Bulletin rectification actions are divided into two parts, Part A is applicable to the T67M and T67M-MkII aircraft and Part B is applicable to the T67M260 and T67M260-T3A aircraft.

ACTION:

1. Check master switch, ignition switch and fuel are OFF. Disconnect external power and hangar aircraft, if required.
2. Remove engine cowlings.
3. Remove air intake filter retainer and filter element.

Approved by: 		
For and on behalf of SLINGSBY AVIATION LIMITED	Date: 18 Feb. 05.	Issue 2
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PART A: APPLICABLE POST MOD M595 (COMPOSITE AIR INTAKE BOX) T67M AND T67M-MKII:

4. Pre Mod M760, part no. T67M-50-101, Ref. Figure 1:
 - 4.1 Inspect mesh within intake duct for cracking and loose retaining rivets.
 - 4.2 Inspect riveted joint between alternate air door and intake duct for condition and any signs of movement. Movement of alternate air door should be smooth throughout its normal travel.
 - 4.3 Place straight edge across top of air duct adjacent to the alternate air door retaining rivets and check for distortion. Any distortion of this face will effect the alternate air door operation.
 - 4.4 Should inspections at paragraphs; 4.1, 4.2 and 4.3 be considered to be unsatisfactory, then return intake duct assembly to SAL for modification to Post Mod M760B/M933 standard. Incorporation of Modifications M760B and M933 satisfy the requirements of this Service Bulletin.
 - 4.5. Should all inspections at paragraphs; 4.1, 4.2 and 4.3 be considered satisfactory, then proceed as follows:
 - 4.5.1 Repeat inspections as required by paragraphs 4.1, 4.2 and 4.3 of this Service Bulletin every 50 flying hours until modifications M760B/M933 are accomplished. Incorporation of modifications M760B and M933 satisfy the requirements of this Service Bulletin.
5. Post Mod M760, Part No. T67M-50-103, Ref. Figure 2:
 - 5.1 Inspect aluminium alloy mesh support angle for cracking.
 - 5.2 Inspect for position of mesh and security, should be forward of support angle. If mesh noted to be aft of angle, then check for security every fifty flying hours until Mod M933 incorporated, ref. paragraph 5.3 below.
 - 5.3 Should inspection at paragraph 5.1 reveal any cracking in the angle, then angle is to be replaced with composite angle in accordance with Mod M933. Return duct to SAL for Mod M933 incorporation. Incorporation of Modification M933 satisfied the requirements of this Service Bulletin.
 - 5.4 If no cracking is found, ref. paragraph 5.1, then inspect every fifty flying hours until modification M933 is incorporated. Incorporation of Modification M933 satisfies the requirements of this Service Bulletin.

PART B: APPLICABLE POST MOD M696 T67M260 AND T67M260-T3A (PRE MOD M830):

6. Pre Mod M759, part no. T67G-50-107, ref. Figure 3:
 - 6.1 Inspect mesh within intake duct for cracking and loose retaining rivets.
 - 6.2 Should inspection at paragraph 6.1 be considered to be unsatisfactory, then return intake duct assembly to SAL for modification to Post Mod M759B/M933 standard. Incorporation of Modifications M759B and M933 satisfy the requirements of this Service Bulletin.
 - 6.3. Should inspection at paragraph 6.1 be considered to be satisfactory, then proceed as follows:
 - 6.3.1 Repeat inspections as required by paragraph 6.1 of this Service Bulletin every fifty flying hours until modifications M759B/M933 are accomplished. Incorporation of modifications M759B and M933 satisfy the requirements of this Service Bulletin.

7. Post Mod M759, Part No. T67G-50-109, ref. Figure 4:
- 7.1 Inspect aluminium alloy mesh support angle for cracking.
 - 7.2 Inspect for position of mesh and security, should be forward of support angle. If mesh noted to be aft of angle then check for security every fifty flying hours until Mod M933 incorporated, ref. paragraph 7.3 below.
 - 7.3 Should inspection at paragraph 7.1 reveal any cracking in angle, then angle is to be replaced with composite angle in accordance with Mod M933. Return duct to SAL for Mod M933 incorporation. Incorporation of Modification M933 satisfies the requirements of this Service Bulletin.
 - 7.4 If no cracking is found, ref. Paragraph 7.1 then inspect every 50 flying hours until modification M933 is incorporated. Incorporation of Modification M933 satisfies the requirements of this Service Bulletin.
8. Annotate logbook "SB 169 Paragraph * complied with" at each inspection until all relevant modifications are incorporated.

*Add relevant applicable paragraph i.e., 4 or 5 or 6 or 7.

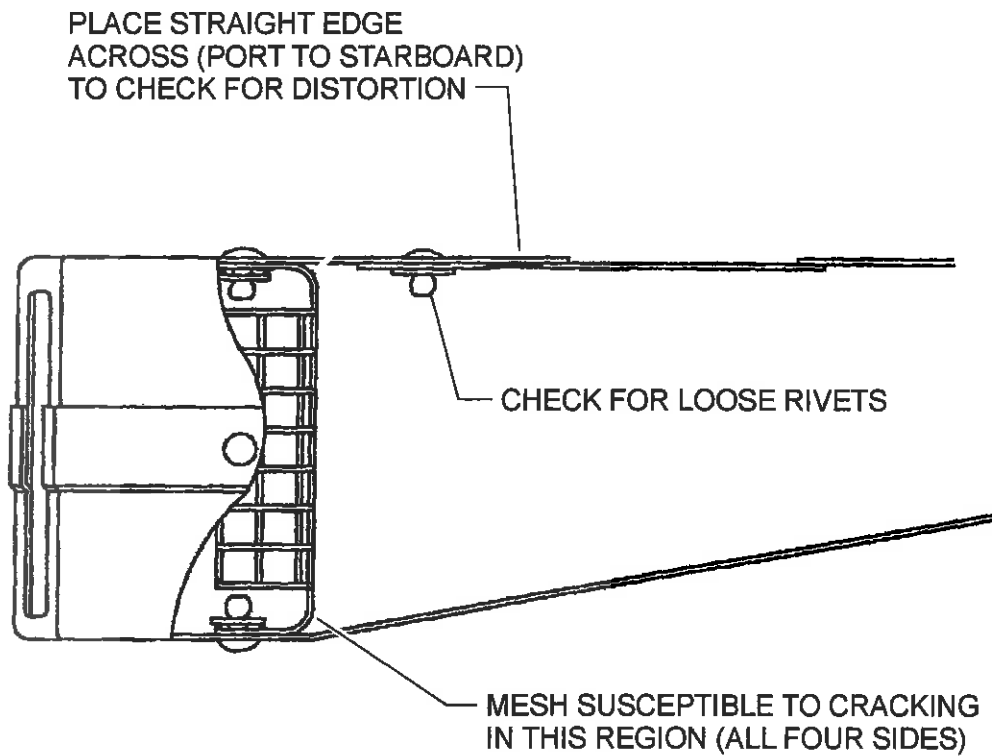


FIGURE 1 AIR INTAKE DUCT T67M-50-101

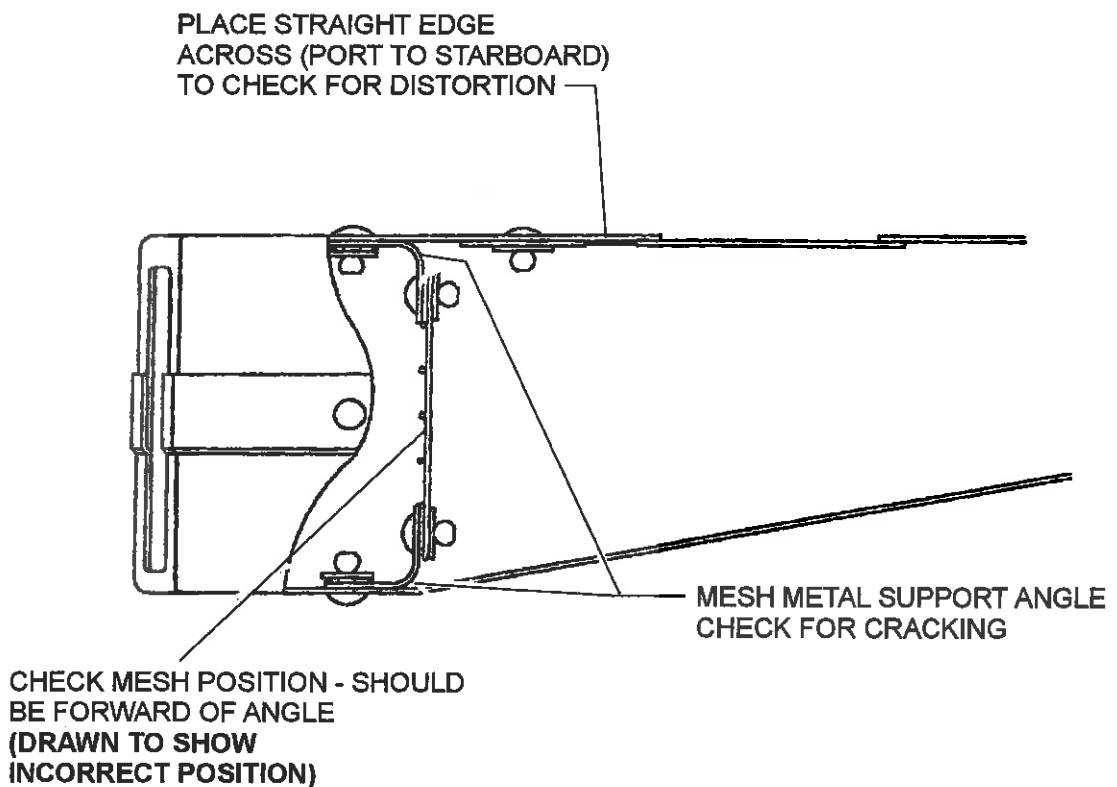


FIGURE 2 AIR INTAKE DUCT T67M-50-103

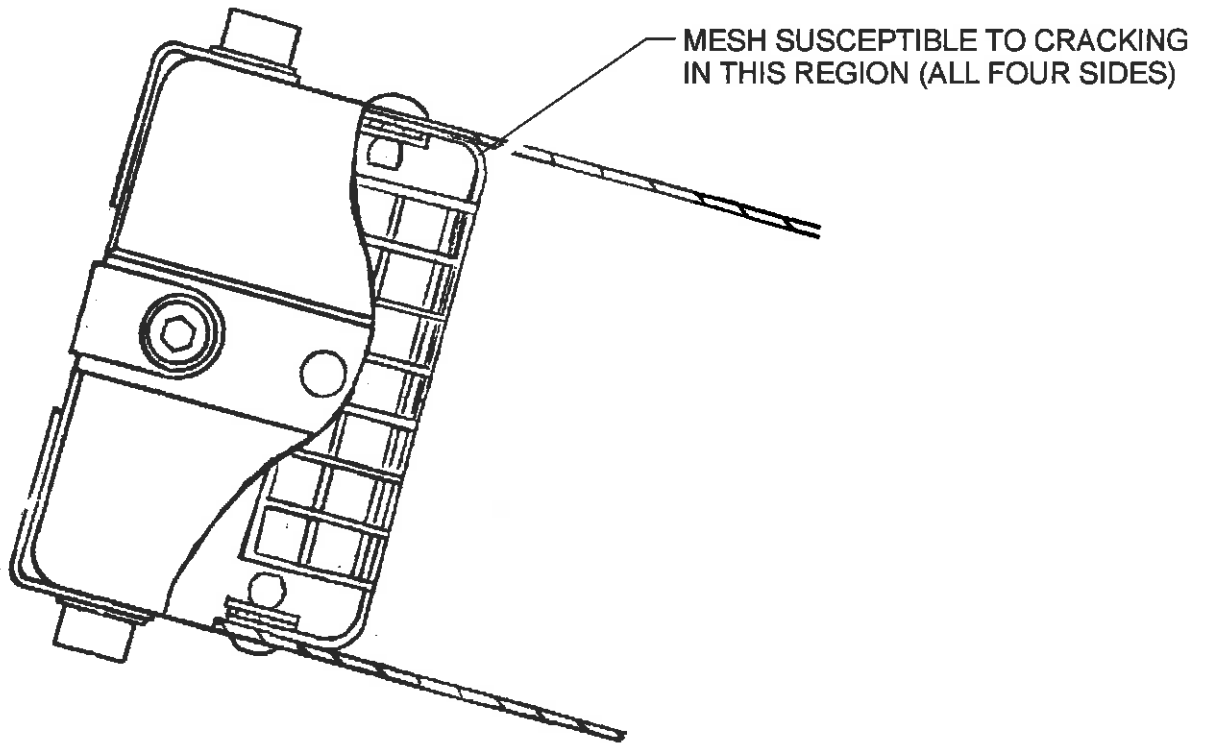
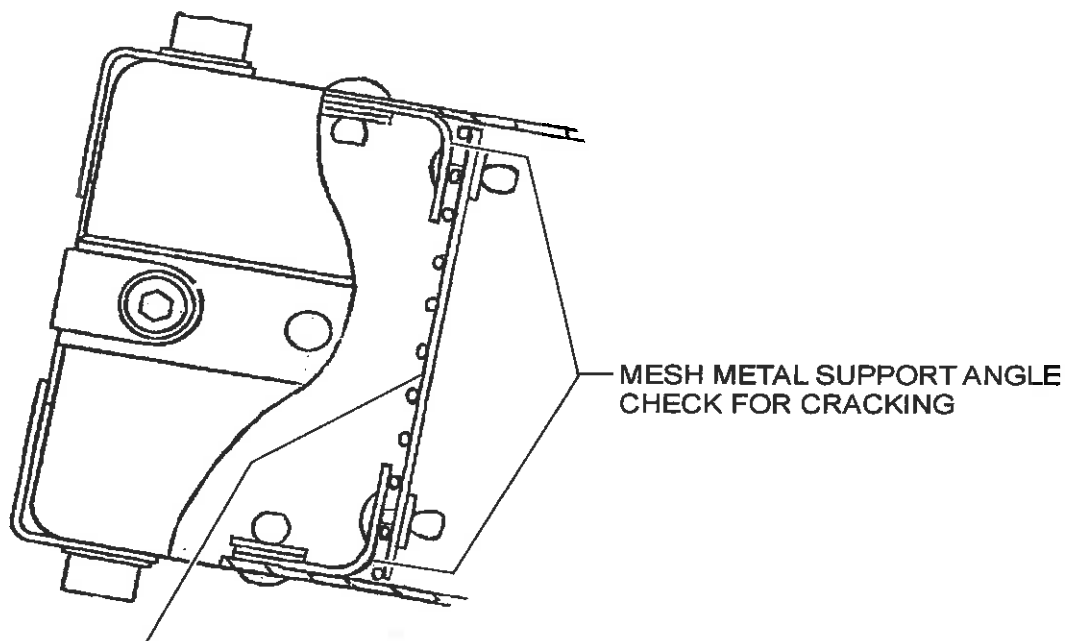


FIGURE 3 AIR INTAKE DUCT T67G-50-107



CHECK MESH POSITION - SHOULD
BE FORWARD OF ANGLE
(DRAWN TO SHOW
INCORRECT POSITION)

FIGURE 4 AIR INTAKE DUCT T67G-50-109