MODEL G-117

Eleven-Tube, Five-Band, Keyboard Touch Tuning, A-C Superheterodyne Receiver

Electrical Specifications

FREQUENCY RANGES

"Standard Broadcast" (A)	540-1,720 kc
"49 Meter Band"	5,920-6,230 kc
"31 Meter Band"	9,480-9,690 kc
"25 Meter Band"	11,680-11,940 kc
"19 Meter Band"	15,080-15,390 kc

R-F ALIGNMENT FREQUENCIES

"Standard Broadcast" (A)	1,500 kc (osc., det., ant.), 600 kc (osc.)
"49 Meter Band"	6,100 kc (osc.)
"31 Meter Band"	9,600 kc (osc., det., ant.)
"25 Meter Band"	11,800 kc (osc.)
"19 Meter Band"	15,200 kc (osc.)

Intermediate Frequency ..... 455 kc

TUBE COMPLEMENT

(1) Type-6K7	R-F Amplifier
(2) Type-6A8	First Detector
(3) Type-6J7	Heterodyne Oscillator
(4) Type-6K7	I-F Amplifier
(5) Type-6H6	Second Det., A.V.C., and Muting
(6) Type-6F5	Audio Voltage Amplifier
(7) Type-6F5	A-F Amp. and Audio Phase Inverter
(8) Type-6F6	Power Output
(9) Type-6F6	Power Output
(10) Type-6U5	Tuning Tube
(11) Type-5T4	Full-Wave Rectifier

Pilot Lamps ..... One Mazda 47, 6-8 volts, .15 amp; Two Mazda 44, 6.3 volts, .25 amp.

POWER SUPPLY RATINGS

Rating A	105-125 volts, 50-60 cycles, 120 watts
Rating B	105-125 volts, 25-30 cycles, 120 watts
Fuse (Motor)	3 amperes

POWER OUTPUT

Undistorted	10 watts
Maximum	12 watts

LOUDSPEAKER

Type	12-inch Electrodynamic
Voice Coil Impedance	2.2 ohms at 400 cycles

Mechanical Specifications

Height	41½ inches
Width	28½ inches
Depth	14½ inches
Weight (net)	73 pounds
Weight (shipping)	92 pounds
Chassis Base Dimensions	15⅝ inches x 8½ inches x 3⅛ inches
Over-all Chassis Height	10¾ inches

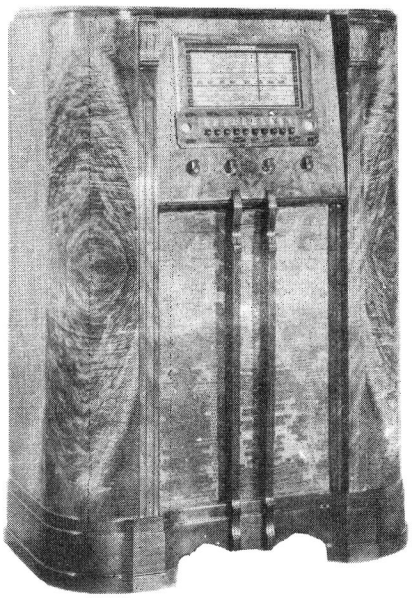
Operating Controls....(1) Power Switch-Tone; (2) Volume; (3) Tuning; (4) Range Selector, left to right, "A," "49 Meter," "31 Meter," "25 Meter," "19 Meter," Ten Keys; left to right, Record Player-Attachment Switch; Eight Station Keys, Manual Tuning Key.

Tuning Drive Ratio (manual) ..... 18 to 1

General Description

This receiver employs an eleven-tube, five-band superheterodyne circuit, the arrangement of which is shown in the Schematic Circuit Diagram. Features of design include electric tuning for eight broadcast stations; push-pull power output stage; magnetite-core i-f transformers; magnetite-core "A" band oscillator tracking adjustment; temperature-stabilized capacitors; four spread-bands; automatic volume control; jack and switch for Record Player attachment; "Tuning Eye" tuning tube; 12-inch, dust-proof electrodynamic loudspeaker; aural-compensated audio volume control; continuously variable high-frequency tone control; provision for remote control attachment; new straight-line dial; illuminated band indicator; noise-reducing adjustment on "A" band and noise reduction on "C" band with G.E. Counterpoise Antenna; air-core trimmer condensers.

Service Data



Model G117

Loudspeaker.—Centering of the loudspeaker is made in the usual manner with three narrow celluloid or paper feelers after first removing the front dust cover. This may be removed by softening its cement with a light application of acetone, using care not to allow the acetone to flow into the air gap. A dust cover should be cemented in place upon completion of adjustment.

Record Player Attachment.—A jack located near the "Tuning Eye" tube is provided for connecting a Record Player Attachment into the audio-amplifying circuit. The cable running from the Record Player Attachment should be terminated in a Stock No. 31048 plug to fit the jack.

Antenna Connections

G.E. Counterpoise Antenna Kit.—Connect the twisted-pair transmission line to terminals A1 and A2 on the terminal board at rear of chassis. Connect the counterpoise to A3. Terminal G may be connected to ground, but this connection is not necessary for correct operation.

Noise-Reducing Adjustment.—After the G.E. Counterpoise Antenna Kit is connected to the receiver, tune the receiver to a point near 900 kc where no station is heard. Turn volume control clockwise until noise is heard. If no noise of a regular character is audible, start any brush-type motor-driven appliance, such as a vacuum cleaner, electric razor, refrigerator, etc., but do not bring it too near the receiver. This will generate noise as a continuous crackling, or buzz. Adjust C1 to a point where this noise is reduced to a minimum. Adjustment of the noise reducing trimmer C1 should be made in the customer's home, with the G.E. Counterpoise Antenna connected to the receiver.

This adjustment is effective only when the G.E. Counterpoise Antenna is used. For all other types of antenna, the noise-adjustment trimmer should be screwed all the way down.

Other Antennas.—Use terminals A1 and A3 on the receiver terminal board as antenna and ground connecting points respectively. Terminal A3 may be connected to terminal G, unless this causes interference, in which case this connection should be omitted.

Calibration Scale

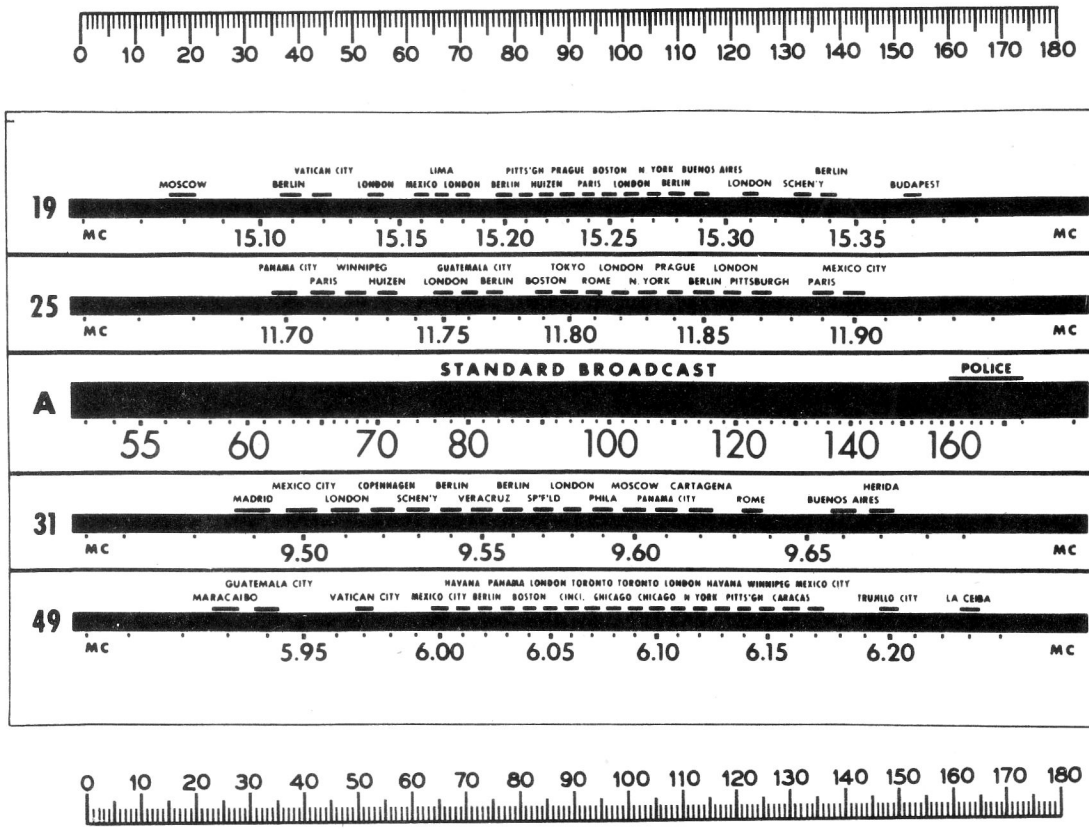


Figure 1—Reduced Reproduction of Receiver Dial, and Corresponding 0-180° Calibration Scales

The corresponding position of the dial indicator for any setting of the calibration scale can be determined by drawing a line from this point on the bottom calibration scale to the same point on the top calibration scale. For example 90° on the calibration scale corresponds approximately to 11.8 mc on the 25-meter band, and 940 kc on "A" band, etc. Read instructions under "Alignment Procedure."

ALIGNMENT PROCEDURE

Cathode-Ray Alignment is the preferable method. Connections for the oscillograph are shown in the chassis drawing.

Output Meter Alignment.—If this method is used, connect the meter across the voice coil, and turn the receiver volume control to maximum.

Test-Oscillator.—For all alignment operations, connect the low side of the test-oscillator to the receiver chassis, and keep the output as low as possible to avoid a-v-c action.

Calibration Scale on Indicator-Drive-Cord Drum.—The tuning dial is fastened in the cabinet and cannot be used for reference during alignment, therefore a calibration scale is attached to the rear of the indicator-drive-cord drum which is mounted on the front shaft of the gang condenser. The setting of the gang condenser is read on this scale, which is calibrated in degrees. The correct setting of the gang in degrees, for each alignment frequency, is given in the alignment table.

As the first step in r-f alignment, check the position of the drum. The "0" mark on the drum scale must be vertical, and directly over the center of the gang-condenser shaft when the plates are fully meshed. The drum is held to the shaft by means of two set screws, which must be tightened securely when the drum is in the correct position.

To determine the corresponding frequency for any setting of the calibration scales, refer to the accompanying drawing which shows the dial with 0-180° calibration scales drawn at top and bottom.

Pointer for Calibration Scale.—Improvise a pointer for the calibration scale by fastening a piece of wire to the gang-condenser frame, and bend the wire so that it points to the "0" mark on the calibration scale when the plates are fully meshed.

Dial-Indicator Adjustment. — After fastening the chassis in the cabinet, attach the dial indicator to the drive cable with indicator at the 530 kc mark, and gang condenser fully meshed. The indicator has a spring clip for attachment to the cable. The spring clip should then be securely fastened to the drive cable with household cement.

Spread-Band Alignment.—The most satisfactory method of aligning or checking the spread-band ranges is on actual reception of short-wave stations of known frequency, by adjusting the magnetite-core oscillator coil for each band so that these stations come in at the correct points on the dial.

In exceptional cases, when the set is being serviced in a location where the noise level is high enough to prevent reception of short-wave stations, a test-oscillator may be used

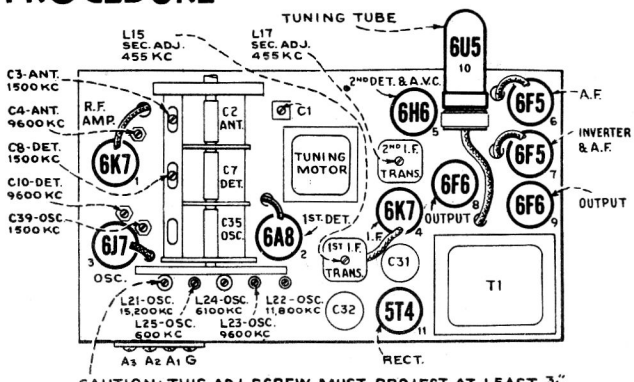


Figure 2—Tube and Trimmer Locations

for alignment, but an extremely high degree of accuracy is required in the frequency settings of the test-oscillator, as a slight error will produce considerable inaccuracy on the spread-band dials. The frequency settings of the test-oscillator may be checked by one or both of the following methods:

1. Determine the exact dial settings of the test-oscillator (for frequencies at or close to the specified alignment frequencies) by zero-bearing the test-oscillator against short-wave stations of known frequency.
2. Use harmonics of the standard-broadcast range of a test-oscillator, first checking the frequency settings on this range by means of a crystal calibrator (G.E. Stock No. 9572), or by zero-beating against standard broadcast stations.

When a test oscillator is employed for spread-band alignment, a final check should be made on actual reception of short-wave stations of known frequency, and the magnetite-core oscillator coil for each band should be re-adjusted so that the stations come in at the correct points on the dial.

Using G.E. Stock No. 150 Test Oscillator.—When using this oscillator for spread-band alignment, insert an open-circuit plug in the "EXT. MOD." jack, and set the test-oscillator dial 800 kc lower than the desired frequency for the four lower frequency ranges, and 800 kc higher than the desired frequency for the two high ranges. This provides an unmodulated signal of the desired frequency and the magic eye may be used as an output indicator for this unmodulated signal.

Steps	Connect the high side of test-oscillator to—	Tune Test-Oscillator to—	Range Selector	Set Tuning Gang to—	Adjust the following for max. peak output
No. 1	6K7 I-F grid cap, in series with .01 mfd.	455 kc	"A"	Quiet point between 550-750 kc	L16, L17 (2nd I-F transformer)
No. 2	6A8 1st-det. grid cap, in series with .01 mfd.	455 kc	"A"		L14, L15 (1st I-F transformer)
No. 3	A2, in series with 100 mmf. Connect A3 to chassis.	1,500 kc	"A"	1,500 kc (151.5°)	C39 (osc.) C3 (ant.) C8 (det.)
No. 4	A2, in series with 100 mmf. Connect A3 to chassis.	600 kc	"A"	600 kc (30.0°)	L25 (osc.)
No. 5	A2, in series with 100 mmf. Connect A3 to chassis.	1,500 kc	"A"	1,500 kc (151.5°)	C39 (osc.)
No. 6	A2. Connect A1 to chassis.	6,100 kc	"49M"	6,100 kc (106°)	L24 (osc.)*
No. 7	A2. Connect A1 to chassis.	9,600 kc	"31M"	9,600 kc (102°)	L23 (osc.)** C4 (ant.) C10 (det.)
No. 8	A2. Connect A1 to chassis.	11,800 kc	"25M"	11,800 kc (90.0°)	L22 (osc.)**
No. 9	A2. Connect A1 to chassis.	15,200 kc	"19M"	15,200 kc (78.0°)	L21 (osc.)**

*** Use maximum inductance peak (plunger in) if two peaks can obtained.**

**** Use minimum inductance peak (plunger out) if two peaks can be obtained.**

Note that the heterodyne oscillator tracks **above** the signal frequency on all bands except "49M," where it is lower than the signal frequency.

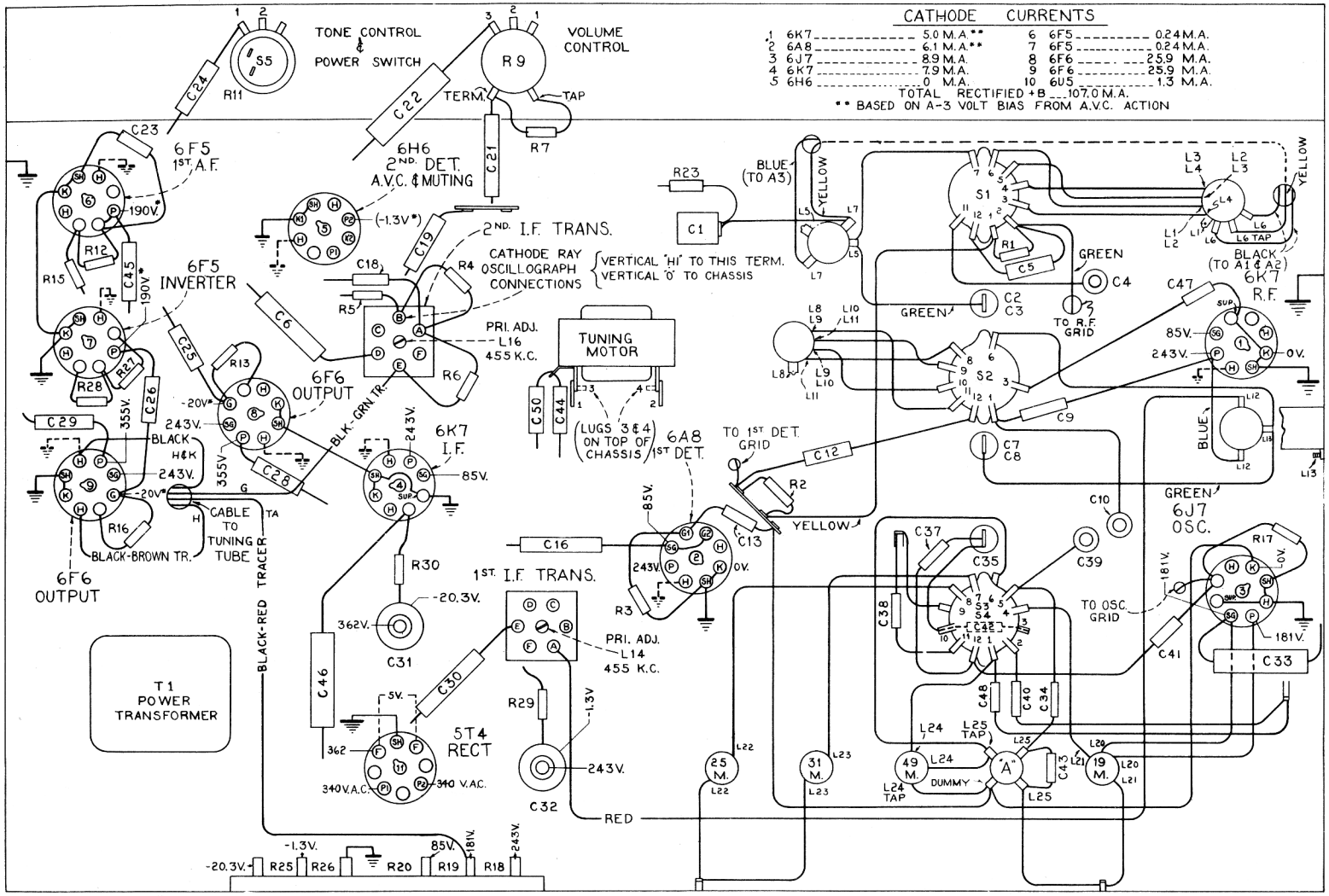
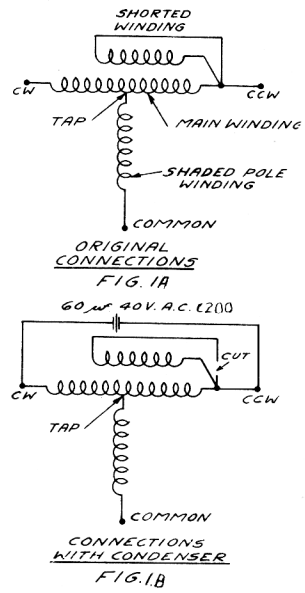


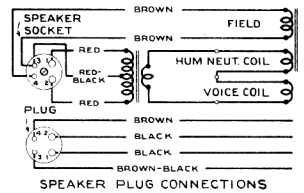
Figure 3—R-F Wiring Diagram and Socket Voltages

Measurements made to chassis unless otherwise indicated, with set tuned to quiet point and volume control at minimum. Values should hold within approximately ±20% with 117-volt a-c supply.

*** NOTE:** Values with star (*) are operating voltages in circuits with high series-resistance. The actual measured voltages will be lower, depending on the voltmeter loading.

TUNING MOTOR WIRING





Above — Connections and Colors of Loudspeaker and Cable.

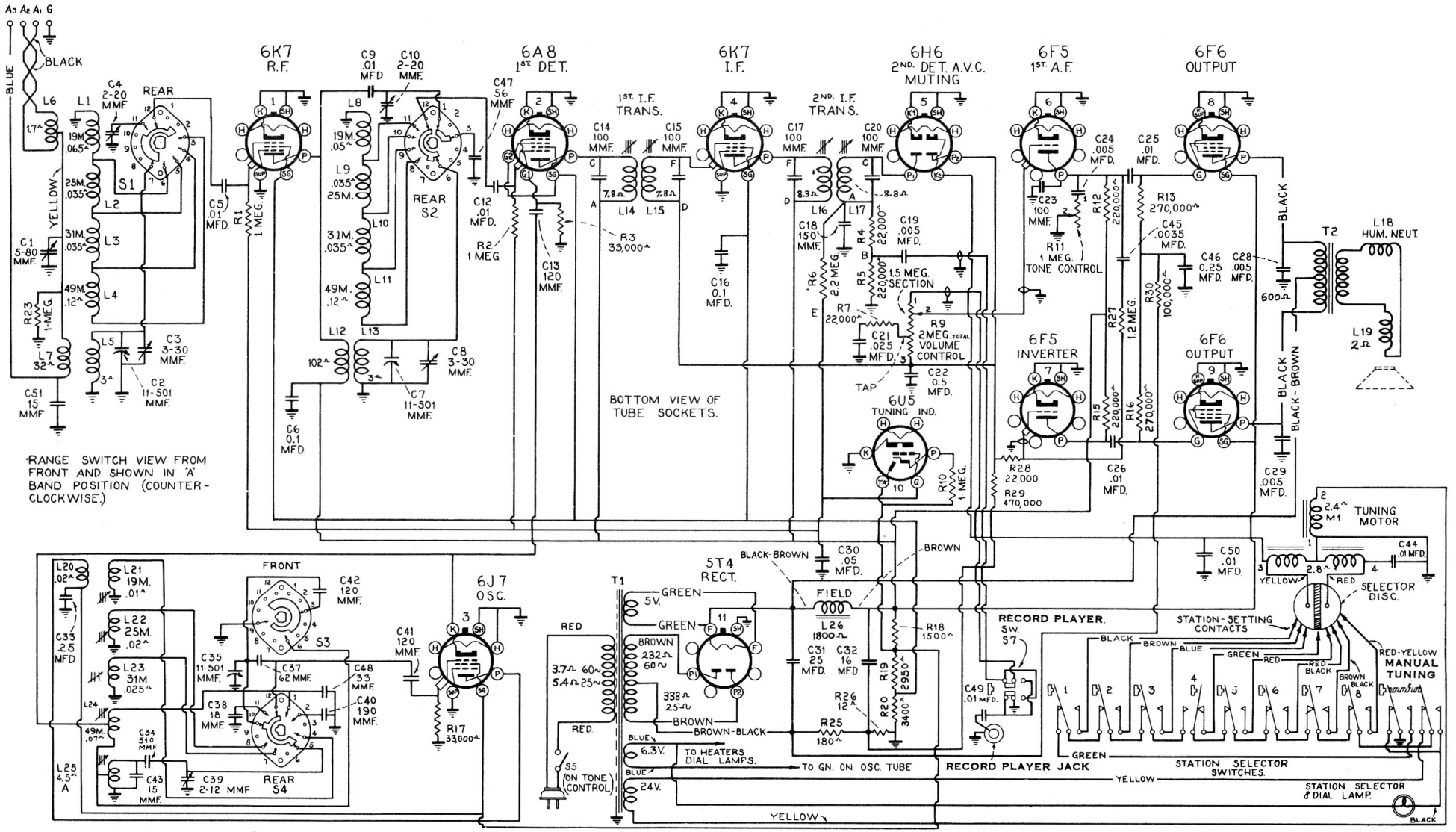


Figure 4—Schematic Circuit Diagram

Precautionary Lead Dress.—

(1) Keep tuning tube cable and the lead from the left pilot light away from the 6F5 grid cap.

(2) Leads on spread-band antenna and r-f coils should be kept short as possible.

(3) Keep black lead from L25 away from C38 and L24.

(4) Keep black lead from L25 to cathode lug on 6J7 away from R17.

(5) The power cord lead and the primary lead of the power transformer which connect to the power switch should be twisted together.

(6) Keep C13 away from the 6A8 control grid lead and from the chassis.

(7) Shielded leads to Record Player jack must be dressed away from switch terminals and jack.

(8) Blue and black leads from antenna board to coils must be twisted.

(9) Black lead and condenser which connect to 6F6 plate should be kept away from inverter grid lead and resistors which connect to it.

Electric Tuning Mechanism

The circuit of the electric tuning mechanism is shown in the schematic diagram, and the mechanical details are illustrated below.

The action can be understood by following a cycle of operation:

When a station key is pushed in, it completes the 24-volt circuit through the corresponding station-setting contact and one-half of the brass selector disc, which is connected to one side of the motor field coil. This energizes the motor, and the rotor is pulled forward, engaging with the gear train that drives the tuning condenser and selector disc. The condenser and disc rotate until the insulation line comes under the particular station-setting contact, and the motor circuit is broken. Inertia carries the insulation line past the station-setting contact which then makes contact to the other half of the disc: This completes the circuit to the other side of the motor field coil. causing the motor to reverse. The floating flywheel is still turning in the original direction and therefore slows down the reversal movement of the motor; as a result the selector disc is moved slowly back until the insulation line is under the station-setting contact, when the circuit is broken and the mechanism stops.

Adjustment of Flywheel Friction

In normal operation, the motor drives the tuning condenser and selector disc until the insulation line just passes the particular station-setting contact: The motor then reverses and moves the disc slowly in the opposite direction until the insulation line is under the contact, and the mechanism stops.

In some cases, particularly with high line-voltage, the disc may make two or three reversals before stopping.

The flywheel friction adjustment screw should be set to give the least number of reversals with the chassis in normal horizontal position.

Adjustment of Selector Disc.

The brass selector disc is fastened to the rear shaft of the tuning condenser by means of two set-screws. When the condenser is at maximum (plates fully meshed) the insulation line should be horizontal, with the operating-end at the left (viewed from rear). The operating-end has dark insulating material and the brass is beveled at this end.

The selector disc should be set so that the contact-tip plungers in the station-setting contacts project not more than 1/16-in. from the body of the contacts.

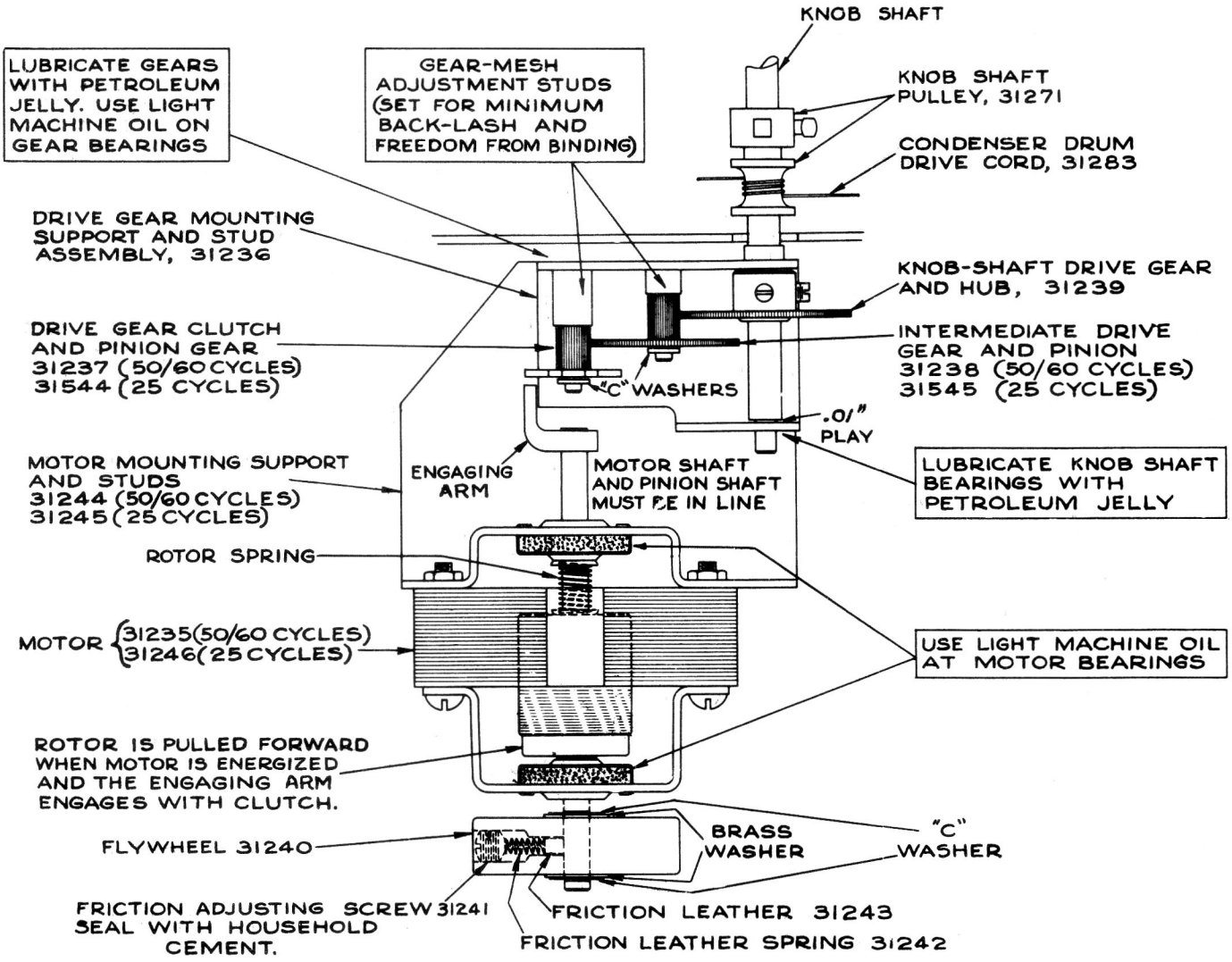


Figure 5—Motor and Gear Mechanism

There must be 1/32-inch clearance between the end of the engaging arm and the face of the intermediate gear when the motor is in its full forward position.

Muting Circuit

When the electric tuning mechanism is in action, the motor-supply voltage is fed into a diode rectifier circuit which applies a high bias to the I-F and first-audio tubes. This prevents audio amplification and makes the set quiet or "mute" while the mechanism is operating.

Lubrication

Motor bearings and **gear bearings;** use light machine oil.

Gear faces; use "Pure Oil No. 611" or petroleum jelly.

Dial-indicator pulleys and **rails;** use "Castordag" or petroleum jelly.

Selector disc; apply *thin* film of petroleum jelly.

Friction leather on flywheel; apply "neats-foot" oil. When replacing leather, soak it for at least 24 hours in neats-foot oil, and insert in flywheel while dripping.

Remote Control Unit

When a Model RK67 Remote Control is connected to the receiver as shown in figure 7 it duplicates the action of the keys on the front panel when No. 1 key is pressed down. The black lead from key No. 1 is unsoldered from No. 1 station-setting contact and soldered to a terminal board which is to be mounted on the frame of selector mechanism. In some cases one of the other seven keys on the set may be used in place of No. 1 key for the operation of the Remote Control.

This arrangement allows the use of only seven of the eight keys when tuning in stations at the set, but allows the use of the entire eight keys on the Model RK67 Remote Control. In operating the RK67 Remote Control the key must be held down until the station has been tuned in. Care must be taken not to hold two of the station-keys down at one time as both windings of the motor may be engaged simultaneously causing the motor to be inoperative and overheated.

ADJUSTMENTS FOR ELECTRIC TUNING

1. Make a list of the desired eight stations, arranged in order from low to high frequencies.

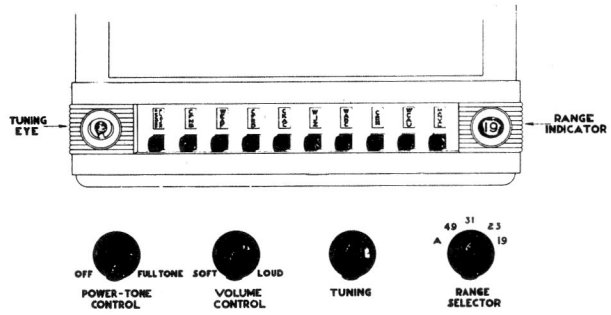


Figure 6—Location of Controls

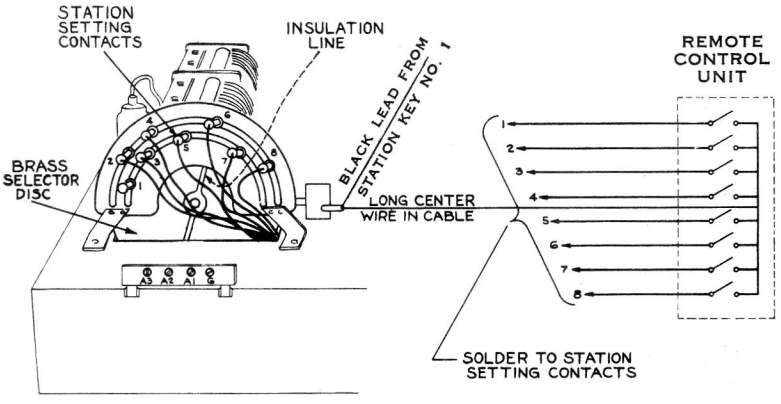
The left-hand key is a Record Player Attachment switch. The right-hand key is for manual tuning.

2. Turn range selector to "A" band, turn power on, and allow a few minutes for warming up.
3. Press down the "manual tuning" (right-hand) key.
4. Manually tune in the first station on the list, using the "Tuning Eye" for accurate tuning.
5. Hold down the "manual tuning" key, and press down station key No. 1 (second from left). Both keys will stay down. Move station-setting contact No. 1 to the insulating line on the disc at rear of gang. When the contact is correctly centered on the insulating line, the central dial lamp will go out.
6. Press down any other key in order to release the manual tuning key and station key No. 1. Then press down station key No. 1 again. The electric tuning mechanism will function to tune in the station, and the central dial lamp will stay on.
7. Repeat this process for the remaining stations.

Figure 7—Station-Setting Contacts and Selector Disc

This illustration shows connections for a RK67 Remote Control Unit. This unit is not supplied with the receiver but may be added as an accessory.

Station Key	Color of Lead To Station-Setting Contact
No. 1	Black
No. 2	Brown
No. 3	Blue
No. 4	Green
No. 5	Red
No. 6	Red-black
No. 7	Brown-black
No. 8	Red-yellow



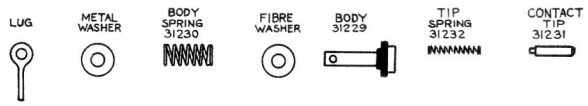
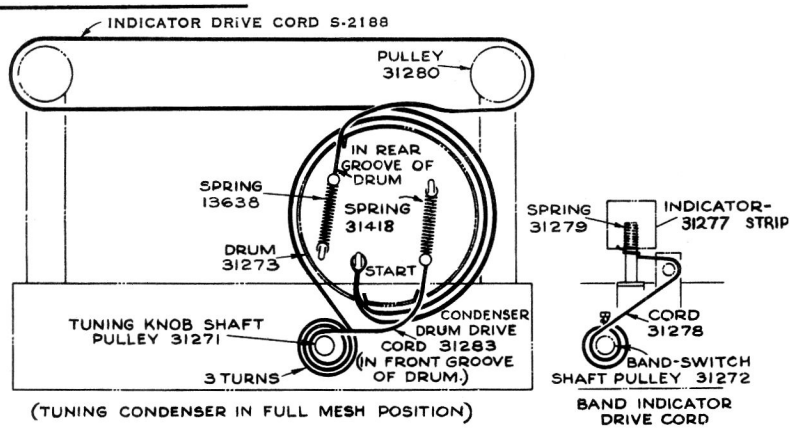


Figure 8—(Above) Component Parts of Station-Setting Contact

Figure 9—(At Right) Drive Cord Arrangement for Tuning Condenser, Dial Indicator, and Band Switch



REPLACEMENT PARTS MODEL G-117

STOCK No.	DESCRIPTION
	RECEIVER ASSEMBLIES
31253	Board-Antenna and ground terminal board
31229	Body-Station-setting contact body,less contact tip and tip spring.....
12714	Capacitor-Adjustable trimmer,2-12 mmfd. (C39).....
12884	Capacitor-Adjustable trimmer,2-20 mmfd (C4,C10).....
31252	Capacitor-Adjustable trimmer,5-80 mmfd (C1).....
31353	Capacitor-15 mmfd. (C43).....
12896	Capacitor-15 mmfd. (C51).....
31350	Capacitor-18 mmfd. (C38).....
31354	Capacitor-33 mmfd. (C48).....
12723	Capacitor-56 mmfd. (C47).....
31349	Capacitor-62 mmfd. (C37).....
12720	Capacitor-100 mmfd. (C23).....
31270	Capacitor-100 mmfd. (C14,C15,C17,C20).
12724	Capacitor-120 mmfd. (C13,C41).....
31352	Capacitor-120 mmfd. (C42).....
12725	Capacitor-150 mmfd. (C18).....
31351	Capacitor-190 mmfd. (C40).....
31348	Capacitor-510 mmfd. (C34).....
30303	Capacitor-.0035 mfd.(C45).....
4838	Capacitor-.005 mfd. (C19,C24,C28,C29).
14393	Capacitor-.01 mfd. (C5,C12,C25,C26, C44,C49,C50).....
4858	Capacitor-.01 mfd. (C9).....
4870	Capacitor-.025 mfd.(C21).....
4886	Capacitor-.05 mfd. (C30).....
4839	Capacitor-0.1 mfd. (C6,C16).....
12484	Capacitor-0.25 mfd. (C33,C46).....
30867	Capacitor-0.5 mfd. (C22).....
5212	Capacitor-16 mfd. (C32).....
14531	Capacitor-25 mfd. (C31).....
S-2208	Capacitor-60 mfd. (C200).....
31544	Clutch-Variable condenser drive gear clutch and pinion gear-engages pin on motor shaft-25 cycle models only.....
31237	Clutch-Variable condenser drive gear clutch and pinion gear-engages pin on motor shaft,50-60 cycle models only..
31263	Coil-"A" Band antenna coil (L5,L7)....
31257	Coil-"A" Band oscillator coil (L25)...
31265	Coil-"A" Band detector coil (L12,L13).
31264	Coil-Coil 19,25,31 and 49 meter band-spread antenna coil (L1,L2,L3,L4,L6).
31266	Coil-19,25,31,and 49 meter bandspread detector coil (L8,L9,L10,L11).....
31258	Coil-19 meter band oscillator coil (L20,L21).....
31254	Coil-25 meter band oscillator coil (L22).....
31255	Coil-31 meter band oscillator coil (L23).....
31256	Coil-49 meter band oscillator coil (L24).....
31234	Condenser-3-gang variable condenser (C2,C3,C7,C8,C35).....
31231	Contact-Contact tip for station-setting contact-Pkg.of 2).....
31260	Core-Adjustable core and stud for "A" band oscillator coil.....
31269	Core-Adjustable core and stud for i-f transformer.....
31259	Core-Adjustable core and stud for 19, 25,31,or 49 meter band oscillator coils.....
31273	Drum-Indicator drive cord drum.....
31240	Flywheel-Variable condenser drive motor flywheel.....
S-2209	Fuse-3 ampere motor fuse.....
31545	Gear-Variable condenser intermediate drive gear and pinion gear,25 cycle models only.....
31238	Gear-Variable condenser intermediate drive gear and pinion gear,50/60 cycle models only.....
31239	Gear-Variable condenser knob shaft drive gear and hub.....
11891	Lamp-Dial lamp.....
31480	Lamp-Electric tuning adjustment indicator lamp.....
31243	Leather-Friction leather for flywheel Pkg.of 2.....

STOCK No.	DESCRIPTION
31246	Motor-Variable condenser drive motor (M-1)-25 cycle models only.....
31235	Motor-Variable condenser drive Motor (M-1)-50/60 cycle models only.....
31228	Plate-Selector contact plate-less contacts.....
31227	Plate-Selector mounting plate-mounts on rear of variable condenser.....
5040	Plug-4-contact female for speaker cable.
31271	Pulley-Motor pulley.....
31272	Pulley-Range switch pulley.....
31250	Resistor-Voltage divider comprising one 1,500 ohms,one 2,950 ohms,one 3,400 ohms,one 12 ohms,and one 180 ohms sections (R18,R19,R20,R25,R26).....
14284	Resistor-22,000 ohms,1/10 watt (R4,R7, R28).....
11300	Resistor-33,000 ohms,1/10 watt (R3,R17).
11281	Resistor-100,000 ohms,1/10 watt (R30)...
11398	Resistor-220,000 ohms,1/10 watt (R12, R15).....
12264	Resistor-220,000 ohms,½ watt (R5).....
11453	Resistor-270,000 ohms,1/10 watt (R13, R16).....
11452	Resistor-470,000 ohms,1/10 watt (R29)...
12013	Resistor-1 meg.,1/10 watt (R2,R10).....
13730	Resistor-1 meg.,½ watt (R1,R23).....
31056	Resistor-1.2 meg.,1/10 watt (R27).....
5131	Resistor-2.2 meg.,1/10 watt (R6).....
31233	Rotor-Selector rotor disc-mounts on rear of variable condenser shaft.....
31241	Screw-¼x20 headless,cone point set screw for flywheel (Pkg.of 20).....
14350	Screw-No.8-32 square head set screw for selector rotor disc (Pkg.of 10).....
4119	Screw-No.8-32 headless set screw for gear,Stock No.31239 (Pkg.of 20).....
4669	Screw-No.8-32 square head set screw for pulley,Stock Nos.31271 and 31272,and drum,Stock No.31273 (Pkg.of 10).....
31364	Socket-Dial lamp socket.....
13871	Socket-Tuning Eye socket.....
31251	Socket-Radiotron socket.....
31365	Socket-Tuning indicator lamp insulated socket.....
31232	Spring-Contact tip spring for station-setting contact (Pkg.of 10).....
12007	Spring-Retaining spring for core,Stock No.31269 (Pkg.of 10).....
31230	Spring-Station-setting contact body spring (Pkg.of 10).....
31261	Spring-Tension spring for core,Stock No.31259 (Pkg.of 10).....
31262	Spring-Tension spring for core,Stock No.31260 (Pkg.of 10).....
31242	Spring-Tension spring for flywheel (Pkg.of 10).....
31245	Support-Variable condenser motor mounting support and studs-for 25 cycle models only.....
31244	Support-Variable condenser motor mounting support and studs-for 50-60 cycle models only.....
31236	Support-Variable condenser drive gear mounting support and studs assembly....
31247	Switch-Range switch (S1,S2,S3,S4).....
31248	Tone Control-H-f tone control and power switch (R11,S5).....
*32068	Transformer-First i-f transformer (L14, L15,C14,C15).....
31267	Transformer-First i-f transformer (L14, L15,C14,C15).....
*14283	Transformer-Second i-f transformer (L16, L17,C17,C20).....
31268	Transformer-Second i-f transformer (L16, L17,C17,C20).....
31226	Transformer-Power transformer,110 volts, 25-60 cycle (T1).....
31225	Transformer-Power transformer,110 volts, 50-60 cycle (T1).....
31249	Volume Control (R9).....
	SPEAKER ASSEMBLIES **Speaker RL70H-2**
13866	Cap-Dust cap for cone center-(Pkg.of 5).
11234	Coil-Field coil (L26).....

*NOTE - On some models Stock #32068 (First i.f. transformer) and stock #14283 (Second i.f. transformer) were used, they may be distinguished by the following marking 76456-508 (first i-f and 70456-503 (second i.f.).

REPLACEMENT PARTS MODEL G-117

STOCK No.	DESCRIPTION
11469	Coil-Neutralizing coil (L18).....
31275	Cone-Speaker cone and voice coil(L19)
5039	Plug-4-contact male plug for speaker.....
31530	Speaker-Complete.....
14534	Transformer-Output transformer (T2)..
14357	Washer-Spring washer to hold field coil securely (Pkg.of 5).....
	MISCELLANEOUS ASSEMBLIES
31276	Bracket-Band indicator mounting bracket complete except less band indicating strip,cord,and tension spring.....
31282	Bracket-Tuning Eye bracket and holder
31344	Contact-Key switch contacts-comprising 13 contacts riveted on insulating strip.....
31345	Contact-Key switch contacts-comprising 10 contacts riveted on insulating strip.....
31278	Cord-Band indicator drive cord.....
S-2188	Cord-Indicator pointer drive cord....
31456	Cover-Protective covers for key markers.....
31283	Cord-Variable condenser drum drive cord.....
31359	Cushion-Station selector key rubber cushion.....
S-2203	Dial-Station selector dial scale.....
S-2200	Escutcheon-Station selector dial escutcheon.....
31277	Indicator-Band indicator strip.....
S-2202	Indicator-Station selector indicator pointer.....
S-2199	Key-Station selector key.....
S-2155	Knob-Range switch,tone control, volume control or station selector knob.....
31346	Lock-Plate-Key switch lock-plate, comprising 10 contact locks in one strip.....
S-2185	Marker-"Record Player" key marker Pkg.of 10.....
S-2186	Marker-"Manual" key marker (Pkg.of 10).....
S-2183	Marker-Station call letter key markers.....

STOCK No.	DESCRIPTION
31280	Pulley-Indicator pointer drive cord pulley.....
14887	Retainer-Indicator pointer drive cord pulley retainer (Pkg.of 20).....
11210	Screw-Chassis mounting screws,washers, and lockwashers for 1 chassis (Pkg. of 4).....
S-2025	Screw-Escutcheon mounting screws (Pkg. of 20).....
31287	Shaft-Indicator pointer slide shaft....
31286	Slide-Indicator pointer carriage and clip.....
31347	Socket-Pickup socket and bracket.....
13638	Spring-Indicator pointer drive cord tension spring (Pkg.of 5).....
31418	Spring-Variable condenser drive cord tension spring (Pkg.of 3).....
31279	Spring-Tension spring for band indicator (Pkg.of 10).....
31313	Spring-Tension spring for station selector key switch latch bar (Pkg.of 5).....
14270	Spring-Retaining spring for knob,Stock No.31355 (Pkg.of 10).....
31288	Stop-Indicator pointer slide stop.....
31360	Switch-Pickup switch for mounting on key switch assembly (S7).....
31312	Switch-Station selector key switch and bracket assembly, complete.....
S-2201	Window-Station selector dial scale crystal.....
	ANTENNA ASSEMBLIES
31426	Counterpoise Line-Additional length 60 ft. long.....
12426	Insulator-Strain and counterpoise insulator-(Pkg.of 5).....
9816	Transmission Line-Additional length 60 ft. long.....