

CHAPTER 3

MAIN PLANES

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Chapter 3 MAIN PLANES

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Introduction

1. A method of pictorial indexing is employed in this chapter to locate and categorize damage and to illustrate repair schemes by step-by-step progression from the main component key diagram, through detailed structural illustrations and negligible damage charts, to repair schemes designed for particular items. Figure 1 - Main plane key diagram,

gives the rib numbers and figure numbers of the main structure illustrations. The structure illustrations simplify the identification of structural items and, in the key, give details of these items together with negligible damage definitions and repair figure numbers.

Outer wing leading edge repair

2. The performance of the aircraft can

be adversely affected if the surface and contour of the outer wing leading edge is not maintained, and extreme care must be taken in forming buttstraps and skin insertion pieces. The thickness limits in 18 s.w.g./L.73 light-alloy sheet vary between -0.003 in. and -0.006 in., depending upon the width of the sheet, consequently variation between the thickness of the existing skin and the

insertion piece must be expected. Any such variation is to be compensated for by shimming between the buttstrap and existing skin, or insertion piece, whichever is necessary to give a flush finish to the repair.

Fitting a new main undercarriage door

3. To fit a new main undercarriage door:-

(1) Jack and trestle the aircraft as detailed in A.P. 4326, Vol. 1, Sect. 2, Chap. 4.

(2) Disconnect the undercarriage door jack from the hydraulic system and connect a test rig to it. To do this remove the inner wing leading edge removable panels and lead the piping from the test rig over the wing leading edge and through the lightening hole in the main spar adjacent to the door jack.

(3) Detach the unserviceable door at its hinge pins and remove and discard it, together with its check link assembly.

(4) Remove and discard the aft hinge attachment bracket Part No. EA1.11.1011 port, EA1.11.1012 starboard from the fuselage side.

(5) Temporarily fit a new hinge attachment bracket and one half of the laminated shim Part No. EA3.11.819.

(6) Remove the forward hinge bracket and check link assembly from the new door and attach it to the fuselage.

(7) Offer up the door and temporarily secure it at the forward hinge. Maximum shims must be applied between the door and the hinge brackets in order that the door is thrown clear of the wing when closed. Nevertheless, the inboard edge of the door may still foul and,

during closing of the door, this edge must be closely observed and any danger of a foul cleared by trimming before the door is fully closed. Failure to observe this precaution may result in buckling of the inner skin at the door edge when the door is reopened.

(8) Manually close the door and carefully position it in the aperture so that the two shoot bolts contact the shoot-bolt pads either simultaneously or with the forward shoot bolt slightly in advance of the rear.

(9) With the door correctly positioned, mark the hinge pin position on to the aft hinge attachment bracket.

(10) Open the door and remove the aft hinge attachment bracket from the fuselage. Drill the hinge pin holes in the bracket using a 6.50 mm drill.

(11) Refasten the bracket to the fuselage, and secure the door to it with the hinge pin. Check the shoot bolts again to ensure that they contact the pads simultaneously by increasing or decreasing the shimming beneath the bracket. Peen over the bolts that secure the bracket to the fuselage.

(12) Mark the edge contour of the door aperture on the wing skin about ½ in. away from the edge. Close the door and transfer the contour of the aperture on to it.

(13) Remove the door and trim it until it just fits the door aperture. The inboard edge must be trimmed to a broad chamfer at its inside corner to avoid fouling of the inner skin on the wing root boundary angle. Do not attempt to obtain any edge clearances at this stage.

(14) Adjust the shims beneath the door hinge brackets until the forward edge

of the door closes inside the wing contour by 0.050 in. and the aft edge is flush with the wing contour when manual pressure is applied.

(15) Manually close the door and engage the shoot bolts by pulling on the tie rod.

(16) Pump the door jack to the fully retracted position and, by adjusting the eye-bolt on the end of the ram, ensure that the jack overrides the door by 0.125 in. minimum.

(17) Manually open the door and pump the jack to the fully extended position. With the door fully open adjust the sequence valve operating tappet to leave a further 0.050 in. travel of the sequence valve plunger before the plunger bottoms.

(18) Apply hand pressure to the shoot-bolt tie rod and force the lock lever into its fully downward position. Adjust the shims between the lock lever and the jack pick-up bracket until the jack overrides the pick-up bracket by 0.020 in.

(19) Connect the jack to the door and close the door under pressure. Again check that no foul occurs at the inboard edge of the door whilst it is closing. Continue to pump until a pressure of 2500 lb/in² is felt at the jack.

(20) Again check the position of the door forward and aft edges relative to the wing contour. Now that the door is closed under pressure the forward edge must be 0.080 in. inside the contour. Adjust the door stop bolt and the shims under the forward hinge bracket to obtain this dimension. Similarly adjust the shims under the aft hinge bracket to bring the aft edge of the door flush with the wing contour.



(21) Adjust the shims between the shoot-bolt housings and the door until a clearance of 0.040 in. is obtained between the shoot-bolt and the top surface of the shoot-bolt pad.

(22) Lower the door and disconnect and pump up the jack. Manually close the door and insert a 0.040 in. packing between the shoot bolts and the shoot-bolt pads. Finally check the up override of the jack. Adjust it as necessary.

(23) Remove the packings and lower the door.

(24) Reconnect the jack and apply a pressure of 2500 lb/in² to it with the pump. Check that the abutment faces on the checklinks contact each other evenly and that there is a clearance of between 0.020 in. min. and 0.030 in. max. between the top of the slot in the slave link and the eccentric bolt that engages in it. If the adjustment on the eccentric bolt is insufficient to provide this clearance, the top of the slot may be extended by filing.

(25) Release the hydraulic pressure and disconnect the jack from the door. Finally check the down override and adjust it if necessary.

(26) Reconnect the jack to the door and pump the door closed.

(27) Select 'door open' and pump very slowly until the shoot bolts are fully retracted. Check that there is a clearance of 0.110 in. min. between the shoot bolt and the forward face of the shoot-bolt pad. Obtain this clearance by adjusting the shoot-bolt tie-rod.

Note...

Mod.No. 3333 introduces an adjustable tie-rod to the aft shoot bolt. Therefore the clearance of 0.110 in. must be obtained on both shoot bolts when

fitting a D door to the post Mod.3333 standard.

(28) Pump the door fully closed and check that the shoot bolts engage a minimum of 0.50 in.

(29) Remove the door from the aircraft and trim it to obtain these edge clearances:-

inboard edge - 0.050 in. clearance
outboard edge - 0.050 in. clearance
forward edge - 0.080 in. clearance
aft edge - to fit flush

The small extended area on the forward edge of the door must have a clearance of 0.10 in. at its inboard edge.

(30) Finally assemble the main undercarriage door to the forward and aft hinges ensuring the correct length of each securing bolt plain shank engagement, using either of the following procedures:-

(a) Measure the amount of the existing packing and fit the appropriate length of bolt and/or washers selected from the following table:-

PACKING	FASTENING
FWD. HINGE	
Nil	bolt A. 25/3C
less than 0.05 in.	bolt A. 25/4C and washer SP./15C
0.05 in. to 0.10 in.	bolt A. 25/4C
0.10 in. to 0.13 in.	bolt A. 25/5C and washer SP./15C
AFT HINGE (top bolt)	
Nil	bolt A. 25/2C
less than 0.03 in.	bolt A. 25/3C and washer SP./15C
0.03 in. to 0.08 in.	bolt A. 25/3C
0.08 in. to 0.13 in.	bolt A. 25/4C and washer SP./15C

AFT HINGE (remaining bolts)
Less than 0.07 in. bolt A. 25/3C and washer
0.07 in. to 0.13 in. bolt A. 25/3C

OR

(b) Assemble the main undercarriage door to the forward and aft hinges using 1.05 in. long bolts Part No. EA3.20.2405 adjusting the amount of each bolt plain shank engagement with an appropriate amount of washers (S.P.15/C) beneath each bolt head to obtain a combined thickness of packings, shims and washers as follows:-

Forward hinge ◀ 0.15 to 0.20 in.
Aft hinge. 0.20 to 0.25 in. ▶

Note...

Method (a) was introduced by S.T.I./Can./148. Method (b) is required on the current issue of the relevant drawings and has the advantage of constant bolt length.

(31) Ensure that a clearance exists between the door forward hinges and the fuselage side when the door is closed. To check for the correct gap proceed as follows:-

(a) With feeler gauges check that a gap of at least 0.010 in. exists between the door forward hinge brackets and the fuselage sides, or any structure attached to the fuselage sides, and also between the side links and the fuselage sides or any structure attached to the fuselage sides.

(b) Where necessary, lightly file the hinge brackets and side links to obtain the clearances. Apply

self-etch primer to the filed surfaces and restore the standard paint finish.

(c) Pump the main undercarriage doors open, applying maximum hand pump pressure, and check that a gap of at least 0.050 in. exists between the hinge brackets and the wing lower boundary angle pieces and rivets, and the side links and the wing lower boundary angle pieces and rivets.

(d) Where necessary lightly file the wing lower boundary angle pieces to obtain the clearances. Protective treat the filed area by applying the local standard paint finish.

(32) Reconnect the door jack to the aircraft hydraulic system and bleed the circuit. Carry out an undercarriage retraction test as detailed in A.P.101B-0400-1 series, Sect.3, Chap.6.

Integral tank sealing with P.R.C. sealants

4. Two types of sealant, Bostik or P.R.C. have been used for sealing integral tanks on initial assembly, but only P.R.C. is to be used on repairs.

The materials required are:-

- ◀ (a) P.R.1422 B.T.2, Ref.No.33H/2203813, a brushing compound.
- (b) P.R.1005 Ref.No.33H/2244949, a ready-mixed protective sealant for brushing or spraying over P.R.1422-2 and P.R.1422 B.T.-2.
- (c) Cleaning solvent W.D.606/615

for cleaning brushes, containers and spray equipment.

◀ (d) Methyl ethyl ketone, Ref.No.33C/1102470, used for cleaning and degreasing.

(e) Paint remover, water rinsable Ref.No.33B/9429259. ▶

(1) The P.R.C. sealants, with the exception of P.R.1005 are available with either of two work lives, standard or extended. The standard material is the one which will normally be used on repair.

(2) Before applying the sealants, ensure that the tank is free from swarf and dirt. Immediately before sealant application the surface must be degreased. Only flameproof inspection lamps are to be used during sealant repairs.

(3) Parts which have been coated with P.R. sealant must be brought together within thirty minutes and bolted at numerous positions to prevent slipping of the mating surfaces. If the parts slip or become separated the P.R. sealant must be cleaned off to the bare metal and the whole process repeated.

(4) All the work must be completed within the application life of the material which, for P.R.1422-2 and P.R.1422 B.T.-2 sealant is four hours at 65 deg F, P.R.1005 may be used until it becomes too thick to apply.

(5) Great care must be exercised to prevent air being trapped in any sealant fillets, because at high altitude the air will expand the sealant into a

blister, which will burst and may cause a leak.

(6) Bolts must be cleaned and degreased before fitting and, when in position, the bolt should not be turned. If the bolt enters a trap nut and has to be turned, then the area must be brush coated with P.R.1422 B.T.-2 after tightening is completed.

Method of using P.R.C. sealant

5. The following procedure is applicable internally.

(1) Remove the existing sealant or external finish down to the bare metal.

(2) Clean the metal surface with a ◀ Methyl ethyl ketone, Ref.No.33C/1102470. ▶ Use a clean paper tissue.

(3) Immediately before applying the sealant, degrease the prepared surface with a clean cloth liberally impregnated with trichlorethylene. Wash one small area at a time and dry it off before the solvent evaporates.

(4) Apply a brush coat of P.R.1422 B.T.-2 over the cleaned surfaces, giving a liberal overlap on any existing fillet.

(5) Where a fillet of material is required, use P.R.1422-2, pressed well into the existing fillet material.

(6) After the P.R.1422-2 has cured enough to prevent damage to its surface, spray or brush on a protective coat of P.R.1005 and allow to cure for a period of 48 hours. ▶

Fitting a new main plane

6. The following procedure for fitting

a new main plane is to be carried out in accordance with the main plane removal instructions and reassembly notes in the relevant A.P.101B-0400-1 series, Sect.3, Chap.2.

(1) Check the Mod. standard of the new main plane.

(2) Transfer all the flexible oil pipes from the engine bay of the old main plane to that of the new main plane.

(3) Check that the front, main, and rear main plane attachment bolts fit their positions in the main plane and fuselage attachment points.

(4) Where possible withdraw the flap hydraulic and main fuel pipes into the fuselage or take other measures to prevent these pipes being trapped when offering up the main plane.

(5) Refer to fig.1A, detail B. Cut back rib number 1 so that the distance between the ends of the rib and the faces of the main spar boom is as follows:-

(a) top 1.9 in.

(b) bottom 2.2 in.

(6) Refer to detail A and file the wing-root edge-member to clear the engine control rods.

(7) Reduce the base of the anchor nut, fitted at the top aft flange of the rear wall, by filing off one of the legs by which it is attached (refer to detail C).

(8) Check that the distance from the

inner faces of the fuselage main-plane attachment angle piece is 1.6 in. (refer to detail D).

(9) Fit an anchor nut, Part No.AGS.2018/C to the inner wing nose rib upper channel (refer to detail A).

(10) Cut back the lipped sealing strip at the aft edge of the wheel to clear the fuselage wing-root-attachment angle pieces (refer to detail B).

(11) File a lead on the forward main-plane attachment point to facilitate mating with the forward main-plane attachment bracket on the fuselage. File a lead on the aft face of the shear plate as shown in detail B.

(12) File a chamfer on the top boom to blend with the fuselage contour (refer to detail B).

(13) Carry out the following procedure to obtain the necessary clearances between the main-plane skin and fuselage. The clearances are:- $0.10^{+0.04}_{-0.01}$ in. around the leading edge in the region of the slotted attachment holes in the main-plane root, and 0.10 in. at the centre line of the last slotted hole and tapering to a gap of 0.050 in. at the centre line of the first unslotted hole (this refers to the top and bottom skins).

Note...

If a scribe gauge and main-plane-to-fuselage attachment tools are not available, manufacture them to fig.1B, 1C and 1D.

(a) Position main-plane gantries Ref.No.4Q/2309 and 4Q/2310 with the inner beam approximately 3 feet from the fuselage and the outer beam approximately 20 feet from the inner beam.

(b) Manoeuvre a crane alongside the leading edge of the main plane and as near as possible to the gantries, with the rear of the crane towards the fuselage.

(c) Sling the main plane and position it so that the main-plane main attachment bracket inboard holes are in line with the fuselage main attachment bracket outboard holes, and the forward and rear main plane attachment brackets level with, and approximately 3 in. from, their respective fuselage attachment brackets (fig.1E).

(d) Secure the respective attachment brackets together with the main attachment jig pins. Fit a spacer between the main plane and fuselage upper main attachment brackets to prevent fore-and-aft movement of the main plane (fig.1F).

(e) Fit jig pins and plates to the forward and rear main-plane-fuselage attachment brackets (fig.1F).

(f) Set the scribing point of the gauge to a dimension of 3.050 in. as follows:-

Adjust a Vernier height gauge to read 3.050 in., stand the gauge on a surface plate, position the

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scribe gauge with the rollers square on the surface plate and adjust the scribing point to the reading given by the height gauge.

(g) Scribe a line commencing at the rear of the main-plane upper skin immediately forward of the main spar, to a point mid-way between the last unslotted hole and the first slotted hole.

(h) Reset the gauge to a dimension of 3.10 in. and scribe a line from a point mid-way between the last unslotted hole and the first slotted hole on the upper skin, round the leading edge to a point mid-way between the last unslotted hole and the first slotted hole on the lower skin.

(j) Reset the gauge to a dimension of 3.050 in. and scribe a line from a point mid-way between the last unslotted hole and the first slotted hole in the lower skin along the remainder of the skin.

(k) With the aid of a straightedge and scribe, taper together the 3.10 in. and the 3.050 in. scribe lines from the centre-lines of the last slotted and first slotted holes at the upper and lower skin.

(m) Dress back the skin to the scribe line and radius all sharp corners.

(14) Locate and drill the holes for the

2 B.A. bolts in the wing-root edge-member.

(15) File the top ends of the flanges of the undercarriage door jack mounting bracket to provide a clearance of 0.02 in. to the nuts when the main plane skin-to-fuselage attachment bolts are fitted.

(16) Check that the main spar to fuselage sealing blocks are still attached to the fuselage. If they need replacing they must be secured with Bostik adhesive specification CS.2558.

(17) Where applicable fit the cabin pressure Y pipe.

(18) Fit the aileron control tube in the main plane.

(19) Position the two new closing strips on the fuselage wing-root-attachment angle piece and file them to suit the contour of the fuselage. Back-mark the closing strips and remove and drill them for the 2 B.A. bolts.

Note...

The main-plane edges of these strips are to be filed and drilled after the main plane is fitted.

(20) Offer up the main plane.

(21) Lubricate and fit the upper and lower main attachment bolts, washers and nuts. Tighten the nuts on the lower bolts to a torque of 1500 lb in. and fit the split pins. The nuts on the upper bolts should be tightened until

the split pin hole in the bolt aligns with the nut slots, the torque required to achieve this must not exceed 1500 lb in.

Note...

At the lower main attachment bolts only, shims, Part No.EA3.20.1401, may be used under the nuts to align the nut slots with the split pin hole in the bolt.

(22)

(a) Check whether a gap exists between the main-plane diaphragm and the mating face of the forward attachment bracket at frame 17. Gaps not exceeding 0.015 in. are acceptable; gaps of 0.015 in. to 0.100 in. must be reduced to the permissible maximum, or less, by the insertion of light-alloy packing, specification L.72.

(b) Insert the forward attachment bolt, fit the nut and partially tighten. Using a feeler gauge, check that the lower surface of the bolt head is fully in contact with the forward face of the bracket. The bolt head must not incline or result in a gap of more than 0.010 in. at any position.

(23) Fit the rear attachment pin, collar and locking bolt. Peen the end of the sealing bolt.

(24) Connect up the aileron control rod.

(25) Fit the shear bolts in the main spar web.

(26) Reconnect the hydraulic pipes, the fuel pipes and the cable looms between the fuselage and the main plane.

(27) Fit the 2 B.A. bolts securing the main-plane skin to the attachment angle piece on the fuselage.

Note...

After fully tightening the bolts, slacken by quarter-turn all those around the leading edge.

(28) Complete the fitting of the closing strips at the wing root. File the out-board edges of the strips until they seat level with the wing skin. Back-mark the position of the 2 B.A. holes from the nut strip in the wing.

(29) Complete the following work in accordance with the associated A.P.101B-0400-1.

(a) If they were removed refit the flaps and ailerons.

(b) Fit the undercarriage and its door.

Note...

Ensure that the Paxolin lead block has been fitted to its mounting bracket on the forward face of the engine firewall in the undercarriage bay before fitting the undercarriage leg fairing.

(c) Reconnect all electrical cable looms between the fuselage and main plane.

(d) Refit the engines and jet pipes.

(e) Carry out all functioning checks.

(f) Fit the engine cowlings.

(g) Check the alignment and the rigging of the aircraft as specified in the associated A.P.101B-0400-1, Sect.2, Chap.4.

(h) Carry out the flight trim checks specified in the appendix to Mod. Canberra 2107 (Mk.2 and 3) or Mod. Canberra 2125 (Mk.4, 6, 7 and 8).

Replacement of bushes in main undercarriage door forward hinge

7. With the aircraft jacked and trestled and the undercarriage door removed, proceed as follows:-

(a) Remove and retain the bolts, washers and stiffnuts securing the hinge mounting bracket to the fuselage.

(b) Remove the bracket, and shims where fitted.

(c) Examine the shims for damage and distortion, renew with the equivalent thickness of shim, if necessary.

(d) Examine the bracket for cracks using the Ardrex penetrant dye method.

(e) If the hinge bracket is free

from cracks, press out the existing bushes.

(f) Remove any burrs from the hinge bracket bore, clean and fit new bushes Ref.No.26FZ/256.

Note...

Ensure adequate support for the bracket flanges when fitting the bushes.

(g) Re-examine the hinge bracket for cracks in the region of the new bushes.

(h) Ream the new bush bores to 0.3125 ± 0.0020 in. Remove all swarf and burrs.

(j) Refit the hinge bracket to the fuselage, together with the existing shims, or new shimming of equivalent thickness. Secure with the existing items retained at (a) above.

Replacement of bushes in main undercarriage side stay (fig.52, item 2)

8. Wear in the side stay knuckle joint may be eliminated by one of two methods, which are as follows:-

(1) Replacement of the bearing ball assembly, Part No.EA1.20.1229, in which the bushes, Part No.EA1.20.1231, are already fitted and line reamed to size.

(2) Replacement of the bushes, Part No.EA1.20.1231, in the bearing ball assembly, Part No.EA1.20.1229, followed by line reaming to size and ensuring correct dimension between the flange faces of the two bearing bushes.

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(3) To eliminate wear of the knuckle joint proceed as follows:-

(a) Jack and trestle the aircraft in accordance with A.P. 101B-0400-1 series, Sect. 2, Chap. 4.

(b) Exhaust the hydraulic pressure from the undercarriage system, A.P. 101B-0400-1 series, Sect. 3, Chap. 6.

(c) Dismantle the side stay knuckle joint (fig. 52, item 2) and remove the assembly of the bearing ball, Part No. EA1.20.1229 and replace with a new one or proceed as follows:-

(i) Remove the bushes, Part No. EA1.20.1229, from the bearing ball assembly, Part No. EA1.20.1229, using a suitable extraction tool.

(ii) Clean and degrease the bearing ball assembly.

(iii) Fit the bushes, Part No. EA1.20.1229, to the bearing ball assembly, Part No. EA1.20.1229, by pressing or drawing into position with the appropriate tool.

(iv) Line up the bush bores to $1.625 \pm \begin{smallmatrix} 0.007 \\ 0.010 \end{smallmatrix}$ in. (fit X).

(v) Check the dimension from the external face of one bush flange to the external face of the other bush flange, the dimension must be $2.900 \pm \begin{smallmatrix} 0.000 \\ 0.004 \end{smallmatrix}$ in.

Note...

If the dimension is more than the figure indicated, very carefully remove equal amounts from the flange area of each bush.

(vi) Remove all swarf and burrs and clean and degrease the bearing ball assembly.

(vii) Reassemble the side stay joint (fig. 52, item 2) with serviceable components and check the alignment of the bearing ball assembly bush bores with those in the lower side stay fork end. Dismantle and reassemble with grease, specification XG-287.

(4) Carry out an undercarriage functioning check in accordance with, A.P. 101B-0400-1 series, Sect. 3, Chap. 6.

(5) Detrestle the aircraft in accordance with A.P. 101B-0400-1 series, Sect. 2, Chap. 4.

Main-plane integral tank, assessment of fuel leakage

9. The degrees of fuel leakage likely to be encountered are as follows:-

Indication	Definition
Stain	Area discoloured, but not wet
Seep	Area discoloured, and wet (glistens in a strong light)

Indication

Definition

Drip	Separate drops fall to the ground or on an upper surface the wet patch spreads rapidly
Running leak	The fuel from the leak can be visually observed

◀ **Removal of permanently attached main plane skin panels**

10. During repair or modification of the main planes it is essential to provide adequate support at all the appropriate points. The trestles must be adjusted to support the main plane; under no circumstances must the trestles be adjusted to serve as jacks. Jacking and trestling of the aircraft must be undertaken in accordance with A.P. 101B-0400-1, series, Sect. 2, Chap. 4, or in accordance with the requirements detailed in the specific modification leaflet of the modification being embodied. Two types of main plane are likely to be encountered, non-integral type fuel tank and integral type fuel tank, to which the following limitations on the removal of permanently attached skin panels must be applied during repair work or modification embodiment.

Note...

1. There are no limitations upon the number of servicing access panels which may be removed.

2. The limitations apply to the in-board and outboard parts of the main plane. ▶

Non-integral tank main planes

(1) In addition to the standard closing panel, adjacent to the main spar lower boom, which may be removed in all cases, not more than one complete permanently attached skin panel must be removed at the same time on the leading or trailing edges. The following limitations apply:-

(a) *Leading edge*

Not more than one complete permanently attached skin panel must be removed at the same time, i.e. the upper or lower leading edge main rib-to-main rib.

(b) *Trailing edge*

Not more than one complete permanently attached skin panel, which is defined as the spanwise skin areas between the Tee-section joint stringers.

(2) Any one permanently attached skin panel removed, must be replaced and finally secured using all fasteners, before the removal of any other single permanently attached skin panel.

*Integral tank main planes***CAUTION**

The integral tank must remain in situ at all times, or a slave integral tank must be fitted when any one permanently attached skin panel is removed.

(1) In addition to the standard closing panel, adjacent to the main spar lower boom, which may be removed in all cases, not more than one complete permanently attached skin panel must be removed at the same time on the leading or trailing

edge. The following limitations apply:-

(a) *Leading edge*

Not more than one complete permanently attached skin panel must be removed at the same time, i.e. the upper or lower leading edge, main rib-to-main rib.

(b) *Trailing edge*

Not more than one complete permanently attached skin panel, which is defined as the spanwise skin areas between the Tee-section joint stringers.

(2) Any one permanently attached skin panel must be replaced and finally secured using all fasteners before the removal of any other single panel.

Note...

1. *When trestling main planes the trestle beam must just contact the skin surface without actually lifting.*

2. *Any necessary deviations from the foregoing procedures, due to complex special repair work, must be referred to The Product Support Department of the Contractor.*

◀ **Main undercarriage bracket, repair of location hole for main pivot pin locking plate dowel**

II. If the hole in which the pivot pin locking dowel engages, becomes oversize, it can be restored to standard dimensions by the following procedure:-

(1) Remove and discard the split pin locking the slotted nut to the main

pivot pin of the main undercarriage leg.

(2) Remove and retain the slotted nut, pivot washer and locking plate assembly.

(3) Bore out the defective hole in the main undercarriage bracket to 0.4375 ± 0.0004 in. dia.

(4) From material specification L.65 or D.T.D.683, manufacture a bush 0.30 in. long with an external dia. of $0.4375 \pm \begin{matrix} 0 \\ 0 \end{matrix} \begin{matrix} 0002 \\ 0004 \end{matrix}$ in. Chamfer one end of the bush 0.020 in. at an angle of 45 deg, then bore and ream the bush to $0.3125 \begin{matrix} +0 \\ +0 \end{matrix} \begin{matrix} 0005 \\ 0002 \end{matrix}$ in. dia.

(5) Clean and degrease the bored-out hole in the undercarriage bracket using trichloroethane, Ref.No.33D/2201949 and 2-ply absorbent paper, Ref.No.32B/1312.

(6) Using a small camel-hair brush, apply Locquic grade N activator, Ref.No.33H/2202564 to the inside of the bored-out hole in the undercarriage bracket (to serve as a primer). Dry the activator with hot air at a temperature of 65 deg C for a period of 20 minutes.

(7) Clean and degrease the bush (manufactured at operation (4)) using trichloroethane, Ref.No.33D/2201949 and 2-ply absorbent paper Ref.No.32B/1312.

(8) Using a small camel-hair brush, apply Locquic grade N activator, Ref.No.33H/2202564 to the outer surface of the bush. Dry the activator with hot air at a temperature of 65 deg C for a period of 20 minutes. ▶

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◀ (9) Grease the bore of the bush to prevent the adhesion of Loctite.

Note...

The amount of freezing required in the following operation can be achieved in a domestic-type refrigerator or deep-freeze cabinet.

(10) Freeze the bush to a temperature of minus 20 deg C to minus 30 deg C.

(11) Apply to the bored-out hole in the undercarriage bracket, a coat of Loctite AV, Ref.No.33H/2201024.

(12) Remove the bush from the freezer, wipe dry and quickly insert into the bored-out hole in the undercarriage bracket.

(13) Allow the Loctite to cure for a period of 24 hours at room temperature.

(14) Ensure that the bush is flush with the surface of the bracket, dress level as necessary and apply self-etching primer.

(15) Clean and degrease the bore of the bush.

(16) Refit the locking plate assembly, pivot washer and slotted nut retained at operation (2). Lock with a new split pin. ▶

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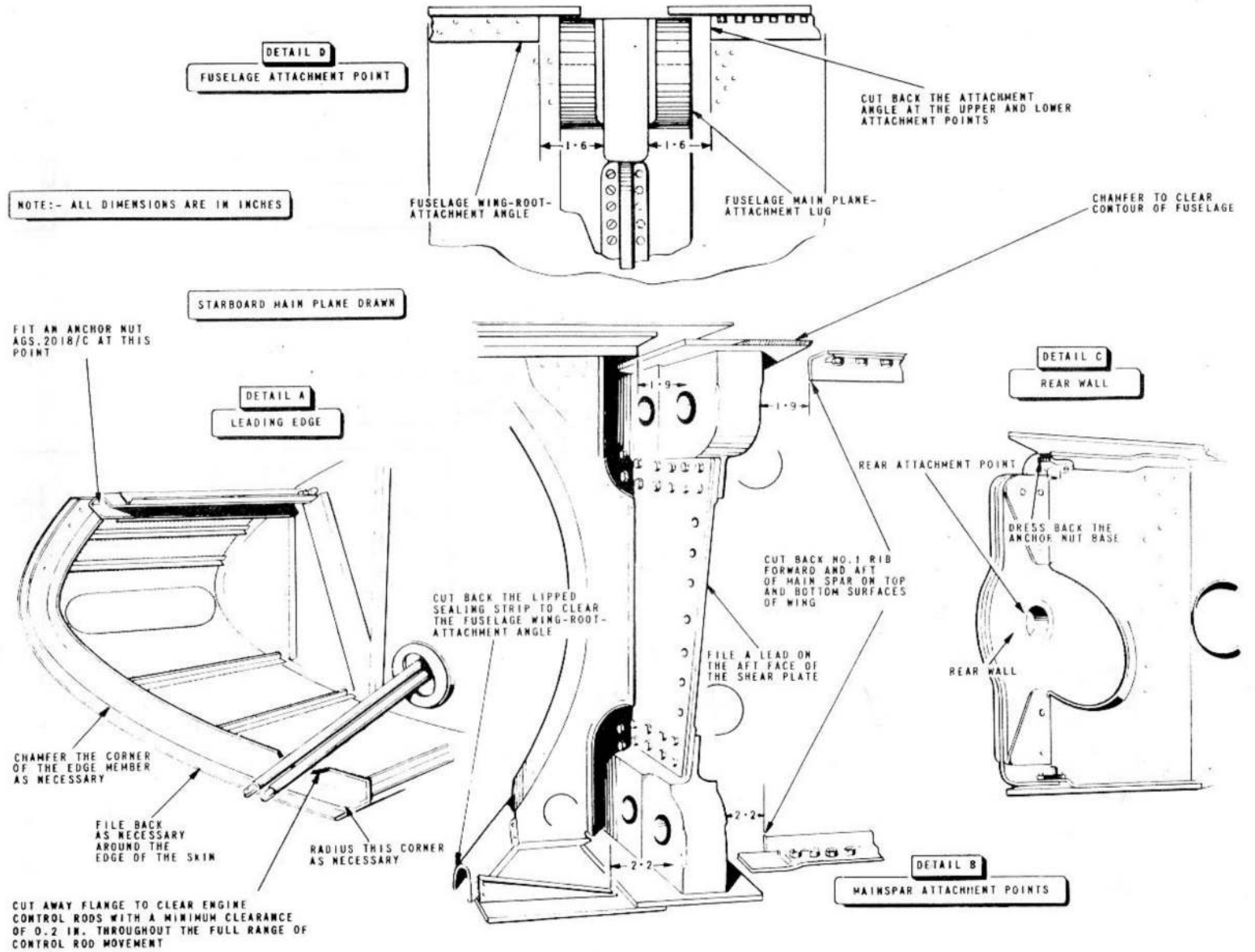


FIG. 1A. PREPARATION FOR FITTING A NEW MAIN PLANE

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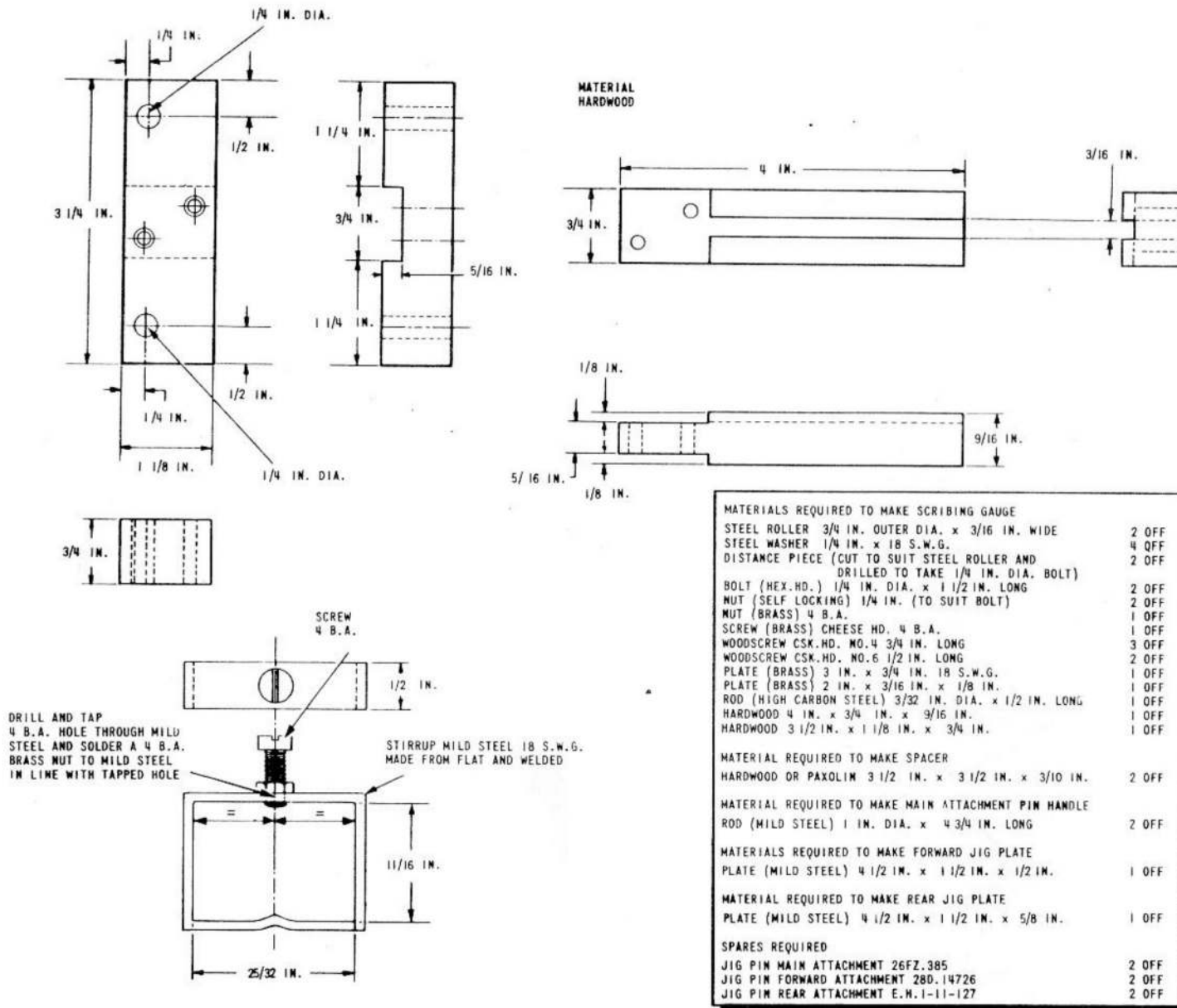


FIG. 1B. MAIN-PLANE SKIN SCRIBE GAUGE COMPONENTS

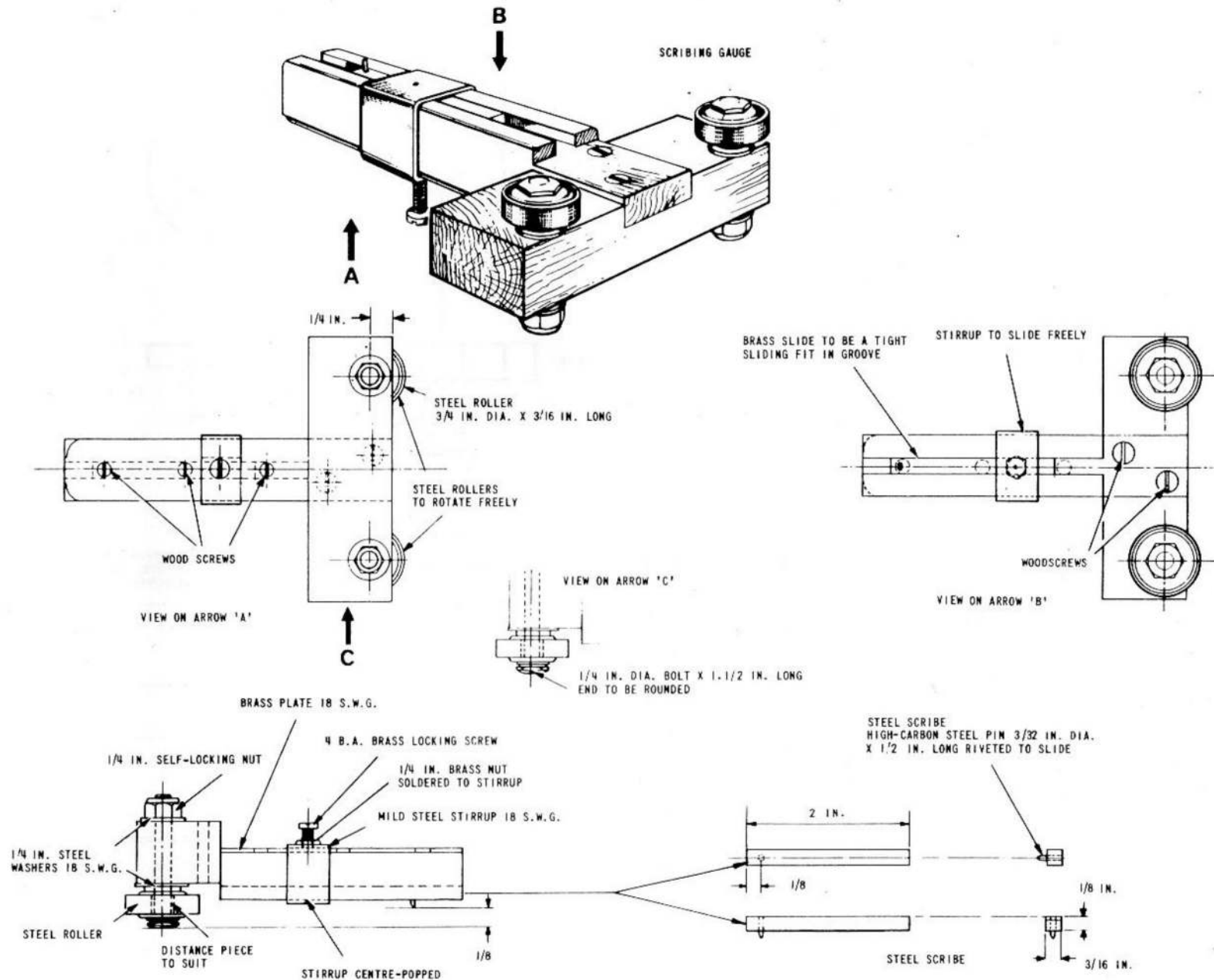


FIG. IC. MAIN-PLANE SKIN SCRIBE GAUGE

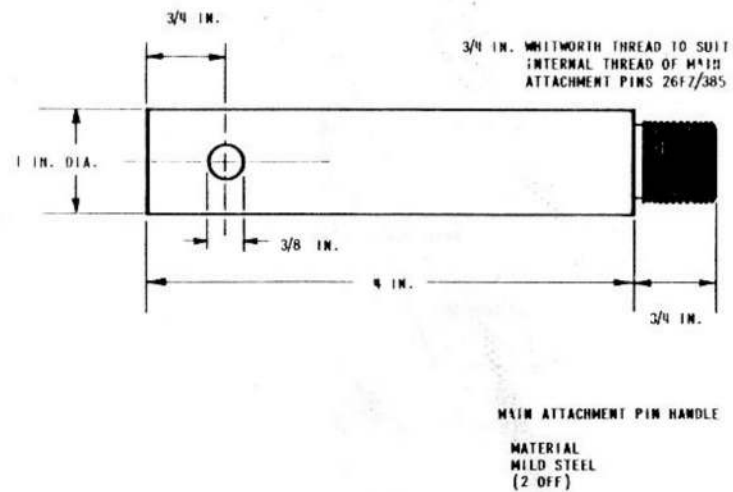
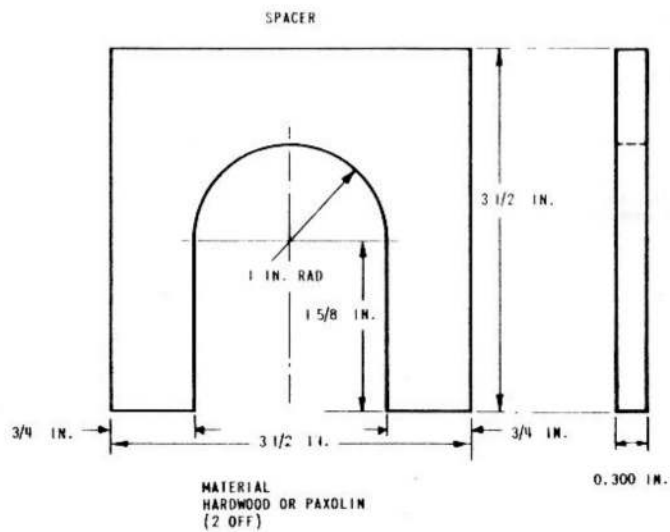
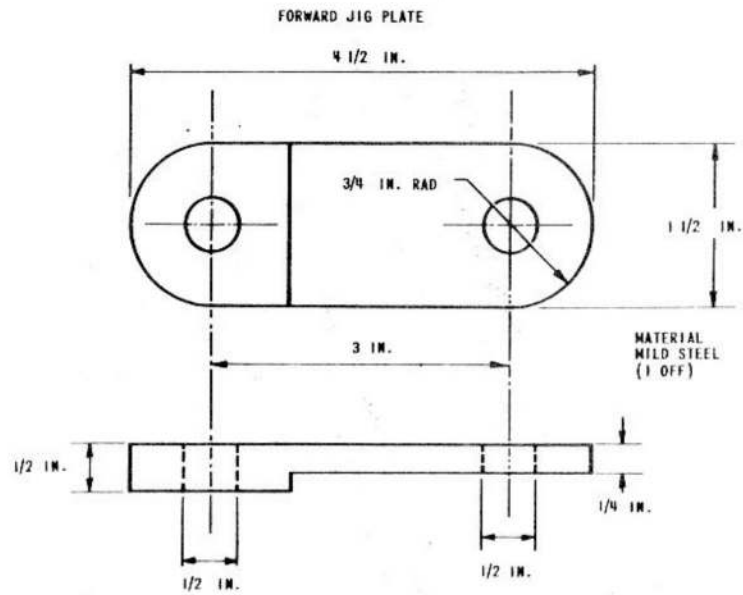
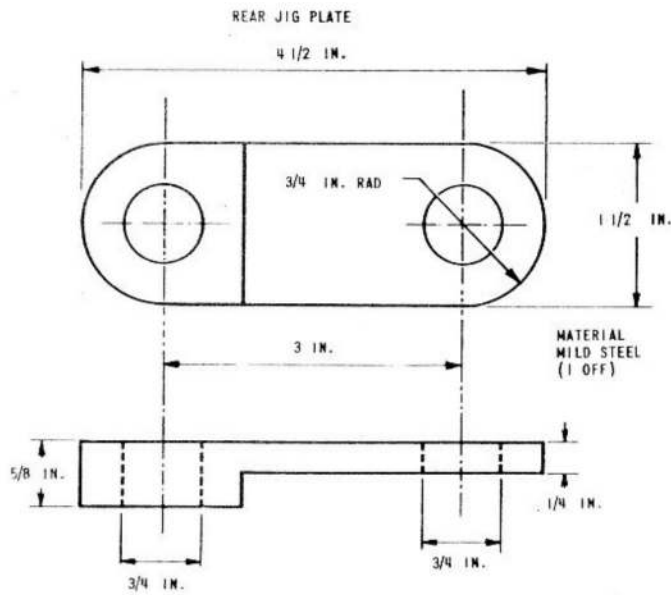


FIG. 1D. MAIN PLANE-TO-FUSELAGE ATTACHMENT TOOLS

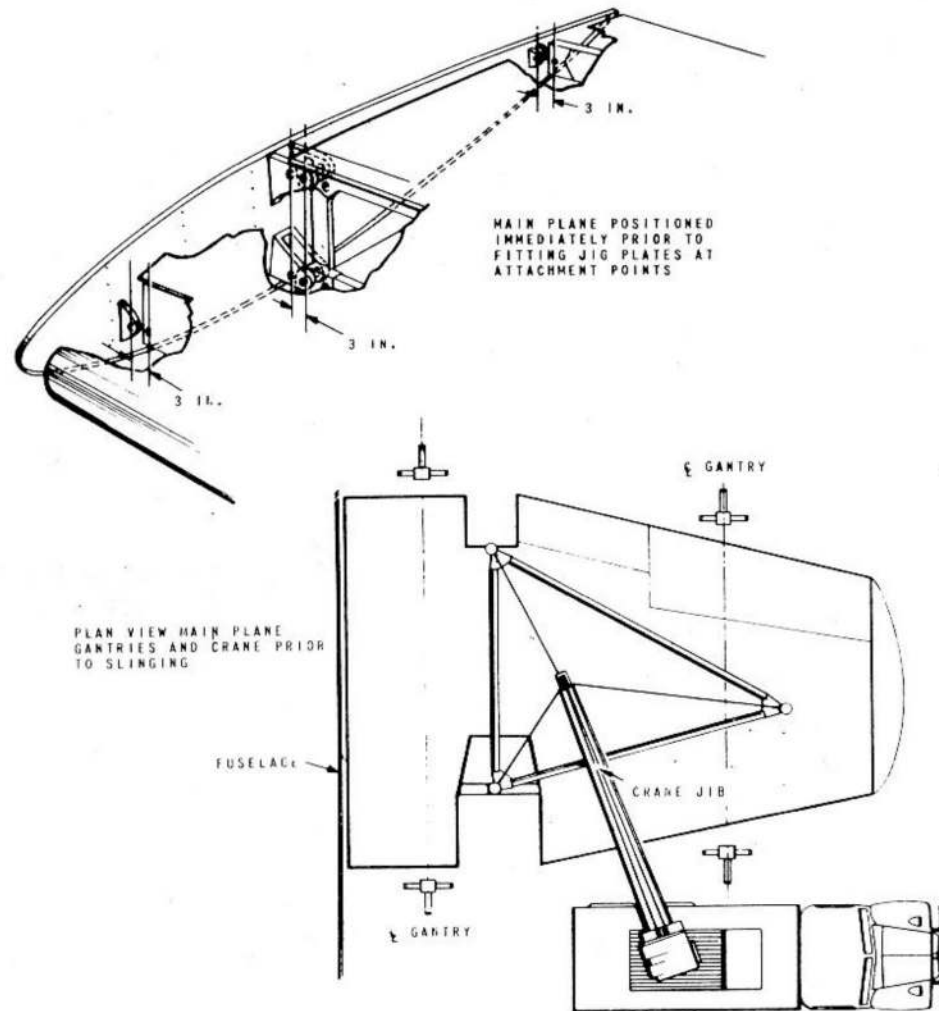


FIG. 1E. MAIN-PLANE SLINGING AND POSITIONING

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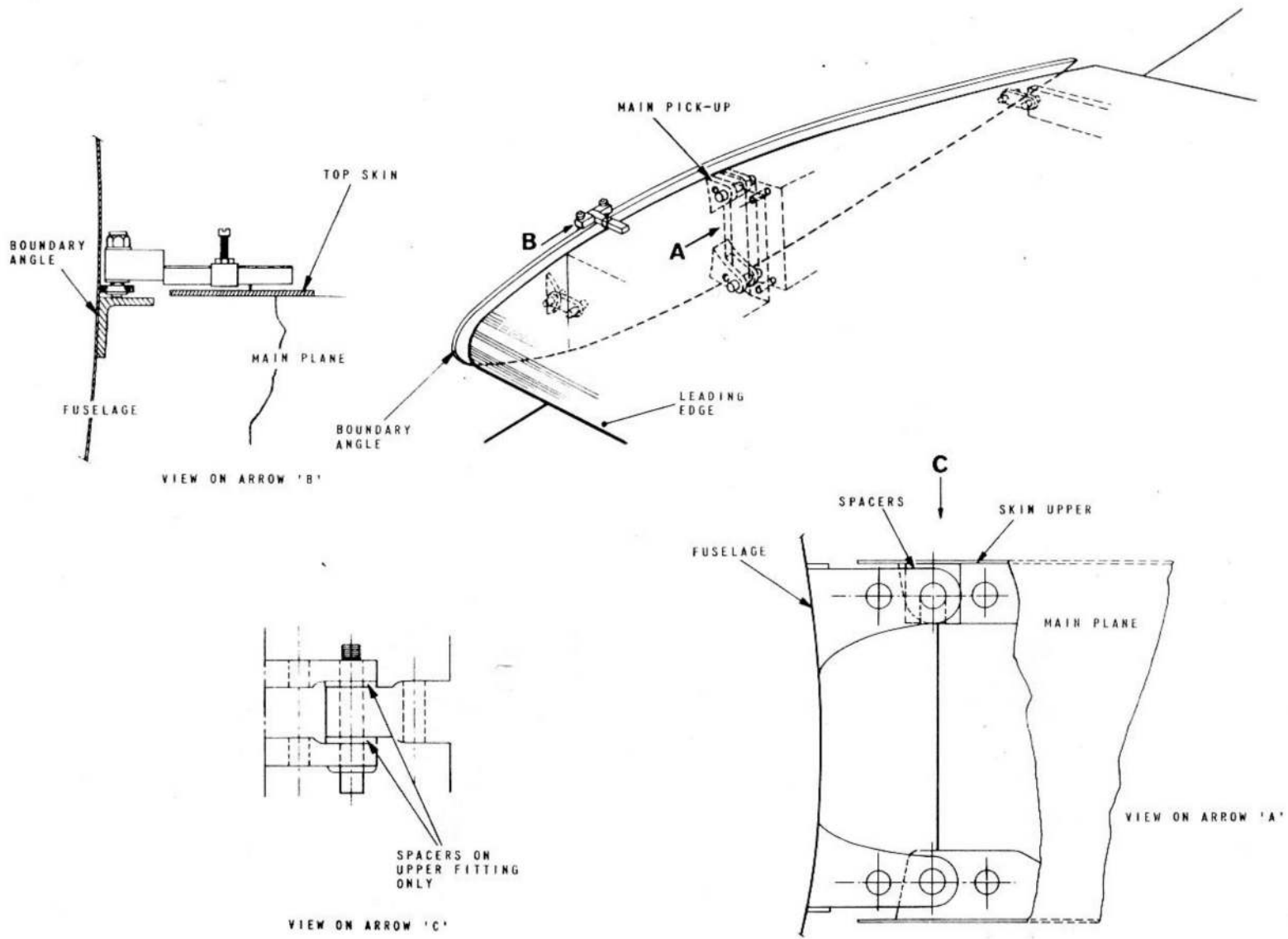


FIG.1F. MAIN PLANE POSITIONED FOR SCRIBING

MAIN PLANE SKINNING, FIG. 5 AND 6

MAIN PLANE, FIG. 2

INNER WING LEADING EDGE, FIG. 3

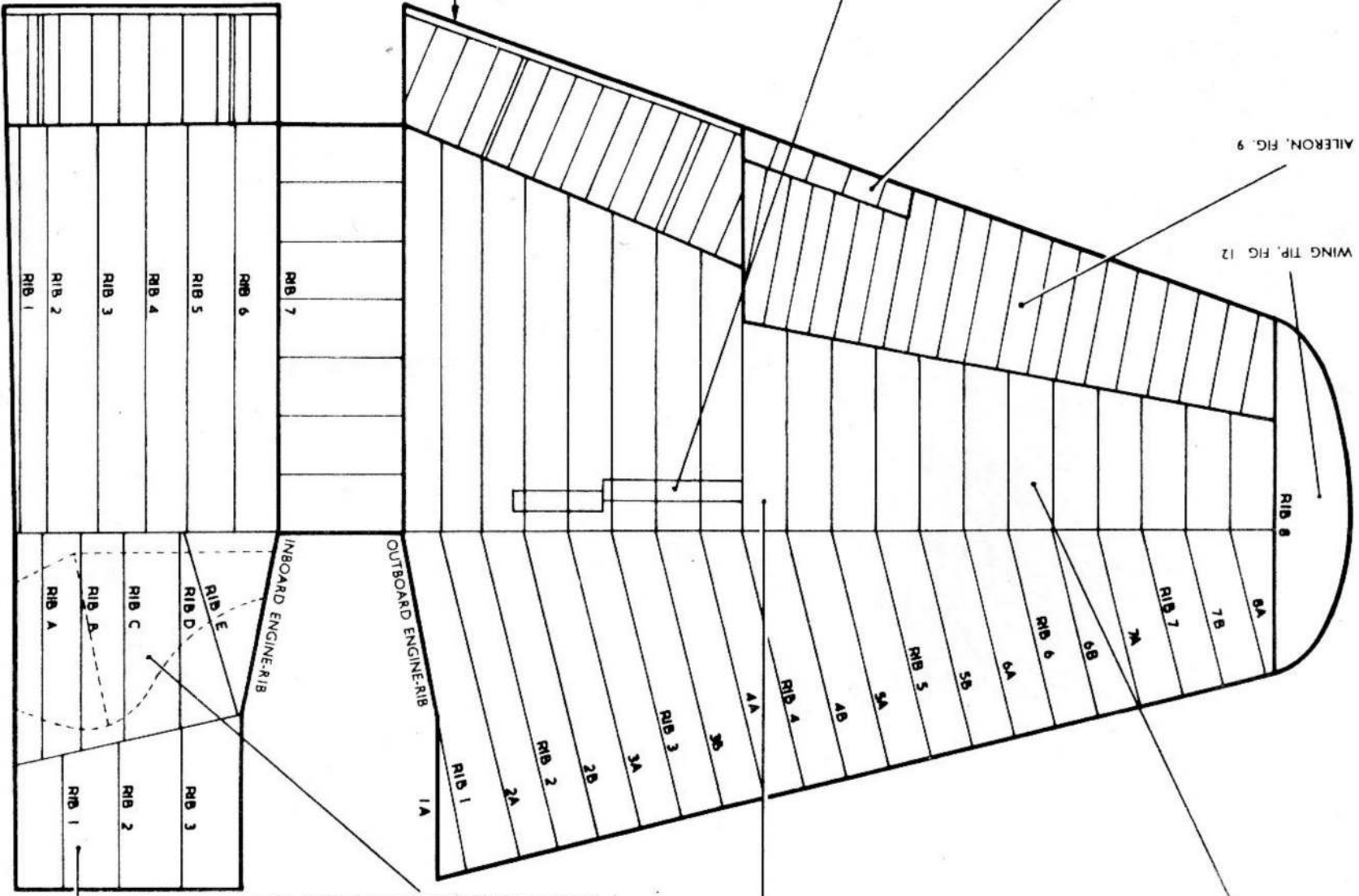


Fig. 1. Key diagram

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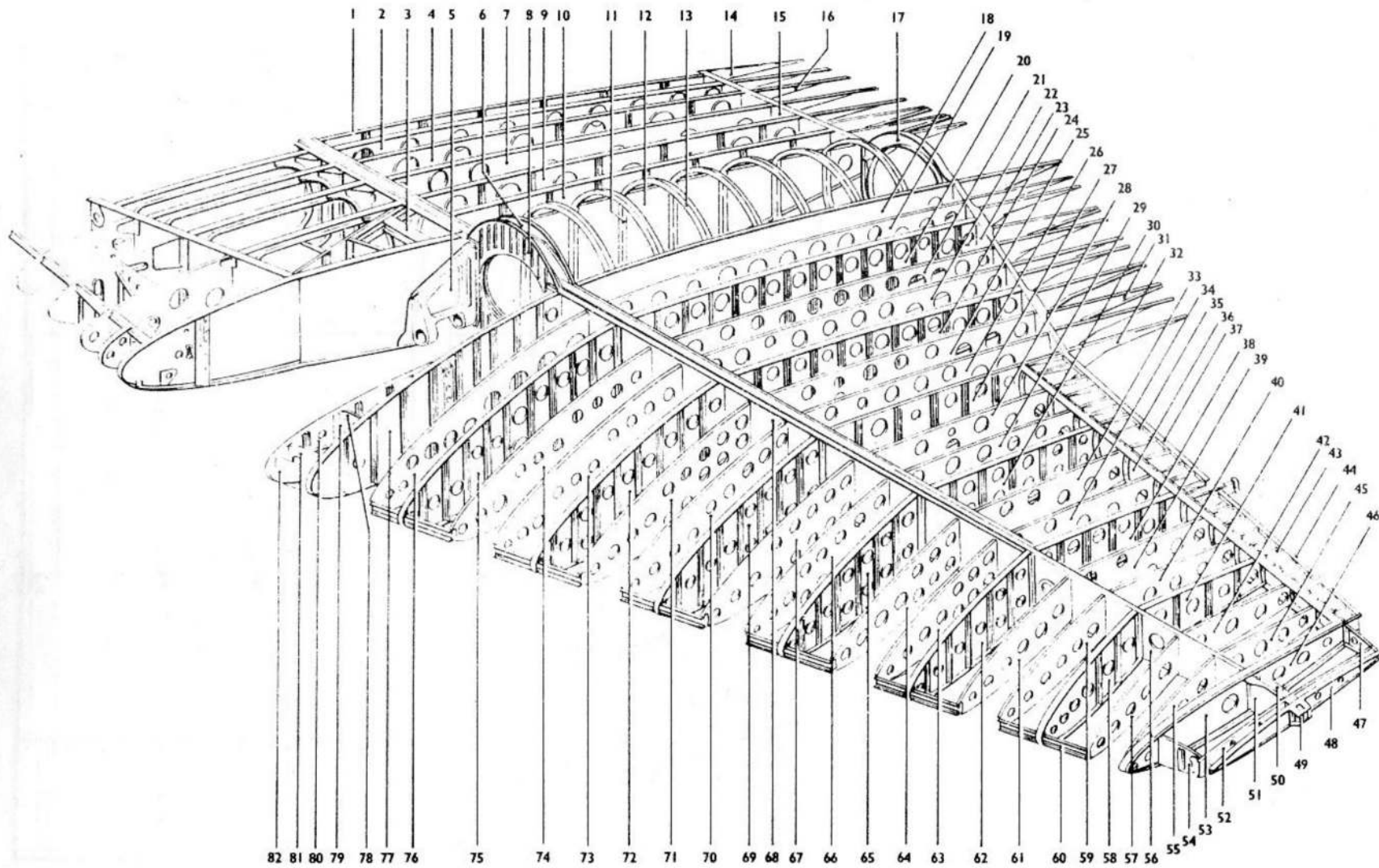


Fig. 2. Main plane structure

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KEY TO FIG. 1 (MAIN PLANE STRUCTURE)

Item	Material			Description	Negligible damage						Repairable damage (To be added later)	Repair fig. No.
	Spec.	S.W.G.	Part No.		Dents		Scratches		Holes			
					Max. depth	Min. dia.	Depth	Spacing	Max. dia.	Pitch ratio		
1	D.T.D.610	20	E.A1.20.275 (port)	Trailing-edge rib No. 1, inner wing	0.04	0.70	0.005	1.00	0.25	24:1		
2			E.A1.20.276 (starb.) (E.E.D.X.70 and E.E.J.219)									
3	D.T.D.546	18	E.A1.20.277 (port)	Trailing-edge rib No. 2, inner wing	0.04	0.70	0.005	1.00	0.25	24:1		
4	D.T.D.610	20	E.A1.20.278 (starb.)	Trailing-edge rib No. 2, inner wing	0.04	0.70	0.005	1.00	0.25	24:1		
5	D.T.D.610	20	E.A1.20.1123 (port)	Undercarriage up-lock bracket support beam	0.04	1.00	0.005	3.00	—	—		
6	D.T.D.610	20	E.A1.20.1124 (starb.)	Undercarriage up-lock bracket support beam	0.04	1.00	0.005	3.00	—	—		
7	D.T.D.610	20	E.A1.20.279 (port)	Trailing-edge rib No. 3, inner wing	0.04	0.70	0.005	1.00	0.25	24:1	37	
8	D.T.D.610	20	E.A1.20.280 (starb.)	Trailing-edge rib No. 3, inner wing	0.04	0.70	0.005	1.00	0.25	24:1		
9	D.T.D.610	20	E.A3.20.1205 (port)	Undercarriage bracket main forging	0.01	0.50	0.015*	4.00*	—	—		
10	D.T.D.610	20	E.A3.20.1206 (starb.)	Undercarriage bracket main forging	0.01	0.50	0.015*	4.00*	—	—		
11	D.T.D.610	20	E.A3.20.45 (port)	Aft side-plate	0.03	0.75	0.15	4.00	—	—		
12	D.T.D.610	20	E.A3.20.46 (starb.)	Aft side-plate	0.03	0.75	0.15	4.00	—	—		
13	D.T.D.546	14	E.A1.20.281 (port)	Trailing-edge rib No. 4, inner wing, comprising :- Web plate, forward	0.04	1.00	0.010	6.00	0.25	24:1		
14	D.T.D.610	20	E.A1.20.282 (starb.)									
15	D.T.D.610	20	E.A1.20.9409 (port)									
16	D.T.D.610	22	E.A1.20.9410 (starb.)									
17	D.T.D.610	22	E.A1.20.9411 (port)	Web plate, centre	0.05	0.75	0.005	6.00	0.25	24:1	37	
18	D.T.D.610	22	E.A1.20.9412 (starb.)	Web plate, centre	0.05	0.75	0.005	6.00	0.25	24:1		
19	D.T.D.610	22	E.A1.20.9413 (port)	Web plate, aft	0.02	0.75	0.005	6.00	0.15	40:1		
20	D.T.D.124A	22	E.A1.20.9414 (starb.)									
21	D.T.D.610	20	E.A3.20.799 (port)	Fire-wall assembly	0.03	0.50	0.005	1.00	—	—		
22	D.T.D.610	20	E.A3.20.800 (starb.)									
23	D.T.D.610	20	E.A1.20.283 (port)	Trailing-edge rib No. 5, inner wing	0.04	0.70	0.005	1.00	0.25	24:1		
24	D.T.D.610	20	E.A1.20.284 (starb.)									
25	D.T.D.610	18	E.A1.20.527 (port)	Trailing-edge rib No. 6, inner wing	0.05	1.00	0.005	1.00	0.25	40:1		
26	D.T.D.610	16	E.A1.20.528 (starb.)									
27	D.T.D.610	16	E.A1.20.3279 (port)	Former	0.05	1.00	0.005	1.00	0.25	24:1		
28	D.T.D.546	16	E.A1.20.3280 (starb.)									
29	D.T.D.610	16	E.A3.20.249 (port)	Aft rib No. 7, inner wing	0.03	0.70	0.005	3.00	—	—		
30	D.T.D.610	16	E.A3.20.250 (starb.)									
31	D.T.D.610	20	E.A1.20.0757 (port)	Former	0.05	1.00	0.005	1.00	0.25	24:1		
32	D.T.D.610	20	E.A1.20.355 (port)									
33	D.T.D.546	12	E.A1.20.356 (starb.)	Rib	0.04	0.70	0.005	2.00	0.25	20:1		
34	D.T.D.610	12	E.A1.20.319 (port)	Rear wall	0.01	0.50	0.010	4.00	0.25	40:1	18	
35	D.T.D.610	20	E.A1.20.8271 (starb.)									
36	D.T.D.610	20	E.A1.20.359 (port)	Rear wall connecting ring	0.04	0.70	0.005	2.00	0.25	20:1		
37	D.T.D.610	20	E.A1.20.360 (starb.)									
38	D.T.D.546	16	E.A1.20.203 (port)	Trailing-edge rib No. 1, outer wing	0.03	0.70	0.005	3.00	—	—		
39	D.T.D.610	20	E.A3.20.141 (port)									
40	D.T.D.610	20	E.A3.20.142 (starb.)	Trailing-edge rib No. 2A, outer wing	0.05	0.75	0.005	1.00	0.25	24:1		
41	D.T.D.610	18	E.A1.20.149 (port)									
42	D.T.D.610	18	E.A1.20.150 (starb.)	Trailing-edge rib No. 2, outer wing	0.05	1.00	0.005	2.00	0.25	32:1		
43	D.T.D.610	20	E.A1.20.53 (port)									
44	D.T.D.610	20	E.A1.20.54 (starb.)	Trailing-edge rib No. 2B, outer wing	0.05	0.75	0.005	1.00	0.25	24:1		
45	D.T.D.610	20	E.A1.20.151 (port)									
46	D.T.D.610	12	E.A1.20.152 (starb.)	Trailing-edge rib No. 3A, outer wing	0.05	0.75	0.005	1.00	0.25	24:1		
47	D.T.D.546	12	E.A1.20.153 (port)									
48	D.T.D.610	18	E.A1.20.154 (starb.)	Rear wall at flap	0.01	0.50	0.010	4.00	0.25	40:1	18	
49	D.T.D.610	18	E.A1.20.373 (port)									
50	D.T.D.610	18	E.A1.20.374 (starb.)	Trailing-edge rib No. 3, outer wing	0.05	1.00	0.005	2.00	0.25	32:1		
51	D.T.D.610	20	E.A1.20.55 (port)									
52	D.T.D.610	20	E.A1.20.56 (starb.)	Trailing-edge rib No. 3B, outer wing	0.05	0.75	0.005	1.00	0.25	24:1		
53	D.T.D.610	20	E.A1.20.155 (port)									
54	D.T.D.610	18	E.A1.20.156 (starb.)	Trailing-edge rib No. 4A, outer wing	0.05	0.75	0.005	1.00	0.25	24:1		
55	D.T.D.610	18	E.A1.20.157 (port)									
56	D.T.D.610	18	E.A1.20.158 (starb.)	Trailing-edge rib No. 4, outer wing	0.05	1.00	0.005	2.00	0.25	32:1		
57	D.T.D.610	20	E.A1.20.57 (port)									
58	D.T.D.610	20	E.A1.20.58 (starb.)	Trailing-edge rib No. 4B, outer wing	0.05	0.75	0.005	1.00	0.25	24:1		
59	D.T.D.610	20	E.A1.20.159 (port)									
60	D.T.D.610	18	E.A1.20.160 (starb.)	Trailing-edge rib No. 5A, outer wing	0.05	0.75	0.005	1.00	0.25	24:1		
61	D.T.D.610	18	E.A1.20.161 (port)									
62	D.T.D.610	18	E.A1.20.162 (starb.)	Trailing-edge rib No. 5, outer wing	0.05	1.00	0.005	2.00	0.25	32:1		
63	D.T.D.610	20	E.A1.20.59 (port)									
64	D.T.D.610	20	E.A1.20.60 (starb.)	Rib	0.04	0.70	0.005	2.00	0.25	20:1		
65	D.T.D.610	20	E.A1.20.1723 (port)									
66	D.T.D.610	20	E.A1.20.408 (starb.)	Rib	0.04	0.70	0.005	2.00	0.25	20:1		
67	D.T.D.610	20	E.A1.20.411 (port)									
68	D.T.D.610	20	E.A1.20.412 (starb.)	Trailing-edge rib No. 5B, outer wing	0.05	0.75	0.005	1.00	0.25	24:1		
69	D.T.D.610	20	E.A1.20.413 (port)									
70	D.T.D.610	22	E.A1.20.163 (starb.)	Trailing-edge rib No. 6A, outer wing	0.05	0.75	0.005	1.00	0.25	24:1		
71	D.T.D.610	22	E.A1.20.164 (port)									
72	D.T.D.610	16	E.A1.20.165 (starb.)	Hinged aileron shroud, inboard	—	—	—	—	—	—		
73	D.T.D.610	16	E.A1.20.166 (port)									
74	D.T.D.610	16	E.A3.20.947 (port)	Rear wall at aileron	—	—	0.005	3.00	—	—	19	
75	D.T.D.610	16	E.A3.20.948 (starb.)									
76	D.T.D.259	—	E.A3.20.1177 (port)	Angle section	0.01	0.50	0.010	3.00	—	—		
77	D.T.D.610	14	E.A3.20.1178 (starb.)									
78	D.T.D.610	14	E.A1.20.8441 (port)	Trailing-edge rib No. 6, outer wing	0.04	1.00	0.010	5.00	0.25	40:1		
79	D.T.D.610	14	E.A1.20.8442 (starb.) (E.E.D.X.40)									
80	D.T.D.610	14	E.A1.20.61 (port)	Trailing-edge rib No. 6, outer wing	0.04	1.00	0.010	5.00	0.25	40:1		
81	D.T.D.610	14	E.A1.20.62 (starb.)									

For details of negligible and repairable damage refer to fig. 13

(Key continued on following page)

*These dimensions are applicable only to the webs and flanges. Scratches in the fillet radius are to be cleaned out and a reinforcing repair applied. Note.—All dimensions are in inches.

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KEY TO FIG. 2 (MAIN PLANE STRUCTURE) (continued)

Item	Material		Part No.	Description	Negligible damage						Repairable damage	Repair fig. No.
	Spec.	S.W.G.			Dents		Scratches		Holes			
					Max. depth	Min. dia.	Depth	Spacing	Max. dia.	Pitch ratio		
39	D.T.D.610	20	E.A1.20.167 (port)	Trailing-edge rib No. 6B, outer wing	0.05	0.75	0.005	1.00	0.25	24:1	(To be added later)	
40			E.A1.20.168 (starb.)									
41	D.T.D.610	18	E.A1.20.169 (port)	Trailing-edge rib No. 7A, outer wing	0.05	0.75	0.005	1.00	0.25	24:1		
			E.A1.20.170 (starb.)									
42	D.T.D.610	20	E.A1.20.63 (port)	Trailing-edge rib No. 7, outer wing	0.05	1.00	0.005	2.00	0.25	32:1		
			E.A1.20.64 (starb.)									
43	D.T.D.610	22	E.A1.20.171 (port)	Trailing-edge rib No. 7B, outer wing	0.05	0.75	0.005	1.00	0.25	24:1		
			E.A1.20.172 (starb.)									
44	D.T.D.259	—	E.A3.20.945 (port)	Hinged aileron shroud, outboard	—	—	—	—	—	—		
			E.A3.20.946 (starb.)									
45	D.T.D.610	20	E.A1.20.8453 (port)	Angle section	0.01	0.50	0.010	3.00	—	—		
			E.A1.20.8454 (starb.)									
46	D.T.D.610	18	(E.E.D.X.40)	Trailing-edge rib No. 8A, outer wing	0.05	0.75	0.005	1.00	0.25	24:1		
			E.A1.20.173 (port)									
47	D.T.D.610	16	E.A1.20.174 (starb.)	Trailing-edge rib No. 8, outer wing	0.05	1.00	0.005	2.00	0.25	32:1		
			E.A1.20.65 (port)									
48	D.T.D.610	16	E.A1.20.66 (starb.)	Rear member assembly	0.05	1.00	0.005	1.00	0.20	20:1		
			E.A1.20.1871 (port)									
49	D.T.D.546	16	E.A1.20.1872 (starb.)	Rib pressing	0.05	1.00	0.005	1.00	0.20	35:1		
			E.A3.20.1553 (port)									
50	D.T.D.546	16	E.A3.20.1554 (starb.)	Rib extension pressing	0.05	1.00	0.005	3.00	—	—		
			E.A1.20.9185 (port)									
51	D.T.D.610	16	E.A1.20.9186 (starb.)	Spar extension pressing	0.05	1.00	0.005	3.00	—	—		
			E.A1.20.9173 (port)									
52	D.T.D.610	16	E.A1.20.10769 (starb.)	Spar extension pressing	0.05	1.00	0.005	3.00	—	—		
			E.A1.20.10770 (port)									
53	D.T.D.610	18	E.A1.20.9174 (starb.)	Rib pressing	0.05	1.00	0.005	1.00	0.20	35:1		
			E.A3.20.1555 (port)									
54	D.T.D.610	14	E.A3.20.1556 (starb.)	Nose rib No. 8, outer wing	0.05	1.00	0.005	2.00	0.25	32:1		
			E.A1.20.35 (port)									
55	D.T.D.610	20	E.A1.20.1869 (port)	Forward member assembly	0.04	1.00	0.005	3.00	0.20	20:1		
			E.A1.20.1870 (starb.)									
56	D.T.D.687	10	E.A1.20.107 (port)	Nose rib No. 8A, outer wing	0.05	0.75	0.005	1.00	0.25	24:1		
			E.A3.20.41 (starb.)									
57	D.T.D.610	20	E.A3.20.42 (port)	Spar web outboard of rib 5	0.01	0.50	0.010	6.00	0.15	35:1		
			E.A1.20.105 (starb.)									
58	D.T.D.610	18	E.A1.20.33 (port)	Nose rib No. 7B, outer wing	0.05	0.75	0.005	1.00	0.25	24:1		
			E.A1.20.103 (starb.)									
59	D.T.D.610	20	E.A1.20.104 (port)	Nose rib No. 7, outer wing	0.05	1.00	0.005	2.00	0.25	32:1		
			E.A1.20.104 (starb.)									
60	D.T.D.610	20	E.A1.20.119 (port)	Nose beam assembly, bay 7, outer wing	0.05	0.75	0.005	1.00	0.25	24:1		
			E.A1.20.101 (starb.)									
61	D.T.D.610	18	E.A1.20.102 (port)	Nose rib No. 6B, outer wing	0.05	1.00	0.005	2.00	0.25	32:1		
			E.A3.20.21 (starb.)									
62	D.T.D.610	20	E.A1.20.99 (port)	Nose rib No. 6A, outer wing	0.05	0.75	0.005	1.00	0.25	24:1		
			E.A1.20.100 (starb.)									
63	D.T.D.610	18	E.A1.20.97 (port)	Nose rib No. 5B, outer wing	0.05	0.75	0.005	1.00	0.25	24:1		
			E.A1.20.98 (starb.)									
64	D.T.D.610	20	E.A1.20.29 (port)	Nose rib No. 5, outer wing	0.05	1.00	0.005	2.00	0.25	32:1		
			E.A1.20.95 (starb.)									
65	D.T.D.610	20	E.A1.20.96 (port)	Nose rib No. 5A, outer wing	0.05	0.75	0.005	1.00	0.25	24:1		
			E.A1.20.93 (starb.)									
66	D.T.D.610	18	E.A1.20.94 (port)	Nose rib No. 4B, outer wing	0.05	0.75	0.005	1.00	0.25	24:1		
			E.A3.20.39 (starb.)									
67	D.T.D.687	8	E.A3.20.40 (port)	Spar web inboard of rib 5	0.01	1.00	0.010	6.00	0.15	56:1		
			E.A1.20.27 (starb.)									
68	D.T.D.610	18	E.A1.20.27 (port)	Nose rib No. 4, outer wing	0.05	1.00	0.005	2.00	0.25	32:1		
			E.A1.20.91 (starb.)									
69	D.T.D.610	20	E.A1.20.92 (port)	Nose rib No. 4A, outer wing	0.05	0.75	0.005	1.00	0.25	24:1		
			E.A1.20.89 (starb.)									
70	D.T.D.610	18	E.A1.20.89 (port)	Nose rib No. 3B, outer wing	0.05	0.75	0.005	1.00	0.25	24:1		
			E.A1.20.90 (starb.)									
71	D.T.D.610	20	E.A1.20.25 (port)	Nose rib No. 3, outer wing	0.05	1.00	0.005	2.00	0.25	32:1		
			E.A1.20.87 (starb.)									
72	D.T.D.610	18	E.A1.20.88 (port)	Nose rib No. 3A, outer wing	0.05	0.75	0.005	1.00	0.25	24:1		
			E.A1.20.85 (starb.)									
73	D.T.D.610	20	E.A1.20.85 (port)	Nose rib No. 2B, outer wing	0.05	0.75	0.005	1.00	0.25	24:1		
			E.A1.20.86 (starb.)									
74	D.T.D.610	18	E.A1.20.23 (port)	Nose rib No. 2, outer wing	0.05	1.00	0.005	2.00	0.25	32:1		
			E.A1.20.83 (starb.)									
75	D.T.D.610	20	E.A1.20.83 (port)	Nose rib No. 2A, outer wing	0.05	0.75	0.005	1.00	0.25	24:1		
			E.A1.20.84 (starb.)									
76	D.T.D.610	16	E.A3.20.17 (port)	Nose rib No. 1, outer wing	0.03	0.70	0.005	3.00	—	—		
			E.A3.20.18 (starb.)									
77	D.T.D.546	16	E.A1.20.315 (port)	Diaphragm	0.05	1.00	0.005	2.00	0.25	28:1		
			E.A1.20.316 (starb.)									
78	D.T.D.610	16	E.A1.20.313 (port)	Diaphragm	0.05	1.00	0.005	2.00	0.25	28:1		
			E.A1.20.314 (starb.)									
79	D.T.D.610	18	E.A3.20.193 (port)	Leading-edge rib No. 1A, outer wing	0.05	1.00	0.005	1.00	0.25	32:1		
			E.A3.20.194 (starb.)									
80	D.T.D.610	16	E.A1.20.3471 (port)	Diaphragm	0.05	1.00	0.005	2.00	0.25	28:1		
			E.A1.20.3472 (starb.)									
81	D.T.D.610	16	E.A1.20.3473 (port)	Diaphragm	0.05	1.00	0.005	2.00	0.25	28:1		
			E.A1.20.3474 (starb.)									

Note.—All dimensions are in inches.

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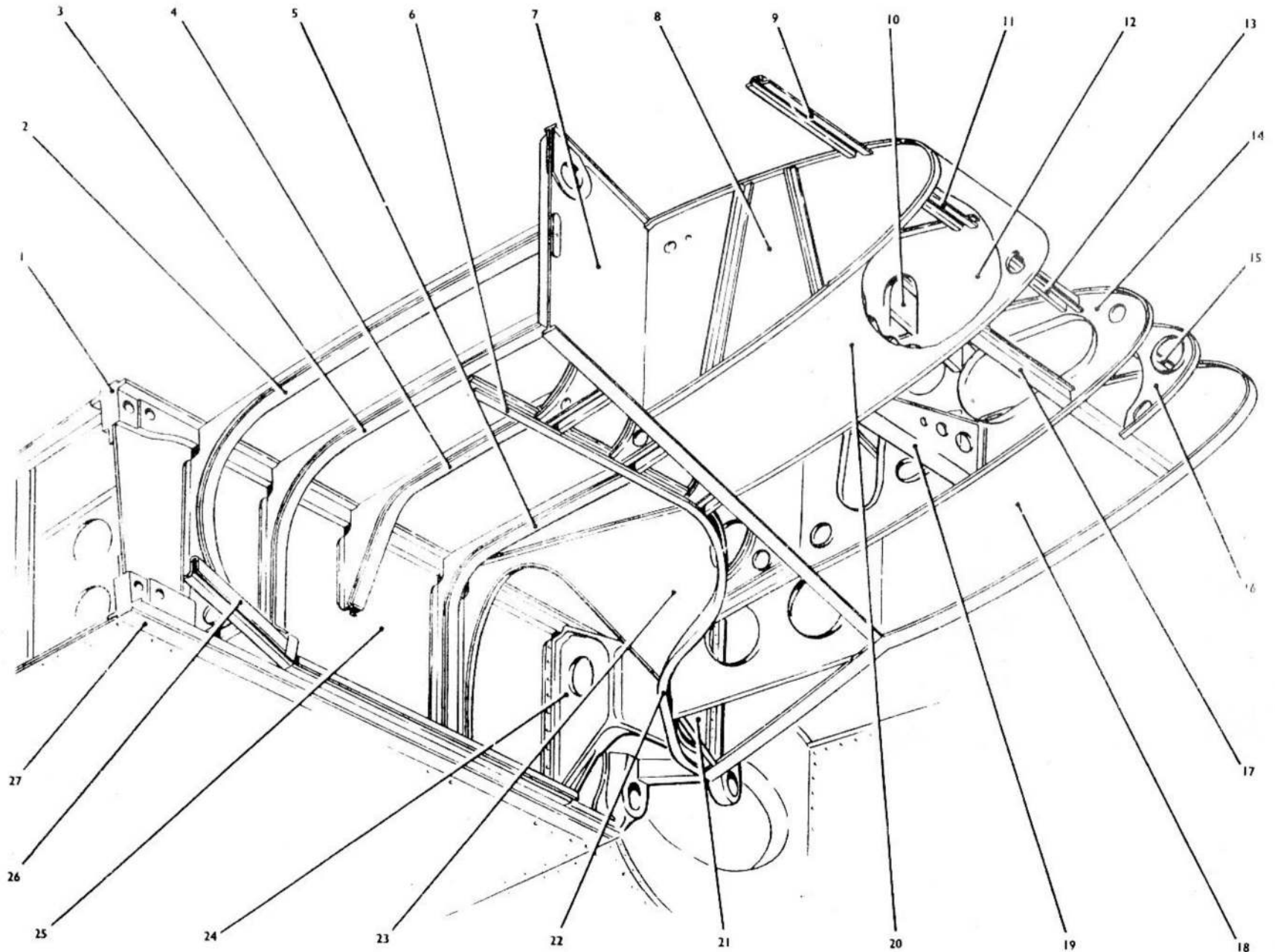


Fig. 3. Inner wing leading-edge structure

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KEY TO FIG.3 (INNER WING LEADING-EDGE STRUCTURE)

Item	Material		Part No.	Description	Negligible damage						Repair fig.No.
	Spec.	S.W.G.			Dents		Scratches		Holes		
					Max. depth	Min. dia.	Depth	Spacing	Max. dia.	Pitch ratio	
1	D.T.D.683	-	E.Al.20.2909 (port) E.Al.20.2910 (starb.) (E.E.D.X.34)	Upper spar-boom	0.01	0.50	0.015*	6.00*	-	-	
2	D.T.D.610	16	E.Al.20.667 (port)	Rib A	0.05	1.00	0.005	1.00	0.125	48:1	
3			E.Al.20.668 (starb.)	Rib B	0.05	1.00	0.005	1.00	0.125	48:1	
4			E.Al.20.669 (port)	Rib C	0.05	1.00	0.005	1.00	0.125	48:1	
5			E.Al.20.670 (starb.)	Rib D	0.05	1.00	0.005	1.00	0.125	48:1	
6			E.Al.20.671 (port)	Wall plate	0.04	1.00	0.005	1.00	0.200	30:1	
7			E.Al.20.672 (starb.)	Diaphragm	0.05	1.00	0.005	1.00	-	-	20, 21
8	D.T.D.610	18	E.Al.20.1061 (port)	Nose rib No.1	0.05	1.00	0.005	1.00	0.250	40:1	
9			E.Al.20.1125 (port)	Leading-edge rail	0.05	1.00	0.005	3.00	-	-	
10	D.T.D.610	20	E.Al.20.1205 (port)	Rear support bracket	0.04	0.75	0.005	3.00	0.200	30:1	
11	D.T.D.610	18	E.Al.20.1206 (starb.)	Leading-edge rail	0.05	1.00	0.005	3.00	-	-	
12			E.Al.20.1127 (port)	Nose rib No.2	0.05	1.00	0.005	1.00	0.250	40:1	
13			E.Al.20.1128 (starb.)	Top forward support bracket	0.04	0.75	0.005	3.00	0.200	30:1	
14	D.T.D.610	18	E.Al.20.1063 (port)	Nose rib No.3	0.05	1.00	0.005	1.00	0.250	40:1	
15			E.Al.20.6659 (starb.)	Leading-edge rail	0.05	1.00	0.005	3.00	-	-	
16	D.T.D.610	20	E.Al.20.1165 (port)	Bottom forward support bracket	0.04	0.75	0.005	3.00	0.200	30:1	
17			E.Al.20.1166 (starb.)	Nose riblet	0.04	0.75	0.005	2.00	0.200	30:1	
18			E.Al.20.1065 (port)	Inboard engine-rib	0.03	0.50	0.005	1.00	-	-	
19	D.T.D.124A	22	E.Al.20.1208 (port)	Rear support bracket	0.04	0.75	0.005	3.00	0.200	30:1	
20	D.T.D.610	20	E.Al.20.1207 (starb.)	Cabin air cooler (Pre Mod.5)	0.05	0.75	0.005	1.00	-	-	
21	L72	20	E.Al.75.7	Skin panel (Post Mod.5)	0.05	0.75	0.005	1.00	-	-	
22	D.T.D.610	16	E.A3.04.609 or	Special diaphragm	0.04	1.00	0.005	3.00	0.200	24:1	
23			E.Al.20.1109 (port)	Wall plate	0.04	1.00	0.005	1.00	0.200	30:1	
24			E.Al.20.1110 (starb.)	Intercostal rib	0.05	1.00	0.005	3.00	0.250	40:1	
25	D.T.D.683	-	E.Al.20.6563 (port)	Undercarriage bracket side forging	0.01	0.50	0.015*	6.00*	-	-	
26	D.T.D.687	6	E.Al.20.6564 (starb.)	Spar web inboard of engine	0.01	0.75	0.010	4.00	-	-	17
27	D.T.D.610	18	E.Al.20.1111 (port)	Stiffener	0.05	1.00	0.005	1.00	-	-	
28	D.T.D.683	-	E.Al.20.1112 (starb.)	Lower spar-boom	0.01	0.50	0.015*	6.00*	-	-	
29			E.Al.20.1665 (port)								
30			E.Al.20.1666 (starb.)								
31			E.A3.20.191 (port)								
32			E.A3.20.192 (starb.)								
33			E.Al.20.8547 (port)								
34			E.Al.20.8548 (starb.)								
35			E.Al.20.2911 (port)								
36			E.Al.20.2912 (starb.)								
37			(E.E.D.X.34)								

*These dimensions are applicable only to the webs and flanges. Scratches in the fillet radius are to be cleaned out and a reinforcing repair applied

Note.- All dimensions are in inches

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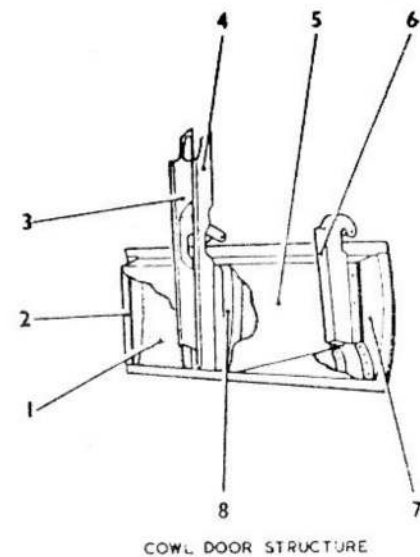
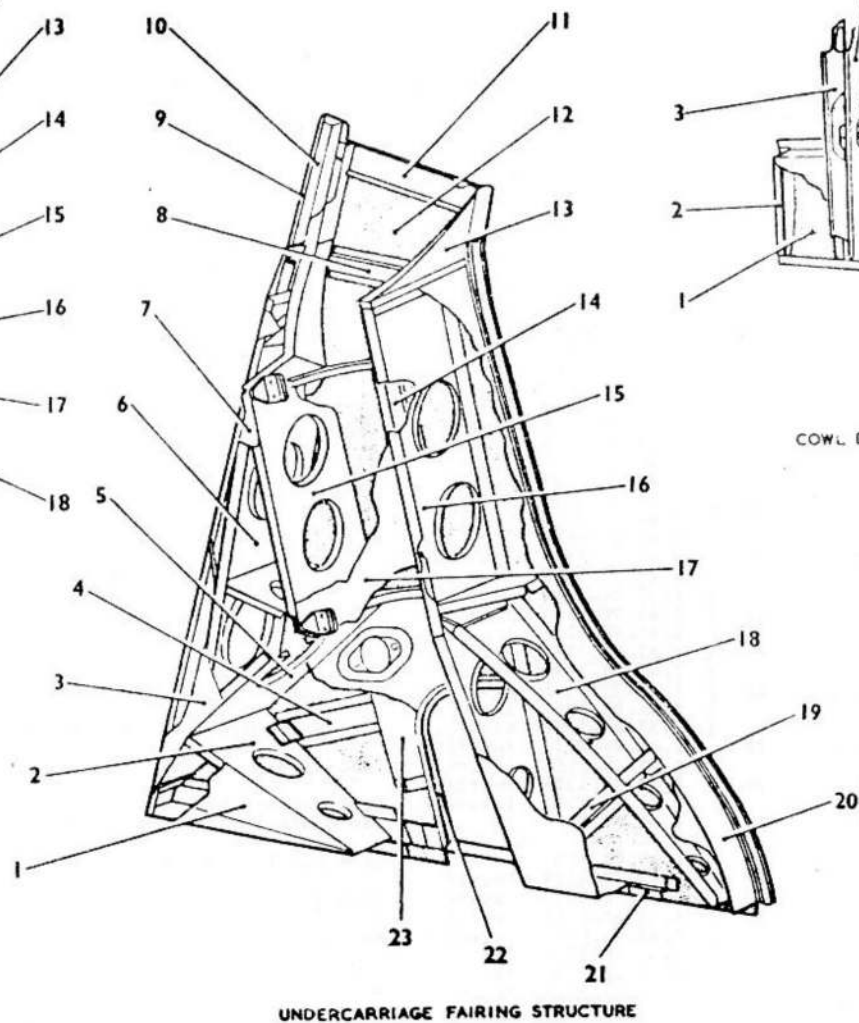
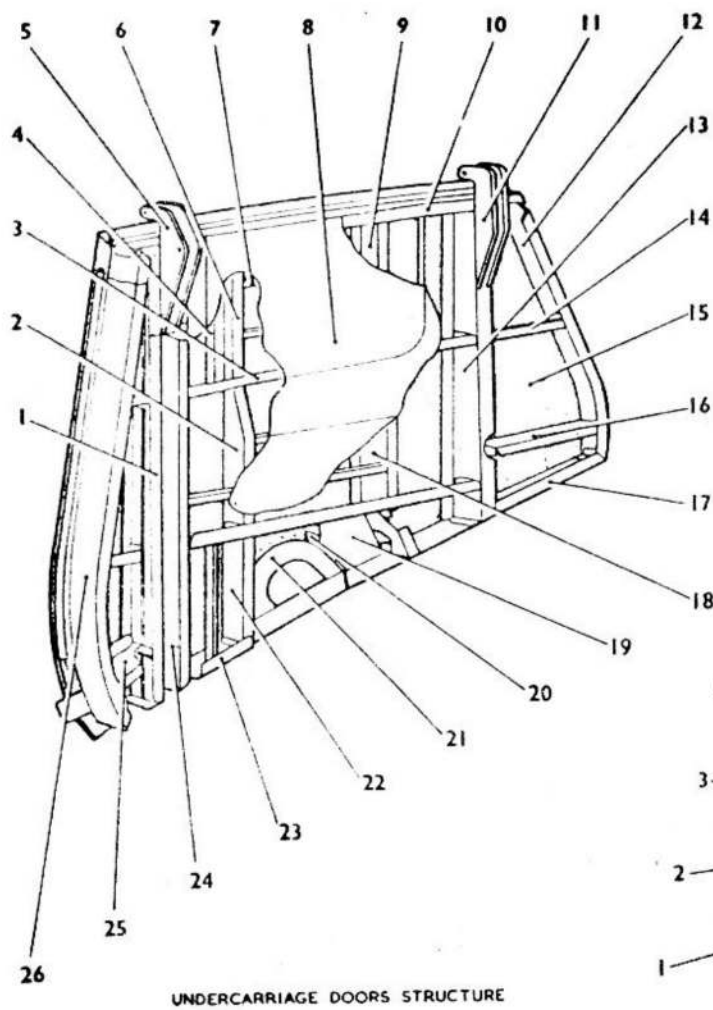


Fig. 4. Undercarriage doors and fairings structure

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KEY TO FIG. 4 (UNDERCARRIAGE DOORS AND FAIRINGS STRUCTURE)

Item	Material			Description	Negligible damage						Repairable damage	Repair fig. No.
	Spec.	S.W.G.	Part No.		Dents		Scratches		Holes			
					Max. depth	Min. dia.	Depth	Spacing	Max. dia.	Pitch ratio		
UNDERCARRIAGE DOORS											(To be added later)	
1	L40	—	E.A1.20.1497 (E.E.D.X.19)	Stiffening angle	0.03	0.70	0.005	3.00	—	—		
2	D.T.D.610	22	E.A1.20.10397 (port) E.A1.20.10398 (starb.)	Reinforcing member	0.05	1.00	0.005	2.00	0.20	20:1		
3	D.T.D.610	18	E.A1.20.1457 (port) E.A1.20.1458 (starb.)	Internal member	0.05	1.00	0.005	1.00	0.20	25:1		32
4	D.T.D.610	22	E.A1.20.1503 (port) E.A1.20.1504 (starb.)	Lipped angle	0.04	0.75	0.005	2.00	0.125	32:1		
5	D.T.D.683	—	E.A1.20.1191	Forward hinge	0.01	0.50	0.010*	3.00*	—	—		
6	D.T.D.610	22	E.A1.20.10387 (port)	Reinforcing member	0.05	1.00	0.005	2.00	0.20	20:1		
7			E.A1.20.10388 (starb.)									
8			E.A1.20.1501 (E.E.J.145)									
9	D.T.D.610	22	E.A1.20.1439 (port)	Inner skin panel	0.10	1.00	0.005	1.00	—	—		29
10			E.A1.20.1440 (starb.)									
11			E.A1.20.10389 (port)									
12	D.T.D.610	18	E.A1.20.10390 (starb.) E.A1.20.1445 (port)	Reinforcing member	0.05	1.00	0.005	2.00	0.20	20:1		
13	D.T.D.683	—	E.A1.20.1446 (starb.)	Inboard edge member	0.05	1.00	0.005	1.00	0.20	30:1		33
14	D.T.D.610	18	E.A1.20.1141 (port) E.A1.20.1447 (port)	Aft hinge	0.01	0.50	0.010*	3.00*	—	—		
15	D.T.D.610	16	E.A1.20.1448 (starb.)	Edge member	0.05	1.00	0.005	1.00	0.20	30:1		
16			E.A1.20.1451 (port)									
17			E.A1.20.1452 (starb.)									
18	D.T.D.610	18	E.A1.20.10381 (port)	Internal member	0.05	0.75	0.005	1.00	0.20	10:1		32
19			E.A1.20.10382 (starb.)									
20			E.A3.20.859									
21	D.T.D.610	16	E.A1.20.1459 (port)	Outer skin	0.05	1.00	0.005	3.00	—	—		30
22			E.A1.20.1460 (starb.)									
23			E.A1.20.1441 (port)									
24	D.T.D.610	16	E.A1.20.1442 (starb.)	Internal member	0.05	0.75	0.005	1.00	0.20	10:1		32
25			E.A1.20.1441 (port)									
26			E.A1.20.1442 (starb.)									
27	D.T.D.610	22	E.A1.20.10391 (port) E.A1.20.10392 (starb.)	Outboard edge member	0.04	1.00	0.005	1.00	—	—		
28	D.T.D.610	16	E.A1.20.10392 (starb.)	Reinforcing member	0.05	1.00	0.005	2.00	0.20	20:1		
29	D.T.D.683	—	E.A3.20.857	Inner skin	0.05	1.00	0.005	1.00	—	—		
30	D.T.D.610	18	E.A3.20.855	Reinforcing plate assembly	0.01	0.50	0.010	3.00	—	—		
31	D.T.D.610	18	E.A3.20.863	Landing plate	0.05	1.00	0.005	1.00	—	—		
32	D.T.D.610	22	E.A1.20.10393 (port)	Reinforcing member	0.05	1.00	0.005	2.00	0.20	20:1		
33			E.A1.20.10394 (starb.)									
34			E.A1.20.10403 (port)									
35	D.T.D.610	16	E.A1.20.10404 (starb.)	Outboard edge member	0.04	1.00	0.005	1.00	0.20	30:1		
36			E.A1.20.1449 (port)									
37			E.A1.20.1450 (starb.)									
38	D.T.D.610	18	E.A1.20.1453 (port)	Top-hat section	0.05	1.00	0.005	3.00	0.20	30:1		
39			E.A1.20.1453 (port)									
40			E.A1.20.1454 (starb.)									
41	D.T.D.610	18	E.A1.20.1443 (port)	Internal member	0.05	0.75	0.005	1.00	0.20	10:1		32
42			E.A1.20.1443 (port)									
43			E.A1.20.1444 (starb.)									
44	D.T.D.610	22	E.A1.20.1444 (starb.)	Edge member	0.05	1.00	0.005	1.00	0.20	30:1		
45			E.A1.20.10393 (port)									
46			E.A1.20.10394 (starb.)									
COWL DOOR												
1	D.T.D.610	22	E.A1.20.1113 (port)	Outer skin	0.03	0.50	0.005	3.00	—	—		
2	D.T.D.610	20	E.A1.20.1114 (starb.) E.A1.50.1101 (port)	Edge stiffeners	0.04	0.75	0.005	1.00	—	—		
3	D.T.D.687	12	E.A1.50.1102 (starb.)	Channel	0.02	0.50	0.010	3.00	—	—		
4			E.A1.50.1123 (port)									
5			E.A1.50.1124 (starb.)									
6	D.T.D.610	20	E.A1.50.1563 (port)	Channel	0.02	0.50	0.010	3.00	—	—		
7			E.A1.50.1564 (starb.)									
8			E.A1.50.1511 (port)									
9	D.T.D.610	16	E.A1.50.1512 (starb.)	Inner skin	0.05	0.75	0.005	1.00	—	—		
10			E.A1.50.1512 (starb.)									
11			E.A1.50.1127 (port)									
12	D.T.D.610	20	E.A1.50.1515 (port)	Top-hat member	0.04	1.00	0.010	3.00	0.125	40:1		
13			E.A1.50.1516 (starb.)									
14			E.A1.50.1115 (port)									
15	D.T.D.610	20	E.A1.50.1115 (port)	Z-section	0.05	0.75	0.005	1.00	—	—		
16			E.A1.50.1115 (port)									
17			E.A1.50.1116 (starb.)									
18	D.T.D.610	20	E.A1.50.1116 (starb.)	Top-hat section	0.05	0.75	0.005	1.00	0.20	15:1		
19			E.A1.50.1116 (starb.)									
20			E.A1.50.1116 (starb.)									

(Key continued on following page)

*The dimensions are applicable only to the webs and flanges. Scratches in the fillet radius are to be cleaned out and a reinforcing repair applied.

Note.—All dimensions are in inches.

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KEY TO FIG. 4 (UNDERCARRIAGE DOORS AND FAIRINGS STRUCTURE) (continued)

Item	Material		Part No.	Description	Negligible damage						Repairable damage	Repair fig. No.
	Spec.	S.W.G.			Dents		Scratches		Holes			
					Max. depth	Min. dia.	Depth	Spacing	Max. dia.	Pitch ratio		
UNDERCARRIAGE FAIRING (To be added later)												
1	D.T.D.610	22	E.A1.20.9299 (port)	Inner skin	0.10	1.00	0.005	1.00	—	—		
			E.A1.20.9300 (starb.)									
2	D.T.D.610	20	E.A3.20.849 (port)	Diaphragm	0.05	0.75	0.005	1.00	0.20	15:1		
			E.A3.20.850 (starb.)									
3	D.T.D.610	22	E.A1.20.9301 (port)	Inner skin	0.10	1.00	0.005	1.00	—	—	29	
			E.A1.20.9302 (starb.)									
4	D.T.D.610	20	E.A3.20.829 (port)	Top-hat stiffener	0.05	0.75	0.005	1.00	0.20	15:1		
5			E.A3.20.830 (starb.)									
6			E.A1.20.1399 (port)									
7			E.A1.20.1400 (starb.)									
8			E.A1.20.6763 (port)									
			E.A1.20.6764 (starb.)									
			E.A1.20.9303 (port)									
			E.A1.20.9304 (starb.)									
9	D.T.D.610	16	E.A1.20.6809 (port)	Stiffener	0.05	0.75	0.005	1.00	0.20	15:1		
			E.A1.20.6810 (starb.)									
10	L.F.S.21	—	E.A1.20.1675 (port)	Hinge panel	0.05	1.00	0.010	3.00	—	—		
11	D.T.D.610	16	E.A1.20.1676 (starb.)	Pad	0.01	0.50	—	—	—	—		
			E.A1.20.1673 (port)									
12	D.T.D.610	22	E.A1.20.1674 (starb.)	Stiffener	0.03	0.50	0.010	3.00	—	—		
13			E.A1.20.9367 (port)									
14			E.A1.20.9368 (starb.)									
15			E.A3.20.723 (port)									
16			E.A3.20.724 (starb.)									
17	D.T.D.510	26	E.A1.20.9347 (port)	Outer skin	0.03	0.50	0.005	1.00	—	—	31	
			E.A1.20.9348 (starb.)									
18	D.T.D.610	20	E.A1.20.6811 (port)	Inner skin member Stiffener	0.10	1.00	0.005	1.00	—	—		
19			E.A1.20.2469 (starb.)									
			E.A1.20.2470 (port)									
			E.A3.20.719 (starb.)									
20	D.T.D.610	22	E.A3.20.720 (port)	Diaphragm	0.05	0.75	0.005	1.00	0.20	15:1		
			E.A1.20.9009 (starb.)									
21	D.T.D.610	18	E.A1.20.9010 (port)	Inner skin	0.05	1.00	0.005	3.00	—	—		
			E.A1.20.6763 (starb.)									
22	D.T.D.610	20	E.A1.20.1407 (port)	Diaphragm	0.05	0.75	0.005	1.00	0.20	15:1		
			E.A1.20.1408 (starb.)									
23	D.T.D.610	18	E.A1.20.9361 (port)	Inner skin	0.10	1.00	0.005	1.00	—	—		
			E.A3.20.847 (starb.)									
			E.A3.20.848 (port)	Edge member	0.05	1.00	0.005	1.00	—	—		
			E.A3.20.823 (port)	Edge member	0.05	1.00	0.005	1.00	—	—		
			E.A3.20.824 (starb.)									
			E.A3.20.827 (port)	Doubling plate	0.03	0.50	0.005	1.00	—	—		
			E.A3.20.828 (starb.)									

*The dimensions are applicable only to the webs and flanges. Scratches in the fillet radius are to be cleaned out and a reinforcing repair applied.

Note.—All dimensions are in inches.

KEY TO FIG. 5 (MAIN PLANE SKINNING, UPPER SURFACE)

Item	Material		Part No.	Description	Negligible damage						Repair fig.No.
	Spec.	S.W.G.			Scratches		Dents				
					Depth	Min. Spacing	Max. depth	Max. width	Min. width	Min. spacing	
1	L.73	18	EA1.20.133	Panel assembly, bay 7	0.005	3.00	0.05	4.50	1.00	6W	14
2			(port)								
3			EA3.20.10	Panel assembly, bay 6							
4			EA3.20.7	(port)							
5			EA3.20.8	(stbd.)							
6			EA1.20.127	(port)							
7			EA1.20.128	(stbd.)							
8			EA1.20.125	(port)							
9			EA1.20.126	(stbd.)							
10			EA1.20.123	(port)							
11	L.72	18	EA1.20.124	Panel assembly, bay 2	0.005	2.00	0.05	4.50	1.00	6W	
12			EA1.20.121	(port)							
13			EA1.20.122	(stbd.)							
14	L.73	16	EA1.20.1117	(port)	0.006	3.00	0.05	5.00	1.00	6W	15
15			EA1.20.1118	(stbd.)							
16			EA1.20.1119	(port)							
17			EA1.20.1120	(stbd.)							
18			EA1.20.1131	(port)							
19	L.72	20	EA1.20.1132	Panel assembly	0.004	3.00	0.04	4.00	0.70	6W	23
20			EA1.20.7062	(stbd.)							
21	L.73	18	EA1.20.8751	Nacelle panel	0.004	3.00	0.04	4.00	0.70	6W	15
22			EA3.20.2625	(port)							
23			EA3.20.2626	(stbd.)							
24			EA3.20.2623	(port)							
25			EA3.20.2624	(stbd.)							
26			EA3.20.2621	(port)							
27			EA3.20.2622	(stbd.)							
28	EA3.20.2619	(port)									
29	L.72	20	EA3.20.2620	Panel assembly	0.005	3.00	0.05	4.50	1.00	6W	14
30			EA1.20.10595	(port)							
31			EA1.20.10811	(stbd.)	0.004	3.00	0.04	4.00	0.70	6W	23

continued...

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KEY TO FIG. 5 (MAIN PLANE SKINNING, UPPER SURFACE) - continued

Item	Material		Part No.	Description	Negligible damage						
	Spec.	S.W.G.			Scratches		Dents		Repair fig.No.		
					Depth	Min. spacing	Max. depth	Max. width		Min. width	Min. spacing
21	L. 73	18	EA3. 20. 2627 (port)	Panel assembly	0.005	3.00	0.05	4.50	1.00	6W	14
22			EA3. 20. 2628 (stbd.)								
			EA3. 20. 2629 (port)								
23	L. 72	24	EA3. 20. 2630 (stbd.)	Panel assembly	0.005	6.00	0.03	3.00	0.50	4W	27
24			EA1. 24. 495 (port)								
	L. 72	26	EA1. 24. 496 (stbd.)	Aileron upper panel	-	-	0.02	3.00	0.50	4W	
24A			EA1. 24. 539 (port)								
	L. 72	22	EA1. 24. 540 (stbd.)	Aileron tab panel	0.003	2.00	0.03	-	0.50	-	
24B			EA3. 20. 949 (port)								
			EA3. 20. 950 (stbd.)								
	L. 72	22	EA3. 20. 977 (port)	Skin top, aileron shroud O/B	0.003	2.00	0.03	-	0.50	-	
			EA3. 20. 978 (stbd.)								
25	L. 73	18	EA3. 20. 2631 (port)	Panel assembly	0.005	3.00	0.05	4.50	1.00	6W	14
26			EA3. 20. 2632 (stbd.)								
			EA3. 20. 2633 (port)								
			EA3. 20. 2634 (stbd.)								
27			EA1. 20. 1873 (port)								
A			EA1. 20. 1874 (stbd.)								
B			EA1. 20. 9215 (port)								
			EA1. 20. 9216 (stbd.)								
			EA1. 20. 9217 (port)								
			EA1. 20. 9218 (stbd.)								
C	L. 72	18	EA1. 20. 9683 (port)	Reinforcing plate	0.005	3.00	0.05	4.50	1.00	6W	
D			EA1. 20. 9684 (stbd.)								
E	L. 73	18	EA1. 20. 7049 (port)	Reinforcing plate	0.010	4.00	0.03	6.00	1.00	4W	
			EA1. 20. 7050 (stbd.)								
			EA1. 20. 7051 (port)								
F	L. 73	14	EA1. 20. 7052 (stbd.)	Reinforcing plate	0.005	3.00	0.05	4.50	1.00	6W	
			EA3. 20. 689 (port)								
G	L. 73	18	EA3. 20. 690 (stbd.)	Closing strip	0.005	3.00	0.05	4.50	1.00	6W	
H			EA3. 20. 479 (port)								
			EA3. 20. 480 (stbd.)								
			EB7. 20. 73 (port)								
J			EB7. 20. 74 (stbd.)								
	EA1. 20. 9551 (port)										
	EA1. 20. 9552 (stbd.)										

Note:- All dimensions are in inches. W, in min. spacing column = the least dimension of damage

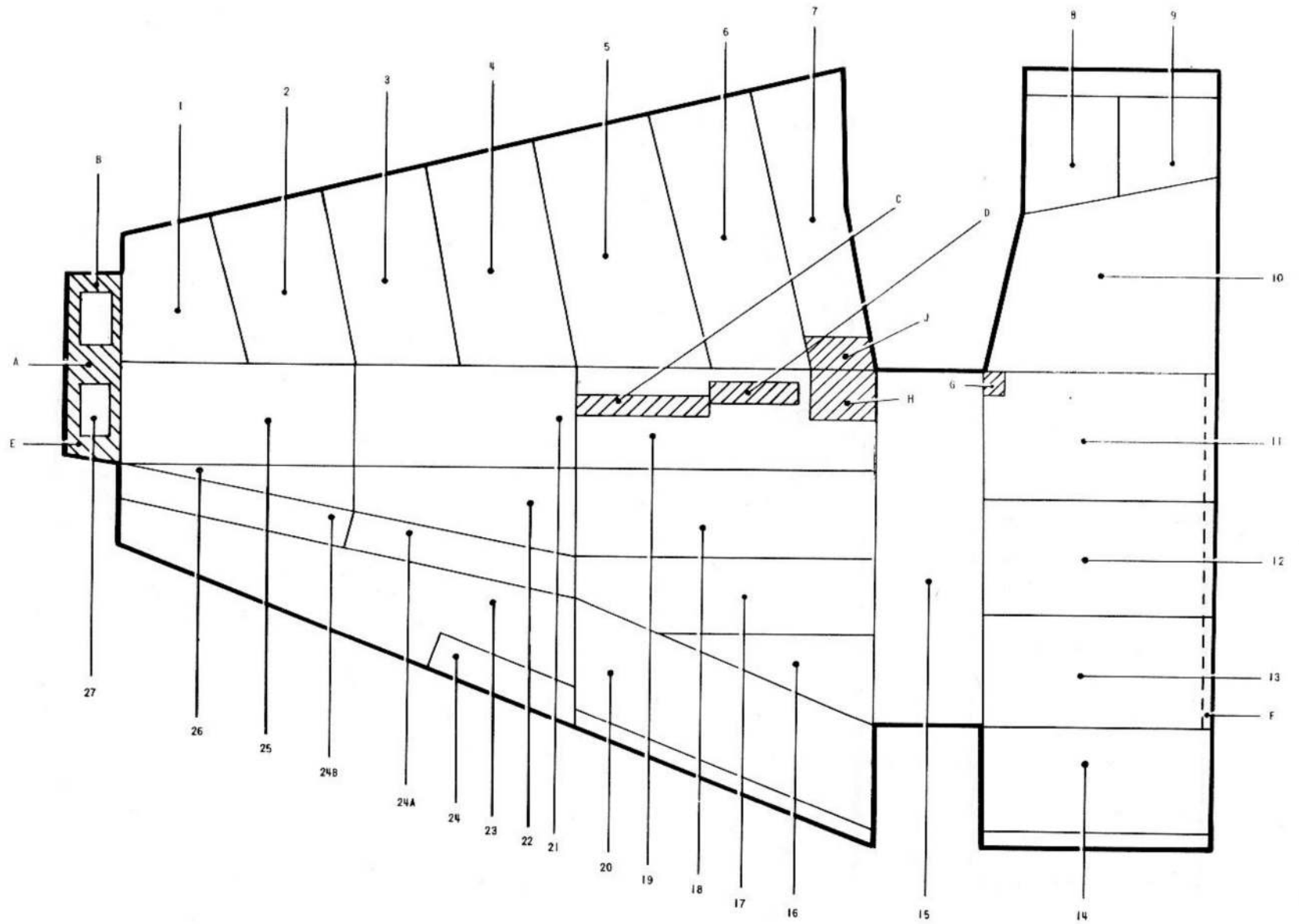


FIG. 5. MAINPLANE SKINNING, UPPER SURFACE

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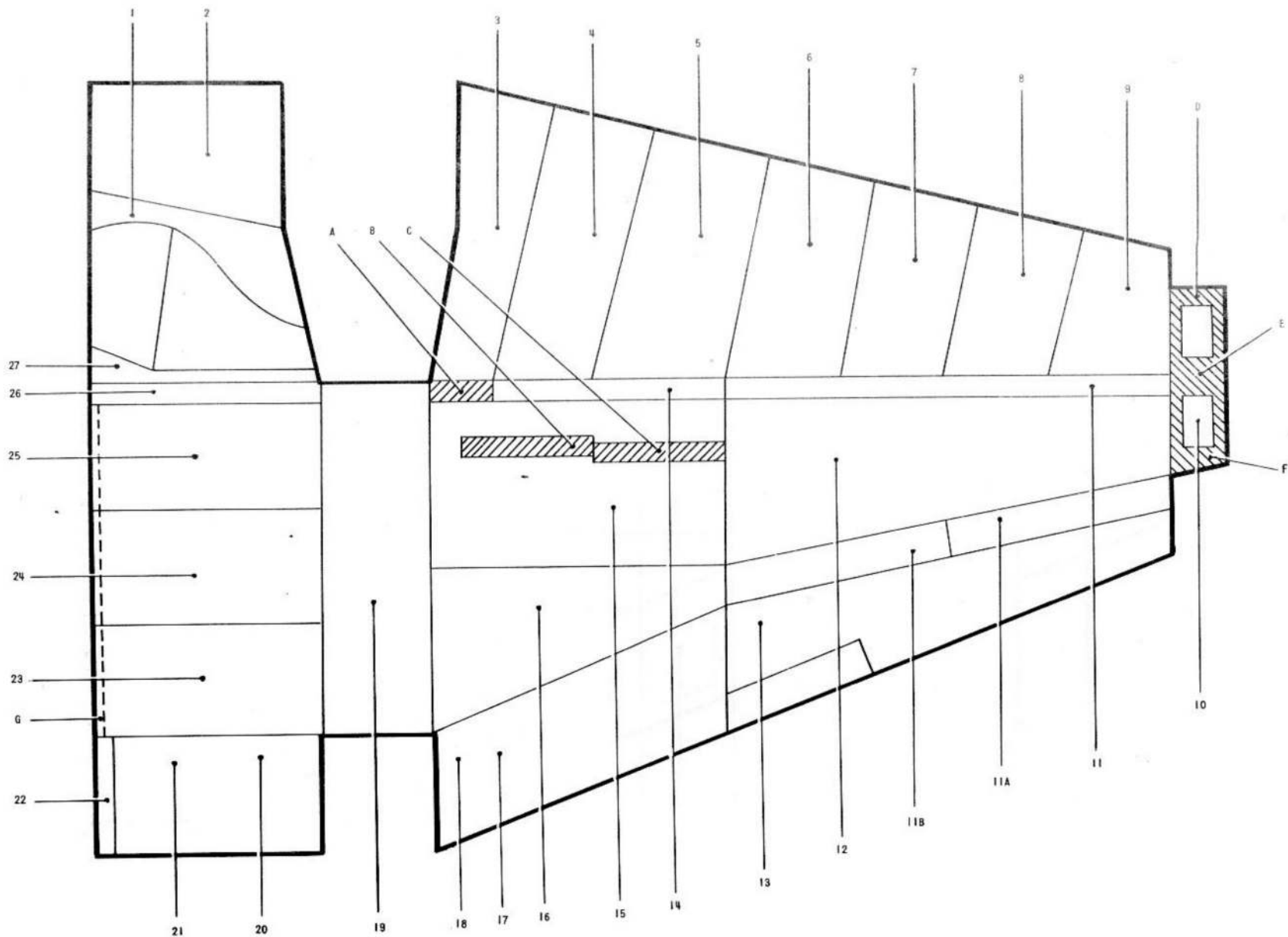


FIG. 6. MAINPLANE SKINNING, LOWER SURFACE

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KEY TO FIG. 6 (MAIN PLANE SKINNING, LOWER SURFACE)

Material		Negligible damage					Repair fig.No.					
Item	Spec.	S.W.G.	Part No.	Description	Scratches			Dents				
					Depth	Min. spacing		Max. depth	Max. width	Min. width	Min. spacing	
1	L. 72	18	EA1.20.3479	(port)	0.005	1.00	0.07	4.50	1.00	6W	14	
2			EA1.20.7053	(stbd.)								Panel assembly
			EA1.20.1315	(port)								Panel assembly (pre Mod.1003/4/5)
	EA1.20.1319	(stbd.)										
3	L. 73	18	EA1.20.121	(port)	0.005	1.00	0.05	4.50	1.00	6W	14	
4			EA1.20.122	(stbd.)								Panel assembly, bay 1
			EA1.20.123	(port)								Panel assembly, bay 2
			EA1.20.124	(stbd.)								
5			EA1.20.125	(port)								Panel assembly, bay 3
			EA1.20.126	(stbd.)								
6			EA1.20.127	(port)								Panel assembly, bay 4
			EA1.20.128	(stbd.)								
7			EA3.20.7	(port)								Panel assembly, bay 5
			EA3.20.8	(stbd.)								
8	EA3.20.9	(port)	Panel assembly, bay 6									
	EA3.20.10	(stbd.)										
9	EA1.20.133	(port)	Panel assembly, bay 7									
10	EA1.20.1875	(port)	Panel assembly									
	EA1.20.1876	(stbd.)										
11	EA3.20.313	(port)										
	EA3.20.314	(stbd.)	Closing panel assembly									
11A	L. 72	22	EA1.20.8457	(port)	0.003	2.00	0.03					
			EA1.20.8458	(stbd.)								
11B	L. 72	22	EA1.20.8443	(port)	0.003	2.00	0.03					
			EA1.20.8444	(stbd.)								
12			EA3.20.2794	(port)								
			EA3.20.2793	(stbd.)	0.005	1.00	0.05	4.50	1.00	6W	14	
13	L. 72	24	EA1.24.515	(port)								
			EA1.24.516	(stbd.)	0.005	6.00	0.03	3.00	0.50	4W	27	
14	L. 73	18	EA3.20.379	(port)	0.005	3.00	0.05	4.50	1.00	6W	14	
			EA3.20.380	(stbd.)								Closing panel assembly
15			EA3.20.2791	(port)								Panel assembly
			EA3.20.2792	(stbd.)								
16			EA3.20.2790	(port)								
	EA3.20.2789	(stbd.)	Panel assembly									

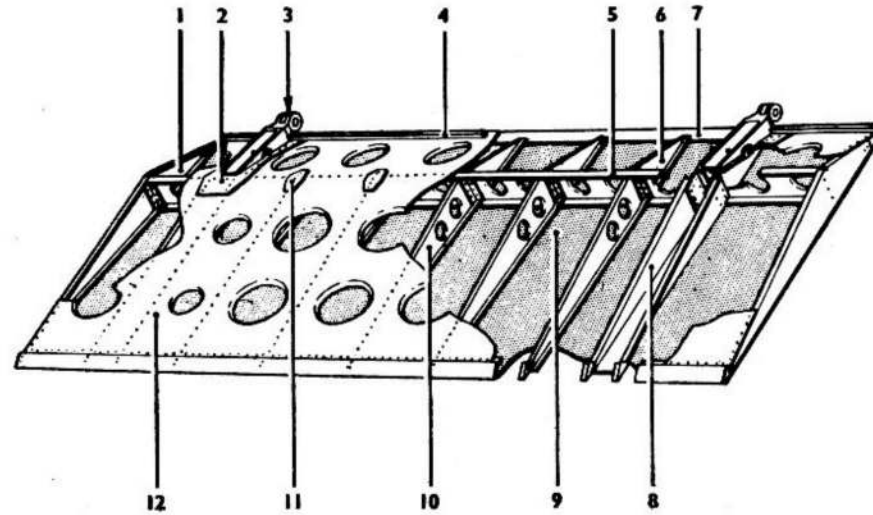
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KEY TO FIG. 6 (MAIN PLANE SKINNING, LOWER SURFACE) - continued

Item	Material		Part No.	Description	Negligible damage						Repair fig.No.
	Spec.	S.W.G.			Scratches		Dents				
					Depth	Min. spacing	Max. depth	Max. width	Min. width	Min. spacing	
17	L. 72	22	EA1. 25. 115 (port)	Outboard flap upper panel	0.005	3.00	0.05	4.00	1.00	4W	24
18			EA1. 25. 116 (stbd.)								
19	L. 73	16	EA1. 25. 117 (port)	Outboard flap lower panel	0.003	2.00	0.03	4.00	0.50	4W	35 and 36
20			EA1. 25. 118 (stbd.)								
21	L. 72	22	EA1. 20. 8787 (port)	Nacelle panel	0.006	3.00	0.05	5.00	1.00	6W	15
22			EA1. 20. 8788 (stbd.)								
23	L. 72	20	EA1. 25. 151 (port)	Inboard flap upper panel	0.005	3.00	0.05	4.00	1.00	4W	24
24			EA1. 25. 241 (stbd.)								
25	L. 72	20	EA1. 25. 153 (port)	Inboard flap lower panel	0.003	2.00	0.03	4.00	0.50	4W	35 and 36
26			EA1. 25. 237 (stbd.)								
27	L. 73	16	EA1. 20. 7063 (port)	Flap shroud panel	0.004	3.00	0.04	4.00	0.70	6W	
28			EA1. 20. 7064 (stbd.)								
29	L. 73	16	EA3. 20. 491 (port)	Panel assembly	0.006	3.00	0.05	5.00	1.00	6W	15
30			EA3. 20. 492 (stbd.)								
31	L. 72	18	EA3. 20. 489 (port)	Panel assembly	0.006	3.00	0.05	5.00	1.00	6W	
32			EA3. 20. 490 (stbd.)								
33	L. 72	18	EA3. 20. 493 (port)	Closing panel assembly	0.006	3.00	0.05	5.00	1.00	6W	
34			EA3. 20. 494 (stbd.)								
35	L. 73	18	EA3. 20. 355 (port)	Panel assembly	0.005	1.00	0.07	4.50	1.00	6W	
36			EA3. 20. 356 (stbd.)								
37	L. 73	18	EA1. 20. 1321 (port)	Doubling plate	0.005	1.00	0.07	4.50	1.00	6W	
38			EA1. 20. 1322 (stbd.)								
39	L. 72	18	EA1. 20. 7057 (port)	Reinforcing plate	0.005	1.00	0.07	4.50	1.00	6W	
40			EA1. 20. 7058 (stbd.)								
41	L. 73	18	EA1. 20. 7045 (port)	Reinforcing plate	0.005	1.00	0.07	4.50	1.00	6W	
42			EA1. 20. 7046 (stbd.)								
43	L. 72	18	EA1. 20. 9841 (port)	Reinforcing plate	0.005	1.00	0.07	4.50	1.00	6W	
44			EA1. 20. 9842 (stbd.)								
45	L. 73	18	EA1. 20. 9239 (port)	Reinforcing plate	0.005	1.00	0.07	4.50	1.00	6W	
46			EA1. 20. 9240 (stbd.)								
47	L. 73	18	EA1. 20. 9237 (port)	Reinforcing plate	0.005	1.00	0.07	4.50	1.00	6W	
48			EA1. 20. 9238 (stbd.)								
49	L. 73	18	EA1. 20. 7047 (port)	Reinforcing plate	0.005	1.00	0.07	4.50	1.00	6W	
50			EA1. 20. 7048 (stbd.)								
51	L. 73	14	EA1. 20. 691 (port)	Closing strip	0.010	4.00	0.03	6.00	1.00	4W	
52			EA3. 20. 692 (stbd.)								

Note:- All dimensions are in inches. W, in min. spacing column = the least dimension of damage



Item	Material		Part No.	Description	Negligible damage						Repairable damage	Repair fig. No.
	Spec.	S.W.G.			Dents		Scratches		Holes			
					Max. depth	Min. dia.	Depth	Spacing	Max. dia.	Pitch ratio		
1	L. 72	22	E.A1.25.53 (port) E.A1.25.54 (starb.)	End rib (outboard)	0.05	1.00	0.005	1.00	0.20	20:1	(To be added later)	
2	L. 72	16	E.A1.25.141	Plate doubler	0.05	1.00	0.010	4.00	0.125	40:1		
3	L. 40	—	E.A1.25.17 (inboard)	Hinge bracket	0.01	0.50	0.015	3.00	—	—		
4			E.A1.25.19 (outboard)									
			E.A1.25.259 (port) E.A1.25.260 (starb.) (E.E.D.X.181)	Stiffener	0.05	1.00	0.010	4.00	0.125	32:1		
5	L. 72	14	E.A1.25.99 (port) E.A1.25.100 (starb.) (E.E.J.240)	Spar assembly	0.04	1.00	0.010	4.00	0.125	48:1		
6	L. 72	24	E.A1.25.45 (port) E.A1.25.46 (starb.)	Nose rib	0.05	0.75	0.005	2.00	0.20	10:1		
7	L. 72	18	E.A1.25.157 (port)	Plate doubler	0.05	1.00	0.005	2.00	—	—	26	
8			E.A1.25.57 (starb.)	Hinge rib assembly	0.05	1.00	0.005	3.00	0.20	30:1		
9	L. 72	22	E.A1.25.153 (port) E.A1.25.237 (starb.)	Lower skin panel	For details of negligible and repairable damage refer to fig. 6							
10	L. 72	24	E.A1.25.55 (port) E.A1.25.56 (starb.)	Trailing-edge rib (intermediate)	0.05	0.75	0.005	2.00	0.20	20:1	25	
11	L. 72	16	E.A1.25.127	Plate doubler	0.05	1.00	0.010	1.00	—	—		
12	L. 72	22	E.A1.25.151 (port) E.A1.25.241 (starb.)	Upper skin panel	For details of negligible and repairable damage refer to fig. 6						24	

Note.—All dimensions are in inches.

Fig. 7. Inboard flap structure

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A.P.101B-0400-6, Part 1, Chap.3
A.L.116, Oct.74

FIG.8 OUTBOARD FLAP STRUCTURE

(illustration overleaf)

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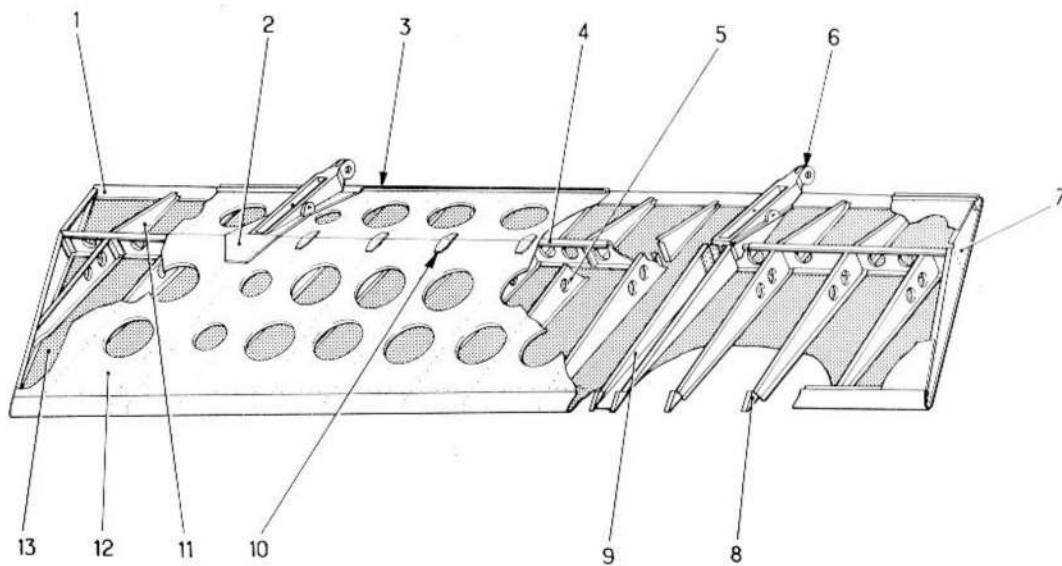


FIG.8. OUTBOARD FLAP STRUCTURE

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KEY TO FIG.8 (OUTBOARD FLAP STRUCTURE)

Item	Material		Part No.	Description	Negligible damage						Repairable damage	Repair fig.No
	Spec.	S.W.G.			Dents		Scratches		Holes			
					Max. depth	Min. dia.	Depth	Spacing	Max. dia.	Pitch ratio		
1	L.72	18	EA1.25.125 (port) EA1.25.251 (starb.)	Plate doubler	0.05	1.00	0.005	2.00	-	-		26
2	L.72	16	EA1.25.141	Plate doubler	0.05	1.00	0.010	4.00	0.125	40.1		
3	L.40	-	EA1.25.225 (E.E.D.X.181)	Stiffener	0.05	1.00	0.010	4.00	0.125	32.1		
4	L.72	14	EA1.25.97 (port) EA1.25.98 (starb.) (E.E.J.240)	Spar assembly	0.04	1.00	0.010	4.00	0.125	48.1		
5	L.72	24	EA1.25.23 (port) EA1.25.24 (starb.)	Trailing edge-rib No.7	0.05	0.75	0.005	2.00	0.20	20.1		25
6	L.40	-	EA1.25.215	Hinge bracket	0.01	0.50	0.015	3.00	-	-		
7	L.72	22	EA1.25.11 (port) EA1.25.12 (starb.)	Rib No.1	0.05	1.00	0.005	1.00	0.20	20.1		
8	L.65	-	EA1.25.1E (port) EA1.25.2E (starb.)	Metal block	0.03	0.50	-	-	-	-		
9	L.72	18	EA1.25.59	Hinge rib assembly	0.05	1.00	0.005	3.00	0.20	30.1		
10		16	EA1.25.127	Plate doubler	0.05	1.00	0.010	1.00	-	-		
11		24	EA1.25.45 (port) EA1.25.46 (starb.)	Nose rib	0.05	0.75	0.005	2.00	0.20	10.1		
12	L.72	22	EA1.25.115 (port)	Upper skin panel	0.03	0.50	0.005	6.00	-	-		24
13			EA1.25.116 (starb.)									
			EA1.25.117 (port)									
			EA1.25.118 (starb.)	Lower skin panel	0.03	0.50	0.005	6.00	-	-		

Note...

All dimensions are in inches

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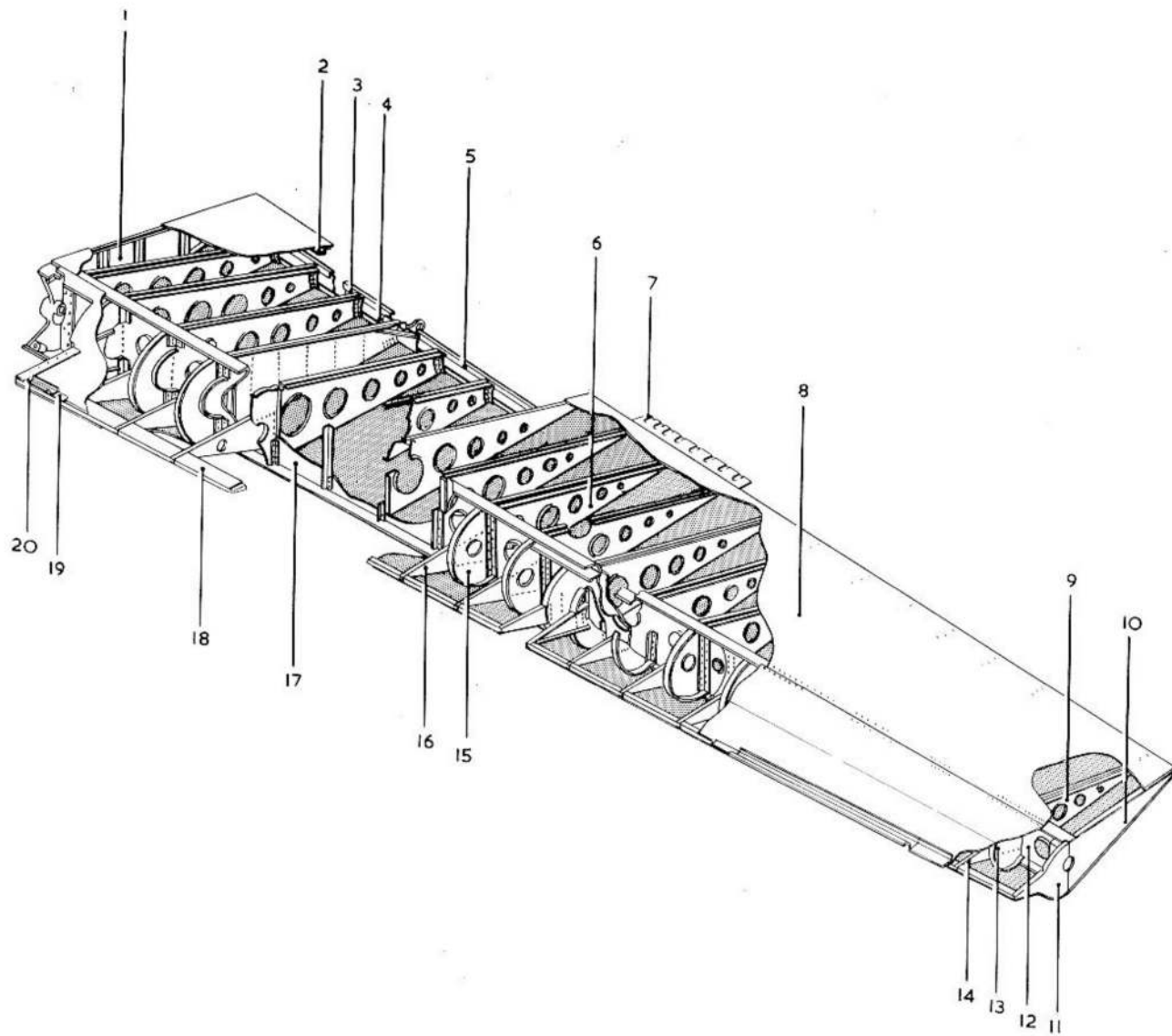


FIG.9. AILERON STRUCTURE

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KEY TO FIG.9 (AILERON STRUCTURE)

Material				Negligible damage					Repairable damage		Repair fig.No.
				Dents		Scratches		Holes			
Item	Spec	S.W.G.	Part No.	Description	Max. depth	Min. dia.	Depth	Spacing	Max. dia.	Pitch ratio	
1	L.72	22	EAL.24.201 (port)	Trailing edge rib, No.1	0.04	0.50	0.005	3.00	-	-	
2			EAL.24.202 (starb)								
3	L.72	24	EAL.24.497 (port)	Top inboard shroud stiffener	0.02	0.50	0.005	3.00	-	-	
4											EAL.24.498 (starb)
5											(E.E.J.62)
6											EAL.24.743
											(E.E.J.63)
											EAL.24.437
7		20	EAL.24.915 (port)	Fixed tab	-	-	0.005	3.00	-	-	
8			EAL.24.916 (starb)								
9	L.72	24	EAL.24.495 (port)	Upper skin	0.05	1.00	0.005	1.00	-	-	
											EAL.24.496 (starb)
											EAL.24.41 (port)
10	L.72	22	EAL.24.42 (starb)	Trailing edge rib, No.19	0.30	0.50	0.005	3.00	0.20	20:1	
11	L.72	22	EAL.24.147 (port)	Trailing edge rib, No.20	0.04	0.50	0.005	3.00	-	-	
12			EAL.24.148 (starb)								
13	L.72	20	EAL.24.655 (port)	Rib No.20, nose web	0.04	0.50	0.005	3.00	-	-	
14	L.72	16	EAL.24.737 (port)	Outboard spar	0.05	1.00	0.005	3.00	-	-	
15			EAL.24.738 (starb)								
16	L.72	22	EAL.24.611	Rib No.19, nose web	0.03	0.50	0.005	3.00	0.20	20:1	
17				EAL.24.609	Rib No.19, beak web	0.04	0.50	0.005	3.00	0.20	20:1
18				EAL.24.575	Rib No.9, nose web	0.03	0.50	0.005	3.00	0.20	20:1
19				EAL.24.537	Rib No.9, beak web	0.04	0.50	0.005	3.00	-	-
20	L.72	16	EAL.24.735 (port)	Inboard spar	0.05	1.00	0.005	3.00	-	-	
			EAL.24.736 (starb)								
21	S.19	-	EAL.24.857	Mass balance	-	-	-	-	-	-	
22	L.72	20	EAL.24.749 (port)	Lower strip	-	-	0.005	1.00	-	-	
23											EAL.24.750 (starb)
24											EAL.24.747 (port)
25											EAL.24.748 (starb)
26			(EEJ.241)	Upper strip	-	-	0.005	1.00	-	-	

Note...

All dimensions are in inches

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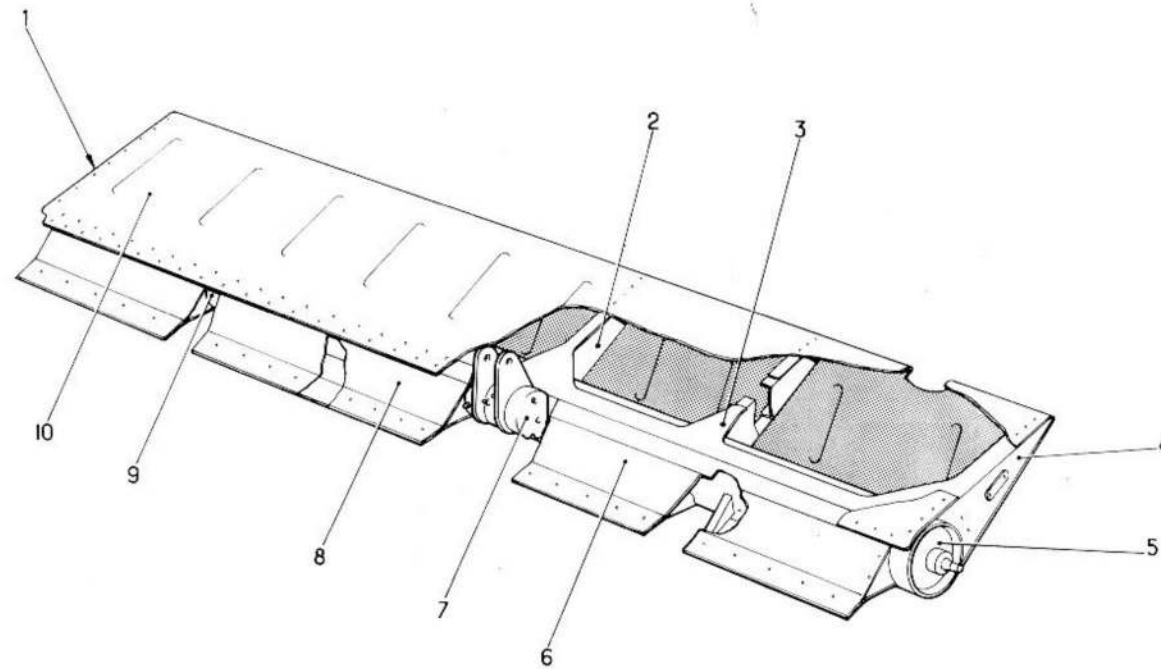


FIG.10 AILERON TAB STRUCTURE

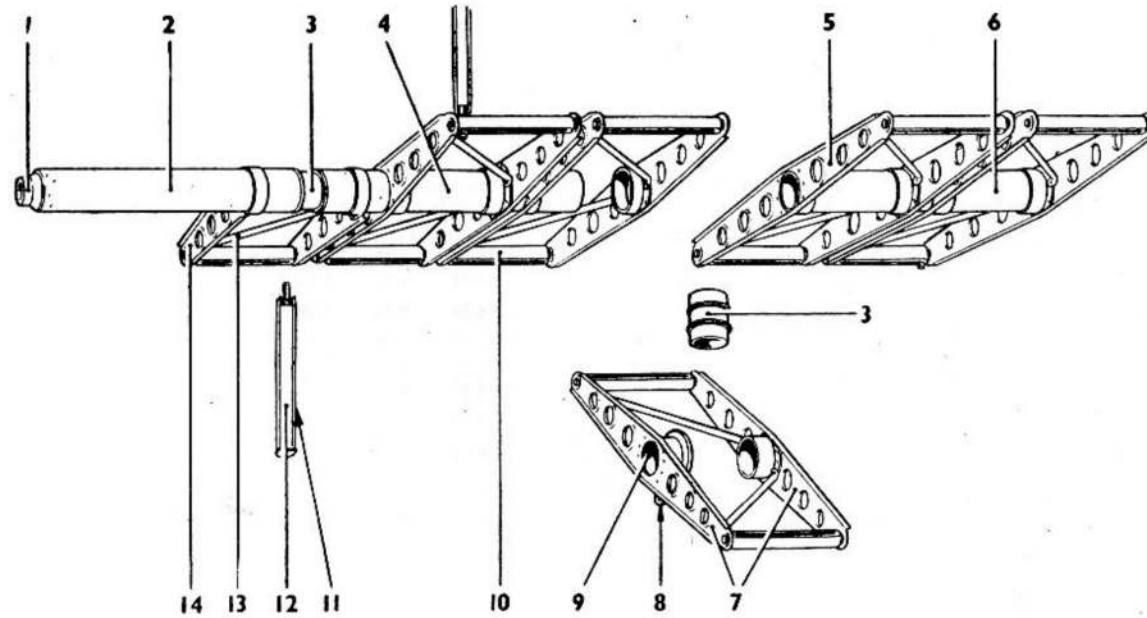
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KEY TO FIG. 10 (AILERON TAB STRUCTURE)

Item	Spec.	S.W.G.	Material		Part No.	Description	Negligible damage						Repairable damage	Repair fig.No.
							Dents		Scratches		Holes			
							Max. depth	Min. dia.	Depth	Spacing	Max. dia.	Pitch ratio		
◀ 1	L. 72	24	EAl. 24.925 (port)	EAl. 24.926 (starb.)		Rib No. 1	0.02	0.50	0.004	3.00	-	-		
2	L. 72	26	EAl. 24.927 (port)	EAl. 24.928 (starb.)		Rib No. 4	0.02	0.50	0.004	3.00	-	-		
3	L. 72	22	EAl. 24.940 (port)	EAl. 24.939 (starb.)		Rib attachment strip	-	-	-	-	-	-	No damage permitted	
4	L. 72	24	EAl. 24.930 (port)	EAl. 24.929 (starb.)		Rib No. 6	0.02	0.50	0.004	3.00	-	-		
5	L. 40	-	EAl. 24.227			Hinge socket	-	-	-	-	-	-	No damage permitted	
6	L. 72	26	EAl. 24.547 (port)	EAl. 24.548 (starb.)		Outer beak plate	0.02	0.50	0.004	2.00	-	-		
7	L. 72	-	EAl. 24.251 (port)	EAl. 24.252 (starb.)		Centre hinge lugs	-	-	-	-	-	-	No damage permitted	
8	L. 72	26	EAl. 24.545 (port)	EAl. 24.546 (starb.) (E. E. J. 152)		Inner beak plate	0.02	0.50	0.004	2.00	-	-		
9	T41	26	EAl. 24.521 (port)	EAl. 24.522 (starb.)		Spar	-	-	-	-	-	-	No damage permitted	
10	L. 72	26	EAl. 24.539 (port)	EAl. 24.540 (starb.)		Skin	0.005	0.50	0.005	-	-	-		

Note...

All dimensions are in inches



Item	Material		Part No.	Description	Negligible damage						Repairable damage	Repair fig. No.
	Spec.	S.W.G.			Dents		Scratches		Holes			
					Max. depth	Min. dia.	Depth	Spacing	Max. dia.	Pitch ratio		
1	D.T.D.683	—	E.A1.20.2095	End fitting	No damage permitted						(To be added later)	
2	T4, 3½ in. O/D	5	E.A1.20.2201	Tube assembly	—	—	0.010	3.00	—	—		
3	D.T.D.464, D.T.D.638 or L.40, 3 in. O/D	3	E.A1.20.2089	Joint sleeve	—	—	0.010	3.00	—	—		
4	T4, 3½ in. O/D	5	E.A1.20.2203	Tube assembly	—	—	0.010	3.00	—	—		
5	D.T.D.610	18	E.A1.20.2059	Side plate	0.05	1.00	0.005	2.00	0.20	20:1		
6	T4, 3½ in. O/D	5	E.A1.20.2205	Tube assembly	—	—	0.010	3.00	—	—		
7	D.T.D.610	18	E.A1.20.2049	Side plates	0.05	1.00	0.005	2.00	0.20	20:1		
8	L.40 or D.T.D.546	—	E.A3.20.259	Jack lever	—	—	0.010	3.00	—	—		
9	L.40 or L.45	—	E.A1.20.2053	Jack lever attachment spool	—	—	0.010	3.00	—	—		
10	D.T.D.683	—	E.A1.20.2057	Cross head	No damage permitted							
11	D.T.D.610	18	E.A1.20.9401	Channel (typical)	—	—	0.005	1.00	—	—		
12	D.T.D.610	20	E.A1.20.9403	Cover (typical)	—	—	0.005	1.00	—	—		
13	D.T.D.310 or T4, ½ in. O/D	22	E.A1.20.2055	Bracing tube	—	—	0.005	2.00	—	—		
14	D.T.D.610	18	E.A3.20.257	Side plate	0.05	1.00	0.005	2.00	0.20	20:1		

Note.—All dimensions are in inches.

Fig. 11. Air brakes structure

RESTRICTED

(A.L.31, Feb. 56)

KEY TO FIG. 12 (WING TIP STRUCTURE)

Item	Material		Part No.	Description	Negligible damage						Repairable damage	Repair fig. No.
	Spec.	S.W.G.			Dents		Scratches		Holes			
					Max. depth	Min. dia.	Depth	Spacing	Max. dia.	Pitch ratio		
1	D.T.D.610	16	E.A1.20.2381	Leading edge rib assembly	No damage permitted						(To be added later)	
2	D.T.D.610	20	E.A1.20.2383 (port)	Main rib assembly	0-05	0-75	0-005	1-00	0-20	15:1		
			E.A1.20.2384 (starb.)									
3	L.16	20	E.A1.20.10677 (port)	Upper skin panel	0-10	1-00	0-005	2-00	—	—		
			E.A1.20.10678 (starb.)									
4	D.T.D.610	20	E.A1.20.2387 (port)	Outboard rib assembly	0-05	0-75	0-005	1-00	0-20	15:1		
			E.A1.20.2388 (starb.)									
5	D.T.D.610	16	E.A1.20.9137 (port)	Angle	0-04	0-75	0-005	2-00	—	—		
6			E.A1.20.9138 (starb.)									
			E.A3.20.1047 (port)	Angle	0-04	0-75	0-005	2-00	—	—		
7			E.A3.20.1048 (starb.)									
			E.A1.20.8067 (port)	Boundary angle	0-04	0-75	0-005	2-00	—	—		
	E.A1.20.8068 (starb.)											
	D.T.D.610	18	E.A1.20.9047	Rib	0-05	0-75	0-005	1-00	0-20	15:1		
	D.T.D.610	16	E.A1.20.9035 (port)	Angle	0-04	0-75	0-005	2-00	—	—		
			E.A1.20.9036 (starb.)									
10	◀D.T.D.213▶	20	E.A3.20.1055 (port)	Upper skin assembly	0-10	1-00	0-005	2-00	—	—		
			E.A3.10.1056 (starb.)									
11	D.T.D.610	16	E.A3.20.1045 (port)	Angle	0-04	0-75	0-005	2-00	—	—		
12			E.A3.20.1046 (starb.)									
			E.A1.20.9040 (port)	Angle	0-04	0-75	0-005	2-00	—	—		
13			E.A1.20.9039 (starb.)									
			E.A1.20.9042 (port)	Angle	0-04	0-75	0-005	2-00	—	—		
14	E.A1.20.9041 (starb.)											
	E.A1.20.9039 (port)	Angle	0-04	0-75	0-005	2-00	—	—				
15	E.A1.20.9040 (starb.)											
	E.A1.20.9041 (port)	Angle	0-04	0-75	0-005	2-00	—	—				
16	E.A1.20.9042 (starb.)											
17	D.T.D.610	22	E.A1.20.9055	Rib	0-05	0-75	0-005	1-00	0-20	15:1		
18			E.A1.20.9059	Rib	0-05	0-75	0-005	1-00	0-20	15:1		
19			E.A1.20.9057	Rib assembly	0-05	0-75	0-005	1-00	0-20	15:1		
20			E.A1.20.9065	Rib	0-05	0-75	0-005	1-00	0-20	15:1		
21			E.A1.20.9067	Wing rib No. 8 extension	0-04	0-75	0-005	3-00	—	—		
22	D.T.D.213	20	E.A1.20.7037 (port)	Rib	0-05	0-75	0-005	1-00	0-20	15:1		
23	D.T.D.610	22	E.A1.20.7038 (starb.)	Upper skin panel	0-10	1-00	0-005	2-00	—	—		
24	D.T.D.213	20	E.A1.20.9061	Rib	0-05	0-75	0-005	1-00	0-20	15:1		
25	D.T.D.610	16	E.A1.20.7039 (port)	Lower skin panel	0-10	1-00	0-005	2-00	—	—		
26	D.T.D.610	22	E.A1.20.7040 (starb.)									
27	D.T.D.213	20	E.A3.20.1885	Riblet	0-04	0-75	0-005	2-00	—	—		
28	D.T.D.610	22	E.A1.20.9053	Rib	0-05	0-75	0-005	1-00	0-20	15:1		
29	D.T.D.610	18	E.A3.20.1887	Lower skin panel	0-10	1-00	0-005	2-00	—	—		
30	D.T.D.610	16	E.A1.20.9051	Rib	0-05	0-75	0-005	1-00	0-20	15:1		
			E.A3.20.1907	Rib assembly	0-05	0-75	0-005	1-00	0-20	15:1		
31	D.T.D.213	16	E.A3.20.1046 (port)	Angle	0-04	0-75	0-005	2-00	—	—		
			E.A3.20.1045 (starb.)									
			E.A3.20.1043 (port)	Lower skin panel	0-07	1-00	0-010	3-00	—	—		
			E.A3.20.1044 (starb.)									
32	D.T.D.610	16	E.A1.20.9036 (port)	Angle	0-04	0-75	0-005	2-00	—	—		
			E.A1.20.9035 (starb.)									
33	D.T.D.213	20	E.A3.20.1035 (port)	Landing plate	0-04	0-75	0-005	3-00	—	—		
			E.A3.20.1036 (starb.)									
34	D.T.D.610	16	E.A1.20.8243 (port)	Boundary angle	0-04	0-75	0-005	2-00	—	—		
			E.A1.20.8244 (starb.)									
35	D.T.D.610	18	E.A1.20.9143	Rib	0-05	0-75	0-005	1-00	0-20	15:1		
36	D.T.D.610	16	E.A3.20.1048 (port)	Angle	0-04	0-75	0-005	2-00	—	—		
			E.A3.20.1047 (starb.)									
37	D.T.D.610	18	E.A3.20.1901	Rib assembly	0-05	1-00	0-005	3-00	0-20	20:1		
38	D.T.D.213	20	E.A1.20.10683 (port)	Lower skin panel	0-10	1-00	0-005	2-00	—	—		
			E.A1.20.10684 (starb.)									
39	D.T.D.610	20	E.A1.20.2385 (port)	Rib assembly	0-05	0-75	0-005	1-00	0-20	15:1		
			E.A1.20.2386 (starb.)									
40	L.16	20	E.A1.20.10679 (port)	Lower skin panel	0-10	1-00	0-005	2-00	—	—		
			E.A1.20.10680 (starb.)									

Note.—All dimensions are in inches.

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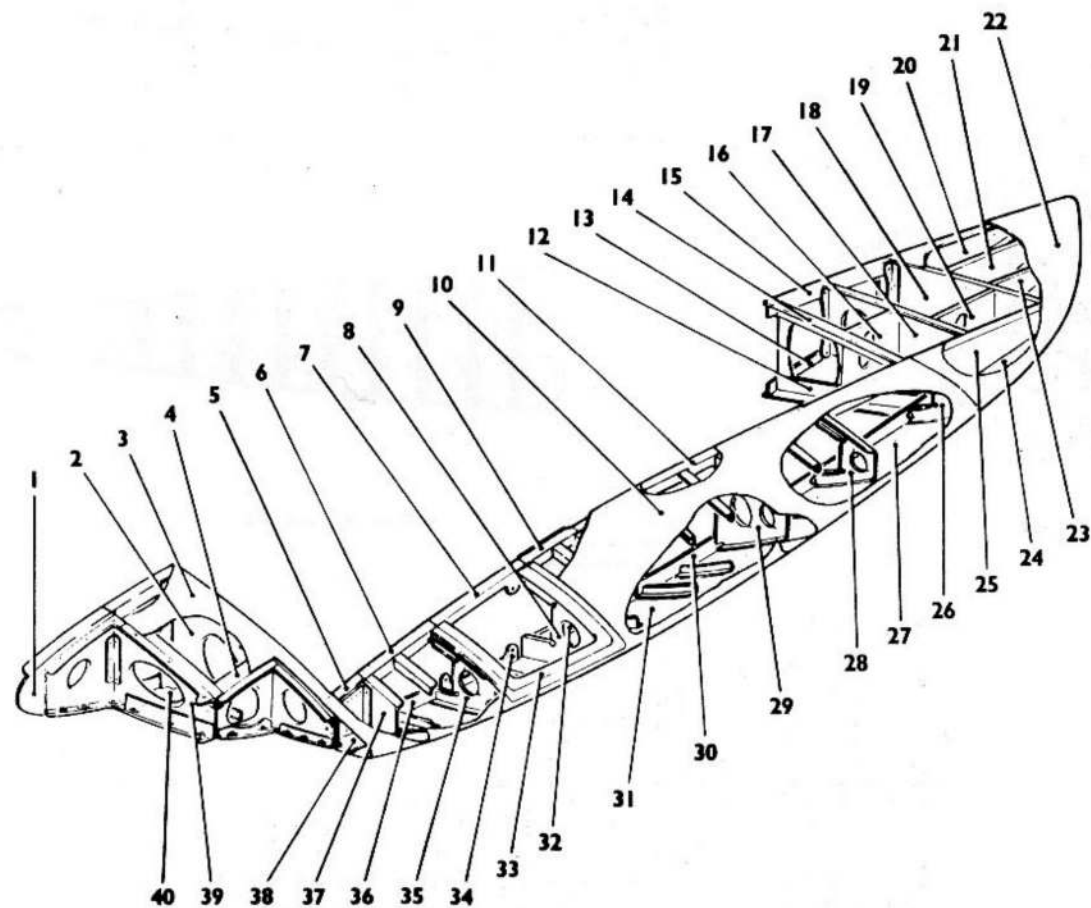
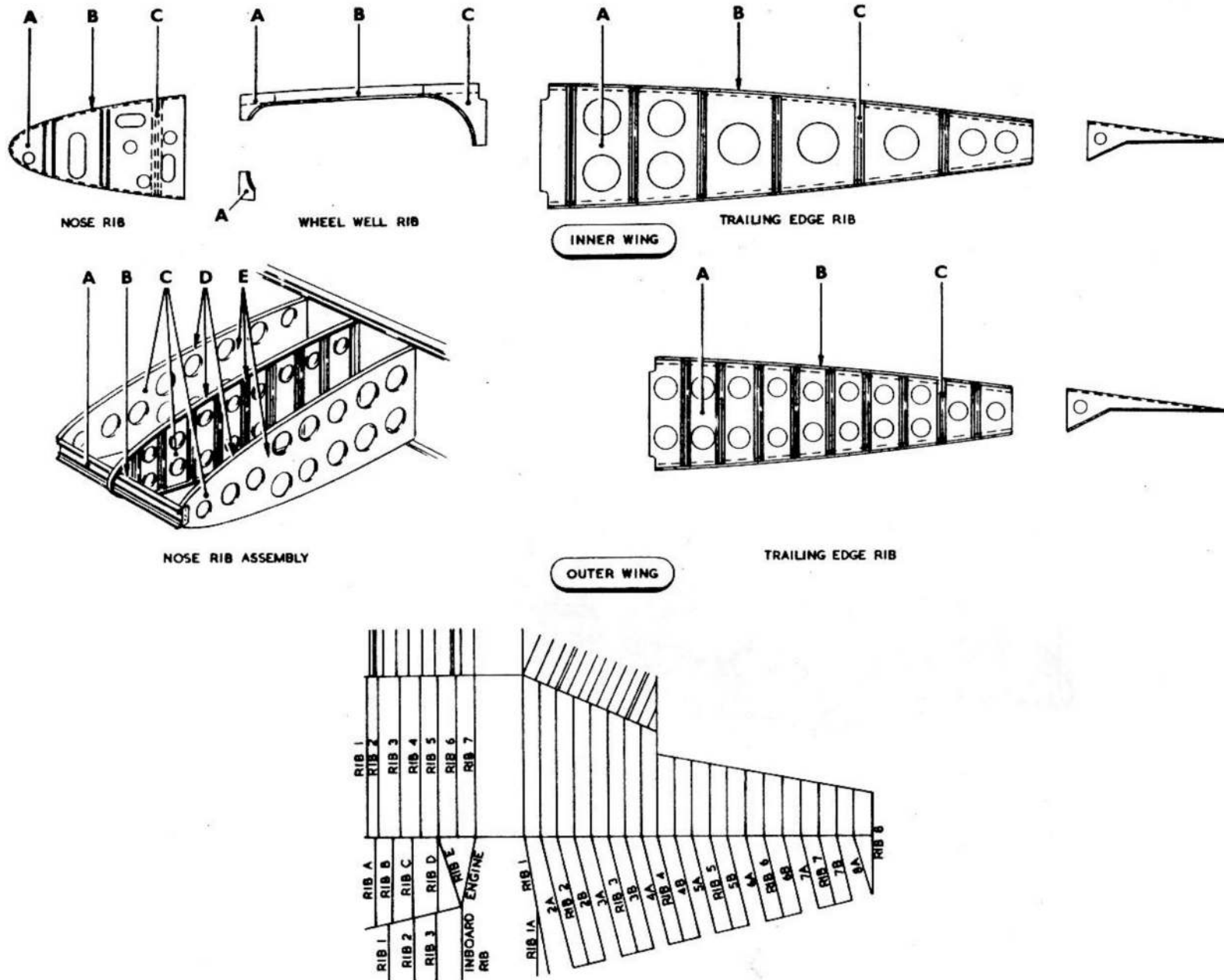


Fig. 12. Wing tip structure

RESTRICTED



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FIG. 13. TYPICAL RIB ASSEMBLIES

KEY TO FIG. 13 (TYPICAL RIB ASSEMBLIES)

Rib No.	Components										Sect. No.	Negligible damage						Repairable damage	Repair fig. No.
	A		B		C		D		E			Dents		Scratches		Holes			
	Section or Spec.	S.W.G.	Section or Spec.	S.W.G.	Section or Spec.	S.W.G.	Section or Spec.	S.W.G.	Section or Spec.	S.W.G.		Max. depth	Min. dia.	Depth	Spacing	Max. dia.	Pitch ratio		
INNER WING NOSE RIBS																	(to be added later)		
1	D.T.D.610	18	—	—	E.E.J.140	18	—	—	—	—	—	—	—	—	—	—	—		
2	D.T.D.610	18	—	—	E.E.J.12	18	—	—	—	—	—	—	—	—	—	—	—		
3	D.T.D.610	18	—	—	E.E.J.133	16	—	—	—	—	—	—	—	—	—	—	—		
Inbd. engine rib	D.T.D.124A	22	E.E.D.X.22	—	E.E.J.57	22	—	—	—	—	—	—	—	—	—	—	—		
INNER WING WHEEL WELL RIBS																			
A	D.T.D.610	16	E.E.J.139	16	D.T.D.610	16	—	—	—	—	12	0-05	0-75	0-005	2-00	0-125	40:1		
B	D.T.D.610	16	E.E.J.139	16	D.T.D.610	16	—	—	—	—	57	0-05	0-75	0-005	2-00	0-125	40:1		
C	D.T.D.610	16	E.E.J.139	16	D.T.D.610	16	—	—	—	—	58	0-05	0-75	0-005	2-00	0-125	40:1		
D	D.T.D.610	16	E.E.J.139	16	D.T.D.610	16	—	—	—	—	59	0-05	0-75	0-005	2-00	0-125	40:1		
E	Refer to fig. 3, item 23 for details										133	0-05	1-00	0-010	3-00	0-125	40:1		
INNER WING TRAILING EDGE RIBS																			
1	—	—	E.E.D.X.70	—	E.E.J.219	20	—	—	—	—	136	0-05	0-75	0-005	2-00	0-125	40:1		
2	D.T.D.610	20	—	—	E.E.J.57	22	—	—	—	—	138	0-05	0-75	0-005	2-00	0-125	40:1		
3	D.T.D.610	20	E.E.D.X.30	—	E.E.J.57	22	—	—	—	—	139	0-05	1-00	0-005	1-00	0-125	48:1		
4	D.T.D.546	14	E.E.D.X.30	—	E.E.J.57	22	—	—	—	—	140	0-05	0-75	0-005	1-00	0-125	40:1		
5	D.T.D.610	20	—	—	E.E.J.57	22	—	—	—	—	219	0-05	0-75	0-005	2-00	0-125	40:1		
6	D.T.D.610	18	E.E.D.X.22	—	E.E.J.57	22	—	—	—	—	E.E.D.X. SECTIONS								
7	D.T.D.546	16	E.E.D.X.25	—	—	—	—	—	—	—	22	0-01	0-50	0-015*	6-00*	—	—		
OUTER WING NOSE RIBS																			
1A	—	—	—	—	D.T.D.610	18	—	—	E.E.J.57	22	25	0-01	0-50	0-015*	6-00*	—	—		
1	—	—	—	—	D.T.D.546	16	E.E.D.X.185	—	E.E.J.138	22	29	0-01	0-50	0-010*	4-00*	—	—		
2A	—	—	—	—	D.T.D.610	20	E.E.D.X.33	—	E.E.J.59	22	30	0-01	0-50	0-010*	4-00*	—	—		
2	D.T.D.610	18	E.E.D.X.61	—	D.T.D.610	18	E.E.D.X.29	—	E.E.J.57	22	33	0-04	1-00	0-005	1-00	—	—		
2B	—	—	—	—	D.T.D.610	20	E.E.D.X.33	—	E.E.J.59	22	45	0-02	0-50	0-010*	4-00*	—	—		
3A	—	—	—	—	D.T.D.610	20	E.E.D.X.33	—	E.E.J.59	22	61	0-01	0-50	0-015	6-00	—	—		
3	D.T.D.610	18	E.E.D.X.61	—	D.T.D.610	18	E.E.D.X.29	—	E.E.J.57	22	70	0-03	0-50	0-010	4-00	—	—		
3B	—	—	—	—	D.T.D.610	20	E.E.D.X.33	—	E.E.J.59	22	72	0-01	0-50	0-010*	6-00*	—	—		
4A	—	—	—	—	D.T.D.610	20	E.E.D.X.33	—	E.E.J.59	22	185	0-01	0-50	0-015*	6-00*	—	—		
4	D.T.D.610	18	E.E.D.X.61	—	D.T.D.610	18	E.E.D.X.29	—	E.E.J.57	22	For details of negligible damage to components of D.T.D. Specification, refer to fig. 2 or 3								
4B	—	—	—	—	D.T.D.610	20	E.E.D.X.33	—	E.E.J.59	22									
5A	—	—	—	—	D.T.D.610	20	E.E.D.X.33	—	E.E.J.59	22									
5	D.T.D.610	20	E.E.D.X.61	—	D.T.D.610	18	E.E.D.X.29	—	E.E.J.57	22									
5B	—	—	—	—	D.T.D.610	20	E.E.D.X.33	—	E.E.J.59	22									
6A	—	—	—	—	D.T.D.610	20	E.E.D.X.33	—	E.E.J.59	22									
6	D.T.D.610	20	E.E.D.X.61	—	D.T.D.610	18	E.E.D.X.29	—	E.E.J.57	22									
6B	—	—	—	—	D.T.D.610	20	E.E.D.X.33	—	E.E.J.59	22									
7A	—	—	—	—	D.T.D.610	20	E.E.D.X.33	—	E.E.J.59	22									
7	D.T.D.610	20	E.E.D.X.61	—	D.T.D.610	18	E.E.D.X.29	—	E.E.J.57	22									
7B	—	—	—	—	D.T.D.610	20	E.E.D.X.33	—	E.E.J.59	22									
8A	—	—	—	—	D.T.D.610	20	E.E.D.X.33	—	E.E.J.59	22									
8	—	—	—	—	D.T.D.610	18	E.E.D.X.45	—	E.E.J.57	22									

(Key continued on following page)

*These dimensions are applicable only to the webs and flanges. Scratches in the fillet radius are to be cleaned out and a reinforcing repair applied.

Note.—All dimensions are in inches

RESTRICTED

KEY TO FIG. 13 (TYPICAL RIB ASSEMBLIES) (continued)

Rib No.	Components										Negligible damage						Repairable damage	Repair fig. No.
	A		B		C		D		E		Dents		Scratches		Holes			
	Section or Spec.	S.W.G.	Section or Spec.	S.W.G.	Section or Spec.	S.W.G.	Section or Spec.	S.W.G.	Section or Spec.	S.W.G.	Sect. No.	Max. depth	Min. dia.	Depth	Spacing	Max. dia.			Pitch ratio
OUTER WING TRAILING EDGE RIBS																		(To be added later)
1	D.T.D.546	16	E.E.D.X.65	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2A	D.T.D.610	20	E.E.D.X.33	—	E.E.J.59	22	—	—	—	—	E.E.J. SECTIONS							
2	D.T.D.610	18	E.E.D.X.30	—	E.E.J.57	22	—	—	—	—	57	0.05	0.75	0.005	2.00	0.125	40:1	
2B	D.T.D.610	20	E.E.D.X.33	—	E.E.J.213	14	—	—	—	—	58	0.05	0.75	0.005	2.00	0.125	40:1	
3A	D.T.D.610	20	E.E.D.X.33	—	E.E.J.59	22	—	—	—	—	59	0.05	0.75	0.005	2.00	0.125	40:1	
3	D.T.D.610	18	E.E.D.X.37	—	E.E.J.59	22	—	—	—	—	213	0.02	0.50	0.010	4.00	0.125	40:1	
3B	D.T.D.610	20	—	—	E.E.J.59	22	—	—	—	—	—	—	—	—	—	—	—	
4A	D.T.D.610	20	E.E.D.X.33	—	E.E.J.59	22	—	—	—	—	—	—	—	—	—	—	—	
4	D.T.D.610	16	E.E.D.X.30	—	E.E.J.57	22	—	—	—	—	—	—	—	—	—	—	—	
4B	D.T.D.610	20	—	—	E.E.J.59	22	—	—	—	—	—	—	—	—	—	—	—	
5A	D.T.D.610	20	—	—	E.E.J.58	20	—	—	—	—	E.E.D.X. SECTIONS							
5	D.T.D.610	18	E.E.D.X.37	—	E.E.J.58	20	—	—	—	—	30	0.01	0.50	0.010*	4.00*	—	—	
5B	D.T.D.610	20	—	—	E.E.J.58	20	—	—	—	—	33	0.04	1.00	0.005	1.00	—	—	
6A	D.T.D.610	20	—	—	E.E.J.58	20	—	—	—	—	37	0.03	0.70	0.010*	4.00*	—	—	
6	D.T.D.610	14	E.E.D.X.30	—	E.E.J.57	22	—	—	—	—	65	0.01	0.50	0.015*	6.00*	—	—	
6B	D.T.D.610	20	—	—	E.E.J.58	22	—	—	—	—	—	—	—	—	—	—	—	
7A	D.T.D.610	20	—	—	E.E.J.58	20	—	—	—	—	—	—	—	—	—	—	—	
7	D.T.D.610	18	E.E.D.X.37	—	E.E.J.58	20	—	—	—	—	For details of negligible damage to components of D.T.D. Specification, refer to fig. 2 or 3							
7B	D.T.D.610	20	—	—	E.E.J.58	20	—	—	—	—	—	—	—	—	—	—	—	
8A	D.T.D.610	20	—	—	E.E.J.58	20	—	—	—	—	—	—	—	—	—	—	—	
8	D.T.D.610	18	E.E.D.X.30	—	E.E.J.57	22	—	—	—	—	—	—	—	—	—	—	—	

*These dimensions are applicable only to the webs and flanges. Scratches in the fillet radius are to be cleaned out and a reinforcing repair applied.

Note.—All dimensions are in inches.

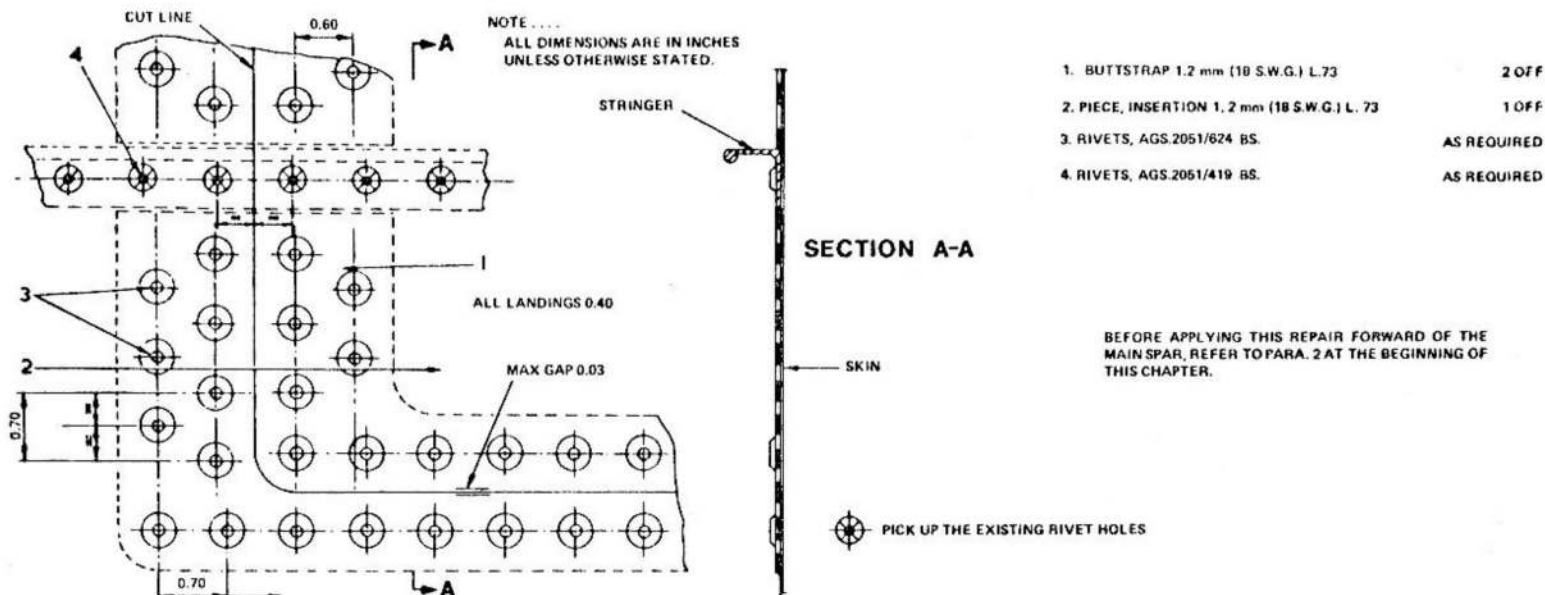


FIG.14. FLUSH SKIN PATCH IN INNER AND OUTER WING, INNER WING, UPPER, FORWARD OF MAIN SPAR, OUTER WING, UPPER AND LOWER, FORWARD AND AFT OF MAIN SPAR. OUTBOARD OF RIB 2

◀ RIVET PART No. AMENDED ▶

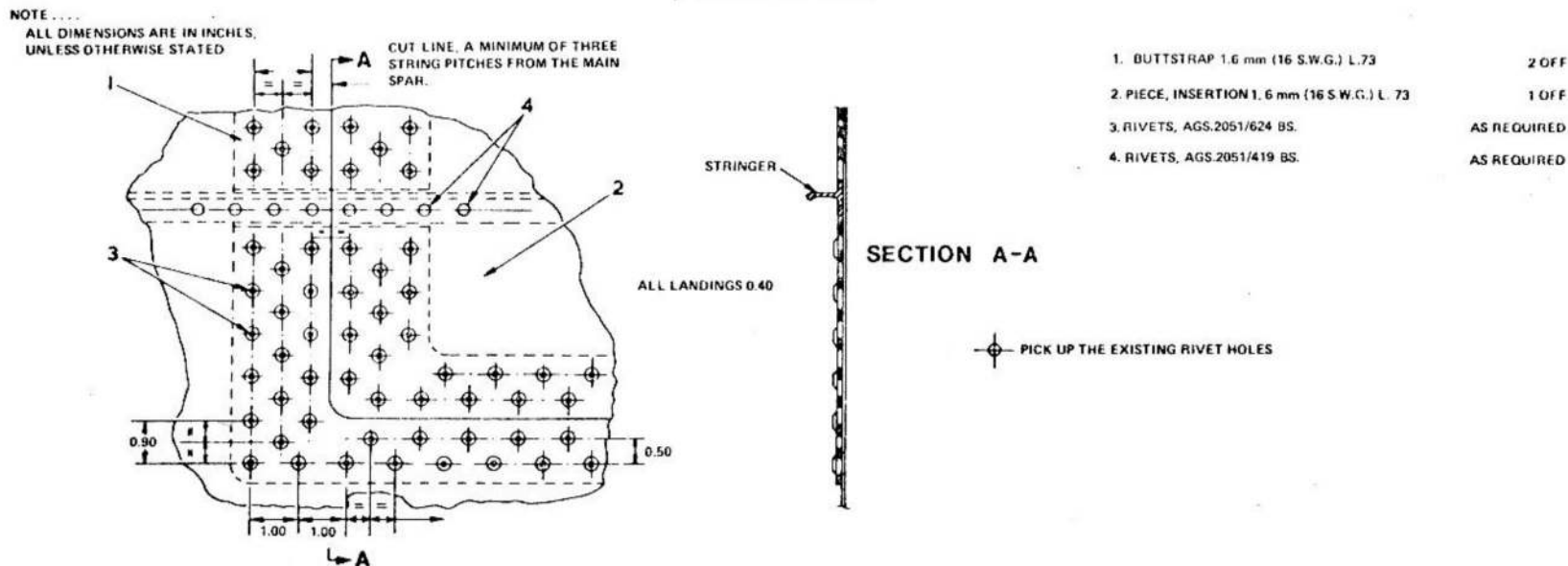


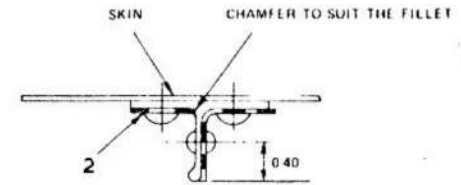
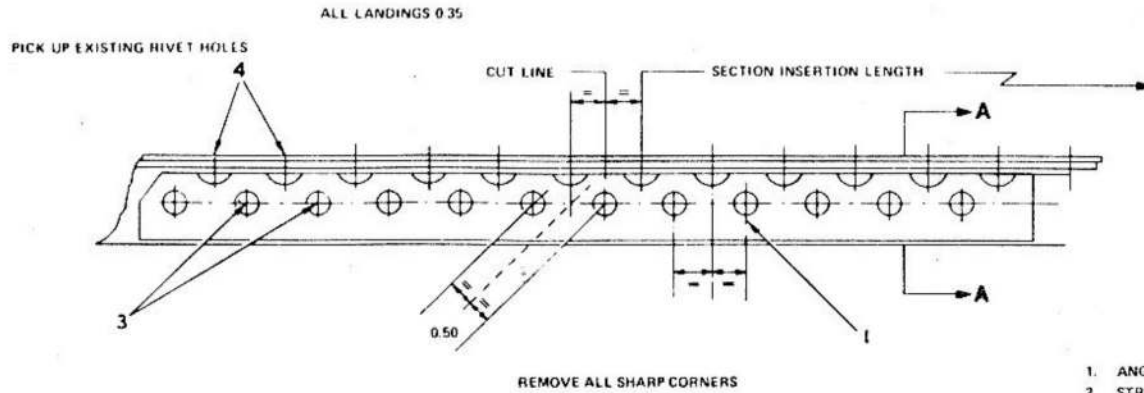
FIG.15. FLUSH SKIN PATCH IN INNER WING, UPPER AND LOWER AFT OF MAIN SPAR

◀ RIVET PART No. AMENDED ▶

RESTRICTED

NOTE
ALL DIMENSIONS ARE IN INCHES
UNLESS OTHERWISE STATED

TEE SECTION INSERTION REPLACEMENT PIECE
MUST BE MADE FROM THE APPROPRIATE
SECTION, CUT TO LENGTH AND MADE ON
EITHER SIDE OF SECTION CUT LINE



SECTION A-A

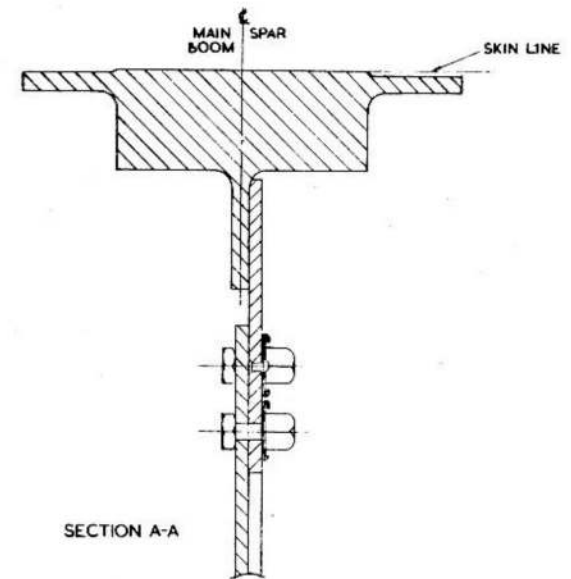
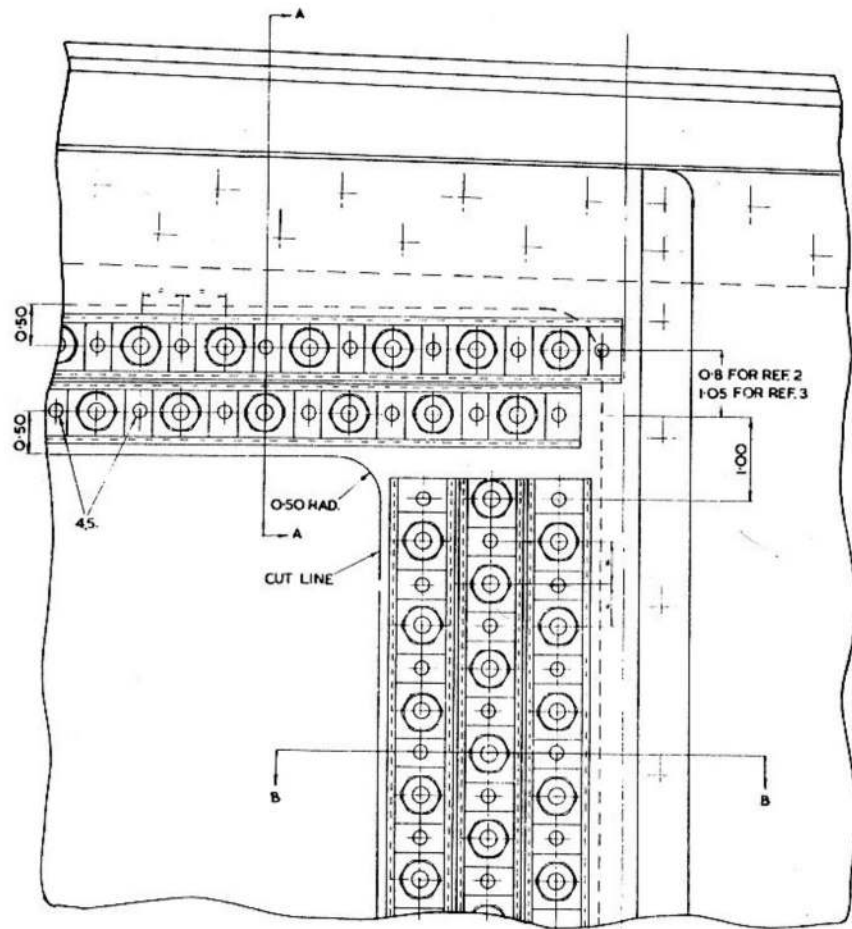
- | | |
|-----------------------------------|--------------------------|
| 1. ANGLE PIECE, REPAIR E E J 223. | 1.6 mm (16 S.W.G.) 2 OFF |
| 2. STRAP, REINFORCING | 1.6 mm (16 S.W.G.) 2 OFF |
| 3. RIVETS AS2227/404 | 24 OFF |
| 4. RIVETS AS2230/606 | 48 OFF |

FIG. 16. INSERTION REPAIR IN T-SECTION SKIN JOINT STRAPS

METRIC DIMENSIONS ADDED

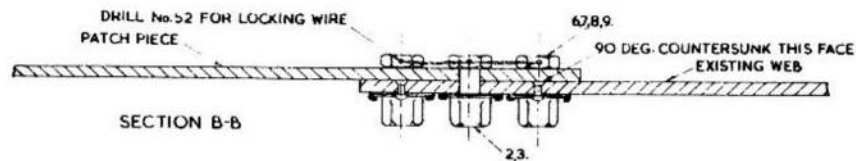
RESTRICTED

ALL DIMENSIONS ARE IN INCHES



SECTION A-A

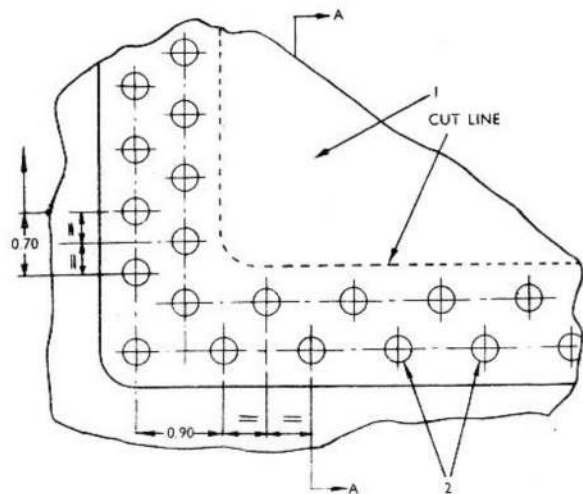
- 1 PATCH PIECE SAME SPEC. AND S.W.G. AS WEB
 - 2 STRIP-NUTS A.G.S. 2015/E/1/11IN. (FOR 8 AND 10 S.W.G.)
 - 3 STRIP-NUTS E A.3.03.123 (FOR 6 S.W.G. ONLY)
 - 4 RIVETS A2229/305 (FOR 8 AND 10 S.W.G.)
 - 5 RIVETS A2229/406 (FOR 6 S.W.G. ONLY)
 - 6 BOLTS 1/4" B.S.F. A25/3E (FOR 8 AND 10 S.W.G.)
 - 7 BOLTS 5/16" B.S.F. A25/4G (FOR 6 S.W.G. ONLY)
 - 8 WASHERS 1/4" S.P. 15/E (FOR 10 S.W.G. ONLY)
 - 9 WASHERS 5/16" S.P. 15/G (FOR 6 S.W.G. ONLY)
- } AS REQUIRED



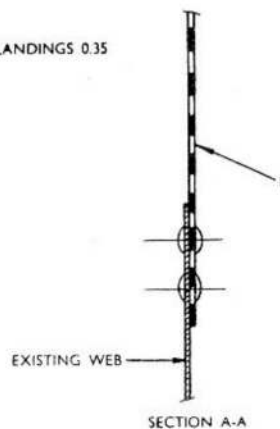
SECTION B-B

NOTE:-STRIP-NUT SIZES AS CALLED UP IN SCHEDULE TO BE STRICTLY ADHERED TO. HOLES FOR ITEMS 6 AND 7 TO BE REAMED 'X' FIT BRITISH STANDARDS. LOCKING WIRE TO BE 22 S.W.G., D.T.D. 189.

Fig.17. Non-flush patch in main spar web



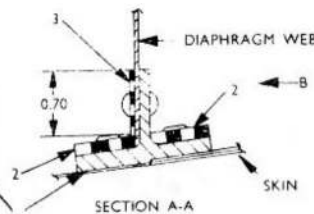
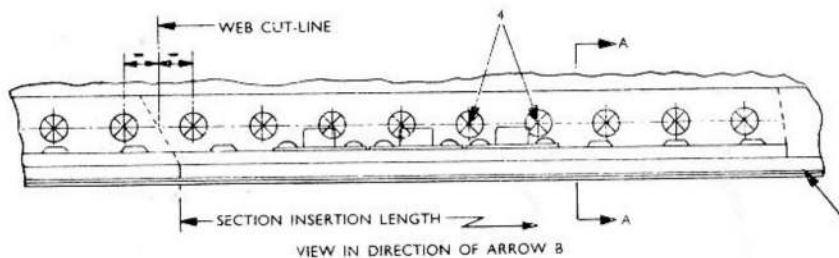
ALL LANDINGS 0.35



ALL DIMENSIONS ARE IN INCHES

- | | | |
|---|------------------------------------|-------------|
| 1 | REPAIR PATCH, 18 S.W.G., D.T.D.610 | 1 OFF |
| 2 | RIVETS, TLP/D.85519 | AS REQUIRED |

Fig. 20. Non-flush patch in diaphragm, inner wing

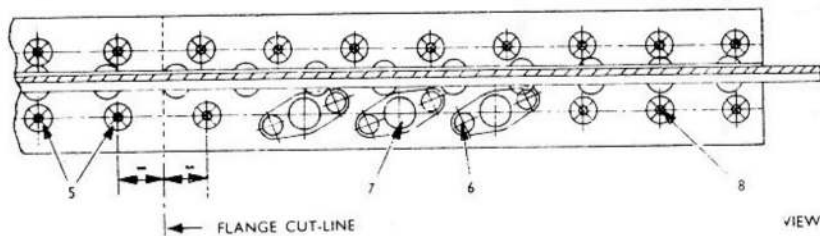


ALL DIMENSIONS ARE IN INCHES

INSERTION REPLACEMENT TO BE MADE FROM APPROPRIATE BOOM, CUT TO LENGTH AND MADE ON EITHER SIDE OF SECTION CUT-LINE

NOTE-RIVETING TO BE IDENTICAL ON BOTH SIDES OF CUT-LINE WHERE APPLICABLE EXISTING ANCHOR NUTS TO BE REPLACED BY THIN TYPE AND PLACED ON TOP OF REPAIR MEMBER

ALL LANDINGS 0.35

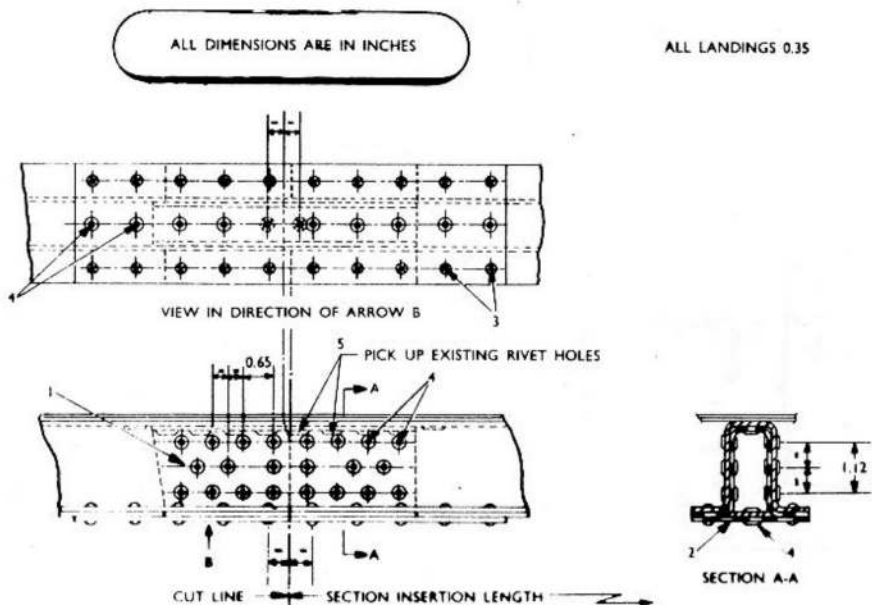


PICK UP EXISTING RIVET HOLES

- | | | |
|---|-------------------------------------|-------------|
| 1 | INSERTION PIECE. | 1 OFF |
| 2 | REPAIR STRIP, 10 S.W.G., D.T.D.166B | 4 OFF |
| 3 | REPAIR STRIP, 16 S.W.G., D.T.D.166B | 2 OFF |
| 4 | RIVETS, AS2227 507 | 16 OFF |
| 5 | RIVETS, A.G.S.2041.514 | 64 OFF |
| 6 | RIVETS, AS2230 306 | AS REQUIRED |
| 7 | ANCHOR NUT, A.G.S.2008 C.1 | AS REQUIRED |
| 8 | PIN SEALING, A.G.S.2042 506 | 64 OFF |

Fig. 21. Insertion repair in diaphragm booms, inner wing

RESTRICTED

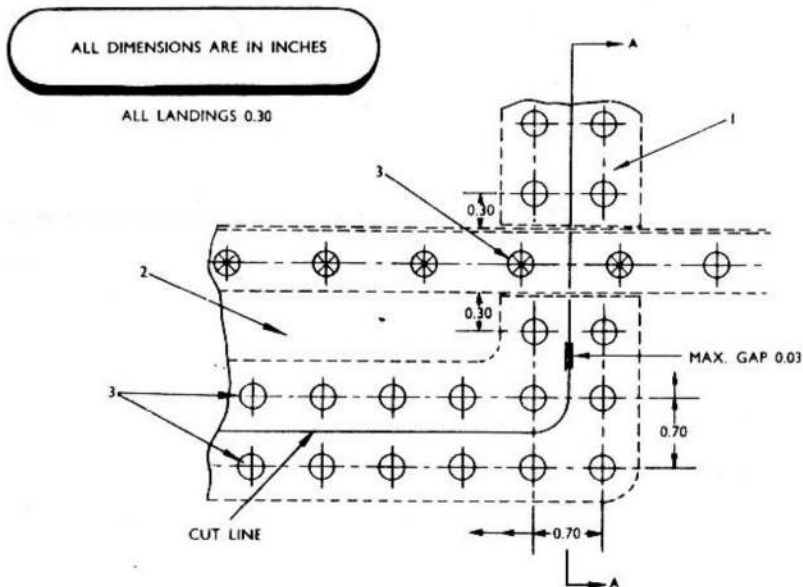


1	REPAIR SECTION, 16 S.W.G., D.T.D.610	...	...	2	OFF
2	STRAP PLATE, 16 S.W.G., D.T.D.610	...	...	2	OFF
3	RIVETS, AS2227/607	...	...	40	OFF
4	RIVETS, TLP;D/BS624	...	...	108	OFF
5	RIVETS, TLP;D/BS636	...	...	16	OFF

PICK UP EXISTING RIVET HOLES

SECTION INSERTION TO BE MADE FROM APPROPRIATE SECTION. CUT TO LENGTH AND MADE ON EITHER SIDE OF SECTION CUT-LINE

Fig. 22. Insertion repair to inner wing arch frames



1	BUTT-STRAP, 20 S.W.G., D.T.D.610	...	...	2	OFF
2	INSERTION PIECE, 20 S.W.G., D.T.D.610	...	...	1	OFF
3	RIVETS, AS2230/404	...	...	AS	REQUIRED

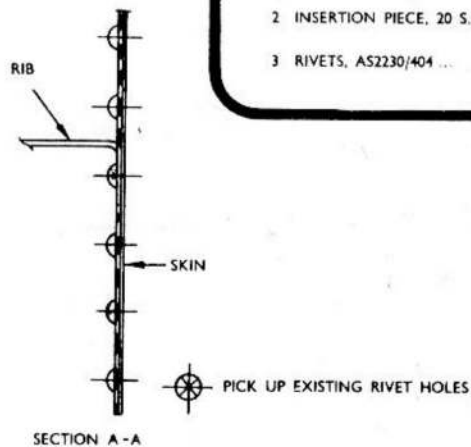


Fig. 23. Insertion repair to flap shroud

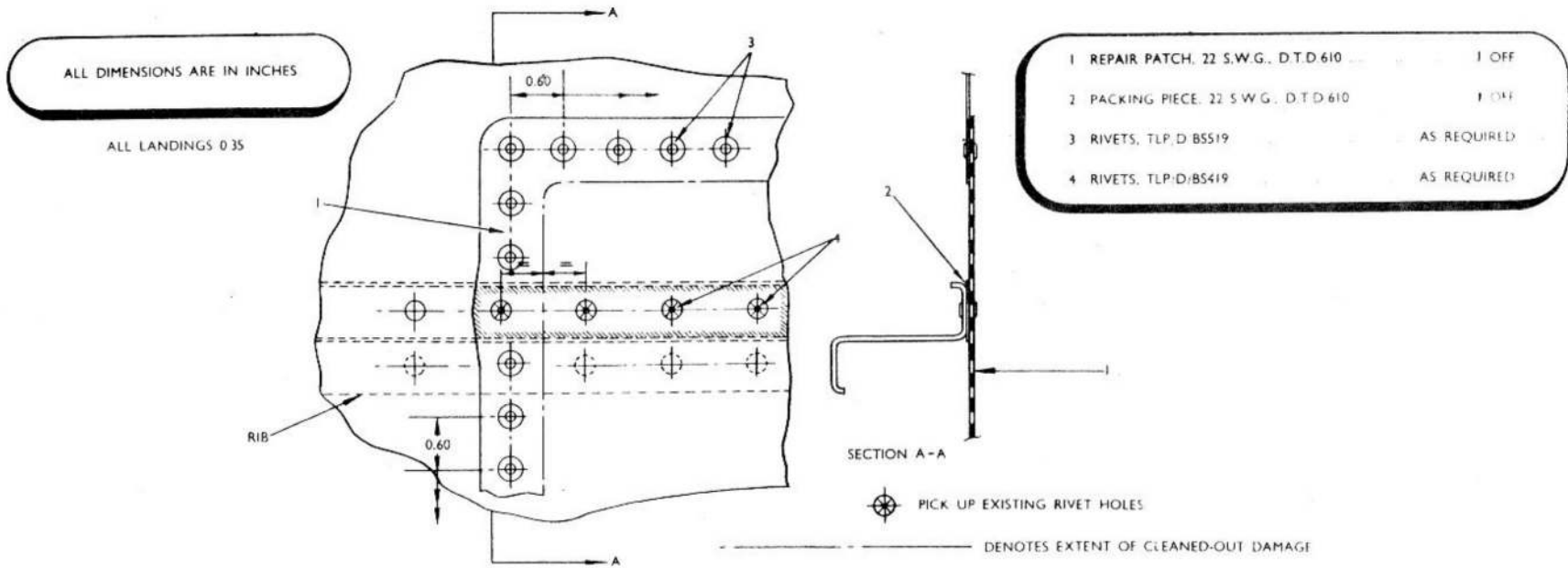


Fig. 24. Non-flush patch in flap upper skin

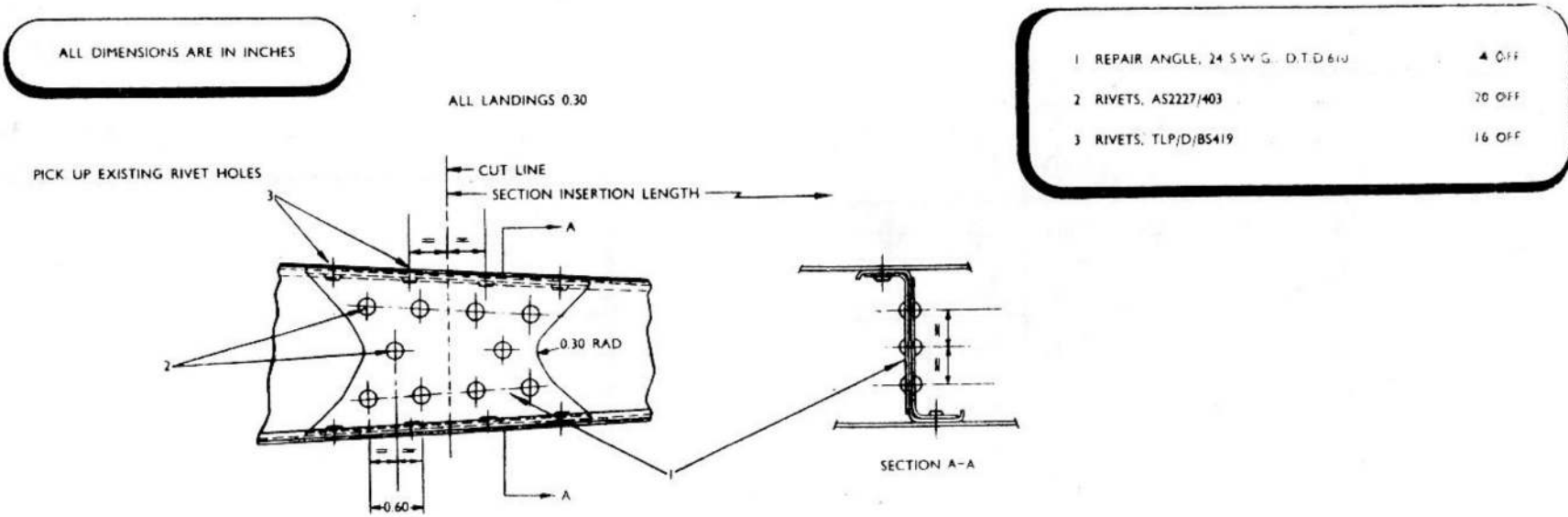


Fig. 25. Insertion repair to flap rib

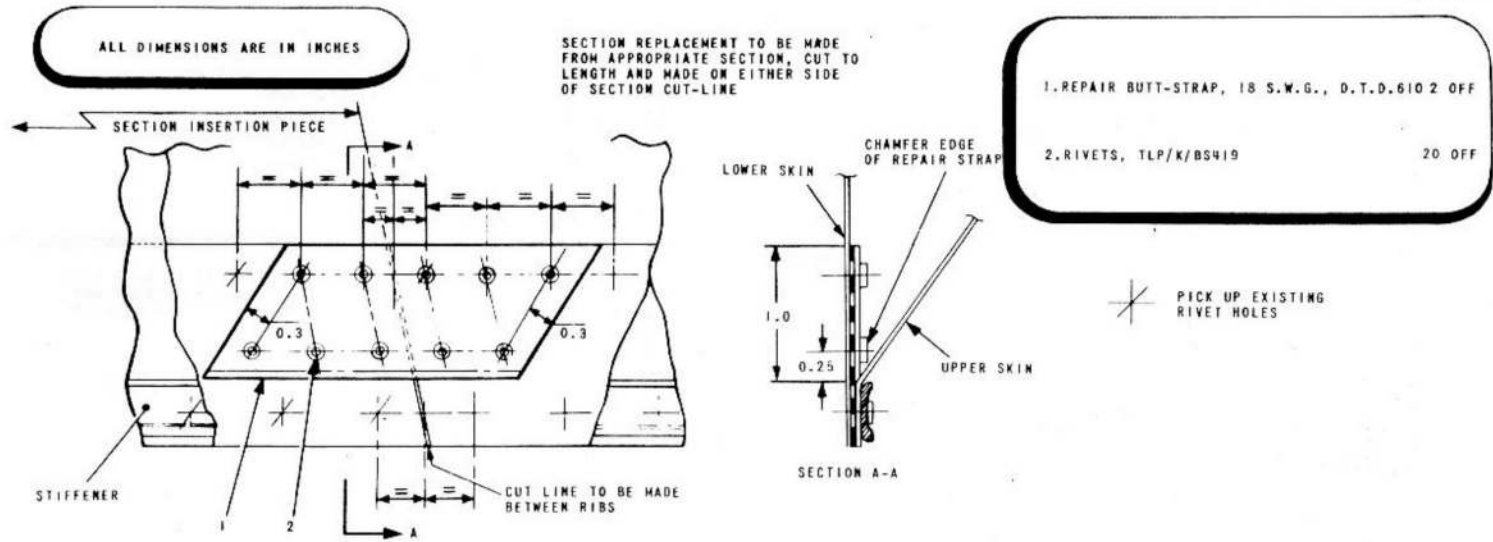


Fig. 26. Insertion repair to flap doubler, flap leading edge

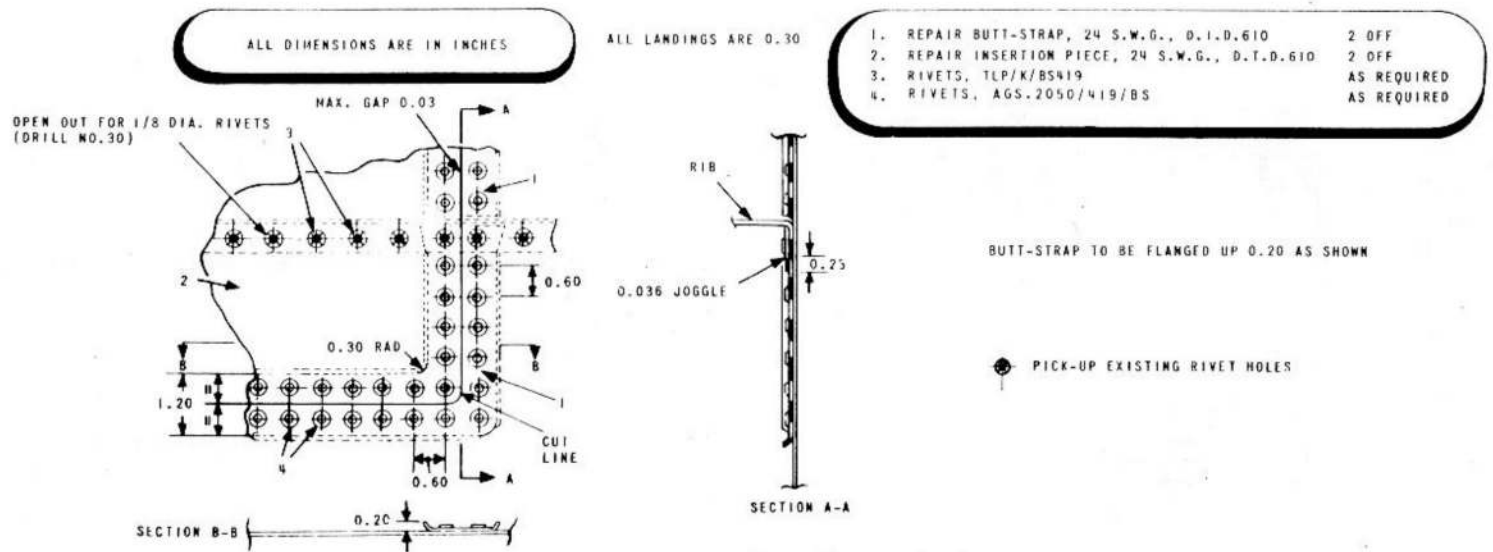
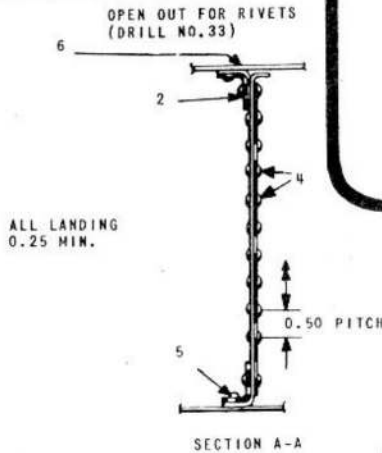
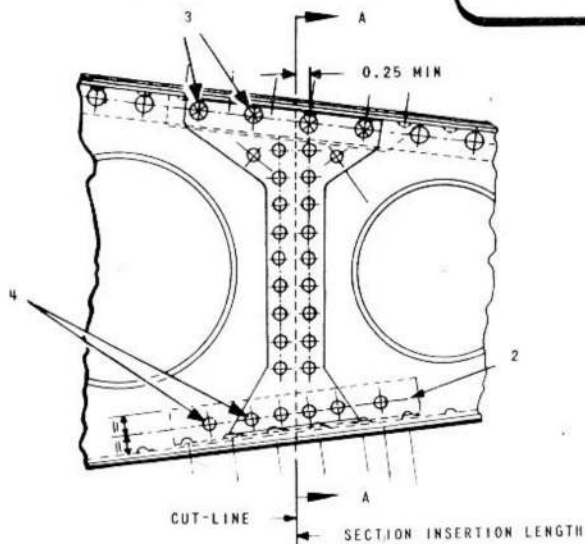


Fig. 27. Flush skin patch in aileron, aft of spar

RESTRICTED

CUT LINE TO BE TAKEN MIDWAY BETWEEN RIVETS IN TOP AND BOTTOM SKIN FLANGE

ALL DIMENSIONS ARE IN INCHES



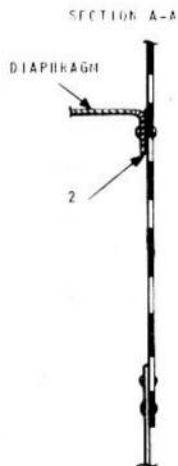
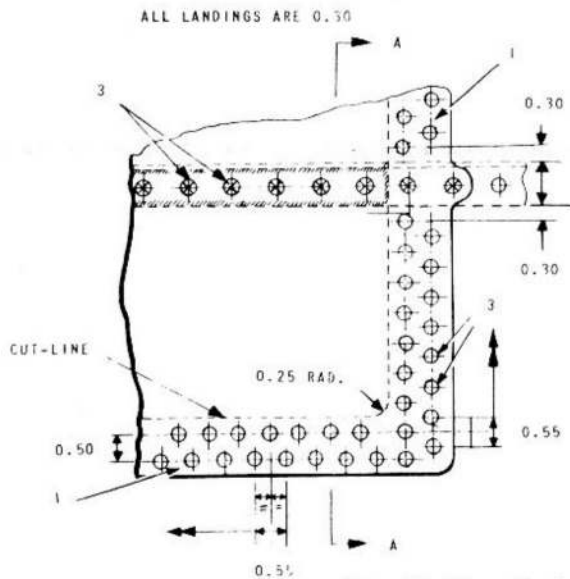
- | | |
|--|--------|
| 1. REPAIR STRAP, 24 S.W.G., D.T.D.610 | 2 OFF |
| 2. REPAIR ANGLE, 24 S.W.G., D.T.D.610 (MAKE FROM E.E.J.51 SECTION) | 4 OFF |
| 3. RIVETS, AS.2227/404 | 8 OFF |
| 4. RIVETS, AS.2227/303 | 40 OFF |
| 5. RIVETS, AS.2230/303 | 12 OFF |
| 6. RIVETS, TLP/K/BS319 | 12 OFF |

SECTION INSERTION PIECE TO BE MADE FROM APPROPRIATE SECTION, CUT TO LENGTH AND MADE ON EITHER SIDE OF SECTION CUT-LINE

THIS REPAIR IS APPLICABLE TO ALL RIBS EXCEPT NO.1, 4, 11, AND 20

PICK-UP EXISTING RIVET HOLES

Fig. 28. Insertion repair to aileron trailing edge rib

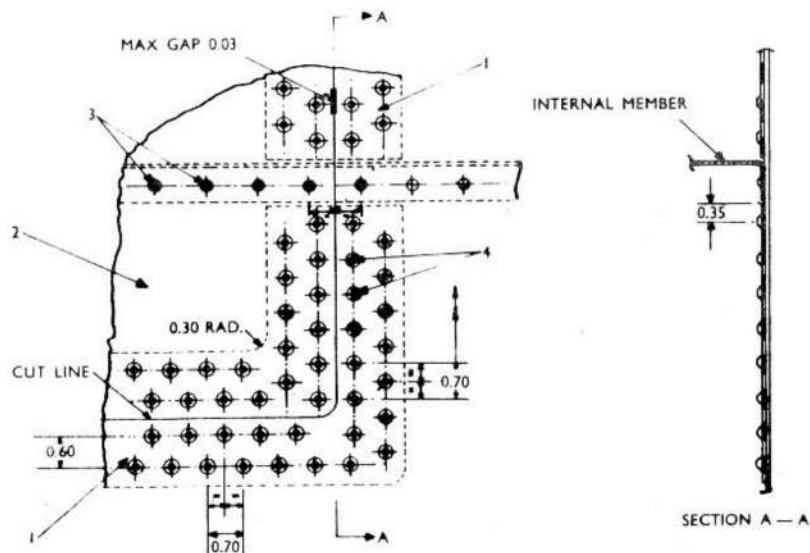


- | | |
|--------------------------------------|-------------|
| 1. PATCH PIECE, 22 S.W.G., D.T.D.610 | 1 OFF |
| 2. PACKING, 22 S.W.G., D.T.D.610 | 1 OFF |
| 3. RIVETS, TLP/K/BS419 | AS REQUIRED |

ALL DIMENSIONS ARE IN INCHES

PICK-UP EXISTING RIVET HOLES

Fig. 29. Non-flush in inner skin, undercarriage fairings and doors



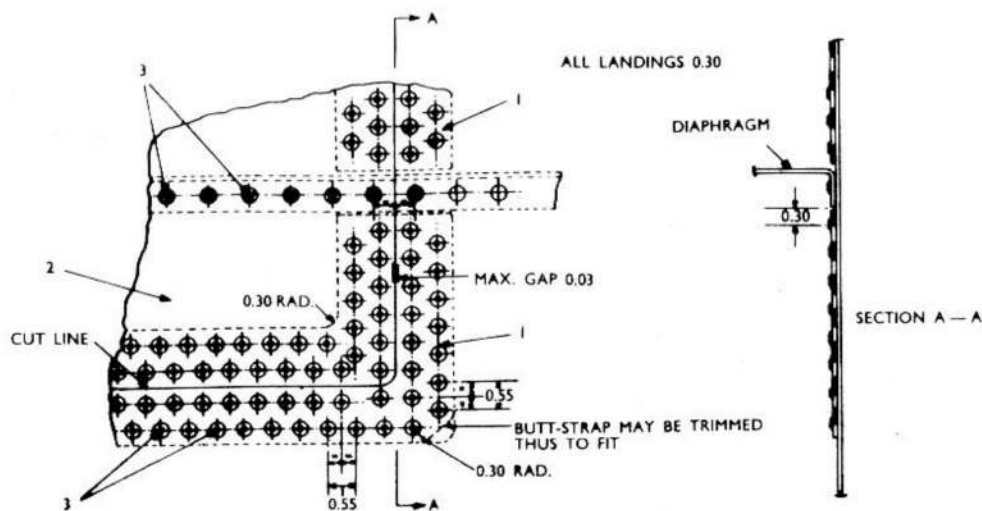
- | | |
|--|-------------|
| 1 BUTT-STRAP, 18 S.W.G., D.T.D.610 | 2 OFF |
| 2 SKIN INSERTION, 18 S.W.G., D.T.D.610 | 1 OFF |
| 3 RIVETS, TLP/K/BS424 | AS REQUIRED |
| 4 RIVETS, TLP/K/BS519 | AS REQUIRED |

ALL DIMENSIONS ARE IN INCHES

ALL LANDINGS ARE 0.35

◆ PICK UP EXISTING RIVET HOLES

Fig. 30. Flush patch in outer skin, undercarriage door



- | | |
|--|-------------|
| 1 BUTT-STRAP, 20 S.W.G., D.T.D.610 | 2 OFF |
| 2 SKIN INSERTION, 20 S.W.G., D.T.D.610 | 1 OFF |
| 3 RIVETS, TLP/K/BS419 | AS REQUIRED |

ALL DIMENSIONS ARE IN INCHES

◆ PICK UP EXISTING RIVET HOLES

Fig. 31. Flush patch in outer skin, undercarriage fairing

RESTRICTED

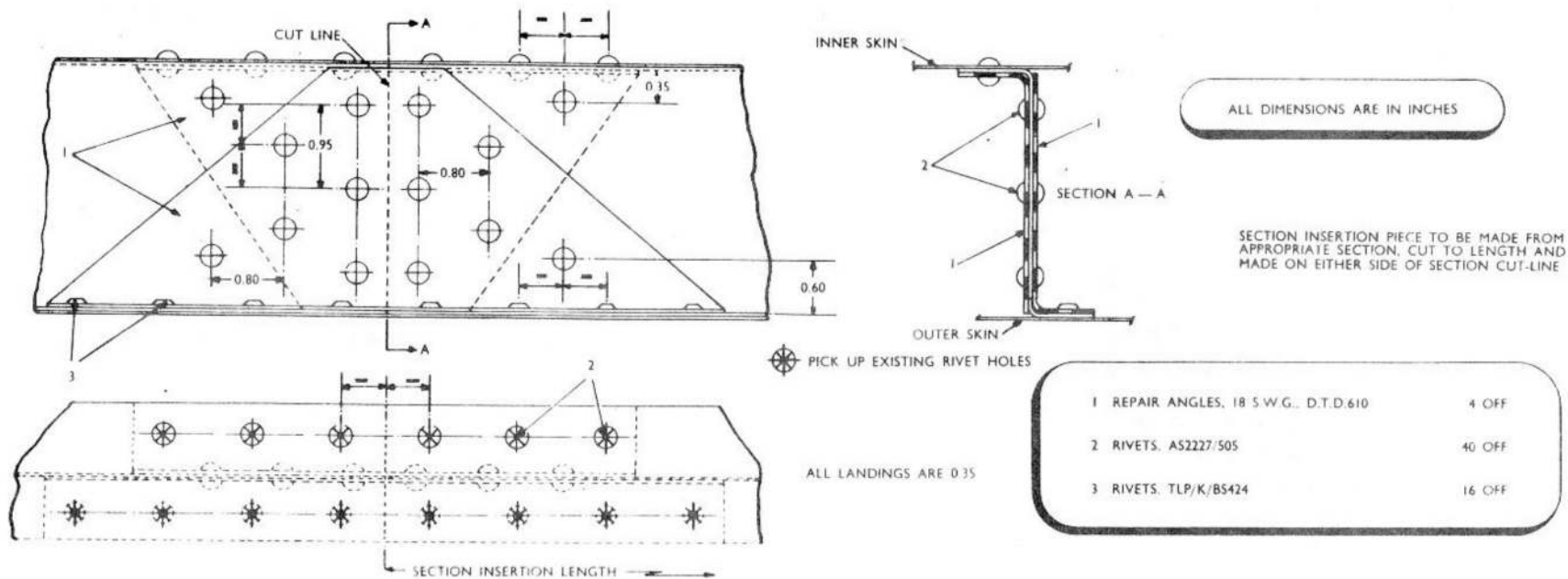


Fig. 32. Insertion repair to internal member, undercarriage door

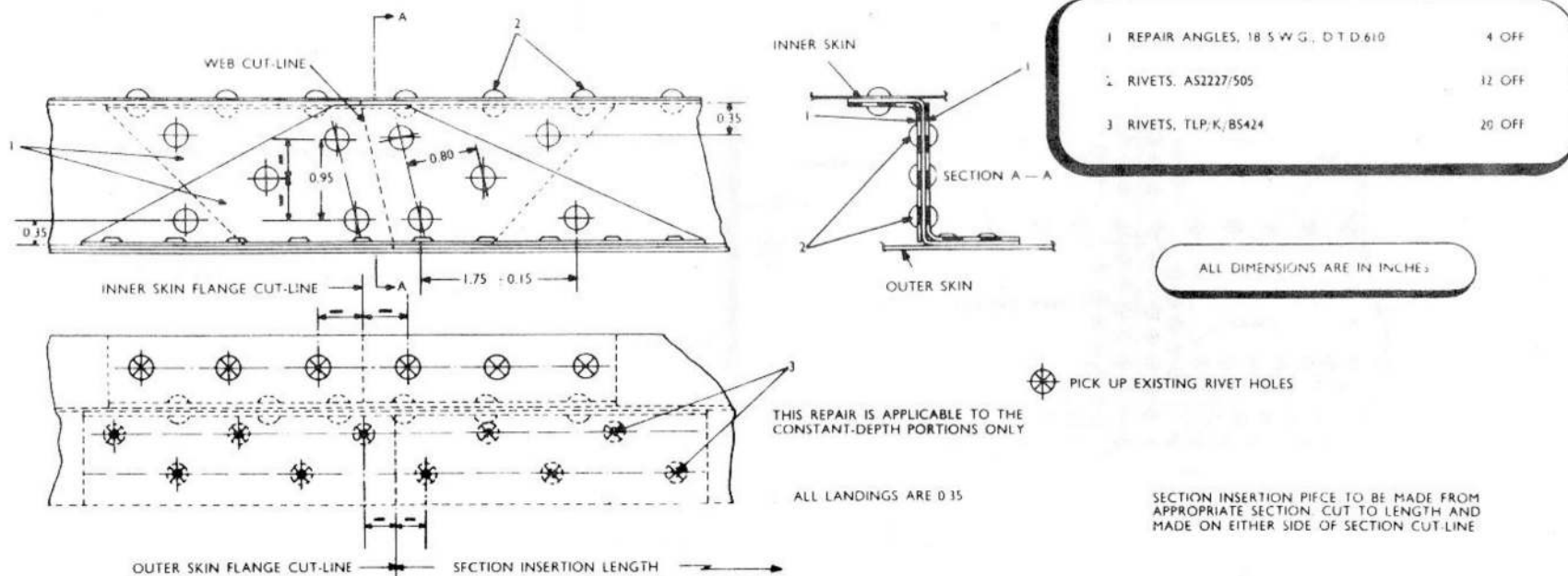
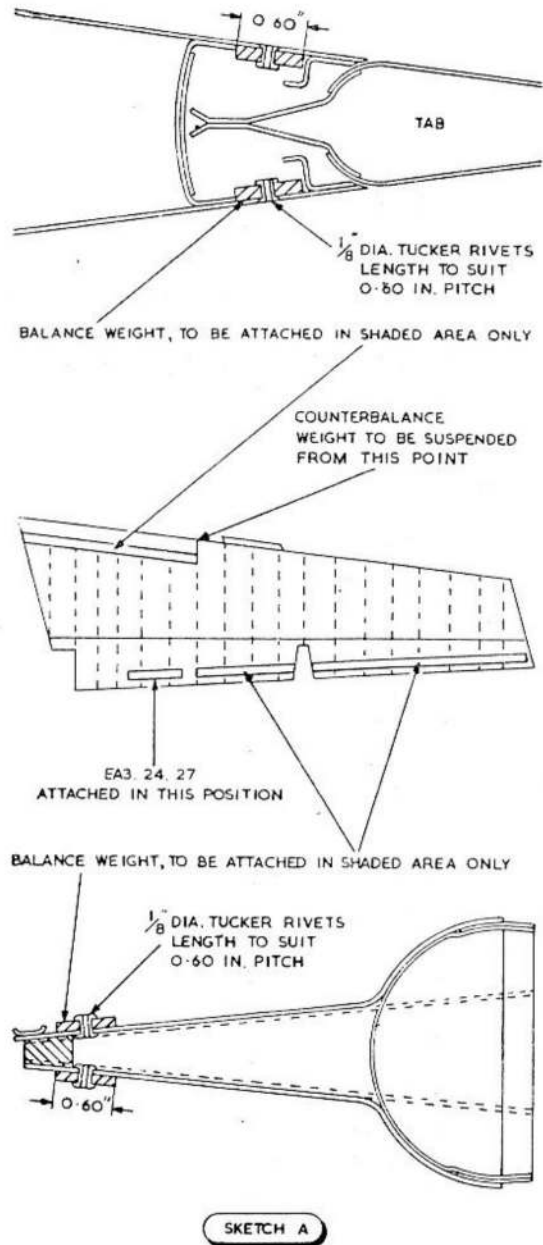


Fig. 33. Insertion repair to inboard edge member, undercarriage door



Balancing instructions (post Mod.895)

1. The aileron and tab, finished to the standard scheme and including the centre hinge bracket, are balanced as an assembly.

2. This assembly has a nose down out-of-balance moment and, when freely supported on its pivot points with the hinge centre line horizontal, the beak will swing downwards.

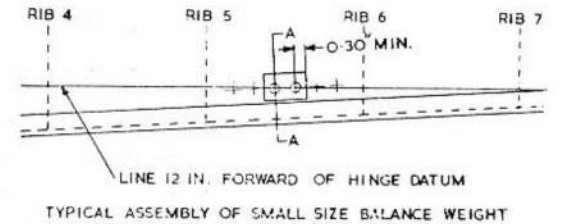
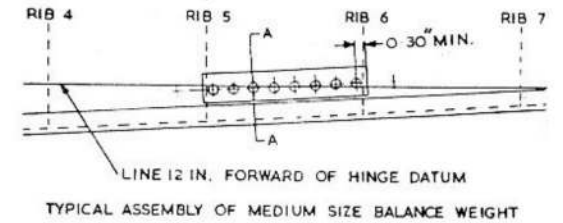
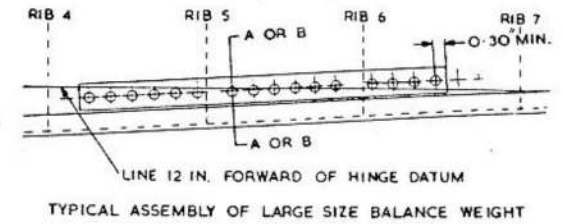
3. This out-of-balance moment must be counterbalanced by an added weight of 1 lb 14 oz \pm 1 oz suspended on wire from the trailing edge at rib 7 datum.

4. Balance may be obtained by adding strips of D.T.D. 610, 0.6 in. wide, on the appropriate side of the hinge line. The s.w.g. and length of the metal must be determined during the balancing operation and attached in one of the positions shown in sketch A.

Balancing instructions (pre Mod.895)

1. Ailerons not having an external weight, Part No. EA3.24.27, fitted to the beak may be insufficiently nose heavy to meet the conditions detailed above and will counterbalance a weight of between 12 oz and 1 lb 13 oz.

2. The table overleaf gives the length in inches of steel bar 0.187 in. thick by 1.45 in. wide which must be attached to the aileron beak to obtain the correct nose down out-of-balance moment. This aileron balance weight may be made



TYPICAL ASSEMBLY OF SMALL SIZE BALANCE WEIGHT
WEIGHTS LESS THAN 16.8 IN. IN LENGTH TO BE ATTACHED TO UPPER SURFACE ONLY (SECTION B-B)
WEIGHTS GREATER THAN THIS LENGTH TO BE DIVIDED INTO TWO EQUAL PARTS AND ATTACHED TO UPPER AND LOWER SURFACES (SECTION A-A).

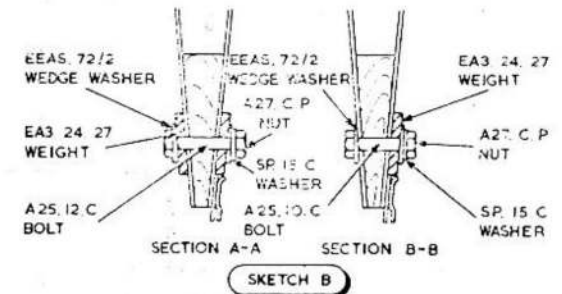


Fig. 34. Adjustment of aileron balance

RESTRICTED

locally from D.T.D.126, D.T.D.124, soft S3, or S1, and should be stamped with the Part No. EA3.24.27 before being attached to the beak as detailed in sketch B.

3. Balancing the aileron in this manner satisfies the requirements of Canberra Mod.895, and the aileron Mod. plate must, therefore, be marked with that number.

4. When any alteration is made to the weight or balance after repair or on

changing a tab, etc., the total weight of the assembly must remain within the limits of $95 \text{ lb } \begin{smallmatrix} +9 \\ -3 \end{smallmatrix} \frac{1}{2} \text{ lb } (+10\%)$.

Balancing instructions (post Mod.875)

Ailerons on which Canberra Mod.875 is embodied are to be balanced as detailed overleaf, except that the counterbalance weights must be 1 lb 14 oz \pm 4 oz, and the total weight $99 \text{ lb } \begin{smallmatrix} +10 \\ -3 \end{smallmatrix} \text{ lb } (10\%)$.

Note...

It is essential that both ailerons on

any particular aircraft conform to the same modification standard with respect to Mod.895.

Balancing instructions (Canberra B(I) Mk. 8)

Ailerons, Part No. EA9.24.1/2 fitted with the centre hinge bracket, Part No. EA1.20.325, are to be balanced as detailed overleaf, except that the counter-balance weights must be 1 lb 14 oz \pm 4 oz and the total weight $102 \text{ lb } \begin{smallmatrix} +10 \\ -3 \end{smallmatrix} \text{ lb } (10\%)$. ▶

Table of weight and corresponding length of steel bar

W = Weight in lb and oz required to balance the aileron. To be suspended from the trailing edge at rib 7 datum.

L = Length in inches of added steel bar required to make W = 1 lb 14 oz

W	L	W	L	W	L	W	L
0-12.00	33.5	1-0.25	25.6	1-4.25	17.7	1- 8.75	9.8
0-12.25	33.1	1-0.50	25.1	1-4.75	17.2	1- 9.00	9.3
0-12.50	32.6	1-0.75	24.7	1-5.00	16.8	1- 9.25	8.8
0-12.75	32.1	1-1.00	24.2	1-5.25	16.3	1- 9.50	8.4
0-13.00	31.7	1-1.25	23.7	1-5.50	15.8	1- 9.75	7.9
0-13.25	31.2	1-1.50	23.3	1-5.75	15.4	1-10.00	7.5
0-13.50	30.7	1-1.75	22.8	1-6.00	14.9	1-10.25	7.0
0-13.75	30.3	1-2.00	22.3	1-6.25	14.4	1-10.50	6.5
0-14.00	29.8	1-2.25	21.9	1-6.50	14.0	1-10.75	6.1
0-14.25	29.3	1-2.50	21.4	1-6.75	13.5	1-11.00	5.6
0-14.50	28.9	1-2.75	21.0	1-7.00	13.0	1-11.25	5.1
0-14.75	28.4	1-3.00	20.5	1-7.25	12.6	1-11.50	4.7
0-15.00	27.9	1-3.25	20.0	1-7.50	12.1	1-11.75	4.2
0-15.25	27.5	1-3.50	19.6	1-7.75	11.6	1-12.00	3.7
0-15.50	27.0	1-3.75	19.1	1-8.00	11.2	1-12.25	3.3
0-15.75	26.5	1-4.00	18.6	1-8.25	10.7	1-12.50	2.8
0-16.00	26.1	1-4.25	18.2	1-8.50	10.2	1-12.75	2.3

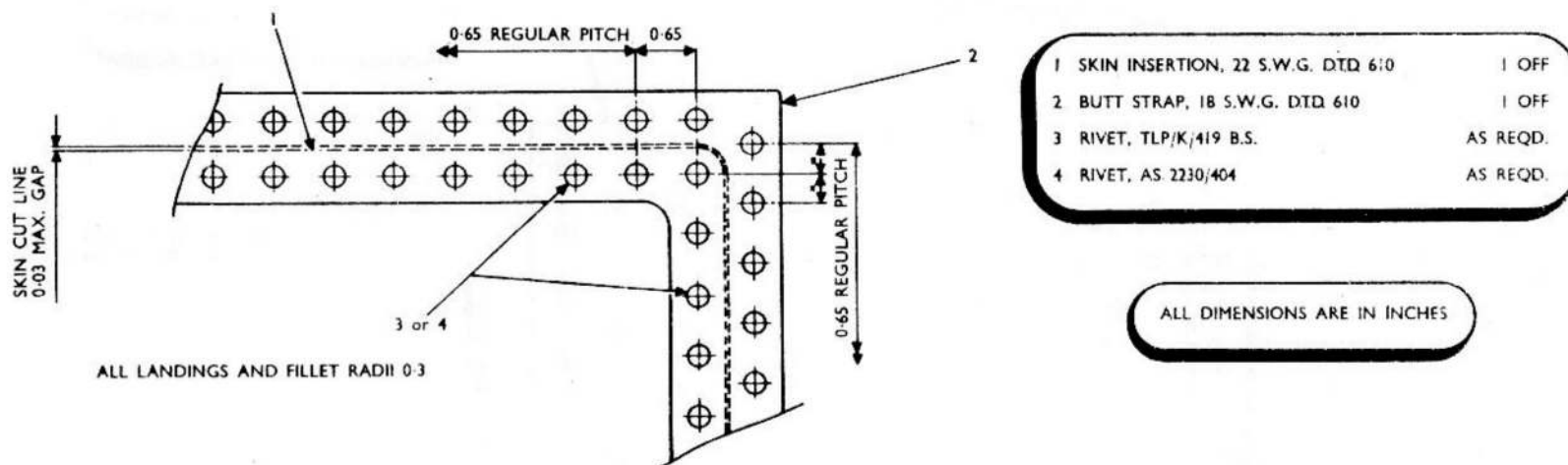
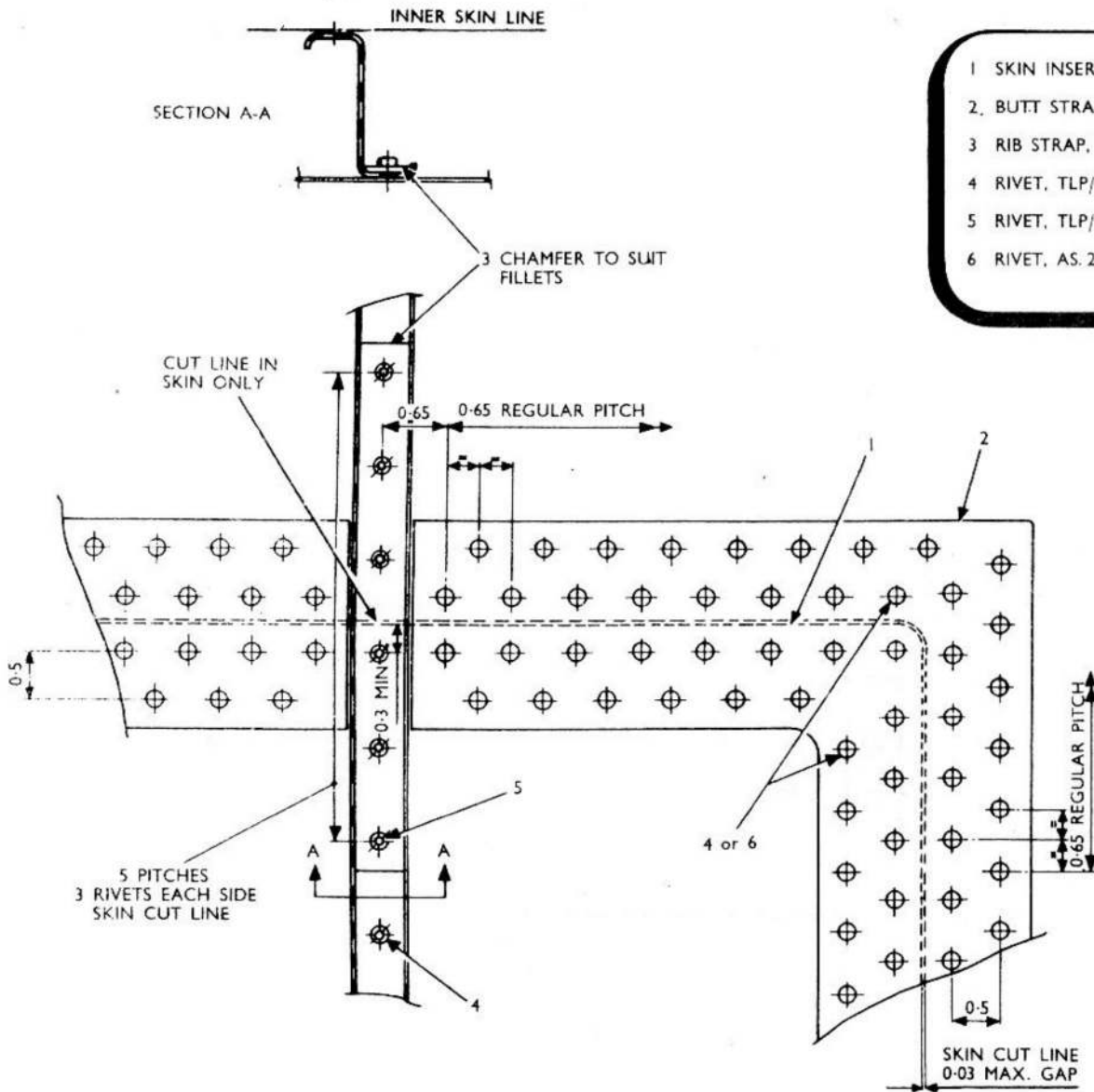


Fig. 35. Flush Patch in Flap Bottom Skin. (Between Ribs only)

RESTRICTED



- | | |
|---------------------------------------|----------|
| 1 SKIN INSERTION, 22 S.W.G. D.T.D 610 | 1 OFF |
| 2 BUTT STRAP, 18 S.W.G. D.T.D 610 | AS REQD. |
| 3 RIB STRAP, 20 S.W.G. D.T.D 610 | AS REQD. |
| 4 RIVET, TLP/K/419 B.S. | AS REQD. |
| 5 RIVET, TLP/K/424 B.S. | AS REQD. |
| 6 RIVET, AS. 2230/404 | AS REQD. |

ALL DIMENSIONS ARE IN INCHES

EXISTING RIVET CENTRES

NOTE
SKIN CUT LINE MUST NOT
CROSS HINGE RIBS OR SPAR

ALL LANDINGS AND FILLET RADII 0.3

Fig. 36. Flush Patch, Crossing Rib. in Flap Bottom Skin

RESTRICTED

ALL DIMENSIONS ARE IN INCHES

 PICK UP EXISTING RIVET CENTRES

NOTE—ACCESS HOLE TO BE MADE IN SKIN
TO FACILITATE RIVETING REPAIR TO
CHAP. 3 FIG. 15.

1	INSERTION PIECE, MAKE FROM EEDX 30	1 OFF
2	JOINT ANGLE, 16 S.W.G. DTD 166B	2 OFF
3	REPAIR STRIP, 20 S.W.G. DTD 166B	2 OFF
4	BUTT STRAP, 20 S.W.G. DTD 166B	4 OFF
5	BUTT STRAP, 16 S.W.G. DTD 166B	2 OFF
6	RIVETS, AS. 2227/507	24 OFF
7	RIVETS, AS. 2230/510	64 OFF

INSERTION REPLACEMENT TO BE MADE FROM
APPROPRIATE SECTION, CUT TO LENGTH AND
MADE ON EITHER SIDE OF SECTION CUT LINE

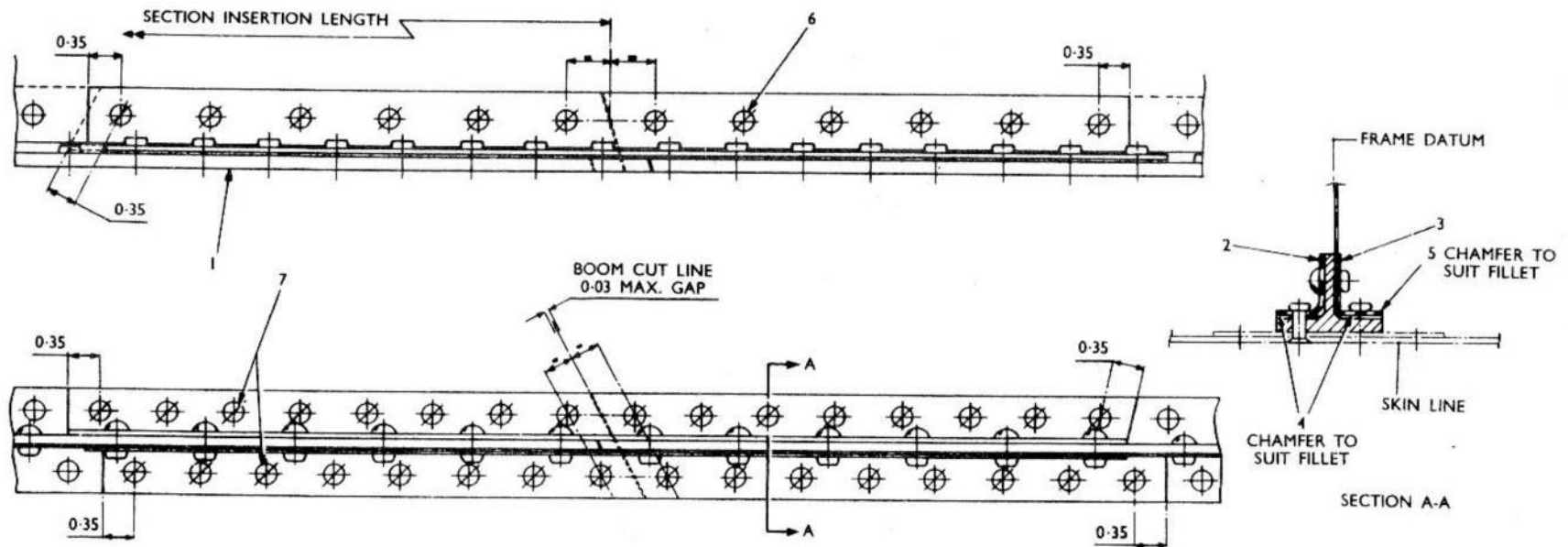


Fig. 37. Boom Insertion at Trailing Edge Ribs 3 and 4, Inner Wing.

RESTRICTED

(A.L. 27, July 55)

548162 39722 3811 8/55 750 CWSLcd1427 Gp979-2

KEY TO FIG. 51 (WEAR LIMITS, MAIN PLANE ATTACHMENTS)

Ref. No.	Joint	Wear point	Dimension new	Clearance new	Permissible worn clearance	Remedial action
1	Main spar to frame 21	Spar boom	1-7507	0-0000 -0-0019 (int.)	0-0000	Renew the bush
			1-7493			
		Bush, outside diameter	1-7512	0-0032 0-0013	0-0050	Renew the bush and/or pin
			1-7507			
		Bush, inside diameter	1-6257	0-0060 0-0005	0-0075	Renew the bolts
			1-6243			
Main pick-up pin	1-6230 1-6225					
2	Diaphragm to frame 17	Diaphragm	0-5020	0-0060 0-0005	0-0075	Renew the bolt
			0-5005			
		Bolt	0-5000 0-4960			
3	Rear spar to frame 27	Rear spar	1-0006	0-0000 -0-0018 (int.)	0-0000	Renew the bush
			0-9994			
		Bush, outside diameter	1-0012	0-0020 0-0003	0-0040	Renew the bush and/or pin
			1-0006			
		Bush, inside diameter	0-7505 0-7495			
Special pin	0-7492 0-7485					

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(A.L.18, March, 1954)



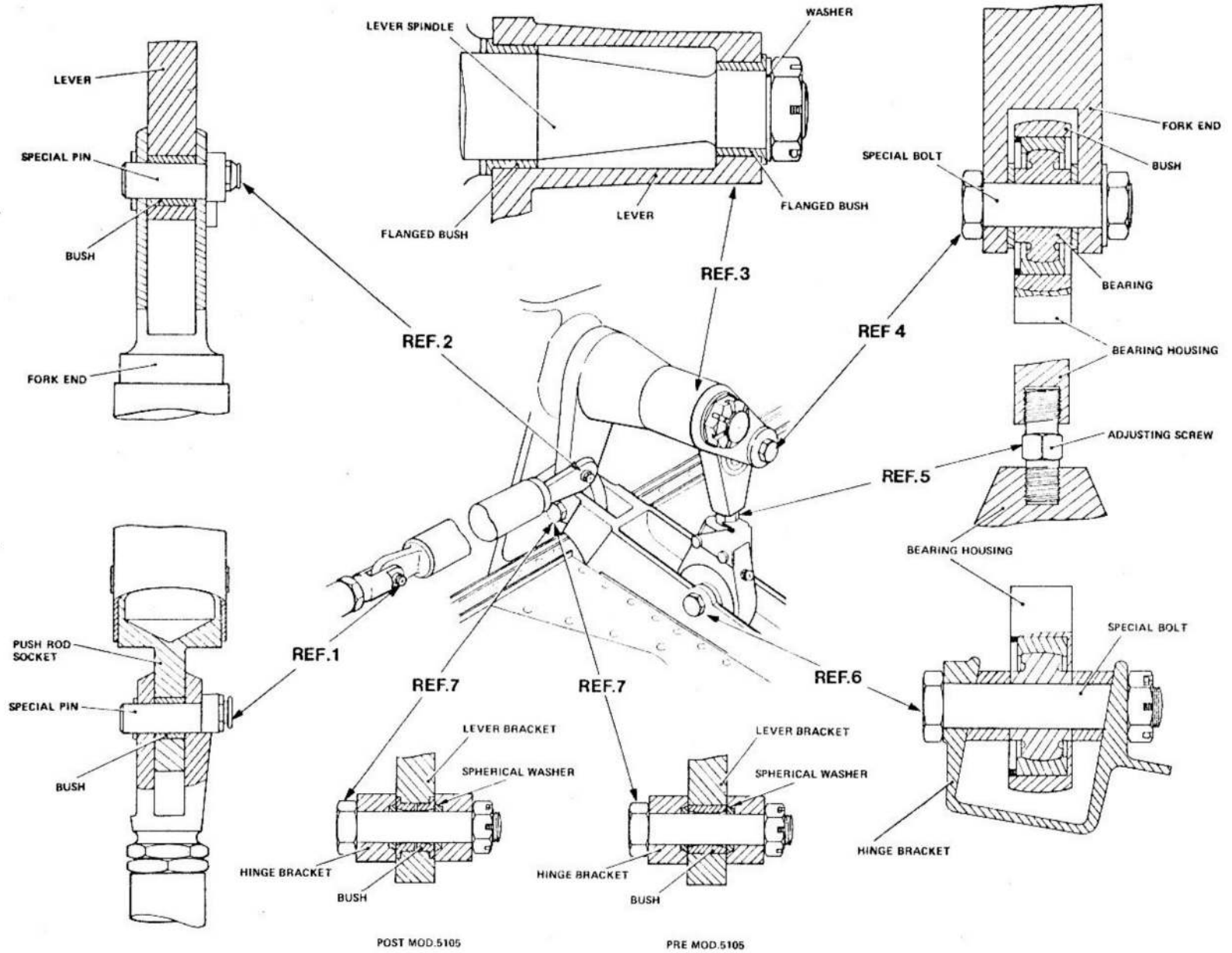
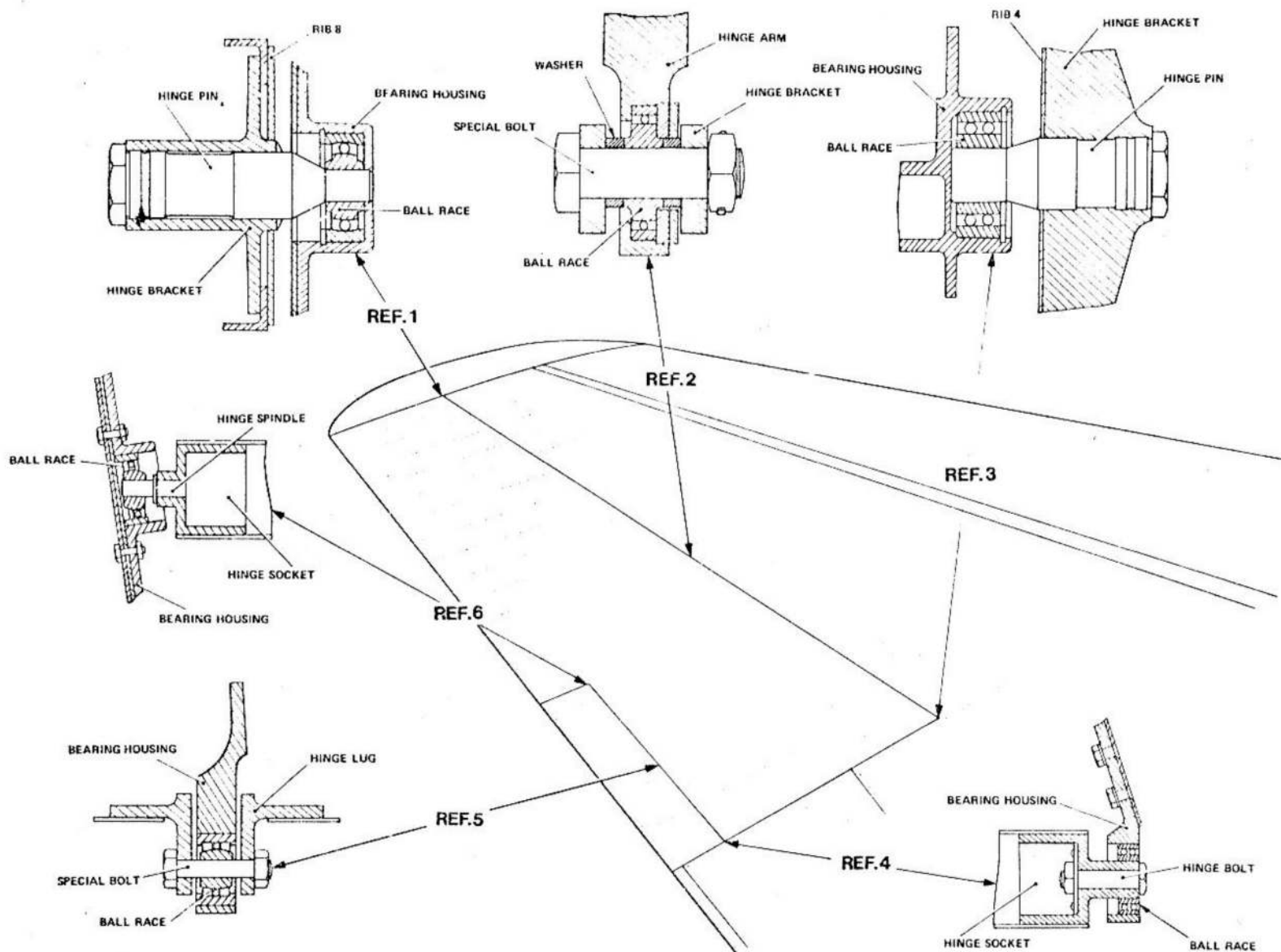


FIG.53. WEAR LIMITS, FLAPS MECHANISM

◀ (Mod.5105 embodied) ▶

RESTRICTED



(Details amended)
FIG.54. WEAR LIMITS, AILERON AND TAB

RESTRICTED

KEY TO FIG. 52 (WEAR LIMITS, UNDERCARRIAGE ATTACHMENTS)

See AL 131

Ref. No.	Joint	Wear point	Dimension new	Clearance new	Permissible worn clearance	Remedial action		
1	Oleo head to main forging	Main forging	2.8759 2.8741	0.0027 0.0000	0.0050	Renew the bolt		
		Pivot pin outside diameter (in area of main forging)	2.8741 2.8732					
		Pivot pin outside diameter (in area of oleo head bushes)	2.8732 2.8723	0.0047	0.0055	Renew the bolt and/or the bushes		
		Oleo head bush inside diameter	2.8770 2.8760	0.0028				
		2	Side stay to attachment bracket	Attachment bracket	3.8760 3.8740	0.0025	0.0025	Renew the bearing bush
Bearing bush, outside diameter	3.8745 3.8735			-0.0005(int.)				
Bearing bush, inside diameter	2.9009 2.8991			0.0050	0.0080	Renew the bush and/or the ball		
Bearing ball, outside diameter	2.8968 2.8959			0.0023				
Bearing ball, inside diameter	1.7507 1.7493			0.0004	0.0004	Renew the bush and/or the ball		
Bush, outside diameter	1.7510 1.7503			-0.0017(int.)				
Bush, inside diameter	1.6257 1.6243			0.0039	0.0050	Renew the bushes and/or the bolt, or the assembly of bearing ball.		
Special bolt	1.6225 1.6218			0.0018				
3	Hydraulic jack to attachment bracket			Bearing ball, inside diameter	1.2006 1.1994	0.0009	0.0009	
				Attachment bracket	1.2003 1.1997	-0.0009(int.)		
				Attachment bracket	1.2003 1.1997	-0.0009(int.)		
4	Up-lock hook to up-lock bracket	Attachment bracket	0.6255 0.6245	0.0028	0.0050	Renew the bolt and/or the bush		
		Special bolt	0.6232 0.6227	0.0013 0.0028				
		Bush, inside diameter	0.6255 0.6245	0.0013	0.0050			
		Bush, outside diameter	0.7502 0.7497	0.0008				
		Hook	0.7505 0.7495	-0.0007(int.)	0.0008	Renew the bush		

SEE AL131

RESTRICTED

KEY TO FIG. 53 (WEAR LIMITS, FLAPS MECHANISM)

Ref. No.	Joint	Wear point	Dimension new	Clearance new	Permissible worn clearance	Remedial action
1	Push rod to hydraulic jack	Push rod socket	0.5629 0.5621	0.0002 -0.0010 (int.)	0.0002	Renew the bush and/or the socket
		Bush, outside diameter	0.5631 0.5627			
		Bush, inside diameter	0.4379 0.4371	0.0034 0.0018	0.0070	Renew the bush and/or the special pin
2	Push rod to bell-crank lever	Fork end	0.4379 0.4371	0.0034 0.0018	0.0070	Renew the special pin and/or the bush
		Special pin	0.4353 0.4345	0.0034 0.0018	0.0070	
		Bush, inside diameter	0.4379 0.4371			
		Bush, outside diameter	0.5631 0.5627	0.0002 -0.0010 (int.)	0.0002	Renew the bush
3	Bell-crank lever to lever spindle	Bore for larger bush	1.6257 1.6243	0.0004 -0.0017 (int.)	0.0004	Renew the bush
		Flanged bush, larger, outside diameter	1.6260 1.6253			
		Flanged bush, larger, inside diameter	1.3756 1.3744	0.0051 0.0027	0.0100	Renew the bush
		Spindle, larger diameter	1.3717 1.3705			
		Spindle, smaller diameter	0.9967 0.9955	0.0051 0.0027	0.0100	Renew the bush
		Flanged bush, smaller inside diameter	1.0006 0.9994			
		Flanged bush, smaller, outside diameter	1.2509 1.2503	0.0003 -0.0015 (int.)	0.0003	Renew the bush
		Bore for smaller bush	1.2506 1.2494			
		Washer, thickness	0.0600 0.0400			Renew the washer to remedy end float in excess of 0.015 in.

Ref. No.	Joint	Wear point	Dimension new	Clearance new	Permissible worn clearance	Remedial action
4	Bell-crank lever to connecting link bearing housing	Fork end, inside diameter	0.6255 0.6245	0.0020 0.0000	0.0050	Renew the special bolt
		Special bolt	0.6245 0.6235	0.0020 0.0000	0.0050	
		Bearing, inside diameter	0.6255 0.6245			
		Bearing, outside diameter (spherical)	1.4975 1.4968	0.0039 0.0018	0.0060	Renew the bearing and/or the bush
		Bush, inside diameter (spherical)	1.5007 1.4993			
		Bush, outside diameter	1.9371 1.9364	0.0018 -0.0003 (int.)	0.0018	Renew the housing
		Bearing housing, inside diameter	1.9382 1.9368			
5	Bearing housing to bearing housing	Adjusting screw				Total play between the two bearing housings on the adjusting screw, in excess of 0.010 in., to be remedied by renewing the adjusting screw
6	Connecting link bearing housing to hinge bracket	Special bolt	0.6245 0.6235	0.0020 0.0000	0.0050	Renew the bolt
		Hinge bracket	0.6255 0.6245			
(The data for the remaining wear points in this joint are as for Ref. No. 4.)						
7	Hinge bracket to lever bracket assembly	Hinge bracket	0.5004 0.4996	0.0050 0.0030	0.0070	Renew the bolt
		Special bolt	0.4966 0.4954	0.0096 0.0064	0.012	Renew the bolt and/or bush
		Bush, inside diameter	0.5050 0.5030			
		Bush, outside diameter	0.6882 0.6877	0.0003 -0.0012 (int.)	0.0003	Renew the bush
		Lever bracket	0.6880 0.6870			
		Spherical washer				End float of the flap in excess of 0.025 in., to be remedied by the renewal of the spherical washers at the in-board hinge (port flaps) or the outboard hinge (starb. flaps)

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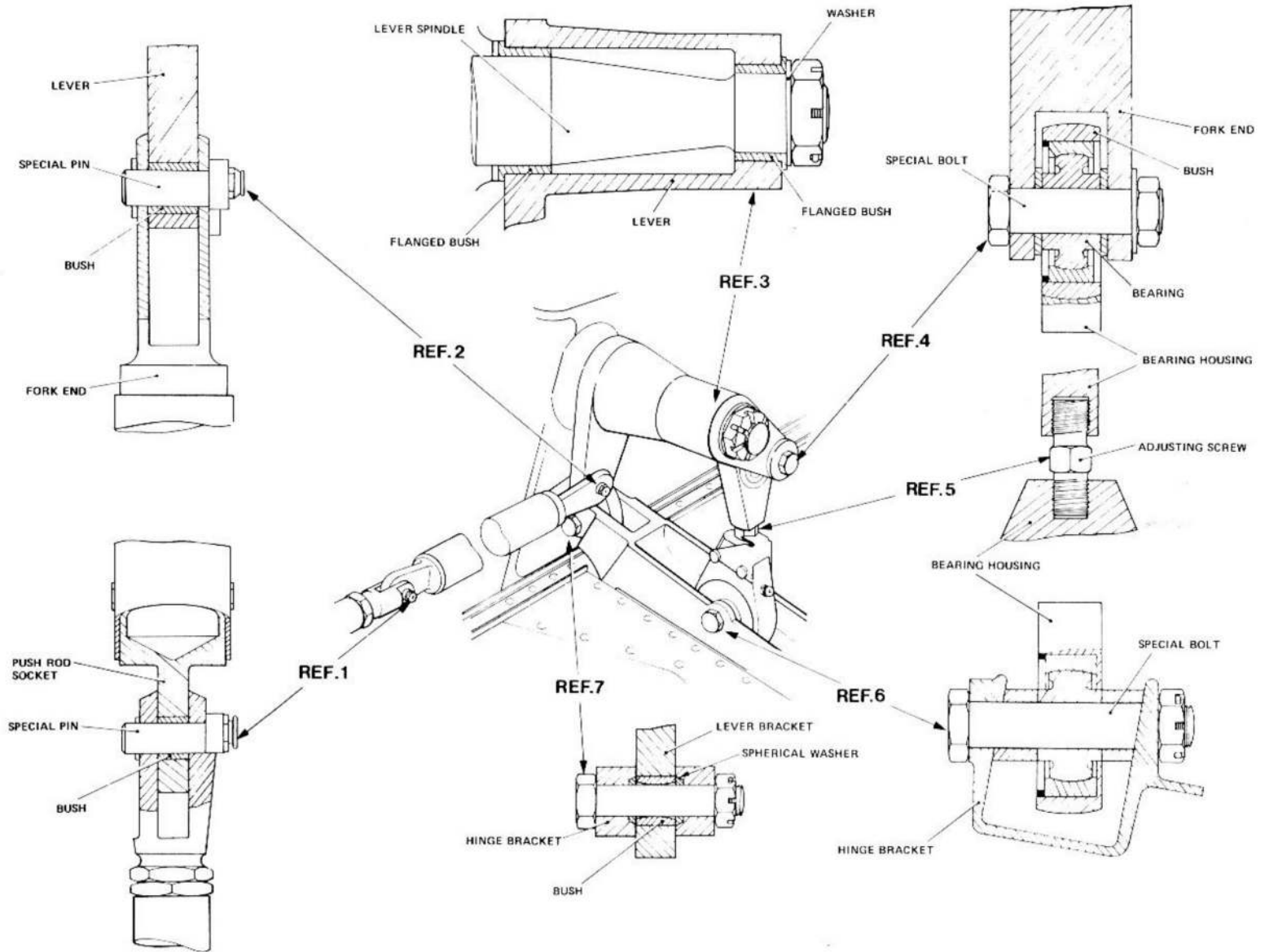
KEY TO FIG. 52 (WEAR LIMITS, UNDERCARRIAGE ATTACHMENTS)

Ref. No.	Joint	Wear point	Dimension new	Clearance new	Permissible worn clearance	Remedial action
1	Oleo head to main forging	Main forging	2.8759			
			2.8741	0.0027	0.0050	Renew the bolt
		Pivot pin outside diameter (in area of main forging)	2.8741	0.0000		
			2.8732			
		Pivot pin outside diameter (in area of oleo head bushes)	2.8732			
			2.8723	0.0047	0.0055	Renew the bolt and/or the bushes
	Oleo head bush inside diameter	2.8770	0.0028			
		2.8760				
2	Side stay to attachment bracket	Attachment bracket	3.8760			
			3.8740	0.0025	0.0025	Renew the bearing bush
		Bearing bush, outside diameter	3.8745	-0.0005(int.)		
			3.8735			
		Bearing bush, inside diameter	2.9009			
			2.8991	0.0050	0.0080	Renew the bush and/or the ball
		Bearing ball, outside diameter	2.8968	0.0023		
			2.8959			
		Bearing ball, inside diameter	1.7507			
			1.7493	0.0004	0.0004	Renew the bush and/or the ball
		Bush, outside diameter	1.7510	-0.0017(int.)		
			1.7503			
Bush, inside diameter	1.6257					
	1.6243	0.0039	0.0050	Renew the bushes and/or the bolt, or the assembly of bearing ball.		
	Special bolt	1.6225	0.0018			
		1.6218				
3	Hydraulic jack to attachment bracket	Bearing ball, inside diameter	1.2006			
			1.1994	0.0009	0.0009	
		Attachment bracket	1.2003	-0.0009(int.)		
			1.1997			
4	Up-lock hook to up-lock bracket	Attachment bracket	0.6255			
			0.6245	0.0028	0.0050	Renew the bolt and/or the bush
		Special bolt	0.6232	0.0013		
			0.6227	0.0028	0.0050	
		Bush, inside diameter	0.6255	0.0013		
			0.6245			
		Bush, outside diameter	0.7502			
			0.7497	0.0008	0.0008	Renew the bush
		Hook	0.7505	-0.0007(int.)		
0.7495						

KEY TO FIG. 53 (WEAR LIMITS, FLAPS MECHANISM)

Ref. No.	Joint	Wear point	Dimension new	Clearance new	Permissible worn clearance	Remedial action
1	Push rod to hydraulic jack	Push rod socket	0.5629 0.5621	0.0002 0.0010 (int.)	0.0002	Renew the bush and/or the socket
		Bush, outside diameter	0.5631 0.5627			
		Bush, inside diameter	0.4379 0.4371	0.0034 0.0018	0.0070	Renew the bush and/or the special pin
		Special pin	0.4353 0.4345			
2	Push rod to bell-crank lever	Fork end	0.4379 0.4371	0.0034 0.0018	0.0070	Renew the special pin and/or the bush
		Special pin	0.4353 0.4345	0.0034 0.0018	0.0070	
		Bush, inside diameter	0.4379 0.4371			
		Bush, outside diameter	0.5631 0.5627	0.0002 0.0010 (int.)	0.0002	Renew the bush
		Lever	0.5629 0.5621			
3	Ball-crank lever to lever spindle	Bore for larger bush	1.6257 1.6243	0.0004 0.0017 (int.)	0.0004	Renew the bush
		Flanged bush, larger, outside diameter	1.6260 1.6253			
		Flanged bush, larger, inside diameter	1.3756 1.3744	0.0051 0.0027	0.0100	Renew the bush
		Spindle, larger diameter	1.3717 1.3705			
		Spindle, smaller diameter	0.9967 0.9955	0.0051 0.0027	0.0100	Renew the bush
		Flanged bush, smaller inside diameter	1.0006 0.9994			
		Flanged bush, smaller, outside diameter	1.2509 1.2503	0.0003 0.0015 (int.)	0.0003	Renew the bush
		Bore for smaller bush	1.2506 1.2494			
		Washer, thickness	0.0600 0.0400			Renew the washer to remedy end float in excess of 0.015 in.

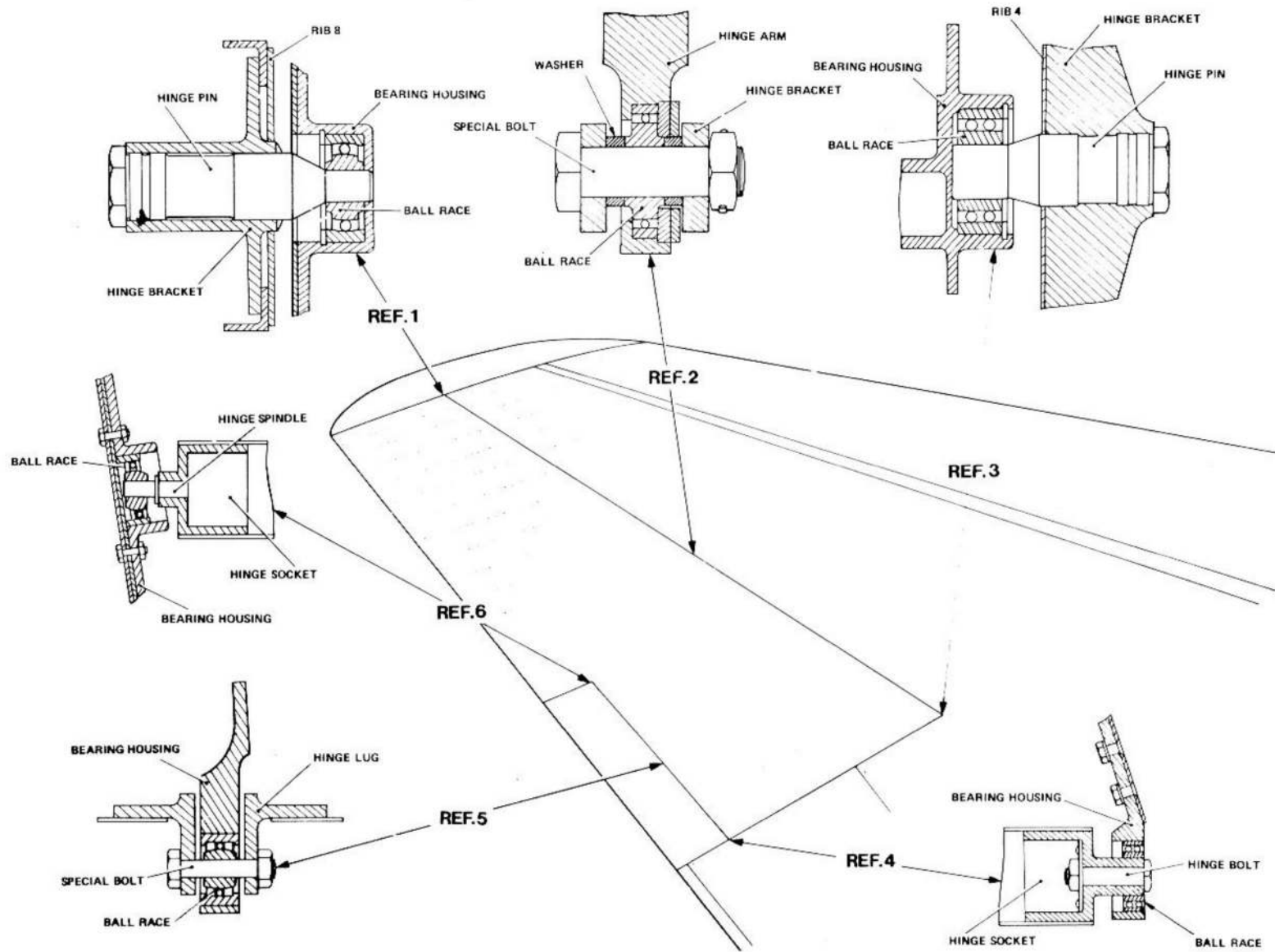
Ref. No.	Joint	Wear point	Dimension new	Clearance new	Permissible worn clearance	Remedial action
4	Bell-crank lever to connecting link bearing housing	Fork end, inside diameter	0.6255 0.6245	0.0020 0.0000	0.0050	Renew the special bolt
		Special bolt	0.6245 0.6235	0.0020 0.0000	0.0050	
		Bearing, inside diameter	0.6255 0.6245			
		Bearing, outside diameter (spherical)	1.4975 1.4968	0.0039 0.0018	0.0060	Renew the bearing and/or the bush
		Bush, inside diameter (spherical)	1.5007 1.4993			
		Bush, outside diameter	1.9371 1.9364	0.0018 0.0003 (int.)	0.0018	Renew the housing
		Bearing housing, inside diameter	1.9382 1.9368			
		5	Bearing housing to bearing housing	Adjusting screw		
6	Connecting link bearing housing to hinge bracket	Special bolt	0.6245 0.6235	0.0020 0.0000	0.0050	Renew the bolt
		Hinge bracket	0.6255 0.6245			
(The data for the remaining wear points in this joint are as for Ref. No. 4)						
7	Hinge bracket to lever bracket assembly	Hinge bracket	0.5004 0.4996	0.0050 0.0030	0.0070	Renew the bolt
		Special bolt	0.4966 0.4954	0.0096 0.0064	0.012	(1) Renew the bolt and/or bush (pre Mod.5105) (2) Renew the bolt and/or bracket assembly (post Mod.5105)
		Bush, inside diameter	0.5050 0.5030			
		Bush, outside diameter	0.6882 0.6877	0.0003 0.0012 (int.)	0.0003	Renew the bush (pre Mod.5105 only)
		Lever bracket	0.6880 0.6870			
		Spherical washer				End float of the flap in excess of 0.025 in. to be remedied by the renewal of the spherical washers at the in-board hinge (port flaps) or the outboard hinge (starb. flaps)



◀ (Annotations repositioned) ▶

FIG. 53. WEAR LIMITS, FLAPS MECHANISM

RESTRICTED



◀ (Details amended) ▶

FIG.54. WEAR LIMITS, AILERON AND TAB

RESTRICTED

KEY TO FIG.54 (WEAR LIMITS, AILERON AND TAB)

Ref. No.	Joint	Wear point	Dimension new	Clearance new	Permissible worn clearance	Remedial action		
1	Aileron to wing at outboard hinge	Bearing housing	$\frac{1.4385}{1.4380}$	$\frac{0.0018}{0.0008}$	0.002	Renew the ball race		
		Ball race, outside diameter	$\frac{1.4372}{1.4367}$					
		Ball race			0.040 (axial)	Renew the ball race		
		Ball race, inside diameter	$\frac{0.3752}{0.3747}$	$\frac{0.0012}{0.0002}$	0.002	Renew the ball race and/or the hinge pin		
		Hinge pin	$\frac{0.3745}{0.3740}$					
	Hinge bracket	$\frac{0.7505}{0.7495}$	$\frac{+0.0013}{-0.0002}$	0.0018	Renew the hinge pin and hinge bracket			
2	Aileron to wing at centre hinge	Hinge bracket	$\frac{0.6255}{0.6245}$	$\frac{0.0020}{0.0000}$	0.002	Renew the bolt and/or the bracket		
		Special bolt	$\frac{0.6245}{0.6235}$					
		Washer	$\frac{0.3590}{0.3570}$			Renew the washer to remedy end float in excess of 0.050 in.		
		Special bolt	$\frac{0.6245}{0.6235}$	$\frac{0.0017}{0.0002}$	0.002	Renew the bolt and/or the ball race		
		Ball race, inside diameter	$\frac{0.6252}{0.6247}$					
		Ball race			0.010 (axial)	Renew the ball race		
		Ball race, outside diameter	$\frac{1.3747}{1.3742}$	$\frac{0.0023}{0.0008}$	0.0023	Renew the ball race		
		Hinge arm	$\frac{1.3765}{1.3755}$					
3	Aileron to wing at inboard hinge	Hinge bracket	$\frac{1.5635}{1.5630}$	$\frac{0.0018}{0.0008}$	0.0035	Renew the ball race		
		Ball race, outside diameter	$\frac{1.5622}{1.5617}$					
		Ball race			0.009 (axial)	Renew the ball race		
		Ball race, inside diameter	$\frac{0.6252}{0.6248}$	$\frac{0.0012}{0.0003}$	0.002	Renew the ball race and/or hinge pin		
		Hinge pin	$\frac{0.6245}{0.6240}$					
	Hinge bracket	$\frac{0.7505}{0.7495}$	$\frac{+0.0013}{-0.0002}$	0.018	Renew the hinge pin and hinge bracket			
4	Tab to aileron at inboard hinge	Hinge socket	$\frac{0.1901}{0.1895}$	$\frac{0.0013}{0.0002}$	0.002	Renew the bolt		
		Hinge bolt	$\frac{0.1893}{0.1888}$					
		Ball race, inside diameter	$\frac{0.1895}{0.1890}$			$\frac{0.0007}{-0.0003}$ (int.)	0.0007	Renew the bolt and/or the ball race
		Ball race				0.025 (axial)	Renew the ball race	
		Ball race, outside diameter	$\frac{0.7771}{0.7766}$	$\frac{0.0018}{0.0008}$	0.002	Renew the ball race		
Bearing housing	$\frac{0.7784}{0.7779}$							

continued . . .

RESTRICTED

KEY TO FIG.54 (WEAR LIMITS, AILERON AND TAB) – continued

Ref. No.	Joint	Wear point	Dimension new	Clearance new	Permissible worn clearance	Remedial action
5	Tab to aileron at centre hinge	Hinge lug	$\frac{0.1901}{0.1895}$	$\frac{0.0013}{0.0002}$	0.002	Renew the bolt and/or the hinge lug
		Special bolt	$\frac{0.1893}{0.1888}$	$\frac{0.0007}{-0.0003}$ (int.)	0.0007	Renew the bolt and/or the ball race
		Ball race, inside diameter	$\frac{0.1895}{0.1890}$			
		Ball race			0.025 (axial)	Renew the ball race
		Ball race, outside diameter	$\frac{0.7771}{0.7766}$	$\frac{0.0018}{0.0008}$	0.002	Renew the ball race
		Bearing housing	$\frac{0.7784}{0.7779}$			

Ref. No.	Joint	Wear point	Dimension new	Clearance new	Permissible worn clearance	Remedial action
6	Tab to aileron at outboard hinge	Hinge socket	$\frac{0.1901}{0.1895}$	$\frac{0.0013}{0.0002}$	0.002	Renew the spindle
		Hinge spindle	$\frac{0.1893}{0.1888}$	$\frac{0.0007}{-0.0003}$ (int.)	0.0007	Renew the spindle and/or the ball race
		Ball race, inside diameter	$\frac{0.1895}{0.1890}$			
		Ball race			0.025 (axial)	Renew the ball race
		Ball race, outside diameter	$\frac{0.7771}{0.7766}$	$\frac{0.0018}{0.0008}$	0.002	Renew the ball race
		Bearing housing	$\frac{0.7784}{0.7779}$			

KEY TO FIG.55 (WEAR LIMITS, AIR BRAKES)

(overleaf)

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KEY TO FIG. 55 (WEAR LIMITS, AIR BRAKES)

Ref. No.	Joint	Wear point	Dimension new	Clearance new	Permissible worn clearance	Remedial action	
1	Assembly of drag channel rollers	Bracket	$\frac{0.1895}{0.1880}$	$\frac{0.0075}{0.0030}$	0.010	Renew the bracket	
		Bolt	$\frac{0.1850}{0.1820}$	$\frac{0.0075}{0.0030}$	0.015	Renew the bush	
		Bush, inside diameter	$\frac{0.1895}{0.1880}$				
		Bush, outside diameter	$\frac{0.3103}{0.3095}$	$\frac{0.0050}{0.0027}$	0.015	Renew the bush and/or the roller	
		Roller	$\frac{0.3145}{0.3130}$				
2	Outboard bearing, air brakes to main plane	Housing	$\frac{2.8765}{2.8755}$	$\frac{0.0025}{0.0010}$	0.0025	Renew the housing and ball race assembly	
		Ball race, outside diameter	$\frac{2.8745}{2.8740}$				
		Ball race	--	--	0.012 (axial)	Renew the housing and ball race assembly	
		Ball race, inside diameter	$\frac{2.3127}{2.3122}$	$\frac{0.0005}{-0.0010 (int.)}$	0.0005	Renew the ball race housing assembly and/or end fitting	
		End fitting	$\frac{2.3132}{2.3122}$				
3	Centre bearing, air brakes to main plane	Bolt	$\frac{0.4369}{0.4363}$	$\frac{0.0016}{0.0002}$	0.005	Renew the bolt and/or the bush	
		Bush, inside diameter	$\frac{0.4379}{0.4371}$				
3	Centre bearing, air brakes to main plane	Bush, outside diameter	$\frac{0.5617}{0.5613}$	$\frac{0.0016}{0.0004}$	0.005	Renew the bush and/or the roller	
		Roller, inside diameter	$\frac{0.5629}{0.5621}$				
	4	Inboard bearing, air brakes to main plane	Housing	$\frac{2.8765}{2.8755}$	$\frac{0.0025}{0.0010}$	0.0025	Renew the housing and ball race assembly
			Ball race, outside diameter	$\frac{2.8745}{2.8740}$			
		Ball race	--	--	0.012 (axial)	Renew the housing and ball race assembly	
	Ball race, inside diameter	$\frac{2.3127}{2.3122}$	$\frac{0.0005}{-0.0010 (int.)}$	0.0005	Renew the ball race housing assembly and/or the end fitting		
	End fitting	$\frac{2.3132}{2.3122}$					
5	Side plate to crosshead	Bearing housing	$\frac{1.2515}{1.2505}$	$\frac{0.0018}{0.0003}$	0.002	Renew the housing and ball race assembly	
		Ball race, outside diameter	$\frac{1.2502}{1.2497}$				
		Ball race	--	--	0.025 (axial)	Renew the housing and ball race assembly	
		Ball race, inside diameter	$\frac{0.3127}{0.3122}$	$\frac{0.0010}{-0.0005 (inc.)}$	0.001	Renew the ball race and housing assembly and/or the crosshead	
		Crosshead	$\frac{0.3127}{0.3117}$				

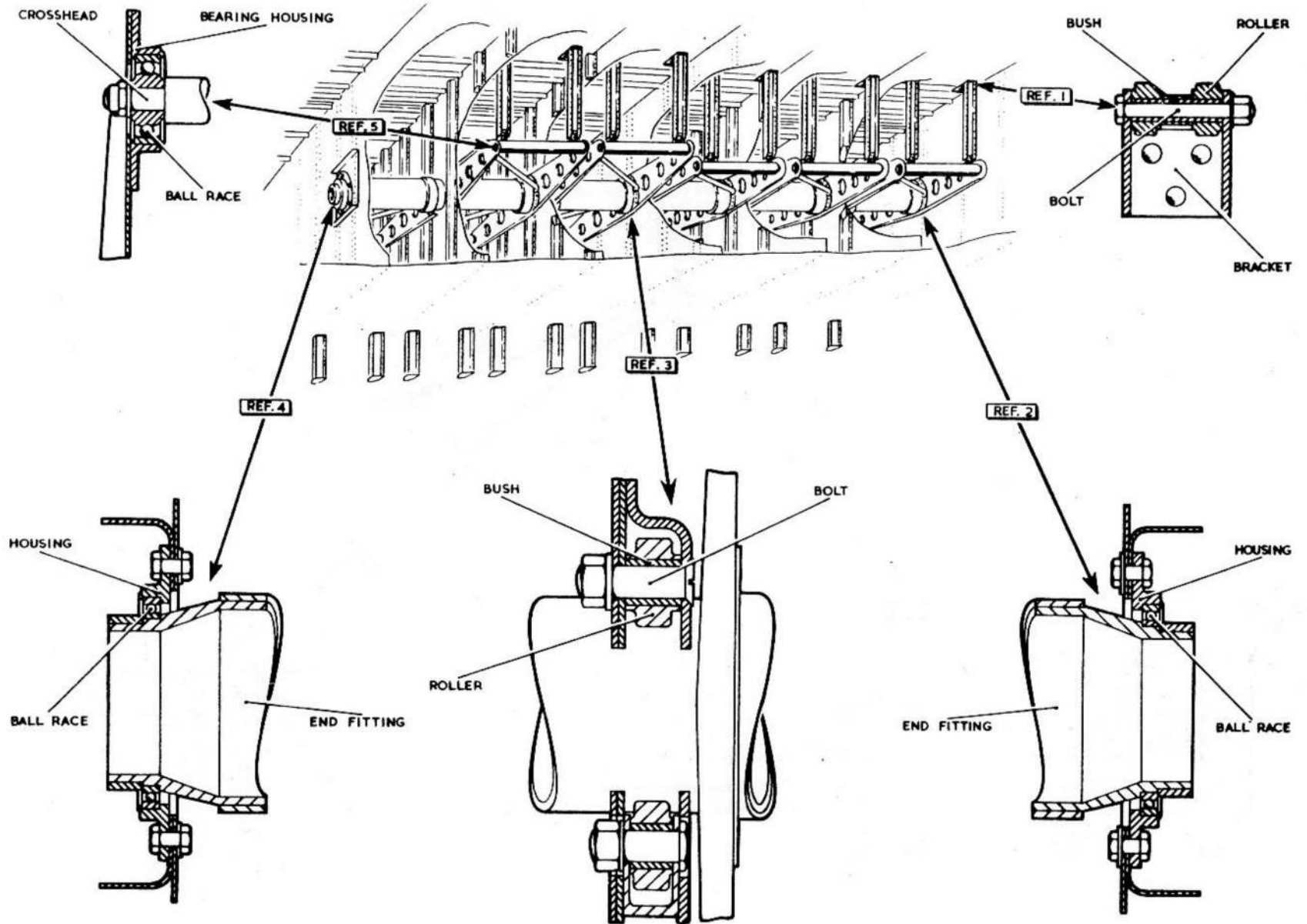
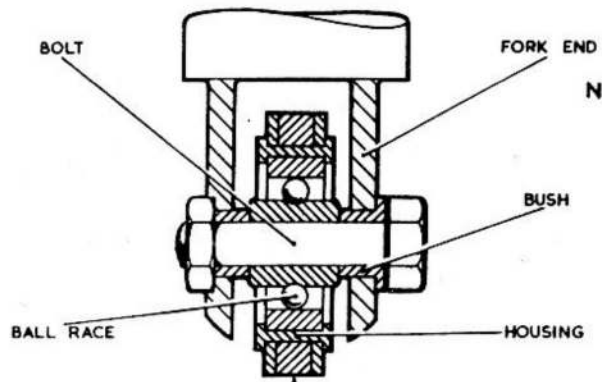


Fig. 55. Wear limits, air brakes

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NOTE.
 AT CONTROL ROD TO AILERON JOINT
 THE BOLT IS ASSEMBLED IN REVERSE
 OF THAT SHOWN.
 I.E. BOLT HEAD IN RECESS.

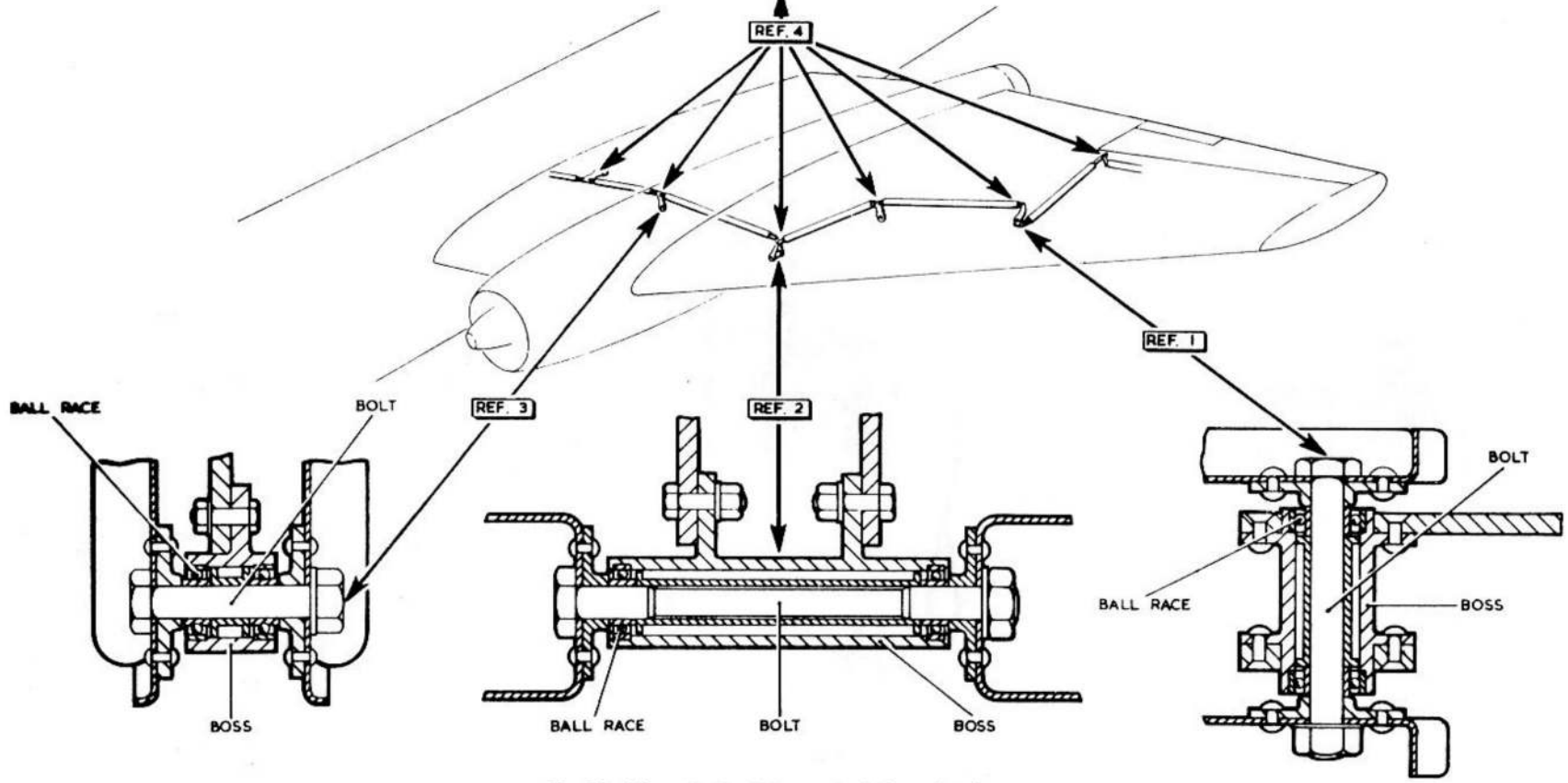


Fig. 56. Wear limits, flying controls in main plane

KEY TO FIG. 56 (WEAR LIMITS, FLYING CONTROLS IN MAIN PLANES)

Ref. No.	Joint	Wear point	Dimension new	Clearance new	Permissible worn clearance	Remedial action
1 and 2	Hinge lever to main plane structure	Boss	0-8760	0-0018 0-0008	0-002	Renew the ball race
			0-8755			
	Centre lever to main plane structure	Ball race, outside diameter	0-8747	0-0010 -0-0005 (int.)	0-001	Renew the ball race and/or the bolt
			0-8742			
			Ball race			
3	Lever arms to main plane structure	Boss	0-8760	0-0018 0-0008	0-002	Renew the boss and the ball race
			0-8755			
	Ball race, outside diameter	0-8747	0-0010 -0-0005 (int.)	0-001	Renew the ball race and/or the bolt	
		0-8742				
		Ball race				0-007 (axial)	Renew the ball race and the boss
4	Control tubes to lever arms	Fork end	0-3754	0-0002 -0-0010 (int.)	0-0002	Renew the bushes
			0-3746			
	Bush, outside diameter	0-3756	0-0008 -0-0001 (int.)	0-001	Renew the bush and/or the bolt	
		0-3752				
	Bush, inside diameter	0-2503	0-0007 -0-0001 (int.)	0-001	Renew the bolt and/or the lever arm assembly	
0-2497						
Bolt		0-2498 0-2495				
Ball race, inside diameter	0-2502	0-0023 0-0008	0-003	Renew the ball race and the lever arm assembly		
	0-2497					
	Ball race				0-025	Renew the ball race and the lever arm assembly
Ball race, outside diameter	0-9011	0-0029 0-9019	0-003	Renew the ball race and the lever arm assembly		
	0-9006					
Housing in lever	0-9029	0-9019	0-003	Renew the ball race and the lever arm assembly		
	0-9019					

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KEY TO FIG. 57 (WEAR LIMITS, MAIN UNDERCARRIAGE DOORS)

Ref. No.	Joint	Wear point	Dimension new	Clearance new	Permissible worn clearance	Remedial action
1	Bell crank lever to under-carriage door	Pedestal	$\frac{0.6005}{0.5995}$	$\frac{0.0003}{-0.0012(int)}$	0.0003	Renew the bush and/or the pedestal
		Bush, outside diameter	$\frac{0.6007}{0.6002}$			
		Bush, inside diameter	$\frac{0.5004}{0.4996}$	$\frac{0.0022}{0.0010}$	0.0070	Renew the bush and/or the pin
		Pin	$\frac{0.4986}{0.4982}$			
2	Push rod to lock lever and forward hinge	Push rod end, inside diameter, (spherical)	$\frac{0.6255}{0.6250}$	$\frac{0.0020}{0.0010}$	0.0050	Renew the bearing
		Spherical bearing, outside diameter	$\frac{0.6240}{0.6235}$			
		Spherical bearing, inside diameter	$\frac{0.1870}{0.1855}$	$\frac{0.0045}{-0.0010(int)}$	0.0070	Renew the pin and/or the bearing
		Pin	$\frac{0.1865}{0.1825}$	$\frac{0.0070}{0.0015}$	0.010	Renew the pin and/or the lock lever
	Lock lever	$\frac{0.1895}{0.1680}$				
	Lock lever	$\frac{0.3770}{0.3755}$	$\frac{0.0040}{0.0010}$	0.0080	Renew the bolt and/or the lock lever	
	Bolt	$\frac{0.3745}{0.3730}$	$\frac{0.0040}{0.0010}$	0.0080	Renew the bolt and/or the forward hinge	
	Forward hinge	$\frac{0.3770}{0.3755}$				

Ref. No.	Joint	Wear point	Dimension new	Clearance new	Permissible worn clearance	Remedial action
3	Forward hinge to fuselage	Forward hinge	$\frac{0.3145}{0.3130}$	$\frac{0.0040}{0.0005}$	0.0080	Renew the bolt and/or the forward hinge
		Bolt	$\frac{0.3125}{0.3105}$	$\frac{0.0040}{0.0005}$	0.0080	Renew the bolt and/or the bush
		Bush, inside diameter	$\frac{0.3145}{0.3130}$			
		Bush, outside diameter	$\frac{0.4012}{0.4008}$	$\frac{-0.0004}{-0.0016(int)}$	-0.0004	Renew the bush
		Hinge bracket	$\frac{0.4004}{0.3992}$			
4	Push rods to bell crank lever	Fork end	$\frac{0.1895}{0.1880}$	$\frac{0.0070}{0.0015}$	0.0100	Renew the pin and/or the rod
		Pin	$\frac{0.1865}{0.1825}$	$\frac{0.0070}{0.0015}$	0.0100	Renew the pin and/or the bell crank lever
		Bell crank lever	$\frac{0.1895}{0.1880}$			
		Bell crank lever, slotted hole, width	$\frac{0.1950}{0.1900}$	$\frac{0.0125}{0.0035}$	0.0250	Renew the pin and/or the lever
		Pin	$\frac{0.1865}{0.1825}$			
5	Aft hinge to fuselage	hinge	$\frac{0.2520}{0.2505}$	$\frac{0.0040}{0.0005}$	0.0080	Renew the hinge and/or the bolt
		Bolt	$\frac{0.2500}{0.2480}$	$\frac{0.0040}{0.0005}$	0.0080	Renew the bracket and/or the bolt
		Hinge bracket	$\frac{0.2520}{0.2505}$			
6	Push rods to shoot bolts	Lock pin	$\frac{0.7972}{0.7962}$	$\frac{0.0043}{0.0023}$	0.0080	Renew the lock pin and/or the housing
		Lock pin housing	$\frac{0.8005}{0.7995}$			

Note... Clearance new between the end of a shoot bolt and its associated pad face is 0.110 in. Accumulative wear in the linkage must not reduce this clearance below 0.060.

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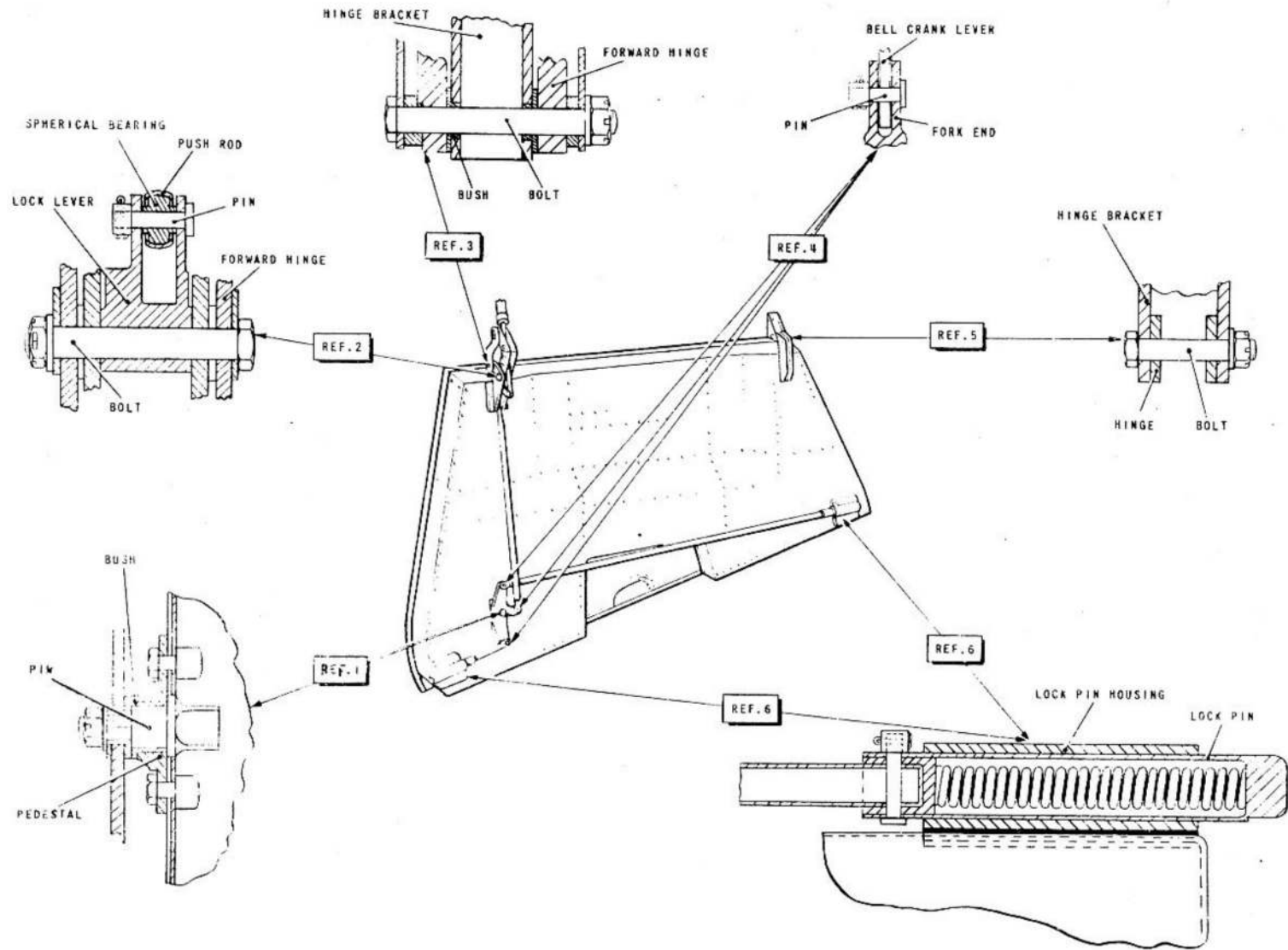


FIG57. WEAR LIMITS, MAIN UNDERCARRIAGE DOORS

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(A.L.55, Oct.58)

APPENDIX I

B (I) Mk. 6 & B (I) Mk. 8

MAIN PLANE STRUCTURE

Appendix I

B(I)Mk.6 and B(I)Mk.8 MAIN PLANE STRUCTURE

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<i>Aileron structure</i>	606

Introduction

1. This appendix illustrates the main plane structure of the B(I)Mk.6 and B(I)Mk.8 in the same manner as the main chapter illustrates the B Mk.2 structure. Only that structure peculiar to B(I)Mk.6 and B(I)Mk.8 is detailed; information which is common to other marks of air-

craft, being already given elsewhere, is not repeated.

2. The figure numbers of all structure illustrations and repair schemes in this appendix commence with the number 6. This is to distinguish them from similar illustrations and repair schemes peculiar

to other marks.

Adjustment of aileron balance

3. After repair the aileron is to be balanced in accordance with the instructions given in fig.34 in this chapter, except that the counterbalance weight must be 1 lb. 14 oz. \pm 4 oz. and the total weight 102 lb. \pm 3 lb.



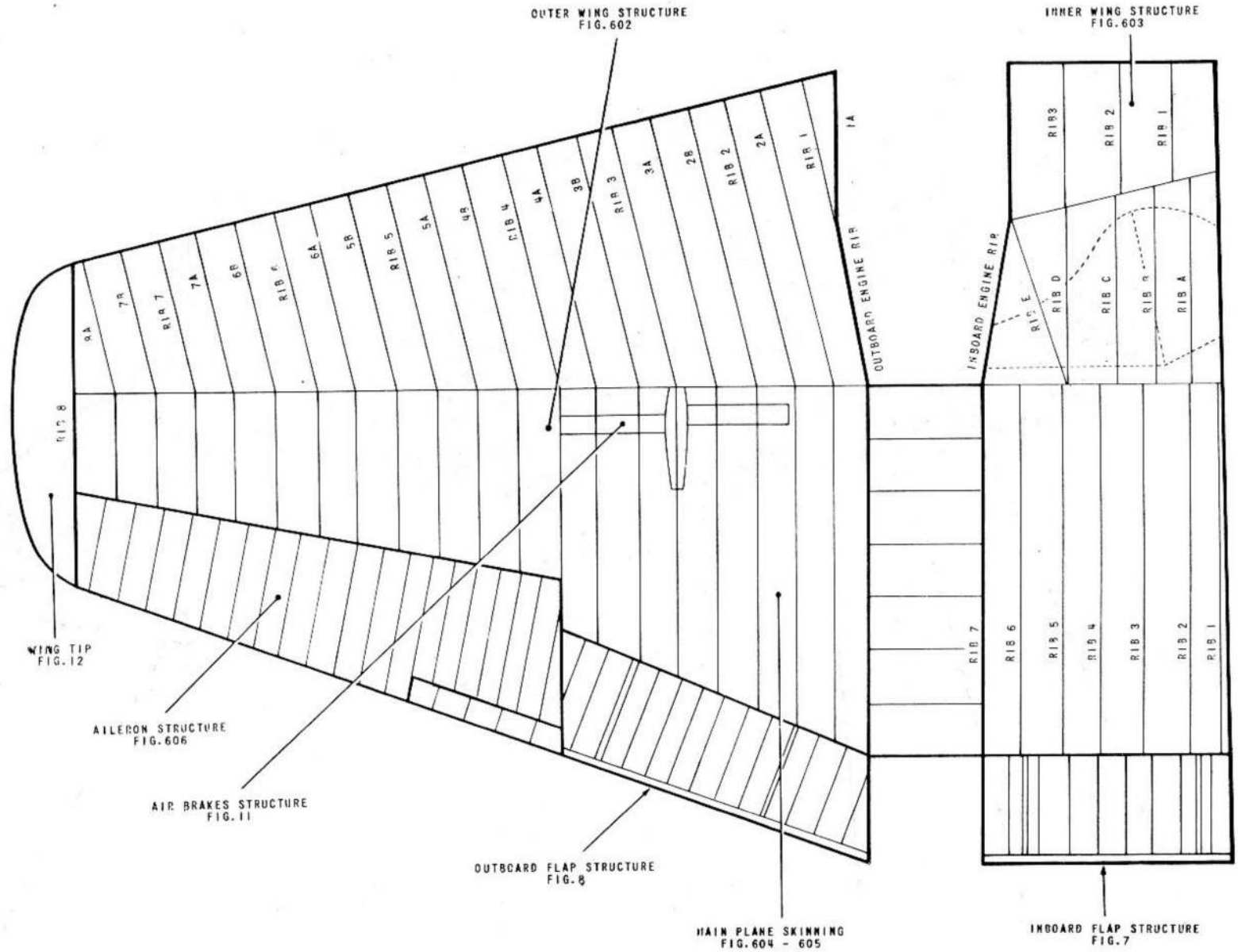


FIG. 601. KEY DIAGRAM

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(A.L.44, July 57)

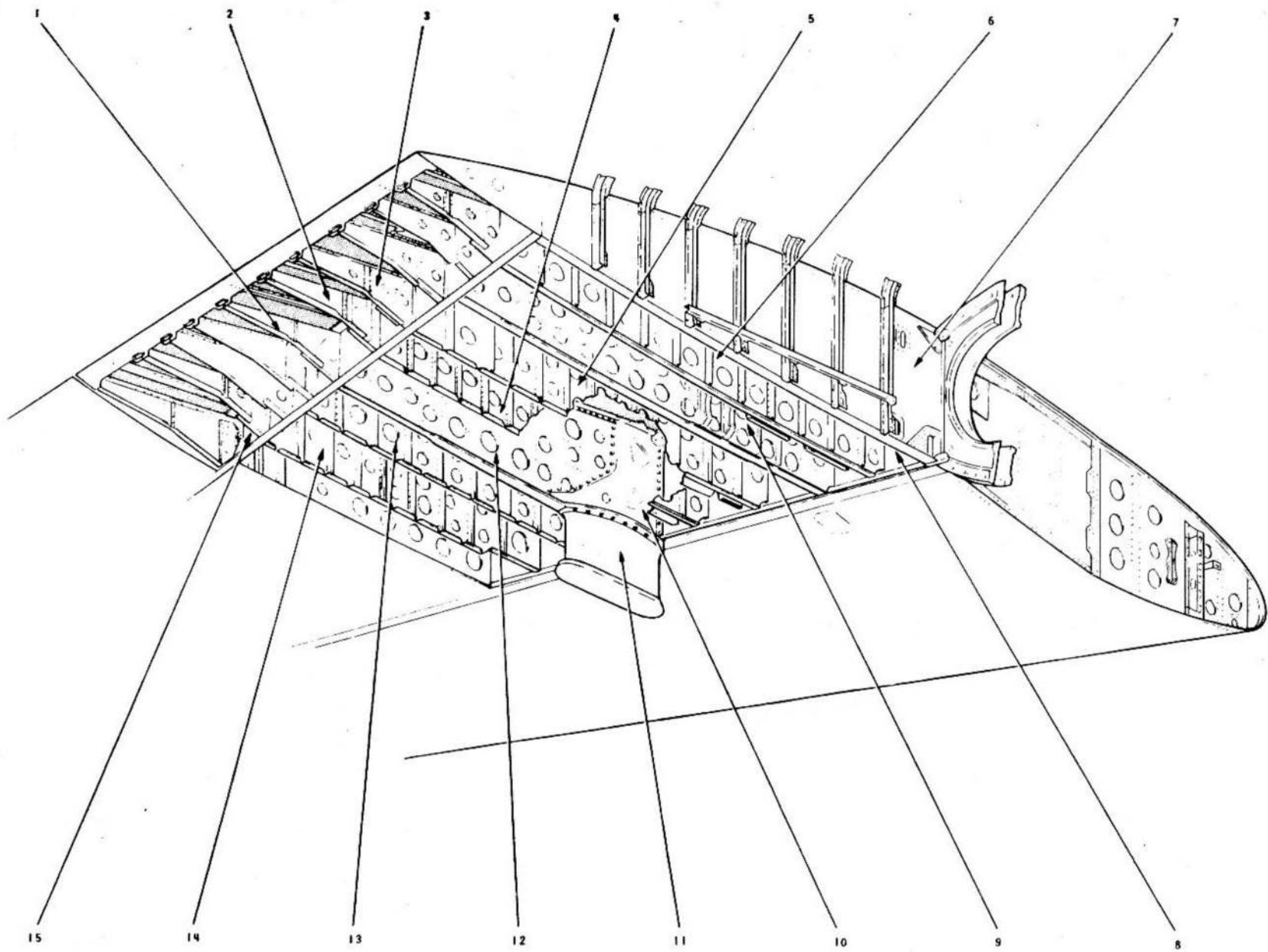


FIG. 602. OUTER WING STRUCTURE

RESTRICTED

KEY TO FIG. 602 OUTER WING STRUCTURE

Item	Material		Part No.	Description	Negligible Damage						Repair Fig. No.
	Spec.	S. W. G.			Dents		Scratches		Holes		
					Max. Depth	Min. Dia.	Depth	Spacing	Max. Dia.	Pitch Ratio	
1	L. 72	20	E. A9. 20. 1193 (starb.)	Flap shroud rib 3	0.04	0.70	0.010	2.00	0.25	20:1	} Chap. 1, fig. 4 and 7
2	L. 72	20	E. A9. 20. 1211 (port)	Flap shroud rib 3A	0.04	0.70	0.010	2.00	0.25	20:1	
3	L. 72	20	E. A9. 20. 1189 (port)	Flap shroud rib 2B	0.04	0.70	0.010	2.00	0.25	20:1	
4	L. 72	20	E. A9. 20. 3331 (port)								
			E. A9. 20. 3357 (starb.)	Trailing edge rib 3A	0.04	0.70	0.010	2.00	0.25	24:1	
5	L. 72	20	E. A9. 20. 3289 (port)								
			E. A9. 20. 3317 (starb.)	Trailing edge rib 2B	0.04	0.70	0.010	2.00	0.25	24:1	
6	L. 72	20	E. A6. 20. 21 (port)								
			E. A6. 20. 175 (starb.)	Trailing edge rib 2A	0.04	0.70	0.010	2.00	0.25	24:1	
7	L. 73	16	E. A9. 20. 771 (port)								
			E. A9. 20. 772 (starb.)	Trailing edge rib 1	0.03	0.70	0.010	3.00	-	-	
8	D. T. D. 687	8	E. A9. 20. 1063 (port)	Spar web plate assy.,							} 17
			E. A9. 20. 1064 (starb.)	outer wing section	0.01	1.00	0.010	6.00	0.15	56:1	
9	L. 72	18	E. A9. 20. 777 (port)								} Chap. 1, fig. 4 and 7
			E. A9. 20. 779 (starb.)	Trailing edge rib 2.....	0.05	1.00	0.010	2.00	0.25	32:1	
10	D. T. D. 721	-	E. A9. 20. 601 (port)								
			E. A9. 20. 602 (starb.)	Casting for pylon suspension...	0.03	0.60	0.020	2.00	0.20	30:1	
11	D. T. D. 721	-	E. A9. 97. 453 (port)								
			E. A9. 97. 455 (starb.)	External store pylon	0.03	0.60	0.020	2.00	-	-	
12	L. 72	18	E. A9. 20. 635 (port)								} Chap. 1, fig. 4 and 7
			E. A9. 20. 636 (starb.)	Trailing edge rib 3	0.05	1.00	0.010	2.00	0.25	32:1	
13	L. 72	20	E. A9. 20. 3325 (port)								
			E. A9. 20. 3326 (starb.)	Trailing edge rib 3B.....	0.05	0.75	0.010	2.00	0.25	24:1	
14	L. 72	20	E. A9. 20. 3267 (port)								
			E. A9. 20. 3268 (starb.)	Trailing edge rib 4A	0.05	0.75	0.010	2.00	0.25	24:1	
15	L. 73	12	E. A9. 20. 1259 (port)								} 18
			E. A9. 20. 1269 (starb.)	Rear wall at flap	0.01	0.50	0.010	4.00	0.25	40:1	

Note: - All dimensions are in inches.

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(A.L. 44, July 57)

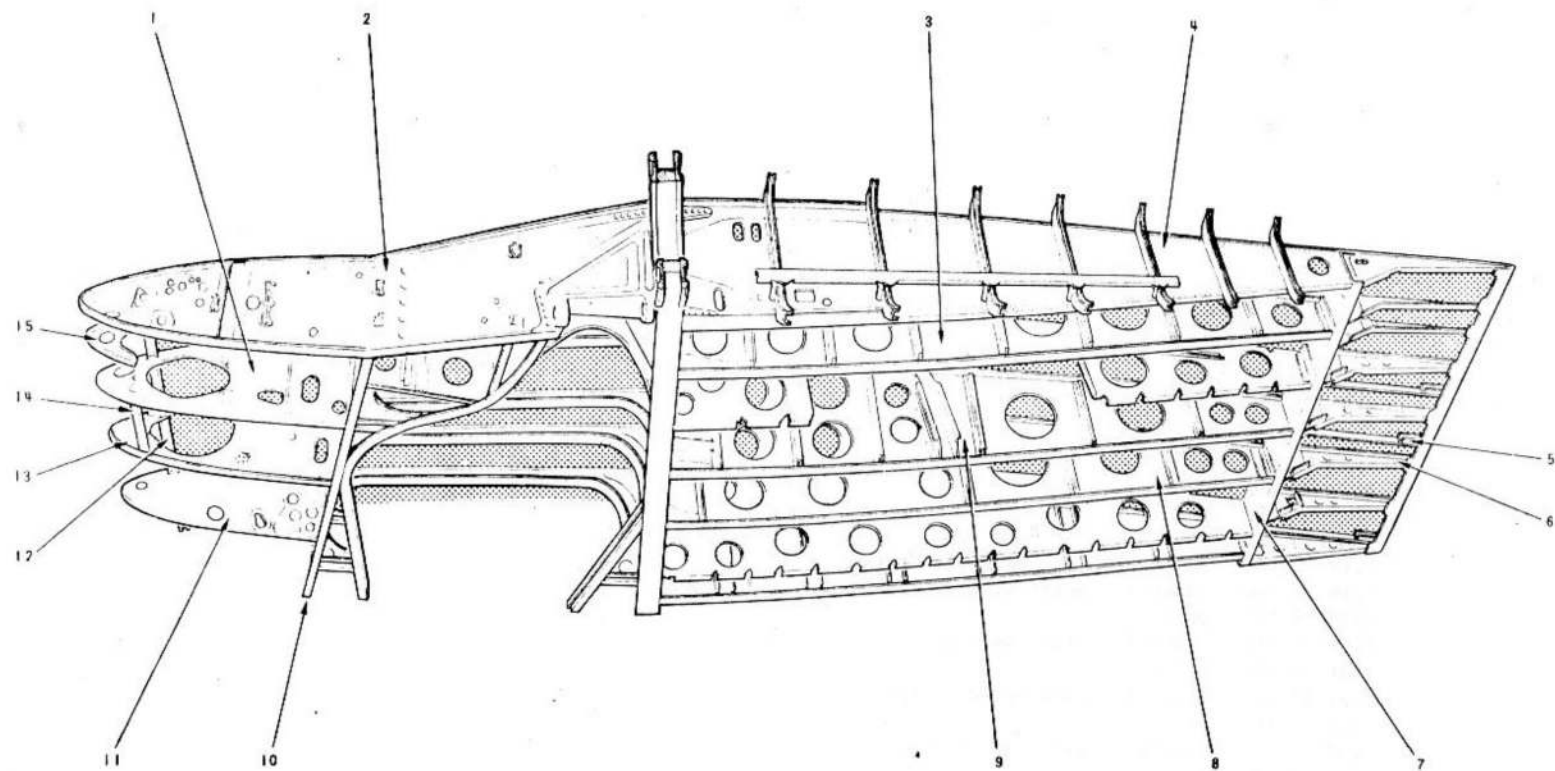


FIG. 603. INNER WING STRUCTURE

RESTRICTED

KEY TO FIG. 603 INNER WING STRUCTURE

Item	Material		Part No.	Description	Negligible Damage						Repair Fig. No.
	Spec.	S.W.G.			Dents		Scratches		Holes		
					Max. Depth	Min. Dia.	Depth	Spacing	Max. Dia.	Pitch Ratio	
1	L.72	18	EA9.20.2579 (port) EA9.20.2581 (stbd.)	Nose rib 3	0.05	1.00	0.010	2.00	0.25	40:1	Chap.1, fig.4
2	S.514	22	EA9.20.553 (port) EA9.20.554 (stbd.)	Inboard engine rib, leading edge	0.03	0.50	0.005	1.00	-	-	
3	L.72	18	EA9.20.757 (port) EA9.20.758 (stbd.)	Rib 6, trailing edge inner wing.	0.05	1.00	0.010	2.00	0.25	32:1	Chap.1, fig.4 and 7
4	L.73	16	EA9.20.759 (port) EA9.20.760 (stbd.)	Rib 7, trailing edge inner wing.	0.03	0.70	0.010	2.00	-	-	
5	L.72	20	EA9.20.1249 (EEJ 102)	Angle piece	0.03	0.50	0.010	1.00	-	-	
6	L.72	20	EA9.20.1231 (port) EA9.20.1197 (stbd.)	Flap shroud rib	0.04	0.70	0.010	2.00	0.25	20:1	Chap.1, fig.4 and 7
7	L.73	12	EA9.20.953 (port) EA9.20.1261 (stbd.)	Rear wall at inboard flap.....	0.01	0.50	0.010	2.00	0.25	40:1	Fig.18
8	L.73	12	EA9.20.753 (port) EA9.20.754 (stbd.)	Forward web plate of Rib 3 trailing edge inner wing	0.01	0.50	0.010	4.00	0.25	40:1	
9	L.73	14	EA9.20.755 (port)	Forward web plate of Rib 4 trailing edge, inner wing	0.04	1.00	0.010	6.00	0.25	24:1	
10	L.72	18	EA9.20.537 (port) EA9.20.749 (stbd.)	Diaphragm	0.05	1.00	0.010	2.00	-	-	20, 21
11	L.72	18	EA9.20.533 (port) EA9.20.535 (stbd.)	Nose rib 1	0.05	1.00	0.010	2.00	0.25	40:1	Chap.1, fig.4 and 7
12	L.72	18	EA9.20.597 (port) EA9.20.598 (stbd.)	Leading edge joint rail assembly	0.05	1.00	0.010	3.00	-	-	
13	L.72	18	EA9.20.549 (port) EA9.20.551 (stbd.)	Nose rib 2	0.05	1.00	0.010	2.00	0.25	40:1	Chap.1, fig.4
14	L.72	20	EA9.20.881	Gearbox mounting bracket (typical)	0.04	0.75	0.005	3.00	0.20	30:1	
15	L.72	20	EA9.20.821	Riblet, inner wing leading edge.	0.04	0.75	0.010	2.00	0.20	30:1	Chap.1, fig.4 and 7

Note: - All dimensions are in inches

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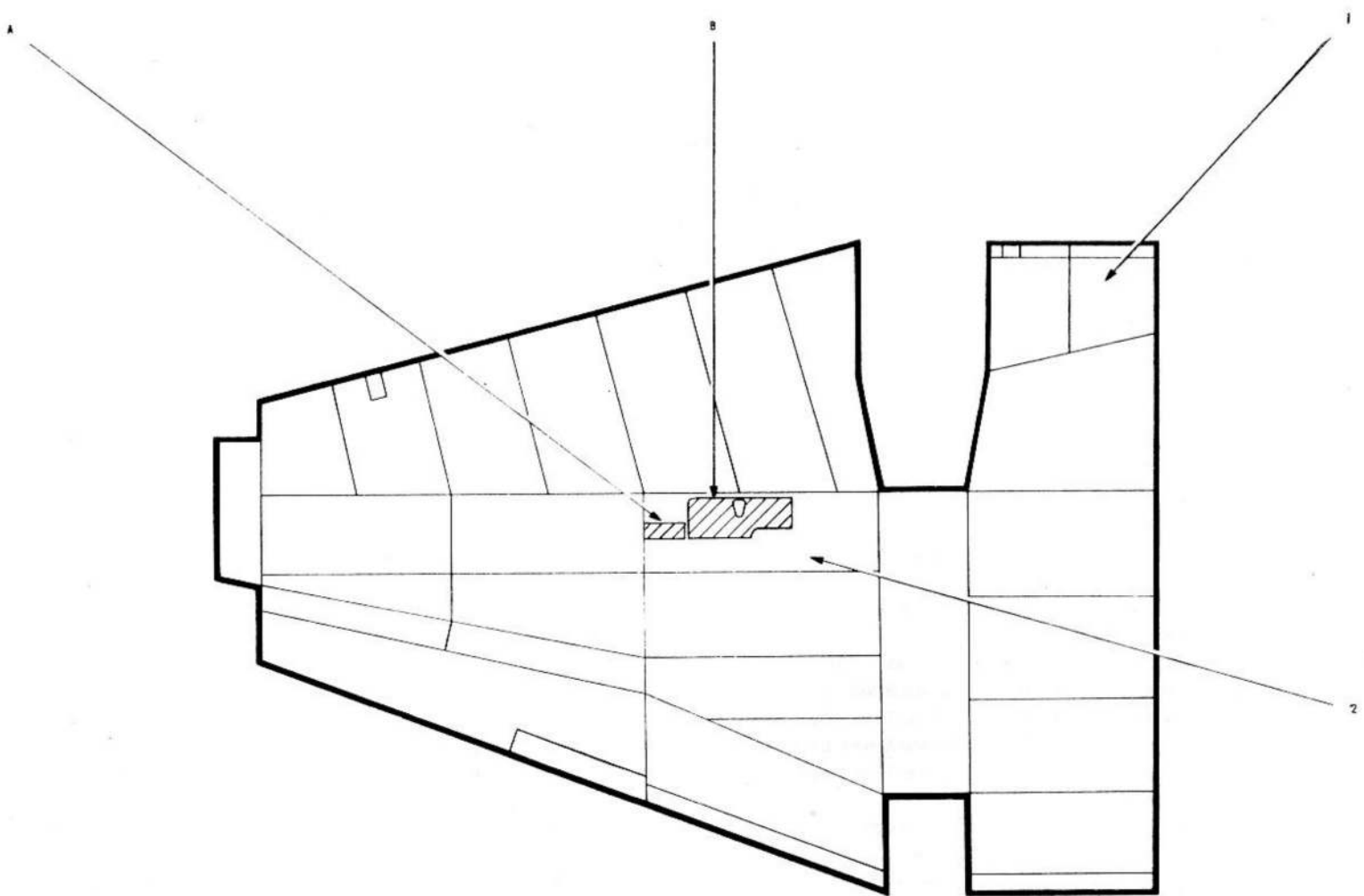


FIG. 604, MAIN PLANE SKINNING, UPPER SURFACE

RESTRICTED

KEY TO FIG. 604 MAIN PLANE SKINNING UPPER SURFACE

Item	Material Spec.	S.W.G.	Part No.	Description	Negligible Damage						Repair Fig.No.
					Scratches			Dents			
					Depth	Min. Spacing	Max. Depth	Max. Width	Min. Width	Min. Spacing	
1	L.72	18	E. B6. 20.483 (port)	Skin	0.005	1.00	0.07	4.50	1.00	6W.	14
			E. A9. 20.863 (starb.)								
2	L.73	18	E. A9. 20.605 (port)	Skin	0.005	3.00	0.05	4.50	1.00	6W.	14
			E. A9. 20.606 (starb.)								
A	L.73	18	E. A9. 20.609 (port)	Reinforcing plate ..	0.005	3.00	0.05	4.50	1.00	6W.	
			E. A9. 20.610 (starb.)								
B	L.73	18	E. A9. 20.607 (port)	Reinforcing plate ..	0.005	3.00	0.05	4.50	1.00	6W.	
			E. A9. 20.608 (starb.)								

Notes: - All dimensions are in inches. *W*, in min. spacing column = the least dimension of damage

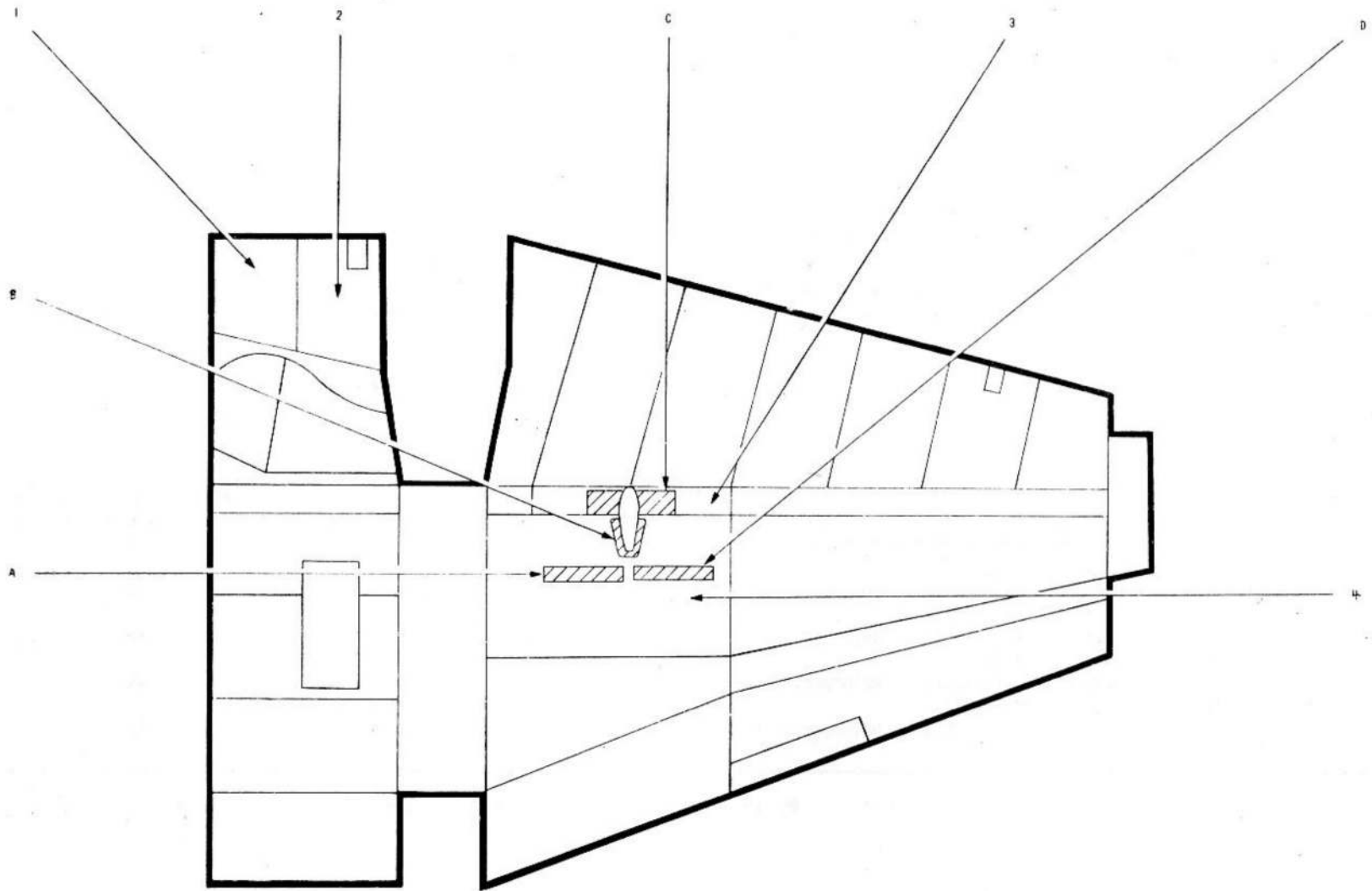


FIG. 605. MAIN PLANE SKINNING, LOWER SURFACE

RESTRICTED

KEY TO FIG. 605 MAIN PLANE SKINNING LOWER SURFACE

Material		S. W. G.	Part No.	Description	Negligible Damage						Repair Fig.No.
Item	Spec.				Scratches			Dents			
					Depth	Min. Spacing	Max. Depth	Max. Width	Min. Width	Min. Spacing	
1	L. 72	18	E. A9. 20. 589 (port)								
			E. A9. 20. 671 (starb.)	Skin	0.005	1.00	0.07	4.50	1.00	6W	14
2	L. 72	18	E. A9. 20. 555 (port)								
			E. A9. 20. 556 (starb.)	Skin	0.005	1.00	0.07	4.50	1.00	6W	14
3	L. 73	18	E. A9. 20. 3441 (port)								
			E. A9. 20. 3442 (starb.)	Skin	0.005	3.00	0.05	4.50	1.00	6W	14
4	L. 73	18	E. A9. 20. 3403 (port)								
			E. A9. 20. 3405 (starb.)	Skin	0.005	3.00	0.05	4.50	1.00	6W	14
A	L. 72	18	E. A9. 20. 675 (port)								
			E. A9. 20. 676 (starb.)	Reinforcing plate..	0.005	1.00	0.07	4.50	1.00	6W	
B	L. 73	18	E. A9. 20. 711	Reinforcing plate..	0.005	1.00	0.04	4.50	1.00	6W	
C	L. 73	14	E. A9. 20. 3433 (port)								
			E. A9. 20. 3434 (starb.)	Reinforcing plate..	0.010	1.50	0.03	3.00	1.00	4W	
D	L. 72	18	E. A9. 20. 679 (port)								
			E. A9. 20. 680 (starb.)	Reinforcing plate.	0.005	1.0	0.07	4.50	1.00	6W	

Notes: - All dimensions are in inches. W, in min. spacing column = the least dimension of damage.

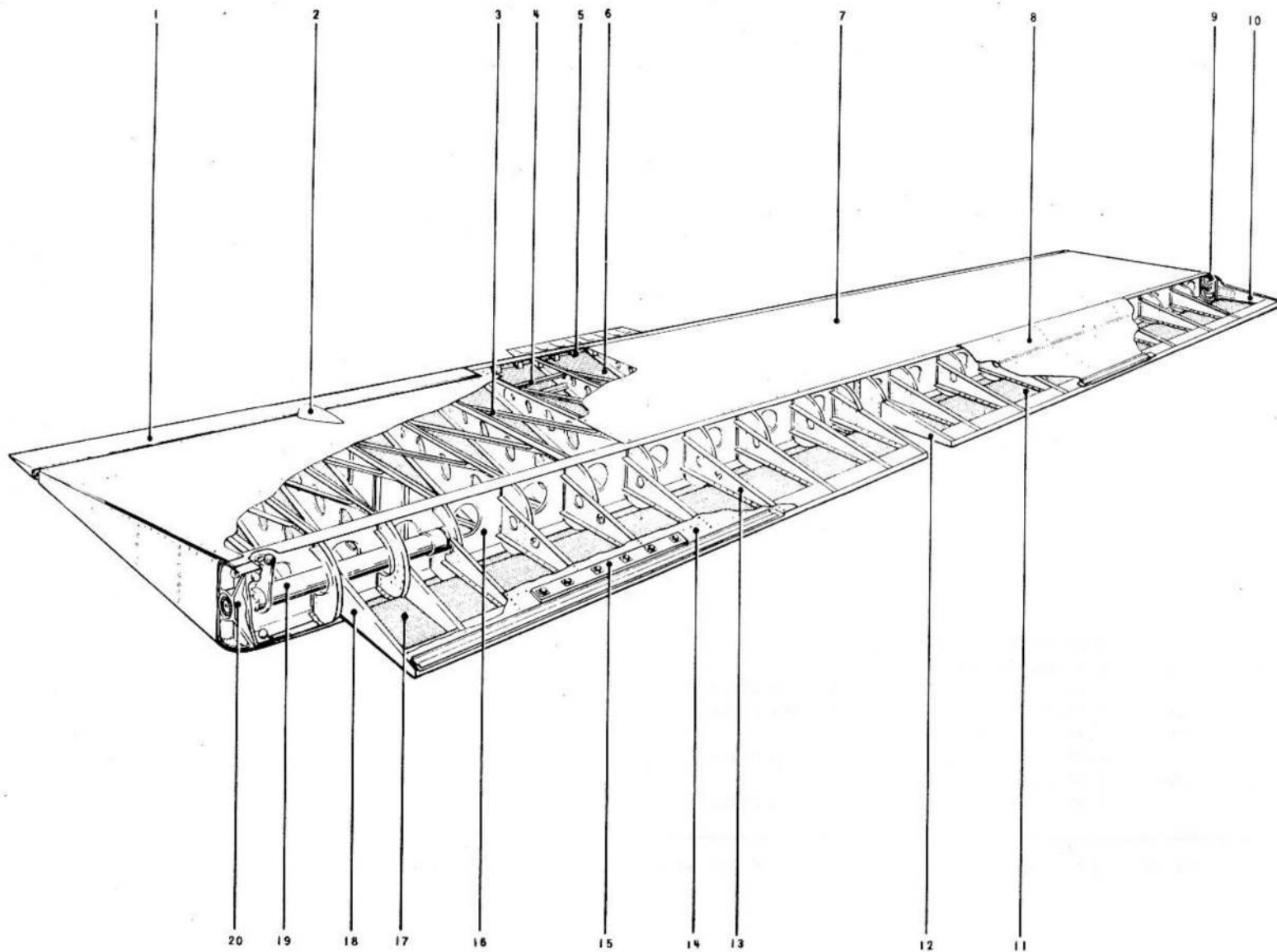


FIG. 606. AILERON STRUCTURE

RESTRICTED

KEY TO FIG. 606 AILERON STRUCTURE

Item	Material		Part No.	Description	Negligible Damage						Repair Fig.No.
	Spec.	S.W.G.			Dents		Scratches		Holes		
					Max. Depth	Min. Dia.	Depth	Spacing	Max. Dia.	Pitch Ratio	
1	-	-	E. A1. 24. 923 (port)	Assembly of aileron tab.....	0.04	0.50	0.020	1.00	-	-	Refer to figure 10, chapter 3
2	L. 59	18	E. A1. 24. 924 (starb.)								
3	L. 72	20	E. A1. 24. 269 (port)	Fairing.....	0.02	0.50	0.010	1.00	-	-	
4	L. 72	20	E. A1. 24. 270 (starb.)								
5	Ash V. 4	-	E. A3. 24. 53 (port)	Stiffener.....	0.02	0.50	0.010	1.00	-	-	
6	L. 72	24	E. A3. 24. 54 (starb.) (EEJ 101)								
7	L. 72	24	E. A3. 24. 57 (port)	Stringer.....	0.02	0.50	0.010	1.00	-	-	
8	L. 72	24	E. A3. 24. 58 (starb.) (EEJ 101)								
9	G. T. D. 298	-	E. A1. 24. 803 (port)	Block insert.....	0.03	0.50	0.005	6.00	-	-	27, 34
10	L. 72	20	E. A1. 24. 804 (starb.)								
11	L. 72	18	E. A3. 24. 515 (port)	Bottom skin, trailing edge.....	0.03	0.50	0.005	6.00	-	-	27, 34
12	L. 72	24	E. A3. 24. 516 (starb.)								
13	L. 72	18	E. A1. 24. 495 (port)	Top skin, trailing edge.....	0.05	1.00	0.005	3.00	-	-	
14	L. 72	18	E. A1. 24. 496 (starb.)								
15	L. 72	18	E. A1. 24. 889 (port)	Top skin, outboard, leading edge	0.020	0.30	0.010	1.00	-	-	
16	L. 72	20	E. A1. 24. 890 (starb.)								
17	L. 72	18	E. A1. 24. 193	Outer bearing housing.....	0.04	0.50	0.005	1.00	-	-	
18	L. 72	18	E. A1. 24. 893 (port)								
19	L. 72	18	E. A1. 24. 894 (starb.)	Nose rib 20.....	0.04	0.50	0.005	1.00	-	-	
20	L. 72	18	E. A1. 24. 891 (port)								
21	L. 72	18	E. A1. 24. 892 (starb.)	Bottom skin, outboard, leading edge	0.04	0.50	0.005	3.00	-	-	
22	L. 72	18	E. A1. 24. 97 (port)								
23	L. 72	20	E. A1. 24. 98 (starb.)	Nose rib 11B.....	0.04	0.50	0.005	3.00	-	-	
24	L. 72	20	E. A1. 24. 73	Nose rib 8.....	0.04	0.50	0.005	3.00	-	-	
25	L. 72	18	E. A1. 24. 885 (port)	Top skin, inboard, leading edge.	0.05	1.00	0.005	3.00	-	-	
26	L. 72	18	E. A1. 24. 886 (starb.)								
27	D. T. D. 124	3/16	E. A3. 24. 27	External balance weight.....	0.02	0.30	0.020	2.00	-	-	
28	L. 72	16	E. A9. 24. 101 (port)	Aileron spar, inboard section...	0.05	1.00	0.005	3.00	-	-	
29	L. 72	18	E. A9. 24. 102 (starb.)								
30	L. 72	18	E. A1. 24. 887 (port)	Bottom skin, inboard, leading edge	0.05	1.00	0.005	3.00	-	-	
31	L. 72	20	E. A1. 24. 888 (starb.)								
32	L. 72	20	E. A1. 24. 131 (port)	Nose rib 2.....	0.04	0.50	0.005	3.00	-	-	
33	L. 72	20	E. A1. 24. 132 (starb.)								
34	-	-	E. A9. 24. 51 (port)	Assembly of tab operating gear..	-	-	-	-	-	-	
35	-	-	E. A9. 24. 52 (starb.)								
36	D. T. D. 300	-	E. A9. 24. 103 (port)	Inboard hinge bracket.....	0.020	0.30	0.010	1.00	-	-	
37	D. T. D. 300	-	E. A9. 24. 104 (starb.)								

Note:- All dimensions are in inches.

RESTRICTED

APPENDIX 2

**B Mk. 6 & PR Mk. 7
MAIN PLANE STRUCTURE**

RESTRICTED

(A.L.44, July 57)

APPENDIX 2

Appendix 2

B MK.6 AND PR MK.7 MAIN PLANE STRUCTURE

CONTENTS

Introduction	Para. 1
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LIST OF ILLUSTRATIONS

Key diagram	Fig. 701
Main plane structure	702
Main plane skinning, upper surface	703
Main plane skinning, lower surface	704

Introduction

1. This appendix illustrates the main plane structure of the B Mk.6 and PR Mk.7 in the same manner as the main chapter illustrates the B Mk.2 structure. Only that structure peculiar to B Mk.6 and PR Mk.7 is detailed; information common to other marks of aircraft, being already

given elsewhere, is not repeated.

2. The figure numbers of all structure illustrations and repair schemes in this appendix commence with the number 7. This is to distinguish them from similar illustrations and repair schemes peculiar to other marks.

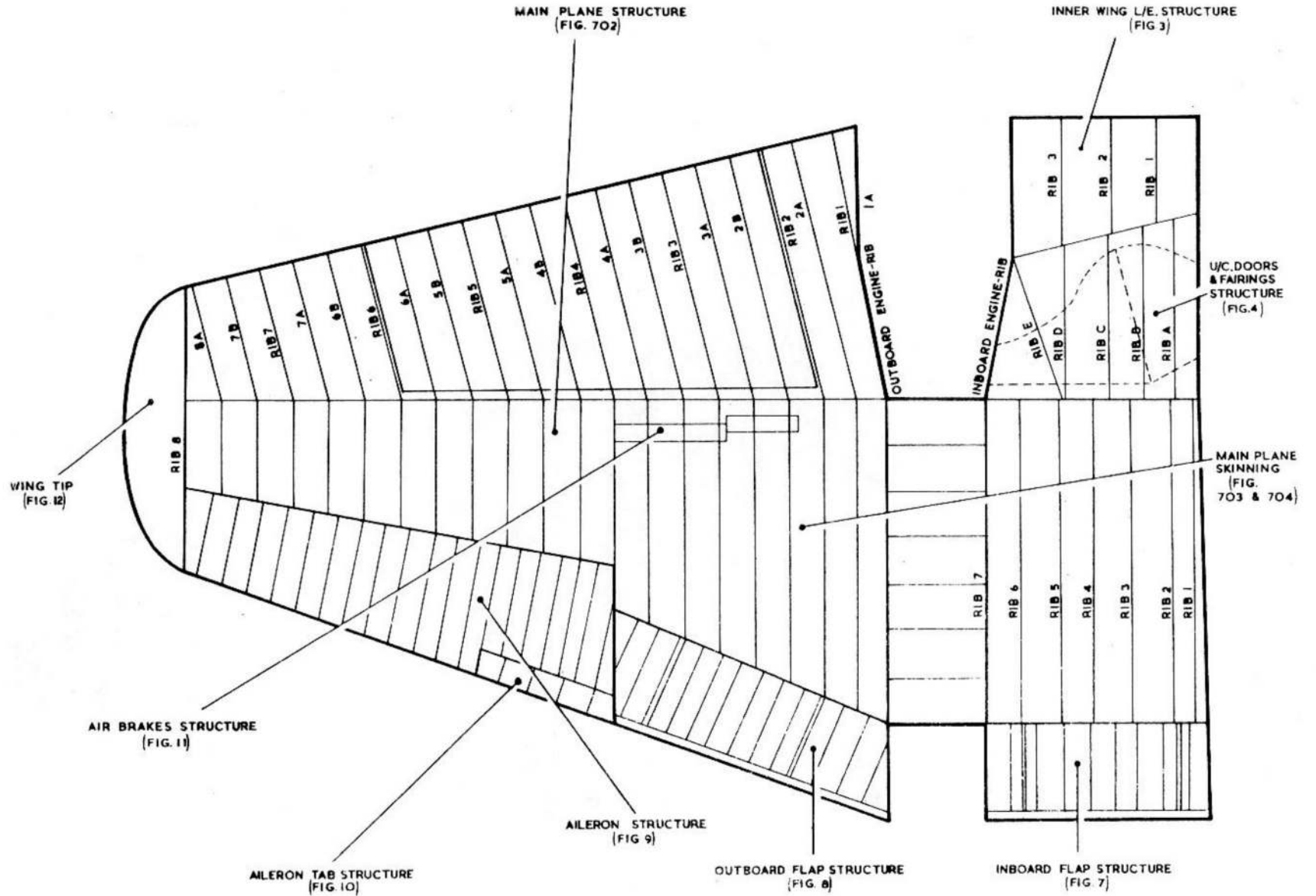


Fig. 701. Key diagram

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(A.L.27, July 55)

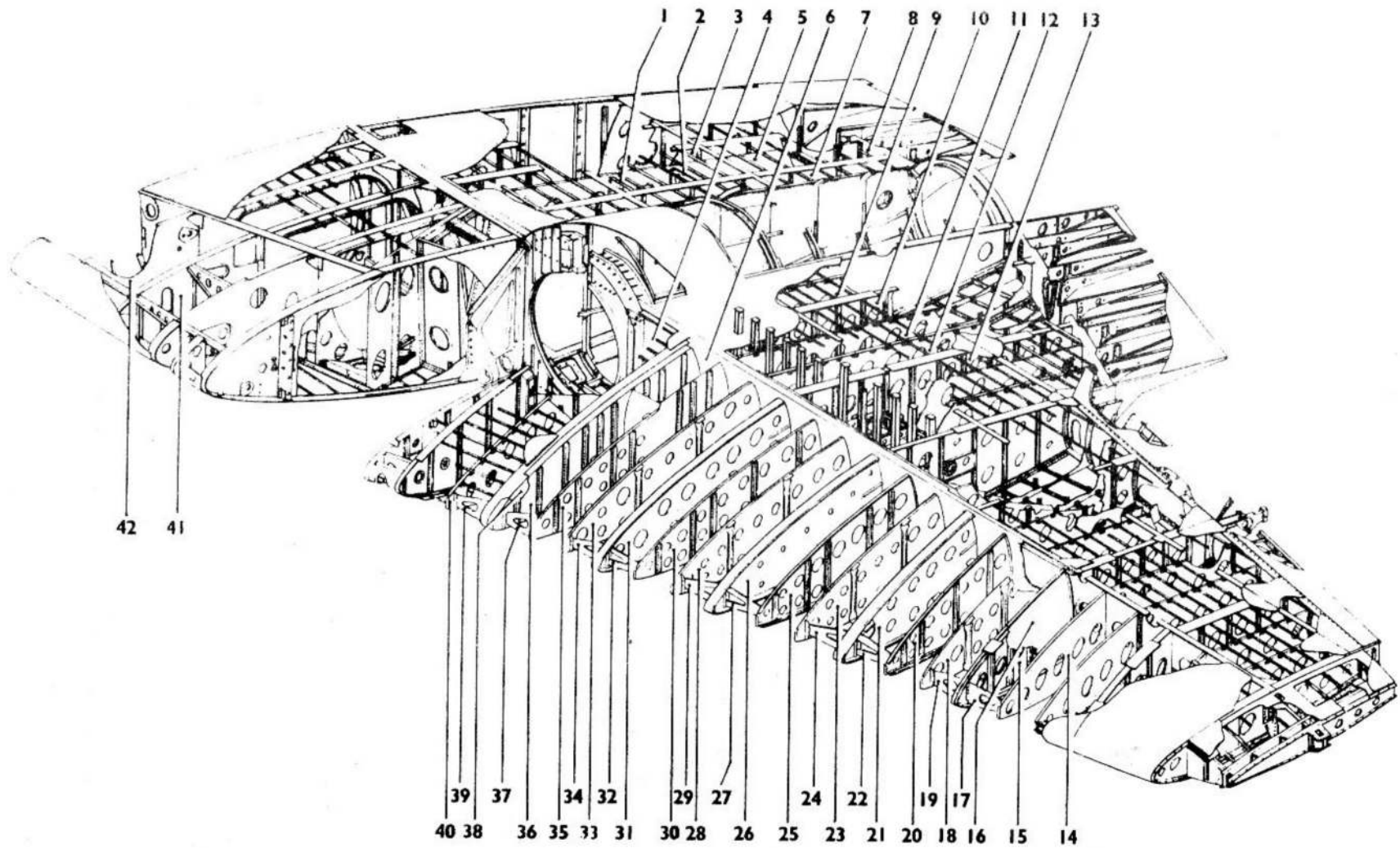


Fig. 702. Main plane structure

548162 39722 3811 8/55 750 CWSLtd1427 Gp979-2

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KEY TO FIG. 702 (MAIN PLANE STRUCTURE)

Item	Material			Description	Negligible damage						Repair fig. No.
	Spec.	S.W.G.	Part No.		Dents		Scratches		Holes		
					Max. depth	Min. dia.	Depth	Spacing	Max. dia.	Pitch ratio	
1 } 2 }	D.T.D.610	22	E.A3.20.1869 (port) E.A3.20.1870 (starb.) E.A3.20.1867 (port) E.A3.20.1868 (starb.)	} Side stay	0-03	0-50	0-005	2-00	0-20	30:1	
3	D.T.D.546	14	E.A3.20.1911 (port) E.A3.20.1912 (starb.) E.A3.20.1911 (port) E.A3.20.1912 (starb.) E.A3.20.1911 (port) E.A3.20.1912 (starb.)									Forward trailing edge rib, No. 4	0-04	1-00	0-01	6-00	0-25	24:1
	D.T.D.610	20	E.A3.20.1911 (port) E.A3.20.1912 (starb.) E.A3.20.1911 (port) E.A3.20.1912 (starb.)	Centre trailing edge rib, No. 4	0-05	0-75	0-005	6-00	0-25	24:1	
	D.T.D.610	22	E.A3.20.1912 (starb.) E.A3.20.1911 (port) E.A3.20.1912 (starb.) E.A3.20.1911 (port)	Aft trailing edge rib, No. 4	0-05	0-75	0-005	6-00	0-15	40:1	
4	D.T.D.687	8	E.A3.20.139	Spar web assembly, inboard of rib No. 5	0-01	1-00	0-01	6-00	0-15	56:1	
	D.T.D.687	10	E.A3.20.141	Spar web assembly, outboard of rib No. 5	0-01	0-50	0-01	6-00	0-15	35:1	
5	D.T.D.610	18	E.A3.20.1843 (port) E.A3.20.1844 (starb.) E.A1.20.3985 (port) E.A1.20.3986 (starb.)	Trailing edge rib No. 5, inner wing	0-05	1-00	0-005	1-00	0-25	28:1	
6	D.T.D.213	16	E.A1.20.3985 (port) E.A1.20.3986 (starb.) E.A3.20.1913 (port) E.A3.20.1914 (starb.)	Rear wall, integral tank	0-05	1-00	0-005	3-00	—	—	
7	D.T.D.610	18	E.A3.20.1913 (port) E.A3.20.1914 (starb.) E.A3.20.1921 (port) E.A3.20.320 (starb.)	Trailing edge rib No. 6, inner wing	0-05	1-00	0-005	1-00	0-25	32:1	
8	D.T.D.546	12	E.A3.20.1921 (port) E.A3.20.320 (starb.) E.A6.20.81 (port) E.A6.20.175 (starb.)	Torque member, rear wall inner wing	0-01	0-50	0-010	4-00	0-25	40:1	
9	D.T.D.610	20	E.A6.20.81 (port) E.A6.20.175 (starb.) E.A6.20.23 (port) E.A6.20.173 (starb.)	Trailing edge rib No. 2A, outer wing	0-05	0-75	0-005	1-00	0-25	24:1	
10	D.T.D.610	18	E.A6.20.23 (port) E.A6.20.173 (starb.) E.A6.20.139 (port) E.A6.20.140 (starb.)	Trailing edge rib No. 2, outer wing	0-05	1-00	0-005	1-00	0-25	32:1	
11 } 12 }	D.T.D.610	20	E.A6.20.139 (port) E.A6.20.140 (starb.) E.A6.20.141 (port) E.A6.20.142 (starb.)	Trailing edge rib No. 2B, outer wing	} 0-05	0-75	0-005	1-00	0-25	24:1	
13	D.T.D.610	18	E.A6.20.141 (port) E.A6.20.142 (starb.) E.A6.20.143 (port) E.A6.20.144 (starb.)	Trailing edge rib No. 3A, outer wing							
14	D.T.D.610	20	E.A6.20.143 (port) E.A6.20.144 (starb.) E.A1.20.3631 (port) E.A1.20.3632 (starb.)	Trailing edge rib No. 3, outer wing	0-05	1-00	0-005	1-00	0-25	32:1	
15	D.T.D.610	18	E.A1.20.3631 (port) E.A1.20.3632 (starb.) E.A1.20.3629	Nose rib 6B, outer wing	0-05	0-75	0-005	1-00	0-25	24:1	
16	D.T.D.213	16	E.A1.20.3989	Nose rib No. 6, outer wing	0-05	1-00	0-005	2-00	0-25	32:1	
17	D.T.D.546	14	E.A1.20.5341	Outboard end wall, outer wing	0-05	1-00	0-005	3-00	—	—	
18	D.T.D.610	20	E.A1.20.5341 E.A1.20.3903 E.A1.20.5241 E.A1.20.5251	Cantilever bracket	0-04	1-25	0-010	3-00	—	—	
			E.A1.20.5343 E.A1.20.3677 E.A1.20.5277 E.A1.20.5236	Forward nose rib No. 6A, outer wing	} 0-05	0-75	0-005	1-00	0-25	24:1	
19	D.T.D.546	14	E.A1.20.5241 E.A1.20.5251	Centre nose rib No. 6A, outer wing							
20	D.T.D.610	20	E.A1.20.5343 E.A1.20.3677 E.A1.20.5277 E.A1.20.5236	Aft nose rib No. 6A, outer wing	} 0-04	1-25	0-010	3-00	—	—	
			E.A1.20.5277 E.A1.20.5236	End shear beam assembly							
			E.A1.20.5236 E.A1.20.3515 (port) E.A1.20.3516 (starb.)	Forward nose rib No. 5B, outer wing	} 0-05	0-75	0-005	1-00	0-25	24:1	
21	D.T.D.610	18	E.A1.20.3515 (port) E.A1.20.3516 (starb.)	Centre nose rib No. 5B, outer wing							
22	D.T.D.546	14	E.A1.20.5337 E.A1.20.3993 E.A1.20.3995	Aft nose rib No. 5B, outer wing	} 0-05	0-75	0-005	1-00	0-25	24:1	
23	D.T.D.610	20	E.A1.20.5337 E.A1.20.3993 E.A1.20.3995 E.A1.20.3997	Forward nose rib No. 5A, outer wing							
			E.A1.20.3995 E.A1.20.3997 E.A1.20.5339 E.A1.20.3733	Centre nose rib No. 5A, outer wing	} 0-05	0-75	0-005	1-00	0-25	24:1	
24	D.T.D.546	20	E.A1.20.5339 E.A1.20.3733	Aft nose rib No. 5A, outer wing							
25	D.T.D.610	20	E.A1.20.3733 E.A1.20.3735 E.A1.20.3737	Centre nose rib No. 5A, outer wing	} 0-04	1-25	0-010	3-00	—	—	
			E.A1.20.3735 E.A1.20.3737	Forward nose rib No. 4B, outer wing							
			E.A1.20.3737 E.A1.20.3513 (port) E.A1.20.3514 (starb.)	Centre nose rib No. 4B, outer wing	} 0-05	0-75	0-005	1-00	0-25	24:1	
26	D.T.D.610	18	E.A1.20.3513 (port) E.A1.20.3514 (starb.)	Aft nose rib No. 4B, outer wing							
27	D.T.D.546	14	E.A1.20.5333 E.A1.20.3807 E.A1.20.3809	Nose rib No. 4, outer wing	} 0-05	1-00	0-005	1-00	0-25	32:1	
28	D.T.D.610	20	E.A1.20.5333 E.A1.20.3807 E.A1.20.3809 E.A1.20.3811	Cantilever bracket assembly							
			E.A1.20.3811 E.A1.20.5335 E.A1.20.3933 E.A1.20.3935	Forward nose rib No. 4, outer wing	} 0-05	0-75	0-005	1-00	0-25	24:1	
29	D.T.D.546	14	E.A1.20.3811 E.A1.20.5335 E.A1.20.3933 E.A1.20.3935	Centre nose rib No. 4, outer wing							
30	D.T.D.610	20	E.A1.20.3933 E.A1.20.3935 E.A1.20.3937 E.A1.20.3939	Aft nose rib No. 4, outer wing	} 0-04	1-25	0-010	3-00	—	—	
			E.A1.20.3935 E.A1.20.3937 E.A1.20.3939	Forward nose rib No. 3B, outer wing							
			E.A1.20.3937 E.A1.20.3939 E.A1.20.3511 (port) E.A1.20.3512 (starb.)	Centre nose rib No. 3B, outer wing	} 0-05	0-75	0-005	1-00	0-25	24:1	
31	D.T.D.610	18	E.A1.20.3937 E.A1.20.3939 E.A1.20.3511 (port) E.A1.20.3512 (starb.)	Aft nose rib No. 3B, outer wing							
32	D.T.D.546	14	E.A1.20.3511 (port) E.A1.20.3512 (starb.) E.A1.20.5337	Nose rib No. 3, outer wing	0-05	1-00	0-005	1-00	0-25	32:1	
			E.A1.20.5337	Centre shear beam assembly	0-04	1-25	0-010	3-00	—	—	

Note.—All dimensions are in inches.

(Key continued on following page)

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KEY TO FIG. 702 (MAIN PLANE STRUCTURE)—contd.

Item	Material		Part No.	Description	Negligible damage						Repair fig. No.	
	Spec.	S.W.G.			Dents		Scratches		Holes			
					Max. depth	Min. dia.	Depth	Spacing	Max. dia.	Pitch ratio		
33	D.T.D.610	20	E.A1.20.4067	Forward nose rib No. 3A, outer wing	}	0.05	0.75	0.005	1.00	0.25	24:1	
			E.A1.20.4069	Centre nose rib No. 3A, outer wing								
			E.A1.20.4071	Aft nose rib No. 3A, outer wing								
34	D.T.D.546	14	E.A1.20.5339	Centre shear beam	}	0.04	1.25	0.010	3.00	—	—	
35	D.T.D.610	20	E.A1.20.4173	Forward nose rib No. 2B, outer wing								
	D.T.D.610	20	E.A1.20.4175	Centre nose rib No. 2B, outer wing								
	D.T.D.610	18	E.A1.20.4177 (port)	Aft nose rib No. 2B, outer wing	}	0.05	0.75	0.005	1.00	0.25	24:1	
			E.A1.20.4178 (starb.)									
			E.A1.20.3987 (port)									
36	D.T.D.213	16	E.A1.20.3988 (starb.)	Assembly of inboard end wall, outer wing	}	0.05	1.00	0.005	3.00	—	—	
			E.A1.20.5345 (starb.)	End shear beam assembly								
			E.A1.20.4237 (port)									
37	D.T.D.546	14	E.A1.20.4238 (starb.)	Nose rib No. 2, outer wing	}	0.05	1.00	0.005	1.00	0.25	32:1	
38	D.T.D.610	18	E.A1.20.5331 (port)	Cantilever bracket assembly								
			E.A1.20.3775 (port)									
39	D.T.D.546	14	E.A1.20.3776 (starb.)	Nose rib No. 2A, outer wing	}	0.05	0.75	0.005	1.00	0.25	24:1	
40	D.T.D.610	20	E.A1.20.59 (port)	Nose rib No. 2, inner wing								
			E.A4.20.61 (starb.)									
			E.A2.20.21 (port)									
41	D.T.D.610	18	E.A1.20.6741 (starb.)	Nose rib No. 1, inner wing	}	0.05	1.00	0.005	1.00	0.25	32:1	
42												

Note.—All dimensions are in inches.

(CONTINUED OVERLEAF)

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(A.L. 51, June 58)

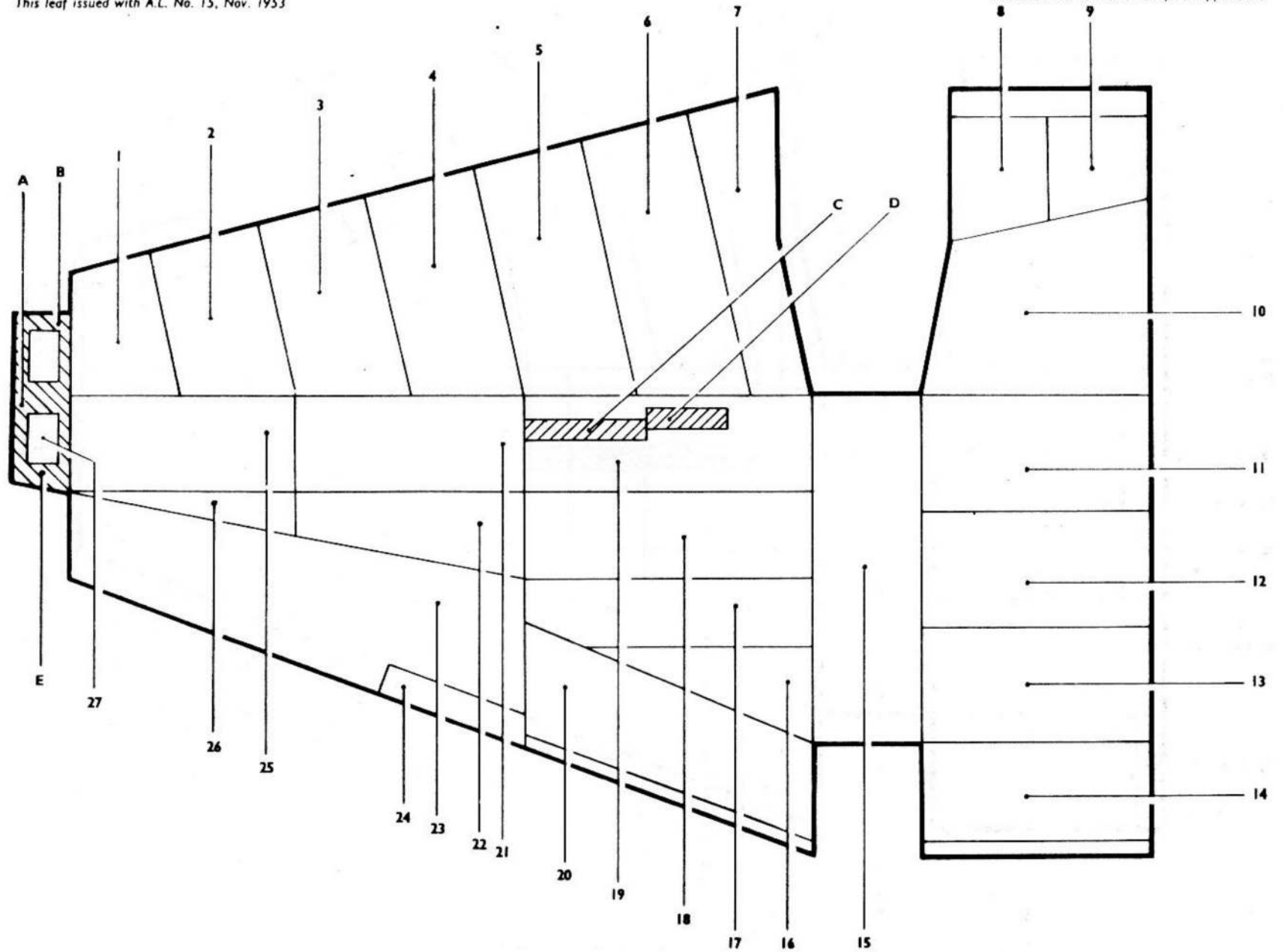


Fig. 703. Main plane skinning, upper surface

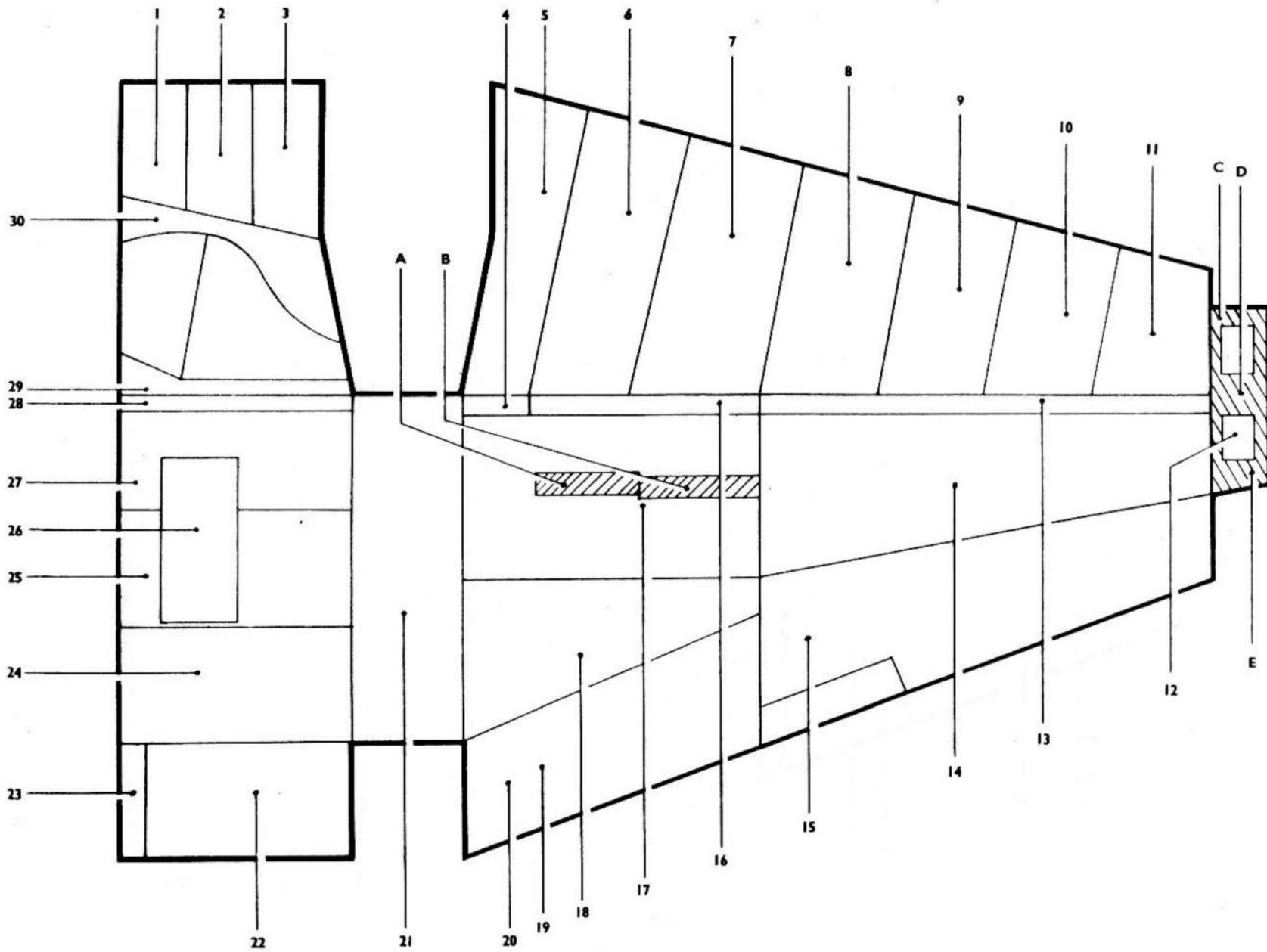


Fig. 704. Main plane skinning, lower surface

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KEY TO FIG. 704 (MAIN PLANE SKINNING, LOWER SURFACE)

Item	Material		Part No.	Description	Negligible damage						Repair fig. No.
	Spec.	S.W.G.			Scratches		Dents				
					Depth	Min. spacing	Max. depth	Max. width	Min. width	Min. spacing	
1	D.T.D.610	18	E.A1.20.1315 (port)	Panel assembly	0 005	1-00	0-07	4 50	1 00	6W	Chap. 1, fig. 5
2	L72	20	E.A2.20.51 (starb.)								
3	D.T.D.610	18	E.34.20.305 (port)	Skin panel	0 005	3 00	0 04	4 00	0 70	6W	Chap. 1, fig. 5
4	D.T.D.546	18	E.B7.20.127 (port)	Panel assembly	0 005	1 00	0 07	4 50	1 00	6W		14
5			E.A1.20.2233 (port)								
6			E.A1.20.2234 (starb.)								
7			E.A1.20.4235 (port)								
8			E.A1.20.4236 (starb.)								
9	E.A1.20.4413 (port)	14	E.A1.20.4414 (starb.)	Panel assembly, bay 1	0-010	6 00	0 03	6 00	1 20	4W	
10	E.A1.20.4415 (port)										
11	E.A1.20.4416 (starb.)										
12	E.A1.20.4417 (port)										
13	E.A1.20.4418 (starb.)										
14	E.A1.20.4419 (port)	18	E.A1.20.4420 (starb.)	Panel assembly, bay 2	0 005	1 00	0 05	4 50	1 00	6W	
15	E.A1.20.4421 (port)										
16	E.A3.20.1647 (port)										
17	E.A3.20.1649 (starb.)										
18	E.A1.20.133 (port)										
19	D.T.D.546	18	E.A1.20.1875 (port)	Panel assembly	0 005	1 00	0 05	4 50	1 00	6W	14
20	E.A1.20.1876 (starb.)										
21	D.T.D.610	24	E.A3.20.1799 (port)	Closing panel assembly	0 005	6 00	0 03	3 00	0 50	4W	27
22			E.A3.20.1800 (starb.)								
23			E.A3.20.2793 (port)								
24			E.A3.20.2794 (starb.)								
25			E.A1.24.515 (port)								
26	D.T.D.546	18	E.A1.24.516 (starb.)	Aileron lower panel	0 005	1 00	0 05	4 50	1 00	6W	14
27	E.A6.20.229 (port)										
28	D.T.D.610	22	E.A6.20.230 (starb.)	Closing panel assembly	0 005	3 00	0 05	4 00	1 00	4W	24 and Chap. 1, fig. 7
29			E.B6.20.687 (port)								
30			E.B6.20.688 (starb.)								
31			E.A3.20.2789 (port)								
32			E.A3.20.2790 (starb.)								
33	D.T.D.610	16	E.A1.25.115 (port)	Outboard flap upper panel	0 005	3 00	0 05	4 00	1 00	4W	Chap. 1, fig. 5
34	E.A1.25.116 (starb.)										
35	D.T.D.546	16	E.A1.25.117 (port)	Outboard flap lower panel	0 003	2 00	0 03	4 00	0 50	4W	15
36			E.A1.25.118 (starb.)								
37			E.A1.20.263 (port)								
38			E.A1.20.264 (starb.)								
39			E.A1.20.264 (starb.)								
40	D.T.D.610	22	E.A1.25.151 (port)	Nacelle panel	0 006	3 00	0 05	5 00	1 00	6W	15
41	E.A1.25.152 (starb.)										
42	D.T.D.610	22	E.A1.25.247 (starb.)	Inboard flap upper panel	0 005	3 00	0 05	4 00	1 00	4W	24 and Chap. 1, fig. 7
43			E.A1.25.248 (port)								
44			E.A1.25.237 (starb.)								
45			E.A1.25.237 (starb.)								
46			E.A1.20.7063 (port)								
47	D.T.D.610	20	E.A1.20.7064 (starb.)	Inboard flap lower panel	0-003	2 00	0 03	4 00	0 50	4W	Chap. 1, fig. 5
48	E.A1.20.7063 (port)										
49	D.T.D.546	16	E.A1.20.7064 (starb.)	Flap shroud panel	0 004	3 00	0 04	4 00	0 70	6W	23
50			E.A3.20.491 (port)								
51			E.A3.20.492 (starb.)								
52			E.A3.20.2035 (port)								
53			E.A3.20.2036 (starb.)								
54	Laminaced glass fibre	0-335 in.	E.A3.20.1947 (port)	Panel assemblies	0 006	3 00	0 05	5 00	1 00	6W	15
55	E.A3.20.1947 (starb.)										
56	D.T.D.546	16	E.A3.20.1947 (port)	Panel assembly	0 005	6 00	0 01	4 00	0 50	3W	15
57			E.A3.20.2033 (port)								
58			E.A3.20.2034 (starb.)								
59			E.A3.20.335 (port)								
60			E.A3.20.336 (starb.)								
61	D.T.D.610	18	E.A1.20.1321 (port)	Closing panel assembly	0-006	3 00	0 05	5 00	1 00	6W	15
62	E.A1.20.1322 (starb.)										
63	D.T.D.610	18	E.A1.20.3479 (port)	Panel assemblies	0 005	1 00	0 07	4 50	1 00	6W	15
64			E.A3.20.1795 (starb.)								
65			E.A1.20.9841 (port)								
66			E.A1.20.9842 (starb.)								
67			E.A1.20.9839 (port)								
68	D.T.D.546	18	E.A1.20.9853 (starb.)	Reinforcing plates	0-005	1 00	0 07	4 50	1 00	6W	
69	E.A1.20.9239 (port)										
70	D.T.D.546	18	E.A1.20.9239 (port)	Reinforcing plates	0-005	1 00	0 07	4 50	1 00	6W	15
71			E.A1.20.9240 (starb.)								
72			E.A1.20.9237 (port)								
73			E.A1.20.9238 (starb.)								
74			E.A1.20.7047 (port)								
75	E.A1.20.7048 (starb.)										

Note.—All dimensions are in inches. W, in min. spacing column—the least dimension of damage

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APPENDIX 3

B Mk. 15 & B Mk. 16 MAIN PLANE STRUCTURE

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Appendix 3 B MK.15 AND B MK.16 MAIN PLANE STRUCTURE

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Introduction

1. This Appendix illustrates the main-plane structure of the B Mk.15 and B Mk.16 in the same manner as the main chapter illustrates the B Mk.2 structure. Only that structure peculiar to the B Mk.15 and B Mk.16 is detailed; information which is common to other marks of aircraft, being already given elsewhere, is not repeated.

2. The figure numbers of all structure and repair schemes in this Appendix commence with the number 15. This is to distinguish them from similar illustrations and repair schemes peculiar to other marks of aircraft. Where an illustration is peculiar to either the B Mk.15 or B Mk.16, it is suitably annotated. Any reference, in the Repair Fig.No. column of the structure illustration keys, to a figure number lower than 1501 is to an illustration in Chapter 2.



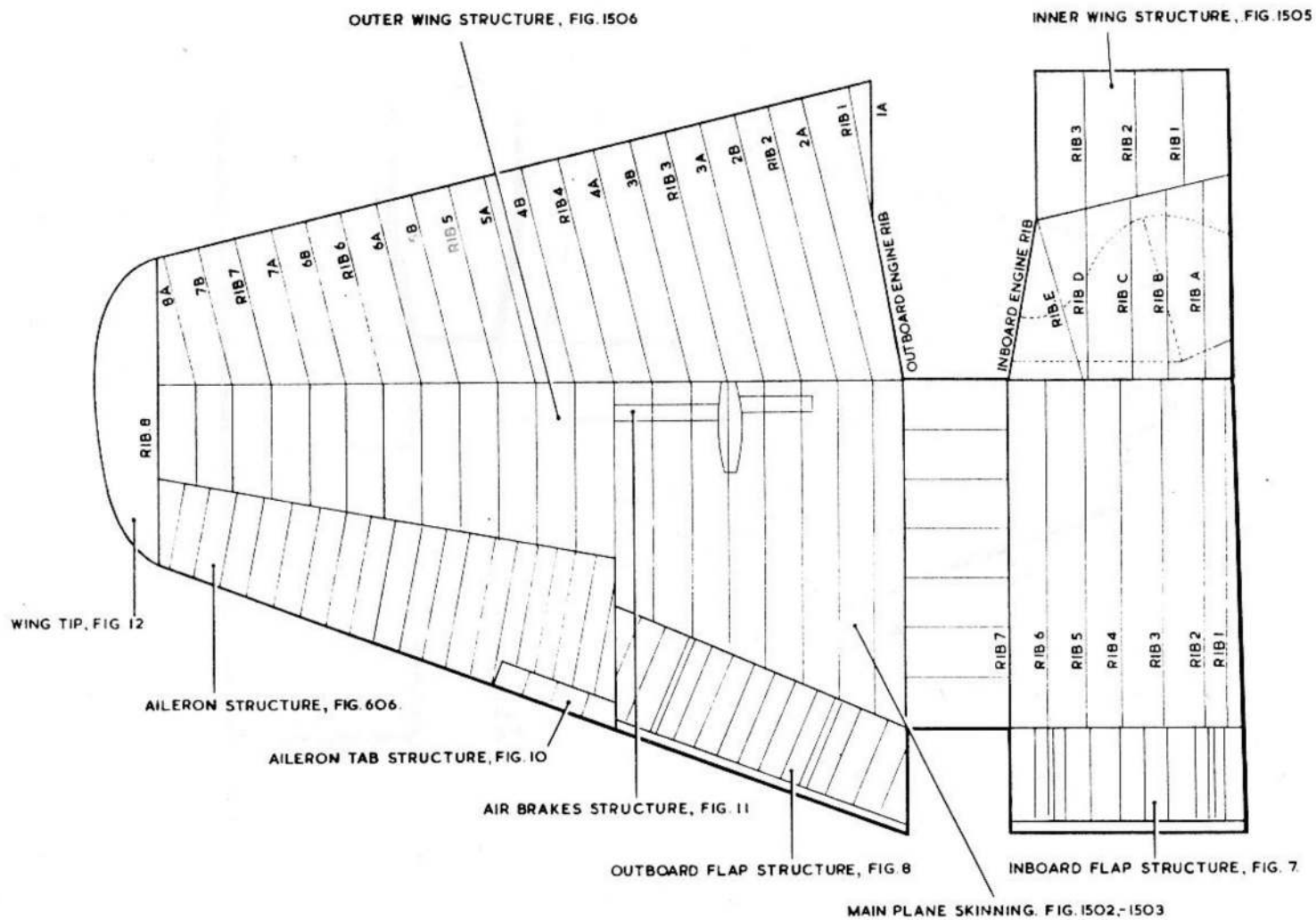


FIG. 1501. KEY DIAGRAM.

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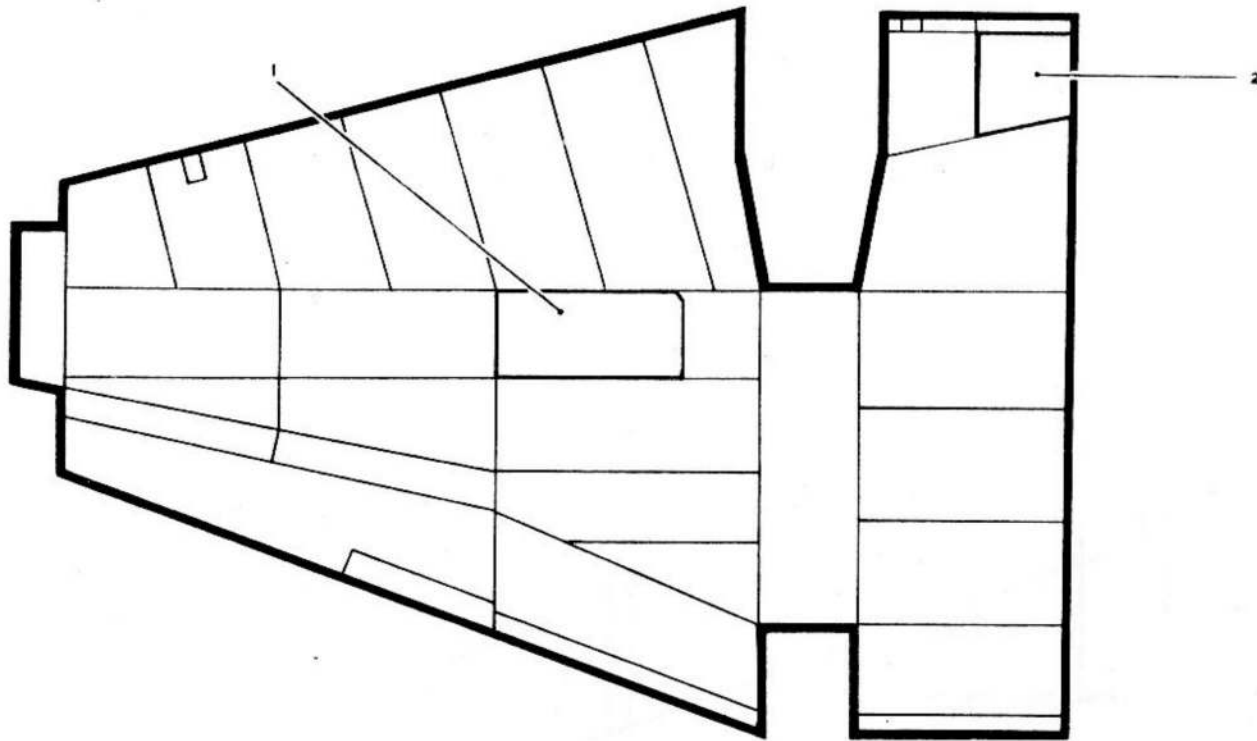


FIG. 1502. MAIN-PLANE SKINNING. UPPER SURFACE

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KEY TO FIG. 1502 (MAIN-PLANE SKINNING, UPPER SURFACE)

Material					Negligible Damage						Repair Fig.No.
Item	Spec.	S.W.G.	Part No.	Description	Scratches			Dents			
					Depth	Min. Spacing	Max. Depth	Max. Width	Min. Width	Min. Spacing	
1	L.72	20	E.B6.20.1173	Removable panel assy. (stbd.)..	0.005	2.00	0.05	4.50	1.00	6W	14
2	L.73	18	E.B6.20.1027	Skin panel.....	0.005	3.00	0.05	4.50	1.00	6W	

Note: - All dimensions are in inches

KEY TO FIG. 1503 (MAIN-PLANE SKINNING, LOWER SURFACE)

					Negligible Damage						
Material					Scratches			Dents			
Item	Spec.	S.W.G.	Part No.	Description	Depth	Min. Spacing	Max. Depth	Max. Width	Min. Width	Min. Spacing	Repair Fig.No.
1	L.72	18	E.B6.20.1171	Panel.....	0.005	1.00	0.07	4.50	1.00	6W	14
2	L.73	18	E.B6.20.1295	Closing panel (port).....	0.005	1.00	0.07	4.50	1.00	6W	
	L.73	18	E.B6.20.1296	Closing panel (stbd.).....	0.005	1.00	0.07	4.50	1.00	6W	
3	L.73	18	E.B6.20.1021	Panel (port).....	0.005	3.00	0.05	4.50	1.00	6W	
	L.73	18	E.B6.20.1023	Panel (stbd.).....	0.005	3.00	0.05	4.50	1.00	6W	
4	L.73	10	E.B6.20.1025	External reinforcing strap (port)....	0.012	3.00	0.02	3.00	0.50	4W	
	L.73	10	E.B6.20.1026	External reinforcing strap (stbd.)...	0.012	3.00	0.02	3.00	0.50	4W	
5	L.73	18	E.B6.20.1109	Panel.....	0.005	3.00	0.05	4.50	1.00	6W	

Note:- All dimensions are in inches. W, in min. column = the least dimension of damage

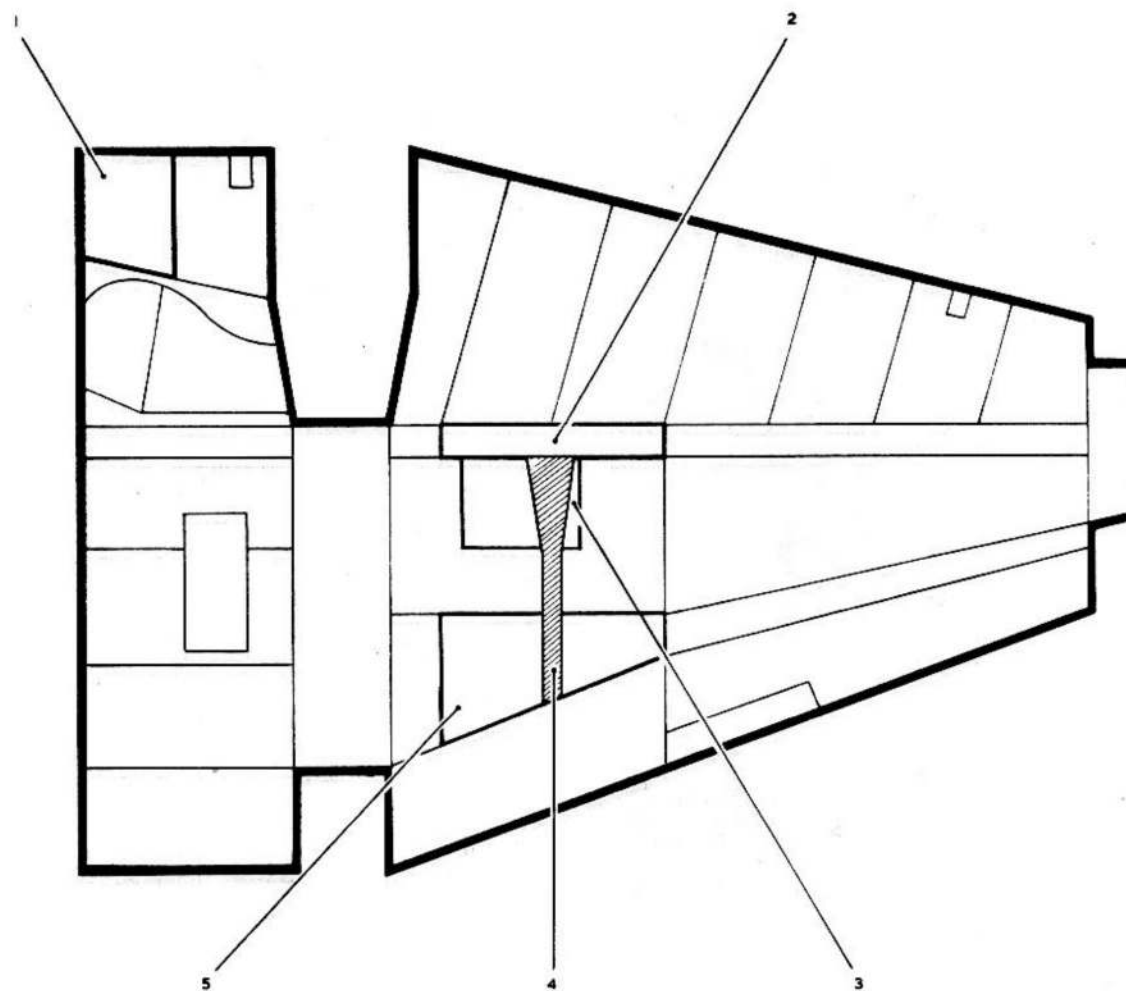


FIG. 1503. MAIN-PLANE SKINNING, LOWER SURFACE

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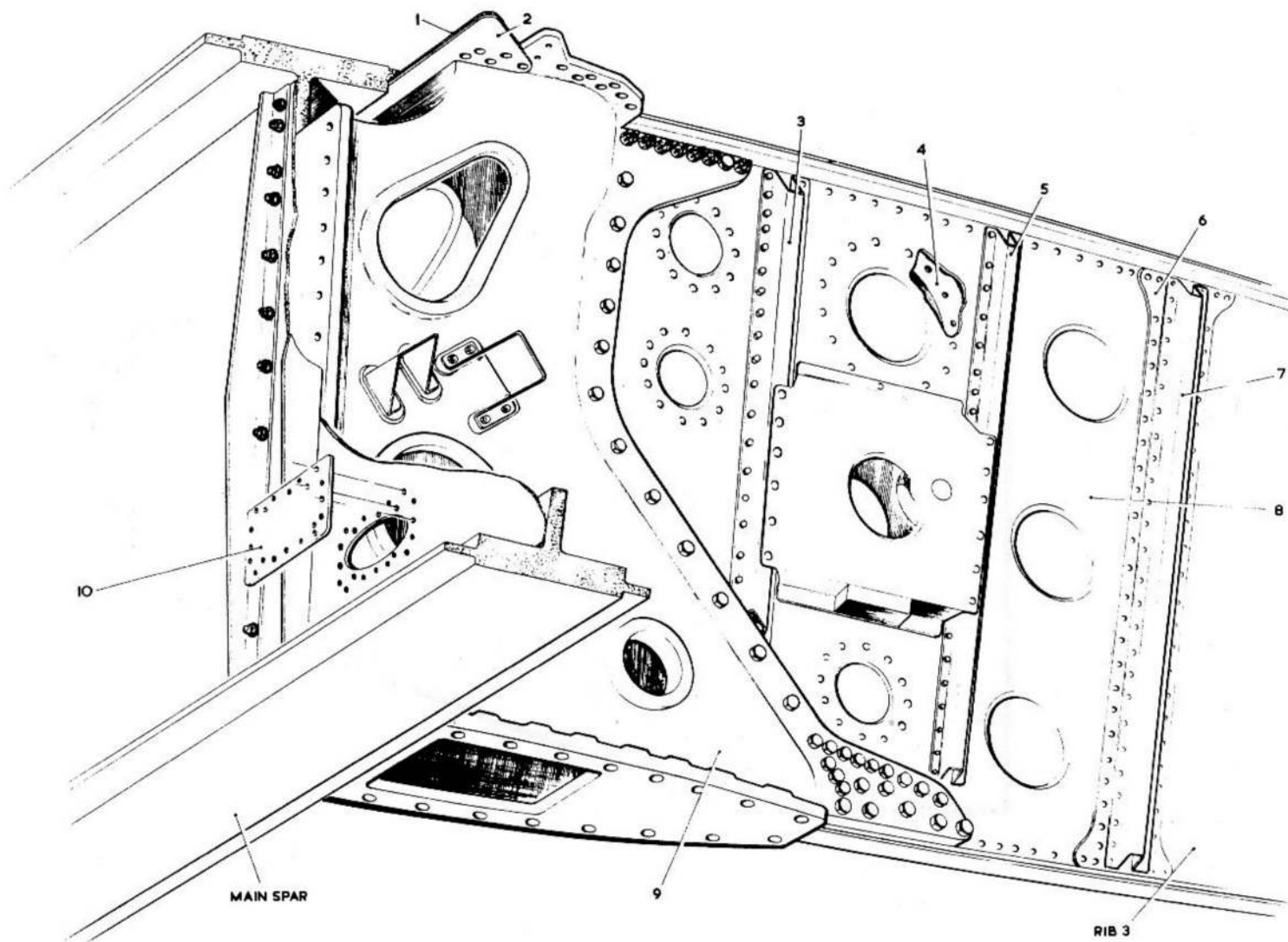


FIG. 1504. TRAILING EDGE RIB 3, AND PYLON CASTING

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KEY TO FIG. 1504 (TRAILING EDGE RIB 3, AND PYLON CASTING)

Item	Description	Part No.	Negligible Damage								Repairable Damage	Repair Fig.No.
			Material		Dents		Scratches		Holes			
			Spec.	S.W.G.	Max. Depth	Min. Dia	Depth	Spacing	Max. Dia	Pitch Ratio		
1	Packing piece.....	E.86.20.1393	L.72	10	0.01	1.00	0.010	6.00	0.20	50:1		
2	Gusset.....	E.86.20.1395	D.T.D.687	10	0.01	1.00	0.010	6.00	0.20	50:1		
3	Stiffener (port).....	E.86.20.1077	L.73	16	0.03	0.70	0.010	3.00	-	-		
	(stbd.).....	E.86.20.1078	L.73	16	0.03	0.70	0.010	3.00	-	-		
4	Web reinforcing plate (port).....	E.86.20.1037	L.73	14	0.04	1.00	0.010	6.00	0.25	24:1		
	(stbd.).....	E.86.20.1038	L.73	14	0.04	1.00	0.010	6.00	0.25	24:1		
5	Stiffener.....	E.86.20.1075	L.73	16	0.03	0.70	0.010	3.00	-	-		
6	Butt strap.....	E.86.20.1039	L.73	16	0.03	0.70	0.010	3.00	-	-		
7	Stiffener.....	E.86.20.1079	L.73	20	0.04	0.70	0.010	2.00	0.25	24:1		
8	Replacement web (port).....	E.86.20.1035	L.73	18	0.05	1.00	0.010	2.00	0.25	32:1		
	(stbd.).....	E.86.20.1036	L.73	18	0.05	1.00	0.010	2.00	0.25	32:1		
9	Casting for pylon suspension (port)....	E.86.20.877	L.53	-	0.03	0.60	0.020	2.00	0.20	30:1		
	(stbd.)..	E.86.20.878	L.53	-	0.03	0.60	0.020	2.00	0.20	30:1		
10	Cover plate.....	E.A9.20.3469	D.T.D.687	8	0.01	1.00	0.010	6.00	0.15	50:1		17

Note:- All dimensions are in inches

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KEY TO FIG. 1505 (CENTRE WING - RIBS STRUCTURE (B MK. 16))

Item	Description	Part No.	Negligible Damage								Repair Fig.No.
			Material		Dents		Scratches		Holes		
			Spec.	S.W.G.	Max. Depth	Min. Dia	Depth	Spacing	Max. Dia	Pitch Ratio	
1	Stiffener (port).....	E. B6. 71. 355	L. 72	18	0.05	1.00	0.005	1.00	0.25	32:1	} Chap. 1, fig. 4 & 7
	Stiffener (stbd.).....	E. B6. 71. 356	L. 72	18	0.05	1.00	0.005	1.00	0.25	32:1	
2	Stiffener (port).....	E. B6. 71. 357	L. 72	18	0.05	1.00	0.005	1.00	0.25	32:1	
	Stiffener (stbd.).....	E. B6. 71. 358	L. 72	18	0.05	1.00	0.005	1.00	0.25	32:1	
3	Stiffener.....	E. B6. 71. 343	L. 72	18	0.05	1.00	0.005	1.00	0.25	32:1	
4	Stiffener (port).....	E. B6. 71. 359	L. 72	18	0.05	1.00	0.005	1.00	0.25	32:1	
	Stiffener (stbd.).....	E. B6. 71. 360	L. 72	18	0.05	1.00	0.005	1.00	0.25	32:1	
5	Stiffener (port).....	E. B6. 71. 397	L. 72	18	0.05	1.00	0.005	1.00	0.25	32:1	
	Stiffener (stbd.).....	E. B6. 71. 398	L. 72	18	0.05	1.00	0.005	1.00	0.25	32:1	
6	Stiffener (port).....	E. B6. 71. 395	L. 72	18	0.05	1.00	0.005	1.00	0.25	32:1	
	Stiffener (stbd.).....	E. B6. 71. 396	L. 72	18	0.05	1.00	0.005	1.00	0.25	32:1	
7	Plate.....	E. B6. 71. 361	L. 72	18	0.05	1.00	0.005	1.00	0.25	32:1	
8	Stiffener (port).....	E. B6. 71. 369	L. 72	18	0.05	1.00	0.005	1.00	0.25	32:1	
	Stiffener (stbd.).....	E. B6. 71. 370	L. 72	18	0.05	1.00	0.005	1.00	0.25	32:1	
9	Stiffener (port).....	E. B6. 71. 371	L. 72	18	0.05	1.00	0.005	1.00	0.25	32:1	
	Stiffener (stbd.).....	E. B6. 71. 372	L. 72	18	0.05	1.00	0.005	1.00	0.25	32:1	
10	Attachment plate.....	E. B6. 71. 553	L. 72	18	0.05	1.00	0.005	1.00	0.25	32:1	
11	Attachment plate.....	E. B6. 71. 555	L. 72	18	0.05	1.00	0.005	1.00	0.25	32:1	
12	Stiffener (port).....	E. B6. 71. 379	L. 72	18	0.05	1.00	0.005	1.00	0.25	32:1	
	Stiffener (stbd.).....	E. B6. 71. 380	L. 72	18	0.05	1.00	0.005	1.00	0.25	32:1	
13	Rib 6, trailing edge, inner wing (port)...	E. G5. 20. 43	L. 72	18	0.05	1.00	0.005	1.00	0.25	40:1	
	Rib 6, trailing edge, inner wing (stbd.)..	E. G5. 20. 44	L. 72	18	0.05	1.00	0.005	1.00	0.25	40:1	
14	Channel (port).....	E. B6. 71. 387	L. 72	18	0.05	1.00	0.005	1.00	0.25	32:1	
	Channel (stbd.).....	E. B6. 71. 388	L. 72	18	0.05	1.00	0.005	1.00	0.25	32:1	
15	Rib 5, trailing edge, inner wing (port)...	E. G5. 20. 41	L. 72	20	0.04	0.70	0.005	1.00	0.25	40:1	
	Rib 5, trailing edge, inner wing (stbd.)..	E. G5. 20. 42	L. 72	20	0.04	0.70	0.005	1.00	0.25	40:1	
16	Channel (port).....	E. B6. 71. 385	L. 72	18	0.05	1.00	0.005	1.00	0.25	32:1	
	Channel (stbd.).....	E. B6. 71. 386	L. 72	18	0.05	1.00	0.005	1.00	0.25	32:1	

Note:- All dimensions are in inches

continued...

KEY TO FIG. 1505 (CENTRE WING - RIBS STRUCTURE (B MK. 16)) - continued

Item	Description	Part No.	Negligible Damage								Repair Fig.No.
			Material		Dents		Scratches		Holes		
			Spec.	S.W.G.	Max. Depth	Min. Dia	Depth	Spacing	Max. Dia	Pitch Ratio	
17	Rib 4, trailing edge inner wing (port)..	E.G5.20.39	-	-	-	-	-	-	-	-	} Chap.1 fig.4 & 7
	comprising:- (stbd.).	E.G5.20.40	-	-	-	-	-	-	-	-	
	Web plate forward (port).....	E.A9.20.755	L.73	14	0.04	1.00	0.010	6.00	0.25	24:1	
	(stbd.).....	E.A1.20.9410	L.73	14	0.04	1.00	0.010	6.00	0.25	24:1	
	Web plate centre (port).....	E.A1.20.9411	L.72	20	0.05	0.75	0.005	6.00	0.25	24:1	
	(stbd.).....	E.A1.20.9412	L.72	20	0.05	0.75	0.005	6.00	0.25	24:1	
18	Web plate aft (port).....	E.A1.20.9413	L.72	22	0.02	0.75	0.005	6.00	0.15	40:1	}
	(stbd.).....	E.A1.20.9414	L.72	22	0.02	0.75	0.005	6.00	0.15	40:1	
18	Channel (port).....	E.B6.71.383	L.72	18	0.05	1.00	0.005	1.00	0.25	32:1	}
	(stbd.).....	E.B6.71.384	L.72	18	0.05	1.00	0.005	1.00	0.25	32:1	
19	Rib 3, trailing edge, inner wing (port)..	E.G5.20.35	L.72	20	0.04	0.70	0.005	1.00	0.25	24:1	} Chap.1, fig.4 & 7
	(stbd.).	E.G5.20.36	L.72	20	0.04	0.70	0.005	1.00	0.25	24:1	
20	Stiffener (port).....	E.B6.71.395	L.72	18	0.05	1.00	0.005	1.00	0.25	32:1	}
	(stbd.).....	E.B6.71.396	L.72	18	0.05	1.00	0.005	1.00	0.25	32:1	
21	Stiffener.....	E.B6.71.339	L.72	18	0.05	1.00	0.005	1.00	0.25	32:1	}
	(port).....	E.B6.71.353	L.72	18	0.05	1.00	0.005	1.00	0.25	32:1	
22	Stiffener (stbd.).....	E.B6.71.354	L.72	18	0.05	1.00	0.005	1.00	0.25	32:1	}
	(port).....	E.B6.71.351	L.72	18	0.05	1.00	0.005	1.00	0.25	32:1	
23	Stiffener (stbd.).....	E.B6.71.352	L.72	18	0.05	1.00	0.005	1.00	0.25	32:1	}
	(port).....	E.B6.71.329	L.72	18	0.05	1.00	0.005	1.00	0.25	32:1	
24	Stiffener.....	E.B6.71.349	L.72	18	0.05	1.00	0.005	1.00	0.25	32:1	}
	(port).....	E.B6.71.349	L.72	18	0.05	1.00	0.005	1.00	0.25	32:1	
25	Stiffener (stbd.).....	E.B6.71.350	L.72	18	0.05	1.00	0.005	1.00	0.25	32:1	}
	(port).....	E.B6.71.350	L.72	18	0.05	1.00	0.005	1.00	0.25	32:1	

Note:- All dimensions are in inches

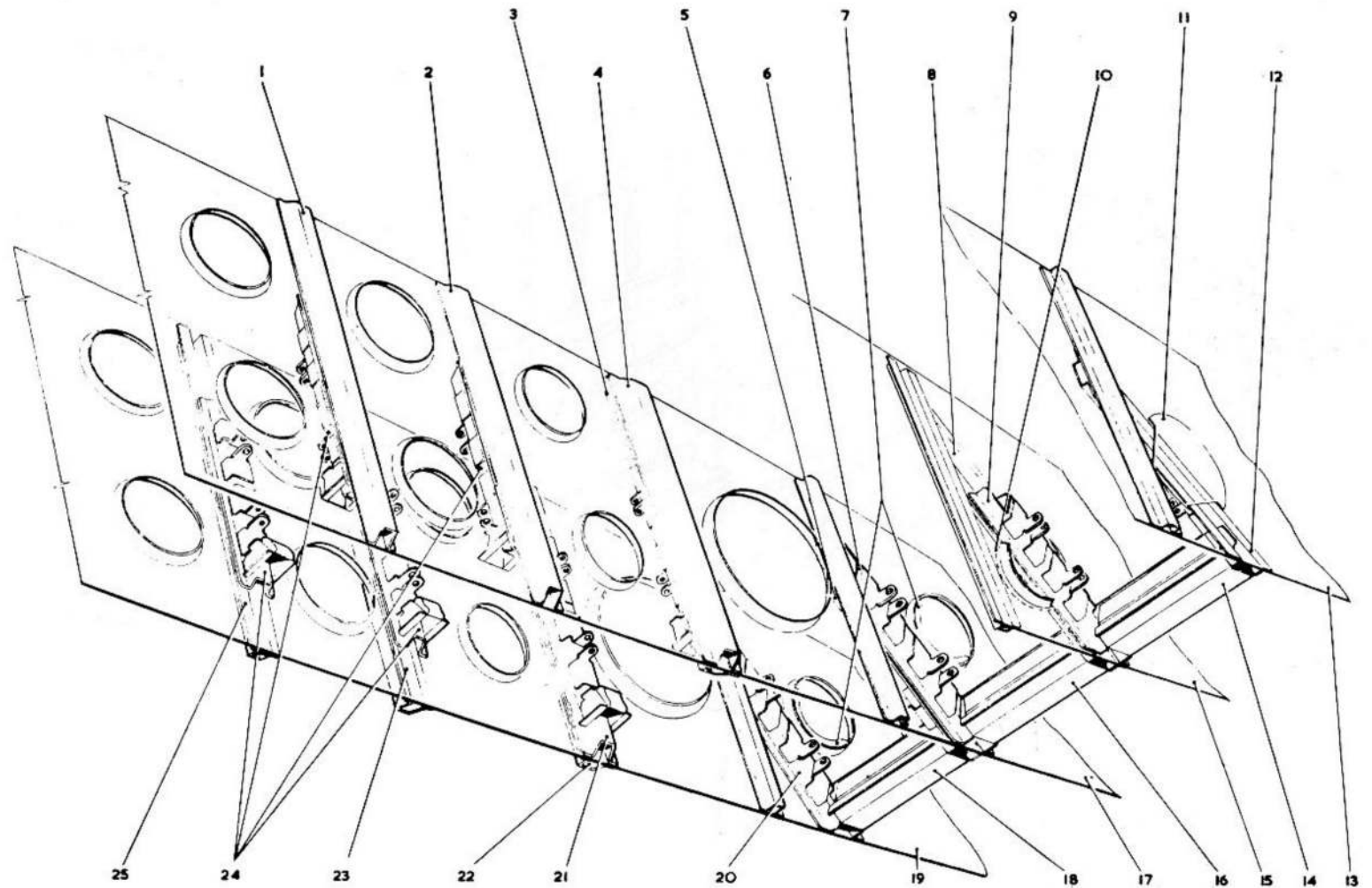


FIG. 1505 .CENTRE WING - RIBS STRUCTURE (B Mk.16)

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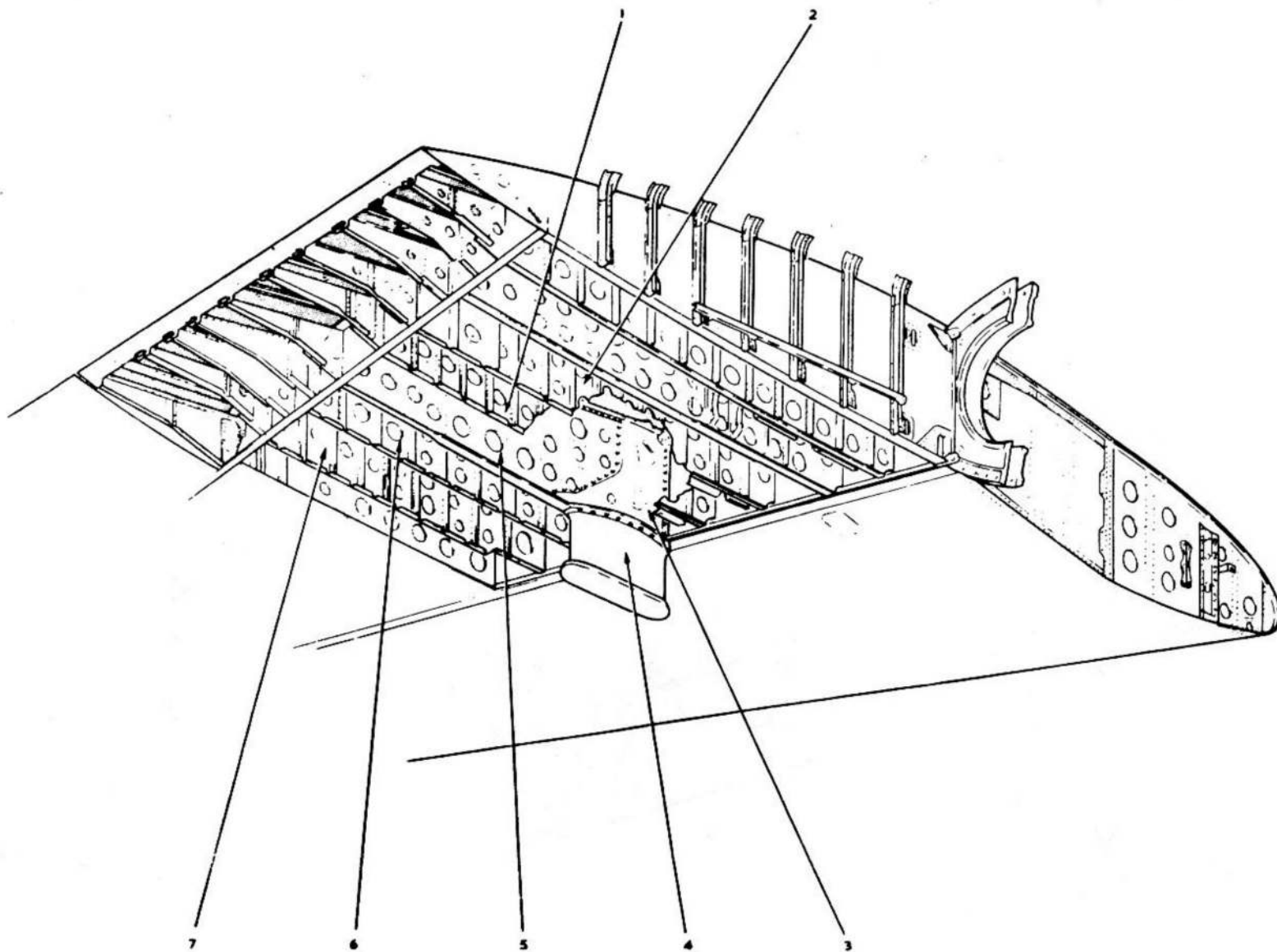


FIG. 1506. OUTER WING STRUCTURE

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KEY TO FIG. 1506 (OUTER WING STRUCTURE)

Item	Description	Part No.	Negligible Damage									Repairable Damage	Repair Fig.No.
			Material		Dents		Scratches		Holes				
			Spec.	S.W.G.	Max. Depth	Min. Dia	Depth	Spacing	Max. Dia	Pitch Ratio			
1	Trailing edge rib 3A (port).....	E. B6.20.1127	L.72	20	0.04	0.70	0.010	2.00	0.25	24:1	}	Chap.1 fig.4 & 7	
	(stbd.).....	E. B6.20.1128	L.72	20	0.04	0.70	0.010	2.00	0.25	24:1			
2	Trailing edge rib 2B (port).....	E. B6.20.1087	L.72	20	0.04	0.70	0.010	2.00	0.25	24:1			
	(stbd.).....	E. B6.20.1088	L.72	20	0.04	0.70	0.010	2.00	0.25	24:1			
3	Casting for pylon suspension (port).....	E. B6.20.877	L.53	-	0.03	0.60	0.020	2.00	0.20	30:1			
	(stbd.).....	E. B6.20.878	L.53	-	0.03	0.60	0.020	2.00	0.20	30:1			
4	External store pylon (port).....	E. A9.97.453	D.T.D.721	-	0.03	0.60	0.020	2.00	-	-			
	(stbd.).....	E. A9.97.455	D.T.D.721	-	0.03	0.60	0.020	2.00	-	-			
5	Trailing edge rib 3 (port).....	E. B6.20.1033	L.72	18	0.05	1.00	0.010	2.00	0.25	32:1		}	Chap.1 fig.4 & 7
	(stbd.).....	E. B6.20.1034	L.72	18	0.05	1.00	0.010	2.00	0.25	32:1			
6	Trailing edge rib 3B (port).....	E. B6.20.1041	L.72	20	0.05	0.75	0.010	2.00	0.25	24:1			
	(stbd.).....	E. B6.20.1042	L.72	20	0.05	0.75	0.010	2.00	0.25	24:1			
7	Trailing edge rib 4A (port).....	E. B6.20.1093	L.72	20	0.05	0.75	0.010	2.00	0.25	24:1			
	(stbd.).....	E. B6.20.1094	L.72	20	0.05	0.75	0.010	2.00	0.25	24:1			

Note: - All dimensions are in inches

KEY TO FIG. 1507 (CONDUITS IN WING)

Item	Description	Part No.	Material		Dents		Negligible Damage		Holes		Repair Fig.No.
			Spec.	S.W.G.	Max. Depth	Min. Dia	Scratches		Max. Dia	Pitch Ratio	
							Depth	Spacing			
1	Rib 1, outer wing (port).....	E.G4.20.79	L.73	16	0.03	0.70	0.010	3.00	-	-	
	(stbd.).....	E.G4.20.80	L.73	16	0.03	0.70	0.010	3.00	-	-	
2	Support angle.....	E.B6.20.1215	L.72	20	0.03	0.50	0.010	1.00	-	-	
3	Reinforcing plate.....	E.B6.20.1143	L.73	10	0.01	3.00	0.02	3.00	-	-	
4	Rib 7, centre wing (port).....	E.G4.20.73	L.73	16	0.03	0.70	0.010	2.00	-	-	
	(stbd.).....	E.G4.20.74	L.73	16	0.03	0.70	0.010	2.00	-	-	

Note:- All dimensions are in inches

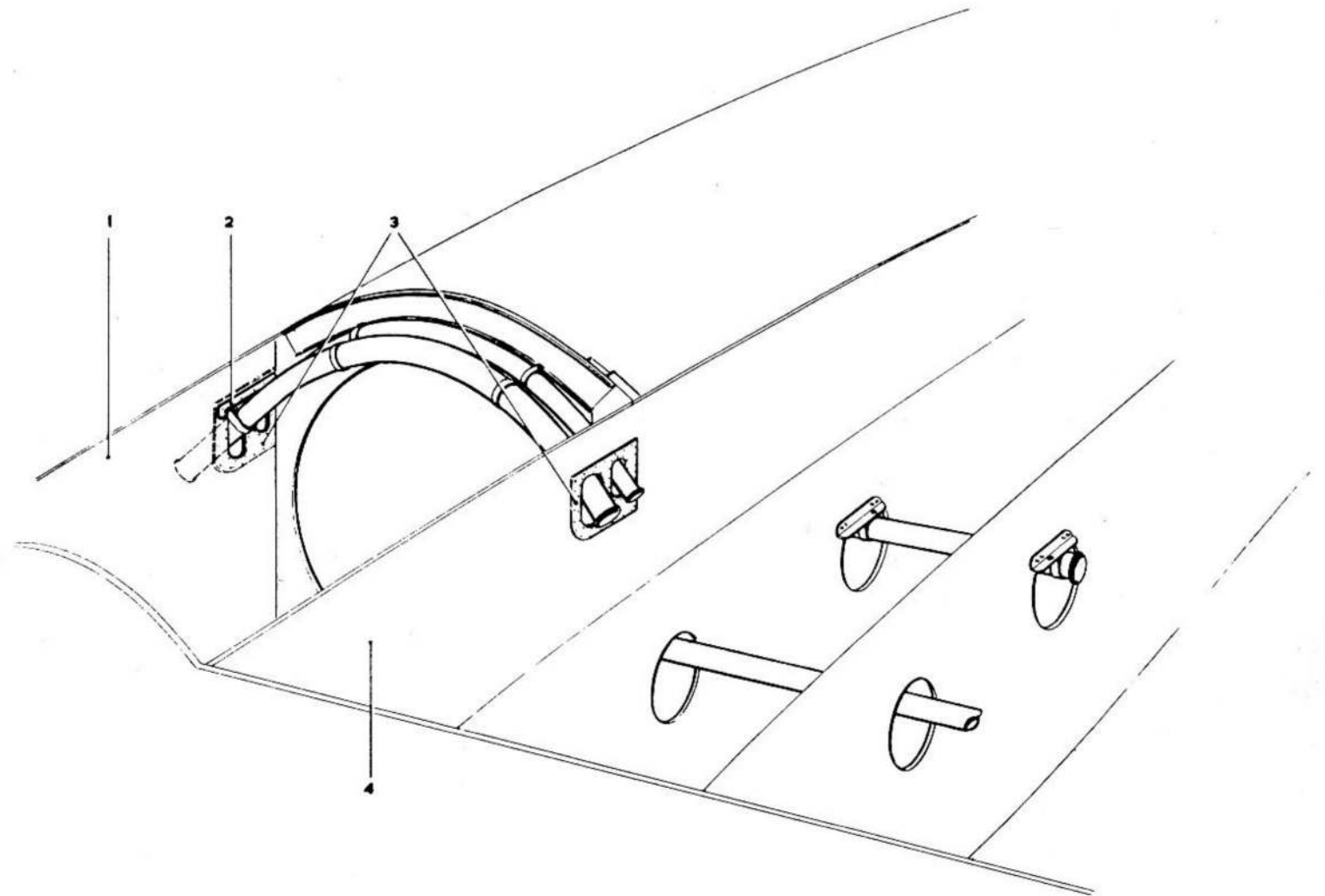


FIG. 1507. CONDUITS IN WING

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APPENDIX 4

CANBERRA PR9

MAIN PLANE STRUCTURE

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KEY TO FIG.904 (MAIN PLANE SKINNING, LOWER SURFACE)

Item	Material		Part No.	Description	Negligible damage						Repair fig.No.
	Spec.	S.W.G.			Scratches		Dents				
					Depth	Spacing	Max. depth	Max. width	Min. width	Min. spacing	
1	L.72	20	E.B8.20.2867	Skin panel, flap shroud, port	0.004	3.00	0.04	4.00	0.70	6W	23
	L.72	20	E.B8.20.2868	Skin panel, flap shroud, starboard	0.004	3.00	0.04	4.00	0.70	6W	23
2	DTD.546	16	E.A3.20.491/2	Skin panel assembly, P/S	0.006	3.00	0.05	5.00	1.00	6W	15
3	DTD.546	16	E.A3.20.2035/6	Skin panel assembly, P/S	0.006	3.00	0.05	5.00	1.00	6W	15
4	DTD.546	16	E.A3.20.2033/4	Skin panel assembly, P/S	0.006	3.00	0.05	5.00	1.00	6W	15
5	DTD.546	16	E.A3.20.355/6	Closing panel P/S	0.006	3.00	0.05	5.00	1.00	6W	15
6	DTD.610	18	E.A1.20.1321/2	Skin panel at spar P/S	0.010	2.00	0.08	5.00	1.00	6W	Ch.1, fig.5
7	L.73	18	E.B8.20.157	Skin panel assembly, port	0.005	1.00	0.05	4.50	1.00	6W	14
	L.73	18	E.B8.20.165	Skin panel assembly, starboard	0.005	1.00	0.05	4.50	1.00	6W	14
8	L.73	18	E.B8.20.159/60	Skin panel assembly P/S	0.005	1.00	0.05	4.50	1.00	6W	14
9	L.73	18	E.B8.20.161/2	Leading edge skin assembly P/S	0.005	1.00	0.05	4.50	1.00	6W	14
10	DTD.546	18	E.B7.20.73/74	Skin panel assembly P/S	0.005	1.00	0.05	4.50	1.00	6W	14
11	DTD.546	12	E.B7.20.71/2	Removable panel P/S	0.010	3.00	0.04	2.50	1.00	6W	R.M.E.
12	L.73	14	E.B6.20.835/6	Skin assembly, tank bay 2 P/S	0.010	6.00	0.03	6.00	1.20	4W	
13	L.73	14	E.B6.20.843/4	Skin assembly, tank bay 3 P/S	0.010	6.00	0.03	6.00	1.20	4W	
14	L.73	14	E.B6.20.849/50	Skin assembly, tank bay 4 P/S	0.010	6.00	0.03	6.00	1.20	4W	
15	L.73	14	E.B6.20.9231/2	Skin assembly, tank bay 5 P/S	0.010	6.00	0.03	6.00	1.20	4W	
16	DTD.546	18	E.A3.20.1649/51	Skin assembly, bay 6 P/S	0.005	1.00	0.05	4.50	1.00	6W	14
17	DTD.546	18	E.A3.20.1433	Skin assembly, bay 7 P/S	0.005	1.00	0.05	4.50	1.00	6W	14
18	L.73	18	E.A8.20.1161/2	Reinforcing plate P/S	0.005	1.00	0.05	4.50	1.00	6W	14
19	L.72	18	E.B8.20.1041	Leading edge skin (fig.903 item 19)	0.005	1.00	0.05	4.50	1.00	6W	14
20	L.73	18	E.B8.20.5149	Reinforcing plate	0.005	1.00	0.05	4.50	1.00	6W	14
21	L.73	18	E.B8.20.1297/8	Main plane extension skin assembly P/S	0.005	1.00	0.05	4.50	1.00	6W	14
22	L.72	20	E.B8.20.1081/2	Skin panel assembly T/E P/S	0.004	3.00	0.04	4.00	0.70	6W	23
23	L.73	18	E.B8.20.2433/4	Closing panel P/S	0.005	1.00	0.05	4.50	1.00	6W	14
24	DTD.546	18	E.B8.20.647/8	Skin panel assembly P/S	0.005	1.00	0.05	4.50	1.00	6W	14
25	L.72	22	E.B8.20.2125/6	Aileron shroud assembly P/S	0.003	2.00	0.03	4.00	0.50	4W	Ch.1, fig.5
26	L.72	22	E.B8.20.2247/8	Aileron shroud assembly P/S	0.003	2.00	0.03	4.00	0.50	4W	Ch.1, fig.5
27	L.73	18	E.A9.20.2763/4	Closing panel P/S	0.005	1.00	0.05	4.50	1.00	6W	14
28	L.73	18	E.A9.20.411/2	Skin panel assembly P/S	0.005	1.00	0.05	4.50	1.00	6W	14
29	L.73	18	E.A9.20.419/20	Skin panel assembly P/S	0.005	1.00	0.05	4.50	1.00	6W	14
30	DTD.546	18	E.A1.20.2233/4	Closing panel P/S	0.005	1.00	0.05	4.50	1.00	6W	R.M.E.
31	DTD.546	16	E.B8.20.3959	Nacelle skin	0.006	3.00	0.05	5.00	1.00	6W	15

Note:- All dimensions are in inches W, in min. spacing column = the least dimension of damage

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KEY TO FIG.905 (AILERON STRUCTURE)

Item	Material		Part No.	Description	Negligible damage						Repair fig.No.	
	Spec.	S.W.G.			Dents		Scratches		Holes			
					Max. depth	Min. dia	Depth	Spacing	Max. dia	Pitch ratio		
1	L.72	24	E.B8.24.19/20	Skin assembly, top inboard	0.030	0.50	0.005	6.00			Ch.3, fig.27	
2	L.72	22	E.B8.24.127/8	End rib No.1 assembly	0.040	0.50	0.005	3.00			Ch.1, fig.5	
3	L.72	24	E.B8.24.133/4	Rib web Typical trailing	0.030	0.50	0.005	5.00	0.200	20:1	Ch.3, fig.28	
	EEJ51 L.72			Angle edge rib assembly	0.030	0.50	0.005	3.00			Ch.3, fig.28	
4	L.73	20	E.B8.24.15/16	Rib 11A Angle 18 swg.	0.040	0.50	0.005	3.00	0.150	14:1		
	L.73	20	E.B8.24.17/18	Rib 11 double rib	0.040	0.50	0.005	3.00				
	L.73	20	E.B8.24.13/14	Rib 11B Angle 18 swg.	0.040	0.50	0.005	3.00				
5	L.59	18	E.B8.24.167/8	Rear fairing inboard	0.060	0.50	0.015	3.00			R.M.E.	
	L.59	18	E.B8.24.169/70	Rear fairing outboard	0.060	0.50	0.015	2.00			R.M.E.	
6	L.72	24	E.B8.24.71/2	Skin assembly, top outboard	0.030	0.50	0.005	6.00			Ch.3, fig.27	
7	DTD.610	24	E.A1.24.31/2	Rib web	0.030	0.50	0.005	3.00	0.200	20:1	Ch.3, fig.28	
	L.72	22	E.B8.24.31/2	Angle typical assembly	0.030	0.50	0.005	3.00			Ch.3, fig.28	
8	L.72	24	E.B8.24.21/2	Skin assembly, bottom	0.030	0.50	0.005	6.00			Ch.3, fig.27	
9	DTD.610	22	E.A1.24.147/8	End rib No.20 assembly	0.040	0.50	0.005	3.00			Ch.1, fig.5	
10	L.72	18	E.B8.24.75/6	Beak skin, top	0.050	0.75	0.005	5.00			Ch.1, fig.5	
11	L.72	18	E.B8.24.77/8	Beak skin, bottom	0.050	0.75	0.005	3.00			Ch.1, fig.5	
12	DTD.610	16	E.A1.24.731/2	Spar, outboard	0.050	1.00	0.005	3.00	0.200	30:1		
13	DTD.610	20		Nose rib web	0.040	0.50	0.005	3.00					R.M.E.
	DTD.610	22	E.A3.24.39	Nose rib stiffener typical assembly	0.030	0.50	0.005	3.00	0.200	20:1	R.M.E.	
14	L.72	20		Web, nose rib No.12	0.040	0.50	0.005	3.00			R.M.E.	
	L.72	18	E.B8.24.57/8	Stiffener	0.050	0.75	0.005	2.00			R.M.E.	
15	L.45		E.B8.24.5/6	Jack pick-up bracket			0.010	2.00			R.M.E. in jig	
	S.95		E.B8.20.4433	Aileron centre hinge			0.010	2.00			R.M.E. in jig	
16	L.72	20		Web, nose rib No.10	0.040	0.50	0.005	3.00			R.M.E.	
	L.72	18	E.B8.24.51/2	Stiffener	0.050	0.75	0.005	2.00			R.M.E.	
17	L.72	16	E.B8.24.123/4	Spar, inboard	0.050	1.00	0.005	3.00	0.200	30:1		
18	DTD.300		E.A9.24.103/4	Hinge bracket assembly			0.010	2.00				R.M.E. in jig

Note:- All dimensions are in inches

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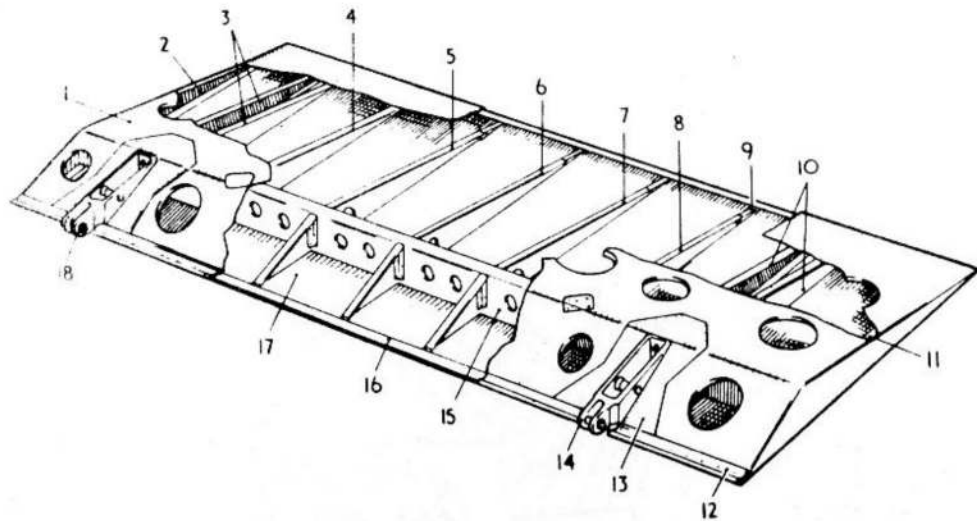


Fig. 906 Inboard flap structure

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KEY TO FIG. 906 (INBOARD FLAP STRUCTURE)

Item	Material Spec. S.W.G.		Part No.	Description	Negligible damage						Repair fig.No.
					Dents		Scratches		Holes		
					Max. depth	Min. dia	Depth	Spacing	Max. dia	Pitch ratio	
1	L. 72	22	E.B8.25.103	Skin, top port flap	0.05	1.00	0.005	3.00	0.20	20:1	Ch. 3, fig. 24, & Ch. 1, fig. 7
	L. 72	22	E.B8.25.105	Skin, top starboard flap	0.05	1.00	0.005	3.00	0.20	20:1	Ch. 3, fig. 24, & Ch. 1, fig. 7
2	DTD. 610	22	E.A1.25.53/4	End ribs P/S	0.05	1.00	0.005	1.00	0.20	20:1	R.M.E.
3	DTD. 610	18	E.A1.25.57	Hinge ribs P/S	0.05	1.00	0.005	3.00	0.20	30:1	
4	DTD. 610	24									
5	DTD. 610	24									
6	DTD. 610	24	E.A1.25.55/6	Intermediate ribs P/S	0.05	0.75	0.005	2.00	0.20	20:1	Ch. 3, fig. 25
7	DTD. 610	24									
8	DTD. 610	24									
9	L.F.S.		E.B8.25.1/2	Packing blocks	0.05	1.00					R.M.E.
10	DTD. 610	18	E.A1.25.57	Hinge ribs P/S	0.05	1.00	0.005	3.00	0.20	30:1	
11	DTD. 610	22	E.A1.25.53/4	End ribs P/S	0.05	1.00	0.005	1.00	0.20	20:1	R.M.E.
12	EEDX181		E.B8.25.1/2	Leading edge stiffener	0.05	1.00	0.010	4.00	0.125	32:1	R.M.E.
13	DTD. 610	16	E.A1.25.141	Doubling plate	0.05	1.00	0.010	4.00			R.M.E.
14	L. 40		E.A1.25.19	Hinge bracket	0.01	0.50	0.015	3.00			R.M.E. in jig
15	DTD. 610	14	E.A1.25.99/100	Spar assembly P/S	0.04	1.00	0.010	4.00	0.125	48:1	
	EEJ240										
16	DTD. 610	18	E.A1.25.157	Leading edge doubler port	0.05	1.00	0.005	2.00			Ch. 3, fig. 26
	DTD. 610	18	E.A1.25.239	Leading edge doubler starboard	0.05	1.00	0.005	2.00			Ch. 3, fig. 26
17	L. 72	22	E.B8.25.25	Bottom skin port flap	0.03	0.50	0.005	3.00			Ch. 3, fig. 35 & 36
	L. 72	22	E.B8.25.107	Bottom skin starboard flap	0.03	0.50	0.005	3.00			Ch. 3, fig. 35 & 36
18	L. 40		E.A1.25.17	Hinge bracket							

Note:- All dimensions are in inches

◀ **Aligning procedure for replacement of flap shroud**

3. With the aircraft jacked up or the wing on suitable supports, carry out the following checks before removing the existing shroud.

(1) Align a straight-edge on the upper surface of the main plane so that it extends over the trailing edge of the shroud, and is in a position as near as possible to the inboard end of the shroud. Mark the position of the straight-edge on the main plane, and take and note a clinometer reading on the straight-edge, mid position.

(2) Repeat this procedure at a position on the outboard end of the shroud.

(3) With a rule or lath take measurements from the ground to each trailing edge corner of the shroud.

(4) Run a line from the wing extension to the nacelle so that it is making contact along the trailing edge of the shroud, mark these positions on the wing extension and nacelle.

(5) Remove the existing shroud and fit

new one using the above checks to locate in position.

Note...

A trim allowance has been left on the leading edge of the new shroud, this should be trimmed to agree with the above checks.

(6) With the flap disconnected from its operating mechanism and swinging on the hinges, push it up to check the clearance as per drawing A.P.101B-0409-1, Sect.3, Chap.2, fig.11. Also check the flap

contact with the stopper pads on the shroud.

Note...

Occasionally a pad may require packing out to make this contact.

(7) Check setting of flaps in accordance with A.P.101B-0409-1, Sect.3, Chap.4, para.134.

(8) A similar procedure as used for aligning the outer shroud may be used to align the inner shroud should it be found necessary to replace it.

FLAP SHROUD REPLACEMENT
ALIGNMENT CHECK PRIOR TO REMOVAL

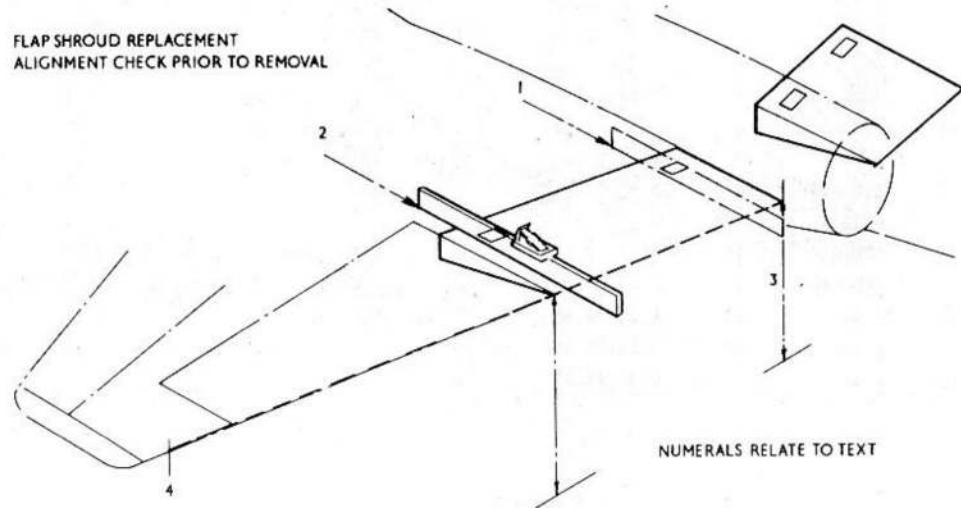


Fig.907. Flap shroud replacement alignment check prior to removal ▶

APPENDIX 5

T Mk. 17 MAIN - PLANE STRUCTURE

Appendix 5 T MK. 17 MAIN-PLANE STRUCTURE.

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LIST OF ILLUSTRATIONS

	<i>Fig.</i>		<i>Fig.</i>
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<i>Main-plane structure</i>	1702	<i>Wing-tip container, structure</i>	1705
<i>Main-plane skinning, upper surface</i> ...	1703	<i>Wing-tip container, skinning</i>	1706

Introduction

1. This appendix illustrates the main-plane structure of the T Mk. 17 in the same manner as the main chapter illustrates the B Mk. 2 main-plane structure. Only that structure peculiar to the T Mk. 17 is detailed; information which is common to other marks of aircraft, being given elsewhere, is not repeated.

2. The figure numbers of all structure illustrations and repair schemes in this appendix commence with the number 17 (the mark number of the aircraft). This is to distinguish them from similar illustrations and repair schemes peculiar to other marks.

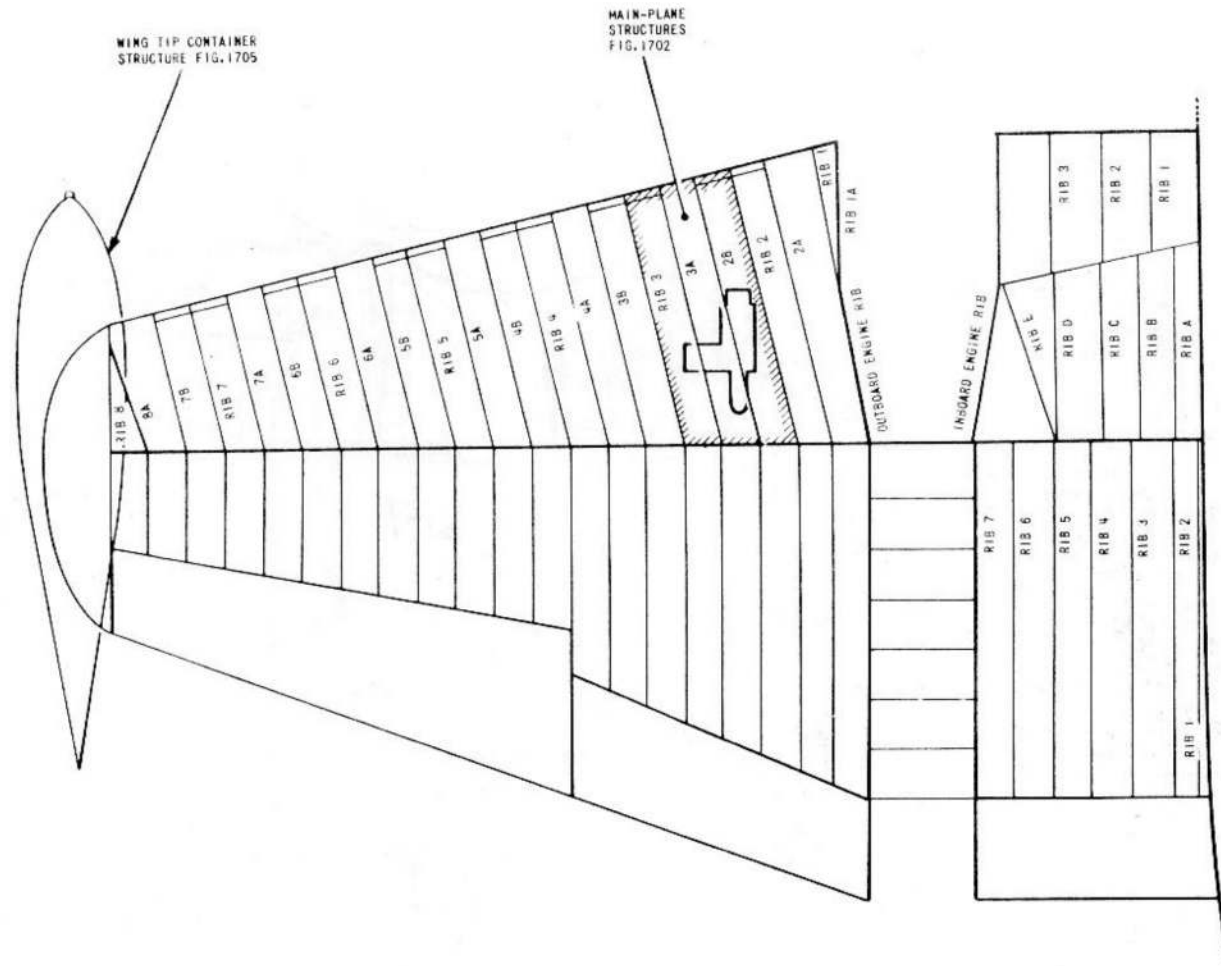
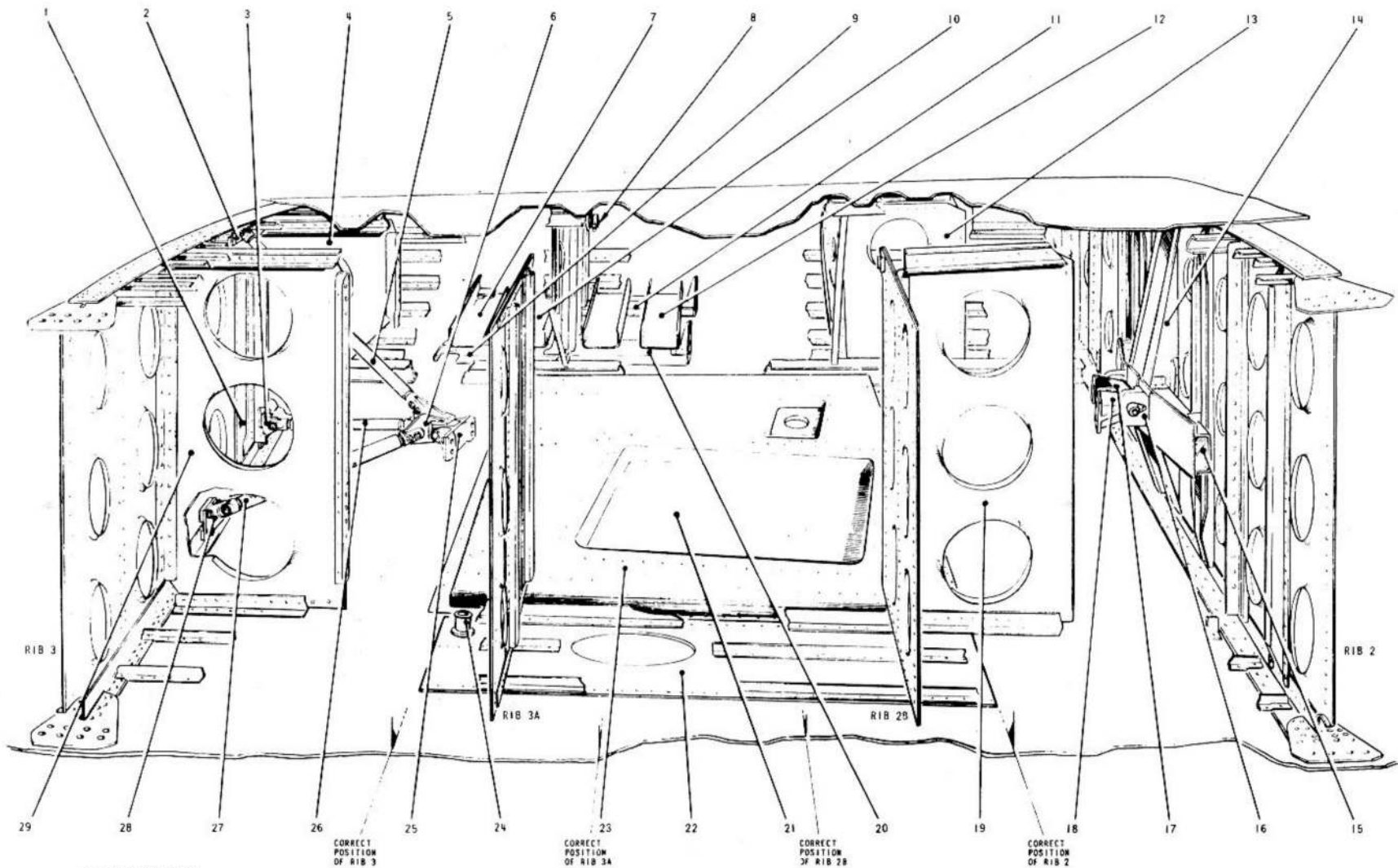


FIG.1701. KEY DIAGRAM

RESTRICTED



VIEW ON PORT WING
LOOKING FORWARD

FIG.1702. MAIN - PLANE STRUCTURE

RESTRICTED

KEY TO FIG.1702 (MAIN-PLANE STRUCTURE)

Item	Material		Part No.	Description	Negligible damage						Repair fig.No.
	Spec.	S. W. G.			Dents		Scratches		Holes		
					Max. depth	Min. dia.	Depth	Spacing	Max. dia.	Pitch ratio	
1	L. 72	18	EG7.75.641	Doubler	0.030	0.500	0.005	1.000			
2	L. 65	MACH PART	EG7.61.33	Bracket, top	0.040	0.375	0.005				
3	L. 65	ALUM ALLOY	EG7.61.41	Lug, strut attachment	0.025	0.250	0.005				
4	L. 73	18	EG7.20.67	Diaphragm, ribs 3 and 3A forward	0.050	1.000	0.005	2.000	0.250	28:1	
5	T. 45	22	EG7.61.43	Tube, strut	0.060	1.500	0.012	1.500	-	-	
6	STEEL S. 21		EG7.61.21	Bracket, gearbox mounting	-	-	-	-	-	-	
7	L. 72	16	EG7.20.427	Member, channel	0.050	1.000	0.005	3.000	0.200	30:1	
8	L. 73	18	EG7.75.645	Bracket	0.030	0.500	0.005	1.000	0.200	10:1	
9	L. 73	16	EG7.20.401	Member, ribs 3 and 3A support	0.050	1.000	0.005	1.000	0.200	10:1	
10	L. 72	16	EG7.20.431	Member, channel	0.050	1.000	0.005	1.000	0.200	10:1	
11	L. 73	16	EG7.20.399	Member, ribs 3 and 3A support	0.050	1.000	0.005	1.000	0.200	10:1	
12	L. 72	16	EG7.20.431/2	Member, channel	0.050	1.000	0.005	1.000	0.200	10:1	
13	L. 73	18	EG7.20.71	Diaphragm, ribs 2B and 2 forward	0.040	0.700	0.005	1.000	0.250	24:1	
14	L. 73	18	EG7.20.159	Beam, rib 2	0.040	0.700	0.005	1.000	0.250	24:1	
15	L. 73	18	EG7.20.155	Beam, rib 2	0.040	0.700	0.005	1.000	0.250	24:1	
16	EEDX. 125		EG7.20.153	Bracket, channel	-	-	-	-	-	-	
17	S. 21	18	EG7.61.13/B	Cover	-	-	-	-	-	-	
18	STEEL 30/158		EG7.61.71								
19	L. 73	18	EG7.20.73	Diaphragm, aft	0.040	0.700	0.005	1.000	0.200	24:1	
20	L. 73	16	EG7.20.409	Member, support	0.050	0.750	0.005	1.000	0.25	24:1	
21	L. 73	10	EG7.20.449	Hatch, access							
22	L. 73	18	EG7.20.227/235	Doubler, port	0.030	0.500	0.005	1.000	0.150	13:1	
23	L. 73	18	EG7.20.451	Hatch, access	0.030	0.500	0.005	2.000	0.150	13:1	
24	L. 85	MACH PART	EG7.75.167	Outlet, flanged	-	-	-	-	-	-	
25	STEEL S. 1 or S. 21		EG7.61.19	Bracket, gearbox mounting	-	-	-	-	-	-	
26	T. 45	22	EG7.61.35	Tube, strut	0.060	0.300	0.012	1.500	-	-	
27	T. 45	22	EG7.61.39	Tube, strut	0.060	0.300	0.012	1.500	-	-	
28	L. 65		EG7.61.37	Strut, attachment	0.030	0.500	0.005	1.000	-	-	
29	L. 17	18	EG7.20.69	Diaphragm, aft	0.040	0.700	0.005	1.000	0.200	13:1	

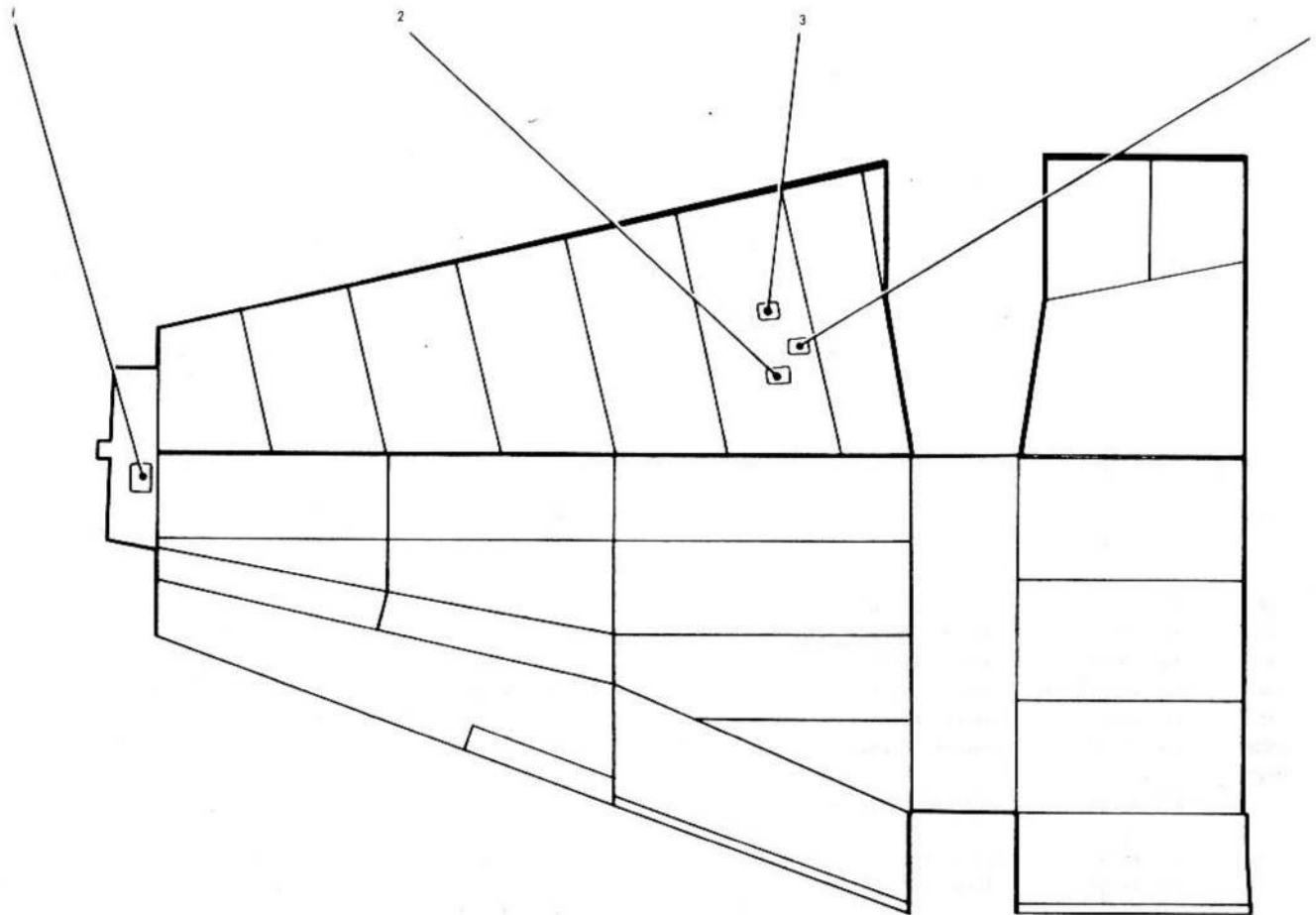


FIG. 1703. MAIN-PLANE SKINNING, UPPER SURFACE

KEY TO FIG. 1703 (MAIN-PLANE SKINNING, UPPER SURFACE)

Item	Material		Part No.	Description	Negligible damage						Repair fig.No.
	Spec.	S.W.G.			Dents		Scratches		Holes		
					Max. depth	Min. dia.	Depth	Spacing	Max. dia.	Pitch ratio	
1	L. 73	18	EG7. 20. 677	Door, access	0.050	1.000	0.005	3.000			
2	L. 73	18	EG7. 20. 307	Panel, access	0.050	1.000	0.005	3.000			
3	L. 73	18	EG7. 20. 299	Panel, access	0.050	1.000	0.005	3.000			
4	L. 73	18	EG7. 20. 303	Panel, access	0.050	1.000	0.005	3.000			

RESTRICTED

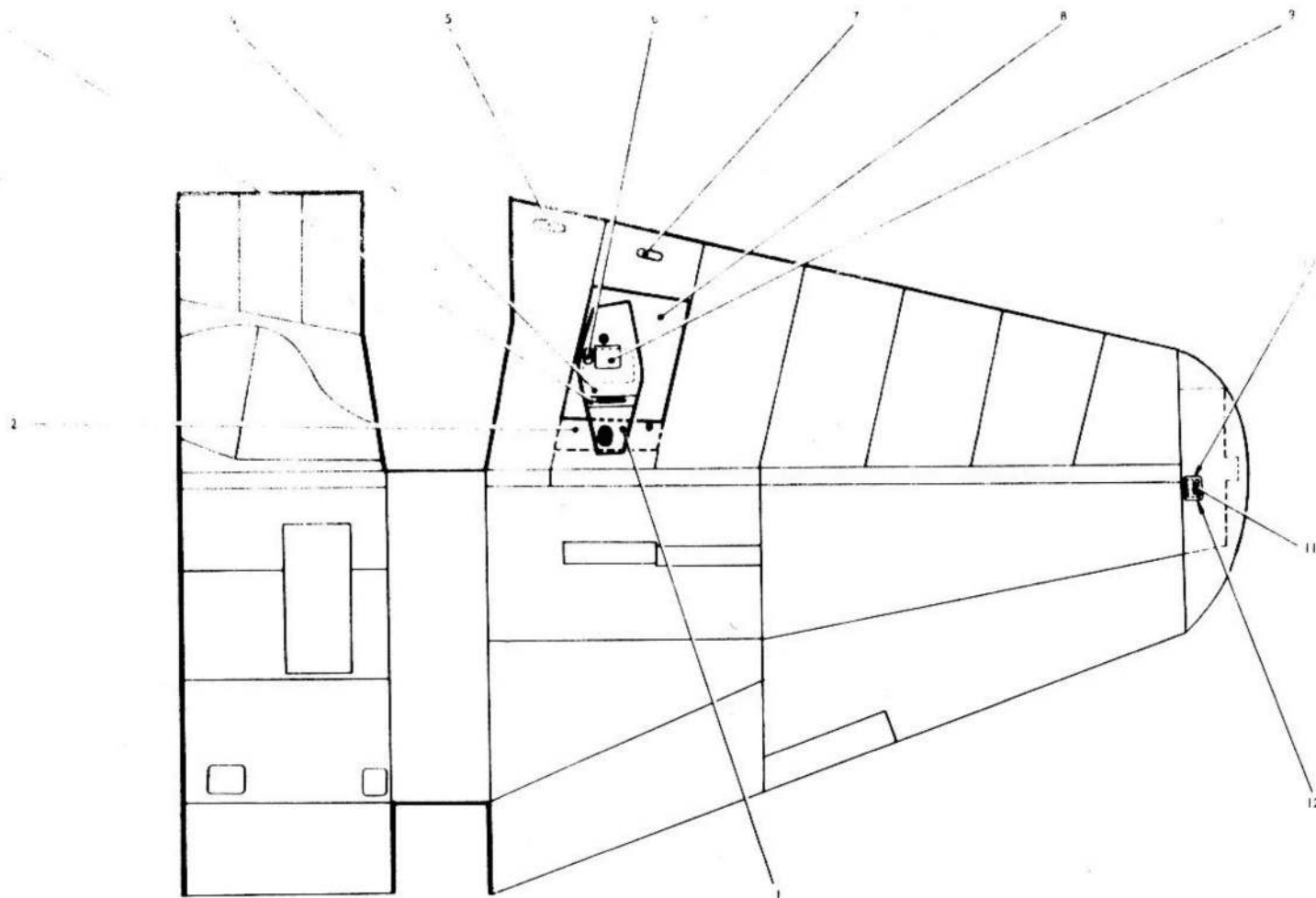
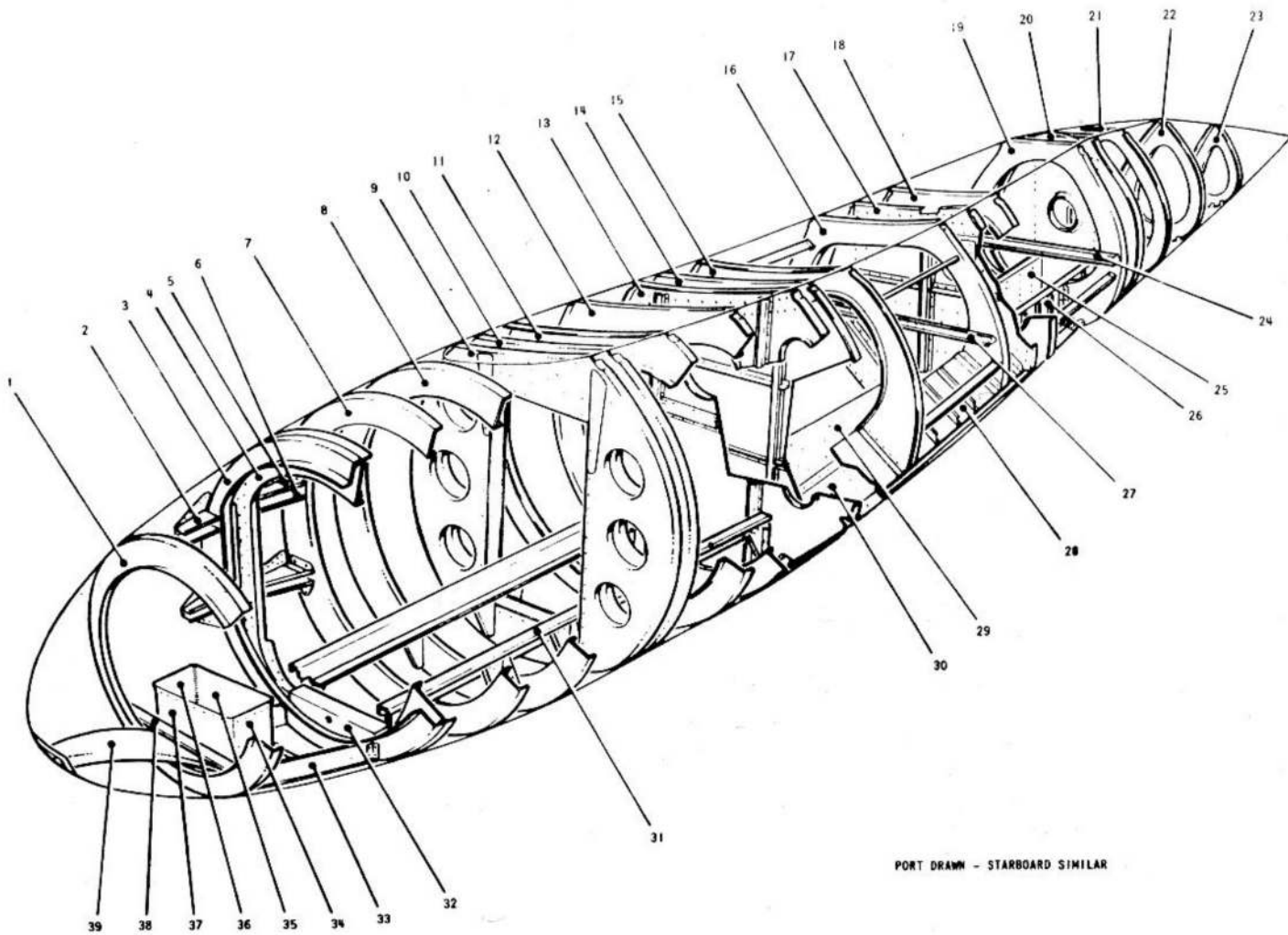


FIG. 1704. MAIN-PLANE SKINNING, LOWER SURFACE

KEY TO FIG. 1704 (MAIN-PLANE SKINNING, LOWER SURFACE)

Item	Material		Part No.	Description	Negligible damage						Repair fig.No.
	Spec.	S.W.G.			Dents		Scratches		Holes		
					Max. depth	Min. dia.	Depth	Spacing	Max. dia.	Pitch ratio	
1	S. 521	22	EG7. 75. 75	Fairing, rear	0.040	0.500	0.007	2.500	-	-	
2	L. 73	18	EG7. 20. 227	Doubler	0.050	1.000	0.005	2.000	-	-	
3	S. 521	22	EG7. 75. 187	Doubler	0.030	0.500	0.005	3.000	-	-	
4	Fibreglass		EG7. 75. 663	Fairing, front	-	-	-	-	-	-	
5	L. 73	18	EG7. 20. 641	Panel, access	0.050	1.000	0.005	1.000	-	-	
6	Fibreglass		EG7. 75. 73	Panel, access	-	-	-	-	-	-	
7	L. 73	12	EG7. 20. 817	Panel, access	0.020	0.500	0.009	1.000	-	-	
8	L. 73	10	EG7. 20. 449	Skin, outer	0.010	3.000	0.020	3.000	-	-	
9	Fibreglass		EG7. 75. 71	Panel, access	-	-	-	-	-	-	
10	L. 73	18	EG7. 20. 669	Panel, access	0.050	1.000	0.005	2.000	-	-	
11	L. 79	18	EAL. 20. 1977	Door, access	0.50	1.000	0.005	2.000	-	-	



PORT DRAWN - STARBOARD SIMILAR

FIG.1705. WING-TIP CONTAINER, STRUCTURE

RESTRICTED

KEY TO FIG.1705 (WING-TIP CONTAINER STRUCTURE)

Item	Material		Part No.	Description	Negligible damage						Repair fig.No.
	Spec.	S.W.G.			Dents		Scratches		Holes		
					Max. depth	Min. dia.	Depth	Spacing	Max. dia.	Pitch ratio	
1	L.72	18	EG7.84.41	Former, Stn.15.04	0.050	1.000	0.005	1.000	0.125	32:1	
2	L.72	18	EG7.84.199	Bracket	0.050	1.000	0.005	1.000	-	-	
3	L.73	14	EG7.84.43	Former, Stn.28.7	0.040	1.250	0.010	3.000	0.125	35:1	
4				Former, 29.8 consisting of:-							
	L.73	16	EG7.84.45	Channel	0.050	1.000	0.005	3.000	0.125	35:1	
	L.73	16	EG7.84.159	Reinforcing	0.050	1.000	0.005	3.000	0.125	35:1	
	L.73	16	EG7.84.161	Reinforcing	0.050	1.000	0.005	3.000	0.200	40:1	
5	L.72	18	EG7.84.169	Diaphragm	0.050	1.000	0.005	3.000	0.200	35:1	
6	L.72	18	EG7.84.171	Diaphragm	0.050	1.000	0.005	3.000	0.200	40:1	
7	L.73	16	EG7.84.47	Former, Stn.37	0.040	1.200	0.010	3.000	0.200	40:1	
8	L.73	16	EG7.84.189	Former, Stn.43	0.040	1.250	0.010	3.000	0.200	35:1	
9	L.72	18	EG7.84.95	Diaphragm 1	0.050	1.000	0.010	2.000	0.200	20:1	
10	L.72	18	EG7.84.97	Diaphragm 2	0.050	1.000	0.010	2.000	0.200	20:1	
11	L.73	18	EG7.84.53	Former, Stn.61.733	0.050	1.000	0.010	2.000	0.200	-	
12	L.73	18	EG7.84.57	Former, Stn.69.367	0.050	1.000	0.010	2.000	0.200	-	
13	L.72	18	EG7.84.83	Diaphragm, 3	0.050	1.000	0.005	3.000	0.200	20:1	
14	L.73	18	EG7.84.353	Diaphragm, 4	0.050	1.000	0.005	3.000	0.200	20:1	
15	L.73	18	EG7.84.443	Former, Stn.83.5	0.050	1.000	0.010	2.000	0.200	35:1	
16	L.73	18	EG7.84.447	Former, Stn.96.5	0.050	1.000	0.010	2.000	0.200	35:1	
17	L.73	16	EG7.84.389	Diaphragm, 5	0.050	1.000	0.005	3.000	0.200	20:1	
18	L.73	18	EG7.84.567	Former, 109.0	0.050	1.000	0.005	3.000	0.200	35:1	
19	L.73	18	EG7.84.575	Former, 122.0	0.050	1.000	0.005	3.000	0.200	35:1	
20	L.73	18	EG7.84.423	Diaphragm, 6	0.050	1.000	0.005	3.000	0.200	20:1	
21	L.72		EA2.62.19	Former, 'k' Stn.136	0.050	1.000	0.005	3.000	0.125	35:1	
22	L.72	18	EA2.62.25	Former, 'n' Stn.146.5	0.050	1.000	0.005	3.000	0.125	35:1	
23	L.72	18	EA2.62.203	Former, Stn.170.75	0.050	1.000	0.005	3.000	0.125	35:1	
24	L.73	18	EG7.84.120	Channel	0.050	1.000	0.005	3.000	0.125	35:1	
25	L.73	18	EG7.84.637	Web	0.050	1.000	0.020	4.000	0.125	40:1	
26	L.73	18	EG7.84.639	Web	0.050	1.000	0.020	4.000	0.125	40:1	
27	L.73	18	EG7.84.573	Channel	0.030	0.500	0.025	1.500	-	-	
28	L.73	18	EG7.84.635	Web, outboard	0.050	1.000	0.020	4.000	0.125	40:1	
29	L.73	18	EG7.84.651	Web, centre	0.050	1.000	0.020	4.000	0.125	40:1	
30	L.73	18	EG7.84.633	Web, centre outboard	0.050	1.000	0.020	4.000	0.125	40:1	
31	L.73	16	EG7.84.113	Rail, loading	0.030	1.000	0.015	3.000	-	-	
32	L.72	18	EG7.84.173	Diaphragm	0.030	0.500	0.025	1.500	0.125	40:1	
33	L.72	18	EG7.84.137	Beam	0.030	1.000	0.015	3.000	0.125	40:1	
34	L.59	18	EG7.84.990	Plate, end	0.030	1.000	0.015	3.000	-	-	
35	L.59	16	EG7.84.99B	Plate, side	0.030	1.000	0.015	3.000	-	-	
36	L.59	18	EG7.84.99C	Plate, end	0.030	1.000	0.015	3.000	-	-	
37	L.59	18	EG7.84.99A	Plate, side	0.030	1.000	0.015	3.000	-	-	
38	L.72	18	EG7.84.345	Member, 'z'	0.030	1.000	0.015	3.000	0.125	40:1	
39				Duct air inlet consisting of:-							
	L.59	14	EG7.84.191A	Duct, top	0.048	1.000	0.005	3.000	-	-	
	L.59	14	EG7.84.191B	Duct, bottom	0.048	1.000	0.006	3.000	-	-	
	L.59	12	EG7.84.191C	Flange, forward	0.040	1.000	0.007	3.000	-	-	
	L.59	12	EG7.84.191D	Flange, aft top	0.040	1.000	0.007	3.000	-	-	
	L.59	12	EG7.84.191E	Flange, aft bottom	0.040	1.000	0.007	3.000	-	-	

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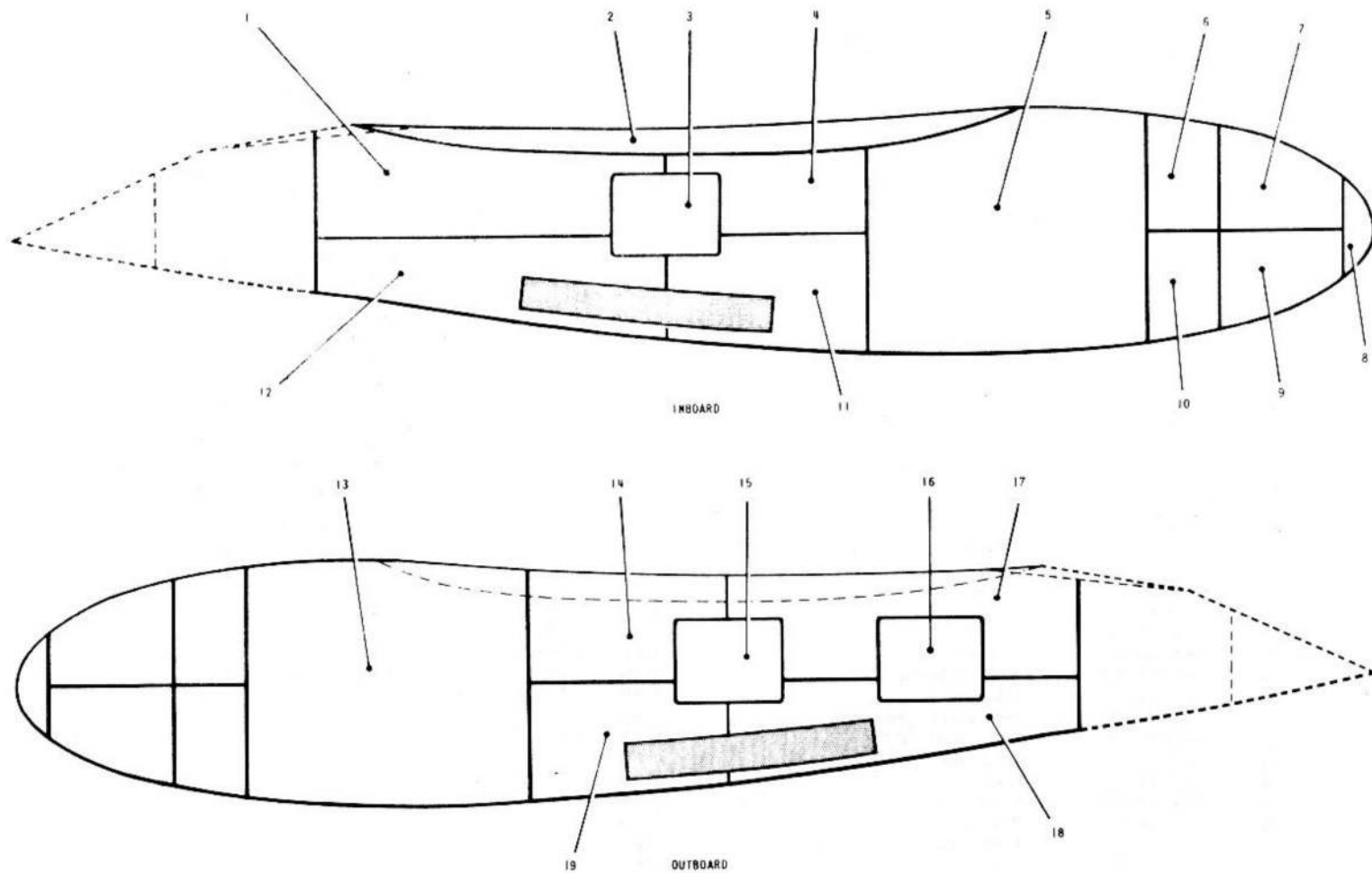


FIG.1706. WING-TIP CONTAINER, SKINNING

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KEY TO FIG. 1706 (WING-TIP CONTAINER SKINNING)

Item	Material		Part No.	Description	Negligible damage						Repair fig.No.
	Spec.	S.W.G.			Dents		Scratches		Holes		
					Max. depth	Min. dia.	Depth	Spacing	Max. dia.	Pitch ratio	
1	L. 59	16	EG7.84.695/6	Skin, centre aft, upper inboard	0.050	1.000	0.005	3.000	0.250	24:1	
2	L. 59	16	EG7.84.33	Plate, top cover	0.050	1.000	0.005	3.000	0.250	24:1	
3	L. 73	16	EG7.84.553	Panel, access inboard	0.050	1.000	0.005	3.000	-	-	
4	L. 59	16	EG7.84.689/90	Skin, centre upper inboard	0.050	1.000	0.005	3.000	0.250	24:1	
5	L. 59	16	EG7.84.683/4	Skin, forward inboard	0.050	1.000	0.005	3.000	0.250	24:1	
6	L. 59	16	EG7.84.759	Skin, nose fairing	0.050	1.000	0.005	3.000	0.250	24:1	
7	L. 59	16	EG7.84.755	Skin, nose fairing	0.050	1.000	0.005	3.000	0.250	24:1	
8	L. 59	16	EG7.84.753	Skin, nose fairing	0.050	1.000	0.005	3.000	0.250	24:1	
9	L. 59	16	EG7.84.757	Skin, nose fairing	0.050	1.000	0.005	3.000	0.250	24:1	
10	L. 59	16	EG7.84.761	Skin, nose fairing	0.050	1.000	0.005	3.000	0.250	24:1	
11	L. 59	16	EG7.84.687/8	Skin, forward inboard	0.050	1.000	0.005	3.000	0.250	24:1	
12	L. 59	16	EG7.84.693/4	Skin, centre	0.050	1.000	0.005	3.000	0.250	24:1	
13	L. 59	16	EG7.84.685/6	Skin, forward	0.050	1.000	0.005	3.000	0.250	24:1	
14	L. 59	16	EG7.84.691/2	Skin, centre upper	0.050	1.000	0.005	3.000	0.250	24:1	
15	L. 73	16	EG7.84.551	Panel, access	0.050	1.000	0.005	3.000	0.250	-	
16	L. 73	16	EG7.84.555	Panel, access	0.050	1.000	0.005	3.000	0.250	-	
17	L. 59	16	EG7.84.697/8	Skin, centre upper	0.050	1.000	0.005	3.000	0.250	-	
18	L. 59	16	EG7.84.693/4	Skin, centre aft lower	0.050	1.000	0.005	3.000	0.250	24:1	
19	L. 59	16	EG7.84.687/8	Skin, centre lower	0.050	1.000	0.005	2.000	0.250	24:1	

RESTRICTED

RESTRICTED

A.P.101B-0400-6, Part 1, Chap.3
A.L.97, July 68

APPENDIX 6

TT MK.18 MAIN-PLANE STRUCTURE

RESTRICTED

APPENDIX 6

Appendix 6 TT MK.18 MAIN-PLANE STRUCTURE

LIST OF CONTENTS

	<i>Para.</i>
<i>Introduction</i>	1

LIST OF ILLUSTRATIONS

	<i>Fig.</i>		<i>Fig.</i>
<i>Key diagram</i>	1801	<i>Main-plane skinning - upper surface...</i>	1803
<i>Main-plane structure</i>	1802	<i>Main-plane skinning - lower surface...</i>	1804

Introduction

1. This appendix illustrates the main-plane structure of the TT Mk.18 in the same manner as the main chapter illustrates the B Mk.2 main-plane structure. Only that structure peculiar to the TT Mk.18 is detailed; information which is common to other marks of aircraft, being given elsewhere, is not repeated.

2. The figure numbers of all structure illustrations and repair schemes in this appendix commence with the number 18 (the mark number of the aircraft). This is to distinguish them from similar illustrations and repair schemes peculiar to other marks.

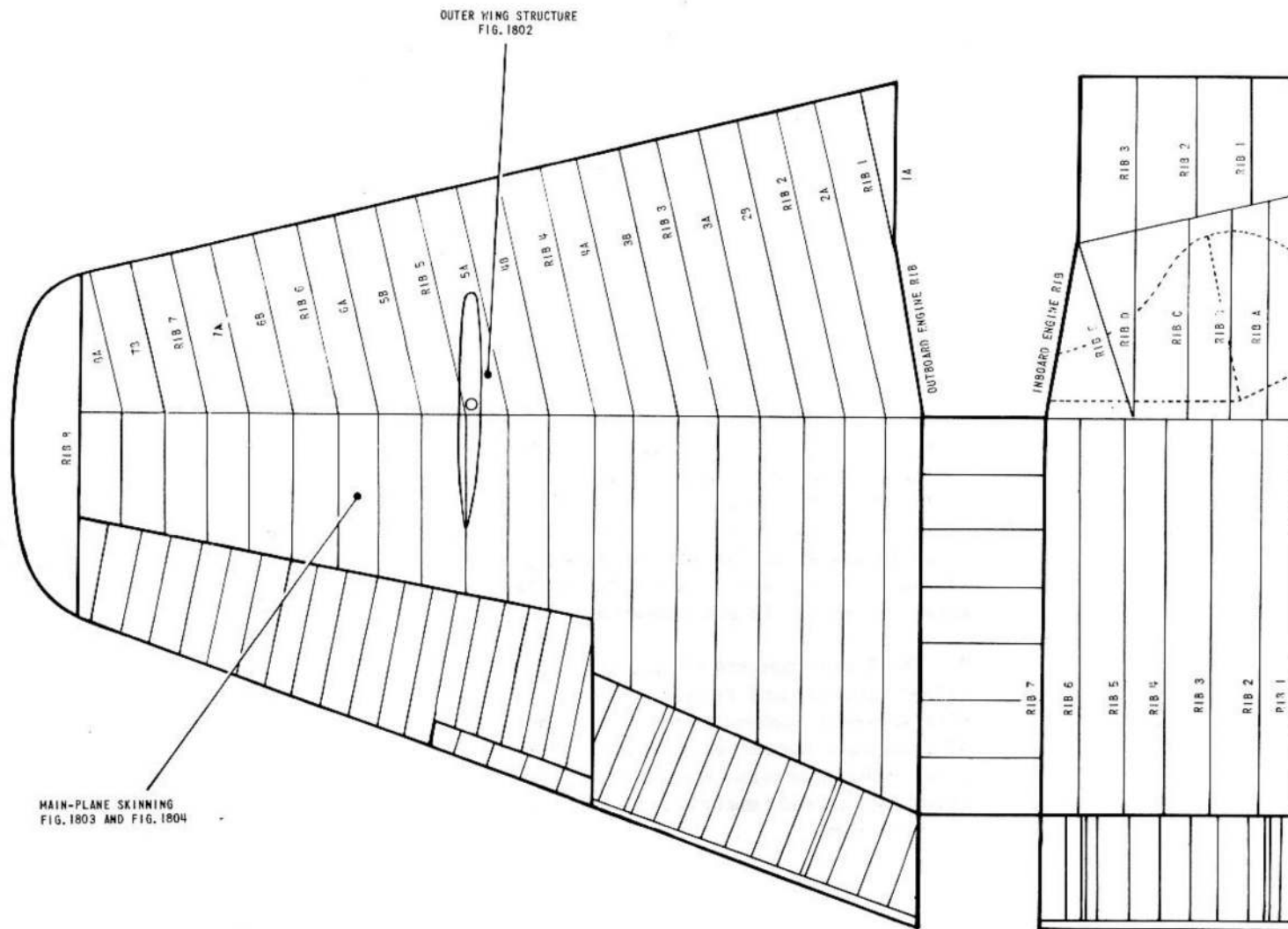


FIG. 1801. KEY DIAGRAM

FIG. 1802. MAIN-PLANE STRUCTURE
(illustration overleaf)

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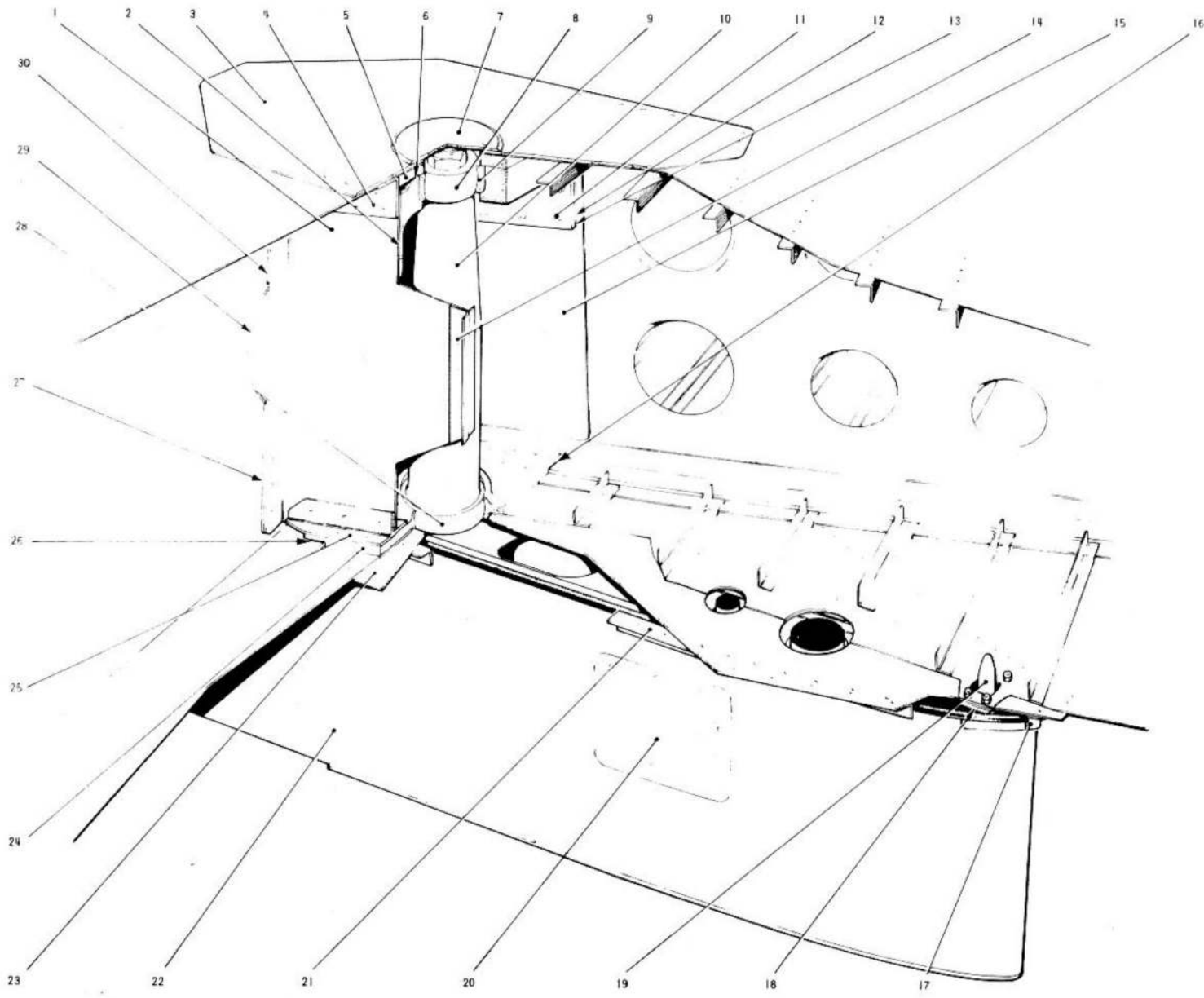


FIG. 1802. MAIN-PLANE STRUCTURE

RESTRICTED

KEY TO FIG.1802 (MAIN-PLANE STRUCTURE)

Item	Spec	S.W.G.	Part No.	Description	Negligible damage						Repair Fig.No.
					Dents		Scratches		Holes		
					Max. depth	Min. dia.	Depth	Spacing	Max. dia.	Pitch ratio	
1	L.73	14	EG9.20.195/6	Diaphragm	0.030	1.20	0.010	6.00	0.25	24: 1	
2	L.72		EG9.20.187	Shim	-	-	-	-	-	-	
3	L.73	14	EG9.20.175/8	Doubler, external	0.040	1.500	0.015	7.00	0.500	20: 1	
4	L.73	14	EG9.20.171/2	Cleat	-	-	-	-	-	-	
5	L.65		EG9.20.159/60	Plate, mounting	0.025	0.250	0.005	-	-	-	
6	L.72		EG9.20.189	Shim	-	-	-	-	-	-	
7	L.73	14	EG9.20.179/80	Plate, cover	0.040	1.500	0.015	7.00	0.50	20: 1	
8	S.95		EG9.20.193/B	Bearing, spherical	-	-	-	-	-	-	
9	S.95		EG9.20.193/A	Housing, ring	-	-	-	-	-	-	
10	S.96		EG9.87.191	Spigot, pylon rear	-	-	-	-	-	-	
11	L.65		EG9.20.191/2	Bracket, bearing	0.025	0.250	0.005	-	-	-	
12	L.73	20	EG9.20.215/6	Plate, packing	-	-	-	-	-	-	
13	L.72		EG9.20.187	Shim	-	-	-	-	-	-	
14	L.73	14	EG9.20.197/8	Piece, angle stiffening	0.050	1.000	0.005	1.000	0.200	10: 1	
15	L.73	16	EG9.20.165/6	Plate, reinforcing	0.050	0.750	0.005	1.000	0.25	24: 1	
16	L.72		EG9.20.205	Shim	-	-	-	-	-	-	
17	L.59	18	EG9.20.199A/ B/200A/B	Flanges	0.050	1.000	0.005	2.000	0.250	24: 1	
18	L.65	1	EG9.20.211/2	Block, bearing	0.025	0.250	0.005	-	-	-	
19	S.95		EG9.87.193	Spigot, pylon	-	-	-	-	-	-	
20	L.72	16	EG9.87.47	Panel, access	0.050	1.000	0.005	3.000	-	-	
21	L.73	18	EG9.20.201/4	Piece, angle fairing	0.050	1.000	0.005	2.000	0.250	24: 1	
22			EG9.87.187	Structure, pylon	-	-	-	-	-	-	
23	L.73	14	EG9.20.177/8	Doubler, external	0.040	1.500	0.015	7.000	0.500	20: 1	
24	S.95		EG9.20.163A/4A	Plate, bearing	-	-	-	-	-	-	
25	L.65		EG9.20.173/4	Bracket, tee	-	-	-	-	-	-	
26	L.72		EG9.20.209	Shim	-	-	-	-	-	-	
27	L.73	12	EG9.20.185	Packing	-	-	-	-	-	-	
28	S.95		EG9.20.163B	Ring, bearing	-	-	-	-	-	-	
29	L.73	12	EG9.20.181	Plate, backing	0.010	1.000	0.010	6.000	0.20	50: 1	
30	L.73	12	EG9.20.183	Packing	-	-	-	-	-	-	

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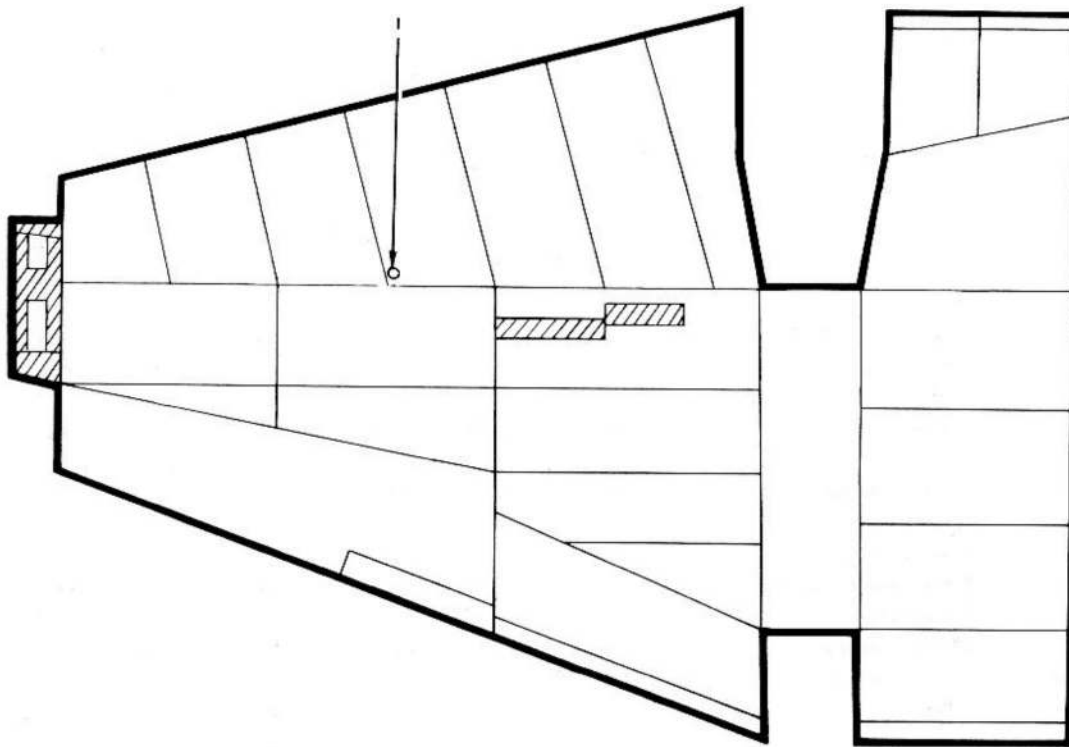


FIG. 1803. MAIN-PLANE SKINNING—UPPER SURFACE

3410

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KEY TO FIG. 1803 (MAIN-PLANE SKINNING - UPPER SURFACE)

Item	Spec.	S. W. G.	Part No.	Description	Negligible damage						Repair Fig.No.
					Dents		Scratches		Holes		
					Max. depth	Min. dia.	Depth	Spacing	Max. dia.	Pitch ratio	
1	L. 73	14	EG9. 20. 179/80	Plate, cover	-	-	-	-	-	-	-

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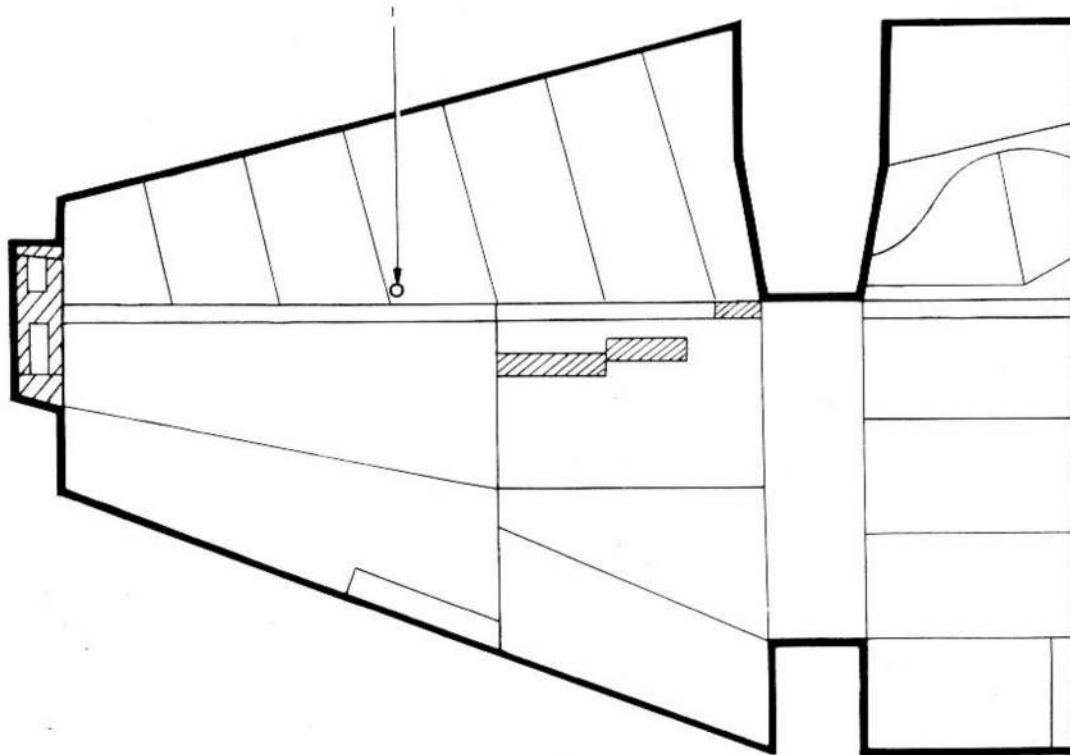


FIG. 1804. MAIN-PLANE SKINNING—LOWER SURFACE

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KEY TO FIG.1804 (MAIN-PLANE SKINNING - LOWER SURFACE)

Item	Spec.	S. W. G.	Part No.	Description	Negligible damage						Repair Fig.No.
					Dents		Scratches		Holes		
					Max. depth	Min. dia.	Depth	Spacing	Max. dia.	Pitch ratio	
1	L. 73	14	EG9.20.179/80	Plate, cover	-	-	-	-	-	-	-

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A.P. 101B-0400-6, Part 1, Chap. 3
A.L. 110, Feb. 73

APPENDIX 7

T Mk.22 MAIN-PLANE STRUCTURE

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Appendix 7 T MK.22 MAIN-PLANE STRUCTURE

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Introduction

1. This appendix illustrates the main-plane structure of the T Mk.22 in the same manner as Appendix 2 to the main chapter illustrates the P.R.7 structure. Only that structure peculiar to the T Mk.22 is detailed; information which is common to other marks, already given elsewhere, is not repeated.

2. The figure numbers of all structure illustrations and repair schemes in this appendix commence with the number 22, this is to distinguish them from similar illustrations and schemes peculiar to other marks.

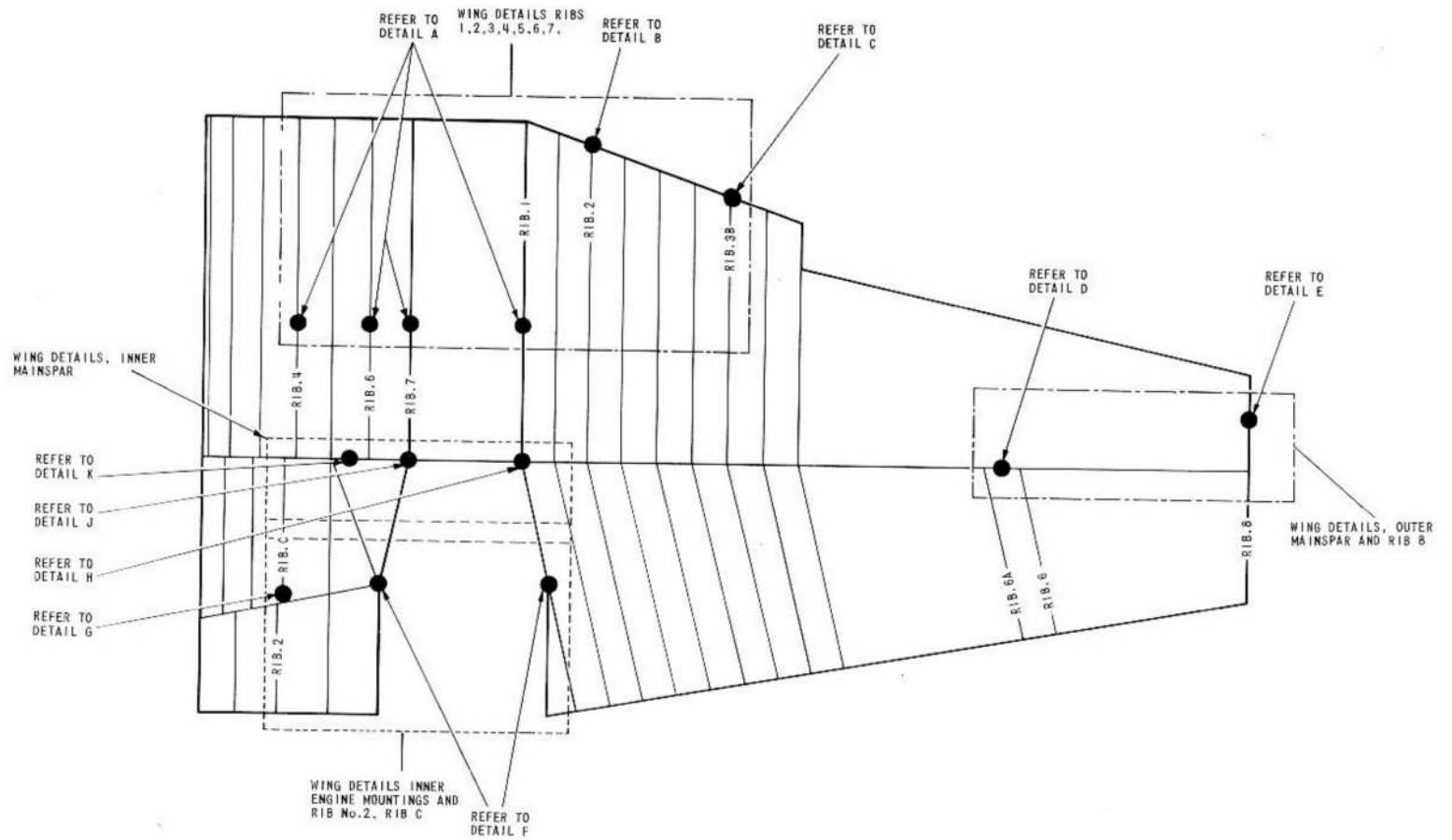


FIG. 2201. MAIN PLANE KEY DIAGRAM

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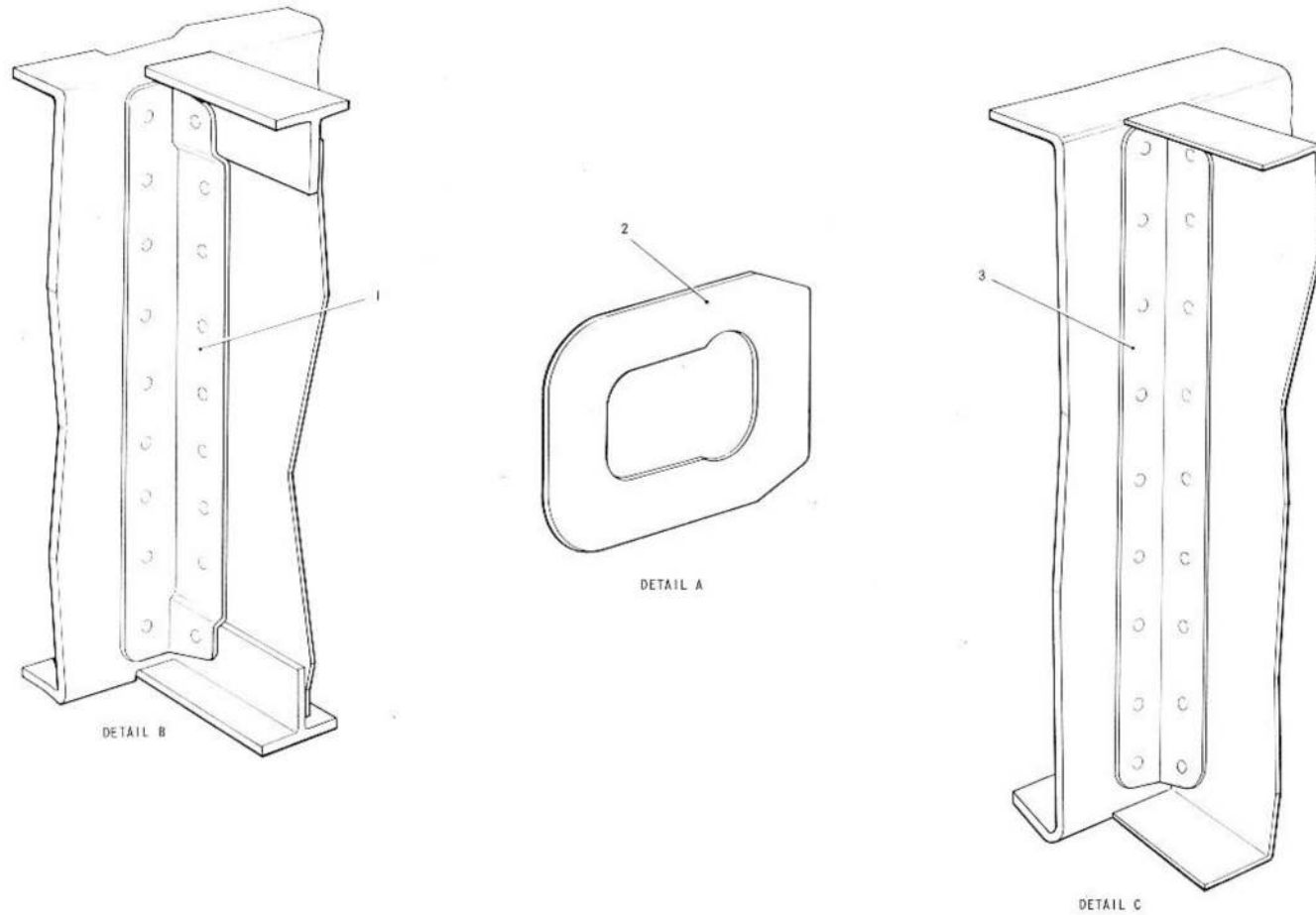


FIG. 2202. WING DETAILS RIBS 1, 2, 3, 4, 5, 6, 7

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KEY TO FIG. 2202 (WING DETAILS, RIBS 1, 2, 3, 4, 5, 6, 7)

Item	Material		Part No.	Description	Negligible damage						Repair fig.No.
	Spec.	S.W.G.			Dents		Scratches		Holes		
					Max. depth	Min. dia.	Depth	Spacing	Max. dia.	Pitch ratio	
1	S. 515	16	EK5. 20. 689	Piece, angle, attachment	0.030	1.00	0.005	1.000	0.250	20:1	
2	S. 515	12	EK5. 20. 29	Plate reinforcing (typical)	0.050	1.00	0.020	1.000	0.300	20:1	
3	S. 515	16	EK5. 20. 691	Piece, angle, attachment	0.030	1.00	0.005	1.000	0.250	20:1	

Note...
All dimensions are in inches

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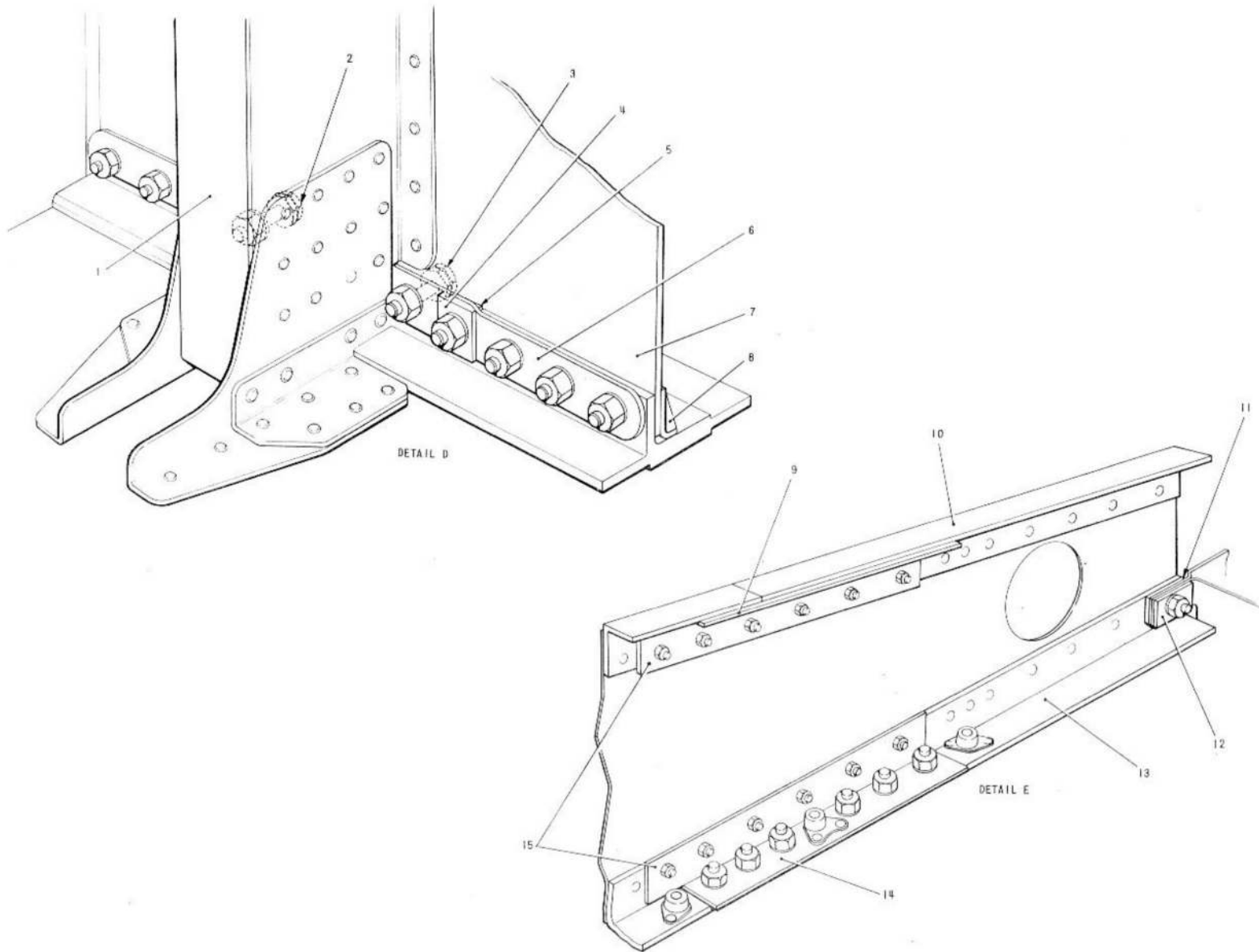


FIG. 2203. WING DETAILS, OUTER, MAIN SPAR AND RIB 8

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KEY TO FIG. 2203 (WING DETAILS, OUTER, MAIN SPAR AND RIB 8)

Material				Negligible damage							Repair fig.No.
Item	Spec.	S.W.G.	Part No.	Description	Dents		Scratches		Holes		
					Max. depth	Min. dia.	Depth	Spacing	Max. dia.	Pitch ratio	
1	L. 73	18	EK5. 20. 705	Channel	0.040	1.000	0.005	3.000	0.200	30:1	
2	S. 97	Bar	EK5. 20. 717	Bolt, special	-	-	-	-	-	-	Renewal recommended
3	S. 97	Bar	EK5. 20. 719	Bolt, special	-	-	-	-	-	-	Renewal recommended
4	L. 73	18	EK5. 20. 711	Piece profile	-	-	-	-	-	-	Renewal recommended
5	L. 73	18	EK5. 20. 713	Piece, insert	0.040	0.700	0.005	1.000	0.200	13:1	-
6	L. 73	18	EK5. 20. 709	Strap, reinforcing	0.010	0.250	0.005	1.500	0.200	13:1	-
7	L. 73		EK5. 20. 715	Shim, laminated	-	-	-	-	-	-	-
8	L. 73	14	EK5. 20. 707	Piece, angle reinforcing	0.030	1.200	0.010	6.000	0.125	10:1	-
9	L. 73	12	EK5. 20. 609	Buttstrap	0.010	1.000	0.010	6.000	0.200	8:1	-
10	L. 65	EEDX. 43	EK5. 20. 605	Piece insertion, boom	0.020	0.500	0.010	2.000	0.125	10:1	-
11	L. 73		EK5. 20. 611	Packing	-	-	-	-	-	-	-
12	L. 73	0.003 laminations	EK5. 20. 613	Shim, laminated							-
13	L. 65	EEDX. 43	EK5. 20. 603	Piece insertion, boom	0.020	0.500	0.010	2.000	0.125	10:1	-
14	L. 73	12	EK5. 20. 609	Buttstrap	0.030	0.700	0.010	3.000	-	-	-
15	L. 73	12	EK5. 20. 607	Buttstrap	0.030	0.700	0.010	3.000	-	-	-

Note...

All dimensions are in inches

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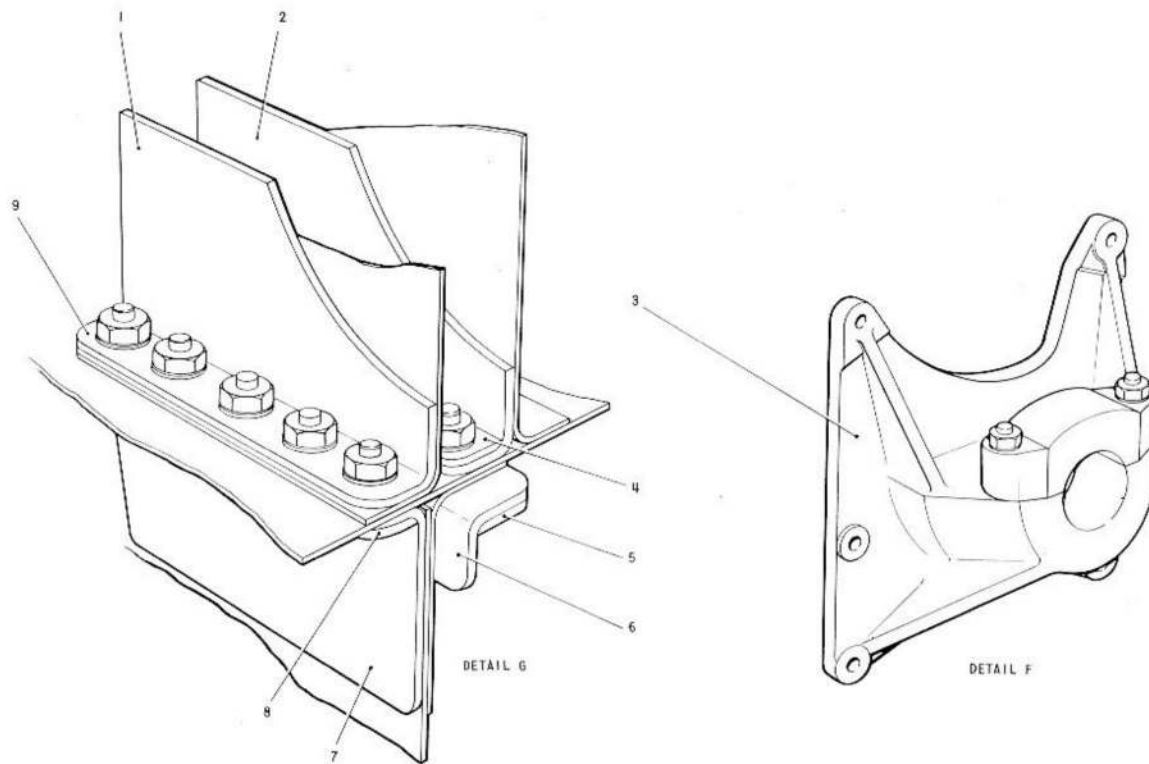


FIG. 2204. WING DETAILS INNER, ENGINE MOUNTINGS, AND RIB No.2, RIB C

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KEY TO FIG.2204 (WING DETAILS INNER, ENGINE MOUNTINGS, AND RIB NO.2, RIB C)

Item	Material		Part No.	Description	Negligible damage						Repair fig.No.
	Spec.	S. W. G.			Dents		Scratches		Holes		
					Max. depth	Min. dia.	Depth	Spacing	Max. dia.	Pitch ratio	
1	L.73	12	EK5.20.647	Cleat, rib C	0.020	0.500	0.009	1.000	-	-	-
2	L.73	12	EK5.20.653	Cleat, rib C	0.020	0.500	0.009	1.000	-	-	-
3	D. T. D. 5024		EK5.51.611	Mounting engine, rear	-	-	0.030	2.000	-	-	-
4	L.73	8	EK5.20.655	Washer, throat	-	-	-	-	-	-	Renewal recommended
5	L.73	8	EK5.20.667	Washer, throat	-	-	-	-	-	-	Renewal recommended
6	L.73	12	EK5.20.665	Cleat, nose rib No.2	0.020	0.500	0.009	1.000	-	-	-
7	L.73	12	EK5.20.659	Cleat, nose rib No.2	0.020	0.500	0.009	1.000	-	-	-
8	L.73	8	EK5.20.661	Washer, throat	-	-	-	-	-	-	Renewal recommended
9	L.73	8	EK5.20.649	Washer, throat	-	-	-	-	-	-	Renewal recommended

Note...
All dimensions are in inches

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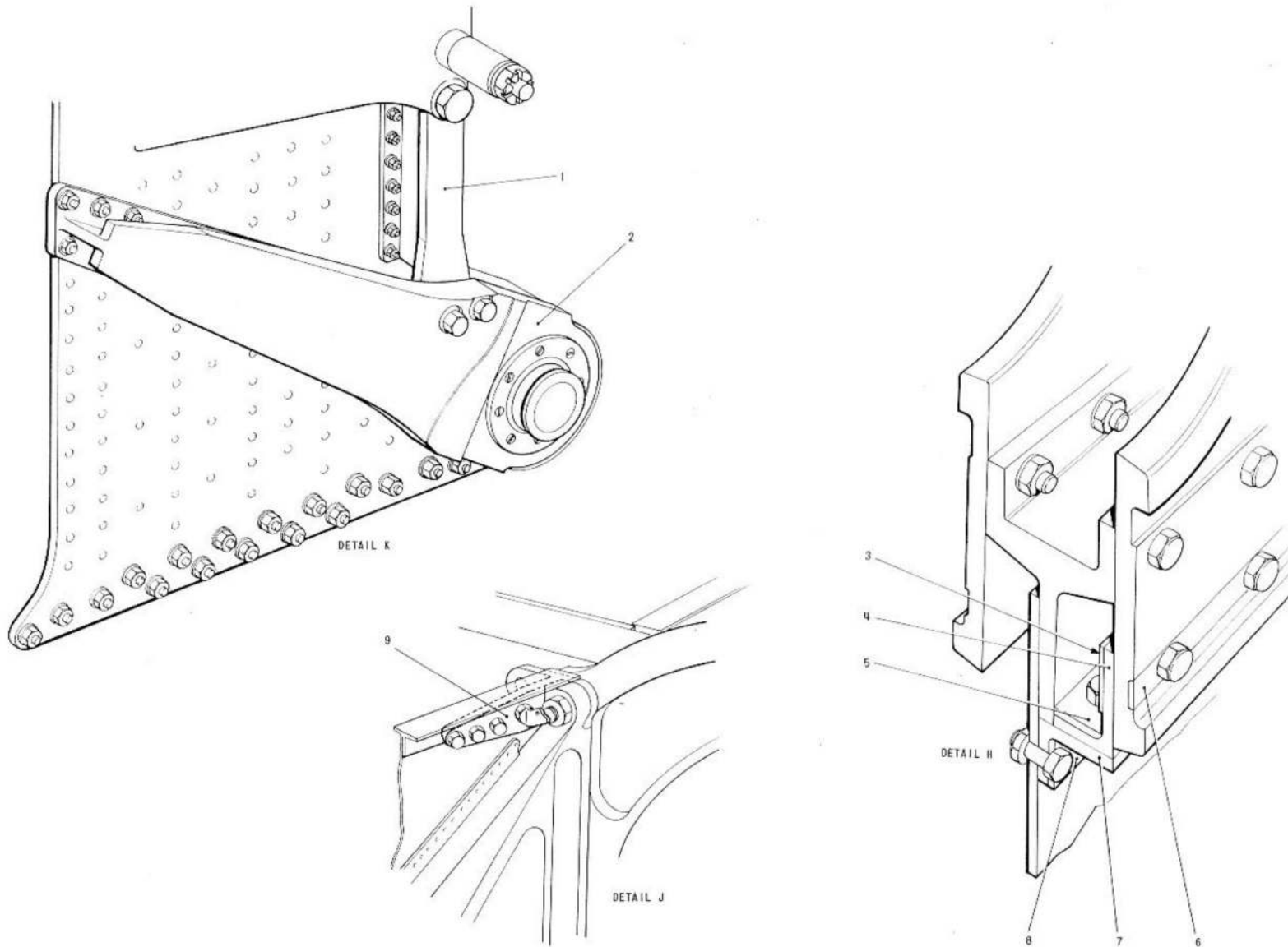


FIG. 2205. WING DETAILS, INNER MAIN SPAR

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KEY TO FIG.2205 (WING DETAILS, INNER MAIN SPAR)

Material			Negligible damage								Repair fig.No.
Item	Spec.	S. W. G.	Part No.	Description	Dents		Scratches		Holes		
					Max. depth	Min. dia.	Depth	Spacing	Max. dia.	Pitch ratio	
1	S.96	Bar	EK5.20.641	Strut tie	-	-	0.030	2.000	-	-	
2	S.96	Bar	EK5.20.639	Bracket attachment, side stay	-	-	0.040	1.500	-	-	
3	L.73	18	EK5.20.733	Plate, nut anchor	0.050	1.000	0.005	2.000	0.250	28:1	
4	L.65	EEDX16	EK5.20.723	Plate, reinforcing	0.025	0.250	0.008	1.500	-	-	
5	L.73	12	EK5.20.727	Strip, profile	0.020	0.500	0.009	1.000	-	-	
6	L.73		EK5.20.731	Strip, packing	0.020	0.500	0.009	1.000	-	-	
7	L.65	EEDX16	EK5.20.725	Piece angle, reinforcing	0.025	0.250	0.008	1.500	-	-	
8	L.73	12	EK5.20.729	Strip, profile	0.020	0.500	0.009	1.000	-	-	
9	S.97	Bar	EK5.20.739	Cleat, rib No.7	-	-	0.050	1.500	-	-	

Note...

All dimensions are in inches

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