

General Electric 143

The connection between terminal number 4 of the 2nd i-f transformer to the 8,200-ohm resistor R2 is connected at the intersection with the B+ line. Late production receivers incorporate the following changes in order to improve the i-f stability. A 0.05- μ f, 200-volt paper capacitor has been added in parallel with resistor R9. This capacitor has a reference number of C16 and stock number UCC-045. Capacitor C5 has been changed to a 0.1- μ f, 200-volt capacitor, stock number UCC-050.

General Electric 145

The following parts have been added to provide replacement of the battery cover plate and assembly parts:

Ref. No.	Description
RAC-078	Cover, cover plate only
RHR-009	Rivet, "A" battery spring rivet
RHR-010	Rivet, "A" battery clip rivet
RHW-014	Washer, "A" battery spring washer
RII-027	Insulator, insulator strip
RMC-037	Clip, battery clip
RMS-189	Spring, "A" battery spring.

The following miscellaneous parts have been added. Most of these parts are required because of the addition of brown and white cabinets.

Ref. No.	Description
RAB-093	Cover, back cover (white)
RAB-094	Cover, back cover (brown)
RAC-063	Cover, loop cover (maroon) substitute for RAC-07
RAC-069	Cabinet, main body (brown) includes hinge
RAC-070	Cabinet, main body (white) includes hinge
RAC-071	Cover, front cover (white) includes hinge
RAC-072	Cover, front cover (brown) includes hinge
RAC-075	Cover, loop cover (white)
RAC-076	Cover, loop cover (brown)
RAI-007	Stop, cover stop
RDK-173	Knob, brown control knob
RHR-004	Rivet, tube socket rivet
RHY-009	Handle, cabinet handle
RSW-070	Switch, power, operates in conjunction with lid.

General Electric 226

This model appears on pages 20-27 through 20-29 of Rider's Manual Volume XX. Resistor R1, tube V1 cathode resistor, was removed from the circuit of late production receivers. This change results in an increase of gain in the r-f amplifier.

Solid dots indicating circuit wiring connections should be added and placed in the cathode lead of tube V4, one at the point where the lead intersects the lower end of R7, the other at the junction of R6 (low end of volume control) and C10. The circuit will then show the cathode properly terminated to B+.

Replacement item RTO-075 should read RTO-083, Audio output transformer.

General Electric 250

This model appears on pages 16-32 through 16-36 of Rider's Manual Volume XV. With particularly rough handling, the battery may be cracked while in place in the battery compartment. To forestall this failure, an additional strip of sponge rubber may be installed at the bottom of the battery cover to give added padding. If the battery does not charge and the fuse checks o.k. and the rectifier disks are not defective, check continuity of the power cord. A few isolated cases have been found in which the power cord has opened up where the cord fastens to the prong in the molded plug. An appreciable increase in duration of operation from a fully charged battery can be effected in the following manner, realizing, however, that some degree of performance is sacrificed in regard to sensitivity and power output. Replace power-supply filter resistor R17 (1,500 ohms) with a 4,700-ohm, 1-watt, carbon resistor. This change should be made only when there is a demand for longer duration of operation to one battery charge.

General Electric 200 Series

These models appear on pages 18-19 through 18-20 of Rider's Manual Volume XVIII. The following changes should be added to the parts list:

RHM-002	Clip, for mounting speaker board
RHM-004	Clip, dial scale mounting clip for plastic cabinet models
RHM-005	Clip, dial scale mounting clip for wood cabinet models.

General Electric 250, 260

Model 250 appears on pages 16-32 through 16-36 of Rider's Manual Volume XV. Model 260 appears on pages 16-6 through 16-12 of Rider's Manual Volume XVI. Add REC-003, Antenna loop connector strip to the parts lists for these models.

General Electric 356

This model appears on pages 18-40 through 18-44 of Rider's Manual Volume XVIII. Resistor R12 has been changed from 220 ohms, 1/2 w, to 330 ohms, 1/2 w, \pm 10%, Cat. No. URD-037.

B. F. Goodrich 92-527, 92-528

These models are the same as Models 92-523, 92-524, 92-525, 92-526.

B. F. Goodrich 93-109, 93-110, 93-111

These models are the same as Models 93-104, 93-105, 93-106.

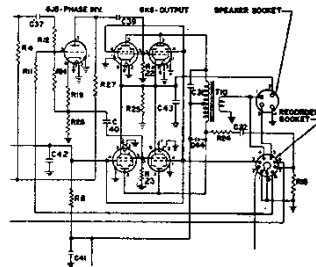
B. F. Goodrich 93-112, 93-113

These models are the same as Models 93-107 and 93-108.

Hoffman C503 and C513, Ch. 115

These models are identical with Models B503 and B513, which appear on pages 17-8 through 17-13 of Rider's Manual Volume XVII, except for the following changes:

1. Push-pull parallel 6K6's are used in the output stage instead of push-pull 6V6's. This is shown in the accompanying diagram.



Circuit changes for Hoffman C503 and C513.

2. On the recorder amplifier the screen dropping resistor R11 has been changed from 0.1 megohm to 2.2 megohms. The cathode resistor, R1, for this stage has been changed from 2,200 ohms to 4,700 ohms. This allows the screen current of the 6SJ7 tube to be self-regulating and to eliminate variations in gain between various 6SJ7's.
3. R31 and C49 have been added in parallel to the S1-sec 2, rear, wafer lead that goes to the phonograph receptacle.
4. Capacitor C30 is now connected to the variable resistor, R20, instead of to ground.

Magnavox AMP-101B

This model is the same as Model AMP-101A which appears on pages 17-1 and 17-2 of Rider's Manual Volume XVII, except for the following change in parts values.

Ref. Part No. No.	Description
5	250129G4 Capacitor, paper, 0.03 μ f, 400 v.

Montgomery Ward 04WG-672 Series

Model 04WG-672 appears on pages 12-31 and 12-32 of Rider's Manual Volume XII. Models A and B are the same as that model which appears in Volume XII. Models C, D, and E are similar to Model 04WG-672 with the following exceptions. Model C employs a plug-in resistor, R13 and R12. The values remain the same as in the earlier models. Model D employs the plug-in resistor and, in addition, a new oscillator coil and 2 section dry electrolytic capacitor. In Model E the loop antenna assembly has been redesigned.

Montgomery Ward 05WG-2745A

This model is the same as Model 94WG-2745A. To reduce regeneration in later production receivers, the following changes were made:

Ref. No.	Part No.	Description
L-1	35A5	Insulated choke
C-6	47X496	500 μ mf ceramic capacitor
R-37	B84562	Added 5,600-ohm, 0.5-w carbon resistor. This resistor replaces the insulated choke L-5 in the circuit diagram.

Montgomery Ward 14WG-518A, 14WG-519A, 14WG-518B, 14WG-519B

These models are similar to Model 14WG-518 and 14WG-519 which appear on page 13-46 of Rider's Manual Volume XIII.

Montgomery Ward 64WG-2007B, 74WG-2007B and C

These models are similar to 54WG-2007A shown on pages 16-28 to 16-30 of Rider's Volume XV, except for the following changes. The drive-cord length has been increased and the following drive-cord replacement instructions are to be used.

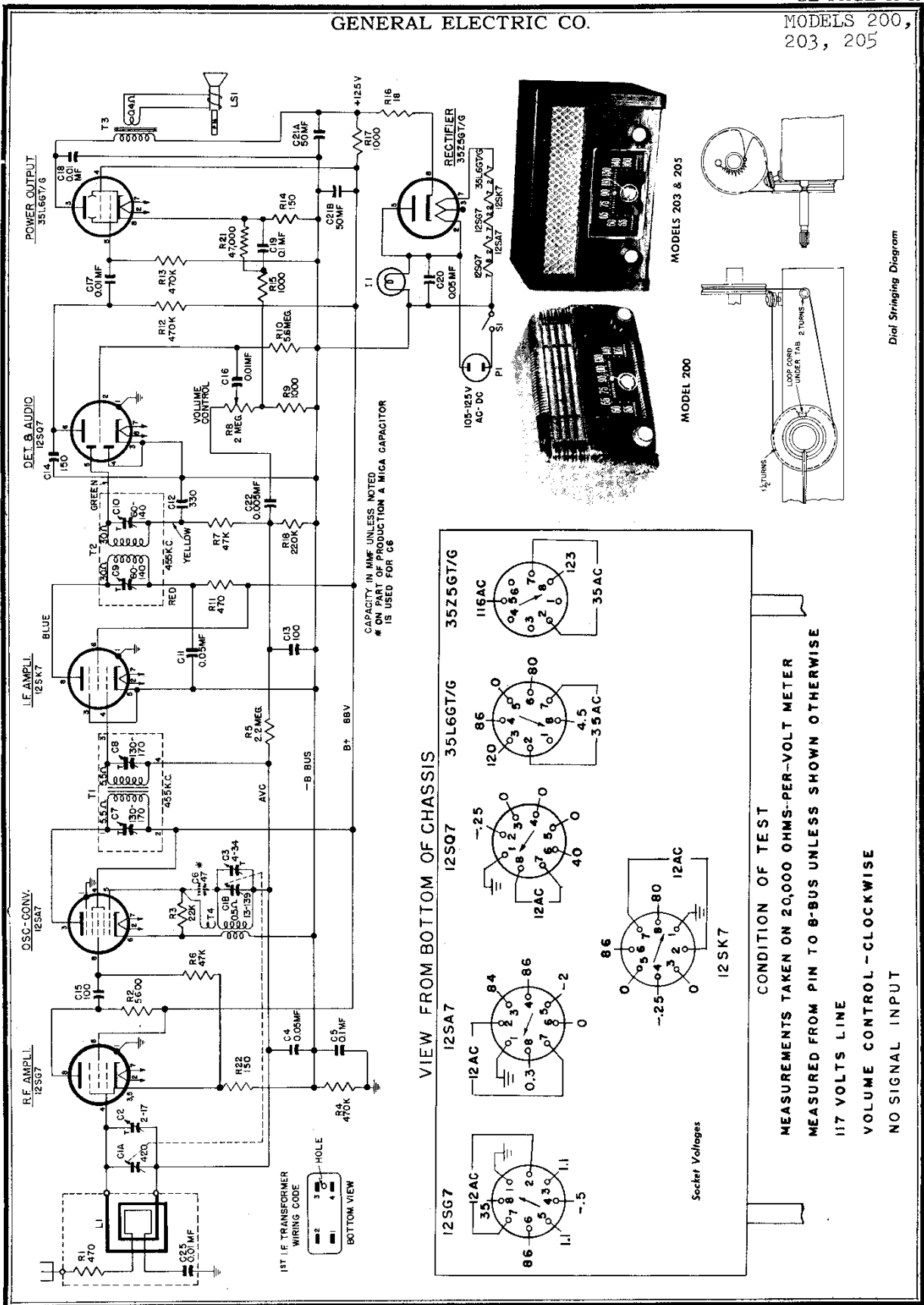
Turn the gang condenser to the fully closed position. Use a new drive cord 18 inches in length and tie one end to the tension spring. Fasten the other end of the tension spring to the hook on the drive pulley. Pass the cord through the slot in the drive pulley rim and continue around pulley 1/2 turn, counterclockwise. Wind 3 1/2 turns counterclockwise (from front of chassis) around tuning shaft. Turns should progress toward rear of chassis. Wind cord counterclockwise around drive pulley in back of previous 1/2 turn. Pass cord through the slot in the pulley rim. Stretch tension spring and tie free end of cord to the spring. Cut off any excess string.

The component parts are the same as those listed on page 15-29 of Rider's Volume XV, except for those listed below.

Ref. No.	Part No.	Description
C-15	B67204	0.20 μ f, 200 v, tubular
C-16	D67104	0.10 μ f, 400 v, tubular
C-18	D67102	0.001 μ f, 400 v, tubular
C-19	17A123	1.0-12 μ f, trimmer.

GENERAL ELECTRIC CO.

MODELS 200,
203, 205



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MODELS 200,
203, 205

GENERAL ELECTRIC CO.

ELECTRICAL RATING (INPUT)

Voltage 105-125 volts a-c or d-c
 Frequency on a-c 25 to 60 cycles
 Wattage 45 watts

OPERATING FREQUENCIES

Broadcast Band 540-1600 kilocycles
 I-F Amplifier 455 kilocycles

POWER OUTPUT (117 VOLTS LINE)

Undistorted 1.2 watts
 Maximum 1.5 watts

LOUDSPEAKER

Type Alnico P.M.
 Outside Cone Diameter 5 1/4 in.
 Voice Coil Impedance (400 cycles) 3.5 ohms

TUBE COMPLEMENT

R.F. Amplifier Type 12SG7
 Oscillator-Converter Type 12SA7
 I.F. Amplifier Type 12SK7
 Detector-Audio Type 12SQ7
 Power Output Type 35L6GT
 Rectifier Type 35Z5GT/G
 Pilot Lamp G-E, Type C7, 115-volt, 10-watt, clear,
 candelabra screw base

ELECTRICAL CIRCUIT ALIGNMENT

ALIGNMENT FREQUENCIES

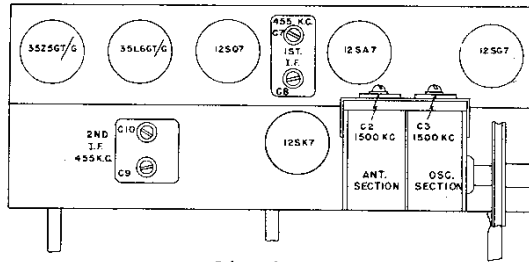
R-F 1500 kilocycles
 I-F 455 kilocycles

EQUIPMENT REQUIRED

1. Test oscillator with audio tone modulation
2. A.C. output meter, 1 1/2 volts full scale
3. 0.05 mf paper capacitor
4. 50 mmf mica capacitor
5. Insulated screwdriver

PROCEDURE—GENERAL

1. Turn dial scale pointer as far counterclockwise as possible. The pointer should coincide with the first marking at the left of the scale. If it doesn't, remove chassis and slip pointer on shaft until the pointer is under reference mark when chassis is bolted in place.
2. For i-f and r-f alignments, the output meter is connected across the loudspeaker voice coil terminals.
3. Keep radio volume control at maximum and attenuate test oscillator signal output so that the output meter reading never exceeds 1 1/4 volts.
4. The chassis must be removed from the cabinet during I-F alignment. For R-F alignment bolt the chassis in the cabinet securely.
5. Connect the capacitor as listed in column 2, between the output "High Side" of test oscillator and the point of input specified.



Tube and Trimmer Location

ALIGNMENT CHART

Step	Connect Test Oscillator to	Test Osc. Setting	Pointer Setting on Radio	Adjustment for Maximum Output
1	12SK7 grid in series with 0.05 mf cap.	455 kc	1500 kc	2nd I-F Trans. Trimmers
2	12SA7 grid in series with 0.05 mf cap.	455 kc	1500 kc	1st and 2nd I-F Trans. Trimmers
3	Ant. Post in series with 50 mmf	1500 kc	1500 kc	C3 (Osc.)
4	Ant. Post in series with 50 mmf	1500 kc	1500 kc	C2 (R-F)

STAGE GAIN AND VOLTAGE CHECKS

Stage gain measurements by vacuum tube voltmeter or similar measuring devices may be used to check circuit performance and isolate trouble. The gain values listed may have tolerances of 20 per cent. Readings taken with low signal input so that AVC is not effective.

- (1) R-F Stage Gains.
 Antenna post to 12SG7 grid 4 at 1000 kc
 12SG7 grid to 12SA7 grid 8 at 1000 kc
 12SA7 grid to 12SK7 grid 30 at 455 kc
 12SK7 grid to 12SQ7 diode plate 57 at 455 kc
- (2) Audio Gain.
 0.12 volt at 400 cycles across volume control (R8) with control set at maximum will give approximately 1 1/2-watt output across speaker voice coil.
- (3) Oscillator Grid Bias.
 D-C voltage developed across the oscillator grid leak (R3). Averages 7.7 volts at 1000 kc.
- (4) Socket Pin Voltages.
 Figure 4 shows voltages from all tube pins to B- unless otherwise specified. Voltage readings much lower than those specified may help localize defective components or tubes.

REPLACEMENT PARTS LIST—MODELS 200, 203, & 205

PART NO.	SYMBOL	DESCRIPTION	PART NO.	SYMBOL	DESCRIPTION
UNIVERSAL REPLACEMENT PARTS			SPECIALIZED REPLACEMENT PARTS (Cont'd)		
UCC-039	C22	CAPACITOR .005 mfd, 600 v, paper	RAX-001		PULLEY—Idler pulley assembly
UCC-040	C25	CAPACITOR .01 mfd, 600 v, paper	RCC-013	C19	CAPACITOR .01 mfd, 200 v, paper
UCC-048	C5	CAPACITOR 0.1 mfd, 600 v, paper	RCC-040	C16, 17, 18	CAPACITOR .01 mfd, 600 v, paper
UCU-020	C6	CAPACITOR .47 mfd, 500 v, mica	RCC-045	C4, 11, 20	CAPACITOR .05 mfd, 600 v, paper
UCU-028	C13, 15	CAPACITOR 100 mmf, 500 v, mica	RCE-037	C21A, 21B	CAPACITOR .50-50 mfd, 150 v, dry electrolytic
UCU-032	C14	CAPACITOR 150 mmf, 500 v, mica	RCT-015	C1A, 1B	CONDENSER Tuning condenser (includes C2 and C3)
UCU-040	C12	CAPACITOR 330 mmf, 500 v, mica	RDC-001		CORD Drive cord assembly
UIC-001		CEMENT Loudspeaker cone cement	RDD-001		DRUM Drive drum and shaft assembly
UIC-002		TRIMMER Cone cement thinner	RDE-001		ESCUTCHEON Dial escutcheon (Models 203, 205)
UOP-528	LS1	SPEAKER 5 1/4 in. PM	RDG-002		PLATE Dial back plate assembly
UOX-001		CONE Replacement cone kit	RDK-006		KNOB Control knob
URD-029	R14, 22	RESISTOR 150 ohms, 1/2 w, carbon	RDS-030		SCALE Dial scale (Models 203, 205)
URD-041	R1, 11	RESISTOR 470 ohms, 1/2 w, carbon	RDS-031		SCALE Dial scale (Models 200, 201)
URD-057	R9, 15	RESISTOR 1000 ohms, 1/2 w, carbon	RHM-004		CLIP Speed clip for dial scale (Model 200)
URD-067	R2	RESISTOR 5600 ohms, 1/2 w, carbon	RHM-005		CLIP Speed clip for dial scale (Models 203, 205)
URD-081	R3	RESISTOR 22,000 ohms, 1/2 w, carbon	RHM-016		CLIP—Osc. coil mtg. clip
URD-089	R6, 7, 21	RESISTOR 47,000 ohms, 1/2 w, carbon	RJS-003		TUBE SOCKET Octal base tube socket (12SA7)
URD-105	R18	RESISTOR 220,000 ohms, 1/2 w, carbon	RJS-006		TUBE SOCKET Octal base tube socket
URD-113	R4, 12, 13	RESISTOR 470,000 ohms, 1/2 w, carbon	RJS-053		SOCKET Pilot lamp socket
URD-120	R5	RESISTOR 2.2 meg, 1/2 w, carbon	RLC-021	T4	COIL Oscillator coil
URD-139	R10	RESISTOR 5.6 meg, 1/2 w, carbon	RRC-002	R8, S1	VOLUME CONTROL 2.0 meg potentiometer, includes power switch
URF-049	R17	RESISTOR 1000 ohms, 2 w, carbon	RRW-008	R16	RESISTOR 18 ohms, 1 w, wirewound
SPECIALIZED REPLACEMENT PARTS			RTL-001	T1	TRANSFORMER 1st I.F. transformer
RAB-001		BEAM-A-SCOPE Cabinet back and loop assembly (Models 203, 205)	RTL-029	T2	TRANSFORMER 2nd I.F. transformer
RAB-003		BEAM-A-SCOPE Cabinet back and loop assembly (Model 200)	RTO-003	T3	TRANSFORMER Output transformer
RAU-002		CABINET Brown plastic (Model 200)	RWL-009	P1	CORD Power cord and plug
RAV-025		CABINET Walnut wood (Model 203)			
RAV-026		CABINET Blonde wood (Model 205)			
RAV-027		CABINET Maple wood (Model 205)			

MODELS YRB67-1, YRB67-2,
YRB82-1
MODELS 200, 203, 205

**GENERAL ELECTRIC CO.
PARTS DESCRIPTION LIST**

MODELS YRB 82-1, YRB 67-1, YRB 67-2

Symbol	Description	Symbol	Description	Symbol	Description
C1	Ant. trimmer condenser	C14	.05 mfd paper capacitor	R2	2.2 megohm carbon resistor
C2A	Tuning condenser, ant. section	C15	.05 mfd paper capacitor	R3	Volume control, 5 megohm
C2B	Tuning condenser, osc. section	C16	.05 mfd paper capacitor	R4	4.7 megohm carbon resistor
C3	Osc. trimmer condenser	C17	.01 mfd paper capacitor	R5	470,000 ohm carbon resistor
C8	220 mmfd mica capacitor	L1	1st I.F. transformer	R6	470,000 ohm carbon resistor
C9	.005 mfd paper capacitor	L2	2nd I.F. transformer	R7	150 ohm carbon resistor
C10	220 mmfd mica capacitor	L3	Loop assembly	R8	2700 ohm carbon resistor
C11	.01 mfd paper capacitor	L4	Oscillator coil	R9	18 ohm carbon resistor
C12	.02 mfd paper capacitor	P1	Pilot lamp	R10	470 ohm carbon resistor
C13A	30 mfd electrolytic capacitor	T1	Output transformer		
C13B	30 mfd electrolytic capacitor	R1	22,000 ohm carbon resistor		

REPLACEMENT PARTS LIST

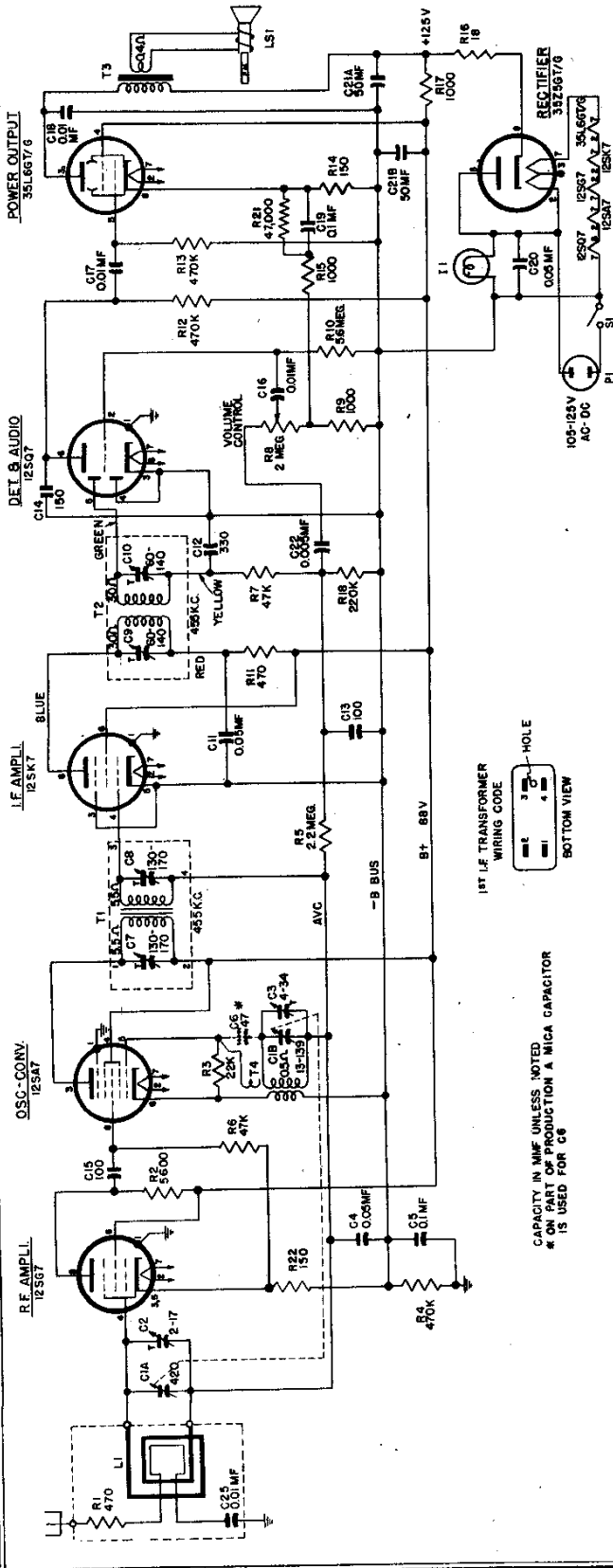
MODELS YRB 82-1, YRB 67-1, YRB 67-2

Stock No.	Description	Stock No.	Description
SPECIALIZED G-E REPLACEMENT PARTS		SPECIALIZED G-E REPLACEMENT PARTS (Cont.)	
SAB 004	Back cover, Models YRB 67-1 and 67-2	STL 001	Transformer, 1st I.F.
SAB 006	Back cover, Model YRB 82-1	STL 002	Transformer, 2nd I.F.
SAU 001	Cabinet, Model YRB 82-1	SPO 001	Transformer, output
SAV 003	Cabinet, Model YRB 67-1	SWL 001	Power cord
SAV 015	Cabinet, Model YRB 67-2		
SCE 002	Capacitor, filter electrolytic, 30-30 mfd 150 volt, C13A, C13B	UNIVERSAL G-E REPLACEMENT PARTS	
SCT 002	Capacitor, tuning, C2A, C2B	UCC 039	Capacitor, .005 mfd paper, C9
SDC 001	Cord, dial drive cord	UCC 040	Capacitor, .01 mfd paper, C17
SDK 002	Knob, Models YRB 67-1 and 67-2	UCC 041	Capacitor, .02 mfd paper, C12
SDK 010	Knob, Model YRB 82-1	UCC 045	Capacitor, .05 mfd paper, C14, C15, C16
SDP 001	Pointer, dial scale	UCU 1036	Capacitor, 220 mmfd mica, C8, C10
SDS 004	Dial scale, Models YRB 67-1 and 67-2	UDL 013	Pilot lamp, Mazda 51
SDS 006	Dial scale, Model YRB 82-1	UOP 526	Speaker, 5 1/4 inch PM dynamic
SHC 001	Hair pin cotter for dial drive	URD 007	Resistor, 18 ohm 1/2 watt carbon, R9
SJP 002	Connector, female to speaker	URD 029	Resistor, 150 ohm 1/2 watt carbon, R7
SJS 001	Pilot lamp socket	URD 041	Resistor, 470 ohm 1/2 watt carbon, R10
SJS 003	Socket, octal tube	URD 081	Resistor, 22,000 ohm 1/2 watt carbon, R1
SIC 001	Coil, oscillator	URD 113	Resistor, 470,000 ohm 1/2 watt carbon, R5, R6
SLL 001	Loop, antenna	URD 129	Resistor, 2.2 megohm 1/2 watt carbon, R2
SMF 002	Snap button	URD 137	Resistor, 4.7 megohm 1/2 watt carbon, R4
SMF 003	Fastener, back cover to cabinet	URE 059	Resistor, 2700 ohm 1 watt carbon, R8
SMS 001	Spring, dial drive drum		
SMU 001	Shaft, dial drive		
SMW 001	Pulley, dial drive		
SRC 003	Volume control, 0.5 megohm with power switch		

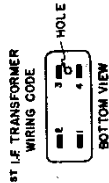
REPLACEMENT PARTS LIST—MODELS 200, 203, & 205

PART NO.	SYMBOL	DESCRIPTION	PART NO.	SYMBOL	DESCRIPTION
UNIVERSAL REPLACEMENT PARTS			SPECIALIZED REPLACEMENT PARTS (Cont'd)		
UCC-039	C22	CAPACITOR—005 mfd, 600 v, paper	RAX-001		PULLEY—Idler pulley assembly
UCC-040	C25	CAPACITOR—01 mfd, 600 v, paper	RCC-013	C19	CAPACITOR—0.1 mfd, 200 v, paper
UCC-048	C5	CAPACITOR—0.1 mfd, 600 v, paper	RCC-040	C16, 17, 18	CAPACITOR—0.1 mfd, 600 v, paper
UCU-020	C6	CAPACITOR—47 mmf, 500 v, mica	RCC-045	C4, 11, 20	CAPACITOR—.05 mfd, 600 v, paper
UCU-028	C13, 15	CAPACITOR—100 mmf, 500 v, mica	RCE-037	C21A, 21B	CAPACITOR—50-50 mfd, 150 v, dry electrolytic
UCU-032	C14	CAPACITOR—150 mmf, 500 v, mica	RCT-015	C1A, 1B	CONDENSER—Tuning condenser (includes C2 and C3)
UCU-040	C12	CAPACITOR—330 mmf, 500 v, mica	RDC-001		CORD—Drive cord assembly
UIC-001		CEMENT—Loudspeaker cone cement	RDD-001		DRUM—Drive drum and shaft assembly
UIC-002		THINNER—Cone cement thinner	RDE-001		ESCUTCHEON—Dial escutcheon (Models 203, 205)
UOP-525	LS1	SPEAKER—5 1/4 in. PM	RDG-002		PLATE—Dial back plate assembly
URD-029	R14, 22	CONE—Replacement cone kit	RDE-006		KNOB—Control knob
URD-041	R1, 11	RESISTOR—150 ohms, 1/2 w, carbon	RDS-030		SCALE—Dial scale (Models 203, 205)
URD-057	R9, 15	RESISTOR—470 ohms, 1/2 w, carbon	RDS-031		SCALE—Dial scale (Models 200, 201)
URD-067	R2	RESISTOR—1000 ohms, 1/2 w, carbon	RHM-004		CLIP—Speed clip for dial scale (Model 200)
URD-081	R3	RESISTOR—5600 ohms, 1/2 w, carbon	RHM-005		CLIP—Speed clip for dial scale (Models 203, 205)
URD-089	R6, 7, 21	RESISTOR—22,000 ohms, 1/2 w, carbon	RHM-016		CLIP—Osc. coil mtg. clip
URD-105	R18	RESISTOR—47,000 ohms, 1/2 w, carbon	RJS-003		TUBE SOCKET—Octal base tube socket (12SA7)
URD-113	R4, 12, 13	RESISTOR—220,000 ohms, 1/2 w, carbon	RJS-006		TUBE SOCKET—Octal base tube-socket
URD-129	R5	RESISTOR—470,000 ohms, 1/2 w, carbon	RJS-053		SOCKET—Pilot lamp socket
URD-139	R10	RESISTOR—2.2 meg, 1/2 w, carbon	RLC-021	T4	COIL—Oscillator coil
URF-049	R17	RESISTOR—5.6 meg, 1/2 w, carbon	RRC-002	R8, S1	VOLUME CONTROL—2.0 meg potentiometer includes power switch
		RESISTOR—1000 ohms, 2 w, carbon	RRW-008	R16	RESISTOR—18 ohms, 1 w, wirewound
SPECIALIZED REPLACEMENT PARTS			RTL-001	T1	TRANSFORMER—1st I.F. transformer
RAB-001		BEAM-A-SCOPE—Cabinet back and loop assembly (Models 203, 205)	RTL-029	T2	TRANSFORMER—2nd I.F. transformer
RAB-003		BEAM-A-SCOPE—Cabinet back and loop assembly (Model 200)	RTO-003	T3	TRANSFORMER—Output transformer
RAU-002		CABINET—Brown plastic (Model 200)	RWL-009	P1	CORD—Power cord and plug
RAV-025		CABINET—Walnut wood (Model 203)			
RAV-026		CABINET—Blonde wood (Model 205)			
RAV-027		CABINET—Maple wood (Model 205)			

GENERAL ELECTRIC CO.

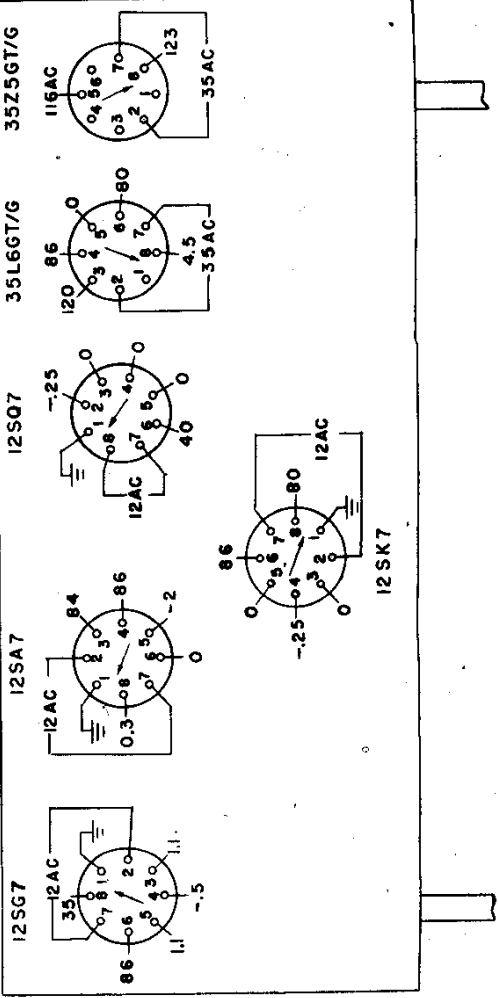


CONDITION OF TEST
 MEASUREMENTS TAKEN ON 20,000 OHMS-
 PER-VOLT METER
 MEASURED FROM PIN TO B-BUS UNLESS
 SHOWN OTHERWISE.
 117 VOLTS LINE
 VOLUME CONTROL-CLOCKWISE
 NO SIGNAL INPUT



CAPACITY IN MMF UNLESS NOTED
 * ON PART OF PRODUCTION A MICA CAPACITOR
 IS USED FOR C6

VIEW FROM BOTTOM OF CHASSIS



MODELS 200, 203, 205

GENERAL ELECTRIC CO.

SPECIFICATIONS

CABINET:

Model	200	203	205
Material	Plastic	Wood	Wood
Color	Brown	Mahogany	Maple
Height	7 1/2 in.	8 1/4 in.	8 1/4 in.
Width	12 in.	13 in.	13 in.
Depth	7 1/2 in.	7 1/8 in.	7 1/8 in.

ELECTRICAL RATING (INPUT)

Voltage	105-125 volts a-c or d-c
Frequency on a-c	25 to 60 cycles
Wattage	45 watts

OPERATING FREQUENCIES

Broadcast Band	540-1600 kilocycles
I-F Amplifier	455 kilocycles

POWER OUTPUT (117 VOLTS LINE)

Undistorted	1.2 watts
Maximum	1.5 watts

LOUDSPEAKER

Type	Alnico P.M.
Outside Cone Diameter	5 1/4 in.
Voice Coil Impedance (400 cycles)	3.5 ohms

TUBE COMPLEMENT

R.F. Amplifier	Type 12SG7
Oscillator-Converter	Type 12SA7
I.F. Amplifier	Type 12SK7
Detector-Audio	Type 12SQ7
Power Output	Type 35L6GT
Rectifier	Type 35Z5GT/G
Pilot Lamp	G-E, Type C7, 115-volt, 10-watt, clear, candelabra screw base

ELECTRICAL CIRCUIT ALIGNMENT

ALIGNMENT FREQUENCIES

R-F	1500 kilocycles
I-F	455 kilocycles

EQUIPMENT REQUIRED

1. Test oscillator with audio tone modulation
2. A.C. output meter, 1 1/2 volts full scale
3. 0.05 mf paper capacitor
4. 50 mmf mica capacitor
5. Insulated screwdriver

PROCEDURE—GENERAL

1. Turn dial scale pointer as far counterclockwise as possible. The pointer should coincide with the first marking at the left of the scale. If it doesn't, remove chassis and slip pointer on shaft until the pointer is under reference mark when chassis is bolted in place.
2. For i-f and r-f alignments, the output meter is connected across the loudspeaker voice coil terminals.

3. Keep radio volume control at maximum and attenuate test oscillator signal output so that the output meter reading never exceeds 1 1/4 volts.

4. The chassis must be removed from the cabinet during I-F alignment. For R-F alignment bolt the chassis in the cabinet securely.

5. Connect the capacitor as listed in column 2, between the output "High Side" of test oscillator and the point of input specified.

ALIGNMENT CHART

Step	Connect Test Oscillator to	Test Osc. Setting	Pointer Setting on Radio	Adjustment for Maximum Output
1	12SK7 grid in series with 0.05 mf cap.	455 kc	1500 kc	2nd I-F Trans. Trimmers
2	12SA7 grid in series with 0.05 mf cap.	455 kc	1500 kc	1st and 2nd I-F Trans. Trimmers
3	Ant. Post in series with 50 mmf	1500 kc	1500 kc	C3 (Osc.)
4	Ant. Post in series with 50 mmf	1500 kc	1500 kc	C2 (R-F)

STAGE GAIN AND VOLTAGE CHECKS

Stage gain measurements by vacuum tube voltmeter or similar measuring devices may be used to check circuit performance and isolate trouble. The gain values listed may have tolerances of 20 per cent. Readings taken with low signal input so that AVC is not effective.

- (1) R-F Stage Gains.
 - Antenna post to 12SG7 grid..... 4 at 1000 kc
 - 12SG7 grid to 12SA7 grid..... 8 at 1000 kc
 - 12SA7 grid to 12SK7 grid..... 30 at 455 kc
 - 12SK7 grid to 12SQ7 diode plate..... 57 at 455 kc
- (2) Audio Gain.
 - 0.12 volt at 400 cycles across volume control (R8) with control set at maximum will give approximately 1/2-watt output across speaker voice coil.
- (3) Oscillator Grid Bias.
 - D-C voltage developed across the oscillator grid leak (R3). Averages 7.7 volts at 1000 kc.
- (4) Socket Pin Voltages.
 - Figure 4 shows voltages from all tube pins to B- unless otherwise specified. Voltage readings much lower than those specified may help localize defective components or tubes.

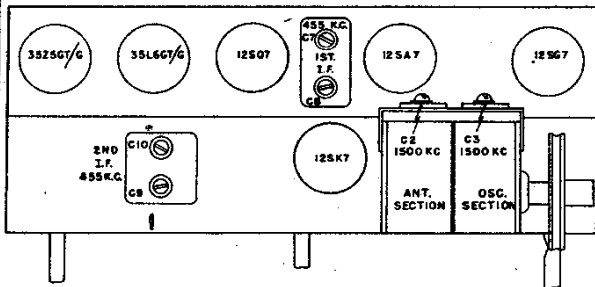


Fig. 1. Tube and Trimmer Location

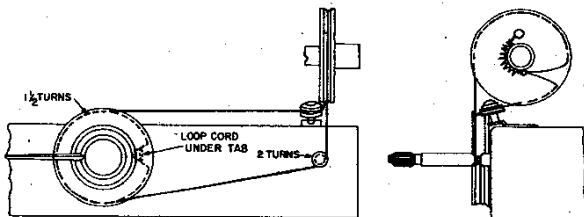


Fig. 2. Dial Stringing Diagram