

# SERVICE BULLETIN

SB No. 99 Issue No. 4

**TITLE**

**INSPECTION AND RECTIFICATION OF RUDDER PEDAL SLIDERS**

**CLASSIFICATION**

This Service Bulletin has been classified by SAL as Highly Recommended

**COMPLIANCE**

Within next 50 flying hours unless Issue 3 invoked and at each subsequent 50 flying hours until Mod M704B invoked.

This issue 4 clarifies information previously given at Issue 3, ref paragraphs 4.3.2 and 4.4.2, rivet head below surface was .2mm now .8mm and .4mm respectively. Also adds alternative rivet ref para 4.4.3.

**APPLICABILITY:**

T67B, T67C Series, T67M (Not Works No. 1999), T67M-MkII, T67M200, T67M260 and T67M260-T3A.

**INTRODUCTION:**

Cases have been reported, during ground maintenance work, of the failure of a rudder pedal adjusting mechanism whereby the pedal position cannot be adjusted. Upon investigation it was found that the adjusting pin retaining bush had rotated causing the roll pin in the adjusting pin to disengage from the lifting mechanism fork.

Cases have also been reported of loose rivets in the upper slider to lower slider joint.

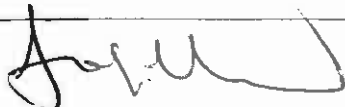
Additionally cherry type rivets may be used to replace the Tucker pop rivets attaching the pedal adjusting mechanism to the slider should the original have any play in them. This latter action is mainly a preventative action.

This Service Bulletin is written to address all three separate issues, and if necessary, to rectify both situations under one modification, Mod M704B.

**ACTION**

1. Remove each pedal/slider assembly and inspect for:
  - i) Correct operation of adjusting pin lifting mechanism, ie roll pin is engaged in fork, and for looseness of bush, ref Fig. 1.
  - ii) Check for any play in upper slider to lower slider attachment rivets, ref Fig. 2.

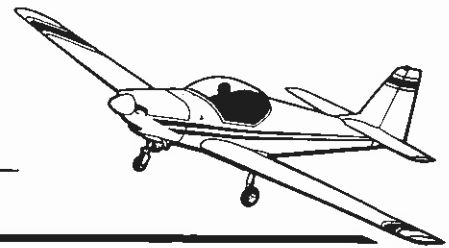
ISSUED BY:



Date 27-9-97

for and on behalf of SLINGSBY AVIATION LIMITED Tel. 01751 432474  
Kirkbymoorside York YO6 6EZ England Fax 01751 431173

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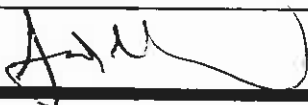
TITLE

**INSPECTION AND RECTIFICATION OF RUDDER PEDAL SLIDERS**

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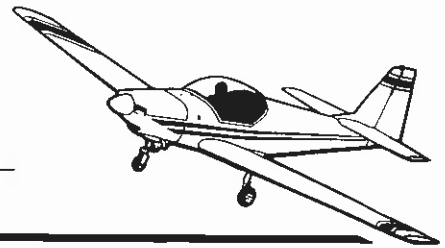
- iii) Check for any play in adjusting mechanism attachment rivets, ref Fig. 3.
2. If either i), ii) or iii) are found to be unsatisfactory, then modify pedals in accordance with paragraph 4.
3. If i), ii) and iii) are found to be satisfactory, then annotate Log Book SB99 carried out. Repeat inspection at every 50 hours until Mod M704B carried out.
4. Modification Procedure:
  - 4.1 Remove pedal pad from slider mechanism.
  - 4.2 Addition of adjusting pin retaining bush anti turn rivet. Fig. 1.
    - 4.2.1 Ensure adjusting mechanism is aligned and is functioning correctly, with roll pin fully engaged in lifting mechanism fork.
    - 4.2.2 Position jig JT67G-45-227 onto upper slider, jig will only fit correctly one way.
    - 4.2.3 Drill 2.85mm dia (No.33 drill) 8mm deep hole. Fig. 1, Section A-A.
    - 4.2.4 Remove jig and csk 120° x 5mm dia.
    - 4.2.5 Using pop rivet gun fit pop rivet 126-24-031 (Tucker TLP/K319BS).
      - i) Ensure head is flush with surface of slider or up to a maximum of .2mm below surface.
      - ii) Ensure adjusting pin and mechanism operate freely.

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## 4.3 Upper slider to lower slider attachment rivets.

Note:

- 1) On Pre Mod M277 aircraft, there are 4 attaching rivets in total. Replace rivets in accordance with the following sequence:

Drill out forward rivet one side and re-rivet, followed by diagonally opposite rivet etc.

- 2) On Post Mod M277 aircraft there are 6 attaching rivets in total. Replace rivets in accordance with the following sequence:

Drill out forward rivet one side and re-rivet, followed by diagonally opposite aft rivet, re-rivet. Repeat with opposite forward and aft rivets. Finally centre rivet one side then opposite side centre.

- 4.3.1 Drill out existing rivets using 4mm dia drill. Ensure drill does not penetrate too far into slider assy.

- 4.3.2 Drill hole out to 4.5mm dia oversize and csk 120° x 8mm dia (1mm deep).

Prior to rivetting ensure upper slider is parallel (Ref 39mm dimension) to and in line with lower slider, and that the rivet head will be flush or up to a maximum of .8mm below surface.

- 4.3.3 Rivet using suitable Cherry Max Rivet gun and rivet 126-24-051 (Cherry CR 3556P-5-3).

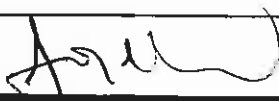
- 4.3.4 After rivetting check alignment and rivets for flushness. Rectify as necessary.

## 4.4 Adjusting mechanism attachment rivets, ref Fig. 3.

Note: Replace rivets in accordance with the following sequence:

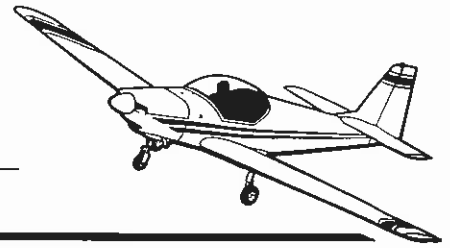
Drill out forward rivet one side and re-rivet, followed by diagonally opposite rivet etc.

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4.4.1 Drill out existing rivets using 3mm dia drill. Ensure drill does not penetrate too far into slider assy.

4.4.2 Drill hole out to 3.6mm dia oversize and csk 120° x 7mm dia (1mm deep).

Prior to rivetting ensure mechanism (both fixed and moving) does not protrude below slider and that the rivet head will be flush or up to a maximum of .4mm below slider surface.

4.4.3 Rivet using suitable cherry max rivet gun and rivet 126-24-052 (Cherry CR3556-4-02 or acceptable alternative CR3556-4-02).

4.4.4 After rivetting, check correct functioning of mechanism, that mechanism does not foul nylon sliders and that rivets are flush ref note at paragraph 4.4.2.

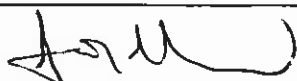
4.5 Identify pedal assy/slider mechanism with Mod M704B.

4.6 Replace pedal pads and replace pedal mechanism into aircraft. Check for correct and free operation, including positive location of the adjusting pin at each pedal position.

4.7 Annotate in Log Book Post Mod M704B accomplished.

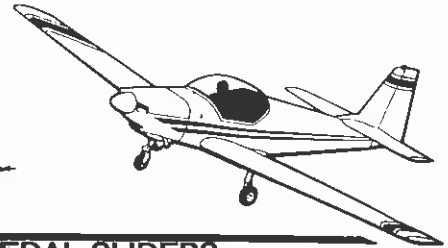
For Mod Kit T67A-05-704B and drill jig, contact SAL Product Support Department.

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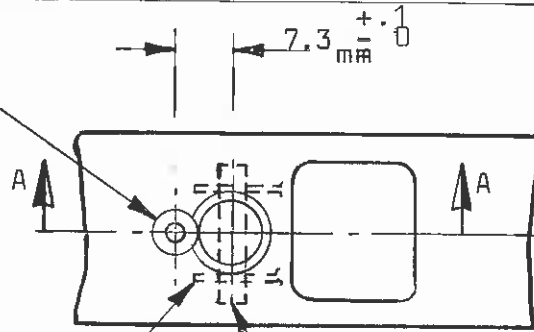
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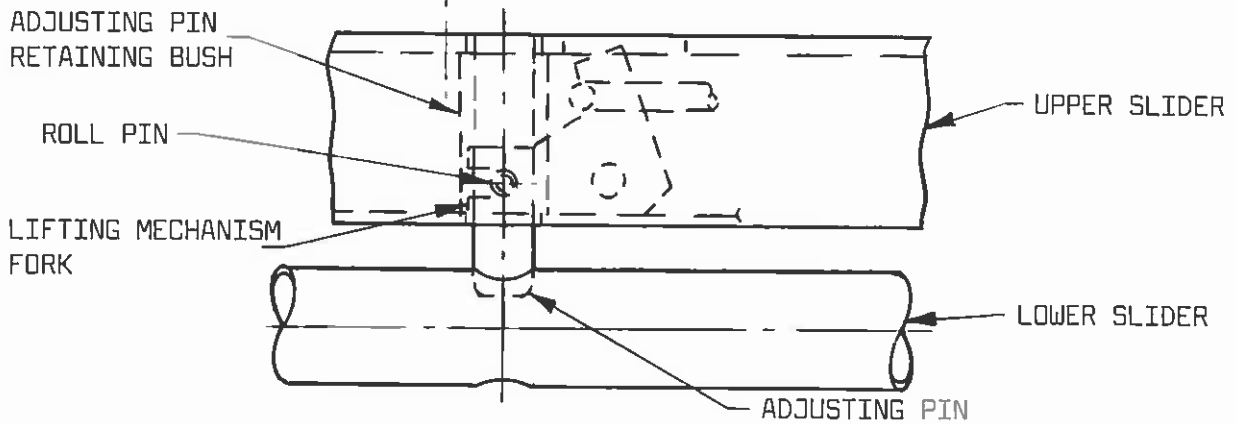
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ANTI TURN RIVET  
TUCKER "POP"  
126-24-031



LIFTING MECHANISM FORK — ROLL PIN

PLAN VIEW



ADJUSTING PIN  
RETAINING BUSH

ROLL PIN

LIFTING MECHANISM  
FORK

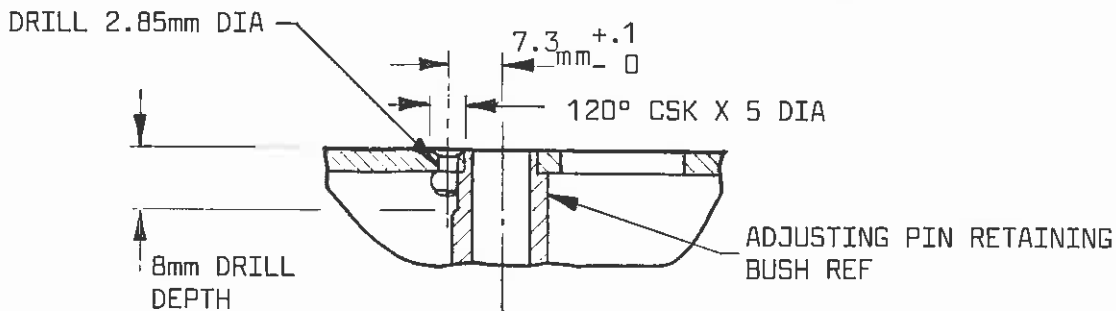
UPPER SLIDER

LOWER SLIDER

ADJUSTING PIN

FORWARD

SIDE VIEW



DRILL 2.85mm DIA

7.3 mm  $\begin{matrix} +.1 \\ 0 \end{matrix}$

120° CSK X 5 DIA

8mm DRILL  
DEPTH

ADJUSTING PIN RETAINING  
BUSH REF

SECTION A-A

FIG 1

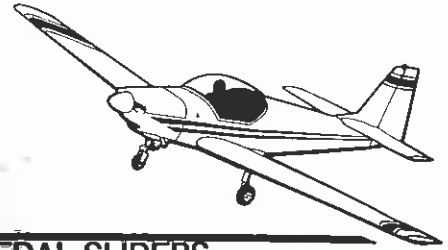
ADJUSTING PIN POSITION IN PEDAL/SLIDER MECHANISM

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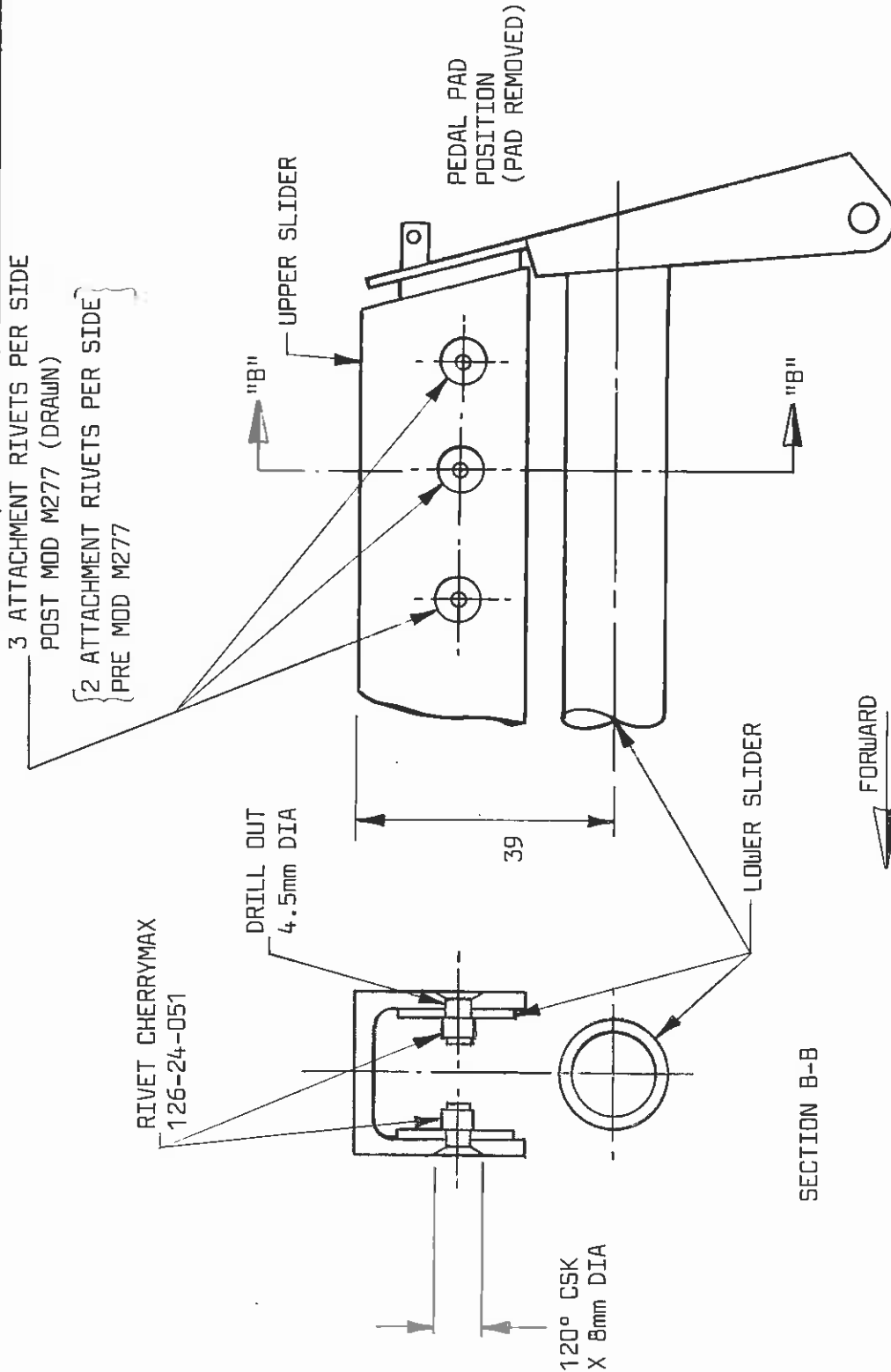


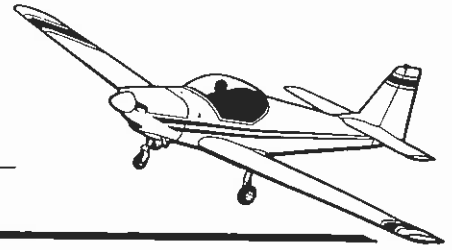
FIG 2  
UPPER SLIDER TO LOWER SLIDER, PEDAL MECHANISM JOINT

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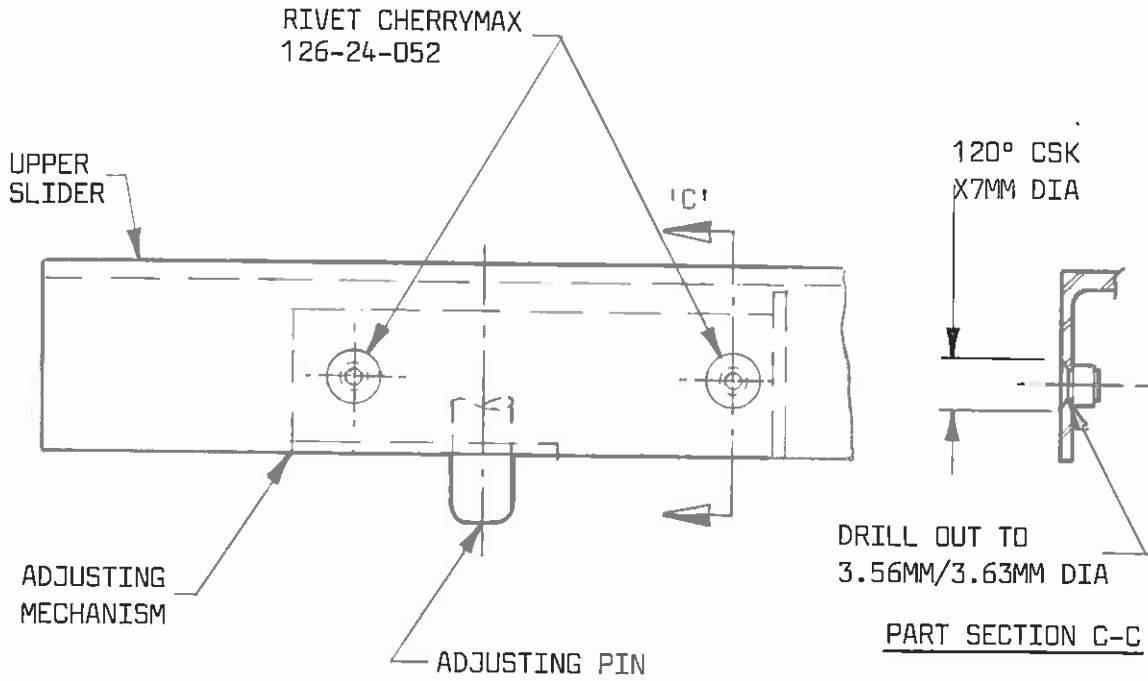


FIG 3

ADJUSTING MECHANISM ATTACHMENT TO SLIDER

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