

CHAPTER 2 FLYING CONTROLS

LIST OF CONTENTS

	Para.
General	1
Ball bearing assemblies	2

LIST OF ILLUSTRATIONS

	Fig.		Fig.
Bearing location diagram — elevator and tailplane controls and hinges	1	Bearing location diagram — aileron controls and hinges	3
Bearing location diagram — rudder controls and hinges	2	Bearing location diagram — flap controls and hinges	4

LIST OF SCHEDULES

	Schedule		Schedule
Wear limits for elevator and tailplane controls and hinges	1/1 to 1/18	Wear limits for aileron controls and hinges	3/1 to 3/5
Wear limits for rudder controls and hinges	2/1 to 2/4	Wear limits for flap controls and hinges	4/1 to 4/7

General

1. Wear limits for flying controls may be found in the accompanying schedules. Obviously if all the moving parts were worn to give the maximum permissible worn clearances it would result in an unacceptable backlash on the control surface concerned, therefore the worn tolerances may only be applied where the limits given for the movement of control surfaces in Section 3, Chapter 4 of the appropriate Volume 1 have not been exceeded. Where an unacceptable amount of movement is found due to wear a

► sufficient number of worn parts should be renewed, including loose bolts found in lever and torque tube assemblies (Ref. Part 1, Chap. 2, paras. 53-56) to bring the movement to an acceptable figure even though the maximum worn dimensions may not have been exceeded. ◀

Ball bearing assemblies

2. All references on the bearing location diagrams, other than those which are cross referred to the schedules, are to ball bearing assemblies details of permissible wear to which may be found in Chapter 1.

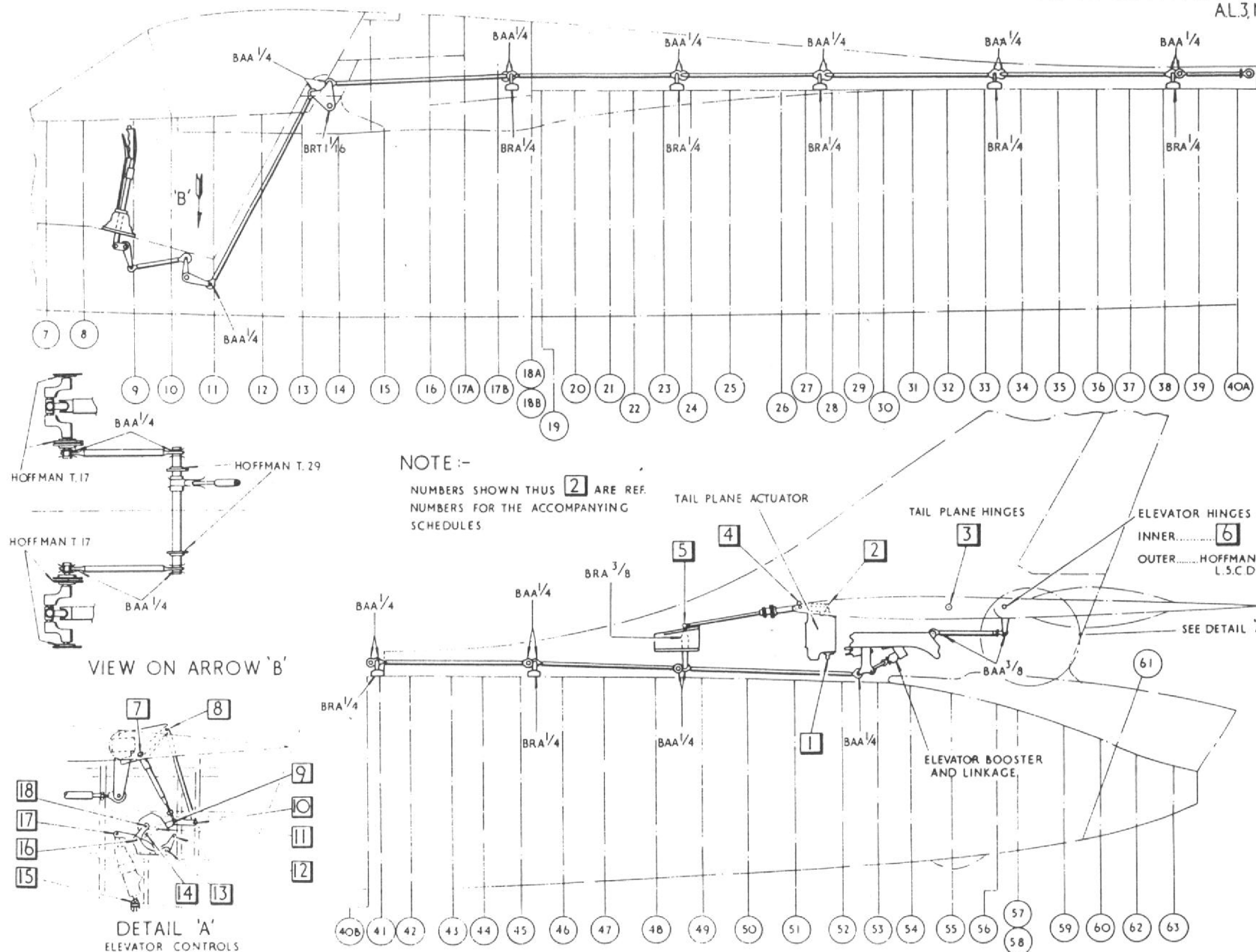
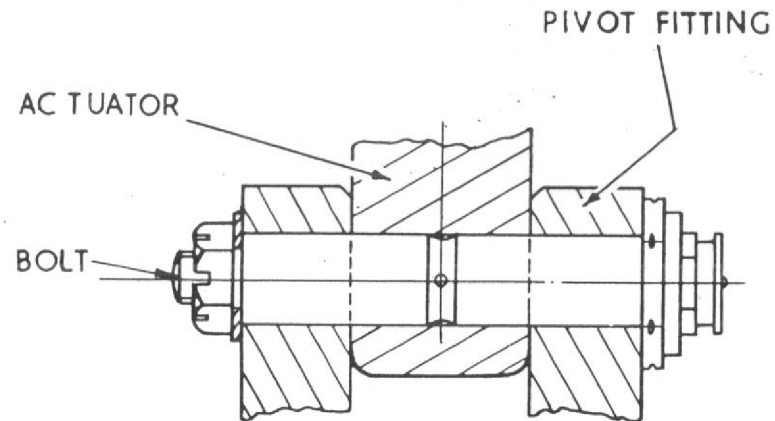


FIG. 1 BEARING LOCATION DIAGRAM-ELEVATOR AND TAIL PLANE CONTROLS AND HINGES.

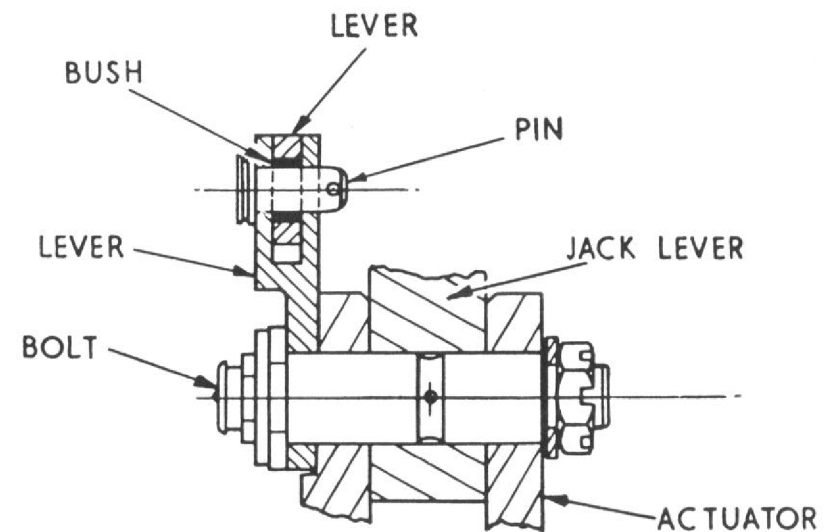
SCHEDULE OF WEAR LIMITS FOR ELEVATOR AND TAILPLANE CONTROLS AND HINGES

Ref.No. on Diagram	Part and Description	Dimension New (in.)	Permissible Worn Dimensions (in.)		Clearance New (in.)	Permissible Worn Clearance (in.)	Remarks	
			Non- Selective Assembly	Selective Assembly				
1/1	Assembly of tailplane actuator with pivot fitting A.211760 at structure between frames 51 and 52 using bolt A.189842	Bolt	$\frac{0.4995}{0.4990}$	0.4985	0.4978	$\frac{0.00125}{0.00025}$	0.002	Bolt and pivot fitting Renew bolt A.189842 and/or actuator (See appropriate Rotax Manual). Note:- Rotation of bolt in pivot fitting is unlikely
		Pivot fitting	$\frac{0.5005}{0.4995}$	0.5005	0.5015	Bolt and actuator		
		Actuator	$\frac{0.5002}{0.4998}$	0.5005	0.5015	$\frac{0.0012}{0.0003}$	0.002	
1/2	Assembly of elevator feel unit lever, bush Std.608.1 with actuator lever F.202129 using pin Std.1221, Z.D.40	Pin	$\frac{0.24925}{0.24875}$	0.2480	0.2465	$\frac{0.00175}{0.00025}$	0.003	Pin and bush Renew pin Std.1221, Z.D.40 and/or bush Std.608.1 and if necessary renew lever F.202129
		Bush	$\frac{0.2505}{0.2495}$	0.2510	0.25225	Pin and lever		
		Lever	$\frac{0.2505}{0.2495}$	0.2510	0.25225	$\frac{0.00175}{0.00025}$	0.003	
	Assembly of tailplane actuator with tailplane jack lever B.185352 using bolt F.202472	Bolt	$\frac{0.4995}{0.4990}$	0.4985	0.49775	$\frac{0.00125}{0.00025}$	0.002	Bolt and jack lever Renew bolt F.202472, renew jack lever B.185352 only if necessary. Note:- Rotation of bolt in pivot fitting is unlikely
		Jack	$\frac{0.50025}{0.49975}$	0.5005	0.5015	Bolt and actuator		
		Actuator	$\frac{0.5002}{0.4998}$	0.5005	0.5015	$\frac{0.0012}{0.0003}$	0.002	

RESTRICTED



1/1



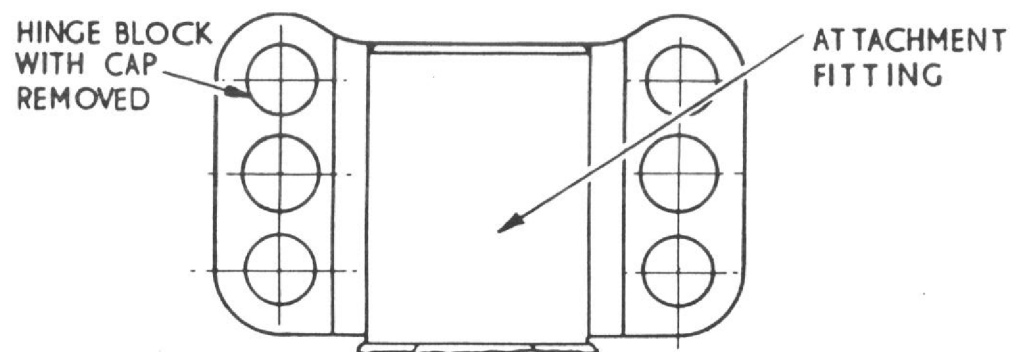
1/2

DETAILS FOR ELEVATOR AND TAILPLANE CONTROLS AND HINGES

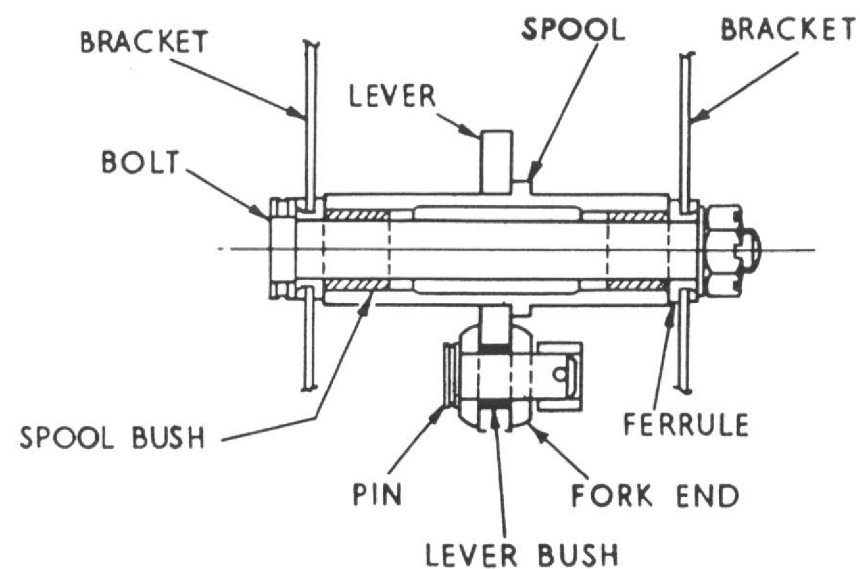
SCHEDULE OF WEAR LIMITS FOR ELEVATOR AND TAILPLANE CONTROLS AND HINGES

Ref.No. on Diagram	Part and Description		Dimension New (in.)	Permissible Worn Dimensions (in.)		Clearance New (in.)	Permissible Worn Clearance (in.)	Remarks
				Non- Selective Assembly	Selective Assembly			
1/3	Assembly of tailplane hinge block A. 185667 with tailplane attach- ment fitting C. 177119 at frame 55 (port and starboard)	Attachment fitting	$\frac{1.2487}{1.2475}$	1.246	1.24475	$\frac{0.00325}{0.00105}$	0.005	Renew hinge block and cap A. 185667 together.
		Hinge block	$\frac{1.25075}{1.24975}$	1.251	1.2537			Renew attachment fitting C. 177119 only if necessary
1/4	Assembly of elevator feel unit lever A. 202126 with bearing brackets A. 209654 and 5 using bolt Std. 325. 222	Bolt	$\frac{0.3125}{0.3095}$	0.3090	0.3070	$\frac{0.0035}{0.0005}$	0.005	Bolt and lever spool Renew bolt Std. 325. 222 and/or bushes Std. 608.4 in lever spool.
		Lever spool	$\frac{0.3130}{0.3120}$	0.3140	0.3175			Renew ferrules Std. 1357.61 in bearing bracket only if necessary
		Ferrules	$\frac{0.3130}{0.3120}$	0.3140	0.3175	$\frac{0.0035}{0.0005}$	0.005	
	Assembly of elevator feel unit C. 209753 with feel unit lever using pin Std. 1221. Z. D. 50	Pin	$\frac{0.24925}{0.24875}$	0.2480	0.2465	$\frac{0.00175}{0.00025}$	0.003	Renew pin Std. 1221. Z. D. 50. and/or bush Std. 608. 1 in lever.
		Bush	$\frac{0.2505}{0.2495}$	0.2510	0.25225			Renew fork and A. 209685 item 1 only if necessary
		Fork end	$\frac{0.2505}{0.2495}$	0.2510	0.25225	$\frac{0.00175}{0.00025}$	0.003	
1/5	Assembly of elevator feel unit C. 209753 with elevator feel connection lever B. 209637 using pin Std. 1221. Z. D. 50	Pin	$\frac{0.24925}{0.24875}$	0.2480	0.2465	$\frac{0.00175}{0.00025}$	0.003	Renew pin Std. 1221. Z. D. 50. and/ or lever bush Std. 608/ 1
		Bush	$\frac{0.2505}{0.2495}$	0.2510	0.25225			Renew feel unit fork end F. 208972 only if necessary
		Fork end	$\frac{0.25025}{0.24975}$	0.2510	0.25225	$\frac{0.0015}{0.0005}$	0.003	

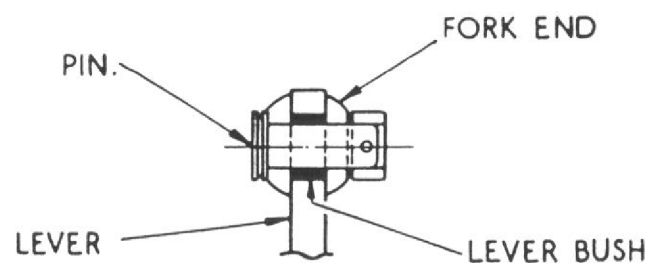
RESTRICTED



1/3



1/4



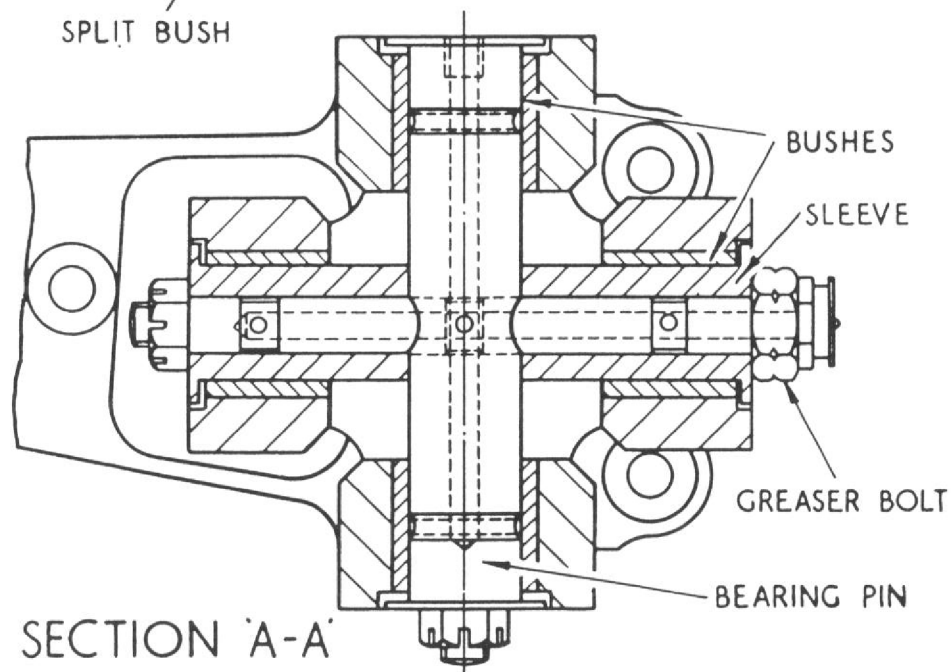
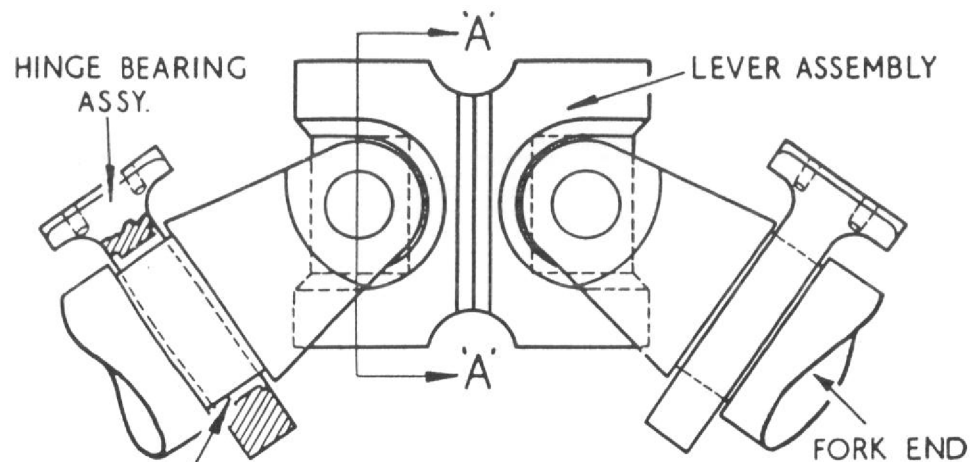
1/5

DETAILS FOR ELEVATOR AND TAILPLANE CONTROLS AND HINGES

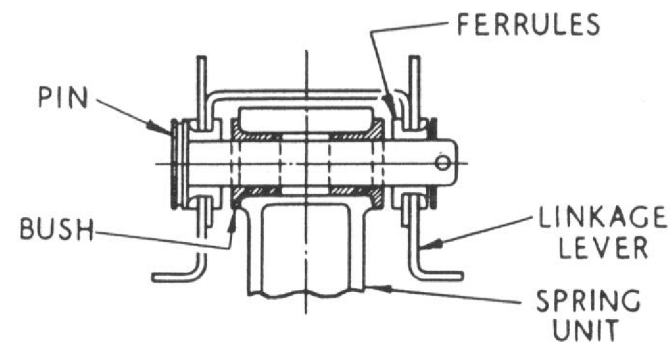
SCHEDULE OF WEAR LIMITS FOR ELEVATOR AND TAILPLANE CONTROLS AND HINGES

Ref.No. on Diagram	Part and Description	Dimension New (in.)	Permissible Worn Dimensions (in.)		Clearance New (in.)	Permissible Worn Clearance (in.)	Remarks
			Non- Selective Assembly	Selective Assembly			
1/6	Assembly of fork ends B.186412-3 with inner hinge bearing assemblies. Using split bushes A.186419	Fork ends	<u>1.81175</u> 1.8110	1.8105	1.80925	<u>0.00225</u> 0.0005	Renew split bush A.186419, renew fork ends B.186412 (Port) and B.186413 (Stbd.) only if necessary
		Split bush	<u>1.81325</u> 1.81225	1.8135	1.81475		
	Assembly of fork ends B.186412-3 with greaser bolts A.186420 using sleeve F.186423 and bushes F.186424					Bushes and sleeves	Renew bushes F.186424, renew sleeves F.186423 and greaser bolts A.186420 only if necessary
		Bushes I/D	<u>0.62675</u> 0.6260	0.6270	0.6285	<u>0.00175</u> 0.0005	
		Sleeves O/D	<u>0.6255</u> 0.6250	0.6240	0.6230		
		Sleeves I/D	<u>0.31275</u> 0.31225	0.3135	0.31425	<u>0.001</u> 0.000	
		Greaser bolts	<u>0.31225</u> 0.31175	0.3115	0.31025		
	Assembly of levers B.186414-5 with bearing pins A.186422 using bushes F.186424	Bushes I/D	<u>0.62675</u> 0.6260	0.6270	0.6285	<u>0.00175</u> 0.0005	Renew bushes F.186424, renew bearing pins A.186422 only if necessary
		Bearing pins	<u>0.6255</u> 0.6250	0.6240	0.6230		
	Assembly of greaser bolts A.186420 with bearing pins A.186422	Greaser bolts	<u>0.31225</u> 0.31175	0.3110	0.3055	<u>0.00575</u> 0.00025	Renew greaser bolts A.186420 and/or bearing pins A.186422
		Bearing pins	<u>0.3175</u> 0.3125	0.3180	0.31925		
1/7	Assembly of spring unit B.211414 with flying tail linkage lever B.211413 using pin Std. 1221. Z.D. 135					Pins and ferrules	Renew pin Std. 1221. Z.D. 135 and/or bushes F.211401. Renew ferrules Std. 1357/22 only if necessary
		Pin	<u>0.24925</u> 0.24875	0.2485	0.24675	<u>0.00175</u> 0.00025	
		Ferrules	<u>0.2505</u> 0.2495	0.2515	0.25225		
		Bushes	<u>0.25025</u> 0.24975	0.2515	0.25225	<u>0.0015</u> 0.0005	0.003

RESTRICTED



1/6



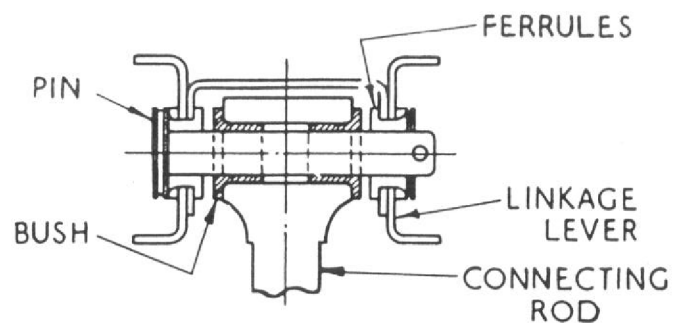
1/7

DETAILS FOR ELEVATOR AND TAILPLANE CONTROLS AND HINGES

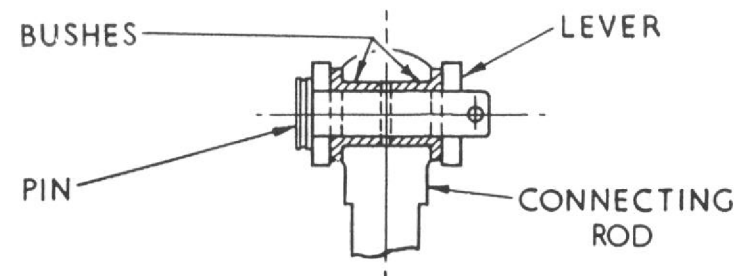
SCHEDULE OF WEAR LIMITS FOR ELEVATOR AND TAILPLANE CONTROLS AND HINGES

Ref.No. on Diagram	Part and Description	Dimension New (in.)	Permissible Worn Dimensions (in.)		Clearance New (in.)	Permissible Worn Clearance (in.)	Remarks
			Non- Selective Assembly	Selective Assembly			
1/8	Assembly of connecting rod A.211409 with flying tail linkage lever B.211413 using pin Std. 1221. Z. D. 135	Pin	$\frac{0.24925}{0.24875}$	0.2485	0.24675	$\frac{0.00175}{0.00025}$	Pin and ferrules Renew pin Std. 1221. Z. D. 135 and/or bushes F.211401. Renew ferrules Std. 1357/22 only if necessary
		Ferrules	$\frac{0.2505}{0.2495}$	0.2515	0.25225		Pins and bushes
		Bushes	$\frac{0.25025}{0.24975}$	0.2515	0.25225	$\frac{0.0015}{0.0005}$	0.003
1/9	Assembly of spring unit B.211414 with lever assembly A.211392 using pin Std. 1221. Z. D. 85	Pin	$\frac{0.24925}{0.24875}$	0.2485	0.24675	$\frac{0.0015}{0.0005}$	Pin and bushes Renew pin Std. 1221. Z. D. 85 and/or bushes F.211401, also lever A.211392 if necessary
		Bushes	$\frac{0.25025}{0.24975}$	0.2515	0.25225		Pin and lever
		Lever	$\frac{0.25025}{0.24975}$	0.2515	0.25225	$\frac{0.0015}{0.0005}$	0.003
1/10	Assembly of connecting rod A.211409 with lever assembly A.211392 using pin Std. 1221. Z. D. 85	Pin	$\frac{0.24925}{0.24875}$	0.2485	0.24675	$\frac{0.0015}{0.0005}$	Pins and bushes Renew pin Std. 1221. Z. D. 85 and/or bushes F.211401, also lever A.211392 if necessary
		Bushes	$\frac{0.25025}{0.24975}$	0.2515	0.25225		Pin and lever
		Lever	$\frac{0.25025}{0.24975}$	0.2515	0.25225	$\frac{0.0015}{0.0005}$	0.003
1/11	Assembly of lever A.211392 with assembly of micro switch mounting plates A.220794 and link F.211423 using pin F.219509	Pin	$\frac{0.1875}{0.18625}$	0.1855	0.18425	$\frac{0.00150}{0.0005}$	Pin and lever Renew pin F.219509 and/or lever A.211392 and link F.211423
		Lever	$\frac{0.18775}{0.18725}$	0.1885	0.18975		Pin and link
		Link	$\frac{0.18775}{0.18725}$	0.1885	0.18975	$\frac{0.00150}{0.0005}$	0.003

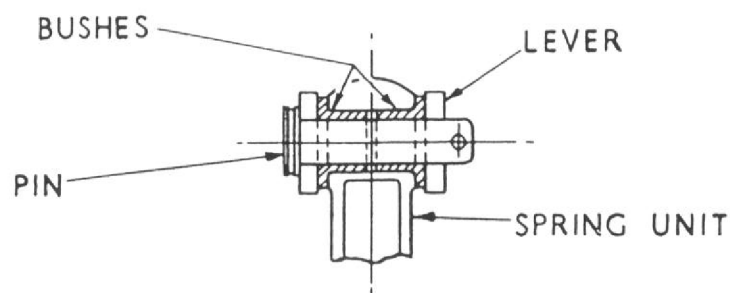
RESTRICTED



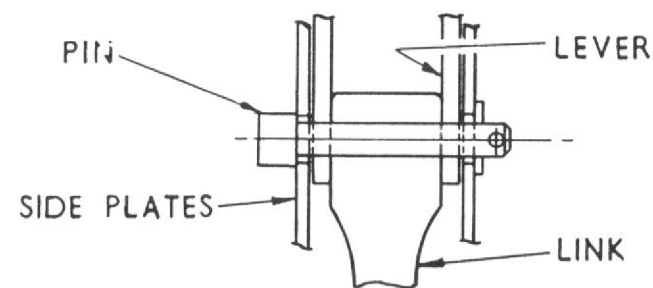
1/8



1/10



1/9



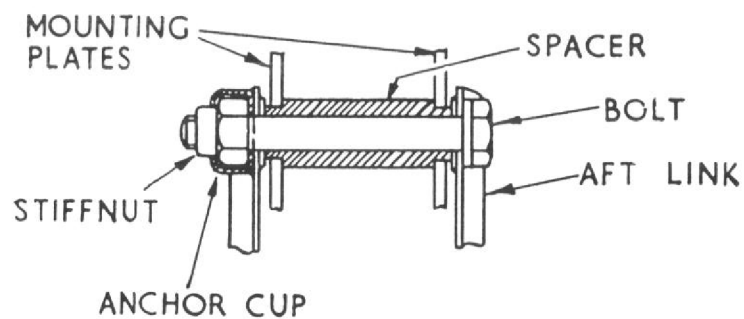
1/11

DETAILS FOR ELEVATOR AND TAILPLANE CONTROLS AND HINGES

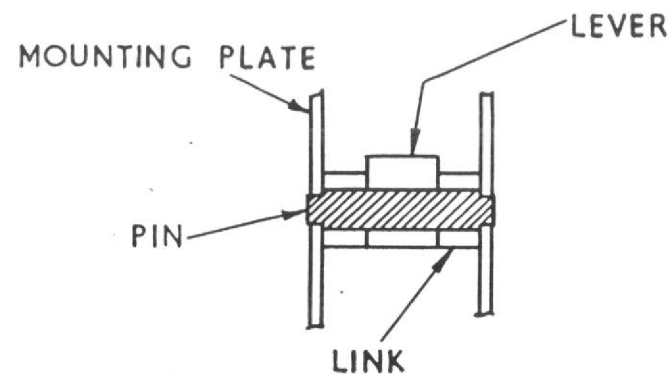
SCHEDULE OF WEAR LIMITS FOR ELEVATOR AND TAILPLANE CONTROLS AND HINGES

Ref. No. on Diagram	Part and Description	Dimension New (in.)	Permissible Worn Dimensions (in.)		Clearance New (in.)	Permissible Worn Clearance (in.)	Remarks
			Non - Selective Assembly	Selective Assembly			
1/12	Assembly of aft link A.211394 on switch carrier with assembly of switch mounting C.223062 using Std. bolt A.25.12.C	Spacer	0.2807 0.2802	0.280	0.2780	0.0013 0.0003	Renew spacer F.211400 and/or mounting plates A.220794 Rotation of bolt in spacer is unlikely
		Plates	0.2815 0.2810	0.283	0.2837		
1/13	Assembly of aft link A.211394 with mounting bracket A.211399 using bolt Std.1551.1.165	Bolt	0.2495 0.2490	0.2485	0.24675	0.00125 0.00025	Renew bolt Std.1551.1.165 and/or bushes F.211398
		Bushes	0.25025 0.24975	0.2515	0.2525		
	Assembly of link F.211423 and lever F.211422 with switch mounting plates A.220794 using pin F.211421	Pin	0.2178 0.2173	0.2170	0.2155	0.0017 0.0007	Renew pin F.211421 and/or link F.211423 and lever F.211422. Renew mounting plates A.220794 only if necessary
		Lever	0.2190 0.2185	0.220	0.2208		
		Link	0.2190 0.2185	0.220	0.2208	0.0017 0.0007	
		Pin	0.1872 0.1867	0.1865	0.18525		
		Plates	0.18775 0.18725	0.1885	0.1892	0.00105 0.00005	
1/15	Assembly of datum actuator E.A.25431 with fuselage eye bolt F.211395 using pin Std.1221.Z.B.70	Pin	0.18675 0.18625	0.186	0.18425	0.0015 0.0005	Renew pin Std.1221.Z.B.70 and/or actuator bushes, also eye bolt F.211395 if necessary
		Bushes	0.18775 0.18725	0.189	0.18975		
		Eye bolt	0.18775 0.18725	0.189	0.18975	0.0015 0.0005	

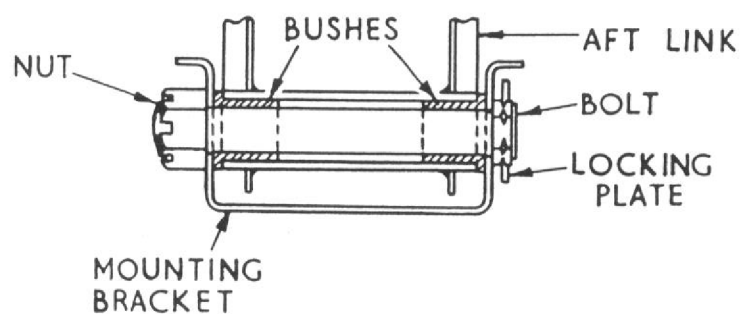
RESTRICTED



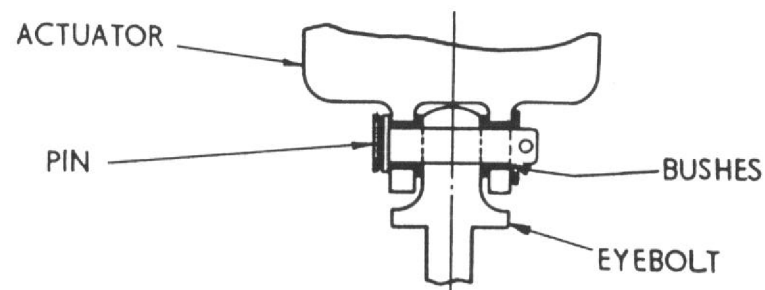
1/12



1/14



1/13



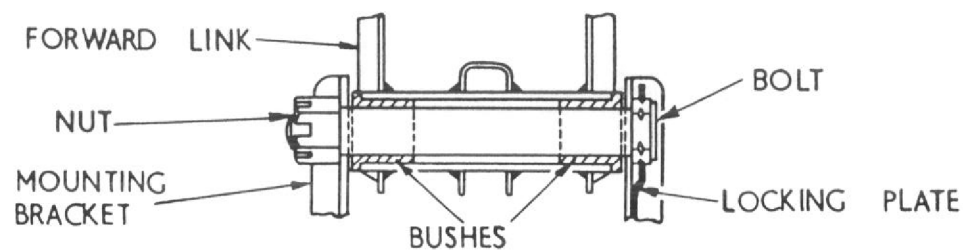
1/15

DETAILS FOR ELEVATOR AND TAILPLANE CONTROLS AND HINGES

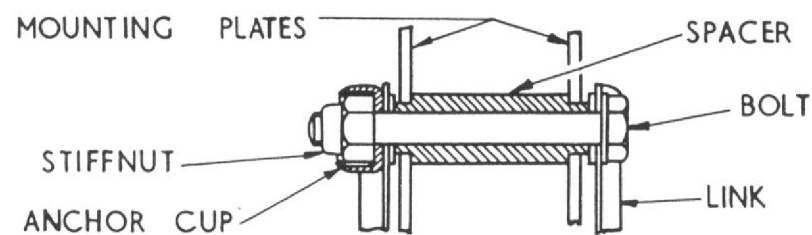
SCHEDULE OF WEAR LIMITS FOR ELEVATOR AND TAILPLANE CONTROLS AND HINGES

Ref.No. on Diagram	Part and Description	Dimension New (in.)	Permissible Worn Dimensions (in.)		Clearance New (in.)	Permissible Worn Clearance (in.)	Remarks
			Non- Selective Assembly	Selective Assembly			
1/ 16	Assembly of forward link A. 211397 with mounting bracket A. 211399 using bolt Std. 1551. 1. 165	Bolt	$\frac{0.2495}{0.2490}$	0.2485 0.24675	$\frac{0.00125}{0.00025}$	0.003	Renew bolt Std. 1551. 1. 165 and/or bushes F. 211398
		Bushes	$\frac{0.25025}{0.24975}$	0.2515 0.2525			
1/ 17	Assembly of datum actuator E. A. 25321 with forward link A. 211397 using pin Std. 1221. Z. B. 45						Renew pin Std. 1221. Z. B. 45 and/or forward link A. 211397. If necessary renew self aligning bearing on actuator
		Pin	$\frac{0.18675}{0.18625}$	0.186 0.184	$\frac{0.0015}{0.0005}$	0.003	
		Link	$\frac{0.18775}{0.18725}$	0.189 0.18975			
		Bearing	$\frac{0.188}{0.187}$	0.189 0.18975	$\frac{0.00175}{0.00015}$	0.003	
1/ 18	Assembly of forward link A. 211397 with assembly of switch mounting C. 223062 using bolt A. 25. 12. C	Spacer	$\frac{0.2807}{0.2802}$	0.280 0.2780	$\frac{0.0013}{0.0003}$	0.003	Renew spacer F. 211400 and/or mounting plates A. 220794. Rotation of bolt in spacer is unlikely
		Plates	$\frac{0.2815}{0.2810}$	0.283 0.2837			

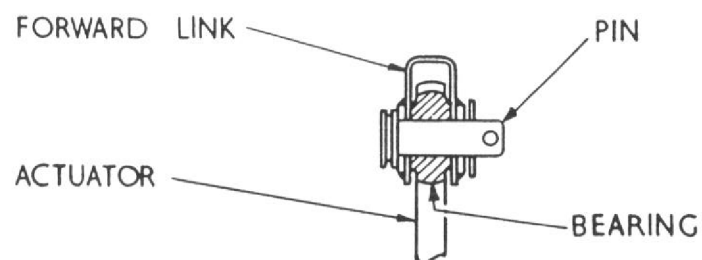
RESTRICTED



1/16



1/18



1/17

DETAILS FOR ELEVATOR AND TAILPLANE CONTROLS AND HINGES

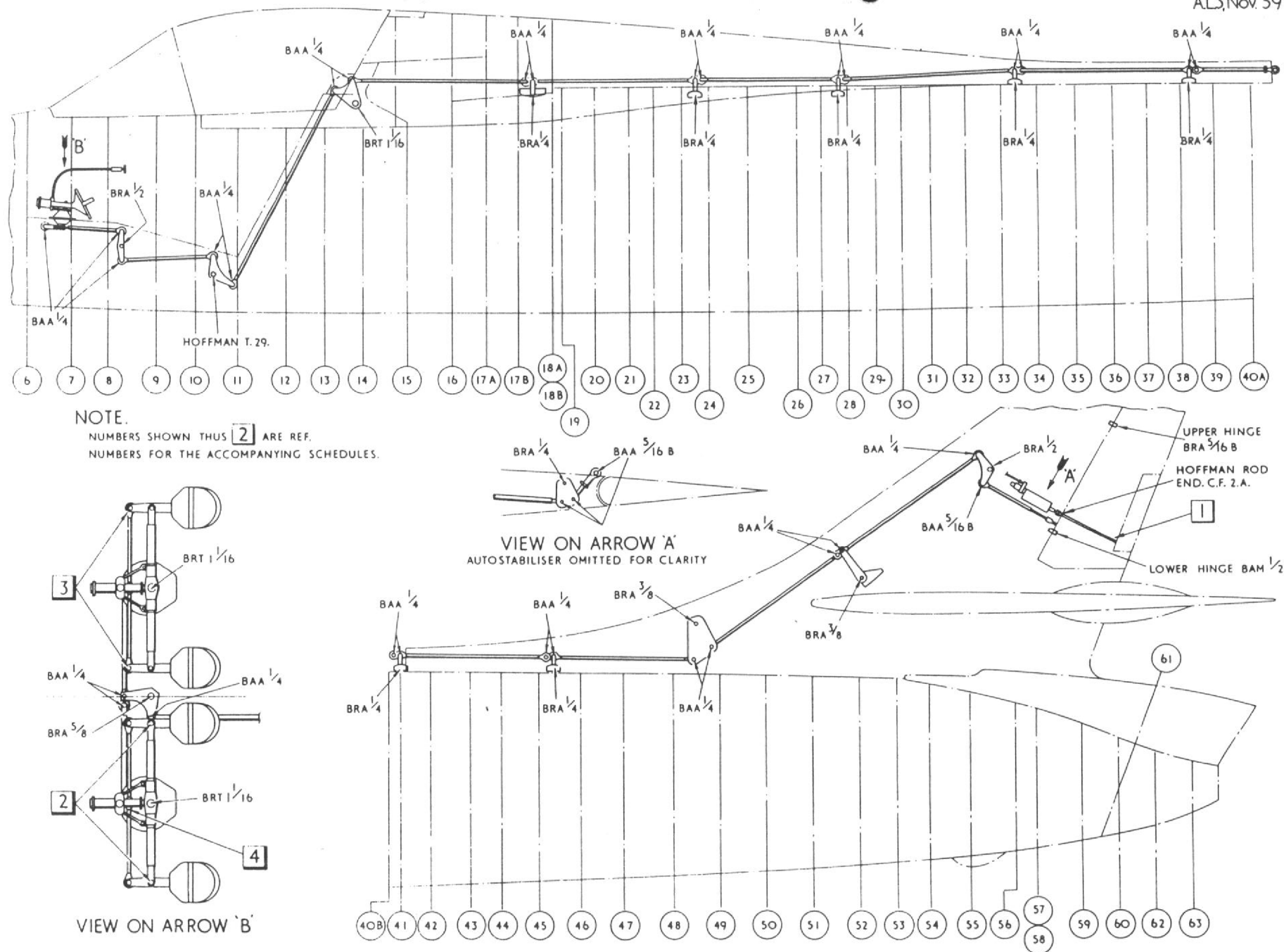
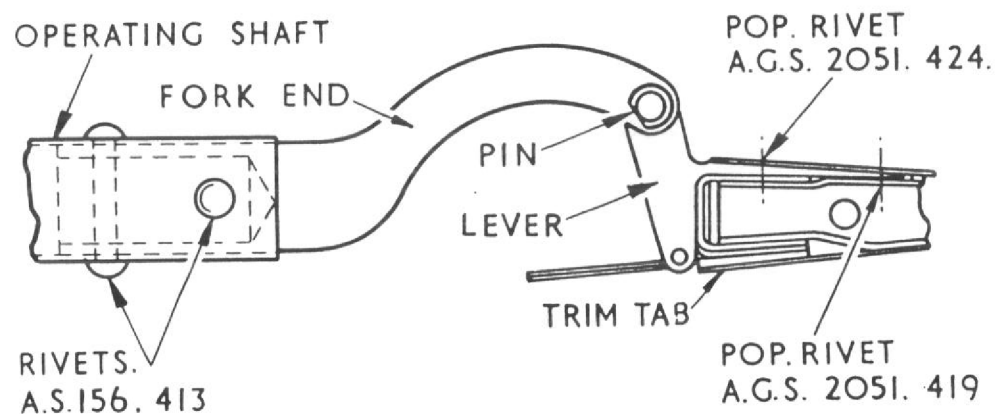


FIG. 2. BEARING LOCATION DIAGRAM - RUDDER CONTROLS AND HINGES

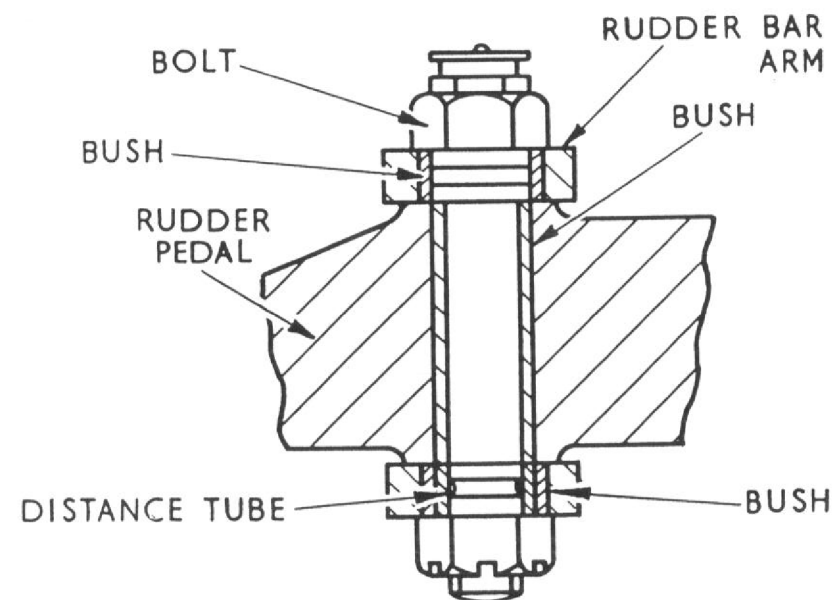
SCHEDULE OF WEAR LIMITS FOR RUDDER CONTROLS AND HINGES

Ref.No. on Diagram	Part and Description	Dimension New (in.)	Permissible Worn Dimensions (in.)		Clearance New (in.)	Permissible Worn Clearance (in.)	Remarks	
			Non- Selective Assembly	Selective Assembly				
2/1	Assembly of trim tab C. 228569 with operating shaft B.203272 using fork end F.203273, lever F.203261 and pin Std. 1221. Z. A. 25	Pin	<u>0.1550</u>	0.1550	0.1540	Pin and lever		Renew pin Std. 1221. Z. A. 25 fork end F.203273 and/or lever F.203261 may also be renewed if necessary
			<u>0.1555</u>			<u>0.0015</u>	0.002	
		Lever and Fork end	<u>0.1565</u>	0.1570	0.1575	Pin and fork end		
			<u>0.1560</u>			<u>0.0015</u>	0.002	
2/2	Assembly of rudder pedal with rudder bar arm using bolt A.S.2209, bushes A.97877 and F.214828, and distance tube A.S.2210	Bolt	<u>0.37475</u>	0.3740	0.3725	Bolt and bush		Renew bush A.97877, bush F.214828 and distance tube A.S.2210 as required. Renew bolt A.S.2209 only if necessary. Rotation of bolt in pedal bush and distance tube is unlikely
			<u>0.37425</u>			<u>0.00125</u>	0.002	
		Bush	<u>0.3755</u>	0.3760	0.37675	Bolt and distance tube		
			<u>0.3745</u>			<u>0.00025</u>		
		Distance Tube I/D.	<u>0.37525</u>	0.3760	0.37675	Distance tube and bush		
			<u>0.37425</u>			<u>0.001</u>	0.002	
2/2	Assembly of rudder pedal with rudder bar arm using bolt A.S.2209, bushes A.97877 and F.214828, and distance tube A.S.2210	Distance Tube O/D.	<u>0.4990</u>	0.4975	0.4955	Distance tube and bush		
			<u>0.4980</u>			<u>0.000</u>		
		Bush	<u>0.5005</u>	0.5015	0.5030	<u>0.0025</u>	0.004	
			<u>0.4995</u>			<u>0.0005</u>		

RESTRICTED



2/1

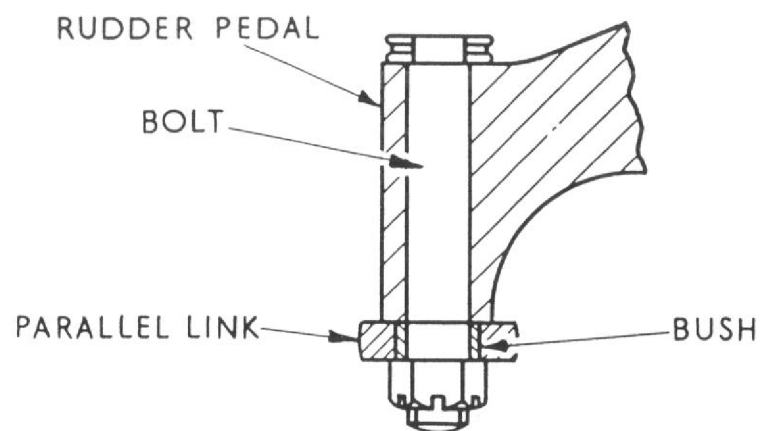


2/2

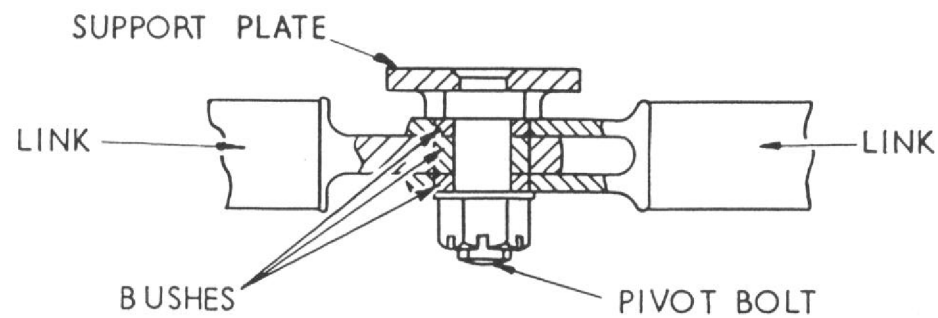
SCHEDULE OF WEAR LIMITS FOR RUDDER CONTROLS AND HINGES

Ref.No. on Diagram	Part and Description	Dimension New (in.)	Permissible Worn Dimensions (in.)		Clearance New (in.)	Permissible Worn Clearance (in.)	Remarks	
			Non- Selective Assembly	Selective Assembly				
2/3	Assembly of rudder pedal with rudder bar parallel link using bolt Std.325.154 and bush F.133837	Bolt	$\frac{0.3125}{0.3095}$	0.3090	0.3070	$\frac{0.0035}{-0.0005}$	0.005	Renew bolt Std.325.154. Wear to pedal rectified by reaming pedal and bush to 11/32 in. dia. Newell 'B' (11/32 in. $\pm$.0005 in.) and fitting bolt Std.326.154. Where bush is worn and not the pedal, bush F.133837 should be renewed
		Pedal	$\frac{0.3130}{0.3120}$	0.3140	0.3175			
		Bush	$\frac{0.3130}{0.3120}$	0.3140	0.3175	$\frac{0.0005}{-0.0005}$	0.005	
2/4	Assembly of parallel links at support plate A.169699 using pivot bolt F.169698 bushes F.133836 and bush F.133837	Pivot bolt	$\frac{0.3115}{0.3110}$	0.3100	0.3080	$\frac{0.002}{0.0005}$	0.004	Renew bushes F.133836 and/or bush F.133837. Renew pivot bolt by renewing support plate A.169699 only if necessary
		Bush	$\frac{0.3130}{0.3120}$	0.3140	0.3155			

RESTRICTED



2/3



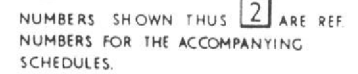
2/4

DETAILS FOR RUDDER CONTROLS AND HINGES

SCHEDULE OF WEAR LIMITS FOR AILERON CONTROLS AND HINGES

Ref.No. on Diagram	Part and Description	Dimension New (in.)	Permissible Worn Dimensions (in.)		Clearance New (in.)	Permissible Worn Clearance (in.)	Remarks
			Non- Selective Assembly	Selective Assembly			
3/1	Assembly of bolt F.205015 with control column fork end and block using bushes A.53067	Bolt	<u>0.4370</u> 0.4368	0.4365	0.4325	<u>0.0037</u> 0.0005	0.005 Renew bushes A.53067. Renew bolt F.205105 only if necessary
		Bushes	<u>0.4405</u> 0.4375	0.4415	0.4420		
	Assembly of pin A.53057/1 torque tube fork A.165967	Pin	<u>0.7493</u> 0.7488	0.7485	0.74675	<u>0.0017</u> 0.00045	0.003 Renew pin A.53057/1. Renew universal fork A.165967 only if necessary
		Fork	<u>0.7505</u> 0.74975	0.7515	0.7523		
3/2	Control column chain and sprocket assemblies	Adjustment of the assembly to be made by use of adjustable rods, and maintained such that no slack is apparent in the chain on moving the control handle. If excessive wear etc. is apparent renew chains: Top chain: A.213425. Bottom chain: A.182743					
3/3	Assembly of manual drive pin F.182015 with bush F.168914	Pin	<u>0.4335</u> 0.4330	0.4320	0.42825	<u>0.03625</u> 0.03475	0.040 Renew pin F.182015 and/or bush F.168914
		Bush	<u>0.46925</u> 0.46825	0.4720	0.4735		

RESTRICTED

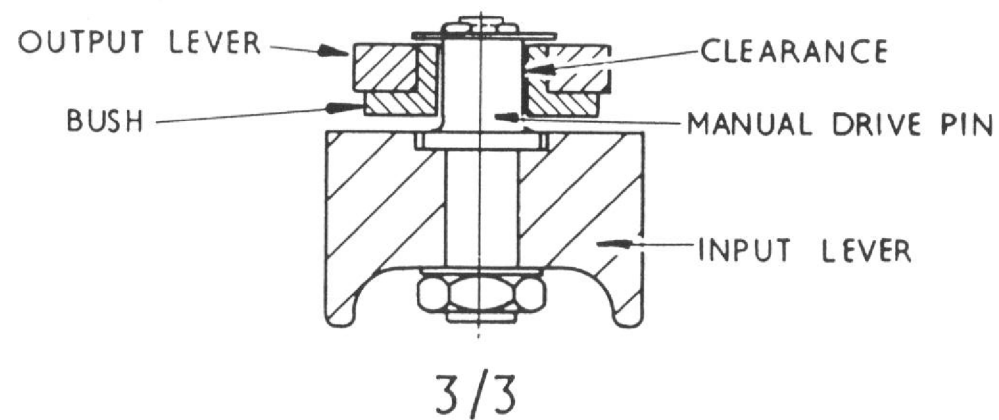
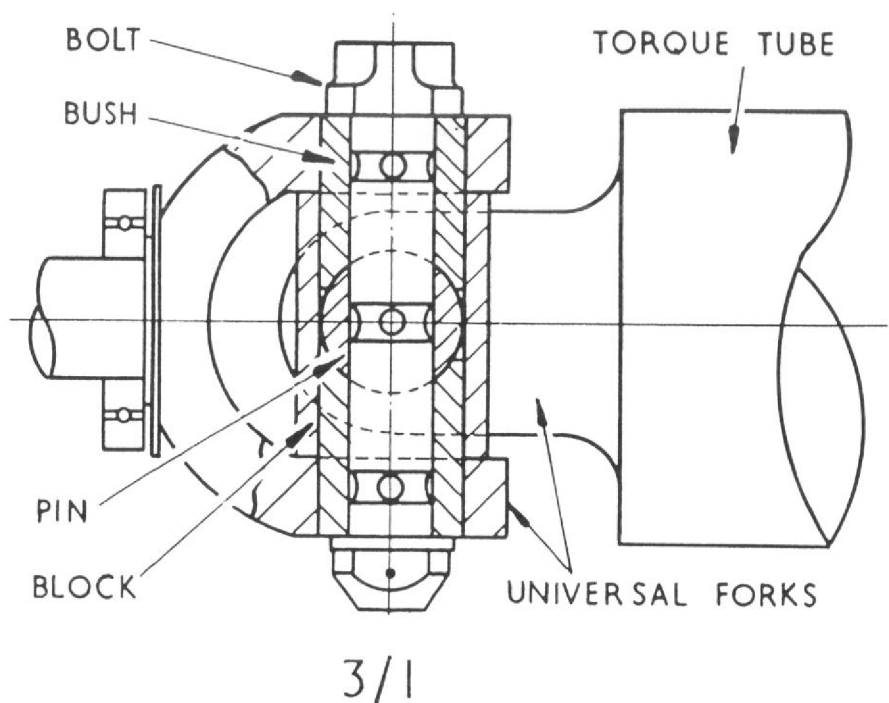


RESTRICTED

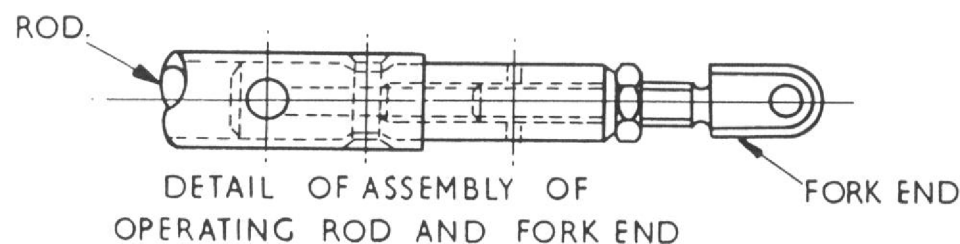
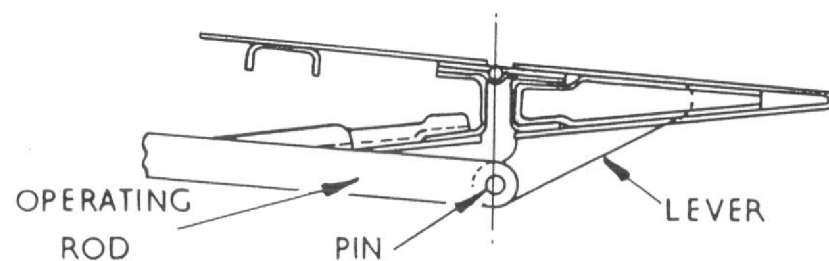
SCHEDULE OF WEAR LIMITS FOR AILERON CONTROLS AND HINGES

Ref.No. on Diagram	Part and Description	Dimension New (in.)	Permissible Worn Dimensions (in.)		Clearance New (in.)	Permissible Worn Clearance (in.)	Remarks	
			Non- Selective Assembly	Selective Assembly				
3/4	Assembly of operating rod A.218102 with trim tab operating lever F.218083 using pin S.P.113.C.3½	Pin	<u>0.18675</u> 0.18625	0.1860	0.1840	<u>0.00175</u> 0.00025	0.003	Renew pin S.P.113.C.3½ and/or operating rod fork end F.218053. Wear to lever rectified by reaming fork end and lever to 7/32 in. dia. Newall 'B' (7/32 in. ± .0005 in.) and using pin Std.1221.Y.C.35. Permissible clearances unchanged
		Rod and lever	<u>0.1880</u> 0.1870	0.1890	0.18975	<u>Pin and lever</u> <u>0.00175</u> 0.00025	0.003	
3/5	Assembly of spindle F.168717 with lever bush F.202435	Spindle	<u>1.3725</u> 1.372	1.3715	1.3695	<u>0.004</u> 0.002	0.005	Renew bush F.202435 and/or spindle F.168717
		Bush	<u>1.376</u> 1.3745	1.3765	1.3775			

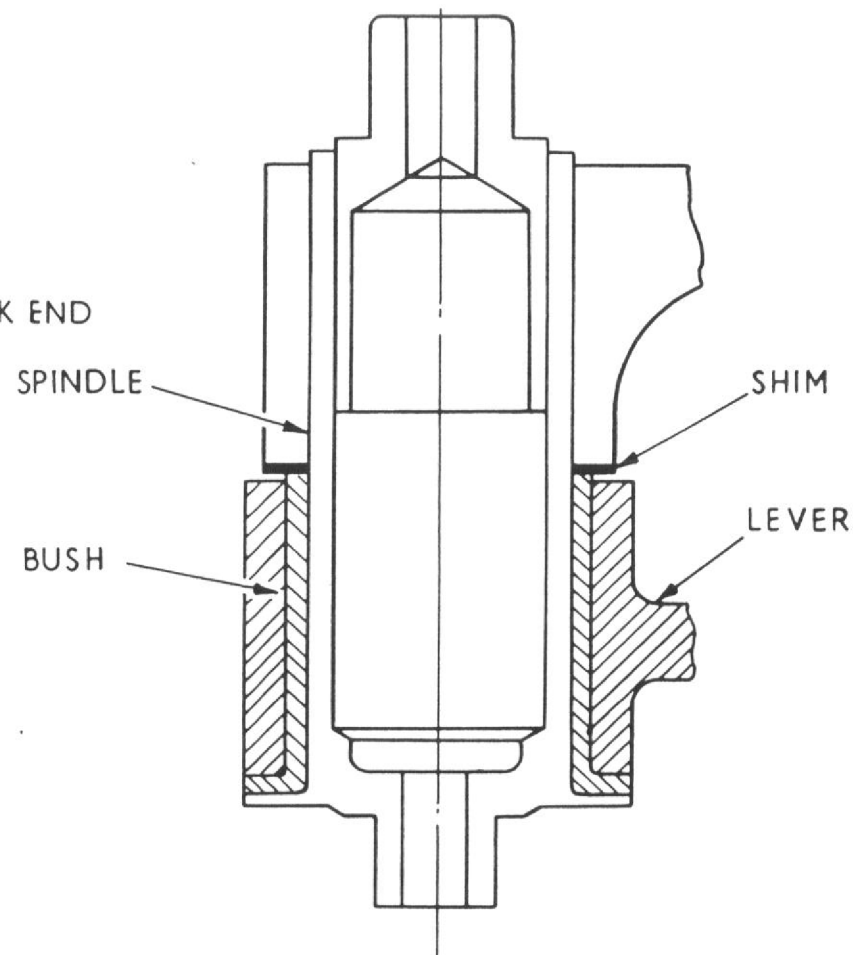
RESTRICTED



DETAILS FOR AILERON CONTROLS AND HINGES

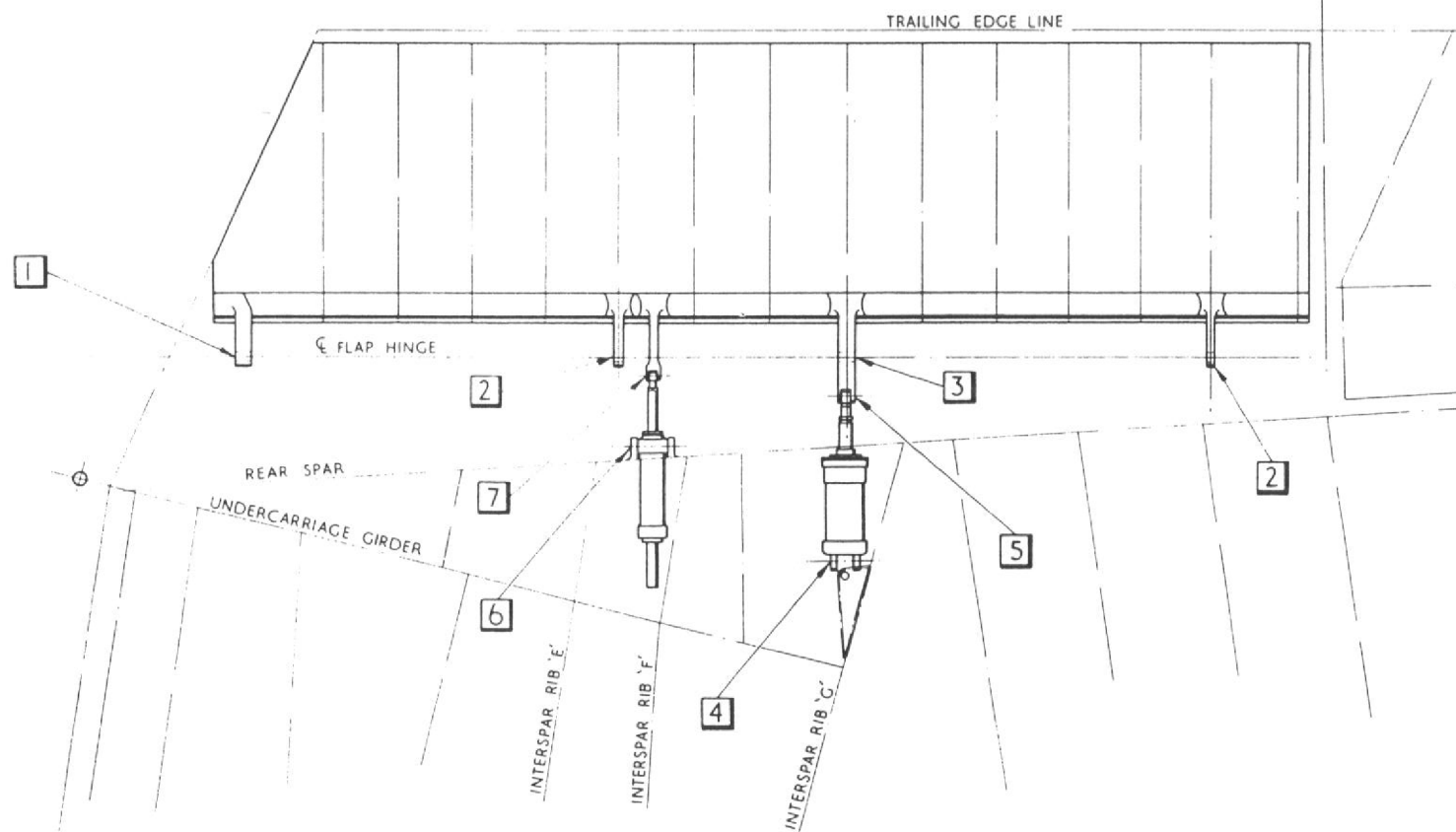


3/4



3/5

DETAILS FOR AILERON CONTROLS AND HINGES



NOTE.

1 NUMBERS SHOWN THUS 2 ARE REF. NUMBERS
FOR THE ACCOMPANYING SCHEDULES

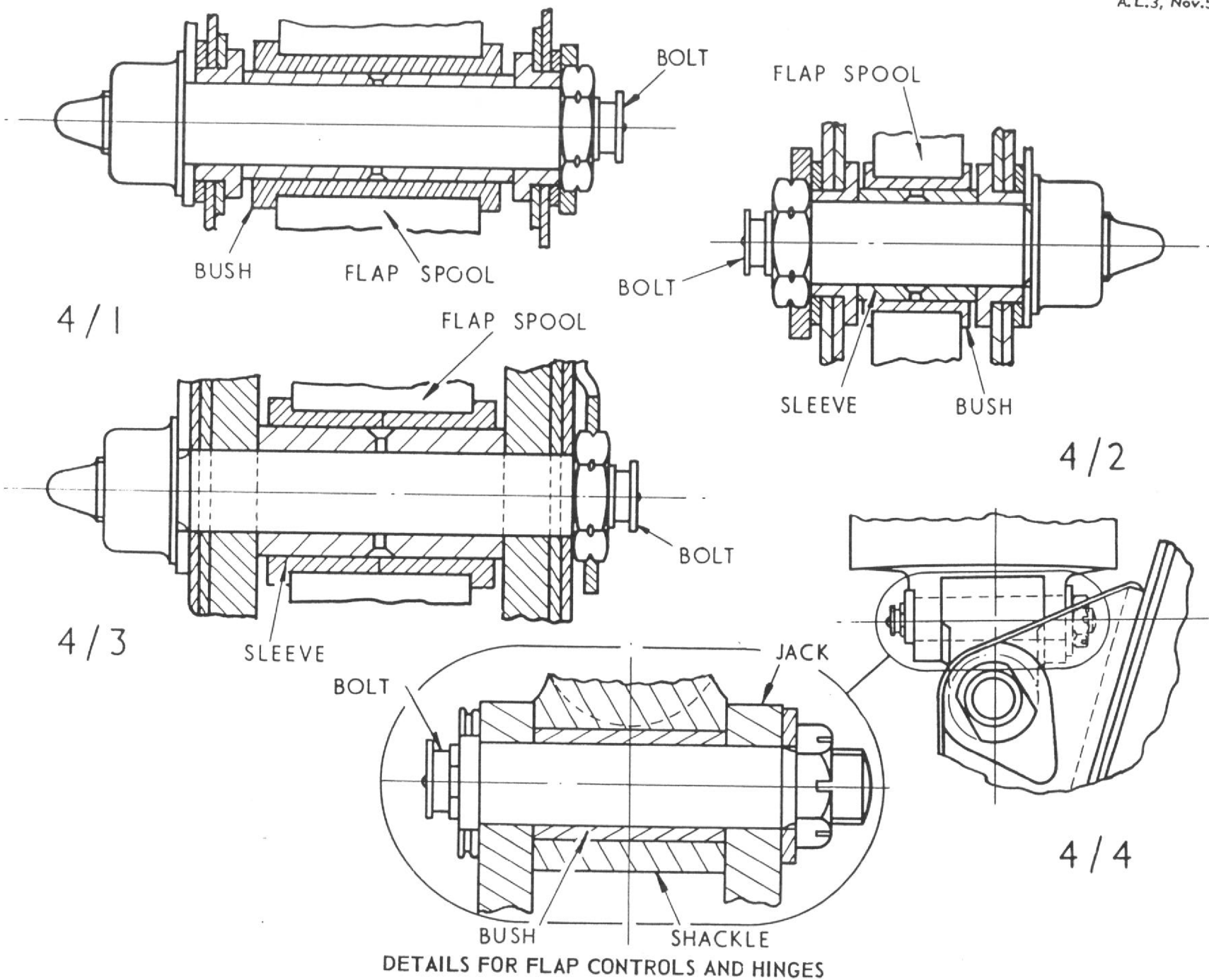
FIG.4.BEARING LOCATION DIAGRAM - FLAP CONTROLS AND HINGES

RESTRICTED

SCHEDULE OF WEAR LIMITS FOR FLAP CONTROLS AND HINGES

Ref.No. on Diagram	Part and Description	Dimension New (in.)	Permissible Worn Dimensions (in.)		Clearance New (in.)	Permissible Worn Clearance (in.)	Remarks
			Non- Selective Assembly	Selective Assembly			
4/1	Inboard flap hinge, assembly of bushes F.181472 with sleeve F.215167	Bushes	$\frac{0.81325}{0.8120}$	0.814	0.815		Renew bushes F.181472 (2 off) and/or sleeve F.215167
		Sleeve	$\frac{0.8080}{0.8070}$	0.807	0.805	$\frac{0.00625}{0.004}$	
4/2	Inboard centre hinge and outboard hinge assembly. Assembly of bushes F.181471 with sleeve F.215166	Bushes	$\frac{0.81325}{0.8120}$	0.814	0.815		Renew bushes F.181471 (2 off) and/or sleeve F.215166
		Sleeve	$\frac{0.8080}{0.8070}$	0.807	0.805	$\frac{0.00625}{0.0040}$	
4/3	Outboard centre hinge, assembly of bushes F.178805 with sleeve F.215165	Bushes	$\frac{1.00075}{0.9995}$	1.001	1.002		Renew bushes F.178805 (2 off) and/or sleeve F.215165
		Sleeve	$\frac{0.9960}{0.9950}$	0.995	0.9935	$\frac{0.00575}{0.0035}$	
4/4	Flap jack, wing anchorage, assembly of jack unit with shackle using bolt F.179226 and bush F.179173	Bolt	$\frac{0.6245}{0.6240}$	0.6235	0.62175	$\frac{0.0015}{0.00025}$	Renew bush F.179173. Renew bolt F.179226 only if necessary
		Bush	$\frac{0.6255}{0.62475}$	0.6265	0.6275		

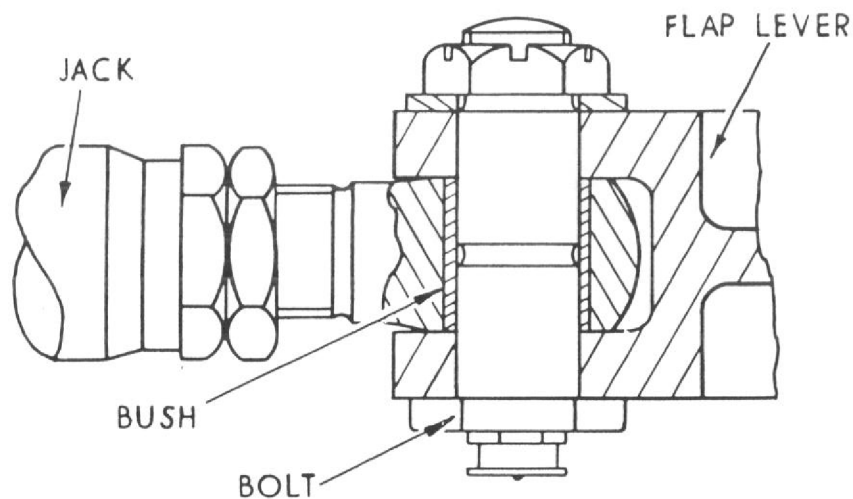
RESTRICTED



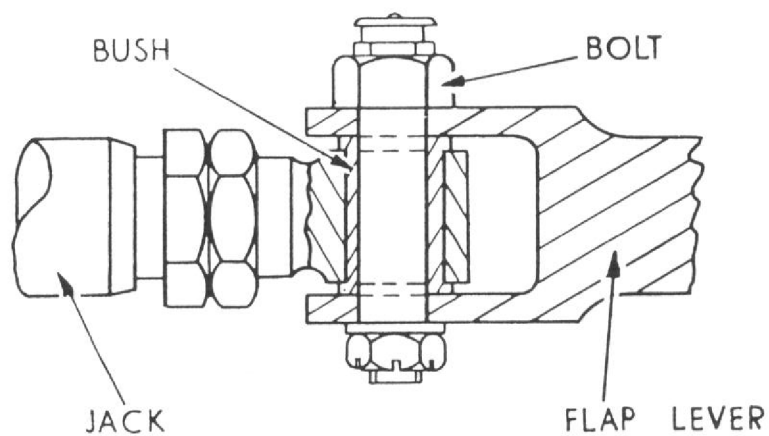
SCHEDULE OF WEAR LIMITS FOR FLAP CONTROLS AND HINGES

Ref.No. on Diagram	Part and Description	Dimension New (in.)	Permissible Worn Dimensions (in.)		Clearance New (in.)	Permissible Worn Clearance (in.)	Remarks
			Non- Selective Assembly	Selective Assembly			
4/5	Flap jack, flap anchorage, assembly of jack unit with flap using bolt F.170109 and bush	Bolt	$\frac{0.6240}{0.6245}$	0.6235 0.6215	$\frac{0.00175}{0.00000}$	0.003	Renew bush (supplied with jack). See Dowty repair Scheme. Renew bolt F.170109 only if necessary
		Bush	$\frac{0.62575}{0.6245}$	0.6265 0.6275			
4/6	Flap synchronising jack, wing anchorage, assembly of jack unit with bearing blocks using pins F.185351 and bushes	Pin	$\frac{0.4365}{0.4360}$	0.4355 0.4340	$\frac{0.002}{0.0005}$	0.003	Renew bushes (supplied with jack). See Dowty repair Scheme. Renew pins F.185351 only if necessary
		Bush	$\frac{0.4380}{0.4370}$	0.4385 0.4395			
4/7	Flap synchronising jack, flap anchorage, assembly of jack unit with flap using bolt F.185860 and bush	Bolt	$\frac{0.37475}{0.37425}$	0.374 0.3725	$\frac{0.00125}{0.00025}$	0.002	Renew bush (supplied with jack). See Dowty repair scheme. Renew bolt F.185860 only if necessary
		Bush	$\frac{0.3755}{0.3745}$	0.376 0.37675			

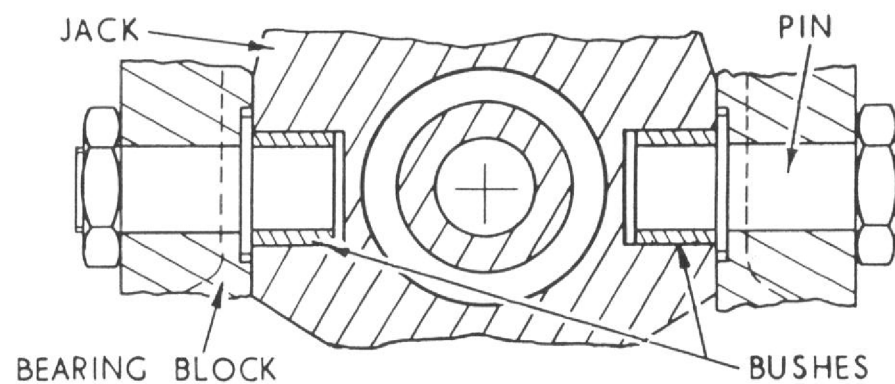
RESTRICTED



4/5



4/7



4/6

DETAILS FOR FLAP CONTROLS AND HINGES

This file was downloaded
from the RTFM Library.

Link: www.scottbouch.com/rtfm

Please see site for usage terms,
and more aircraft documents.

