Chapter 4 GENERAL SERVICING

LIST OF CONTENTS

LIST OF ILLUSTRATIONS

LIST OF TABLES

WARNING

AIRCREW EJECTION SEATS ARE FITTED TO THIS AIRCRAFT

Before attempting to enter the cabin ensure that the instructions detailed on the LETHAL WARNING marker card at the front of the handbook have been complied with. This is very important.

ENGINE

The air intake safety guards should be fitted at all times when engine is being ground run except when it is intended to take off after running up. It is essential that personnel are aware of the air intake depression and jet efflux danger areas as shown in Sect.2, Chap.2.

Introduction

1. This chapter contains information on the general servicing of the complete aircraft, together with tables listing the Standard and Special Ground Equipment and the Special Tools required for the operations described. This special equipment has been designed to eliminate any possibility of damage and distortion occurring during servicing and should, therefore, be used in preference to other types of similar equipment, as otherwise the efficiency of the aircraft may be seriously impaired. When carrying out servicing operations, ensure that the air-intake and jet-pipe blanking boards are in position. Other covers or protective devices should also be fitted, provided that they do not impede the progress of the work in hand. Servicing, dismantling and lubricating information applicable to particular assemblies and installations is covered in the appropriate chapters of Sections 3, 4, 5, 6 and 7. The servicing procedure for the standard components installed in this aircraft will be found in the relevant Air Publications listed at the beginning of this volume, or mentioned in the text.

Standard and special ground equipment

2. The ground equipment provided for use when servicing this aircraft is listed in Table 1 below:-

TABLE 1

Standard and special ground equipment

Subject	Ref.No.	Part No.	Description	No.off	Application
TOWING AND STEERING	4GB/3071	–	Arm forward steering	1	Steering from spools on nose wheel
	26FX/95612	D.218657	Adapter, towing arm	1	
	4GB/4174	–	Towing arm long Mk.2	1	Used with D.218657
	4GB/4138	–	Bridle, towing	1	Backward towing from main undercarriage
JACKING EQUIPMENT	4Q/2617	–	Jack, lifting, 5-ton	3	
	4Q/2620	–	Trestle Mk.3	2	Main jacking under wing, used with 4Q/2617
	4Q/2618	–	Trestle Mk.1	1	Main jacking under nose, used with 4Q/2617
	4Q/2655	–	Jack adapter head, Mk.102	3	For use with 4Q/2617
	4Q/2667	–	Jack, pillar, hydraulic 8-ton	1	Wheel changing, nose and main
	4Q/2807	–	Jack adapter head, Mk.113	1	For use with 4Q/2667
	26FX/95606	B.205909	Pads, jacking, wing	2	
	26FX/95607	B.208925	Pads, jacking nose	1	
	26FX/95608	A.205912	Bracket jacking nose undercarriage	1	Nose wheel changing
	26FX/95609	B.205914	Bracket jacking main undercarriage	1	Main wheel changing
TRESTLING EQUIPMENT	–	–	U.J. Trestle No.1	2	Component trestling
	–	–	U.J. Trestle No.6	4	Component trestling, wing
	26FX/95041	C.190878	Cradle, trestle, forward rear fuselage	1	
	26FX/	C.232866	Cradle, trestle, aft rear fuselage	1	

TABLE 1 - continued

Subject	Ref.No.	Part No.	Description	No.off	Application
TRESTLING EQUIPMENT (continued)	26FX/95613	C.220364	Cradle, trestle, forward front fuselage	1	For use with U.J. Trestle No.1
	26FX/95614	C.220363	Beam, trestle, rear front fuselage	1	For use with U.J. Trestle No.1
	26FX/95020	C.190377	Crutch, trestle, centre fuselage	2	For use with U.J. Trestle No.1
	26FX/95615	B.220361	Strut, bracing, front fuselage cradle	2	
	26FX/95368	B.206954	Strut, bracing, rear fuselage cradle	2	
	26FX/95052	A.189921	Clip, anchorage, nose wheel leg	1	
	26FX/	A.230750	Link, nose wheel anchorage clip	1	
	26FX/95234	B.199253	Strut, bracing, rear fuselage	1	For use when removing gun installation (Mk.8 aircraft only)
	26FX/95022	D.194044	Cradle, trestling, wing inboard	2	
	26FX/95023	D.194045	Cradle, trestling, wing outboard	2	
SLINGING EQUIPMENT	26FX/95011	D.188575	Sling, complete aircraft	1	
	26FX/95877	E.248990	Sling, aircraft salvaging, fuselage	1	Without engine
	26FX/95370	D.206952	Sling, aircraft salvaging, fuselage	1	With engine
	26FX/95049	C.190378	Sling, centre fuselage	1	
	26FX/95611	C.220365	Sling, front fuselage (without gun and ammunition)	1	For use with C.220363-4
	26FX/95367	B.207188	Sling, rear fuselage with tail unit	1	
	26FX/95366	C.206953	Sling, rear fuselage less tail unit	1	
	26FX/95014	C.188900	Sling, outer wing	1	
	26FX/95222	C.199388	Sling, outer wing, vertical position	1	
	26FX/95016	B.190526	Sling, tailplane, fin and rudder	1	
	26FX/95610	D.222260	Sling, windscreen	1	
	26FX/95720	B.229927	Sling, cockpit canopy	1	
ENGINE REMOVAL AND REPLACEMENT	4GC/5377	GM.9161	Sling, engine change unit	1	Avon E.C.U. and stand
	4GC/5348	J.53558	Sling engine	1	Avon engine
	26FX/95216	C.200213	Trolley, engine	1	
	26FX/95046	B.191737	Rail, engine, detachable	1	

TABLE 1 - continued

Subject	Ref.No.	Part No.	Description	No.off	Application
RIGGING EQUIPMENT	26FX/95736	D.231154	Base clinometer at tailplane	1	
	26FX/95644	C.224263	Gauge, incidence, mainplane	1	
	26FX/95006	A.192534	Gauge dihedral, mainplane and tailplane	1	
	26FX/95007	B.201624	Gauge, incidence, tailplane	1	
	26FX/95792	D.232208	Rigging fixture	1	For retaining control surfaces in neutral position
	26FX/95220	A.201222	Bar, levelling	1	
	26FX/95143	F.198704	Spigot, levelling	2	
	26FX/95633	D.228419	Board, elevator movement checking	1	
MISCELLANEOUS SPECIAL EQUIPMENT	26FX/95617	A.218961	Guard, safety, air-intake, port	1	
	26FX/95618	A.218962	Guard, safety, air-intake, starboard	1	
	26FX/95604	C.213633	Blanking cover assy, air-intake, port and starboard	1	
	26FX/95552	C.218417	Cover, jet pipe	1	
	26FX/95029	C.191636	Lock, safety, main undercarriage	2	
	26FX/95616	B.214206	Lock, safety, nose undercarriage	1	
	26FX/95303	Dunlop A.10054	Extractor, main wheel	1	
	26FX/95032	Dunlop A.5826	Extractor, nose wheel	1	
	27G/5062	Dunlop A.10039	Brake alignment fixture	1	
	26FX/95728	D.227026	Nose wheel UP microswitch setting jig	1	
	26FX/95513	B.214835	Nose wheel UP microswitch setting gauge	1	
	26FX/95508	C.210921	Nose wheel DOWN microswitch setting gauge	1	
	26FX/95733	B.227016	Nose wheel door sequence valve setting jig	1	
	26FX/-	C.235557	Hood lock jack microswitch gauge	1	
	26FX/95860	A.249091	Gauge checking main undercarriage rear lock	1	

TABLE 1 - continued

Subject	Ref.No.	Part No.	Description	No.off	Application
MISCELLANEOUS SPECIAL EQUIPMENT (continued)	26FX/95861	A.249092	Gauge checking main undercarriage front lock	1	
	–	A.204974	Wheel bay, guard for spigot	2	
	26FX/95741	C.229925	Trolley, tail empennage	1	
	26FX/95603	D.213985	Pilots ladder	2	Access to cockpit
	26FX/95421	A.214536	Position indicator, aileron booster adjustment unit	1	
	26FX/95715	A.227530	Dial spanner, aileron booster adjustment unit	1	
	27D/3082	B.214119	Weather cover, cockpit	1	
	27D/3177		Weather cover, pressure head	1	
	26FX/95217	C.200177	Weather cover, centre fuselage, port	1	
	26FX/95218	C.200178	Weather cover, centre fuselage, starboard	1	
	26FX/20089	B.K.871	Computor, weight and C.G. (with case)	1	
	26FX/95527	A.208035	Adapter for external air supply	1	For use with Air Trolley (Service Supply)
	26FX/95427	C.208502	Fuel system ground pressure testing	1	
	26FX/95725	B.230207	Strut, jury, for hood	1	To hold hood in open position.
	26FX/95727	C.230908	Cover, protection of J.B. on floor starboard	1	
	26FX/95726	C.230909	Cover, protection of J.B. on floor port	1	
	26FX/95797	C.231754	Defuelling equipment, wheels UP, assembly	1	
	26FX/	B.274018	Cover, ground, for airstream direction detector probe	1	
	26FX/20591	DGA/G/121/120	Tool, canopy release unit stop	1	
MISCELLANEOUS STANDARD EQUIPMENT	4F/	–	Trolley, hydraulic servicing	1	
	4F/1913	–	Trolley, electrical testing, Mk.4	1	
	4F/1714	–	Trolley, pressure-testing, Mk.1C	1	
	4F/1715 or 1856		Trolley servicing instrument Mk.1A or 1B	1	
	4G/4220	–	Trolley, oxygen charging, Mk.2	1	

TABLE 1 – continued

Subject	Ref. No.	Part No.	Description	No.off	Application
MISCELLANEOUS STANDARD EQUIPMENT (continued)	4G/	–	Trolley, radar cooling and testing	1	
	4G/4221	–	Trolley, H.P. air charging, Mk.2	1	
	4G/4342	–	Mats, main plane	2	
	◀ 4G/2051053	–	Ladder, flat top	2 ▶	
	4G/4857 or 4858	–	Trolley E.C.U. servicing Mk.1 or 2	1	
	105G/11	–	Adapter, for use with Type 37 rectifier	1	
	5P/2908		Rectifier, metal transportable, Type 37	1	
PICKETING AND CONTROL LOCKING EQUIPMENT	–	D.191910	Picketing fitting, main undercarriage	2	Main picketing and rearward towing from main undercarriage (embalmed aircraft only)
	–	A.191716	Picketing fitting, nose undercarriage	1	Main picketing at nose wheel (embalmed aircraft only)
	26FX/95203	F.159908	Picketing fitting, rear fuselage	1	
	26FX/95205	A.176437	Shackle, picketing, main undercarriage	2	
	26FX/95204	A.176434	Shackle, picketing, nose undercarriage	1	
	26FX/95605	B.219222	Flying controls locking gear	1	
	26FX/95137	C.189263	Aileron locking gear	2	
	26FX/95138	C.192836	Elevator locking gear	2	
	26FX/95139	B.189267	Rudder lock	1	
	26FX/95307	A.201031	Aileron and rudder rigging locks	2	
	26FX/95306	A.201030	Elevator rigging lock	1	

Special tools

3. The special tools provided for use when servicing this aircraft are given in table 2 below:-

TABLE 2

Special tools

Ref.No.	Part No.	Description	No.off
26FX/95058	A.191552	Extractor, main spar joint pins	1
26FX/95059	A.191655	Extractor, rear spar joint pins	1
26FX/95140	B.198963	Extractor, for front spar wing joint bush	1
26FX/95141	C.198962	Extractor, for rear spar wing joint bush	1
26FX/95080	B.191654	Tool for undercarriage UP lock	1
26FX/2726	A.195020	Adapter for connection of pressure gauge	1
26FX/95086	A.194464	Guide for fuel tank vent connector (also used as bung when pressure testing tanks)	2
26FX/95390	A.212332	Key for hydraulic reservoir	1
26FX/95223	B.200521	Tool for assembly of rear transport joint spigot	1
26FX/95228	Z.4948	Spanner for rear transport joint nuts	1
26FX/95308	B.204866	Spanner for front fuselage attachment nuts	1
26FX/95309	A.204865	Distance piece, special, for use at front fuselage attachment nuts	1
26FX/95087	A.194634	Spanner for Dunlop brake adjustment	1
26FX/95085	A.194578	Spanner for inverted-flight valve connection	1
26FX/95081	B.194717	Spanner for refuelling valve in forward tanks	1
26FX/95425	A.190295	Spanner for fuel system	1
26FX/95503	B.209815	Spanner for fuel system in wings	1
26FX/95504	B.209816	Spanner for fuel system in wings	1

TABLE 2 – continued

Ref. No.	Part No.	Description		
26FX/95226	A.201955	Spanner for main fuel delivery joint		1
26FX/95163	A.197766	Spanner for hydraulics in centre fuselage		1
26FX/95165	A.197767	Spanner for hydraulics in centre fuselage		1
26FX/95166	A.197768	Spanner for hydraulics in centre fuselage		1
26FX/95164	F.199124	Spanner for hydraulics in centre fuselage		1
26FX/95304	F.199406	Spanner for elevator outer hinge lock nut		1
26FX/95305	F.199407	Spanner for elevator outer hinge bolt		1
26FX/95311	A.209612	Spanner for flap hinge bolts		1
26FX/95645	B.224080	Spanner crutching for pylons		1
26FX/	F.261597	Stud for Pt.No.F.261598	Identical to	8
26FX/	F.261598	Block for adjustment of undercarriage door spigot	items authorized by STI/Hunter/263	2

Note . . .

Special tools for gun servicing on Mk.8 aircraft are listed in Sect.7, Chap.3.

TABLE 3

Packing Dimensions (fig.1)

Component	Height	Width	Length	Weight (lb)
Nose piece	2 ft 5 in.	2 ft 8 in.	2 ft 4½ in.	20
Front fuselage	6 ft 0 in.	5 ft 1¼ in.	15 ft 5¼ in.	900
Centre fuselage	5 ft 10 in.	10 ft 0 in.	16 ft 0 in.	1425
Rear fuselage	6 ft 9½ in.	4 ft 2½ in.	17 ft 1 in.	600
Tail cone	3 ft 6½ in.	3 ft 2 in.	4 ft 1 in.	75
Wing	2 ft 1 in.	11 ft 4 in.	19 ft 8 in.	972
Rudder	5 ft 2 in.	0 ft 8 in.	2 ft 0 in.	35
Fin	6 ft 0 in.	0 ft 7½ in.	4 ft 10 in.	60
Tail plane	0 ft 6½ in.	7 ft 11 in.	11 ft 10 in.	206
Elevator	0 ft 9 in.	1 ft 11 in.	7 ft 8 in.	67½
Aileron	0 ft 5 in.	2 ft 7 in.	8 ft 8 in.	75
Flap	0 ft 5 in.	2 ft 7 in.	7 ft 6 in.	70
Wing tip	0 ft 7 in.	0 ft 11 in.	5 ft 2¼ in.	6
Hood	2 ft 4 in.	4 ft 4 in.	4 ft 10 in.	150
Ammunition box	2 ft 7 in.	9½ in.	2 ft 0 in.	40
Bullet fairing	0 ft 10½ in.	0 ft 9 in.	3 ft 5½ in.	5

Dimensions given are to the nearest quarter of an inch. The weight of a component is for a single item only.

Order of dismantling and assembly

4. The breakdown points for dismantling the aircraft are shown in fig.1. The recommended order of dismantling is as follows:-

(1) Jack up the aircraft *(fig.2)* and retract the alighting gear.

(2) Position the component trestles to fully support the aircraft.

(3) Remove the outer wings *(Sect.3, Chap.2)* after removing any external stores which may be fitted.

Note . . .

The flaps, ailerons and pylons, if fitted, may be removed after the wings have been dismantled from the fuselage.

(4) Remove the rear fuselage *(Sect.3, Chap.1).*

Note . . .

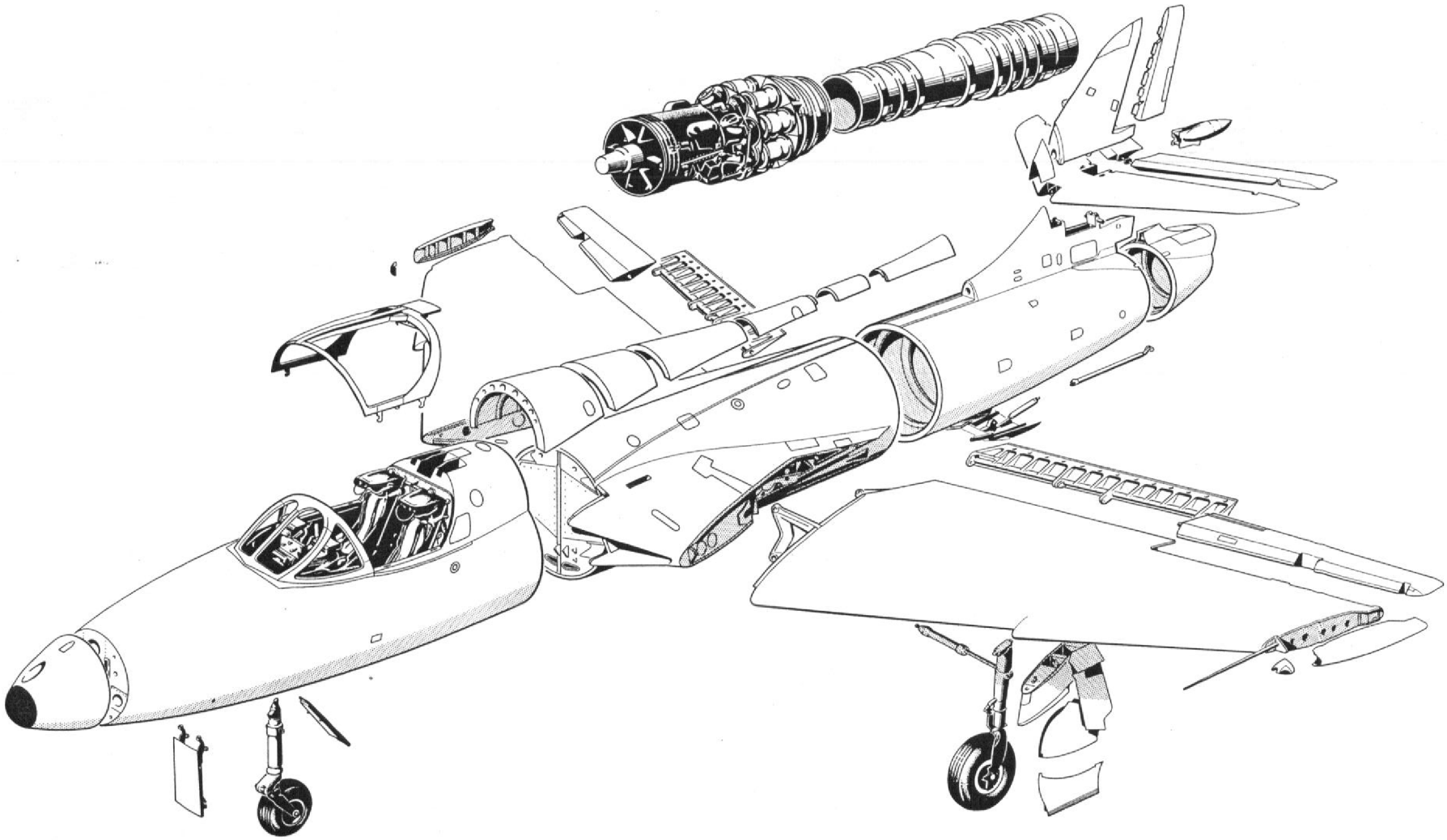
The rudder, elevators and tail plane (Sect.3, Chap.3) may be removed before or after the rear fuselage is removed from the centre fuselage

(5) Remove the engine *(Sect.4, Chap.1).*

(6) Remove the front fuselage *(Sect.3, Chap.1).*

(7) Remove the fuselage nose portion if necessary *(Sect.3, Chap.1).*

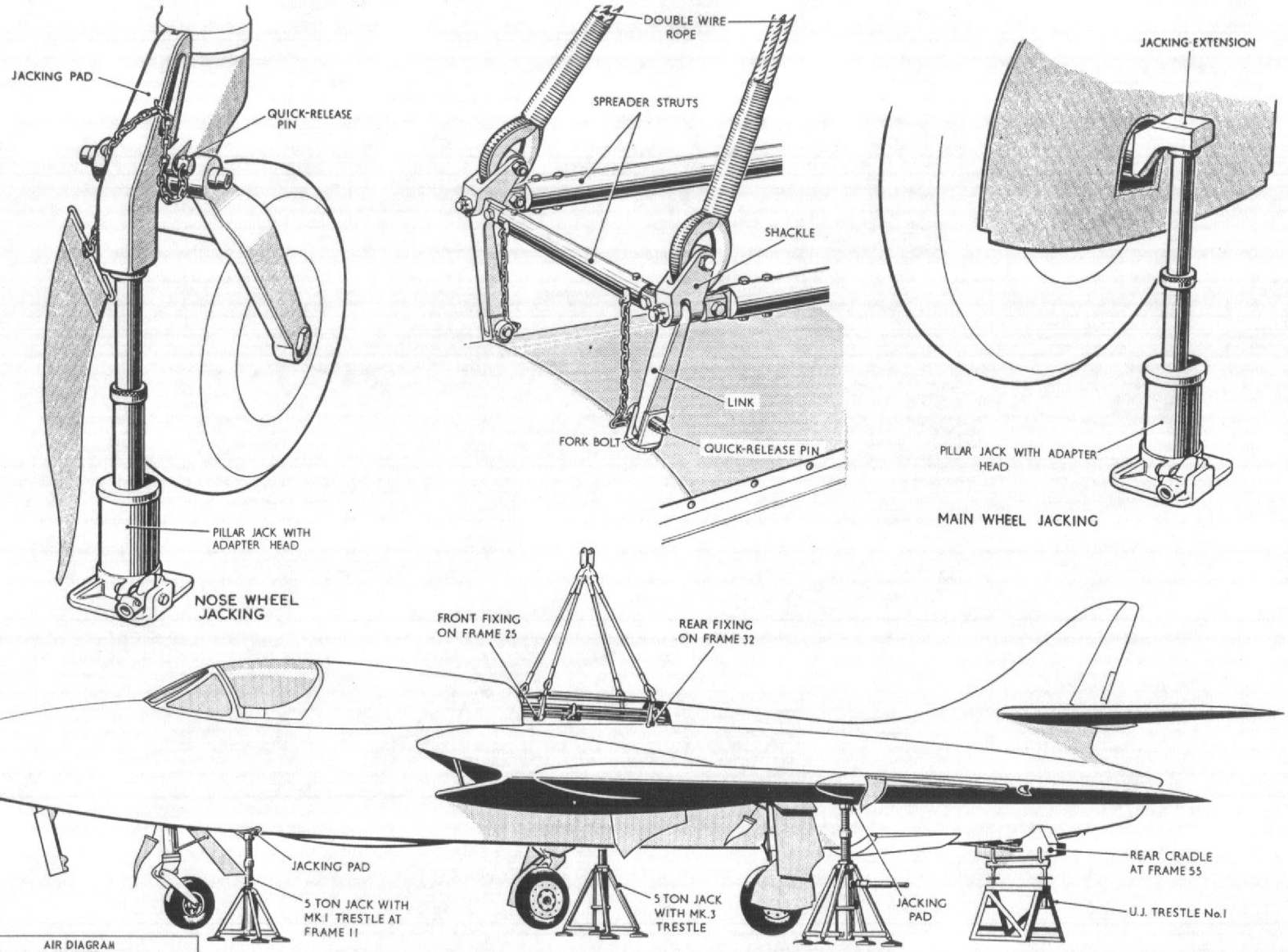
5. The assembly of the principal components is, in general, a direct reversal of the procedure given in para.4.



	AIR DIAGRAM 7513D/MIN HUNTER T MK 8, 8B & 8C
ISSUE 2	PREPARED BY MINISTRY OF AVIATION FOR PROMULGATION BY ADMIRALTY

13960

Fig. 1. Major components



	AIR DIAGRAM 7513E/MIN HUNTER T MK 8, 8B & 8C
ISSUE 1	PREPARED BY MINISTRY OF AVIATION FOR PROMULGATION BY ADMIRALTY

FIG. 2 Jacking, trestling and slinging

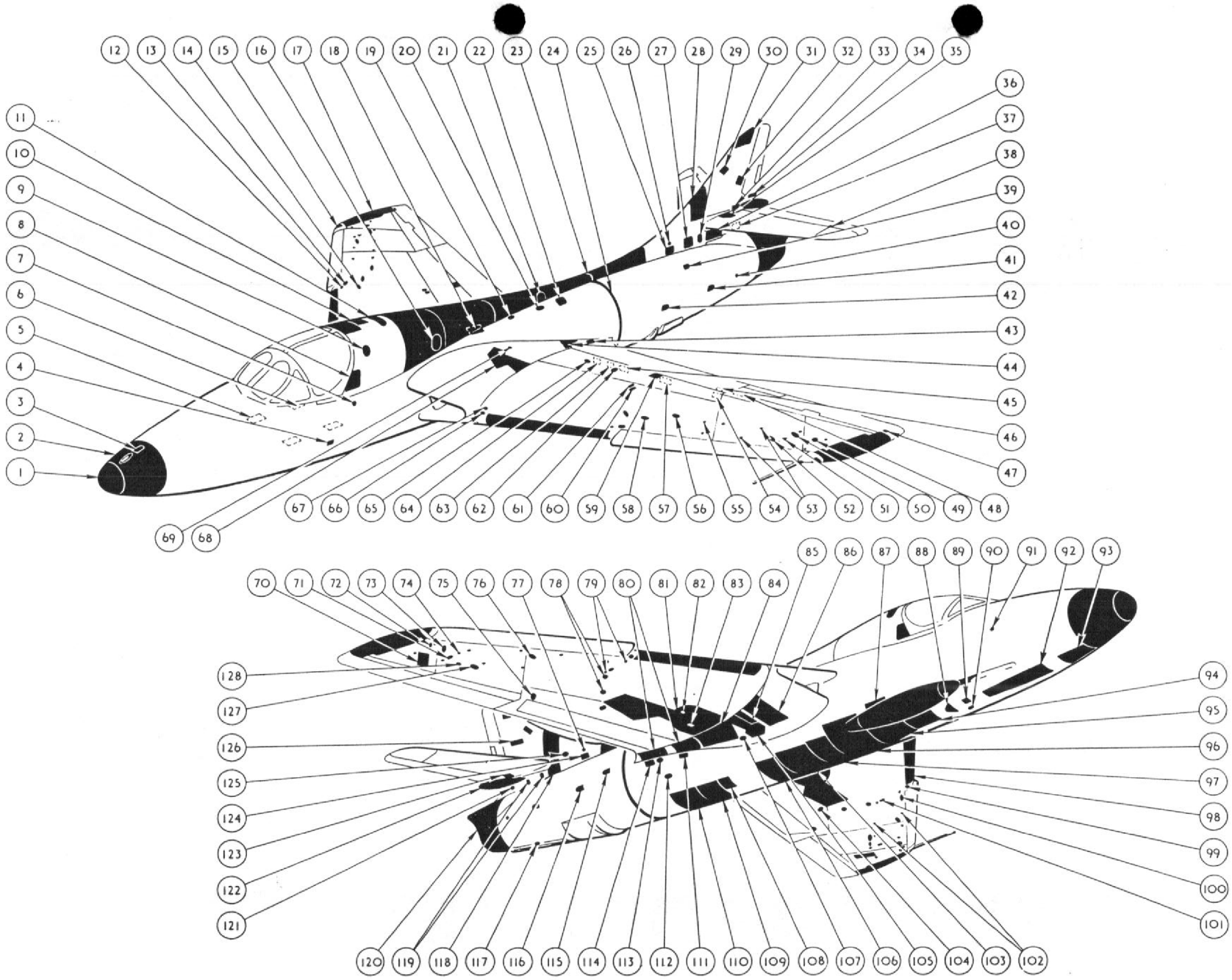


Fig. 3 Access panels

13962

KEY TO FIG.3 (ACCESS PANELS)

1 Radar scanner (Mk.8), General access (Mk 8B & 8C)
2 Detachable nose piece
3 Camera servicing
4 Pilot's foot step
5 Control column - cabin floor
6 Flying controls - cabin floor
7 External emergency hood release
8 Hood locking & jettison gear
9 Hydraulic equipment
10 General access
11 Flying controls
12 Pylon crutching
13 General access
14 General access
15 Navigation lamp window
16 Fuel level switches
17 Detachable wing tip
18 Fuel vent connections
19 Suction relief valve
20 Duct to engine bleed valve
21 Defuelling pressure connection
22 Cold air unit & dipstick
23 Fairing for flying controls
24 Transport joint butt strap
25 Flying controls lever
26 Flying controls pivot bolt
27 Hydraulic accumulator; pressure gauge & electrics
28 Flying controls
29 Tail plane actuator
30 Rudder controls
31 Detachable tip
32 Rudder controls
33 Tail plane & elevator hinges
34 General access
35 Tail plane hinge
36 Selector valve & elevator power controls
37 Elevator control lever
38 Elevator outer hinge
39 Jet pipe thermocouples
40 Jet pipe rear mounting
41 Electrical connections
42 Electrical connections
43 Hydraulic reservoir filler
44 Rear spar pin joint & flying controls
45 Aileron controls
46 Electrical connections
47 Aileron outer hinge
48 Aileron trim tab actuator
49 General access
50 General access
51 Pylon crutching
52 General access
53 Rocket projectile mountings
54 Aileron controls
55 Sling socket
56 General access
57 Aileron controls
58 General access
59 Flap jack
60 Flap jack anchorage
61 Flap jack greaser
62 Flap synchronizing jack
63 Aileron controls
64 Drum switch - flap control
65 Undercarriage jack attachment bolt
66 Wing pin joint
67 Sling socket
68 Main spar pin joint
69 Manual undercarriage release
70 Aileron booster unit
71 By-pass valve; fuel & air connections
72 Aileron booster unit
73 General access
74 Pylon crutching
75 Aileron controls
76 General access
77 Elevator feel unit
78 General access
79 Pylon crutching
80 General access
81 Main wheel bay access
82 Brake bleed screw
83 Wheel brake
84 Main undercarriage door
85 Fuel transfer pipe & pressure relief valve
86 General access
87 Armament door (Mk.8), General access (Mk 8B & 8C)
88 Flying controls
89 Nose wheel jack
90 Nose wheel pivot pin
91 Radar cooling connection (ground use only)
92 Nose wheel doors
93 General access
94 Oxygen bottles
95 Gun pack (Mk.8), General access (Mk 8B & 8C)
96 Radio & electrical bay
97 Fuel pump
98 Detachable leading edge
99 General access
100 General access
101 Fuel & air connections
102 Rocket projectile mountings
103 Fuel system
104 General access
105 Main spar pin joint
106 Engine starter
107 General access
108 General access
109 Gear box & gear box filler
110 Engine access
111 Gear box shaft coupling and engine mounting
112 Oil level sighting
113 Hydraulic filter
114 Igniter plug
115 Electrical connections
116 General access
117 Tele-briefing plug
118 Tail plane actuator
119 Elevator booster unit
120 Detachable tail cone
121 Elevator lever
122 Detachable bullet fairing
123 Elevator inner hinge
124 Flying controls & micronic filter
125 Elevator feel unit
126 Rudder trim tab actuator
127 General access
128 General access

Jacking, trestling and slinging

6. The methods to be employed and the jacks, trestles, etc., to be used when jacking, slinging and trestling the complete aircraft for servicing are illustrated in fig.2. It should be noted that the fuselage jacking pad has a concave bearing surface and must not be interchanged with the wing jacking pad, which has a flat bearing surface.

Note . . .

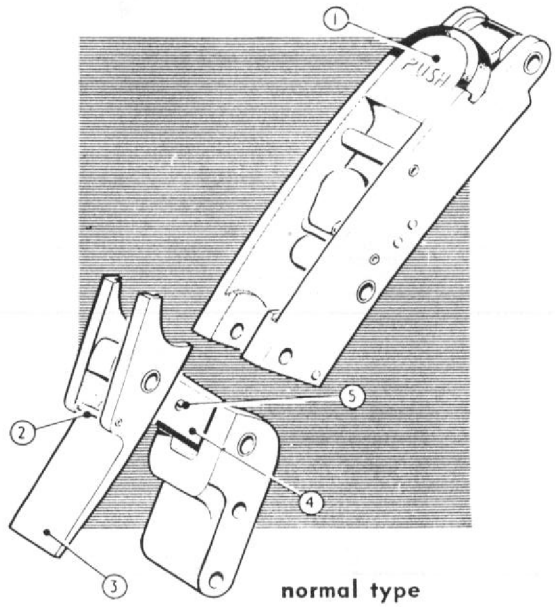
It is adviseable to check the charging of the main undercarriage legs before lowering the aircraft off the trestles (A.P.1803E, Vol.1, Sect.2).

Access doors and panels

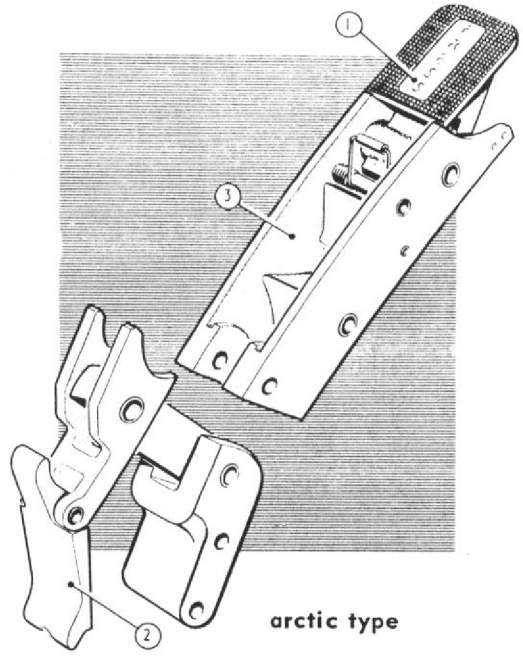
7. The positions of the access doors and removable panels are shown in fig.3, the components to which they give access being given in the key. When handling the doors and panels, care should be taken to ensure that they are not damaged or distorted in any way. When re-fitting them, ensure that they fit flush with the surrounding surface and that they are secure and effectively locked. Screws removed from access panels must be replaced by screws of the same length, after first ensuring that fouling has not already taken place, otherwise damage to components, pipe lines or structure in the vicinity of the panel may occur.

◀ **Note . . .**

The screws and bolts required for the attachment of the dorsal fin panels are detailed in fig.6. ▶



normal type



arctic type

Fig.4 Toggle Fasteners

Toggle fasteners

8. Certain removable panels are secured in position by toggle fasteners *(fig.4)*. To open these fasteners, the catch lever (1) marked PUSH is depressed with the fore-finger *(do not use tools)* causing the hook integral with this lever to disengage from pin (2) in the toggle lever (3), withdrawing it from the housing and disengaging the fastener. For re-engagement, the hooks on the end of the toggle lever are engaged in the recess and the lever pressed home with the palm of the hand. Adjustment is accomplished by screwing up or unscrewing the links (4), after first slackening off the grub screw (5) in the side face of the links. One turn of the thread on the links gives 0.036 in. of adjustment and the total adjustment available is 0.5 in. When adjustment is satisfactory, the grub screw must be re-tightened.

Note . . .

The grub screw must be slackened off before adjustment as otherwise the threads will be damaged. The grub screw must be re-tightened after adjustment.

9. Certain access doors in the undersurface of the fuselage are secured by Arctic type toggle fasteners fig.4. To open these fasteners, the knurled safety catch plate (1) is depressed and the lever (2) ejected sufficiently to enable it to be easily withdrawn from the housing

(3) For re-engagement, the lever is engaged with the housing and then pressed home with the palm of the hand. Adjustment is accomplished by removing the split pin and then screwing up or unscrewing the links. One turn of the thread on the links gives 0.036 in. and the total adjustment available is 0.5 in. When adjustment is satisfactory, lock with a split pin.

Rigging of fixed surfaces

10. When checking the alignment of the structure by means of the diagonal dimensions given in fig.5, there is no need to trestle the aircraft. When the incidence and dihedral are being checked, the aircraft must be trestled in the flying position, with the equipment shown in fig.2. The procedure for rigging is as follows:–

(1) Check the alignment of the structure.

(2) Jack up the aircraft and level it transversely, by means of a straight edge and spirit level placed across the fuselage side members against the windscreen arch.

(3) Place a levelling spigot *(Ref.26FX/95143)* into each of the levelling points attached to the fuselage structure in the port wheel bay and level the aircraft longitudinally with a straight edge and spirit level placed across these two spigots. The trestle at frame 55 is to be adjusted to take the weight of the rear fuselage after the aircraft has been levelled longitudinally.

(4) Check the incidence and dihedral of the wings, using the gauges quoted in Table 1.

(5) Check the incidence and dihedral of the tail plane, using the gauges quoted in Table 1.

(6) When checking the variable incidence of the tailplane use a clinometer with the clinometer base Pt.No.D.231154 *(fig.5)*. To fit the base, remove the port top tailplane fairing, locate the lugs between the front and rear tailplane spars, with the side of the base painted red facing outboard and secure to the appropriate anchor nuts normally used for the tailplane fairing.

The adjustment of the individual control surfaces is described in Sect.3, Chap.4.

Miscellaneous drain points

11. A series of small holes, extending from frame 19 *(Sect.3, Chap.1)* to the tail end, are provided in the undersurface of the fuselage to allow any moisture and surplus fuel which may accumulate between these frames to drain away. Surplus fuel from the high pressure cock, combustion chambers and the exhaust unit is conducted through pipes to eject at the bottom of the fuselage. All the drain holes should be inspected periodically to ensure that they are not blocked, otherwise an accumulation of fuel, with its resultant fire may arise. Small cocks are provided at the lowest points of the fuel system, together with a drain plug in the engine fuel filter casing, to enable any water or sediment to be drained from the fuel *(Sect.2, Chap.2)*. Moisture drain traps are also provided in the pitot installation *(Sect.5, Chap.2)*.

Cleaning cabin hood

12. When cleaning or polishing the cabin hood, care must be taken to ensure that no rags that have been in contact with trichlorethylene are used, as rags so contaminated will cause serious damage to the surface. Refer to A.P.1464D, Vol.1, Part 2, Sect.5, Chap.5, for detailed instructions on the care of transparent plastic panels.

Cleaning cabin

13. When wiping over those portions of the instrument panels, shelves, etc., which contain labels, only clean dry rags should be used. Many of these labels will be damaged if rags impregnated with fuel, grease solvent or thinners are used.

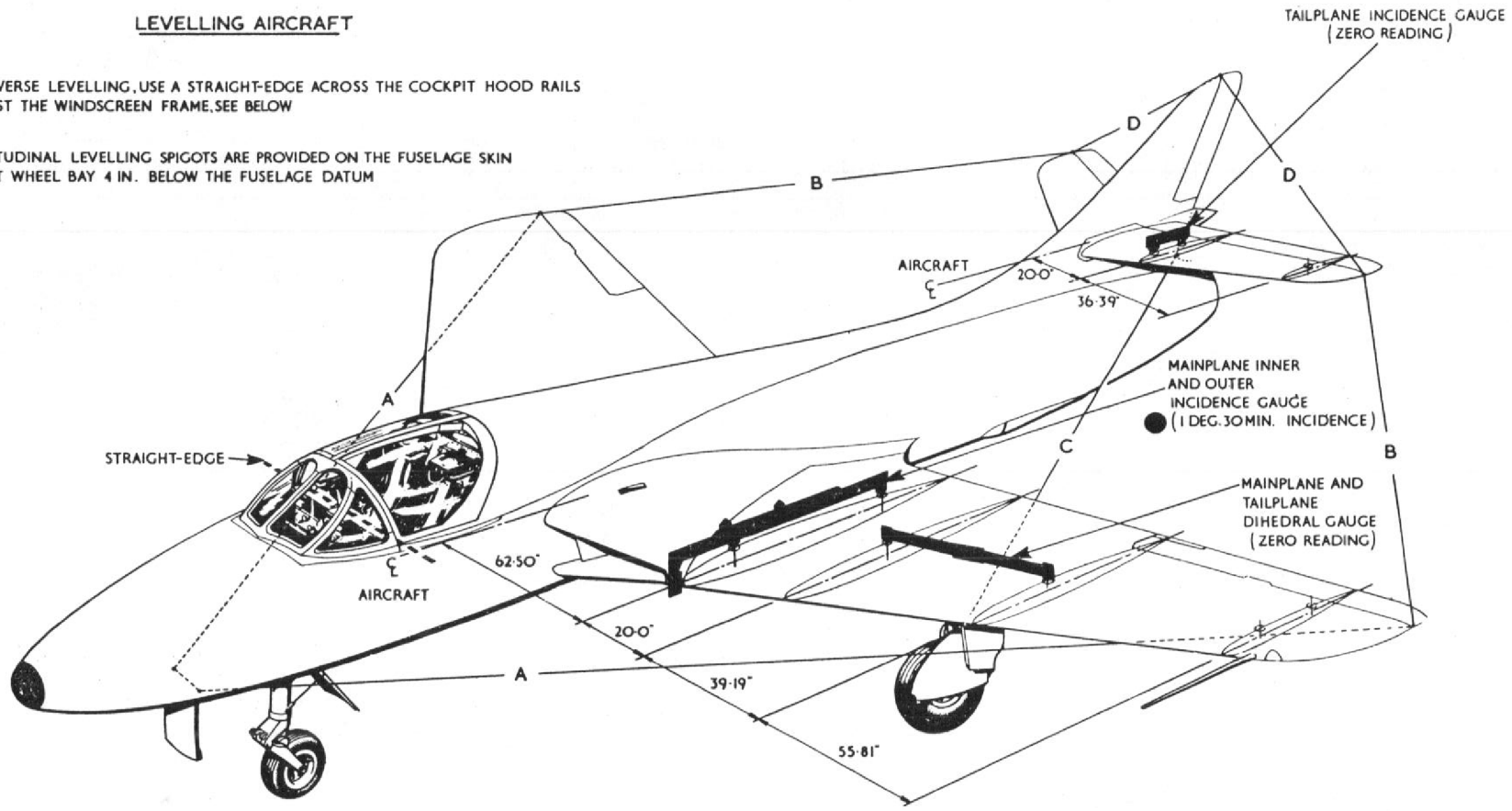
Pipe lines

14. Before the assembly of pipe lines of the fuel system, hydraulic system and air conditioning system *(not the oxygen system)*, the threads of all pipe couplings should be lubricated with anti-seize compound ZX–28G. When re-assembling pipe lines, ensure that the arrows on the pipes, non-return valves and other components, point in the direction of flow. Tighten the unions by hand first and examine the lay of the pipe to ensure that the maximum clearance from other pipes, components or structure is obtained to eliminate the possibility of chafing. After final tightening, ensure that the clearance has been maintained.

LEVELLING AIRCRAFT

FOR TRANSVERSE LEVELLING, USE A STRAIGHT-EDGE ACROSS THE COCKPIT HOOD RAILS AND AGAINST THE WINDSCREEN FRAME, SEE BELOW

FOR LONGITUDINAL LEVELLING SPIGOTS ARE PROVIDED ON THE FUSELAGE SKIN IN THE PORT WHEEL BAY 4 IN. BELOW THE FUSELAGE DATUM

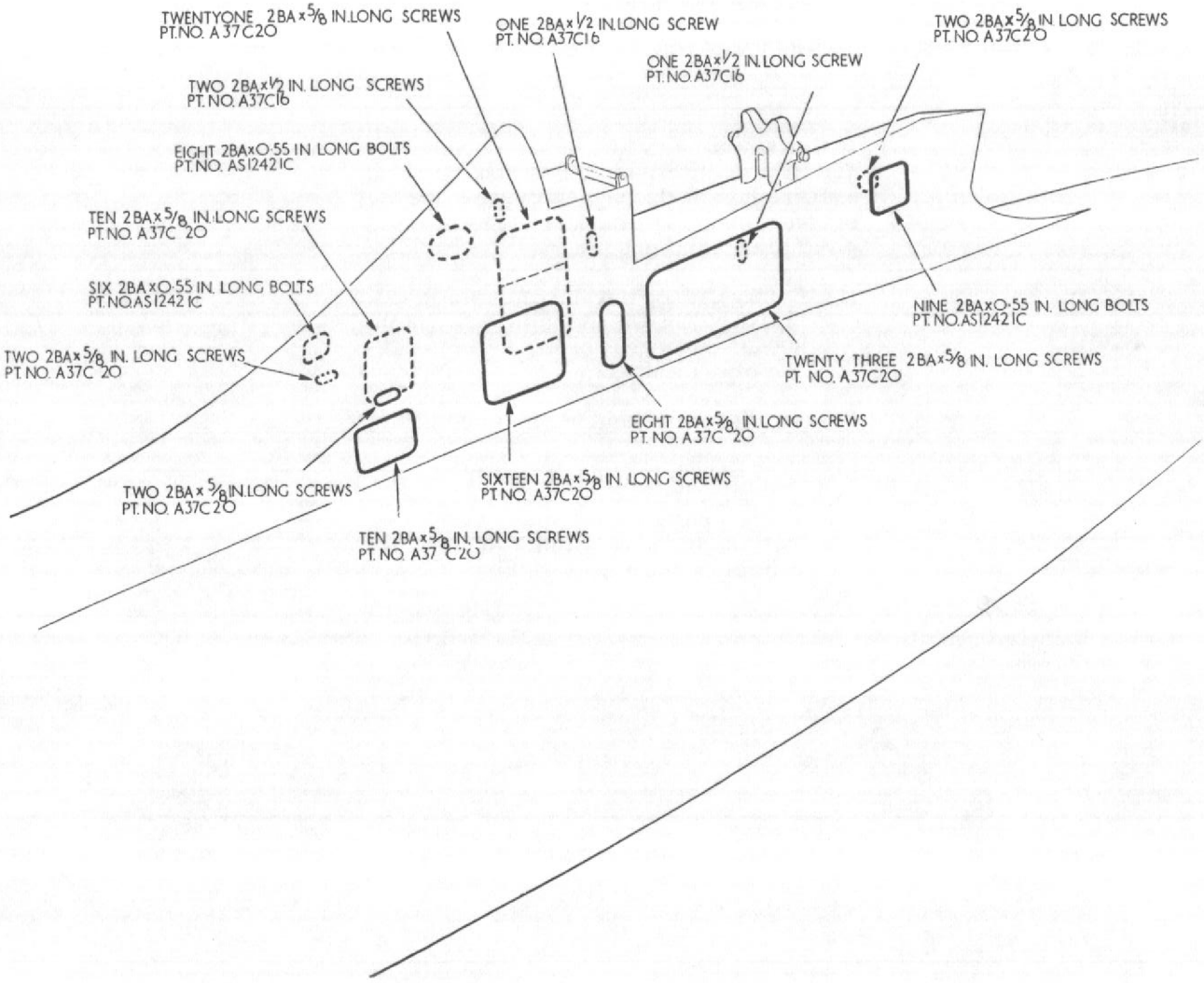


● TOLERANCE AT WING ROOT AND TIP ± 0 DEG. 20 MIN. A COMBINATION OF A POSITIVE ERROR AT ONE WING TIP WITH A NEGATIVE ERROR AT THE OTHER MUST NOT GIVE A TWIST OF MORE THAN 0 DEG. 25 MIN.

SYMMETRY CHECK

CHECKING POINTS	LIMITS
A — NOSE WHEEL DOOR CUT-OUT TO OUTBOARD END OF AILERON	0·50 IN.
B — OUTBOARD END OF AILERON TO OUTBOARD END OF ELEVATOR	0·50 IN.
C — UNDERCARRIAGE WHEEL HUB TO TRAILING EDGE OF FIN	0·50 IN.
D — TIP OF FIN TO OUTBOARD END OF ELEVATOR	0·25 IN

Fig. 5. Rigging diagram



T.P. 17571

Fig.6 Dorsal fin access panels attachment fixings

◀ **Hot air ductings**

15. Every opportunity must be taken to examine hot air ductings throughout the life of the aircraft, particular attention being given to the following :—

(1) Damage to, or discolouration of, ducts, pipes, wiring or structure adjacent to hot air ductings, which may be indicative of gas leakages.

(2) Security and condition of all duct joints.

(3) Duct lagging for sign of damage.

(4) Visible portions of duct metalwork, particularly in the vicinity of welds for signs of cracking. ▶