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CHAPTER 6

ENGINE BAY

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Chapter 6 ENGINE BAY

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Engine mounting

1. The engine mounting, situated at the rear of the fuselage, consists of two welded tubular steel Z-frames. The frames are attached to eye-bolts located in the two cross-tubes. Two eye-bolts, one at the centre of each cross-tube, provide additional direct engine pick-up points. For power plant repairs, refer to A.P.4320, Vol. 6.

Engine cowlings

2. The power unit is enclosed from Bulkhead No. 4 to the propelling nozzle by upper and lower front and rear cowling panels and a rear cone.

Negligible and repairable damage

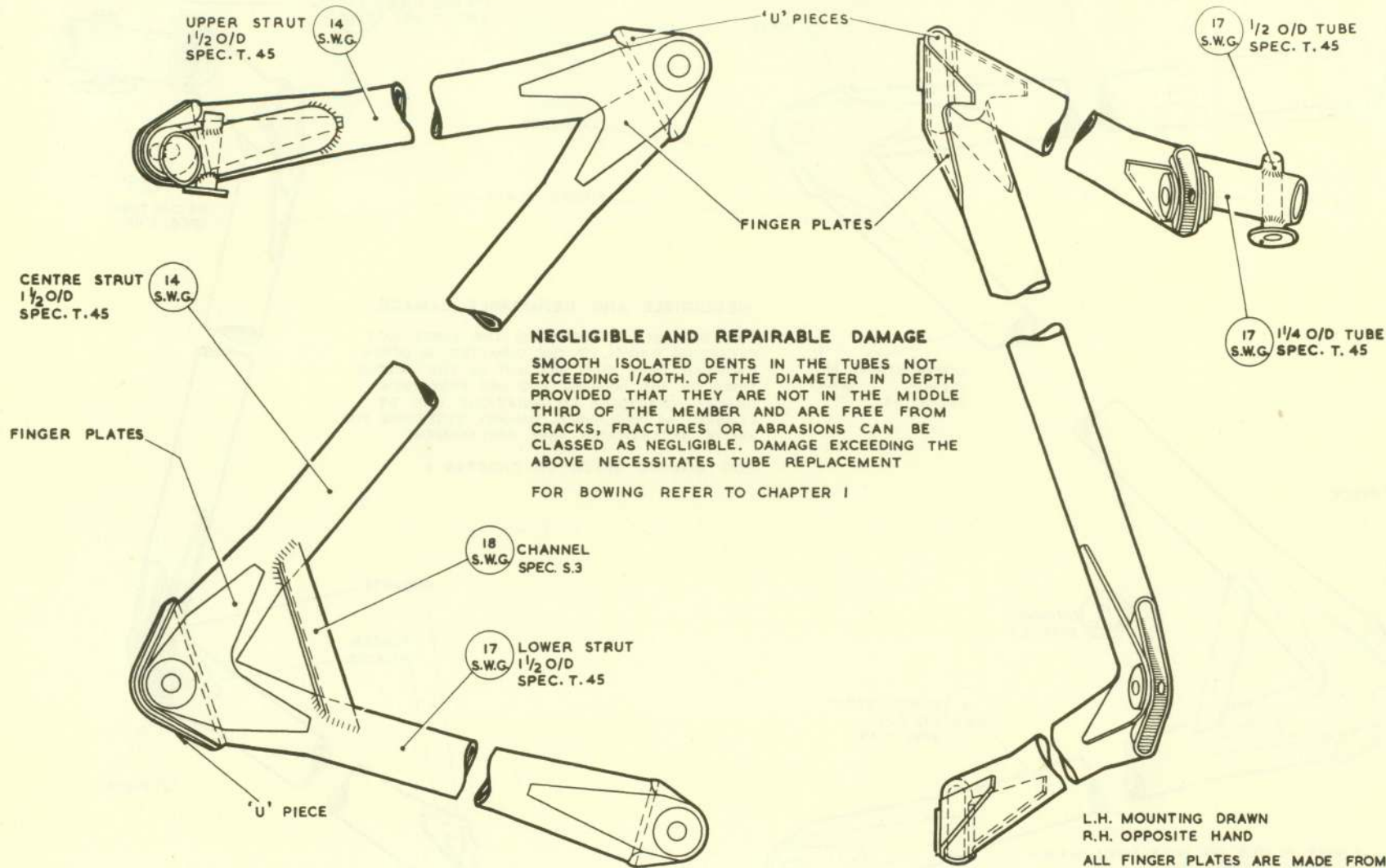
3. The definitions of negligible and repair-

able damage are given on the relevant illustrations.

Wear limits

4. Wear limits of the male and female parts of the engine mounting will be introduced in this chapter at a later date.

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NEGLIGIBLE AND REPAIRABLE DAMAGE

SMOOTH ISOLATED DENTS IN THE TUBES NOT EXCEEDING 1/40TH. OF THE DIAMETER IN DEPTH PROVIDED THAT THEY ARE NOT IN THE MIDDLE THIRD OF THE MEMBER AND ARE FREE FROM CRACKS, FRACTURES OR ABRASIONS CAN BE CLASSED AS NEGLIGIBLE. DAMAGE EXCEEDING THE ABOVE NECESSITATES TUBE REPLACEMENT

FOR BOWING REFER TO CHAPTER I

LEFT HAND MOUNTING ILLUSTRATED

L.H. MOUNTING DRAWN
 R.H. OPPOSITE HAND
 ALL FINGER PLATES ARE MADE FROM 12 S.W.G. SPEC. D.T.D. 124A (ANNEALED)
 ALL 'U' PIECES ARE MADE FROM 10 S.W.G. SPEC. D.T.D. 124A (ANNEALED)
 ALL DIMENSIONS ARE IN INCHES

Fig. 6/1. Engine mounting, Mk.1,2 and 4

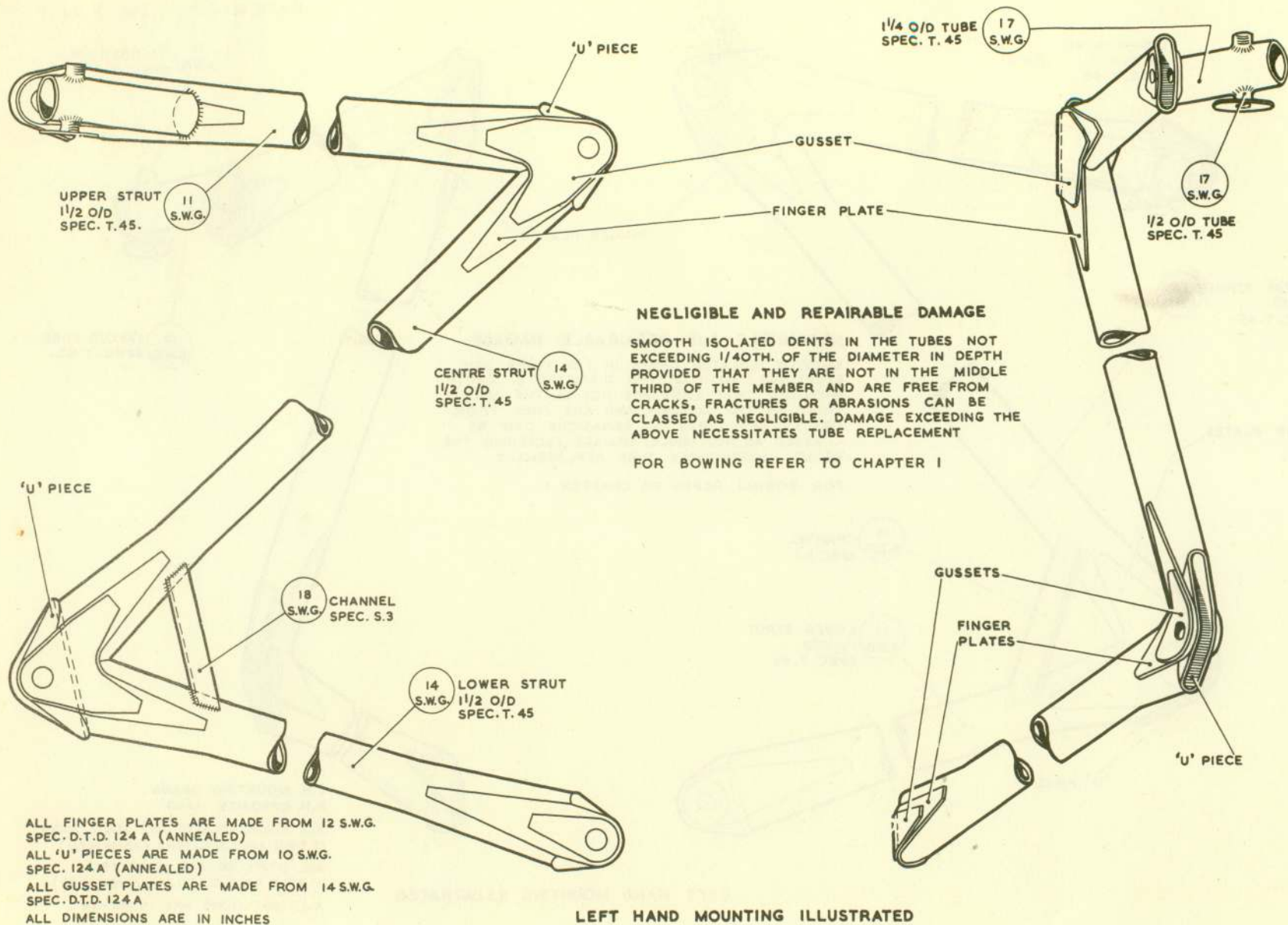
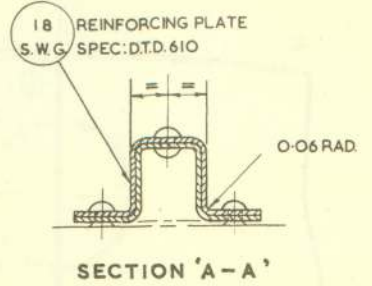
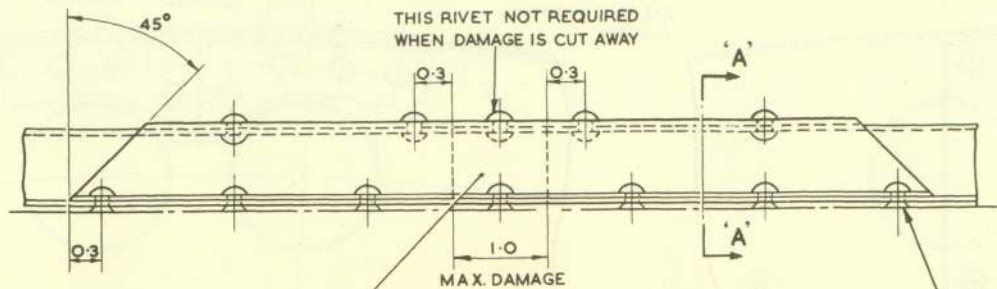


Fig.6/2. Engine mounting, Mk.3

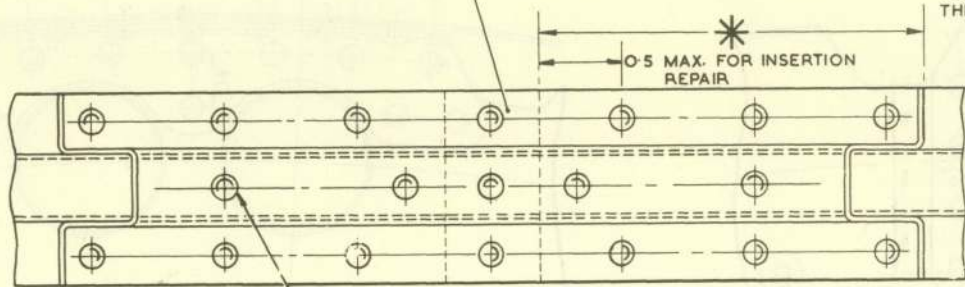
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THIS RIVET NOT REQUIRED WHEN DAMAGE IS CUT AWAY

DAMAGED PORTION OF STIFFENER TO BE DRESSED OUT OR CUT AWAY AS REQUIRED. IF CUT AWAY PACKING MUST BE INSERTED UNDER FLANGES.

5/32 DIA. C'SK HEAD RIVETS A.S.2229 TO PICK UP EXISTING HOLES NOT LESS THAN THREE RIVETS EACH SIDE OF THE DAMAGE WHERE STIFFENERS ARE SPOT-WELDED TO SKINS, THESE RIVETS TO BE POSITIONED MID-WAY BETWEEN THE SPOT-WELDS.



SNAP HEAD SOLID RIVETS A.S.2227 OR STEEL CHOBERT RIVETS A.G.S.2040 5/32 DIA. WHERE STIFFENER IS 18 SWG. OR GREATER AND 1/8 DIA. WHERE 20 SWG. OR LESS.

REINFORCING PLATE BENT TO FIT OVER STIFFENER

EXISTING STIFFENER

INSERTION REPAIR

A NEW LENGTH OF STIFFENER MAY BE INSERTED BY BUTT-JOINING IT TO THE EXISTING PORTION WITH A STRAP SIMILAR TO THE PATCH ABOVE; EACH HALF BEING AS SHOWN THUS * ABOUT THE BUTT-JOINT. SHOULD ADJACENT STIFFENERS BE SIMILARLY DAMAGED, THE BUTT-JOINTS SHOULD BE STAGGERED.

ALL DIMENSIONS ARE IN INCHES

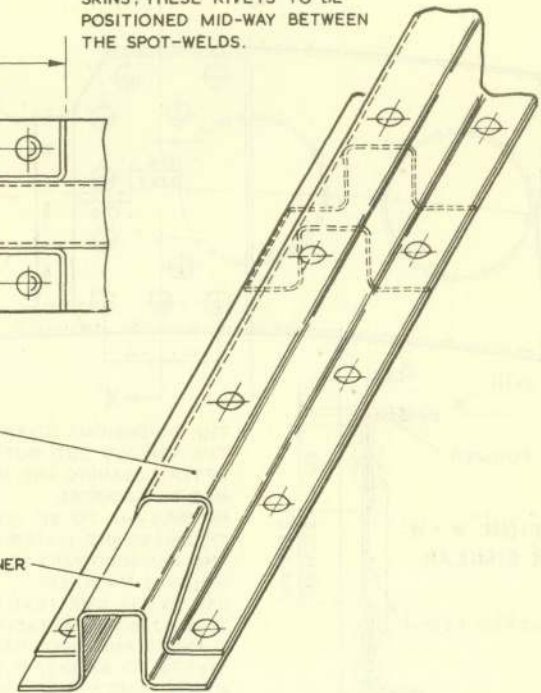
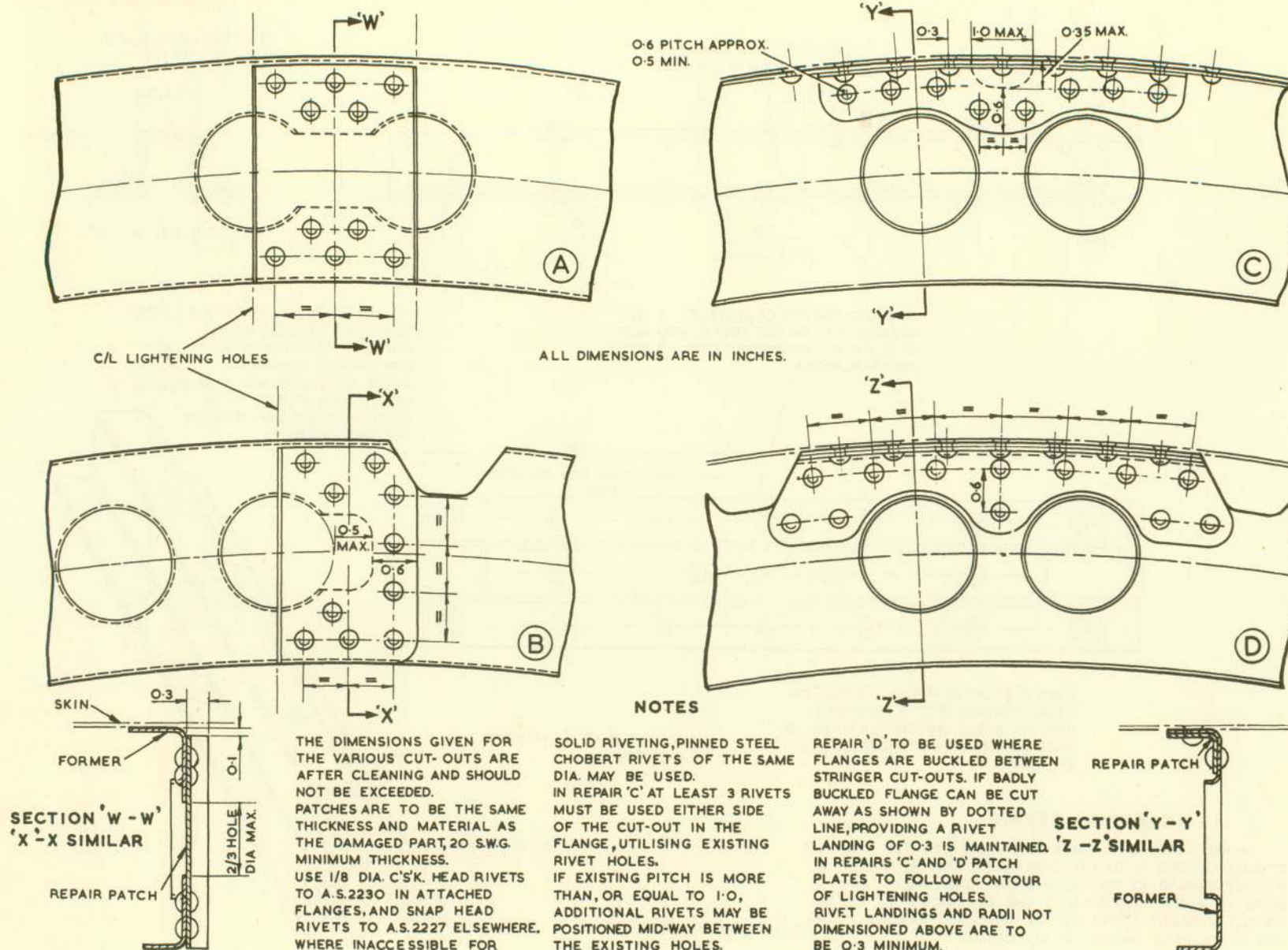


Fig.6/9. Stiffener repair, engine cowling



NOTES

THE DIMENSIONS GIVEN FOR THE VARIOUS CUT-OUTS ARE AFTER CLEANING AND SHOULD NOT BE EXCEEDED.

PATCHES ARE TO BE THE SAME THICKNESS AND MATERIAL AS THE DAMAGED PART, 20 SW.G. MINIMUM THICKNESS.

USE 1/8 DIA. C'S.K. HEAD RIVETS TO A.S.2230 IN ATTACHED FLANGES, AND SNAP HEAD RIVETS TO A.S.2227 ELSEWHERE, WHERE INACCESSIBLE FOR

SOLID RIVETING, PINNED STEEL CHOBERT RIVETS OF THE SAME DIA. MAY BE USED.

IN REPAIR 'C' AT LEAST 3 RIVETS MUST BE USED EITHER SIDE OF THE CUT-OUT IN THE FLANGE, UTILISING EXISTING RIVET HOLES.

IF EXISTING PITCH IS MORE THAN, OR EQUAL TO 1.0, ADDITIONAL RIVETS MAY BE POSITIONED MID-WAY BETWEEN THE EXISTING HOLES.

REPAIR 'D' TO BE USED WHERE FLANGES ARE BUCKLED BETWEEN STRINGER CUT-OUTS. IF BADLY BUCKLED FLANGE CAN BE CUT AWAY AS SHOWN BY DOTTED LINE, PROVIDING A RIVET LANDING OF 0.3 IS MAINTAINED. IN REPAIRS 'C' AND 'D' PATCH PLATES TO FOLLOW CONTOUR OF LIGHTENING HOLES. RIVET LANDINGS AND RADII NOT DIMENSIONED ABOVE ARE TO BE 0.3 MINIMUM.

Fig.6/10. Former repair, engine cowling

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