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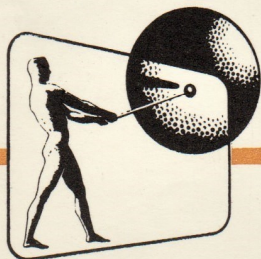
Issue 1/160

GAUMONT-KALEE

OPTICAL SOUNDHEADS

TYPES-543-378-847

SPARES LIST



RANK PRECISION INDUSTRIES LTD.

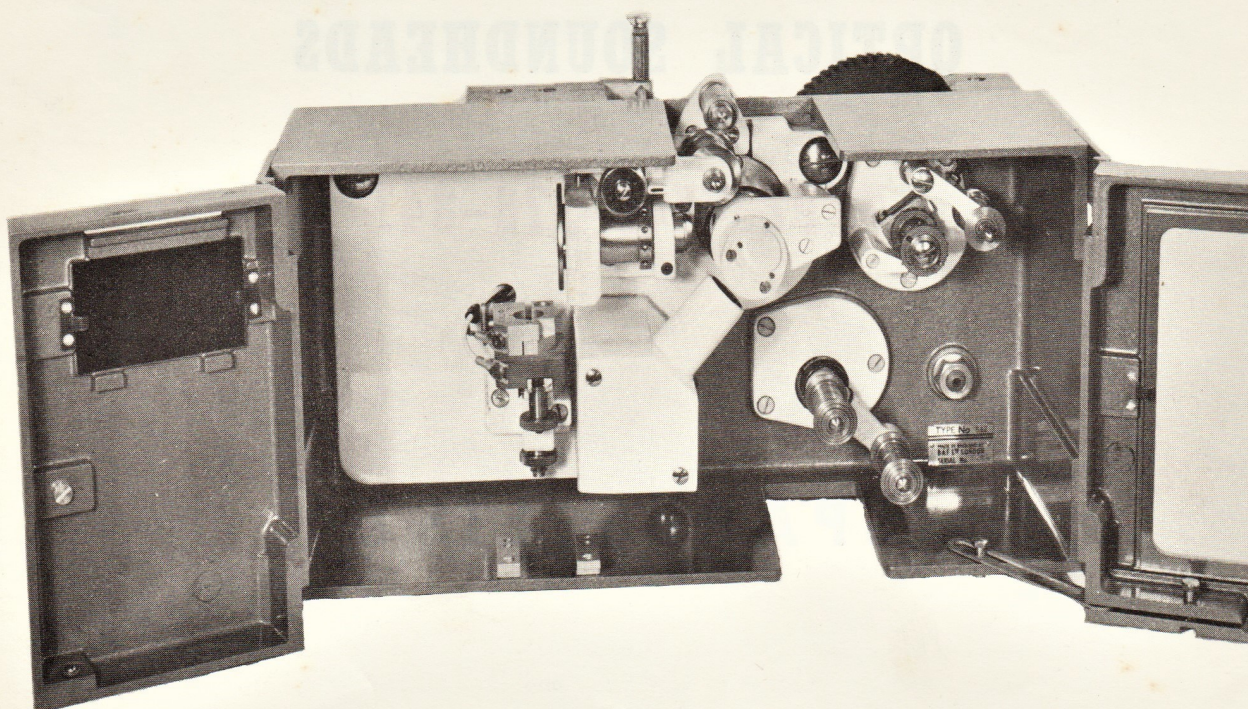
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GAUMONT-KALEE

TYPE 543



OPTICAL

SOUNDHEAD

SPARE PARTS LIST

When ordering Spare Parts from this List, always give as much information as possible. In addition to the number of the part to be replaced, quote its name, with the type and serial numbers of the unit in which it is fitted.

IMPORTANT: The Part Number must always be quoted.

Bei der Bestellung von Ersatzteilen sollte eine eingehende Beschreibung beigelegt werden. Ausser der Nummer des Teils, das ersetzt werden soll, sollte seine Benennung sowie die Typen- und Seriennummern des Gerätes angegeben werden, in den das Teil eingebaut werden soll.

WICHTIG: Die Listenbezeichnung des Teils muss auf jeden fall angegeben werden.

Quand vous commandez des pièces a l'aide de cette liste veuillez donner le plus d'information possible. En plus du numéro de la pièce, veuillez indiquer son nom ainsi que le type et numéro de la machine à laquelle elle est destinée.

IMPORTANT: Le numéro de la pièce doit toujours être donné.

Cuando se hace un pedido de piezas de recambio se debe hacer lo mas detallado posible. Aparte del número de la parte que se reemplaza, indicar su nombre, con los números de tipo y serie de la sección donde van ajustados.

IMPORTANTE: El número de la parte siempre debe indicarse.

Bij bestelling van onderdelen van deze lijst verzoeken wij U altijd zoveel mogelijk bijzonderheden te verstrekken. Afgezien van het nummer van het te vervangen onderdeel verzoeken wij U de naam ervan op te geven alsmede het type en de serie nummers van de machines, waarin e.e.a. gemonteerd moet worden.

BELANGRIJK: Het nummer van het onderdeel moet altijd opgegeven worden.

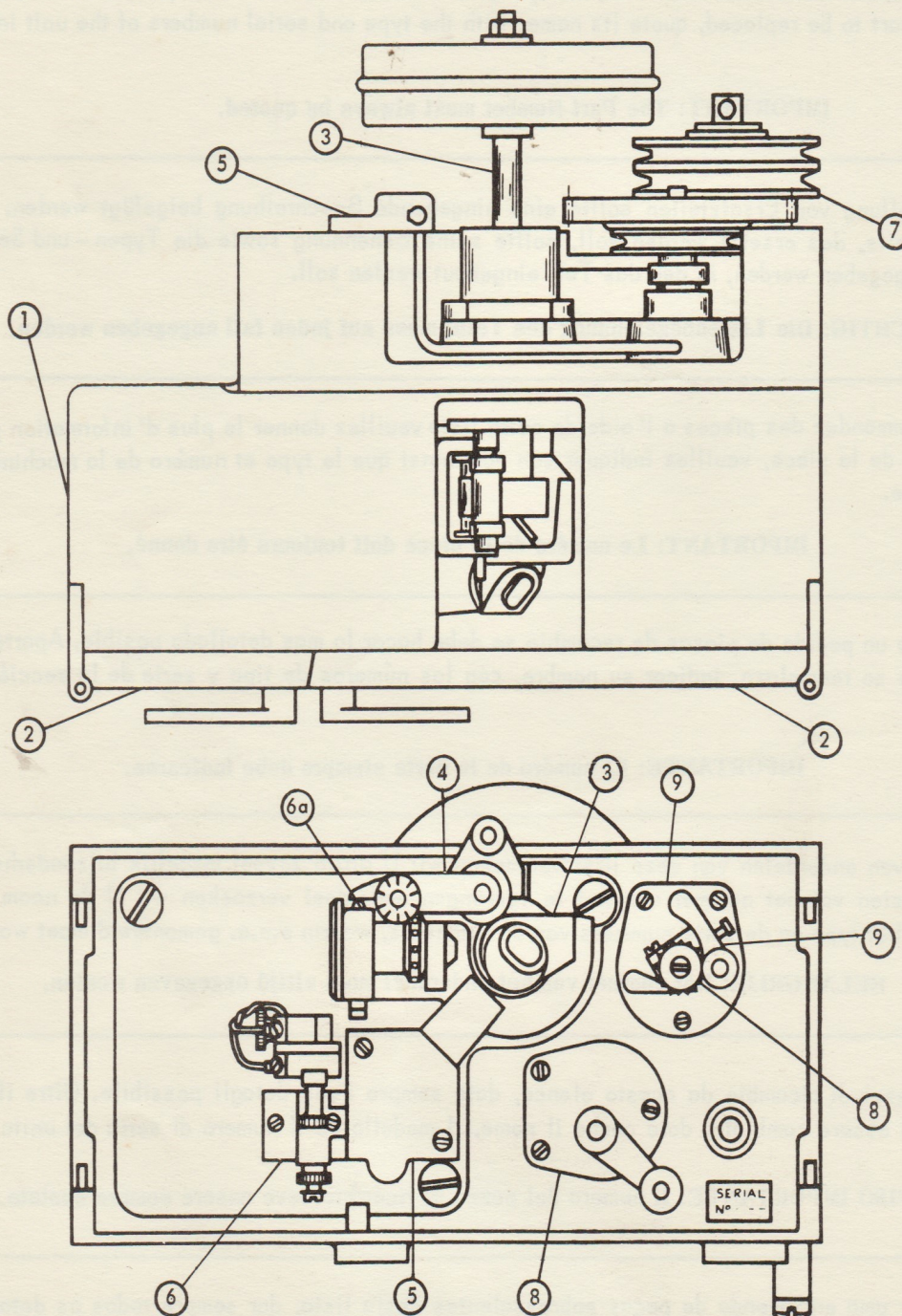
Per ordinare pezzi di ricambio da questo elenco, date sempre i più dettagli possibile. Oltre il numero del pezzo che deve essere cambiato, date anche il nome, il modello ed il numero di serie del unita nella quale e montato.

AVVISO IMPORTANTE: Il numero del pezzo di ricambio deve essere sempre quotato.

Quando se fizer uma encomenda de peças sobressalentes desta lista, dar sempre todos os detalhes possíveis. Além do número da peça a substituir, indicar o seu nom, bem como tipo e número da máquina onde a mesma deve ser ajustada.

IMPORTANTE: O número da peça sempre deve indicar-se.

KEYPLATE 543 SOUNDHEAD



ENCIRCLED FIGURES REFER TO PLATE NUMBERS

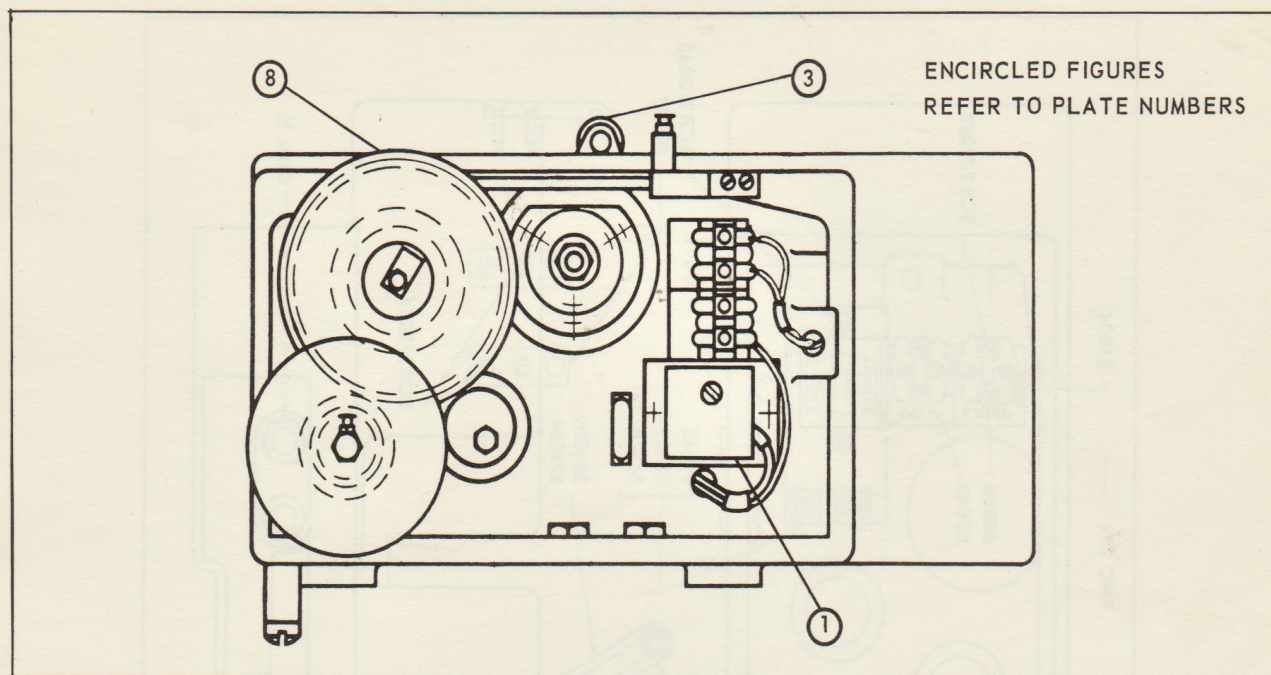


Plate No.	Part No.	Assemblies	Qty	Screws, etc.	Part No.	Qty
Plate 1	83,041	SCREENED TERMINAL BLOCK ASSY.	1	4BA x $\frac{1}{4}$ " roundhead screw	SCR 3/2045	2
		SOUNDHEAD BODY	1			
Plate 2	543,010	LARGE DOOR ASSEMBLY	1			
	543,011	SMALL DOOR ASSEMBLY	1			
Plate 3	543,020	SCANNING UNIT ASSEMBLY	1	Held by 83,022 & 83,023		
	83,156	FLYWHEEL SHAFT & HOUSING ASSEMBLY	1	2BA x $\frac{3}{4}$ " cheesehead screw	SCR 9/1093	3
				2BA shakeproof washer	WAS 508	3
	378,087	GUIDE ROLLER & SUPPORT ASSEMBLY	1	2BA x $\frac{3}{8}$ " cheesehead screw	SCR 3/1058	2
Plate 4	378,073	ARTICULATED, LAYON ROLLER ASSEMBLY	1			
		SPINDLE	1	2BA x $\frac{5}{16}$ " socket head grub screw	GRU 8/64	1
Plate 5		PHOTO CELL HOLDER ASSEMBLY AND COVER	1	$\frac{3}{4}$ " cheesehead screw	SCR 9/1093	2
		OIL & PIPE ASSEMBLY	1	2BA x $\frac{5}{8}$ " cheesehead screw	SCR 3/1086	2
Plate 6	378,045	EXCITER LAMPHOLDER ASSY,	1	2BA x $1\frac{1}{2}$ " cheesehead screw	SCR 3/1135	1
Plate 6a		PLUNGER ASSEMBLY	1	2BA x $\frac{5}{8}$ " cheesehead screw	SCR 3/1086	1
Plate 7	543,002	LAYSHAFT ASSEMBLY	1	$\frac{7}{16}$ " BSF hexagonal nut	NUT 3/145	1
				$\frac{7}{16}$ " BSF plain washer	WAS 3/426	1
Plate 8		MAIN DRIVE GEARING	1			
	378,024	JOCKEY ROLLER ASSEMBLY SPROCKETS	1	2BA x $\frac{3}{4}$ " cheesehead screw	SCR 3/1093	3
Plate 9	83,003	SPROCKET SHAFT ASSEMBLY	1	2BA x $\frac{3}{4}$ " cheesehead screw	SCR 3/1093	3
	83,096	ROLLER AND ARM	1	Held by 83,097		

PLATE 1

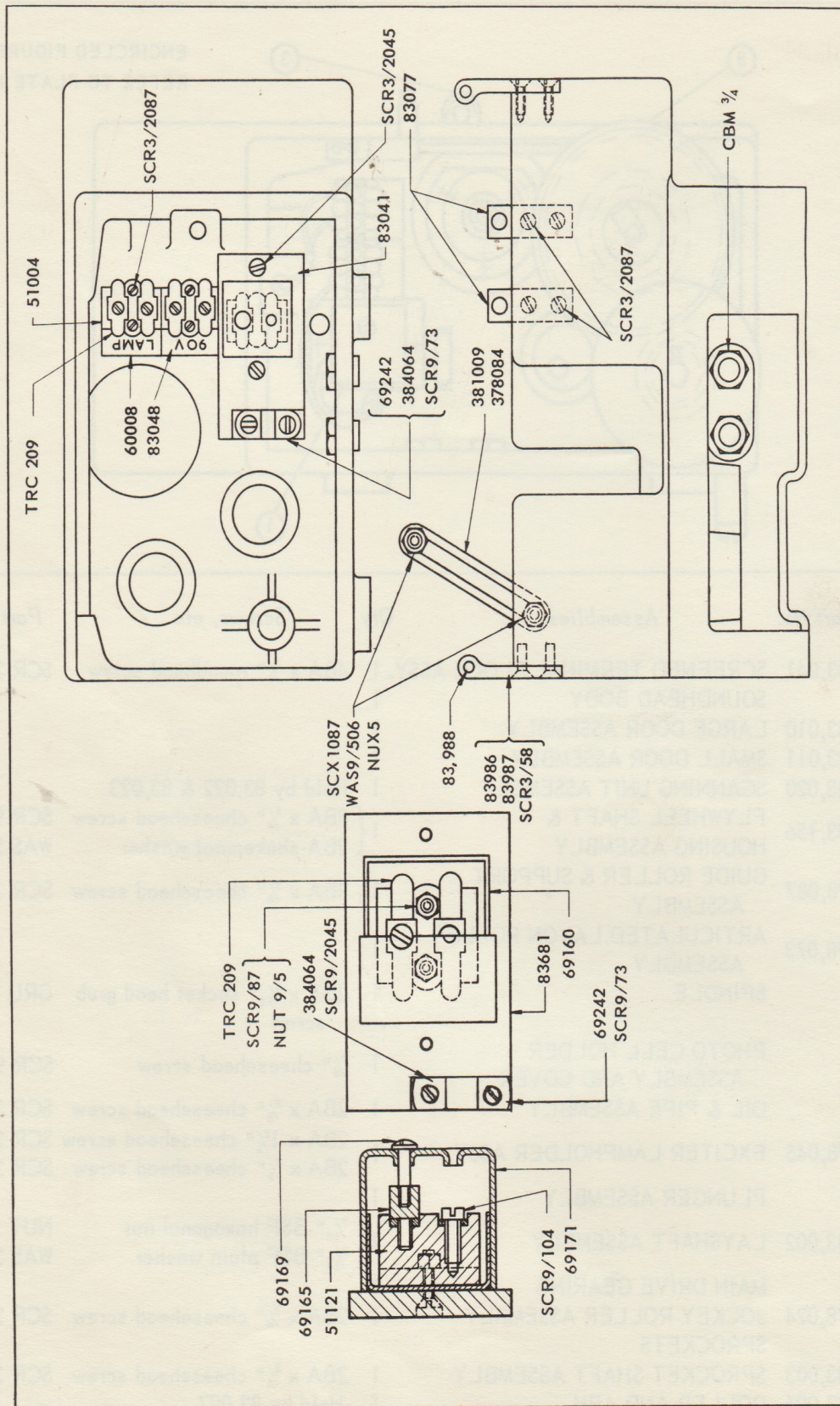


PLATE-1

Part No.	Description	Qty	Screws etc	Part No.	Qty
83,041	SCREENED TERMINAL BLOCK ASSEMBLY				
83,681	Base	1	As assembly		
51,121	Terminal Block	1	{ 4BA x $\frac{5}{8}$ " countersunk screw	SCR 9/87	2
69,160	Lower Cover	1	{ 4BA nut	NUT 9/5	2
TRC 209	Tags	2	{ 2BA x $\frac{1}{4}$ " cheesehead screw	SCR 9/1044	1
			{ Retained by 69,165		
69,165	Earth Terminal	1	Threaded		
69,169	Earth Screw	1	Threaded		
384,064	Saddle Clip	1	4BA x $\frac{1}{4}$ " roundhead screw	SCR 9/2045	2
69,242	Distance Piece	1	4BA x $\frac{1}{2}$ " countersunk screw	SCR 9/73	2
69,171	Cover	1	Held by 69,169		
	SOUNDHEAD BODY				
543,006	Main Casting (on 543 and 847 only)	1			
83,001	Main Casting (on 378 only)	1			
83,987	Hinge Piece	2	{ 2BA x $\frac{3}{8}$ " countersunk screw	SCR 3/58	8
83,986	Hinge Piece	2			
83,077	Catch Plate	2	4BA x $\frac{5}{8}$ " roundhead screw	SCR 3/2087	4
83,988	Hinge Pin	4			
CBM $\frac{3}{4}$ "	$\frac{3}{4}$ " Smooth Bore Conduit Bush Hexagonal	2	Threaded		
543,005	Nameplate (on 543 only)	1	Drive screws 00 x $\frac{1}{4}$ " long	S3/990001	2
378,044	Nameplate (on 378 only)	1	Drive screws 00 x $\frac{1}{4}$ " long	S3/990001	2
847,002	Nameplate (on 847 only)	1	Drive screws 00 x $\frac{1}{4}$ " long	S3/990001	2
381,009	Door Stay (as on 543 and 378)	1	{ 4BA standard plain washer	WAX 405	3
378,084	Spacer	2	{ 4BA standard hexagonal nut	NUX 5	2
			{ 4BA shakeproof washer	WAS 9/506	2
			{ 4BA x $\frac{5}{8}$ " cheesehead screw	SCX 1087	2
			{ Held by 83,080		
381,009	Door Stay (as on 847)	1	{ 4BA standard hexagonal nut	NUX 5	2
378,084	Spacer	1	{ 4BA standard plain washer	WAX 405	2
			{ 4BA shakeproof washer	WAS 9/506	2
83,080	Shoulder Screw (on 847 only)	2			
60,008	Designation Plate	1			
83,048	Designation Plate	1	{ 4BA x $\frac{5}{8}$ " roundhead screw	SCR 3/2087	4
51,004	Terminal Block assembly	2			
83,054	Oil Collector assembly	1	If fitted		

Parts Nos 83,986/7 HINGE ASSEMBLY

This assembly appeared in the past as 83,072 and 83,073.

The hinge pieces and pins are now detailed separately to facilitate replacement.

PLATE 2

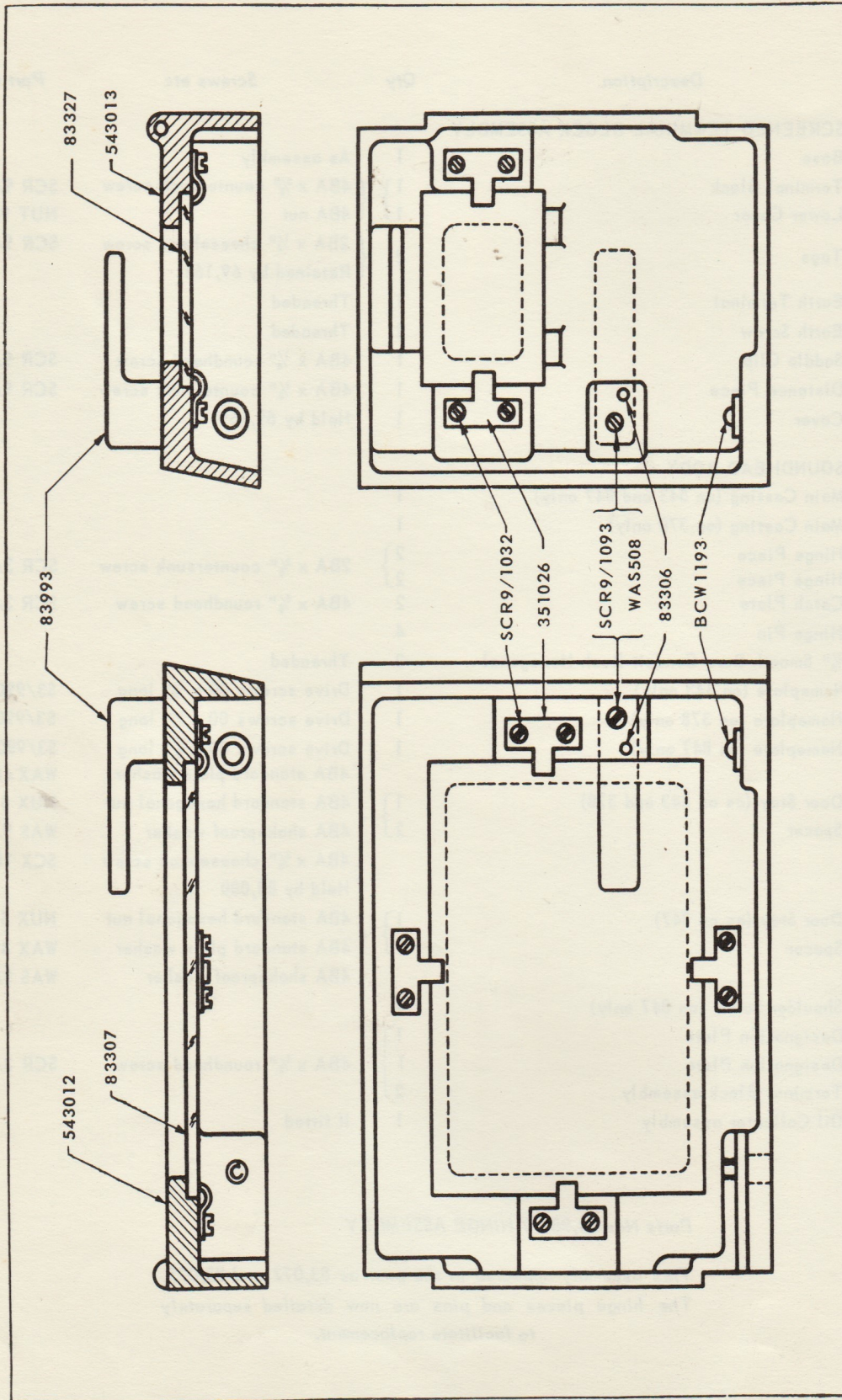


PLATE 2

Part No.	Description	Qty	Screws etc	Part No.	Qty
543,010	LARGE DOOR ASSEMBLY (on 543 & 847 only)				
83,073	LARGE DOOR ASSEMBLY (on 378 only)				
543,012	Door (on 543 and 847 only)	1			
83,301	Door (on 378 only)	1			
83,993	Handle	1	2BA x 3/4" cheesehead screw	SCR 9/1093	1
			2BA shakeproof washer	WAS 508	1
83,306	Dowel Pin	1			
83,307	Window	1	Held by 351,026		
351,026	Clamp	4	6BA x 3/16" cheesehead screw	SCR 9/1032	8
BCW 1193	Ball Catch	1			
543,011	SMALL DOOR ASSEMBLY (on 543 & 847 only)				
83,074	SMALL DOOR ASSEMBLY (on 378 only)				
543,013	Door (on 543 & 847)	1			
83,321	Door (on 378 only)	1			
83,993	Handle	1	2BA x 3/4" cheesehead screw	SCR 9/1093	1
			2BA shakeproof washer	WAS 508	1
BCW 1193	Ball Catch	1			
83,306	Dowel Pin	1			
351,026	Clamp	2	6BA x 3/16" cheesehead screw	SCR 9/1032	4
83,327	Window	1	Held by 351,026		

NOTES BELOW APPLY TO PLATE 3 OVERLEAF

Part No 674,000

FLYWHEEL ASSEMBLY

On early model Soundheads a spun aluminium Fluid Flywheel was used, either part No 83,071 or the similar but later 428,000. On Soundheads made after June 1952, the current type, part No 674,000 made of cast aluminium, is employed instead of the now obsolete spun models. Where it is necessary to replace one of the older types a new part No 674,000 will be supplied. This can be fitted in place of the older types if the following instructions are followed:

The collar and washer on the Shaft should be removed with the old Flywheel, and the new Flywheel should then be fitted to the Shaft with the screwheads of the two Filler Plugs facing away from the Soundhead Body. A standard 3/8in. washer should then be fitted (the old washer can be used, but the collar must never be refitted), and the Flywheel and washer secured by the 3/8in. Whitworth nut.

Part No CSE 5/8"

FLYWHEEL AND SHAFT

(Note: For Flywheel see 674,000)

On Soundheads manufactured before June 1953, the Locking Collar, type 83,503 was employed instead of Circlip CSE 5/8in. to retain the Flywheel Shaft in its Housing.

On Soundheads so fitted, replacement of the Collar will necessitate replacement of the complete Shaft and Bearing assembly with the new assembly 83,501. This is to ensure that the new type Flywheel Shaft, grooved for the Circlip, cannot be fitted in old Bearings, where it would cause irregular scanning, with resultant loss of sound quality. Where models already fitted with the Circlip require replacement of any part of this assembly other than Shaft or Bearings, this part may be replaced as a single item, but Shaft and Bearings must always be replaced together.

PLATE 3

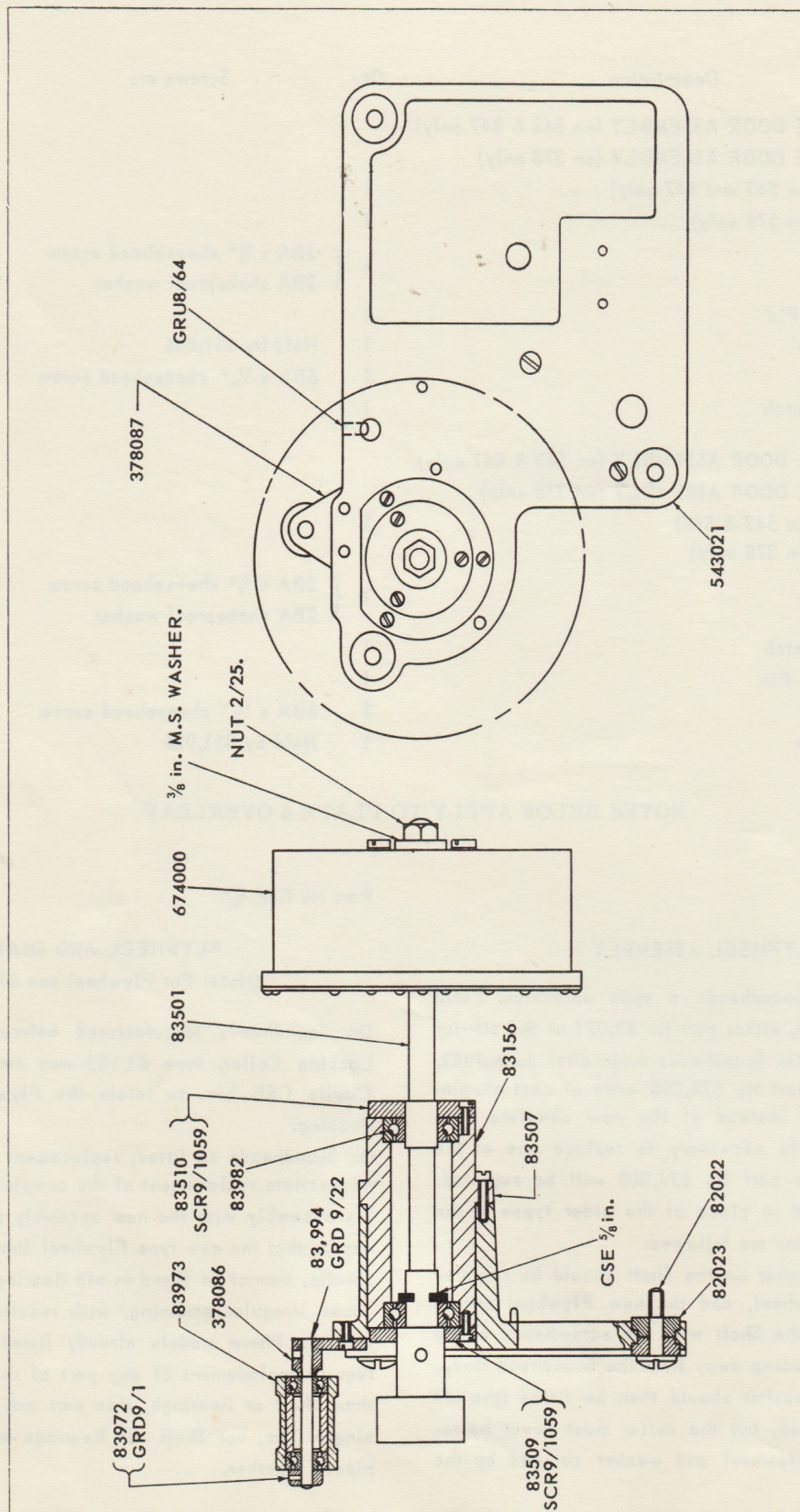


PLATE-3

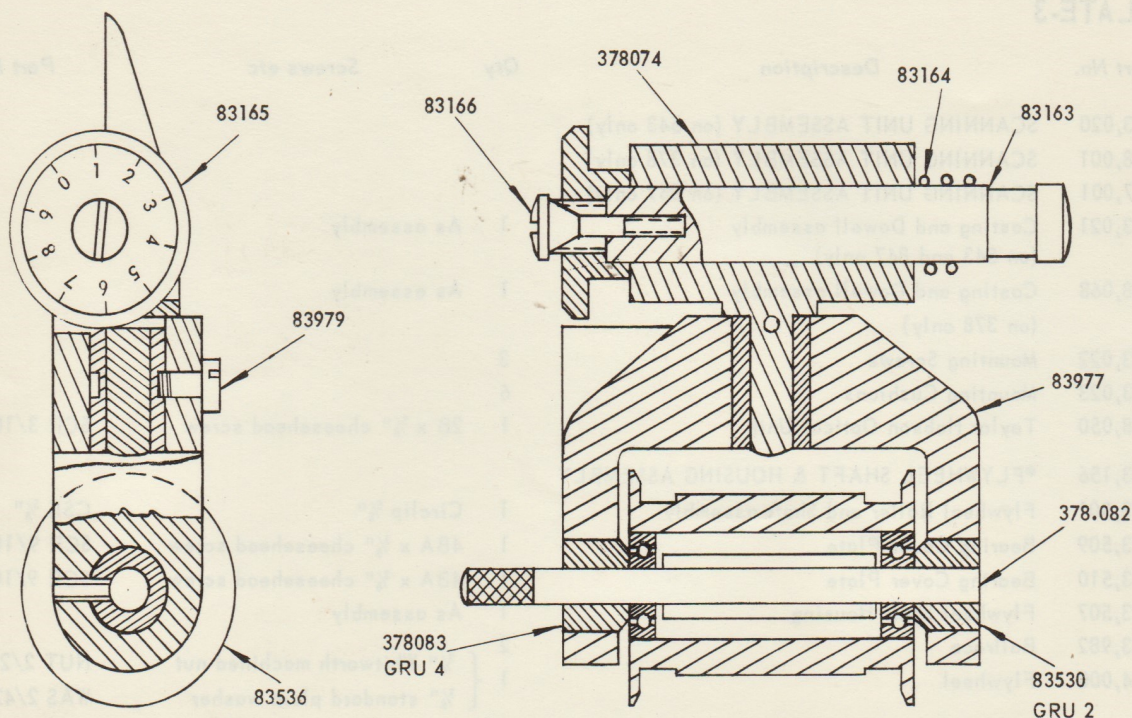
Part No.	Description	Qty	Screws etc	Part No	Qty
543,020	SCANNING UNIT ASSEMBLY (on 543 only)				
378,001	SCANNING UNIT ASSEMBLY (on 378 only)				
847,001	SCANNING UNIT ASSEMBLY (on 847 only)				
543,021	Casting and Dowell assembly (on 543 and 847 only)	1	As assembly		
378,068	Casting and Dowell assembly (on 378 only)	1	As assembly		
83,022	Mounting Screws	3			
83,023	Mounting Cushions	6			
378,050	Taylor Hobson Optical Unit	1	2B x $\frac{5}{8}$ " cheesehead screw	SCR 3/1086	3
83,156	*FLYWHEEL SHAFT & HOUSING ASSEMBLY				
83,501	Flywheel Roller and Shaft assembly	1	Circlip $\frac{5}{8}$ "	CSE $\frac{5}{8}$ "	1
83,509	Bearing Cover Plate	1	4BA x $\frac{3}{8}$ " cheesehead screw	SCR 9/1059	3
83,510	Bearing Cover Plate	1	4BA x $\frac{3}{8}$ " cheesehead screw	SCR 9/1059	3
83,507	Flywheel Shaft Housing	1	As assembly		
83,982	Ballrace	2			
674,000	Flywheel	1	$\frac{3}{8}$ " Whitworth machined nut	NUT 2/25	1
			$\frac{3}{8}$ " standard plain washer	WAS 2/425	1
378,087	*GUIDE ROLLER & SUPPORT ASSEMBLY				
83,973	Guide Roller assembly	1	Held by 83,972		
83,972	Collar	1	6BA x $\frac{1}{8}$ " socket head grub screw	GRD 9/1	1
378,086	Support	1	As assembly		
83,994	Spindle	1	4BA x $\frac{3}{16}$ " socket head grub screw	GRD 9/22	1

NOTE: The sub-assemblies of the Scanning Unit assembly will be found on plates 3,4,5 and 6; these will be shown thus: *

GUIDE ROLLER AND SUPPORT ASSEMBLY

On early model Soundheads part No. 83,970 Support and part No 83,971 Spindle were used, they have now been replaced by part No 378,086 Support and part No 83,974 Spindle. The old type Spindle was screwed into the Support, the modified Spindle is now a slide fit and is secured by a socket head grub screw. Should either of the old parts need replacing both new parts must be ordered. The fixings to the Scanning Unit assembly are the same for both old and new parts.

PLATE 4

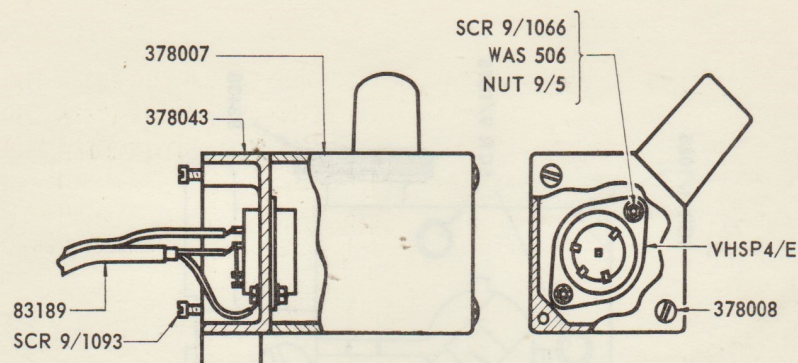


Part No.	Description	Qty	Screws Etc	Part No.	Qty
*SPINDLE					
83,163	Pivot Spindle	1			
83,164	Spring	1			
83,165	Adjusting Knob	1	Held by 83,166		
83,166	Locking Screw	1			
*ARTICULATED LAYON ROLLER ASSEMBLY					
378,073	Layon Roller Arm	1	Held by 83,979		
378,074	Bearing Arm and Pin assembly	1	As assembly		
83,979	Special Screw	1			
83,536	Layon Roller	1			
378,082	Layon Roller Spindle	1	{ 6BA x $\frac{5}{16}$ " socket head grub screw { 6BA x $\frac{3}{16}$ " socket head grub screw	GRU 4	1
83,530	Spindle Locating Collar	1		GRU 2	1
378,083	Spindle Locating Collar	1			

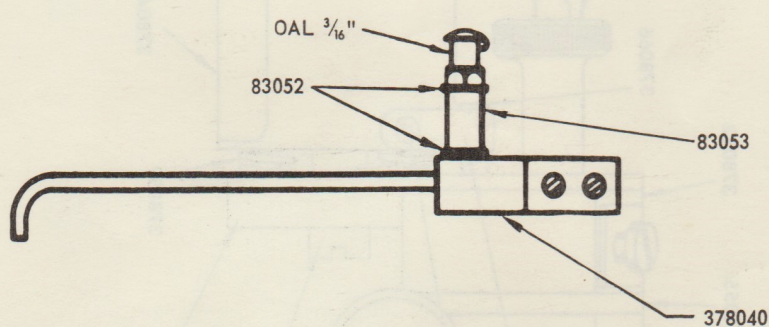
Part No 378,073 LAYON ROLLER ASSEMBLY

Certain early Soundheads were fitted with a rigid Layon Roller Arm, instead of the present Articulated Arm. This rigid Arm is obsolete, and where wear or damage make it necessary to replace any part of this assembly, a complete new assembly 83,976 must be fitted in its place. The two assemblies are directly interchangeable.

PLATE 5



Part No.	Description	Qty	Screws etc	Part No.	Qty
*PHOTO CELL HOLDER ASSEMBLY AND COVER					
378,043	Photo Cell Holder assembly	1	2BA x 3/4" cheesehead screw	SCR 9/1093	2
378,007	Photo Cell Cover	1	Held by 378,008		
378,008	Cover Fixing Screws	2			
VHSP4E	4 Pin Valveholder type SP4E (on 378 and 543 only)	1	4BA x 7/16" cheesehead screw	SCR 9/1066	2
			4BA standard hexagonal nut	NUT 9/5	2
			4BA shakeproof washer	WAS 506	2
VHSP8/US	Octal Valveholder (on 847 only)	1	4BA x 7/16" cheesehead screw	SCR 9/1066	2
			4BA standard hexagonal nut	NUT 9/5	2
			4BA shakeproof washer	WAS 506	2
83,189	Cell Cable Form				



OILER AND PIPE ASSEMBLY					
378,040	Oil Pipe assembly	1	As assembly		
83,052	Leather Washer	2			
83,053	Oiler Mounting Columns	1	Threaded		
OAL 3/16"	Oiler. Rotherham type AL 1	1	Threaded		

PLATE 6

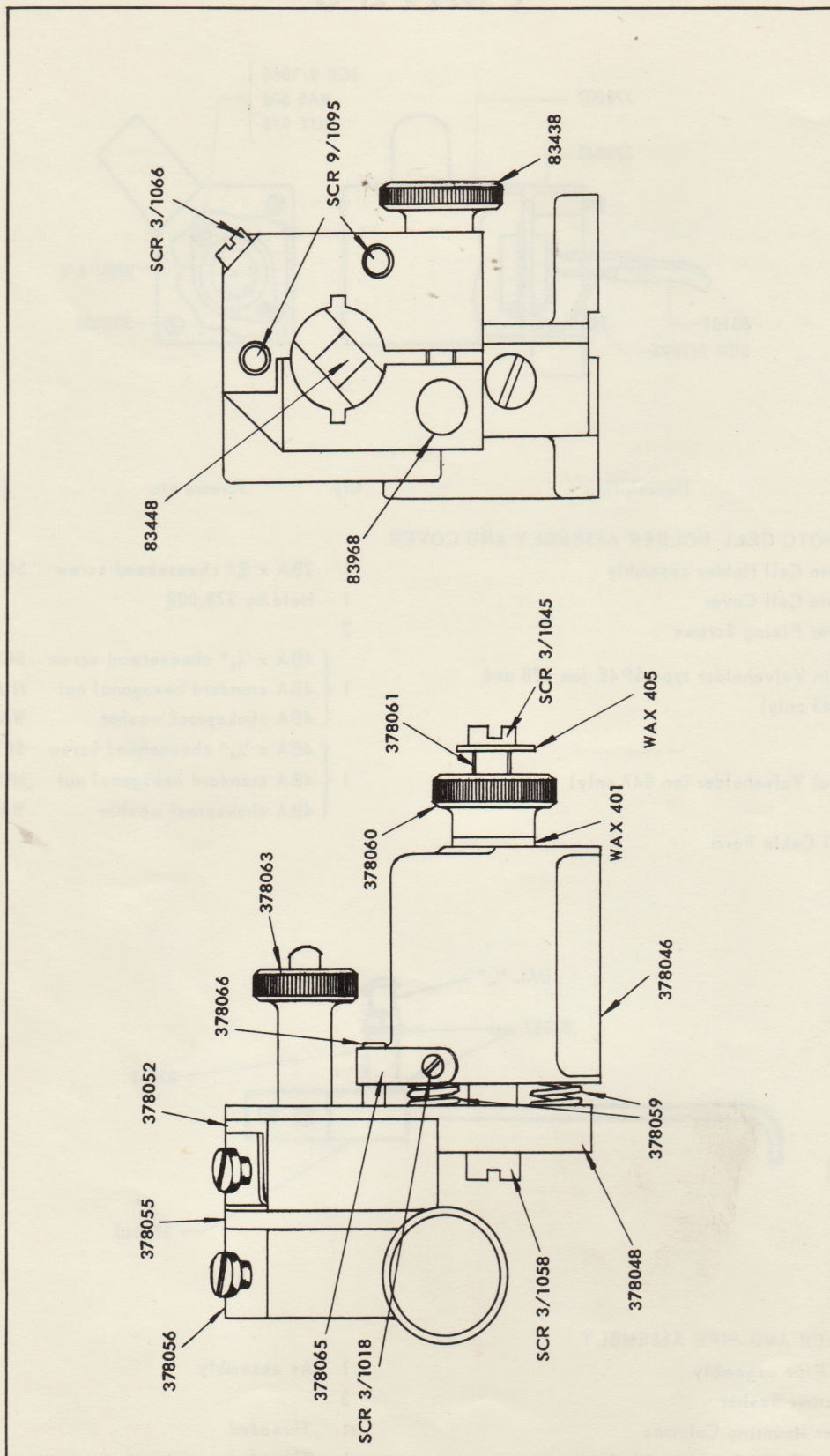
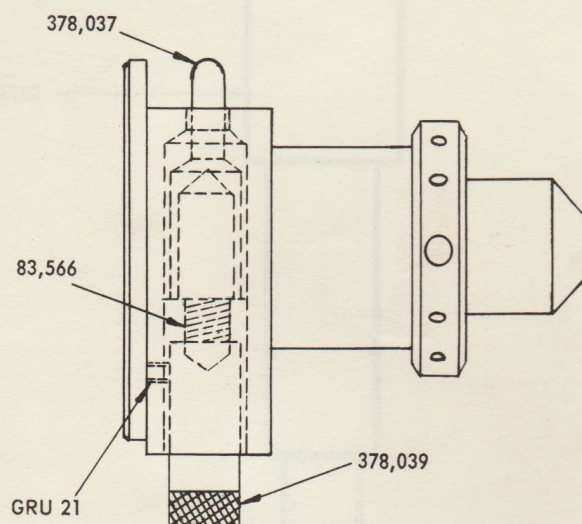


PLATE-6

Part No.	Description	Qty	Screws etc	Part No.	Qty
378,045	*EXCITER LAMPHOUSE ASSEMBLY				
378,046	Lamp Bracket	1	{ OBA standard plain washer Held by 378,060	WAX 401	1
378,048	Slide assembly	1	2BA x $\frac{3}{8}$ " cheesehead screw	SCR 3/1058	1
378,052	Saddle assembly	1	{ 6BA x $\frac{3}{4}$ " cheesehead screw Held by 378,063	SCR 9/1095	2
378,055	Insulator	1			
378,056	Clamp assembly	1			
378,059	Spring	2			
378,060	Adjusting Nut	1	4BA x $\frac{1}{4}$ " cheesehead screw	SCR 3/1045	1
			4BA large washer	WAX 405	1
378,061	Vertical Adjusting Spindle	1			
83,438	Lamp Clamping Screw	1			
83,448	Contact assembly	1	4BA x $\frac{7}{16}$ " cheesehead screw	SCR 3/1066	2
378,063	Saddle Clamp Nut	1			
378,065	Spring	1	6BA x $\frac{1}{8}$ " cheesehead screw	SCR 3/1018	1
378,066	Pin	1	Fitted under 378,065		
83,968	Nut	1			
83,190	Exciter Lamp Cable Form				

PLATE-6a



+PLUNGER ASSEMBLY

378,037	Plunger	1			
83,566	Plunger	1			
378,039	Spring Plug	1	4BA x $\frac{1}{8}$ " socket head flat point grub screw	GRU 21	1

PLATE 7

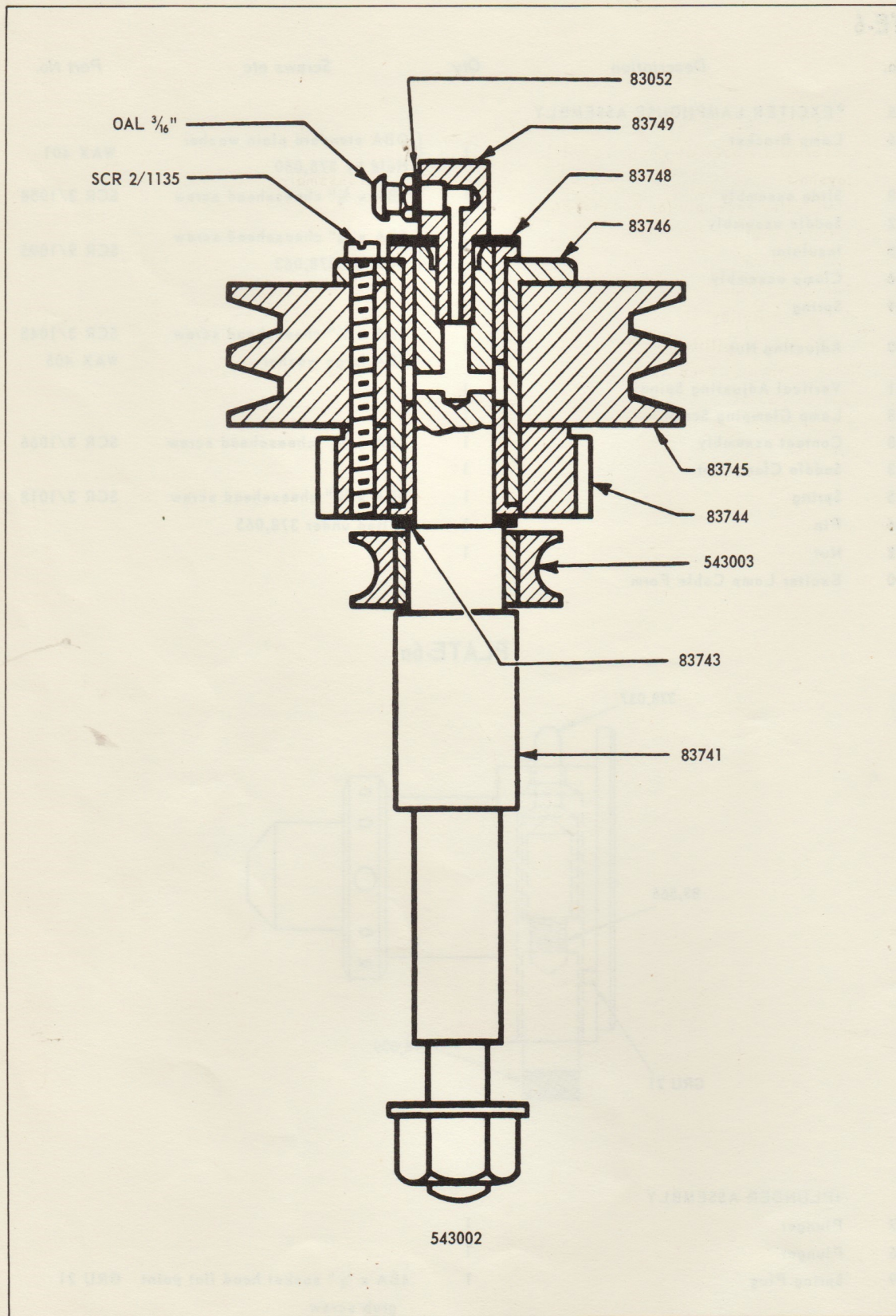


PLATE 7

Part No.	Description	Qty	Screws etc	Part No.	Qty
543,002	LAYSHAFT ASSEMBLY (on 543 and 847 only)				
83,012	LAYSHAFT ASSEMBLY (on 378 only)				
83,741	Layshaft	1	As assembly		
543,003	Idler Pulley assembly (on 543 and 847 only)	1			
83,742	Idler Sprocket (on 378 only)	1			
83,743	Thrust Washer	1			
83,744	Main Drive Pinion	1			
83,745	Main Drive Pulley	1	2BA x 1½" cheesehead screw	SCR 2/1135	3
83,746	Pulley Sleeve (oilite bushed)	1			
OAL ⅜"	Oiler. Rotherham type AL 1	1	Threaded ⅜" x 32 t.p.i.		
83,052	Leather Washer	1			
83,748	Washer	1			
83,749	Retaining Screw	1			

PLATE 8

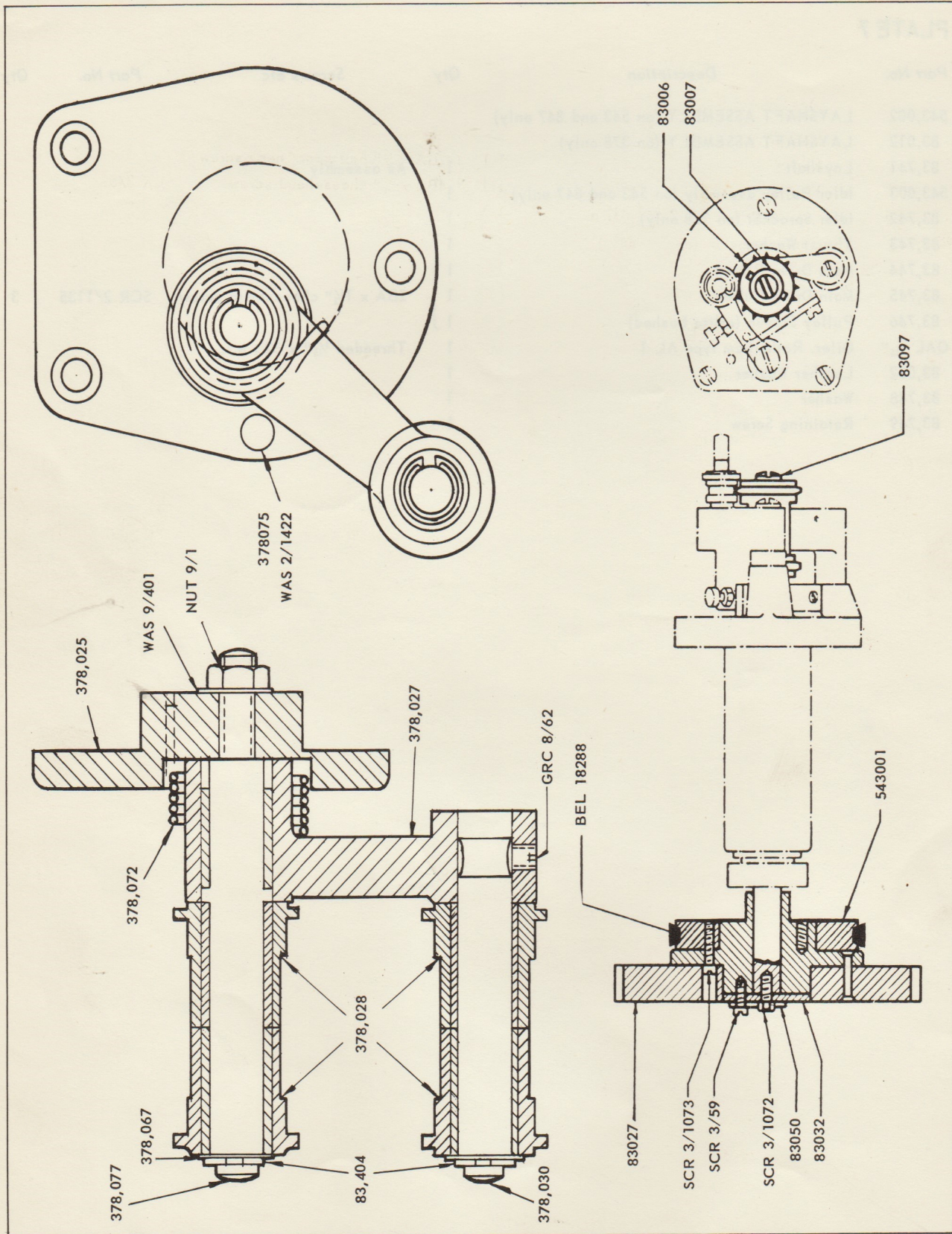


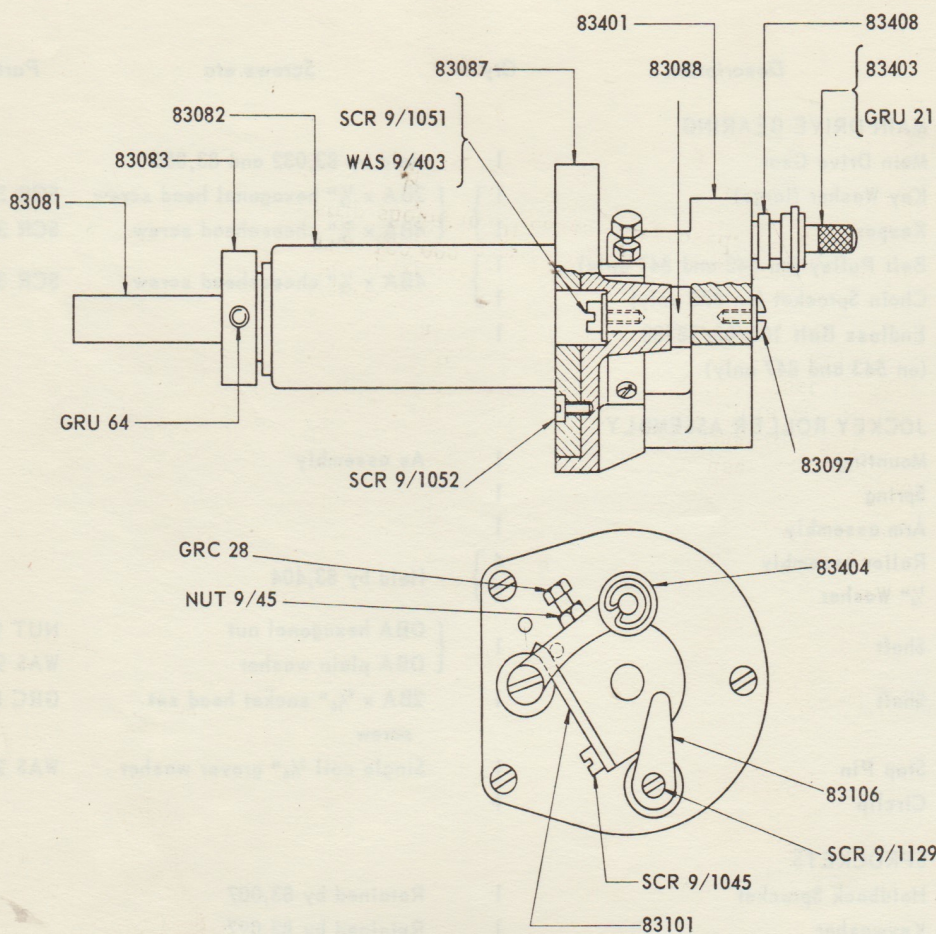
PLATE 8

Part No.	Description	Qty	Screws etc	Part No.	Qty
MAIN DRIVE GEARING					
83,027	Main Drive Gear	1	Held by 83,032 and 83,050		
83,032	Key Washer (large)	1	{ 2BA x 1/2" hexagonal head screw	SCR 3/1072	1
83,050	Keeper	1		SCR 3/59	3
543,001	Belt Pulley (on 543 and 847 only)	1	{ 4BA x 3/8" cheesehead screw	SCR 3/1073	3
83,035	Chain Sprocket (on 378 only)	1			
BEL 18288	Endless Belt 100/03/18288 (on 543 and 847 only)	1			
JOCKEY ROLLER ASSEMBLY					
378,024	Mounting	1	As assembly		
378,025	Spring	1			
378,027	Arm assembly	1			
378,028	Roller assembly	4	{ Held by 83,404		
378,067	1/4" Washer	2			
378,077	Shaft	1	{ OBA hexagonal nut	NUT 9/1	1
			{ OBA plain washer	WAS 9/401	1
378,030	Shaft	1	2BA x 3/16" socket head set screw	GRC 8/62	1
378,075	Stop Pin	1	Single coil 3/16" grover washer	WAS 2/1422	1
83,404	Circlip	1			
SPROCKETS					
83,006	Holdback Sprocket	1	Retained by 83,007		
83,007	Keywasher	1	Retained by 83,097		
83,097	End Screw	1			

Part No. 83,050 KEEPER

This part was not fitted to Soundheads completed before
May 1949. Where not already fitted it need not be added.

PLATE 9



Part No.	Description	Qty	Screws etc	Part No.	Qty
83,003	SPROCKET SHAFT				
83,087	Mounting Bracket	1	As assembly		
83,082	Sprocket Shaft	1	4BA x $\frac{5}{16}$ " cheesehead screw	SCR 9/1052	3
83,081	Sprocket Shaft	1	Retained by 83,083		
83,083	Locking Collar	1	2BA x $\frac{5}{16}$ " socket head grub screw	GRU 64	1
83,106	Stripper	1	4BA x $\frac{13}{16}$ " cheesehead screw	SCR 9/1129	1
83,101	Spring	1	4BA x $\frac{1}{4}$ " cheesehead screw	SCR 9/1045	1
83,088	Roller Arm Pivot	1	<div> <div>2BA x $\frac{5}{16}$" cheesehead screw</div> <div>2BA Washer</div> </div>	SCR 9/1051	1
				WAS 9/403	
83,096	ROLLER AND ARM				
83,401	Roller Arm	1	As assembly		
83,403	Spindle	1	4BA x $\frac{1}{8}$ " socket head grub screw	GRU 21	1
83,408	Bushed Roller	2	Retained by 83,404		
83,404	Circlips	2			
GRC 28	Adjusting Screw	1	4BA locknut	NUT 9/45	1
83,097	End Screw	1			

ROLLER ASSEMBLIES

The older type Soundheads were fitted with Rollers part No. 83,402. Where one of these is to be replaced, both Rollers on the same spindle must be replaced at the same time by new Roller assemblies part No. 83,408.