

MAIN PLANE

Repair of damage to inboard end of wing
by fitment of replacement root end of "D" nose.
(Completely revised)

Repair preparation

1. (1) Trestle the wing as shown in fig. 1.

(2) Remove the fabric from the root end to a point somewhere between rib No. 8 and No. 9.

(3) Disconnect outer ends of electrical cables in conduit in leading edge, pull cables clear and cut locally through skin to sever top and bottom stringers and the conduit midway between stations No. 70 and 80 (fig. 2).

(4) Detach skin from rib at station No. 80 and from stringer portions between stations 75 and 80.

(5) Detach ribs from spar web from station No. 70 to root.

(6) Detach skins from spar flanges from station No. 80 to root.

(7) Remove root end of "D" nose.

(8) Bell the end of the conduit left in the main plane and detach remaining half of joint strap from end of top stringer next to spar.

Repair instructions (fig. 3).

2. (1) Offer up replacement part RC1 W111 (port) or RC1. W112 (starboard).

(2) Set up jig (part No. RC1. W113) as shown in fig. 1.

(3) Trim outer edge of skin as necessary to allow main and front spars to pick up in jig and satisfy diagonal check dimensions (para. 3).

(4) Pull back ribs to fit flush against the spar web.

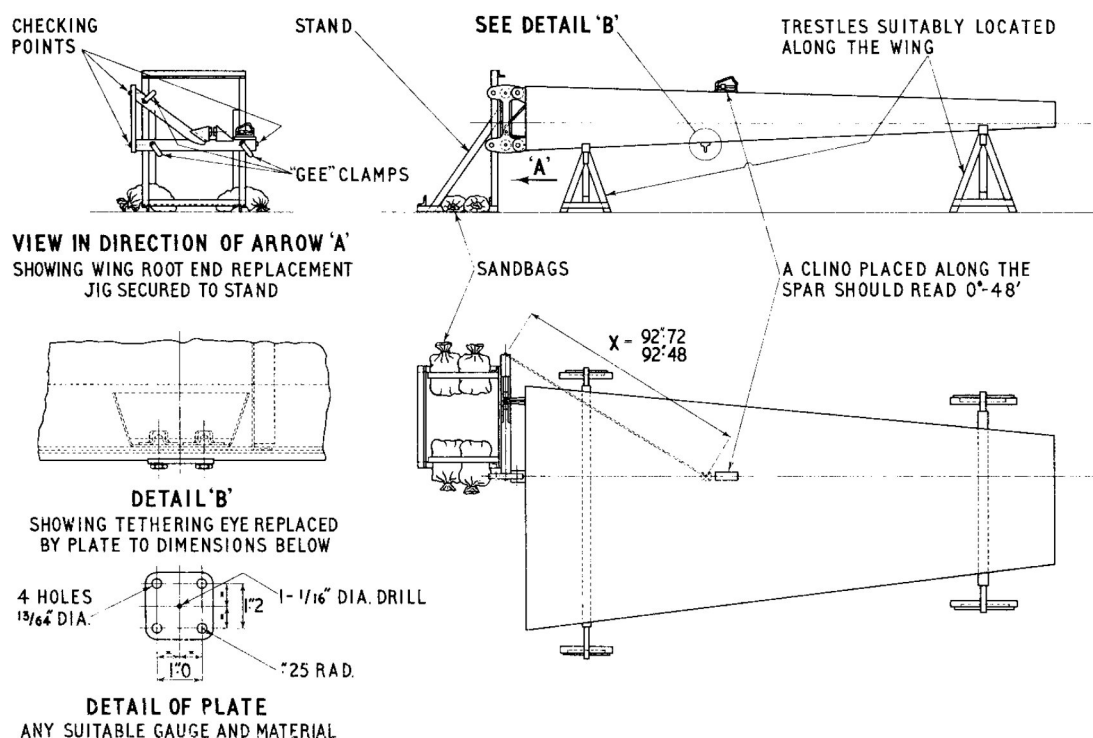


Fig. 1. Trestling and checking methods

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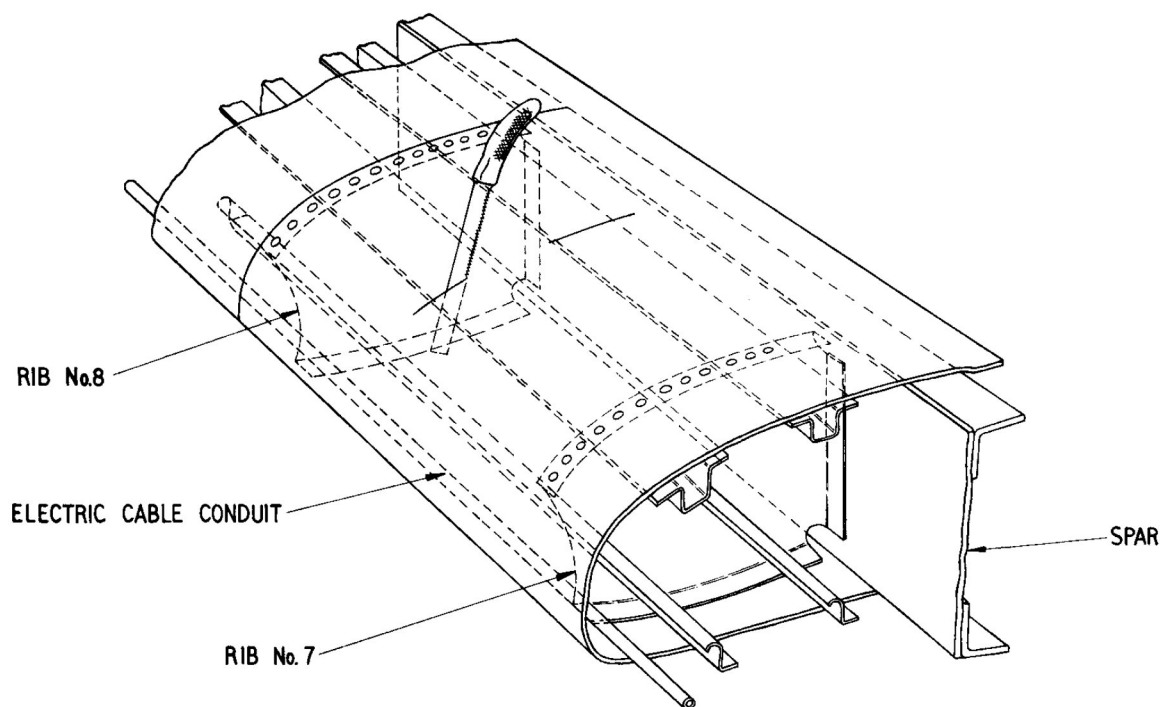


Fig.2. Cutting stringers

- (5) Rivet skin to spar flanges.
- (6) Rivet rib flanges to spar web.
- (7) Bind over break in conduit with insulating tape.
- (8) Join up all stringers as shown in fig.6/17 or 6/18 as appropriate; in the case of the stringer mentioned in para.1 (8), utilize existing rivet holes.
- (9) Fit repair patch as shown in fig.3.

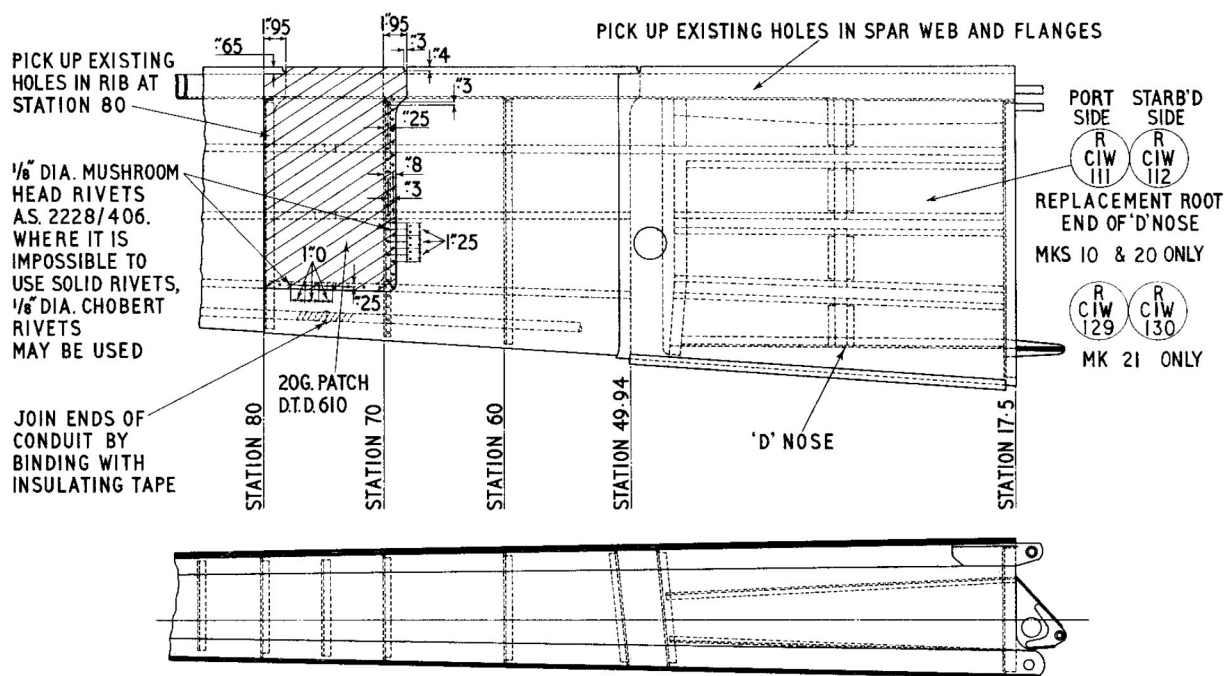
Method of using checking jig (fig.1)
3. (1) Support the main plane on trestles kept rigidly in position with sand bags. A clinometer set along the spar should read 48 minutes.

- (2) Secure the wing root jig RC.1. W.113 vertically by use of 'G' clamps and verify a reading of the clinometer suitably mounted on the platform provided as 0 deg.

(3) In this position the wing can be offered up to the jig and checked for alignment as follows :- Drop plumb lines through the checking points at the ends of the jig and another from the tethering point on the underside of the wing. The tethering eye should be replaced by a suitable plate holed in the centre through which the plumb line should pass.

(4) The dimension 'X' between the forward checking point on the jig and the tethering point should be within the limits shown (fig.1).

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INSTRUCTIONS FOR SETTING UP WING TO CARRY OUT THIS REPAIR
ARE GIVEN IN FIGURE AND LEAFLET A.I

ALL STRINGERS REPAIR TO FIGS 6/17 AND 6/18

Fig. 3. Refitment of new root end of 'D' nose

Estimate of requisite labour

4. Preparation will entail 40 bench hours and the actual replacement a further 45 bench hours.

Repair material

5. The following material will be required.

Stores reference	Description	Size	Specification
30B/1451	Alclad	20 s.w.g.	D.T.D. 610
30B/1526	Alclad	21 s.w.g.	D.T.D. 610
28Q/1068	Rivet, msh.hd. AS2228/406	1/8 in. dia.	L. 69
28Q/6446	Rivet, Chobert TK3SNA	1/8 in. dia.	
	Replacement root end of 'D' nose R.CI.W.111, Port		
	Replacement root end of 'D' nose R.CI.W.112, Starboard		

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