General Electric Co.

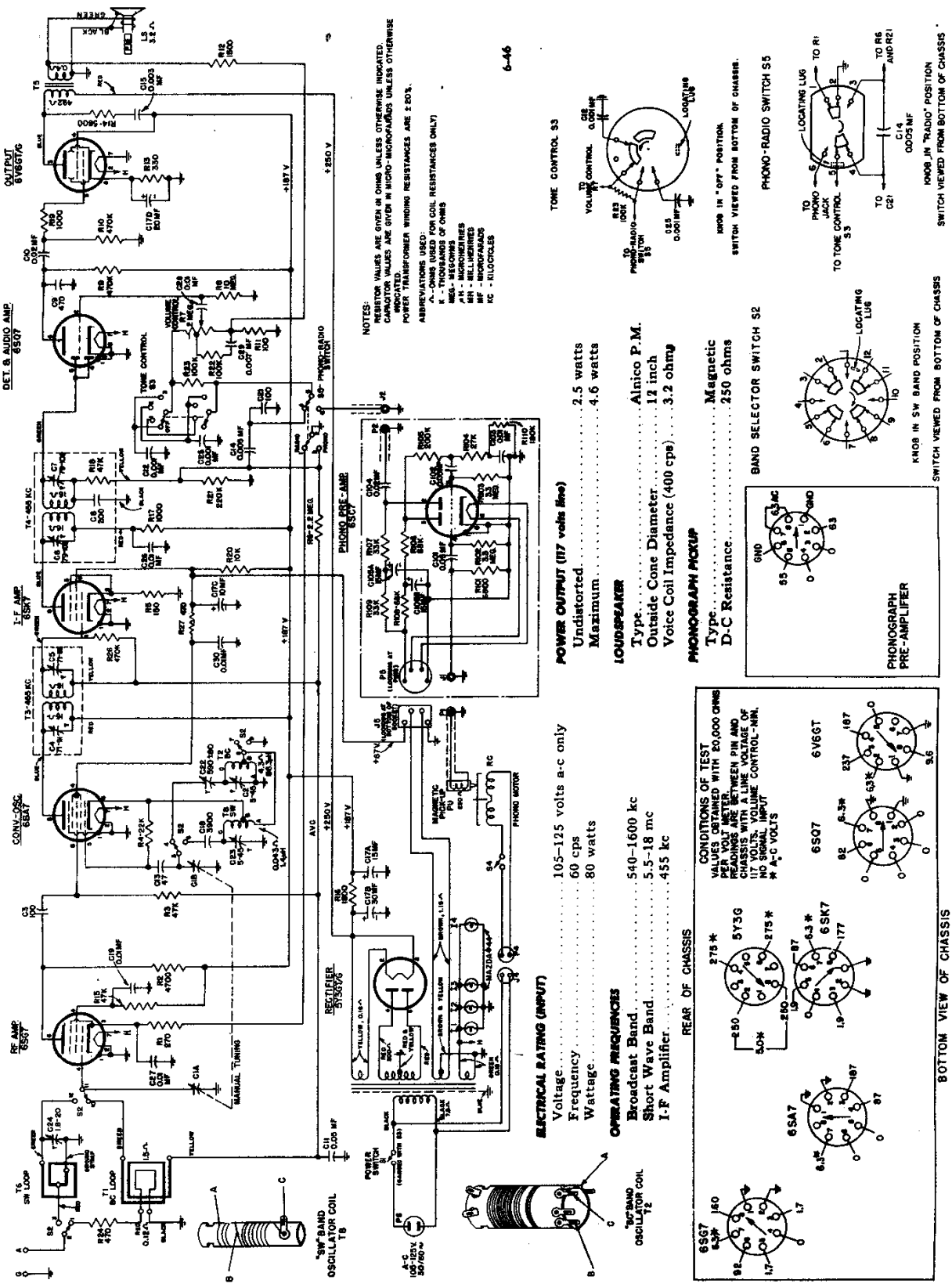
Model: 326	Chassis:	Year: Pre 1948
Power:	Circuit:	IF:
Tubes:		
Bands:		

Resources

- Riders Volume 15 - GE 15-49
- Riders Volume 15 - GE 15-50
- Riders Volume 15 - GE 15-51
- Riders Volume 15 - GE 15-52

MODELS 326,327

GENERAL ELECTRIC CO.

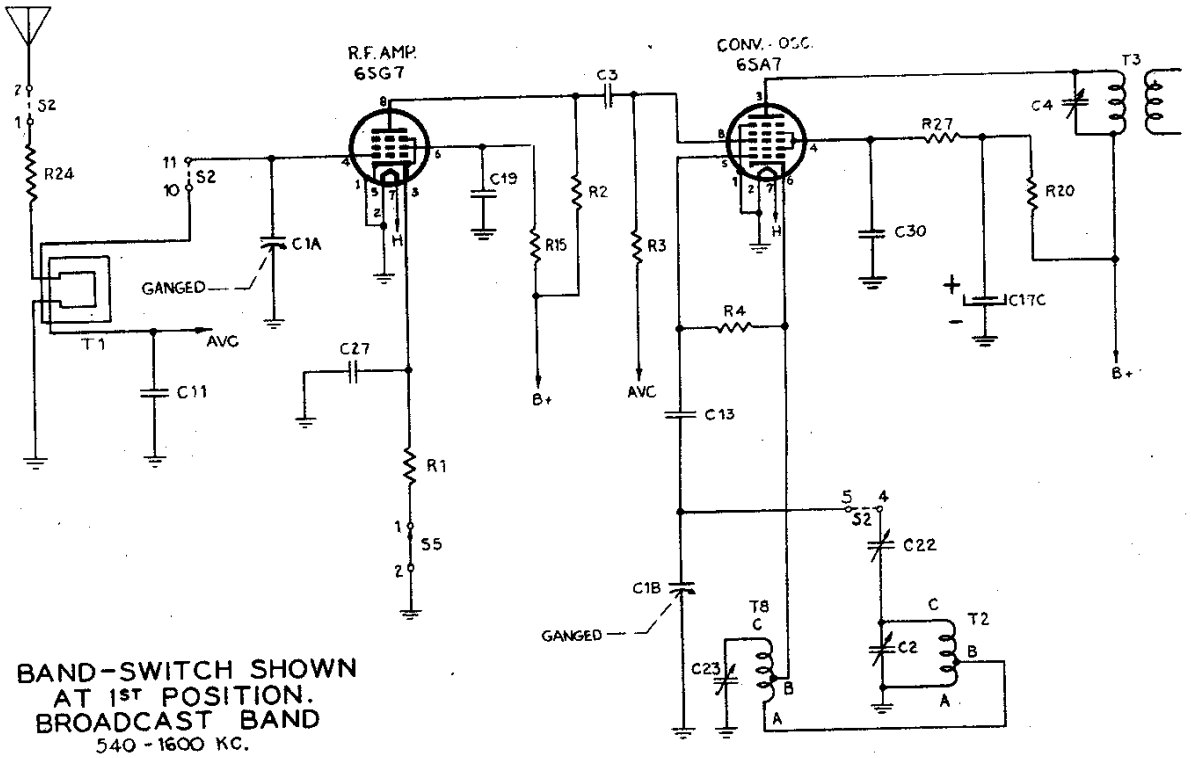


Record Changer: Single-post, General Instrument Model 204
Two-post, Seeburg Model K

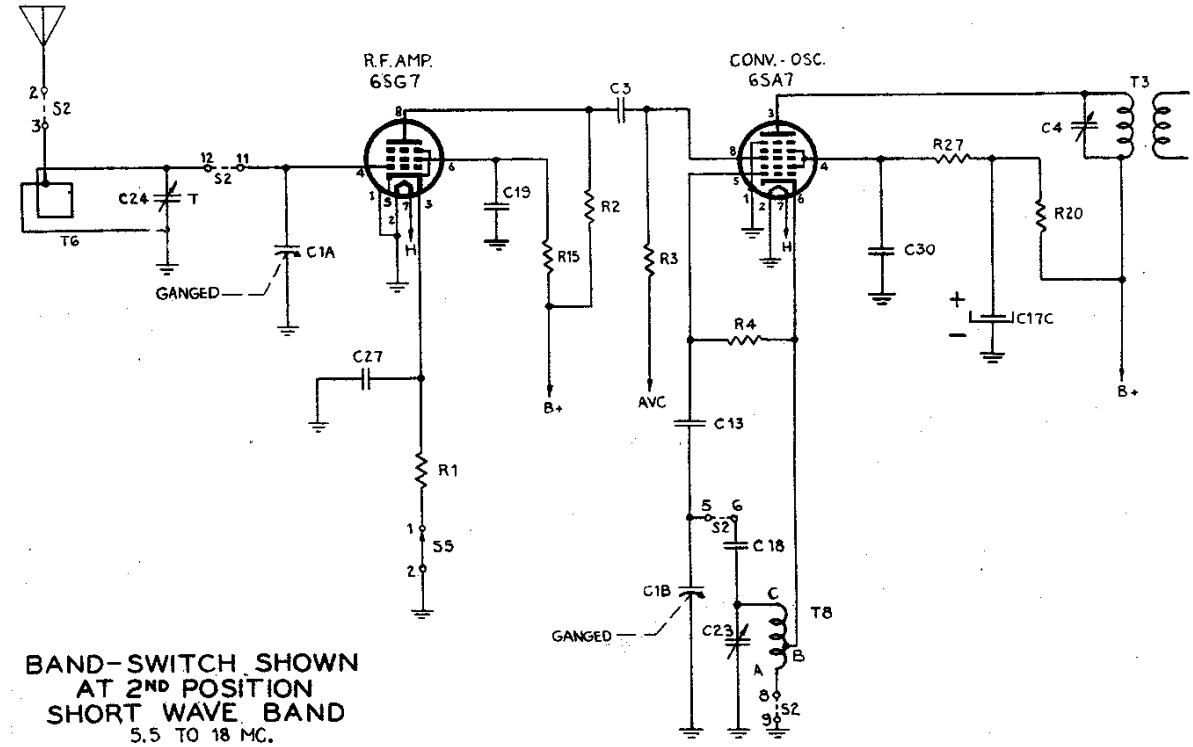
"clarified schematics"

MODELS 326, 327

GENERAL ELECTRIC CO.



BAND-SWITCH SHOWN AT 1ST POSITION. BROADCAST BAND 540 - 1600 KC.



BAND-SWITCH SHOWN AT 2ND POSITION SHORT WAVE BAND 5.5 TO 18 MC.

GENERAL ELECTRIC CO.

ELECTRICAL CIRCUIT ALIGNMENT

EQUIPMENT REQUIRED

1. Test oscillator with audio tone modulation.
2. A-C output meter, 1½ volts full scale.
3. Insulated screwdriver.

ALIGNMENT PROCEDURE

The alignment procedure is given in table form. All i-f alignments may be made with the chassis removed from the cabinet. However, the r-f alignments should be made with the chassis and loop antennas securely fastened in the cabinet, as the relative position of the loop antenna with respect to the chassis materially affects the alignment. All oscillator and r-f trimmers are accessible from the rear of the cabinet when the chassis is installed; the location of these trimmers is shown in Fig. 1.

The r-f signal should be capacity coupled by placing a two-foot wire on the output post (high side) of the test oscillator to act as an antenna. This antenna should be kept two feet or more away from the receiver loop to insure freedom from too much coupling. Metal objects such as meters and tools should not be placed on top of the receiver cabinet.

The output meter should be connected across the loud-speaker voice coil terminals. The low side of the test oscillator output should be connected to the chassis ground; the high side of the test oscillator output should be connected as indicated in the alignment chart. During the entire alignment procedure, the radio volume control should be in its maximum position. The test oscillator output signal should be attenuated so that the output meter reading never exceeds 1¼ volts.

ALIGNMENT CHART

Step	Connect Test Oscillator to	Test Oscillator Setting	Dial Settings	Adjust Trimmers
1	6SK7, pin 4, in series with 0.05 mf	455 kc	"BC" Band 550 kc	C6 and C7 for maximum
2	6SA7, pin 8, in series with 0.05 mf	455 kc	"BC" Band 550 kc	C4 and C5 for maximum
3	‡Capacity Coupled	1500 kc	"BC" Band 1500 kc	*C2 (Osc.) for maximum
4	‡Capacity Coupled	580 kc	"BC" Band 580 kc	*C22 (Osc) for maximum
5	‡Capacity Coupled	1500 kc	"BC" Band 1500 kc	*C2 (Osc) for maximum
6	‡Capacity Coupled	18 mc	"SW" Band 18 mc	**C23 (Osc.) to signal
7	‡Capacity Coupled	18 mc	"SW" Band 18 mc	*C24 (Ant.) for maximum

‡ Use two-foot antenna on output of test oscillator.
* Rock gang condenser when making alignment.
** Use minimum capacity peak.

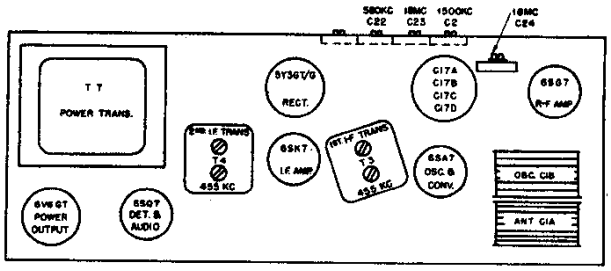


Fig. 1—Tube and Trimmer Location

STAGE GAIN AND VOLTAGE CHECKS

Stage gain measurements may be made with a vacuum tube voltmeter to check circuit performance and to locate stages which are not operating properly. The gain values listed may have a tolerance of 20%. Readings should be taken with the AVC shorted out. This may be done conveniently by connecting the yellow Beam-a-Scope lead to ground.

1. R-F Stage Gains.
   Antenna to 6SG7 grid..... 4 at 1000 kc
   6SG7 grid to 6SA7 grid.....14 at 1000 kc
   6SA7 grid to 6SK7 grid.....74 at 455 kc

   Audio Gain.
   The power output across the speaker voice coil should be approximately ½ watt with 0.06 volts at 400 cps applied between the high side of the volume control and ground.

3. Oscillator Grid Bias.
   The d-c voltage developed across the oscillator grid leak (R4) averages 5.7 volts at 1000 kc.

4. Socket Pin Voltages.
   Fig. 4 shows typical tube pin voltages. All readings should be made from the pins to ground unless otherwise indicated.

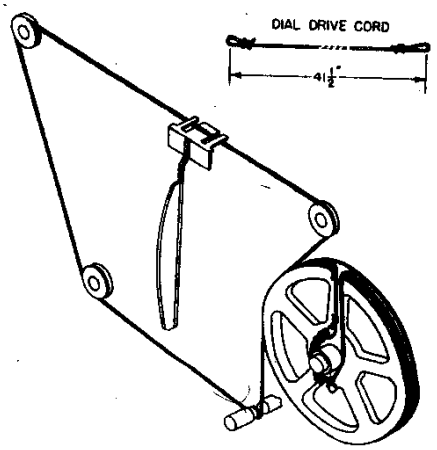


Fig. 3—Dial Stringing Diagram

GENERAL ELECTRIC CO.

MODEL 321 (LATE)

Cat. No.	Symbol	Description
UNIVERSAL G-E REPLACEMENT PARTS		
UCC-009	C27	Capacitor—0.02 mfd., 200 V., paper
UCC-013	C32	Capacitor—0.1 mfd., 200 V., paper
UCC-025	C10,14	Capacitor—0.01 mfd., 400 V., paper
UCC-030	C12	Capacitor—0.1 mfd., 400 V., paper
UCC-039	C26, 31	Capacitor—0.005 mfd., 600 V., paper
UCC-040	C15	Capacitor—0.01 mfd., 600 V., paper
UCC-045	C11, 16, 33	Capacitor—0.05 mfd., 600 V., paper
UDL-018	I1	Pilot Lamp—115 V., 10 watt candelabra base
UOP-525	LS1	Speaker—5¼ in. permanent magnet loudspeaker
URD-015	R19	Resistor—39 ohms, ½ W., carbon
URD-017	R5	Resistor—47 ohms, ½ W., carbon
URD-021	R1	Resistor—68 ohms, ½ W., carbon
URD-029	R13	Resistor—150 ohms, ½ W., carbon
URD-041	R20	Resistor—470 ohms, ½ W., carbon
URD-049	R12, 18	Resistor—1000 ohms, ½ W., carbon
URD-065	R2	Resistor—4700 ohms, ½ W., carbon
URD-085	R4	Resistor—33,000 ohms, ½ W., carbon
URD-089	R3	Resistor—47,000 ohms, ½ W., carbon
URD-113	R7, 9, 10, 11	Resistor—470,000 ohms, ½ W., carbon
URD-129	R6	Resistor—2.2 megohms, ½ W., carbon
URD-139	R8	Resistor—5.6 megohms, ½ W., carbon
URE-007	R15	Resistor—18 ohms, 1 W., carbon
URF-049	R14	Resistor—1000 ohms, 2 W., carbon
SPECIALIZED G-E REPLACEMENT PARTS		
RAV-001		Cabinet—Cabinet, less escutcheon and back
RCE-001	C17A, 17B, 17C	Capacitor—50 mfd., 150 V., 50 mfd., 150 V., 40 mfd., 25 V., dry electrolytic
RCT-003	C1A, 1B, 2	Capacitor—Tuning capacitor assembly
RCU-110	C13	Capacitor—47 mmf., 500 V., mica
RCU-112	C3	Capacitor—100 mmf., 500 V., mica
RCU-113	C9	Capacitor—150 mmf., 500 V., mica
RCU-115	C8	Capacitor—330 mmf., 500 V., mica
RCX-001	C18, 19, 20, 21	Trimmer Strip—Station selector adjustments (r-f)
RCX-002	C22, 23, 24, 25	Trimmer Strip—Station selector adjustments (osc.)
RCY-002	C30	Capacitor—1.5-15 mmf. antenna trimmer

Cat. No.	Symbol	Description
SPECIALIZED G-E REPLACEMENT PARTS (Cont'd)		
RDK-004		Knob—Control Knob (tuning)
RDK-007		Key—Station selector key
RDK-009		Knob—Control knob (volume)
RDK-023		Knob—Tone control wafer knob
RDP-003		Pointer—Dial scale pointer
RDS-004		Scale—Dial scale
RDX-003		Assembly—Dial scale back plate assembly
RDX-004		Assembly—Drive cord assembly
RHC-001		Cotter—Hairpin shaft retaining cotter
RHG-001		Grommet—Tuning capacitor mtg. grommet
RHM-007		Stud—Idler pulley stud
RHM-008		Cam—Tone switch cam
RHM-009		Link—Tone switch cam link
RHM-010		Clip—Tone control shaft clip
RHM-011		Bushing—Tuning shaft bushing
RHX-001		Assembly—Chassis mounting assembly
RIT-006		Cover—Electrolytic capacitor cardboard cover
RJC-001		Terminal— Loudspeaker lead terminals
RJS-007		Socket—Pilot lamp socket
RJS-008		Socket—Octal base tube socket
RJS-004		Socket—Mtg. socket for electrolytic capacitor
RLC-002	T2	Coil—Oscillator coil
RLL-004	L1	Beam-a-scope—Cabinet back and antenna assembly
RLP-001	L2	Coil—Plate choke
RLP-002	L4, R16	Coil—Series peaking coil and resistor assembly
RLW-001	L3	Coil—Wavetrap coil
RMM-001		Shield—Tube shield and clip
RMM-002		Shield—Light shield
RMS-001		Spring—Drive cord spring
RMS-003		Spring—Station selector button spring
RMU-003		Shaft—Tuning shaft and cotter pin
RMW-001		Pulley—Drive cord idler pulley
RRC-003	R17	Volume Control—2 meg. potentiometer
RSP-001	S3	Switch—Station selector push button switch
RSW-003	S2	Switch—Tone control switch
RTL-003	T3	Transformer—1st I-F transformer
RTL-004	T4	Transformer—2nd I-F transformer
RTO-002	T5	Transformer—Output transformer
RWL-009	P1	Cord—Power cord and plug
RYC-001		Card—Station letter cards

MODELS 326, 327

Cat. No.	Symbol	Description
UNIVERSAL G-E REPLACEMENT PARTS		
UCC-037	C15	CAPACITOR—0.003 mf., 600 v., paper
UCC-039	C14	CAPACITOR—0.005 mf., 600 v., paper
UCC-040	C19, 26, 27, 28, 30, 103	CAPACITOR—0.01 mf., 600 v., paper
UCC-041	C10, 104	CAPACITOR—0.02 mf., 600 v., paper
UCC-045	C11, 101, 102	CAPACITOR—0.05 mf., 600 v., paper
UDL-005	I1, 2, 3, 4	PILOT LAMP—G.E. No. 44, 6-8 v., 0.25 amp.
UIC-001		CEMENT—Speaker cone replacement cement
UOP-1206	LS	SPEAKER—12 inch PM speaker
UOX-005		CONE—Replacement speaker cone kit
URD-025	R11	RESISTOR—100 ohms, ½ w., carbon
URD-029	R5	RESISTOR—150 ohms, ½ w., carbon
URD-035	R1	RESISTOR—270 ohms, ½ w., carbon
URD-037	R13	RESISTOR—330 ohms, ½ w., carbon
URD-041	R24, 27	RESISTOR—470 ohms, ½ w., carbon
URD-049	R17, 19	RESISTOR—1000 ohms, ½ w., carbon
URD-053	R12	RESISTOR—1500 ohms, ½ w., carbon
URD-065	R2	RESISTOR—4700 ohms, ½ w., carbon
URD-067	R14	RESISTOR—5600 ohms, ½ w., carbon
URD-077	R101	RESISTOR—6800 ohms, ½ w., carbon
URD-081	R4	RESISTOR—22,000 ohms, ½ w., carbon
URD-083	R104	RESISTOR—27,000 ohms, ½ w., carbon
URD-085	R107, 109	RESISTOR—33,000 ohms, ½ w., carbon
URD-089	R3, 15	RESISTOR—47,000 ohms, ½ w., carbon
URD-093	R106, 108	RESISTOR—68,000 ohms, ½ w., carbon
URD-097	R22, 23	RESISTOR—100,000 ohms, ½ w., carbon
URD-105	R21	RESISTOR—220,000 ohms, ½ w., carbon
URD-113	R9, 10, 26	RESISTOR—470,000 ohms, ½ w., carbon
URD-129	R6	RESISTOR—2.2 meg., ½ w., carbon
URD-133	R102, 103	RESISTOR—3.3 meg., ½ w., carbon
URD-145	R8	RESISTOR—10 meg., ½ w., carbon
URF-055	R16	RESISTOR—1800 ohms, 2 w., carbon
URF-073	R20	RESISTOR—10,000 ohms, 2 w., carbon
SPECIALIZED G-E REPLACEMENT PARTS		
RAC-001		COVER—Beam-a-scope Cover
RAL-001		JEWEL—Pilot light jewel
RCC-001	C29	CAPACITOR—0.007 mfd., 600 v., paper
RCC-035	C12, 25	CAPACITOR—0.001 mf., 600 v., paper
RCE-002	C105A	CAPACITOR—15 mf., 350 v., dry electrolytic
	C105B	CAPACITOR—15 mf., 350 v., dry electrolytic
	C17A	CAPACITOR—15 mf., 350 v., dry electrolytic
RCE-003	C17B	CAPACITOR—30 mf., 350 v., dry electrolytic
	C17C	CAPACITOR—10 mf., 250 v., dry electrolytic
	C17D	CAPACITOR—20 mf., 25 v., dry electrolytic
RCT-005	C1A, 1B	CAPACITOR—2 gang tuning capacitor
RCU-064	C9	CAPACITOR—470 mmf., mica
RCU-110	C13	CAPACITOR—47 mmf., mica
RCU-112	C3, 21	CAPACITOR—100 mmf., mica
RCU-189	C18	CAPACITOR—3900 mmf., mica
RCX-020	C2	CAPACITOR—Trimmer, 5-45 mmf.
	C16	CAPACITOR—Trimmer, 15-90 mmf.
	C22	CAPACITOR—Trimmer, 590±80 mmf.
	C23	CAPACITOR—Trimmer, 5-45 mmf.
RCY-004	C24	CAPACITOR—Trimmer, 1.8-20 mmf.
RDC-004		CORD—Dial drive cord, 41½ in. long
RDD-003		DRUM—Dial drum assembly
RDE-005		ESCUTCHEON—Dial escutcheon
RDF-005		WASHER—Felt washer for knobs
RDK-036		KNOB—Mahogany knob (plain)
RDK-038		KNOB—Oak knob (plain)
RDK-039		KNOB—Mahogany knob (pointer)

Cat. No.	Symbol	Description
SPECIALIZED G-E REPLACEMENT PARTS		
RDK-041		KNOB—Oak knob (pointer)
RDP-005		POINTER—Dial scale pointer
RDS-016		SCALE—Dial scale
RDX-008		BACKPLATE—Dial backplate assembly
RHG-001		GROMMET—Tuning capacitor mounting grommet
RHG-003		GROMMET—Rubber grommet, ⅛ in. I.D. for ½ in. hole
RHG-004		GROMMET—Rubber grommet, 3/16 in. I.D. for ⅜-in. hole
RHM-012		CUSHIONS—Rubber dial scale cushions
RHM-014		STUD—Shaft for upper pulleys on backplate
RHM-015		BUSHING—Tuning shaft bushing, washer, and nut
RHU-002		SPACER—Tuning capacitor mounting spacer
RJB-001		RECEPTACLE—Two-pin speaker receptacle
RJB-002		TERMINAL STRIP—Terminal strip for phono pre-amplifier, 2 terminals
RJC-001		PLUG—Tip plug for speaker leads
RJC-002		CONNECTOR—Clip for antenna loop connections
RJP-002	P5	PLUG—4-prong plug for pre-amplifier
RJP-004	P2	PLUG—Phono pre-amplifier output plug
RJS-003		SOCKET—Octal socket for receiver chassis
RJS-011		SOCKET—Pilot light socket for cabinet jewel
RJS-012		PLATE—Mounting plate for capacitor C17A, B, C, D
RJS-013		SOCKET—Pilot light socket for chassis lights
RJS-014	J5	RECEPTACLE—Four prong receptacle (Power to pre-amp.)
RJS-015		SOCKET—Octal socket for pre-amplifier (shock mounted)
RJX-001	J2	RECEPTACLE—Phono input receptacle on receiver chassis
RJS-049	J4	RECEPTACLE—Phono motor connector (female)
RJX-003	J1	RECEPTACLE—Phono input receptacle on pre-amplifier
RLC-004	T2	COIL—BC Band oscillator coil
RLC-005	T8	COIL—SW Band oscillator coil
RLL-005	T6	LOOP—SW Band antenna loop
RLL-006	T1	LOOP—Beam-a-scope BC Band loop
RMC-001		CLAMP—Mounts BC Band oscillator coil
RMC-002		CLAMP—Mounts SW Band oscillator coil
RMM-003		SHIELD—Bottom shield for 2nd I-F transformer
RMS-001		SPRING—Drive cord tension spring
RMU-004		SHAFT—Tuning shaft with cotter pin and "C" clip
RMW-001		PULLEY—Upper back plate pulley
RMW-002		PULLEY—Chassis idler pulley
ROC-001		CONE—Speaker cone and dust cap
RPX-010	PU	PICKUP—Magnetic pickup cartridge
RRC-005	R7	POTENTIOMETER—Volume control, 2 meg. tapped at 1 meg.
RRD-089	R18	RESISTOR—47,000 ohms, ½ w., carbon
RRD-104	R105	RESISTOR—200,000 ohms, ½ w., carbon
RSW-006	S5	SWITCH—Phono-Radio switch
RSW-007	S2	SWITCH—Band switch
RSX-003	S1	SWITCH—Power switch
	S3	SWITCH—Tone control switch
RTL-005	T3	TRANSFORMER—1st I-F transformer
RTL-006	T4	TRANSFORMER—2nd I-F transformer
RTO-004	T5	TRANSFORMER—Output transformer
RTP-010	T7	TRANSFORMER—Power transformer
RWL-004	P6	CORD—Power cord and plug