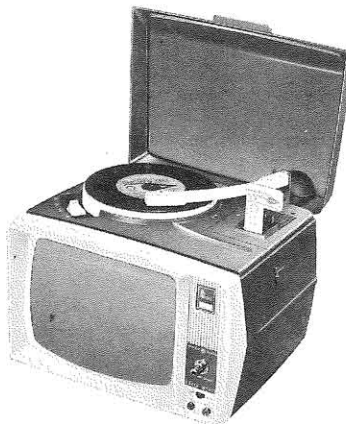


GENERAL ELECTRIC

PHONO - VIEWER SERVICE MANUAL

A615
SHOW 'N
TELL
PHONO-VIEWER
MODEL
A615A



Model A615

GENERAL

The General Electric model A615 Show 'N Tell Phono-viewer is a 2 transistor set with a 4-speed manual turntable and a slide-film projection system. Designed to be used with General Electric Picture-sound program albums, it shows pictures timed to words and music.

To set the record in proper synchronization with the showfilm, the mark on the indicator shaft next to the turntable should be turned (by rotating the turntable manually) to point to the arrow molded in the top of the cabinet. Then the showfilm holder is pushed down in the film slot and the set turned on.

VERY IMPORTANT!

When any A.C.-operated test equipment is to be used for servicing, an isolation transformer should be used in series with either the set or the test equipment line cord. In the absence of an isolation transformer, check for the presence of A.C. line voltage with a D.C.-operated VOM between the phono-viewer ground and the test equipment. If line voltage is present, reverse the position of one of the power plugs in the A.C.-outlet. The test equipment can now be used normally.

Failure to observe these precautions may result in destruction of either the output transistor or the turntable motor, or both, in addition to creating a dangerous condition.

ADJUSTMENTS

When the projection lamp is replaced, variations in filament location within the lamp may require re-positioning of the lamp bracket to produce full, even illumination of the screen. Correct adjustment procedure is shown in the lamp replacement illustrations.

The small mirror located in front of the projection lens might also require re-adjustment if it has been removed from the cabinet. Reposition to correctly frame picture on screen.

CABINET DISASSEMBLY

The cabinet front and screen are fastened to the cabinet by two screws at the top. The top and bottom halves of the cabinet are fastened to each other by four screws located inside the cabinet. Two of these are at the front inside corner of the set. The other two, located behind the large mirror and film advance mechanism, are accessible through holes in the bottom of the cabinet.

FILM ADVANCE MECHANISM

The film advance mechanism is shown in one of the illustrations. Improper operation of this mechanism will produce faulty framing or indexing of the picture on the screen. Typical indexing problems and their solution are listed below.

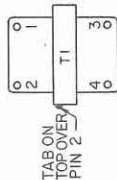
1. Excessive friction drag on film drive assembly shaft. Lubricate shaft at both support points. Readjust phono motor to eliminate binding between worm and helical gears.
2. Film holder slips. Caused by worn film holder. Replace film holder.

MISCELLANEOUS MECHANICAL TROUBLESHOOTING

1. Won't focus properly. Remove complete lens assembly (holder) by removing retaining clip and lifting out. Adjust lens tube in or out of holder until proper focusing is possible.
2. Fan does not operate. Fan set screw may be loose, or fan may be binding against air duct or duct bracket. May also cause turntable to stop.

TRANSISTOR REPLACEMENT

Should the output transistor, TR2, be replaced, use a heat transferring grease or paste applied to the transistor case to aid heat transfer to the heat sink.



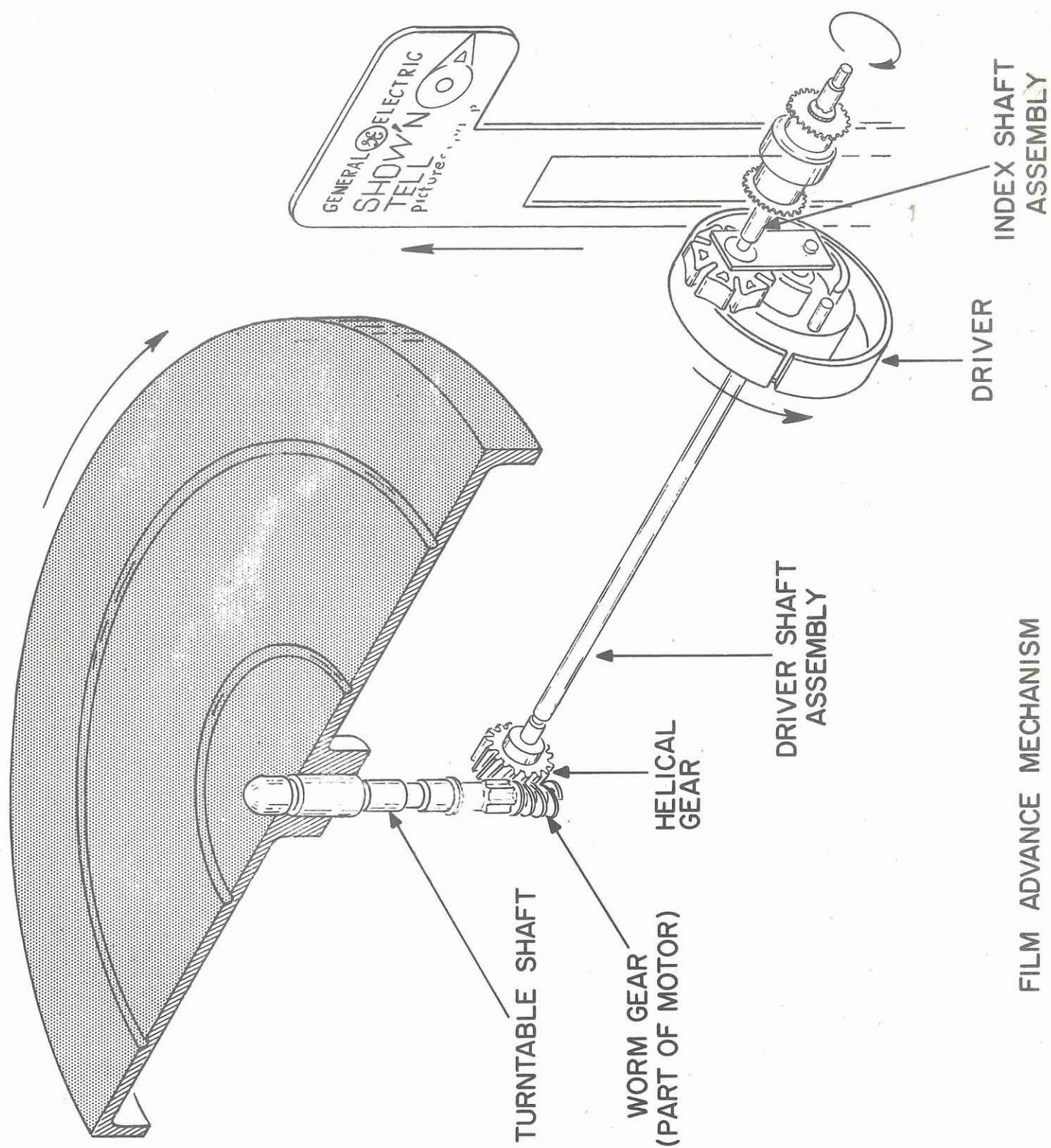
1. UNLESS OTHERWISE NOTED: CAPACITORS MORE THAN 1 MF CAPACITORS LESS THAN 1 MF RESISTORS ARE 1/2 WATT, K=1000
2. # INDICATES WIRES FROM COMPONENT BOARD.
3. SEE PARTS LIST FOR VALUES OF RESISTOR R4 (VALUES CHANGE WITH TRANSISTOR RATINGS)
4. —<— INDICATES WIRE NUT CONNECTIONS EXTERNAL TO CIRCUIT BOARD.

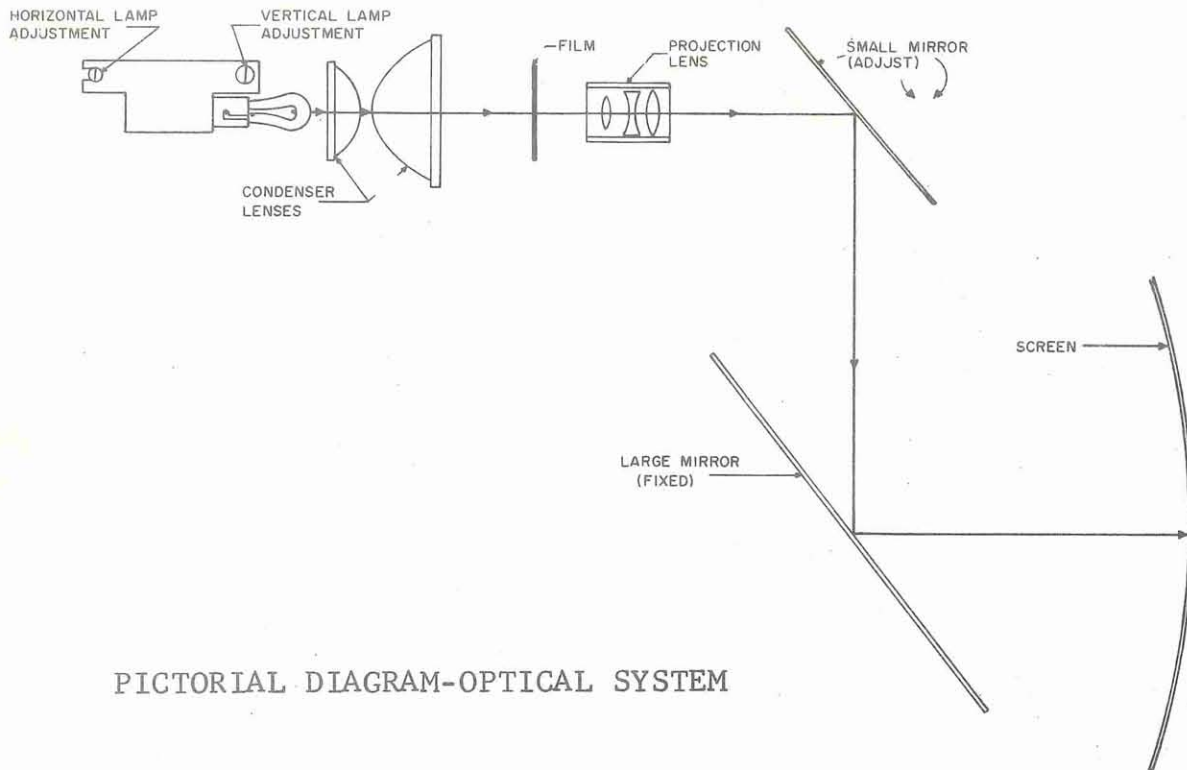
SCHEMATIC WIRING DIAGRAM FOR PHONO
AMPLIFIER MODEL A 615

COMPONENT SUBSTITUTION CHART

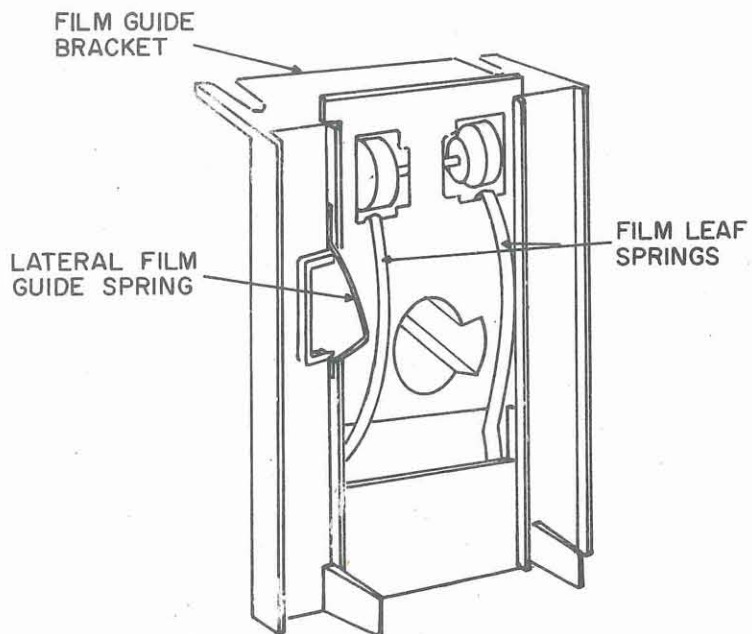
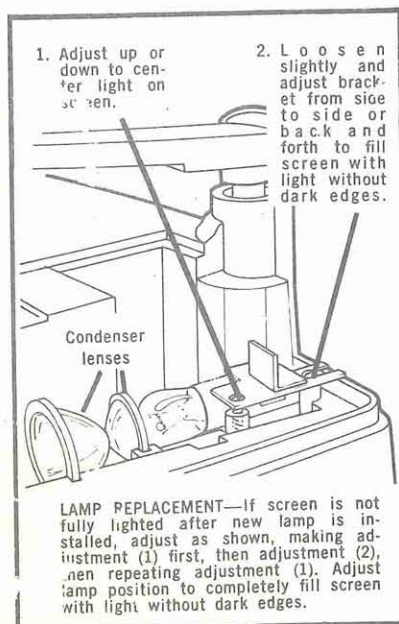
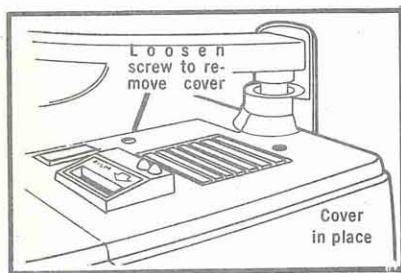
The following components may vary in different group versions of this model. Use it to determine the necessary changes required when substituting another component for the original one. When substituting from one group, all items listed as being in the new group must be used.

[illegible]





PICTORIAL DIAGRAM-OPTICAL SYSTEM



FILM GUIDE MECHANISM



REPLACEMENT PARTS LIST

CATALOG NO.	SYMBOL	DESCRIPTION	LIST PRICE	CATALOG NO.	SYMBOL	DESCRIPTION	LIST PRICE
AMPLIFIER				RS-6722	Fan.....	.35	
RS-2615	C1	.01 MF, 450 Volt		RS-9985	Air Duct.....	.75	
	C2	2 MFD 15V ELECTRO- LYTIC.....	1.10	RT-1054	Cartridge.....	2.75	
RS-5990	C4	.003 MF, 450 Volt		RT-1055	Tone Arm.....	3.75	
	C5	100 MFD, 15V ELEC- TROLYTIC.....	1.50	RT-1361	Phono Motor, 110V, 60 Cycles	8.95	
RT-1285	C6	250 MFD, 25V ELEC- TROLYTIC.....	.85	*-RT-1549	Turntable.....	.60	
RS-6686	R8,S1	Volume Control W/SW, 500K.....	1.25	CABINET AND APPEARANCE ITEMS			
RT-1491	R10	82 Ohm, Resistor, 2 Watt.....		RB-1689	Screen.....	1.25	
RS-6471	D1	Rectifier.....	1.20	*-RB-1900	Cabinet Front.....	2.25	
RS-6469	T1	Output Transformer.	1.50	*-RB-1901	Cabinet Bottom.....	2.95	
RS-7412	TR1	Transistor.....	1.00	*-RB-1902	Cabinet Top.....	3.25	
RS-7108	TR1	Transistor.....	1.00	*-RB-1903	Projector Lens Cover.....	.75	
RS-7107	TR1	Transistor.....	1.00	*-RB-1904	Top Cover.....	1.95	
RS-7622	TR2	Transistor.....	1.00	RS-9995	Paper Film Holder.....Pkg.2	.25	
RS-7623	TR2	Transistor.....	1.00	RT-1281	Index Indicator Window.Pkg.5	.25	
RS-7624	TR2	Transistor.....	1.00	RT-1336	Volume Knob.....Pkg.2	.30	
RS-7626	TR2	Transistor.....	1.00	*-RT-1546	Earphone, 15 Ohm.....	1.00	
RS-7628	TR2	Transistor.....	1.00	*-RT-1547	Grille Insert.....	.40	
RT-1094		Transistor Heat Sink.....Pkg.5	.25	*-RT-1548	Medallion25	
PROJECTOR				MISCELLANEOUS			
RS-6668		Condenser Lens, Large.....	.75	RB-1284	4" Speaker.....	2.25	
RS-6669		Condenser Lens, Small.....	.75	RS-1594	Speaker Clip.....Pkg.5	.25	
RS-6675		Projection Lens Asm.....	.75	RS-2590	Power Cord.....	.70	
RS-6681		Small Mirror.....	.50	RS-3822	Vol. Knob Retainer....Pkg.10	.50	
RS-6682		Large Mirror.....	1.25	RS-6251	Earphone Jack.....	.30	
RS-6710		Projection Lens Arm Clip....Pkg.5	.25	RT-1201	Earphone Jack Nut....Pkg.3	.30	
RS-6725		Project Lamp.....	.95	*-RT-1550	Lamp Switch.....	.40	
RS-6761		Lamp Adj. Screw.....Pkg.5	.25	RT-1551	Special Screw (Cabinet Front to Top).....Pkg.5	.25	
PHONOGRAPH				FILM DRIVE			
RS-4187		0.7 Mil. Stylus.....	1.25	RS-6670	Film Guide.....	.25	
RS-4382		Turntable Center Disc.....	.35	RS-6677	Film Idler Wheels.....	.25	
RS-4633		Turntable Pad.....Pkg.5	.25	RS-6738	Idler Tension Spring...Pkg.5	.25	
RS-6236		Turntable "E" Ring.....Pkg.5	.25	RS-6762	Leaf Spring, Film Guide....Pkg.5	.25	
				RT-1283	Index Shaft Assembly.....	.95	
				RT-1284	Drive Shaft Assembly.....	.25	

All parts not listed by catalog numbers are common items, obtainable from radio parts jobbers.

Underlined capitalized items above, are most frequently needed replacement components.

Prices are suggested list prices subject to change without notice.

*-Denotes parts not previously cataloged.

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PRODUCT SERVICE—RADIO RECEIVER DEPT.

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