

Film-Tech

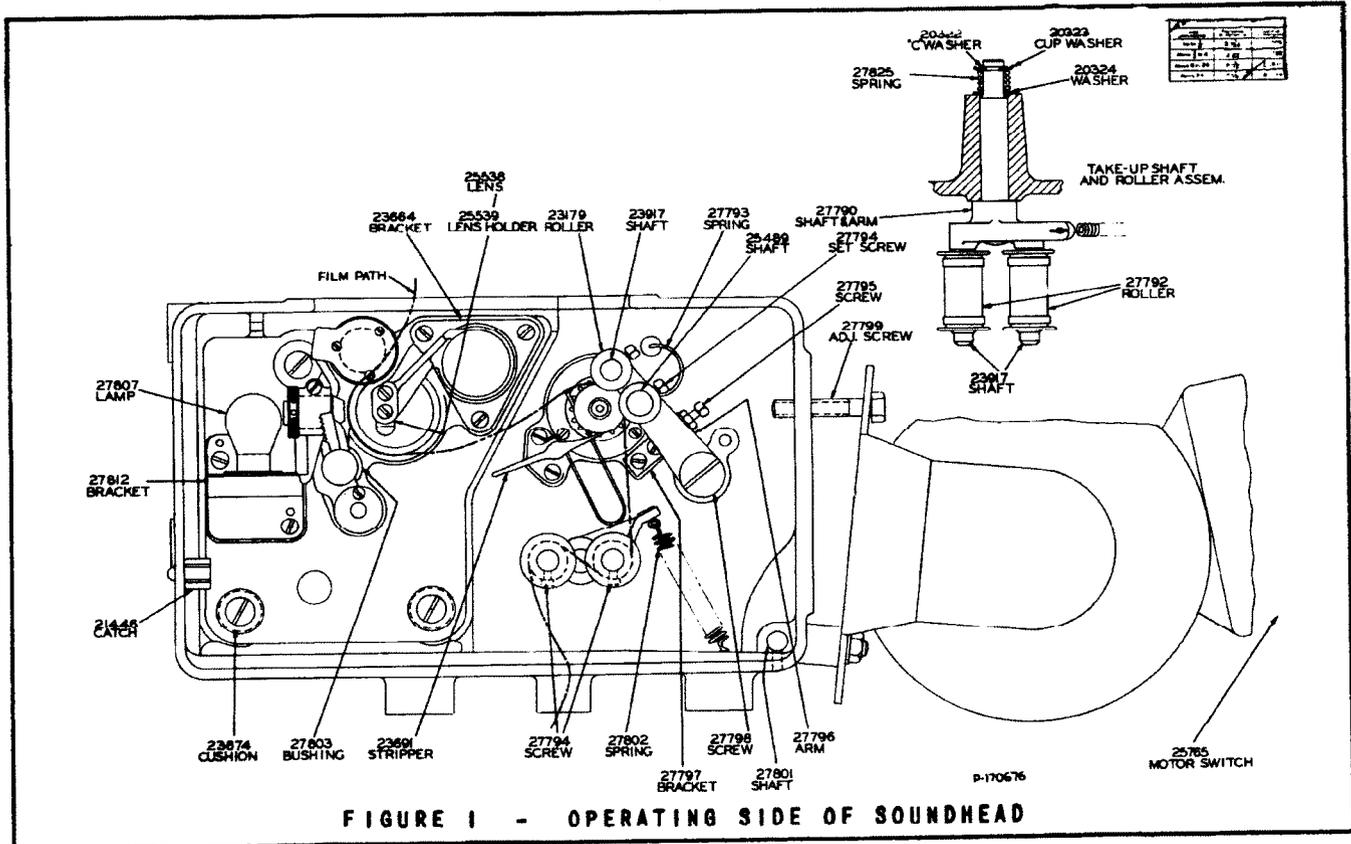
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RCA Photophone Soundhead MI-9001



OPERATION

1. Thread the film through the soundhead as shown in figure 1, leaving approximately the same amount of slack in the loop (between sound drum and sprocket) as shown in the drawing.

To open the guide roller threading, the latch knob must be pulled outward and the roller moved to the left.

2. Start the soundhead by turning "ON" the motor switch on the switch box panel.

CARE OF SOUNDHEAD

DRIVE BELT

When the equipment is installed the motor drive belt tension should be adjusted just tight enough so that no slippage occurs between the motor pulley and either drive belt. Adjustment may be made by loosening the two locknuts on the side of the soundhead and

above the motor, and adjusting the two capsscrews. When adjustment is completed retighten locknuts.

OILING SOUNDHEAD

Always keep the soundhead scrupulously clean and well oiled, as the continuous good performance of the soundhead will repay any effort spent in its care.

It is recommended that the pad rollers and tension rollers be oiled by dipping one end of a toothpick in oil and applying the oil that adheres to the toothpick to the oil holes. The main tension roller shaft and lateral guide roller mounting stud and latch should receive two drops of oil periodically.

The two oil cups, one on each soundhead drive motor bearing, should periodically receive two drops of oil (Stock #25551) or motor oil of SAE-40 rating. The oil cup on the projector drive gear shaft should receive two drops of the same oil at least once each day.

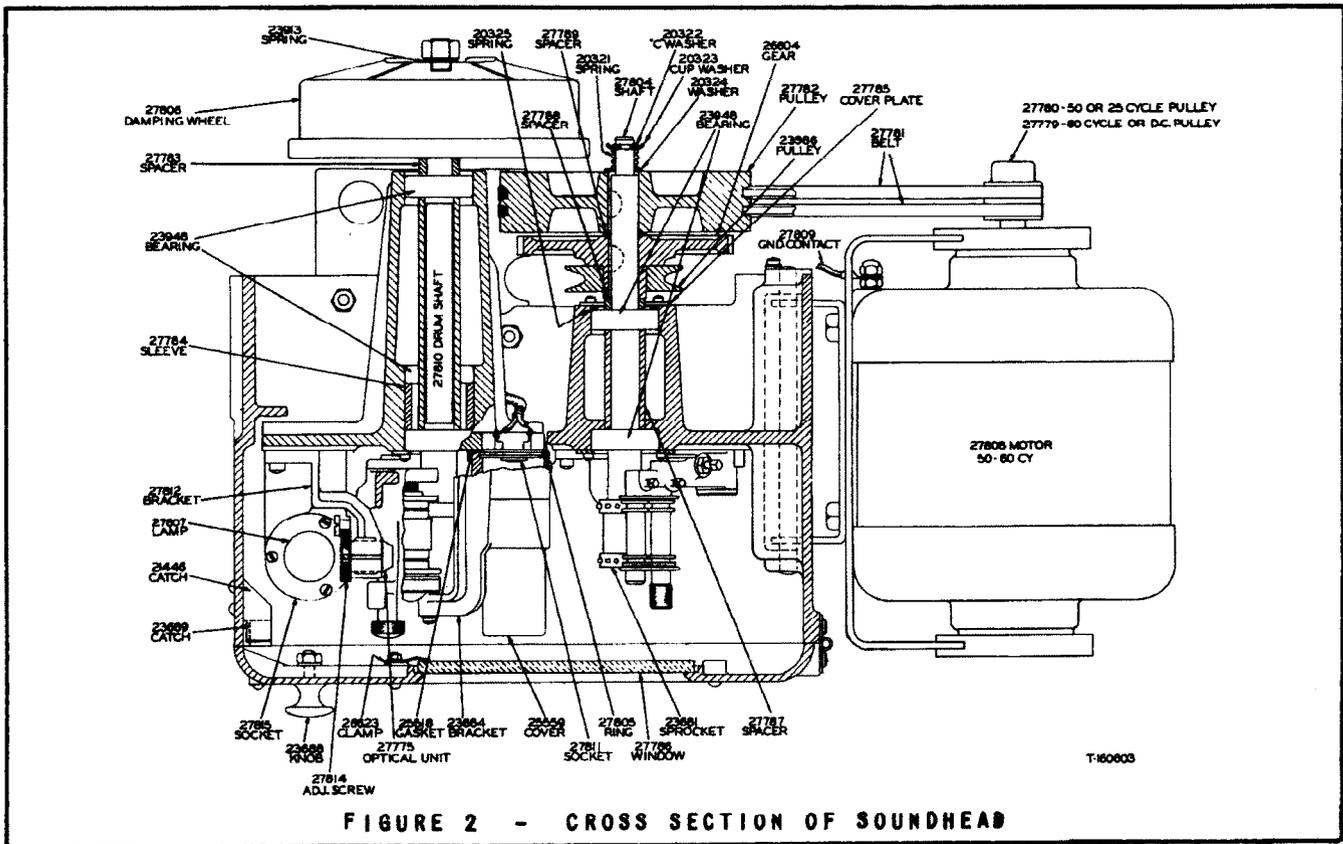


FIGURE 2 - CROSS SECTION OF SOUNDHEAD

EXCITER LAMP

The exciter lamp is of the prefocused type and requires no further adjustment after insertion in the exciter lamp socket. Always keep one tested spare exciter lamp for use in an emergency. One spare tested photocell should also be kept available.

OPTICAL SYSTEM

The optical system lenses, photocell condenser lens, exciter lamp and photocell should be cleaned with lens tissue or a soft clean piece of linen before each day's performance.

LATERAL GUIDE AND SOUND TAKE-OFF DRUM

It is very important that the sound take-off drum be kept thoroughly clean. Foreign material such as dirt or film emulsion on the drum will cause poor quality sound, "flutter" or wows.

Never use any metallic instrument such as a screwdriver, knife blade, etc., for cleaning purposes, as any scratches made on the sound drum may scratch the film.

After the end of the day's performance, the lateral guide roller assembly should be left in the "open" position, to prevent flattening of the felt on the pressure roller on the spot where it comes to rest, otherwise, "flutter" and "wows" in the sound will result.

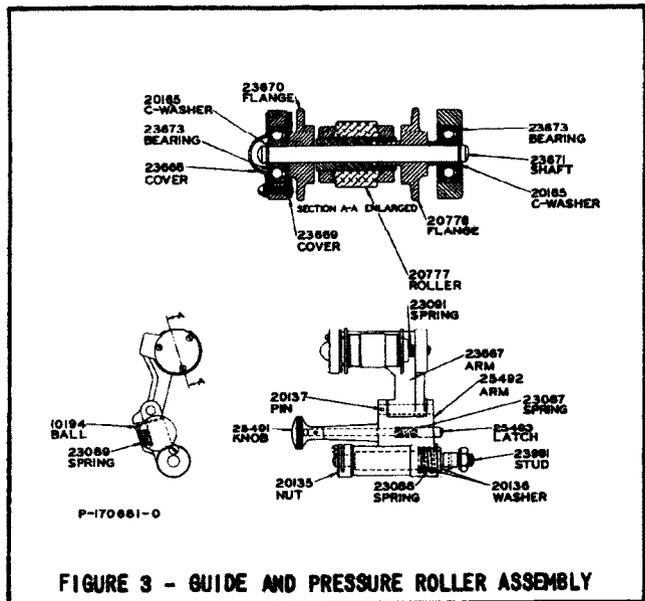


FIGURE 3 - GUIDE AND PRESSURE ROLLER ASSEMBLY

REPLACEMENT PARTS

<u>STOCK NO.</u>	<u>DESCRIPTION</u>	<u>STOCK NO.</u>	<u>DESCRIPTION</u>
Main Case Assemblies			
27803	Bushing - Lateral guide roller mounting bushing	23991	Stud - Lateral guide and pressure roller assembly mounting stud
21446	Catch - Female door catch	20165	Washer - "C" washer for roller shaft
23689	Catch - Male door catch	20136	Washer - Washer for retaining Stock No.23088 spring
26623	Clamp - Door glass clamp	Rotary Stabilizer & Drum Shaft	
23674	Cushion - Sound bracket mounting cushion-set of 2	25508	Bearing - Ball bearing for damping wheel
23688	Knob - Soundhead door knob	23948	Bearing - Ball bearing for drum shaft
27786	Window - Door window	25518	Gasket - Vellumoid gasket for ball bearing
Optical System And Exciter Lamp Assemblies			
27812	Bracket - Optical unit bracket	25509	oil - 1/2 pint of special oil for damping wheel assembly
23664	Bracket - Phototube bracket complete with 3 mounting screws, and 3 washers	27810	Shaft - Rotary stabilizer drum shaft
25559	Cover - Phototube cover	27783	Spacer - Steel spacer between drum shaft ball bearing retainer and damping wheel
23106	Gasket - Phototube socket gasket	27784	Spacer - Steel spacing sleeve for drum shaft
25539	Holder - Phototube lens holder	23913	Spring - Stabilizer spring driver complete with nut and lockwasher
27807	Lamp - Exciter lamp 4 volt, 3/4 amp.	27806	Wheel - Damping wheel assembly complete
25538	Lens - Phototube lens	Constant Speed Sprocket Assembly	
27775	Optical Unit - Optical unit complete	23948	Ball Bearing - Sprocket shaft ball bearing
27805	Ring - Spacer ring for phototube socket	27809	Contact - Ground contact
27814	Screw - Optical system horizontal adjusting screw	27785	Cover - Cover plate for constant speed sprocket shaft and drive shaft bearings
27815	Socket - Exciter lamp socket	27804	Shaft - Constant speed sprocket shaft
27811	Socket - Phototube socket complete with leads	27788	Spacer - Spacer between constant speed sprocket shaft bearing and pulley
Lateral Guide & Pressure Roller Assemblies			
25492	Arm - Lower arm for lateral guide	27789	Spacer - Spacer washer between gear and flywheel pulley
23667	Arm - Upper arm for lateral guide	27787	Spacer - Spacer sleeve between constant speed sprocket shaft bearings
10194	Ball - Steel ball for pressure roller arm locking mech.	20325	Spring - Adjusting spring between constant speed sprocket shaft bearing and cover plate
23673	Bearing - Ball bearing for lateral guide roller shaft	20321	Spring - Coil tension spring at end of constant speed sprocket shaft
23669	Cover - Inner cover for lateral guide roller ball bearings	23691	Stripper - Film stripper
23668	Cover - Outer cover for lateral guide roller ball bearings	23681	Sprocket - Constant speed sprocket
20776	Flange - Lateral guide roller inner flange	20322	Washer - "C" washer for end of constant speed sprocket shaft
23670	Flange - Lateral guide roller outer flange	20323	Washer - Cup washer used between "C" washer and tension spring at end of constant speed sprocket shaft
25491	Knob - Knurled knob with taper pin for latch	20324	Washer - Thrust washer for tension spring Stock No. 20321
25493	Latch - Lateral guide and pressure roller latch complete with taper pin	Pad Roller Assembly	
20135	Nut - Knurled adjusting nut with locking screw	27796	Arm - Pad roller arm
20137	Pin - Pivot pin for upper arm with taper pin	27797	Bracket - Pad roller adjustment bracket
20777	Roller - Pressure roller	23179	Roller - Pad roller
23671	Shaft - Roller shaft with two "C" washers		
23087	Spring - Coil spring for pressure roller latch		
23088	Spring - Coil spring for lower arm pivot		
23091	Spring - Coil spring for lateral guide roller		
23089	Spring - Spring for pressure roller locking mechanism		

REPLACEMENT PARTS (CONT'D)

<u>STOCK NO.</u>	<u>DESCRIPTION</u>
27795	Screw - Pad roller arm adjustment screw and nut
27794	Screw - Pad roller set screw
27798	Screw - Pad roller arm bearing screw
25489	Shaft - Pad roller shaft with knurled knob
23917	Shaft - Pad roller shaft
27793	Spring - Pad roller position spring

Take-Up Shaft & Roller Assembly

27792	Roller - Take-up roller
27794	Screw - Take-up roller set screw
27790	Shaft and Arm Assembly - Shaft and Arm for mounting complete take-up roller assembly
23917	Shaft - Roller shaft
27825	Spring - Coil tension spring at end of take-up shaft
27802	Spring - Take-up roller tension spring
20322	Washer - "C" washer for end of take-up shaft
20323	Washer - Cup washer used between "C" washer and tension spring at the end of take-up shaft
20324	Washer - Thrust washer for coil tension spring, Stock No. 27825

**Drive Motor Assemblies
(MI-9110, MI-9111)**

27781	Belt - Motor drive belt
27808	Motor - Drive motor for 50 or 60 cycle operation

<u>STOCK NO.</u>	<u>DESCRIPTION</u>
27780	Pulley - 50 or 25 cycle motor shaft pulley and set screw
27779	Pulley - 60 cycle or d-c motor shaft pulley and set screw
27782	Pulley - Double grooved flywheel pulley and mounting key. Mounts on constant speed sprocket shaft
27799	Screw - Belt tension adjustment screw & nut
27801	Shaft - Motor bracket shaft and set screw
25765	Switch - 30 amp. double pole motor starting switch

Simplex Accessories (MI-9120)

26197	Belt - Round leather take-up belt
26604	Gear - 66-tooth spiral gear projector and take-up drive
23835	Guide - Film guide assembly with oil trough
23986	Pulley - Simplex take-up drive pulley

Projector Drive Shaft (MI-9127)

28661	Gear - Textolite drive gear for pinion 28664
20012	Nut - Shaft Nut
22490	Oil Cup - Oil cup with nut
28664	Pinion - Steel drive pinion
28667	Screws - #8-32 x 1/2 machine screws for drive gear
27819	Shaft - Shaft complete
22235	Washer - Spacing washer
23984	Washer - Thrust washer - (Bronze)
26811	Washer - Thrust washer - (steel)