

Service Bulletin

S.B. No: 165

Title: INSPECTION FOR WATER IN LEADING EDGE OF RUDDER PLUS ADDITION OF DRAIN HOLE

Classification: This Service Bulletin has been classified by the CAA as Mandatory

Compliance: At next scheduled service

Applicability: T67B, T67C, T67M, T67M-MkII, T67M200, T67M260 and T67M260-T3A

Issue 2: Introduces a tap test to rudder 'D' box area plus Figure 3.

INTRODUCTION:

Cases have been reported of water accumulation in the lower 'D' box of the leading edge of the rudder and of "relief" of air pressure when applying drain hole to Issue 1 of this Service Bulletin.

The water ingress was through the top hinge lower rib spar joint debond, Subsequent inspection of later rudders by SAL, revealed de-pressurisation holes had been blocked during manufacture.

This Service Bulletin requires an inspection of leading edge joints, rectification to top hinge and a drain hole in the lower rib of the 'D' box. Access for the drain hole is gained via a hole drilled in the lower rudder fairing which may be subsequently repaired.

This Service Bulletin is a one time inspection and rectification.

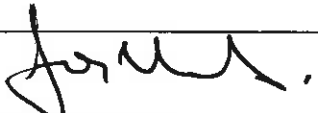
ACTION:

1. Remove rudder from aircraft in accordance with Maintenance Manual.
2. Mark position of 6mm (.25 inch) drain hole on the rudder horn. Carefully form a 25mm (1 inch) diameter access hole in the rudder lower fairing on centreline. Ref Figure 1. This hole to be as directly under proposed drain hole as possible.
3. Carefully drill 6mm (.25 inch) diameter hole in the leading edge of the lower rib as shown in Figure 1.

Note 1: Drill through rudder horn fitting.

Note 2: Drill will also penetrate tapping plate 1.2mm (.048 inch) thick sandwiched in rib lay-up.

4. Drain out any water that may be present and allow to dry.
5. Inspect the upper rudder hinge lower closing rib bond, both to the rudder skin and spar, for signs of bond failure, ref Figure 2. If a debond is found, use a suitable feeler gauge to establish extent of failure.

Approved by: 	Date 28 th March '01	Issue 2
For and on behalf of SLINGSBY AVIATION LIMITED		
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6. Check rudder 'D' box structure for any de-bonds iaw T67 GRP Repair Manual. Perform 'tap' test over areas indicated, refer Figure 3.
7. Ref paragraph 5.
 - i. If bond has failed, clean joint and inject with Araldite 420. Allow to cure. Continue as per paragraph 9.
 - ii. If joint is sound, continue as per paragraph 9
8. Ref paragraph 6.
 - i. If a de-bond is found, or any doubt exists, contact SAL.
 - ii. If joint is sound, continue as per paragraph 9.
9. Refer to Figure 2 and prepare area for laminating. Laminate 2 layers 92110 ✱ cloth over area shown, allow to cure. Laminate in accordance with T67 GRP Repair Manual.

Note: Ensure fitting is laminated around and that fitting has release agent or tape on it to prevent laminate contaminating hinge.
10. Paint drain hole created at paragraph 3 and repair, if required, 25mm (1 inch) hole in rudder lower l/edge i.a.w. T67 GRP Repair Manual. Ensure existing access hole/drain hole is not blocked.
11. Refinish repaired areas in accordance with T67 GRP Repair Manual.
12. Annotate logbook "SB 165 complied with, Mod M906B incorporated".

For further information or materials please contact SAL Customer Support Department.

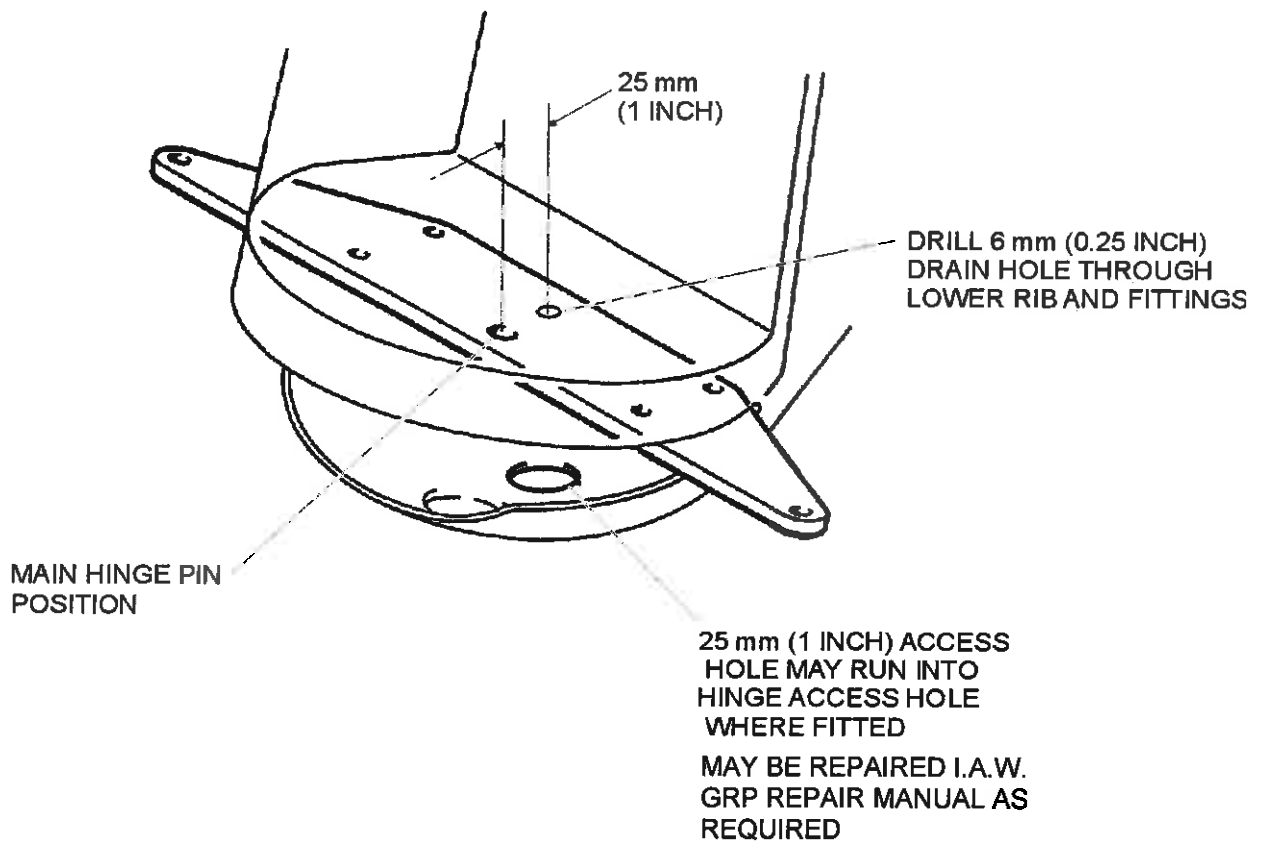


Figure 1 Rudder Lower Hinge

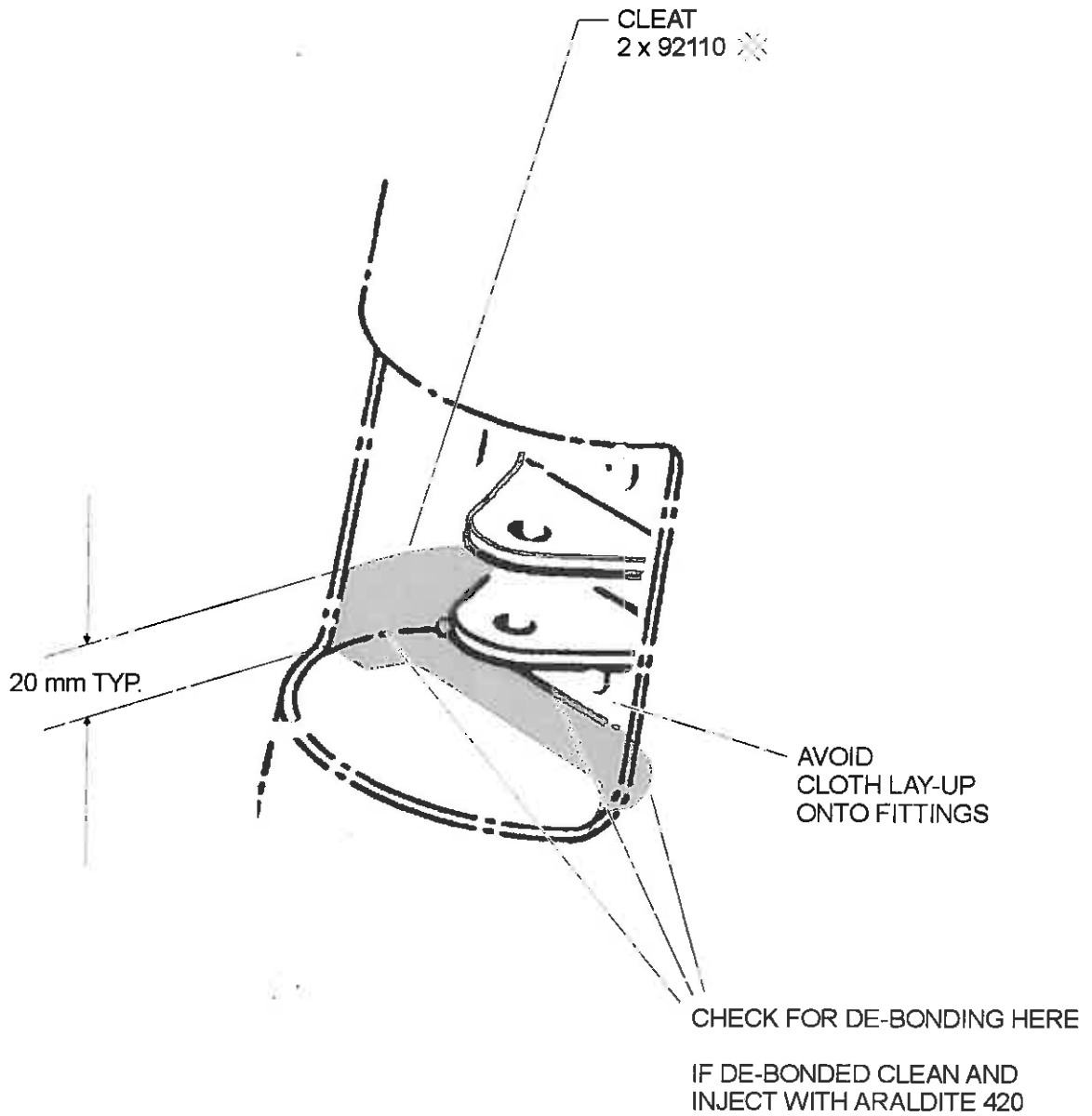


Figure 2 Rudder Top Hinge

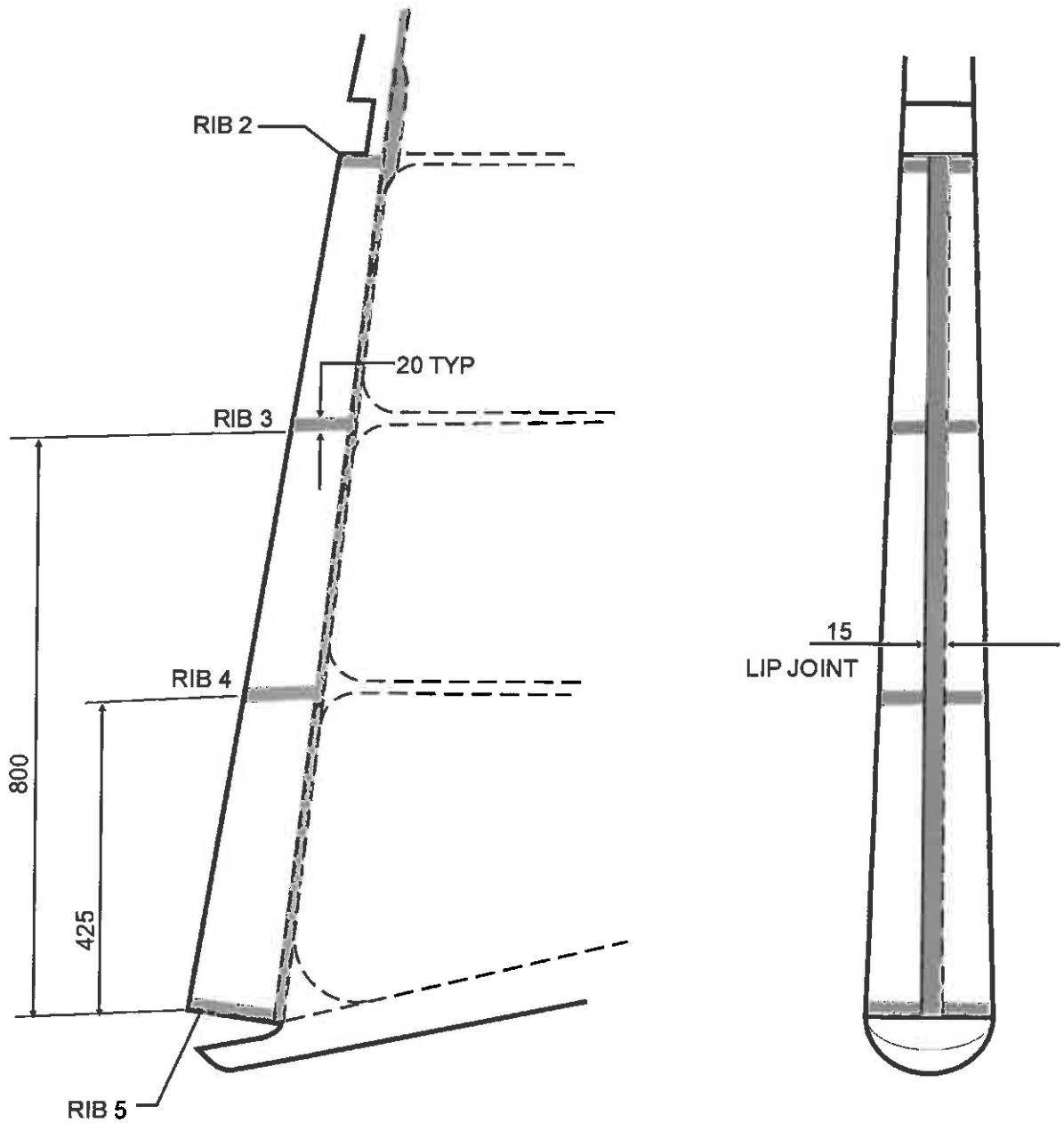


Figure 3 Rudder 'D' Box Structure