

Appendix 1 - Chapter 4

TAIL UNIT

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NOTE...

Where figure numbers on illustrations are identical, the Mod. number in the title indicates the structural differences.

- FIG. A402 FIN LEADING EDGE AND FRONT FIN POST
- ◀ FIG. 403 FIN INTERMEDIATE STRUCTURE (REFER TO PART 1)
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- FIG. A405D RUDDER SKINNING
- FIG. 406A RUDDER BALANCE SEAL REPAIRS (REFER TO PART 1)
- FIG. A407 ASSEMBLY OF RUDDER BALANCE SEAL

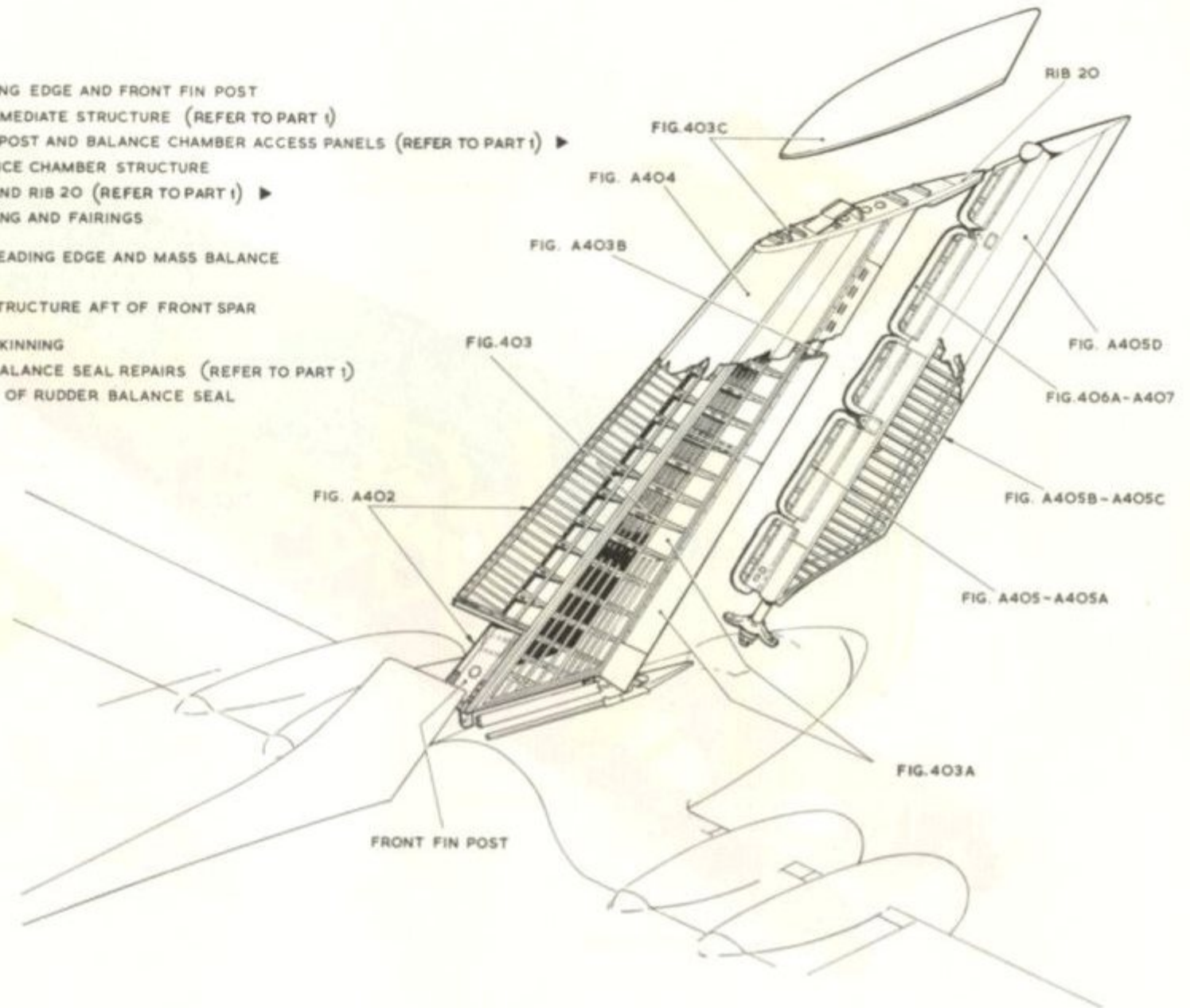


Fig. A401. Tail unit key diagram

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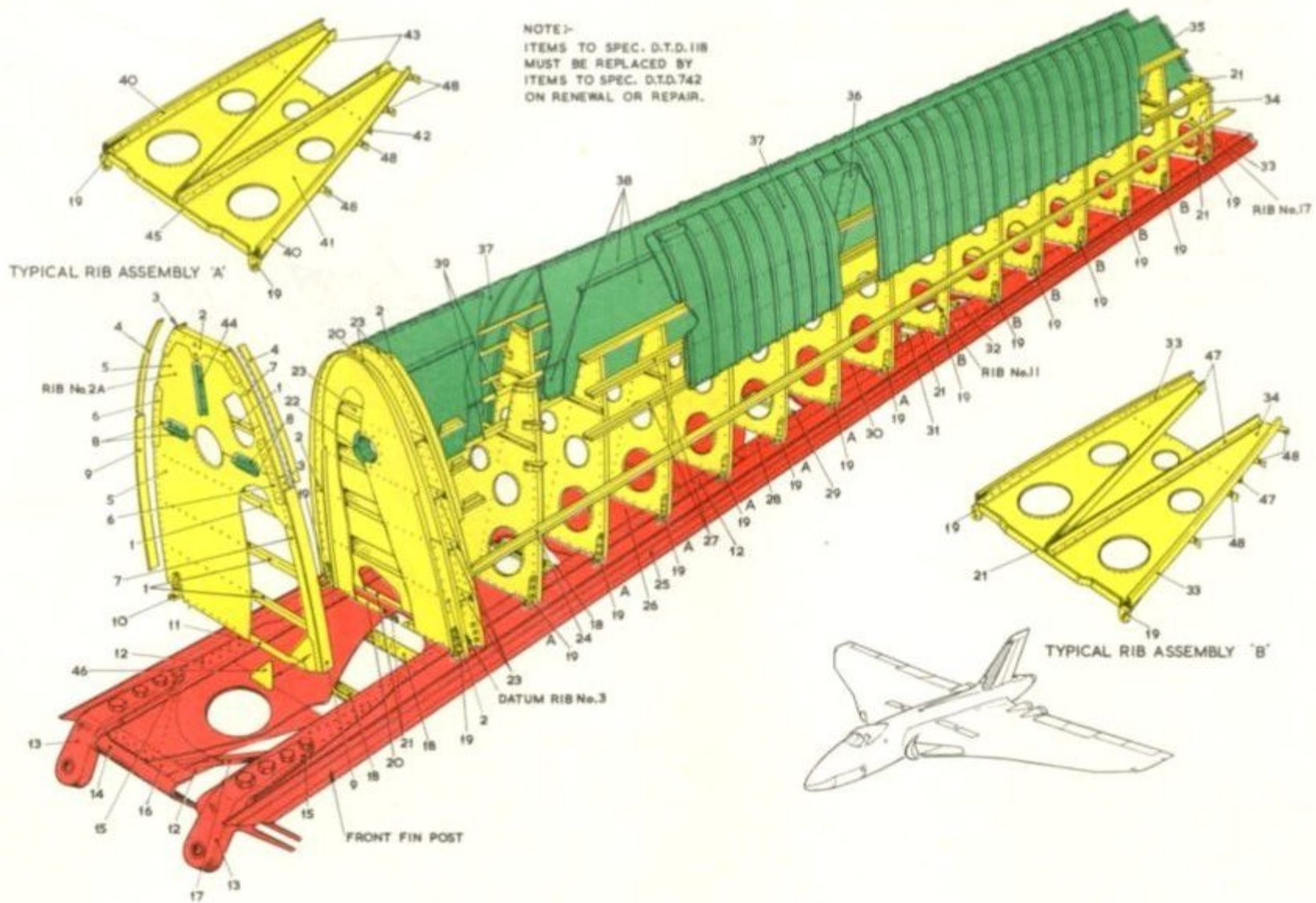


Fig. A402 Fin L/Edge - front fin post

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KEY TO FIG. A 402

Item	Material		Description	Negligible Damage				Repair Fig.
	Spec.	S. W. G. or Section		Dents	Holes	Pitch Ratio		
				Depth	Dist. Apart	Dia.		
1	L. 72	60/SS. 1793	Angle	x 0.025	3.0	0.25	6:1	113
2	L. 72	18	Stiffening plate	x 0.05	3.0	0.25	6:1	-
3	L. 72	18	Angle	0.05	3.0	0.25	6:1	113
4	L. 72	12	Packing	x 0.025	3.0	0.25	8:1	-
5	L. 72	20	Web	0.05	3.0	0.25	10:1	118
6	L. 72	249/SS. 1793	Angle	x 0.025	3.0	0.25	6:1	-
7	L. 72	18	Angle	x 0.05	3.0	0.25	6:1	113
8	L. 72	12B/SS. 1793	Angle	x 0.05	3.0	0.25	4:1	-
9	D. T. D. 626	12	Packing	x 0.025	3.0	0.25	8:1	-
10	S. 99	Forging	Club foot	* -	-	-	-	-
11	L. 72	183/SS. 1793	Angle	0.025	3.0	0.25	6:1	113
12	D. T. D. 687	14	Doubler plate	0.025	3.0	0.25	8:1	-
13	S. 99	Forging	Joint fitting	* -	-	-	-	-
14	L. 72	8	Angle	0.025	3.0	-	-	-
15	L. 72	24	Rubbing plate	0.025	3.0	-	-	-
16	D. T. D. 687	18	Reinforcing plate	0.025	3.0	0.25	8:1	-
17	L. 72	18	Stiffener angle	0.025	3.0	0.25	8:1	113
18	L. 72	219/SS. 1793	Angle	0.025	3.0	0.25	8:1	112
19	L. 65	Forging	Club foot	* -	-	-	-	-
20	D. T. D. 626	20	Web	0.05	3.0	0.25	8:1	103, 104
21	L. 72	20	Angle	0.05	3.0	0.25	6:1	113
22	L. 59	18	Plate	0.05	3.0	0.25	6:1	-
23	L. 72	18	Channel	0.05	3.0	0.25	6:1	108
24	L. 72	828/SS. 1793	Angle	0.05	3.0	0.25	6:1	111
25	D. T. D. 5074	-	Fin post	* -	-	-	-	-
26	D. T. D. 687	12	Web	0.025	3.0	-	-	116
27	L. 72	830/SS. 1793	Angle	0.05	3.0	0.125	6:1	111
28	D. T. D. 687	14	Joint plate	0.025	3.0	0.25	8:1	-
29	L. 72	528/SS. 1793	Angle	0.025	3.0	0.25	8:1	113
30	D. T. D. 687	14	Web	0.025	3.0	-	-	103, 116
31	L. 72	16	Angle	0.05	3.0	0.25	10:1	-
32	L. 72	213/SS. 1793	Angle	0.025	3.0	0.25	8:1	113
33	L. 72	16	Angle	0.05	3.0	0.25	6:1	113
34	D. T. D. 118A	20	Web	0.05	3.0	0.25	4:1	103, 106
35	L. 72	762/SS. 1793	Angle	0.05	3.0	0.25	6:1	113
36	D. T. D. 118	20	Butt strap	0.05	3.0	0.25	6:1	-
37	L. 72	SS. 4330	Inner skin	0.05	3.0	0.25	10:1	-

* No repairs permitted
x More expedient to renew than repair
All dimensions are quoted in inches

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KEY TO FIG. A402 (cont'd)

Item	Material		Description	Negligible Damage				Repair Fig.
	Spec.	S, W, G, or Section		Dents	Dist. Apart	Holes	Pitch Ratio	
				Depth		Dia.		
38	D. T. D. 118	20	Duct wall	0.05	3.0	0.25	10:1	103, 116
39	D. T. D. 118	20	Angle	0.05	3.0	0.125	6:1	113
40	L. 72	528/SS, 1793	Angle	0.05	3.0	0.125	6:1	113
41	D. T. D. 118	18	Web	0.05	3.0	0.25	4:1	103, 106
42	L. 72	183/SS, 1793	Angle	0.05	3.0	0.125	6:1	113
43	L. 72	12B/SS, 1793	Angle	0.05	3.0	0.125	8:1	113
44	L. 72	60/SS, 1793	Angle	x 0.025	3.0	0.25	6:1	-
45	L. 72	18	Angle	0.05	3.0	0.125	6:1	113
46	L. 72	18	Gusset plate	0.05	3.0	0.25	6:1	-
47	L. 72	18	Angle	0.05	3.0	0.25	6:1	113
48	L. 72	20	Angle	x 0.05	3.0	0.25	6:1	113

* No repairs permitted

x More expedient to renew than repair

All dimensions are quoted in inches

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KEY TO FIG.A403B (POST MOD.569)

Item	Material		Description	Negligible Damage				Repair Fig.
	Spec.	S.W.G. or Section		Dents	Holes			
				Depth	Dist. Apart	Dia.	Pitch Ratio	
1	L.65	-	Bracket	* -	-	-	-	-
2	D.T.D.626	20	Web	0.25	3.0	-	-	103
3	L.72	100/SS.1793	Channel	0.05	3.0	0.25	8:1	108
4	L.72	153/SS.1793	Boom	0.025	3.0	-	-	108
5	L.72	788/SS.1793	Angle	0.05	3.0	-	-	113
6	L.73	18	Bracket	0.025	3.0	-	-	108
7	L.73	18	Channel	0.05	3.0	0.25	8:1	-
8	L.72	132/SS.1793	Angle	0.05	3.0	0.25	8:1	113
9	D.T.D.626	20	Diaphragm	0.05	3.0	-	-	-
10	L.72	762/SS.1793	Angle	0.05	3.0	0.25	8:1	113
11	L.72	18	Angle	0.05	3.0	0.25	8:1	-
12	D.T.D.626	18	Skin	0.05	3.0	-	-	103, 116
13	L.72	20	Bracket	x 0.05	3.0	0.25	8:1	-
14	L.72	20	Diaphragm	0.05	3.0	0.25	8:1	115
15	L.72	20	Angle	x 0.05	3.0	0.25	8:1	108
16	L.72	20	Sealing plate	0.05	3.0	0.25	8:1	-
17	L.72	863/SS.1793	Angle	0.05	3.0	0.25	8:1	-
18	L.72	787/SS.1793	Angle	0.05	3.0	0.25	8:1	-
19	D.T.D.118	22	Web	0.25	3.0	-	-	103
20	L.72	508/SS.1793	Channel	0.05	3.0	0.25	8:1	107, 108
21	L.72	22	Gusset plate	x 0.05	3.0	-	-	-
22	L.72	22	Doubling plate	0.05	3.0	0.25	8:1	-
23	L.72	20	Angle	0.1	3.0	0.25	6:1	-
24	L.72	20	Diaphragm	0.1	3.0	0.25	6:1	-
25	L.72	20	Reinforcing plate	0.025	3.0	0.25	8:1	-
26	S.514	16	Channel	0.025	3.0	-	-	-
27	D.T.D.118	22	Diaphragm	0.05	3.0	0.25	6:1	-
28	D.T.D.626	20	Web	0.025	3.0	0.25	8:1	103, 116
29	L.72	20	Diaphragm	0.1	3.0	0.25	8:1	-
30	L.59	20	Corner fairing	0.1	3.0	-	-	-
31	S.510	24	Corner bracket	0.1	3.0	-	-	104
32	D.T.D.626	10	Sealing plate	0.05	3.0	-	-	-
33	L.72	138/SS.1793	Angle	x 0.05	3.0	0.25	8:1	-
34	L.72	136/SS.1793	Angle	x 0.05	3.0	0.25	8:1	-
35	L.65	444/SS.3075	Bracket	-	-	-	-	-
36	L.72	496/SS.1793	Channel member	0.05	3.0	0.25	8:1	-
37	D.T.D.626	20	Side panel	0.05	3.0	-	-	-

x More expedient to renew than repair
* No repairs permitted
All dimensions are quoted in inches.

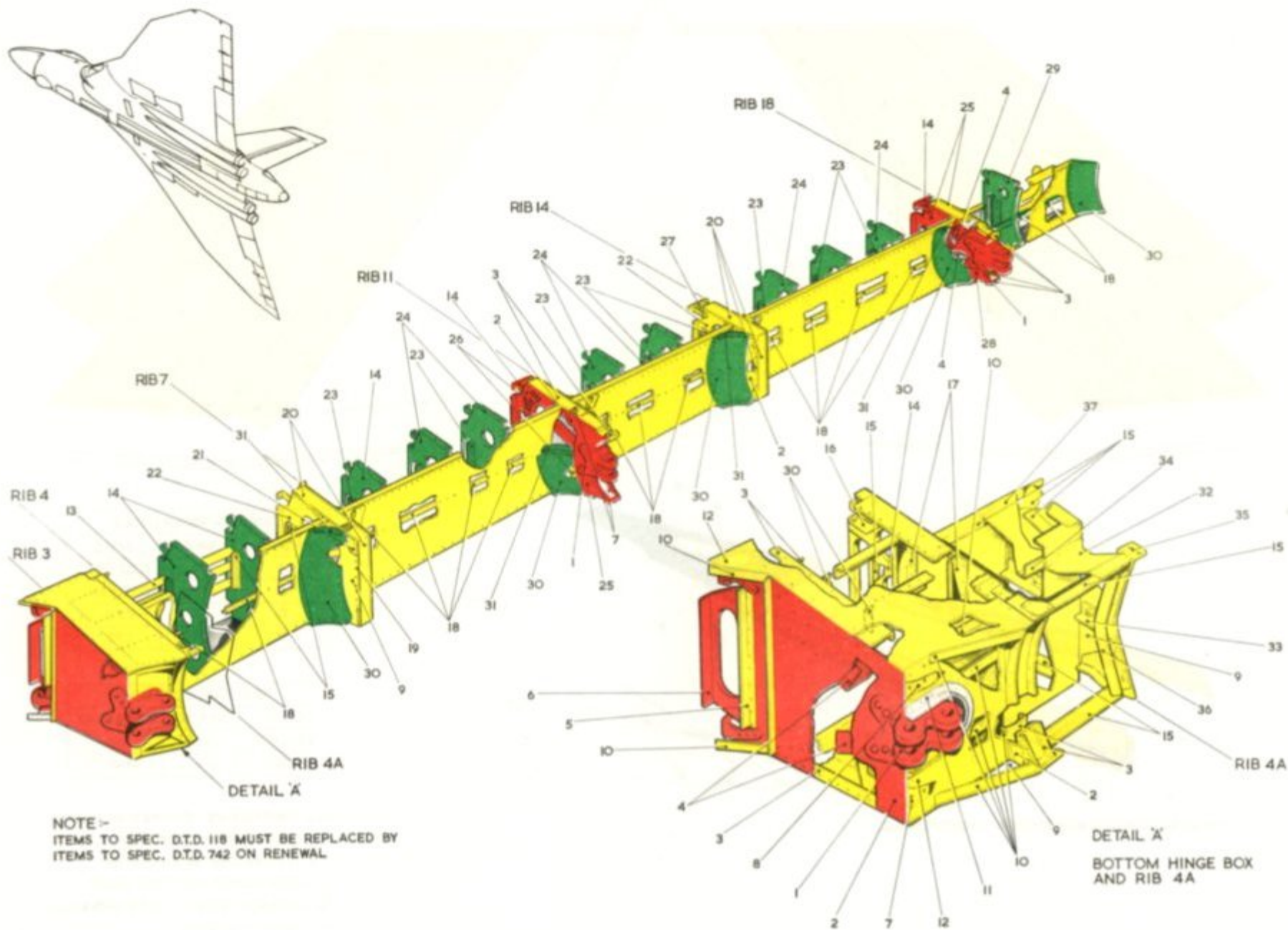
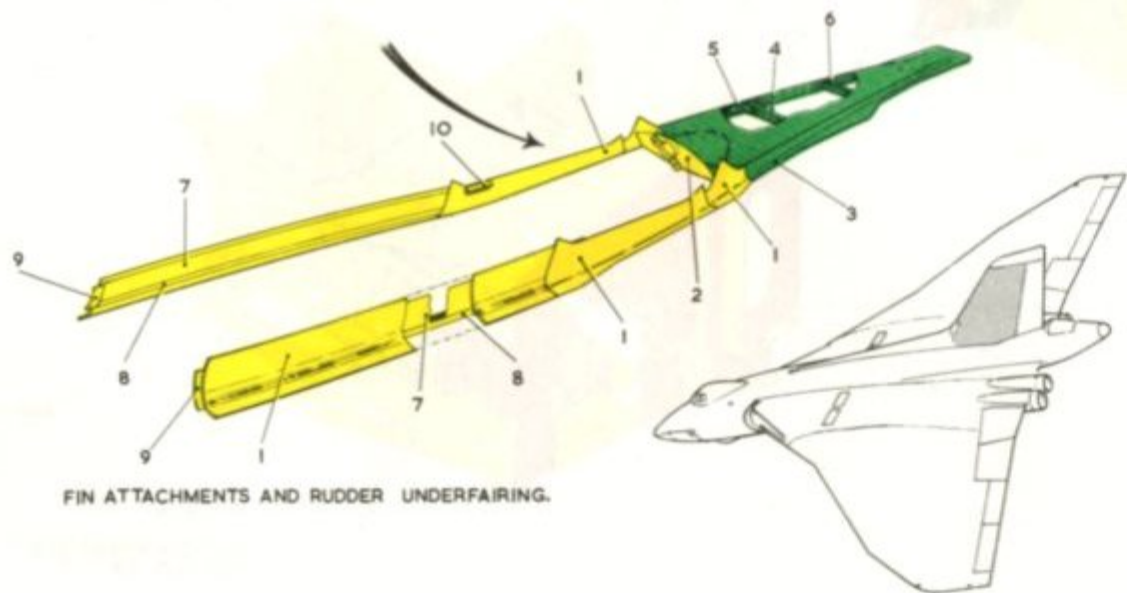
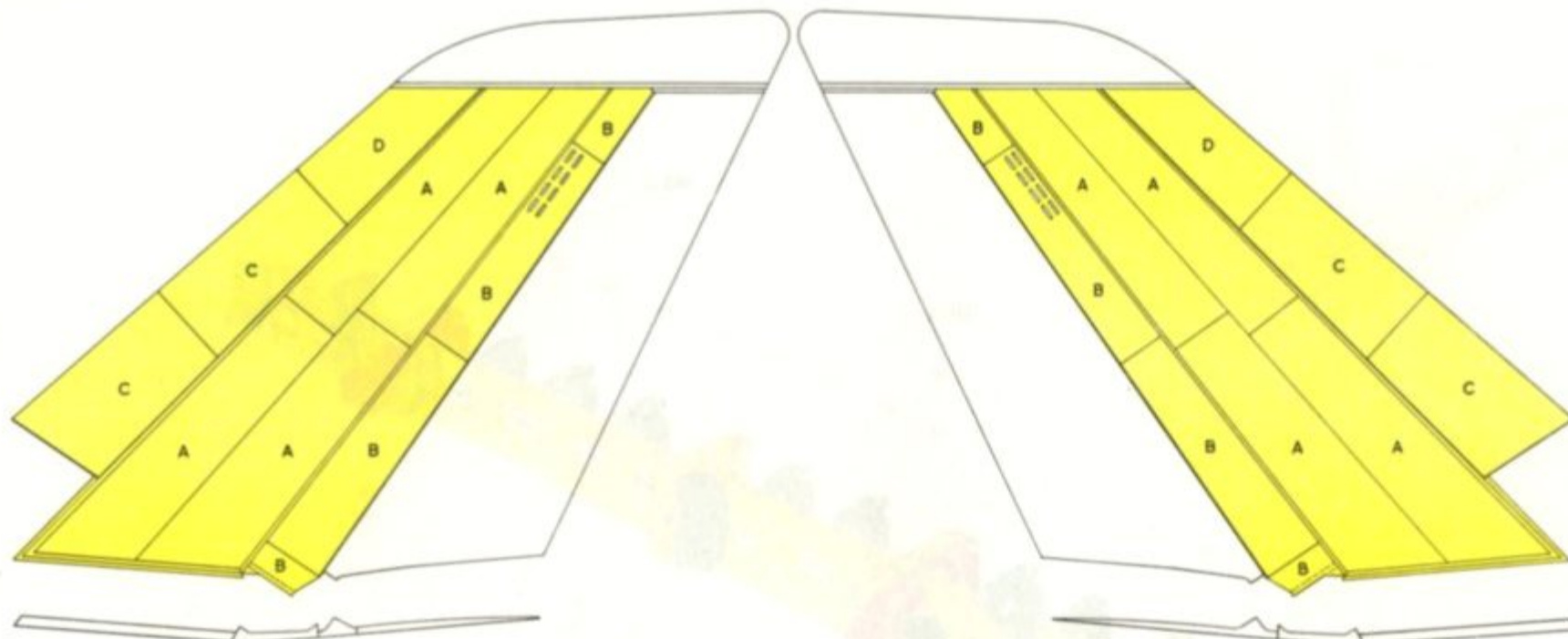


Fig.A403B Fin balance chamber (Post Mod.569)

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FIN ATTACHMENTS AND RUDDER UNDERFAIRING.

SKINNING REFERENCES		
PREFIX	S.W.G.	SPEC.
A	14	D.T.D. 626
B	18	D.T.D. 626
C	18	L72
D	20	L72

NEGLECTIBLE DAMAGE		
DENTS	DEPTH	DIST. APART
YELLOW	0-05	5-0
GREEN	0-1	4-0

ALL DIMENSIONS QUOTED IN INCHES,
FOR SKIN REPAIRS SEE FIG.103,104,
116,117, DAMAGE IN AREAS OF
CONCENTRATED RIVETING MUST
BE REPAIRED WITH JOINTS ARRANGED
OUTSIDE THE AREA.

Fig.A 404 Fin skinning
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KEY TO FIG. A404

Item	Material		Description	Negligible Damage				Repair Fig.
	Spec.	S. W. G. or Section		Dents Depth	Dist. Apart	Holes Dia.	Pitch Ratio	
1	L. 72	20	Fairing	0.05	3.0	-	-	103, 104
2	L. 59	20	Dishing	0.05	3.0	0.25	6:1	103
3	L. 72	20	Fairing	0.05	3.0	-	-	103, 104
4	L. 72	20	Stiffener	x 0.05	3.0	0.125	10:1	-
5	L. 72	20	Bracket	x 0.025	3.0	-	-	-
6	L. 72	850/SS. 1793	Stiffener	x 0.05	3.0	0.125	10:1	-
7	L. 72	16	Plate	0.05	3.0	0.25	6:1	-
8	L. 72	16	Angle	0.05	3.0	0.25	6:1	113
9	L. 72	18	Strap plate	x 0.05	3.0	-	-	-
10	L. 72	13B/SS. 1793	Angle	x 0.025	3.0	0.125	10:1	-

* No repairs permitted.
x More expedient to renew than repair.
All dimensions are quoted in inches.

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KEY TO FIG. A405 (POST MOD. 2060)

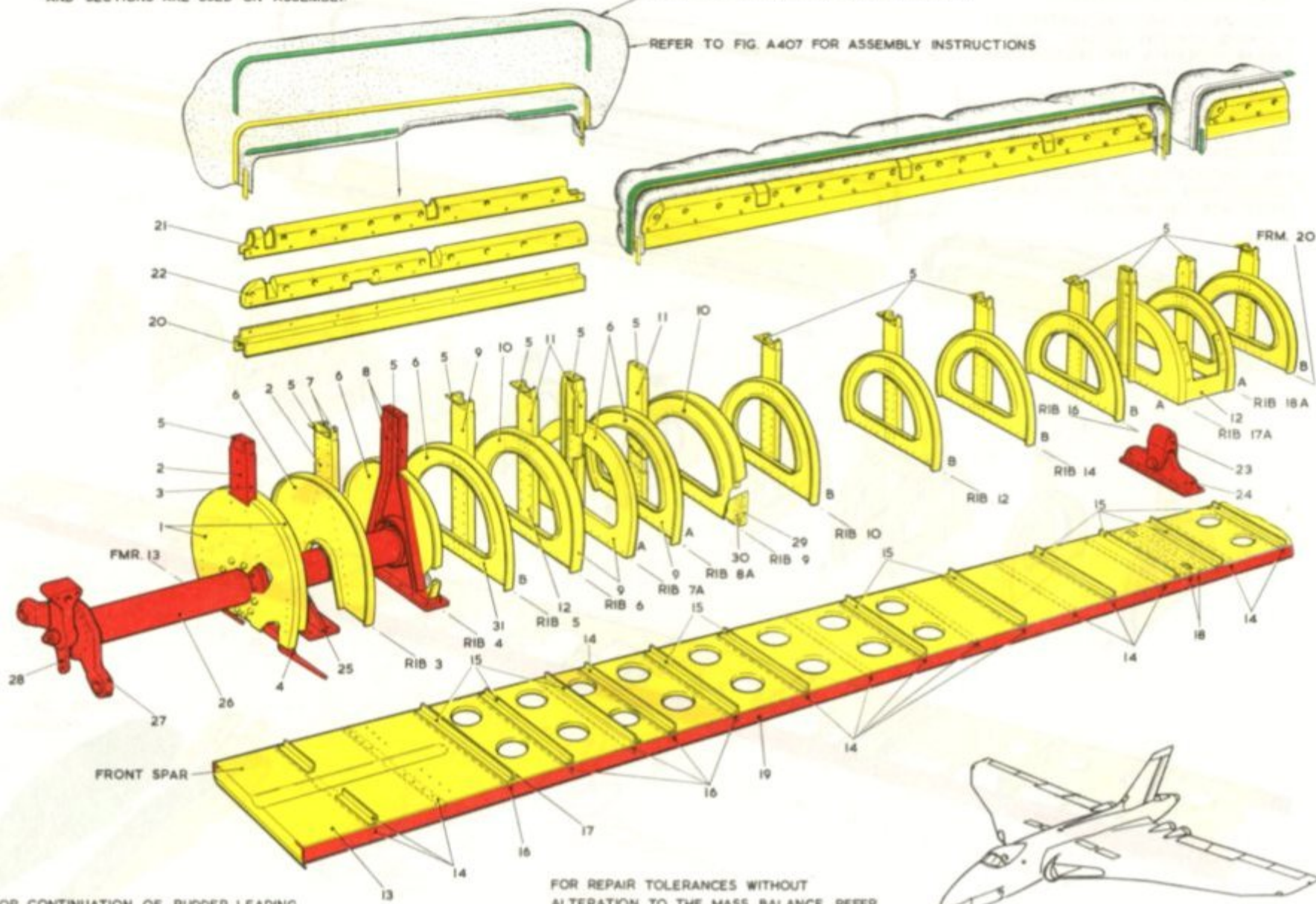
Item	Material		Description	Dents Depth	Negligible Damage		Pitch Ratio	Repair Fig.
	Spec.	S.W.G. or Section			Holes Dist. Apart	Dia.		
1	L.72	18	Former	0.05	3.0	0.125	8:1	108
2	L.72	18	Plate	x 0.05	6.0	0.125	10:1	-
3	L.72	18	Channel	0.05	6.0	0.125	10:1	-
4	L.65	-	Bracket	* -	-	-	-	-
5	L.72	20	Angle	* -	-	-	-	113
6	L.72	24	Pressing	0.05	3.0	0.25	4:1	108
7	L.72	183/SS.1793	Angle	0.05	6.0	0.125	8:1	113
8	L.72	183/SS.1793	Angle	0.05	6.0	0.125	10:1	113
9	L.72	22	Plate	x 0.05	6.0	0.25	6:1	-
10	L.72	22	Pressing	0.05	3.0	0.25	4:1	108
11	L.72	776/SS.1793	Balance channel	0.05	6.0	0.25	6:1	108
12	L.72	20	Plate	0.05	6.0	0.25	6:1	-
13	D. T. D. 687	16	Web	0.1	6.0	0.25	10:1	-
14	L.72	24	Angle	x 0.05	6.0	0.125	6:1	113
15	L.72	797/SS.1793	Angle	x 0.05	6.0	0.125	6:1	113
16	L.72	841/SS.1793	Angle	x 0.05	6.0	0.125	6:1	113
17	D. T. D. 687	18	Joint strap	x 0.05	6.0	0.125	6:1	-
18	L.72	20	Angle	x 0.05	6.0	0.125	6:1	113
19	D. T. D. 364	415/SS.3075	Spar boom	* -	-	-	-	-
20	L.65	-	Balance support member	x 0.05	3.0	0.125	8:1	-
21	L.72	22	Balance weight support skin	0.05	3.0	0.125	8:1	-
22	LEAD	-	Balance weight	0.01	3.0	-	-	-
23	L.65	-	Hinge fitting	* -	-	-	-	-
24	S.96	-	Housing	* -	-	-	-	-
25	L.65 or D. T. D. 683	-	Bracket	* -	-	-	-	-
26	S.96	-	Torque shaft	* -	-	-	-	-
27	S.99	-	Operating lever	* -	-	-	-	-
28	S.96	-	Bottom bearing housing	* -	-	-	-	-
29	L.72	22	Gusset	x 0.05	6.0	0.25	8:1	-
30	L.72	14	Foot bracket	* 0.025	6.0	0.125	10:1	-
31	L.72	183/SS.1793	Balance channel	0.05	6.0	0.125	10:1	-

* No repairs permitted
x More expedient to renew than repair
All dimensions are quoted in inches

NOTE - PREFIX IDENTICAL LETTERS AT THE NOSE FORMERS INDICATE THAT SIMILAR MATERIALS AND SECTIONS ARE USED ON ASSEMBLY

REFER TO FIG. 406A FOR RUDDER REPAIRS

REFER TO FIG. A407 FOR ASSEMBLY INSTRUCTIONS



FOR CONTINUATION OF RUDDER LEADING EDGE REFER TO FIG. A405A

FOR REPAIR TOLERANCES WITHOUT ALTERATION TO THE MASS BALANCE REFER TO THE TEXT IN CHAPTER 3.

462716 250 1/68 H.S.A. 1354

Fig. A405 Rudder leading edge and mass balance (Post Mod. 2060)

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FOR REPAIR TOLERANCES WITHOUT ALTERATIONS TO MASS BALANCE REFER TO TEXT IN CHAPTER 3.

NOTE - PREFIX IDENTICAL LETTERS AT THE NOSE FORMERS INDICATE THAT SIMILAR MATERIALS AND SECTIONS ARE USED ON ASSEMBLY.

REFER TO FIG. 406A FOR RUDDER BALANCE SEAL REPAIR.

REFER TO FIG. A407 FOR ASSEMBLY INSTRUCTIONS.

FOR CONTINUATION OF RUDDER LEADING EDGE REFER TO FIG. A405 (POST MOD. 569 AND 891)

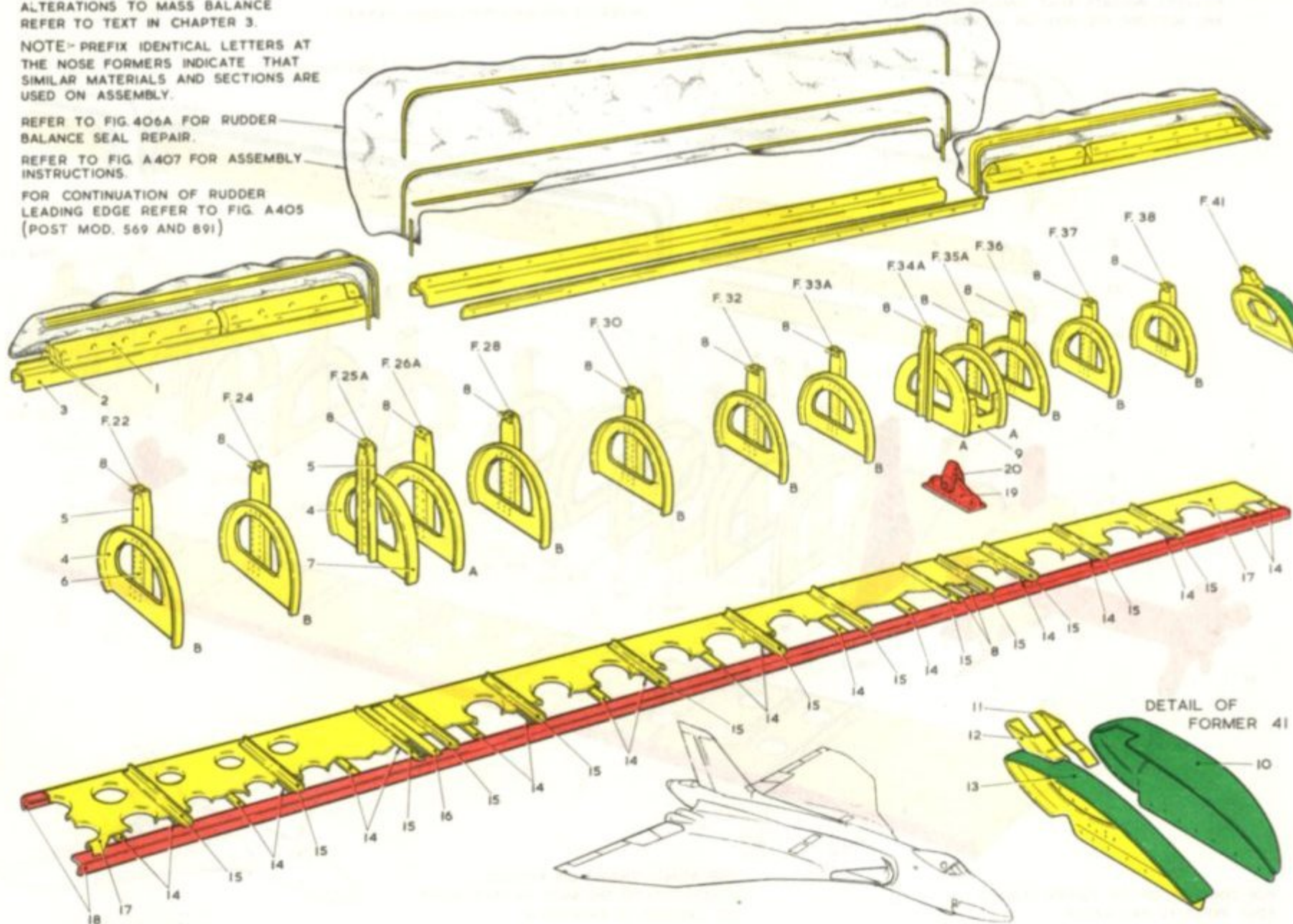


Fig. A405A Rudder leading edge and mass balance (Post Mod. 2060)

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A.P.101B-1900-6A, Part 1, App.1, Chap.4
A.L.50, Aug.67

KEY TO FIG.A405A (POST MOD.569 AND 891)

Item	Material		Description	Negligible Damage				Repair Fig.
	Spec.	S.W.G. or Section		Dents	Holes	Pitch Ratio		
				Depth	Dist. Apart	Dia.		
1	D. T. D. 5074	415/SS. 3075	Spar boom	* -	-	-	-	-
2	L. 72	24	Angle	x 0.05	6.0	0.125	6:1	113
3	L. 72	797/SS. 1793	Angle	x 0.05	6.0	0.125	6:1	113
4	D. T. D. 687	18	Strap plate	0.05	6.0	0.125	6:1	-
5	L. 72	20	Angle	x 0.05	6.0	0.125	6:1	113
6	D. T. D. 687	18	Web	0.1	6.0	0.25	10:1	106, 118
7	L. 72	775/SS. 1793	Balance channel	x 0.05	6.0	0.25	6:1	108
8	L. 72	24	Pressing	x 0.05	3.0	0.25	4:1	108
9	L. 72	20	Strap plate	0.05	3.0	0.125	6:1	-
10	L. 59	20	Cap	0.05	6.0	-	-	-
11	L. 72	22	Inner channel	0.05	6.0	0.25	6:1	-
12	L. 72	20	Angle	x -	-	-	-	-
13	L. 72	22	Plate	0.05	6.0	0.125	6:1	-
14	L. 72	776/SS. 1793	Balance channel	x 0.05	6.0	0.25	6:1	108
15	L. 72	22	Plate	x 0.05	6.0	0.25	6:1	-
16	L. 72	22	Pressing	0.05	3.0	0.25	4:1	108
17	L. 72	20	Strap plate	0.05	6.0	0.125	6:1	-
18	S. 96	-	Housing bracket	* -	-	-	-	-
19	L. 65	Forging	Hinge fitting	* -	-	-	-	-
20	L. 72	20	Door	0.05	6.0	0.25	6:1	-
21	L. 65	D. 257	Balance support member	0.05	3.0	0.125	8:1	-
22	L. 72	22	Balance weight support skin	0.05	3.0	0.125	8:1	-
23	LEAD	-	Balance weight	0.1	3.0	-	-	-
24	L. 72	22	Form strip	x 0.025	6.0	-	-	-
25	D. T. D. 118	22	Balance skin	0.05	6.0	0.125	8:1	-
26	7. F. 1. S/W/AF	-	Seal - Silicone rubber coated linen	-	-	-	-	406A

* No repairs permitted
x More expedient to renew than repair
All dimensions are quoted in inches

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KEY TO FIG. A405B (POST MOD. 569 AND 1028)

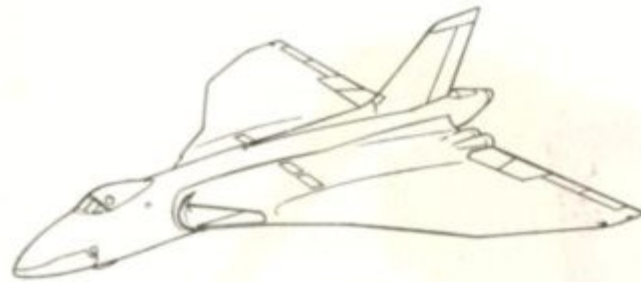
Item	Material		Description	Depth	Negligible Damage		Pitch Ratio	Repair Fig.
	Spec.	S.W.G. or Section			Dents	Holes		
					Dist. Apart	Dia.		
1	L. 59	20	Bottom fairing	0.025	6.0	-	-	103
2	L. 59	20	End plate	0.05	6.0	-	-	-
3	L. 72	22	Stiffener	x 0.05	6.0	0.25	8:1	-
4	L. 72	18	Stiffening strip	x 0.05	6.0	0.25	6:1	-
5	L. 72	22	Angle	x 0.05	4.0	0.125	10:1	-
6	L. 72	22	Angle	x 0.05	6.0	0.125	10:1	-
7	L. 72	20	Web	0.05	6.0	0.25	8:1	106
8	L. 72	249/SS. 1793	Boom	0.05	6.0	0.125	10:1	113
9	L. 72	22	Angle	x 0.05	6.0	0.25	8:1	-
10	L. 72	20	Web	0.05	6.0	0.25	8:1	106
11	L. 72	24	Angle	0.05	6.0	0.125	10:1	113
12	L. 72	18	Packing	x 0.05	6.0	0.25	8:1	-
13	D. T. D. 118	24	Web	0.05	6.0	0.25	8:1	106, 108
14	L. 72	24	Angle	0.05	6.0	0.125	10:1	113
15	D. T. D. 118	18	Packing	x 0.05	6.0	0.25	8:1	-
16	L. 72	14	Foot bracket	*	-	-	-	-
17	L. 72	24	Lipped angle	x 0.05	6.0	0.25	8:1	-
18	D. T. D. 118	18	Packing	x 0.05	6.0	0.25	8:1	-
19	L. 72	24	Angle	x 0.05	6.0	0.125	10:1	113
20	L. 72	16	Reinforcing plate	x 0.025	4.0	0.125	10:1	-
21	L. 72	24	Angle	0.05	6.0	0.125	10:1	113
22	D. T. D. 118	24	Angle	x 0.05	6.0	0.125	16:1	-
23	D. T. D. 118	18	Strip	x 0.05	6.0	0.25	8:1	-
24	L. 72	841/SS. 1793	Angle	0.05	6.0	0.25	8:1	-
25	L. 72	854/SS. 1793	Stiffener angle	0.05	6.0	0.125	10:1	-
26	D. T. D. 118	22	Plate	x 0.025	4.0	-	-	-
27	L. 72	8	Plate	x 0.025	6.0	0.125	16:1	-
28	D. T. D. 118	22	Channel	0.025	6.0	0.25	8:1	-
29	D. T. D. 118	22	Angle	x 0.05	6.0	0.125	16:1	-
30	D. T. D. 118	20	Angle	x 0.05	6.0	0.125	12:1	-
31	D. T. D. 118	24	Angle	x 0.05	6.0	0.125	16:1	-
32	D. T. D. 118	24	Riblet	0.05	4.0	0.125	10:1	120
33	L. 72	20	Angle	x 0.05	6.0	0.125	10:1	-
34	D. T. D. 118	10	Wedge strip	x 0.025	6.0	0.125	20:1	-
35	D. T. D. 259	-	Block	x 0.025	6.0	-	-	-
36	D. T. D. 118	20	Web	0.025	8.0	0.125	16:1	-
37	D. T. D. 118	20	Angle	x 0.05	6.0	0.125	12:1	-
38	D. T. D. 626	20	Stiffener	0.025	6.0	0.125	16:1	-
39	L. 72	8	Plate	x 0.025	6.0	0.125	16:1	-

x More expedient to replace than repair.

* No repairs permitted.

All dimensions are quoted in inches.

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FOR REPAIR TOLERANCE WITHOUT ALTERATIONS TO THE MASS BALANCE REFER TO THE TEXT IN CHAPTER 3

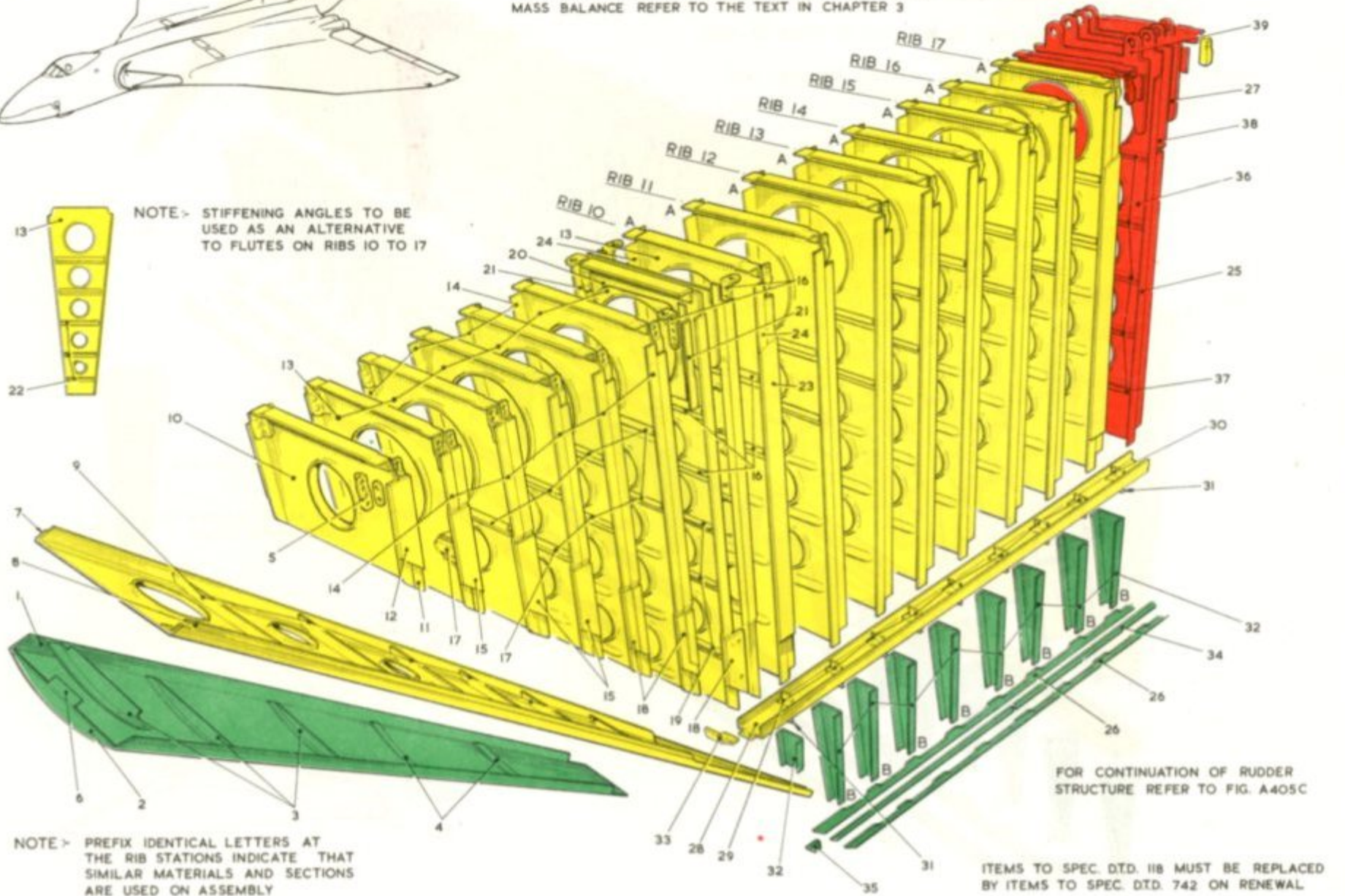


Fig. A405B Rudder structure aft of front spar (Post mod. 569 and 1028)

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FOR REPAIR TOLERANCES WITHOUT ALTERATION TO MASS BALANCE
REFER TO TEXT IN CHAPTER 3.
ITEMS TO SPEC. DTD. 118 MUST BE REPLACED BY ITEMS TO SPEC.
DTD. 742 ON RENEWAL.

NOTE - PREFIX IDENTICAL LETTERS AT RIB STATIONS INDICATE THAT
SIMILAR MATERIALS AND SECTIONS ARE USED
ON ASSEMBLY.

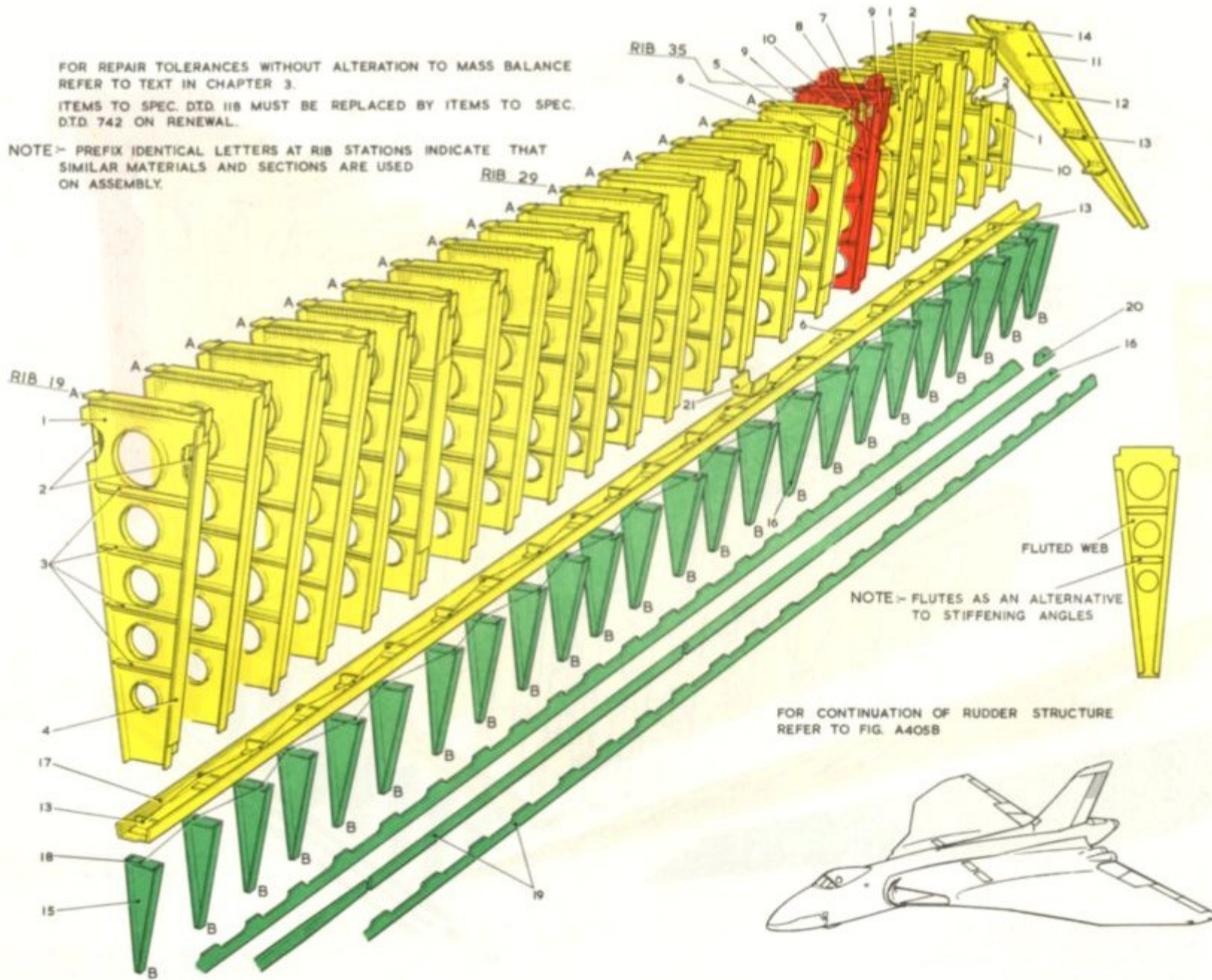


Fig. A405C Rudder structure aft of front spar (Post mod.569 and 1028)

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A.P.101B-1900-6A, Part 1, App.1, Chap.4
A.L.50, Aug.67

KEY TO FIG. A405C (POST MOD. 569 AND 1028)

Item	Material		Description	Dents Depth	Negligible Damage		Holes Pitch Ratio	Repair Fig.
	Spec.	S.W.G. or Section			Dist. Apart	Dia.		
1	D.T.D. 118	24	Web	0.05	6.0	0.25	8:1	106, 108
2	L. 72	841/SS. 1793	Angle	0.05	6.0	0.125	12:1	113
3	L. 72	24	Angle	x 0.05	6.0	0.125	12:1	113
4	L. 72	18	Strip	x 0.025	4.0	0.125	10:1	-
5	D.T.D. 118	20	Web	0.025	8.0	0.125	16:1	106, 108
6	D.T.D. 118	20	Angle	x 0.05	6.0	0.125	12:1	113
7	L. 73	8	Plate	x 0.025	6.0	0.125	16:1	-
8	D.T.D. 626	20	Stiffener plate	x 0.025	6.0	0.125	16:1	-
9	L. 72	854/SS. 1793	Angle	x 0.05	6.0	0.125	10:1	113
10	D.T.D. 118	24	Stiffening angle	x 0.05	6.0	0.125	12:1	113
11	L. 72	24	Rib web	0.05	6.0	0.25	8:1	106, 108
12	L. 72	22	Bracket	x 0.05	6.0	0.25	8:1	-
13	L. 72	22	Angle	x 0.05	6.0	0.125	12:1	113
14	L. 72	22	Diaphragm	x 0.05	8.0	-	-	-
15	D.T.D. 118	24	Riblet	0.05	4.0	0.125	10:1	120
16	D.T.D. 118	24	Strip	x 0.025	4.0	0.125	10:1	-
17	D.T.D. 118	22	Channel	x 0.05	6.0	0.25	8:1	-
18	D.T.D. 118	24	Angle	x 0.05	6.0	0.125	12:1	113
19	D.T.D. 118	22	Plate	x 0.025	6.0	-	-	-
20	D.T.D. 259	-	Block	x 0.025	6.0	-	-	-
21	D.T.D. 118	22	Joint channel	x 0.05	6.0	0.125	12:1	-

x More expedient to replace than repair
All dimensions are quoted in inches

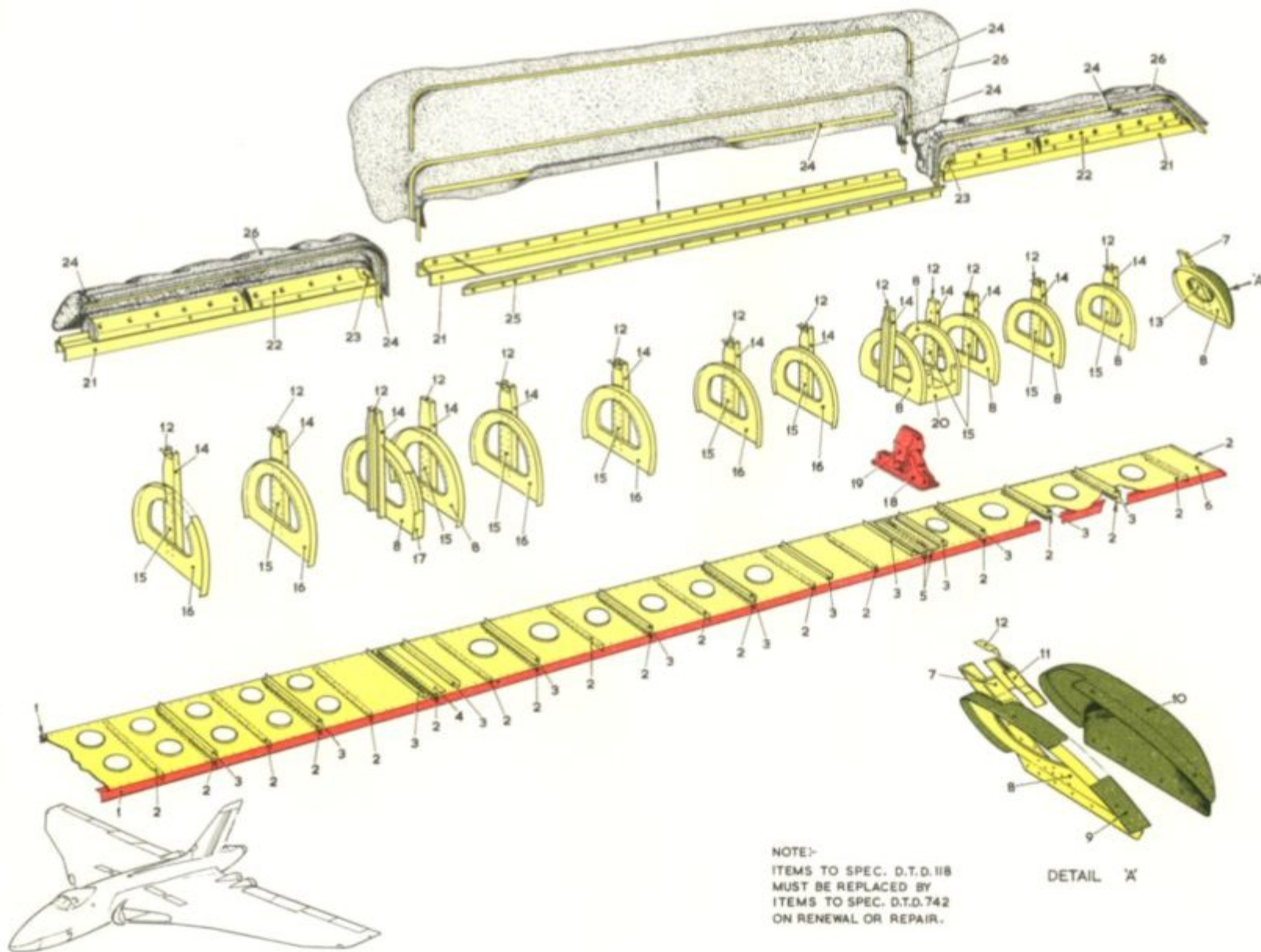


Fig.A405A. Rudder L/Edge and mass balance (Post Mod. 569 and 891)

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KEY TO FIG.A405 (POST MOD.569 and 891)

Item	Material		Description	Negligible Damage				Repair Fig.
	Spec.	S.W.G. or Section		Dents	Holes	Pitch Ratio		
				Depth	Dist. Apart	Dia.		
1	D.T.D.118	22	Balance skin	0.05	3.0	0.125	8 : 1	
2	L.65	D.257	Balance support member	x 0.05	3.0	0.125	8 : 1	
3	S.96	-	Bottom bearing	* -	-	-	-	
4	S.94	-	Torque shaft	* -	-	-	-	
5	S.99	-	Operating lever	* -	-	-	-	
6	L.65	Forging	Bracket	* -	-	-	-	
7	D.T.D.687	16	Web	0.1	6.0	0.25	10 : 1	
8	D.T.D.5074	415/SS.3075	Spar boom	* -	-	-	-	
9	L.72	24	Angle	x 0.05	6.0	0.125	6 : 1	113
10	L.72	797/SS.1793	Angle	x 0.05	6.0	0.125	6 : 1	113
11	D.T.D.687	18	Joint strap	x 0.05	6.0	0.125	6 : 1	
12	D.T.D.687	18	Web	0.1	6.0	0.25	10 : 1	
13	L.72	841/SS.1793	Angle	x 0.05	6.0	0.125	6 : 1	113
14	L.72	841/SS.1793	Angle	x 0.05	6.0	0.125	6 : 1	113
15	L.72	20	Angle	x 0.05	6.0	0.125	6 : 1	
16	Lead	-	Balance weight	0.1	3.0	-	-	
17	L.72	18	Bottom former	0.05	3.0	0.125	8 : 1	108
18	L.72	206/SS.1793	Channel	0.05	6.0	0.125	10 : 1	
19	L.72	18	Plate	x 0.05	6.0	0.125	10 : 1	
20	L.72	18	Top former	0.05	3.0	0.125	8 : 1	108
21	L.65	-	Block	* -	-	-	-	
22	L.72	10	Reinforcing plate	x 0.025	3.0	0.125	10 : 1	
23	L.65 or D.T.D.5054	Forging	Bracket	* -	-	-	-	
24	L.72	18	Plate	x 0.05	6.0	0.25	6 : 1	
25	L.72	183/SS.1793	Angle	0.05	6.0	0.125	8 : 1	113
26	L.72	24	Pressing	0.05	3.0	0.25	6 : 1	108
27	L.72	183/SS.1793	Angle	0.05	6.0	0.125	10 : 1	113
28	L.72	22	Plate	x 0.05	6.0	0.25	6 : 1	
29	L.72	24	Pressing	0.05	3.0	0.25	4 : 1	108
30	L.72	776/SS.1793	Balance channel	0.05	6.0	0.25	6 : 1	108
31	L.72	20	Plate	x 0.05	6.0	0.25	6 : 1	
32	L.72	22	Pressing	0.05	3.0	0.25	4 : 1	108
33	L.72	20	Angle	x -	-	-	-	
34	L.72	22	Form strip	x 0.05	3.0	0.125	8 : 1	
35	7F1.S/W/A.F	-	Seal - Silicone rubber coated linen	-	-	-	-	406A

* No repairs permitted

x More expedient to renew than repair
All dimensions are quoted in inches

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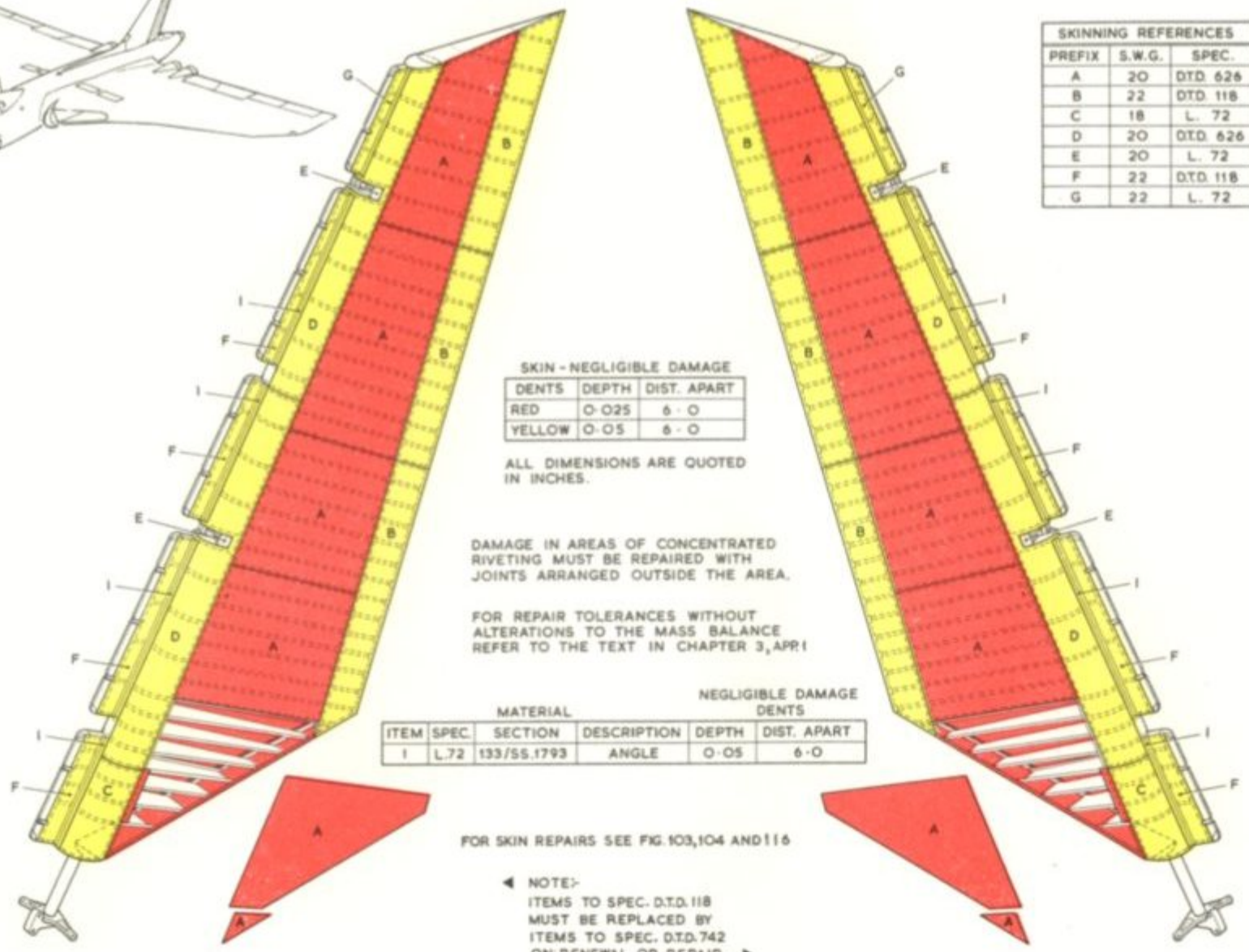
KEY TO FIG.A405 (POST MOD.569 and 891 cont'd.)

Item	Material		Description	Negligible Damage				Repair Fig.
	Spec.	S.W.G. or Section		Dents	Dist. Apart	Holes	Pitch Ratio	
				Depth		Dia.		
36	S.96	-	Hinge	* -	-	-	-	-
37	L.65	Forging	Hinge	* -	-	-	-	-
38	L.72	18	Bracket	x 0.025	6.0	0.125	10 : 1	
39	L.72	18	Channel	0.025	6.0	0.25	10 : 1	
40	L.72	10	Plate	x -	-	-	-	
41	Rubber	-	Plug	-	-	-	-	
42	L.72	22	Gusset	x 0.05	6.0	0.25	8 : 1	
43	L.72	14	Foot bracket	* 0.025	6.0	0.125	10 : 1	
44	L.72	18	Plate	x 0.05	6.0	0.25	8 : 1	
45	L.72	22	Gusset	x 0.05	3.0	0.25	4 : 1	
46	L.72	22	Fixing strip	x 0.05	3.0	0.125	8 : 1	
47	L.72	22	Support skin	0.05	6.0	0.25	6 : 1	

* No repairs permitted.

x More expedient to renew than repair.
All dimensions are quoted in inches.

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SKINNING REFERENCES		
PREFIX	S.W.G.	SPEC.
A	20	DTD 626
B	22	DTD 118
C	18	L. 72
D	20	DTD 626
E	20	L. 72
F	22	DTD 118
G	22	L. 72

SKIN - NEGLIGIBLE DAMAGE

DENTS	DEPTH	DIST. APART
RED	0.025	6.0
YELLOW	0.05	6.0

ALL DIMENSIONS ARE QUOTED IN INCHES.

DAMAGE IN AREAS OF CONCENTRATED RIVETING MUST BE REPAIRED WITH JOINTS ARRANGED OUTSIDE THE AREA.

FOR REPAIR TOLERANCES WITHOUT ALTERATIONS TO THE MASS BALANCE REFER TO THE TEXT IN CHAPTER 3, APR 1

MATERIAL			NEGLIGIBLE DAMAGE DENTS		
ITEM	SPEC.	SECTION	DESCRIPTION	DEPTH	DIST. APART
1	L.72	133/SS.1793	ANGLE	0.05	6.0

FOR SKIN REPAIRS SEE FIG. 103, 104 AND 116

NOTE:-
ITEMS TO SPEC. D.T.D. 118
MUST BE REPLACED BY
ITEMS TO SPEC. D.T.D. 742
ON RENEWAL OR REPAIR.

◀ Fig.A405D. Rudder skinning (Pre Mod. 569) ▶

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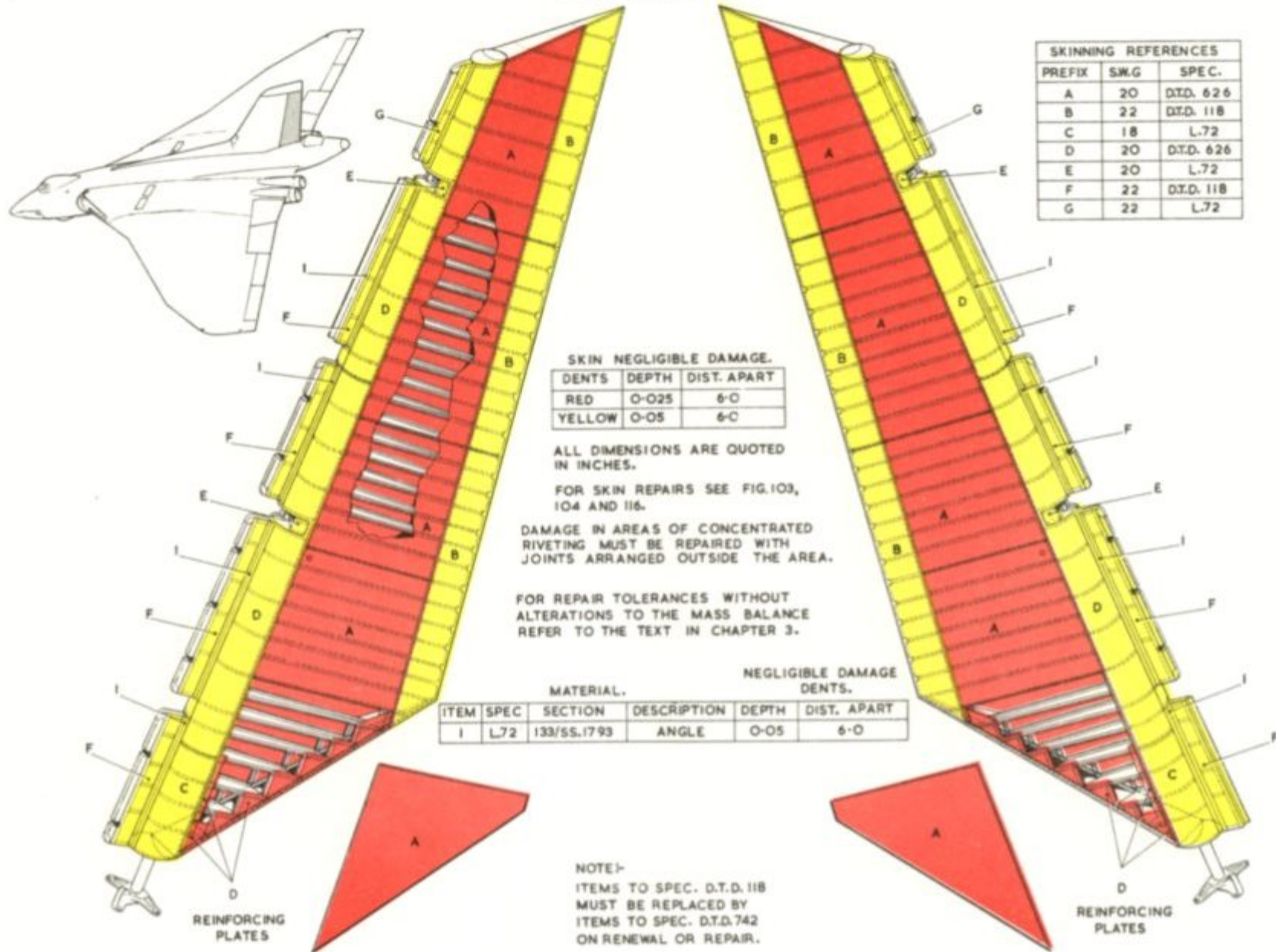


Fig.A405D Rudder skinning (Post Mod.569)

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FOR REPAIR TOLERANCES WITHOUT ALTERATIONS TO MASS BALANCE REFER TO TEXT IN CHAPTER 3.

NOTE- PREFIX IDENTICAL LETTERS AT THE NOSE FORMERS INDICATE THAT SIMILAR MATERIALS AND SECTIONS ARE USED ON ASSEMBLY.

REFER TO FIG. 406A FOR RUDDER BALANCE SEAL REPAIR.

REFER TO FIG. A407 FOR ASSEMBLY INSTRUCTIONS.

FOR CONTINUATION OF RUDDER LEADING EDGE REFER TO FIG. A405 (POST MOD. 569 AND 891)

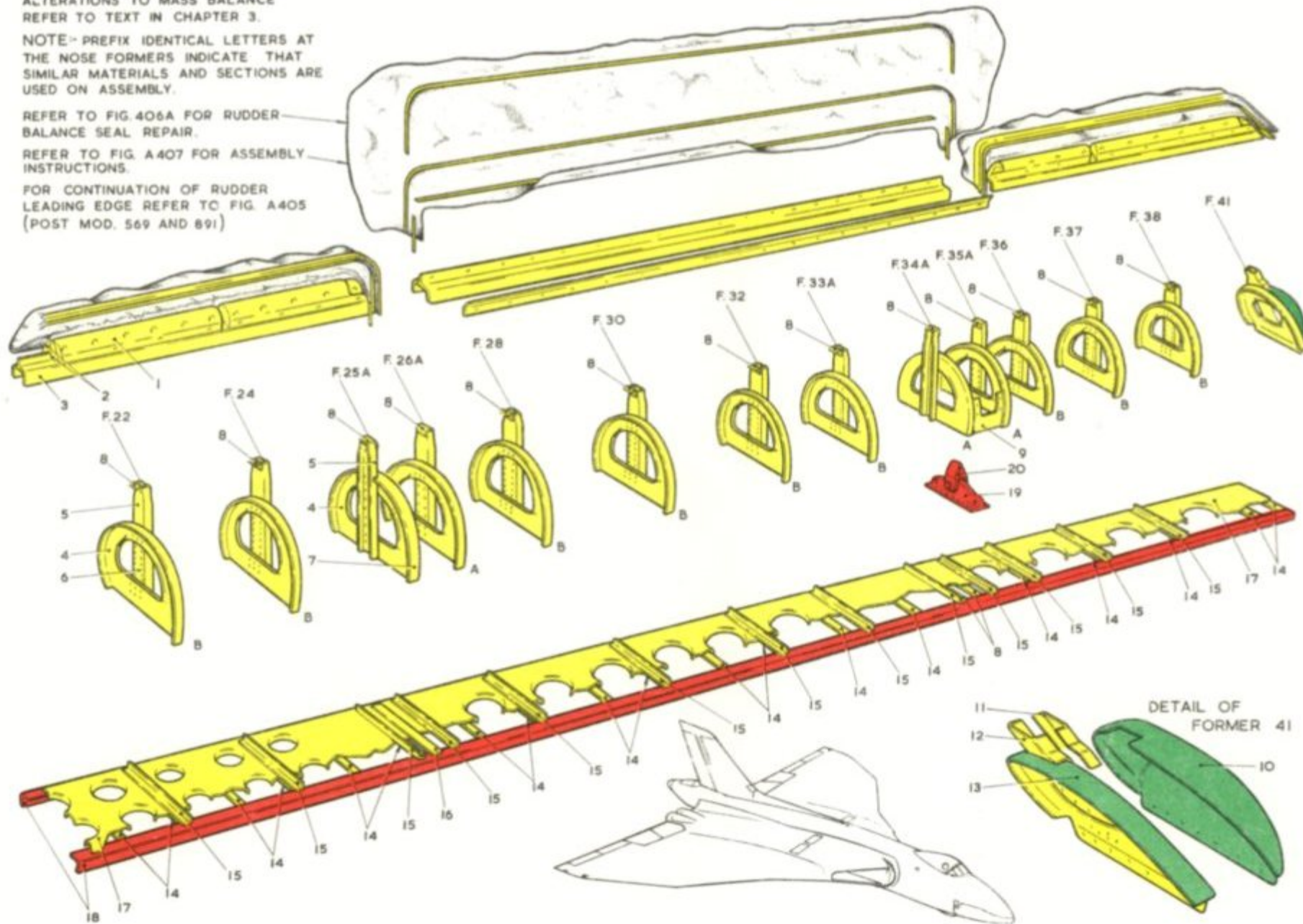


Fig. A405A Rudder leading edge and mass balance (Post Mod. 2060)

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KEY TO FIG. A405A (POST MOD.2060)

Item	Material		Description	Dents Depth	Negligible Damage			Repair Fig.
	Spec.	S.W.G. or Section			Holes Dist. Apart	Dia.	Pitch Ratio	
1	L.72	22	Balance weight support skin	0.05	3.0	0.125	8:1	-
2	LEAD	-	Balance weight	0.1	3.0	-	-	-
3	L.65	-	Balance support member	0.05	3.0	0.125	8:1	-
4	L.72	24	Pressing	0.05	3.0	0.25	4:1	108
5	L.72	776/SS.1793	Balance channel	0.05	6.0	0.25	6:1	108
6	L.72	22	Plate	x 0.05	6.0	0.25	6:1	-
7	L.72	20	Strap plate	x 0.05	3.0	0.125	6:1	-
8	L.72	20	Angle	x -	-	-	-	-
9	L.72	20	Door frame	0.05	6.0	0.25	6:1	-
10	L.59	20	Cap	0.05	6.0	-	-	-
11	L.72	775/SS.1793	Channel	0.05	6.0	0.25	6:1	-
12	L.72	22	Channel	0.05	6.0	0.25	6:1	-
13	L.72	20	Strap plate	x 0.05	6.0	0.125	6:1	-
14	L.72	24	Angle	x 0.05	6.0	0.125	6:1	113
15	L.72	797/SS.1793	Angle	x 0.05	6.0	0.125	6:1	113
16	D.T.D.687	18	Strap	x 0.05	6.0	0.125	6:1	-
17	D.T.D.687	18	Web	0.1	6.0	0.25	10:1	-
18	D.T.D.364	415/SS.1793	Spar boom	* -	-	-	-	-
19	S.96	-	Hinge housing	* -	-	-	-	-
20	L.65	-	Hinge fitting	* -	-	-	-	-

x More expedient to renew than repair

* No repairs permitted

All dimensions are quoted in inches

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KEY TO FIG. A405B (POST MOD.2060)

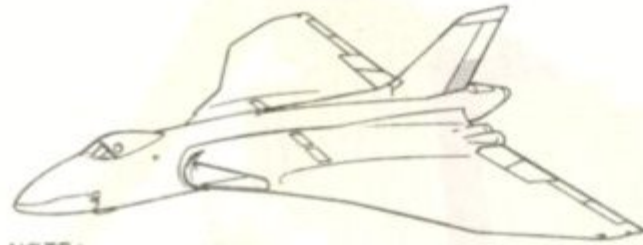
Item	Material Spec.	S.W.G. or Section	Description	Depth	Negligible Damage			Repair Fig.
					Dents	Holes		
					Dist. Apart	Dia.	Pitch Ratio	
1	L.72	20	Fairing	0.025	6.0	-	-	103
2	L.72	20	End plate	0.05	6.0	-	-	-
3	L.72	22	Stiffener	x 0.05	6.0	0.25	8:1	-
4	L.72	18	Stiffening strip	x 0.025	4.0	0.125	10:1	-
5	L.72	20	Web	0.05	6.0	0.25	8:1	106
6	L.72	249/SS.1793	Boom	0.05	6.0	0.125	10:1	113
7	L.72	22	Angle	x 0.05	6.0	0.25	8:1	-
8	L.72	24	Web	0.05	6.0	0.25	8:1	106,108
9	L.72	24	Angle	0.05	6.0	0.125	10:1	113
10	L.72	18	Packing	x 0.05	6.0	0.25	8:1	-
11	L.72	16	Reinforcing plate	0.025	4.0	0.125	10:1	-
12	L.72	841/SS.1793	Angle	0.05	6.0	0.125	6:1	113
13	L.72	854/SS.1793	Angle stiffener	0.05	4.0	0.125	10:1	113
14	L.72	20	Stiffener	0.025	6.0	0.125	16:1	-
15	L.72	8	Plate	x 0.025	6.0	0.125	16:1	-
16	L.72	22	Channel	0.05	6.0	0.25	8:1	-
17	L.72	20	Bracket	0.05	3.0	0.25	6:1	-
18	L.72	20	Angle	0.05	6.0	0.125	10:1	113
19	L.72	24	Riblet	0.05	4.0	0.125	10:1	120
20	L.72	22	Lower plate	x 0.025	4.0	-	-	-
21	L.65	-	Block	x 0.025	6.0	-	-	-
22	L.72	10	Wedge strip	x 0.025	6.0	0.125	20:1	-
23	L.72	14	Foot bracket	* -	-	-	-	-

x More expedient to renew than repair

* No repairs permitted

All dimensions are quoted in inches

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NOTE:-
PREFIX IDENTICAL LETTERS AT RIB STATIONS INDICATE THAT SIMILAR MATERIALS AND SECTIONS ARE USED ON ASSEMBLY.
FOR REPAIR TOLERANCES WITHOUT ALTERATIONS TO THE MASS BALANCE REFER TO THE TEXT IN CHAPTER 3.
FOR CONTINUATION OF RUDDER STRUCTURE REFER TO FIG. A405C

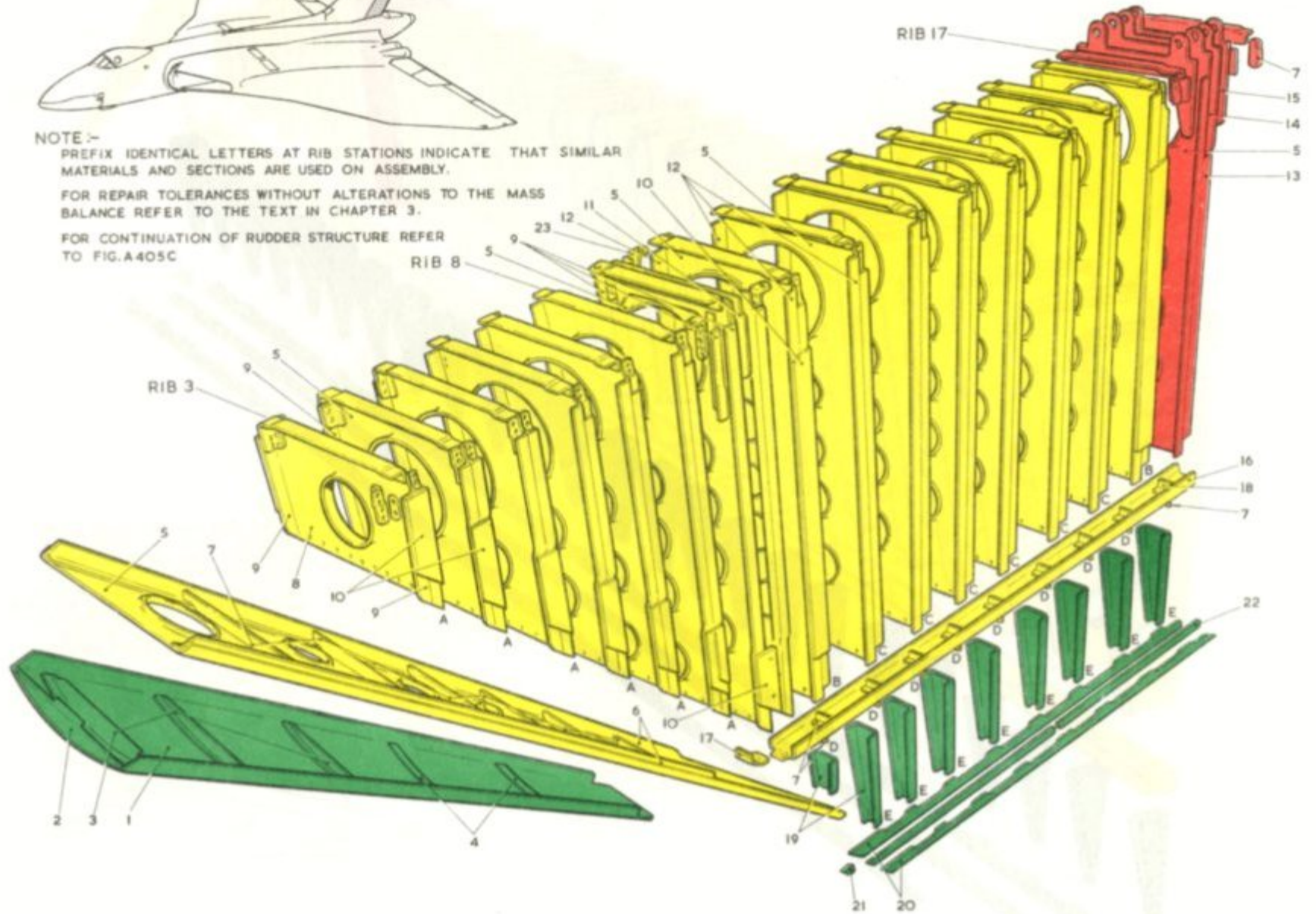
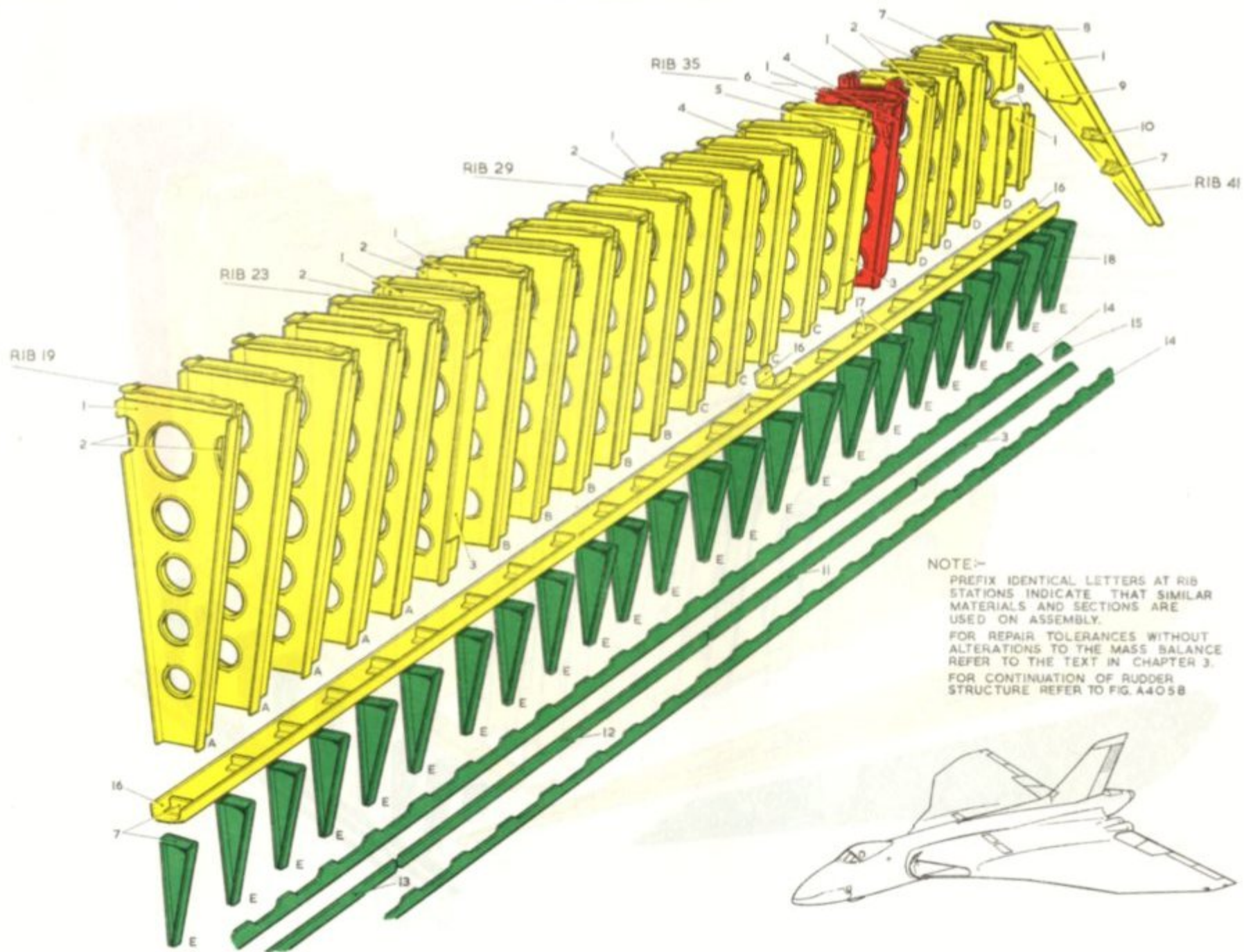


Fig. A405B Rudder structure aft of front spar (Post Mod. 2060)

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NOTE:-
PREFIX IDENTICAL LETTERS AT RIB STATIONS INDICATE THAT SIMILAR MATERIALS AND SECTIONS ARE USED ON ASSEMBLY.
FOR REPAIR TOLERANCES WITHOUT ALTERATIONS TO THE MASS BALANCE REFER TO THE TEXT IN CHAPTER 3.
FOR CONTINUATION OF RUDDER STRUCTURE REFER TO FIG. A405B

Fig. A405C Rudder structure - aft of front spar (Post mod. 2060)

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KEY TO FIG.A405C (POST MOD.2060)

Item	Material Spec.	S.W.G. or Section	Description	Negligible Damage				Repair Fig.
				Dents Depth	Dist. Apart	Holes Dia.	Pitch Ratio	
1	L.72	20	Web	0.1	2.5	0.25	4:1	106, 108
2	L.72	841/SS.1793	Angle	0.05	6.0	0.125	6:1	113
3	L.72	18	Strip	x 0.025	4.0	0.125	10:1	-
4	L.72	854/SS.1793	Angle	0.05	4.0	0.125	10:1	113
5	L.72	20	Plate	0.05	6.0	-	-	-
6	D.T.D.390	8	Plate	x 0.025	6.0	0.125	16:1	-
7	L.72	22	Angle	0.05	6.0	0.125	10:1	-
8	L.72	20	Diaphragm	0.05	8.0	-	-	-
9	L.72	22	Bracket	0.05	6.0	0.25	8:1	-
10	L.72	133/SS.1783	Angle	x 0.05	6.0	0.25	8:1	-
11	L.72	12	Wedge strip	x 0.025	6.0	0.125	20:1	-
12	L.72	14	Wedge strip	x 0.025	6.0	0.125	20:1	-
13	L.72	16	Wedge strip	x 0.025	6.0	0.125	20:1	-
14	L.72	22	Plate	x 0.025	6.0	-	-	-
15	L.65	-	Block	* -	-	-	-	-
16	L.72	22	Channel	x 0.05	6.0	0.125	12:1	-
17	L.72	20	Angle	0.05	6.0	0.125	10:1	-
18	L.72	24	Riblet	0.05	4.0	0.125	10:1	120

* No repairs permitted.

x More expedient to replace than repair.

All dimensions are quoted in inches.

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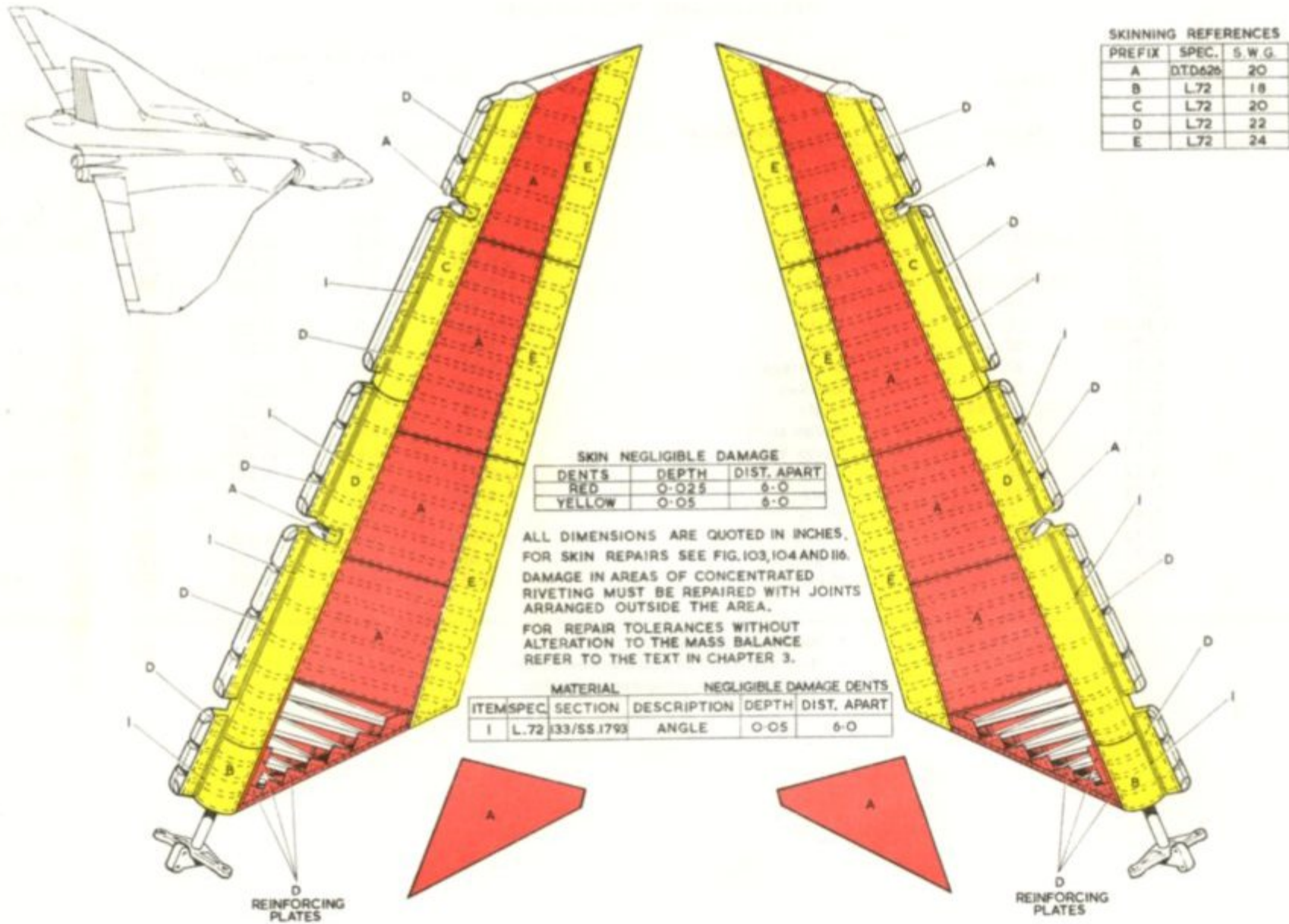


Fig. A405D Rudder skinning (Post Mod. 2060)

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A.P. 101B-1900-6A, Part 1, App. 1, Chap. 4
A.L. 51, Oct. 67

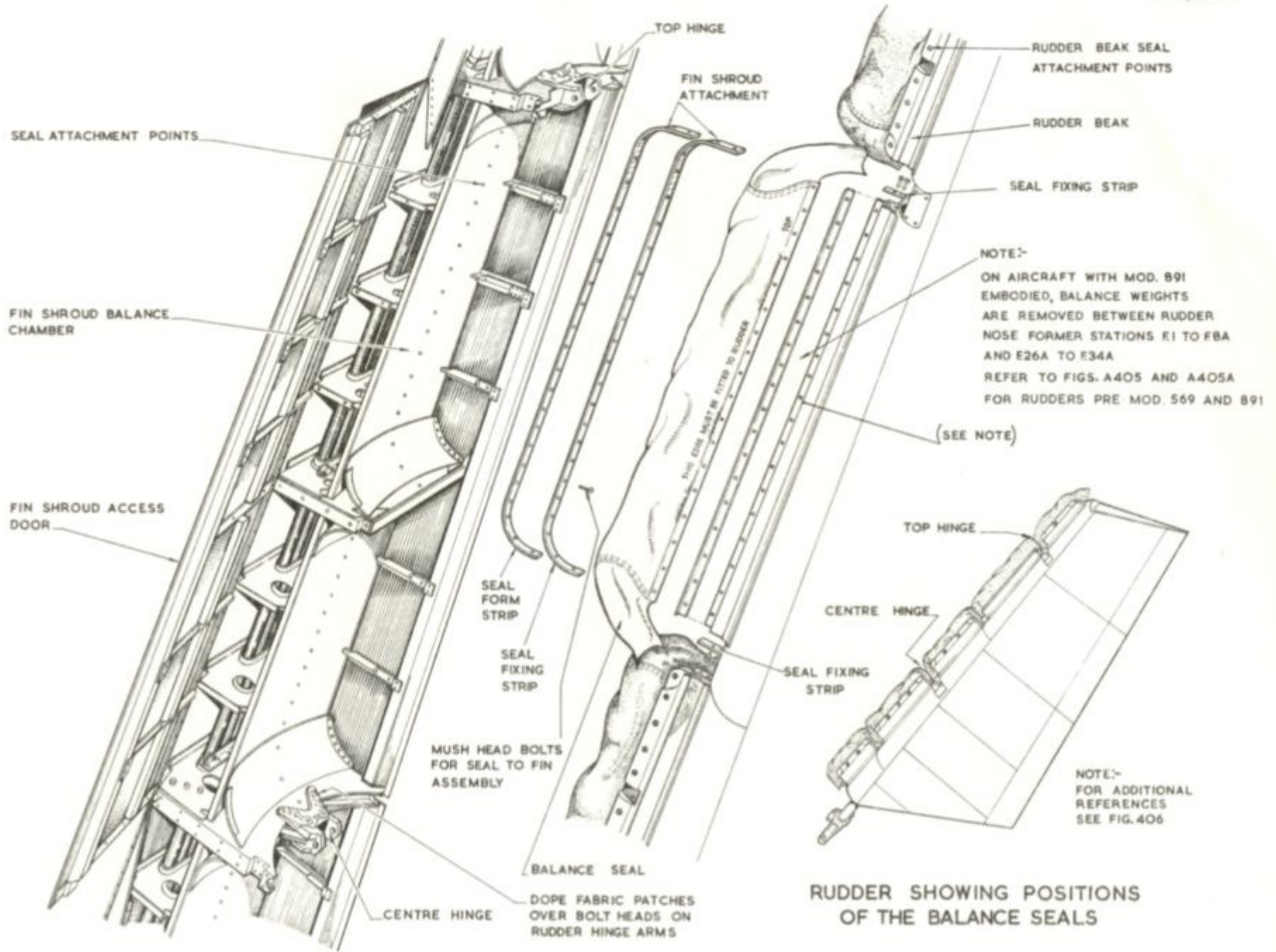


Fig. A407 Assembly of rudder balance seal

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