

REPLACEMENT PARTS

CONDENSERS

Symbol	Description	Part No.
C15	.002 mfd. 600 Volt	64B1-14
C1, C7	.005 mfd. 600 Volt	64B1-12
C10	.01 mfd. 400 Volt	64B1-25
C5	.05 mfd. 200 Volt	64B1-32
C11, C12	.0001 mfd.	65B7-17
C2, C6	.00025 mfd.	65B7-22
C8	.0008 mfd.	64B5-31
C9	4. mfd. 150 Volt	67A4-2
C3, C4	Dual trimmer	66A9-1
C13, C16	.01 mfd. 400 Volt	64B1-25

RESISTORS

R12	.75 ohm 1/4 w (wire)	61A2-1
R11	390. ohm 1/4 w	60B2-301
R13	2200 ohm 1/4 w	60B2-222
R1	15,000 ohm 1/2 w	60B8-153
R4	33,000 ohm 1/2 w	60B8-333
R3	220,000 ohm 1/2 w	60B8-224
R2	470,000 ohm 1/4 w	60B2-474
R9, R10	1,000,000 ohm 1/4 w	60B2-105
R6	2,200,000 ohm 1/4 w	60B2-225
R5, R8	4,700,000 ohm 1/4 w	60B2-475

TRANSFORMERS and COILS

Symbol	Description	Part No.
L1	Antenna Coil	AC105-1
L2	Oscillator Coil	AB104-4
L3	1st I.F. Transformer	72B5
L4	2nd I.F. Transformer	72B6
L5	Choke Coil (RF)	AB103-1
T1	Output Transformer (specify full speaker part no. including mfg. code when ordering.)	

MISCELLANEOUS

Description	Part No.
Background, Dial	22C5-1
Cabinet, R643-W	35C25
Cable, Battery (complete with plug)	A1026
Cap. Grid	90A1-4
Cord, Dial (5" on tuner) (53" on dial drive)	50A1-1
Drum and Hub, Tuning	A1035
Escutcheon	23A8-1
Iron Core, with wire (Osc.)	71B1-3
Iron Core, with wire (Ant.)	71B1-4
Knob	A1028
Permeability Tuner Assembly, complete	33A7-2

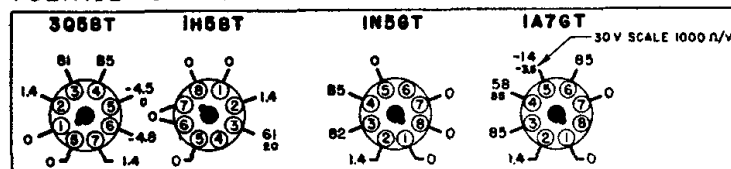
MISCELLANEOUS

Description	Part No.
Plug, Battery 5 Prong	88A4-4
Pointer, Dial	25A9-1
Pulley, Fibre Dial	17A1-3
Scale, Glass Dial	21B13
Screw studs (for iron cores)	27A4
Shield, Tube	87A8
Shaft, Tuning	28A11-1
Shaft and pulley (Tuner)	A1040
Socket, octal tube	87A10-2
Speaker and output Transformer (specify all numbers appearing on Output Trans. as well as speaker when ordering.)	78B5
Spring, Dial Drum Cord Tension	19A1-3
Spring, Tuner slide cord tension	19A1-4
Spring, Tuner slide pressure	18A1
Spring, Tuner, front bearing takeup	19A5
Spring, Tuner, back bearing takeup	19A6
Spring, Hairpin (To hold Ant-Osc. coils)	19A3-1
Switch, SPST (Economizer) SW2	88A1-6
Terminal, Tuner slide cord	9A8-1
Washer, C	4A4-1
Washer, spring (shaft)	4A6-3-0
Washer, spring (coils)	4A6-5-0

VOLTAGE DATA

All readings made between tube socket terminals and chassis. Voltages indicated have been obtained using a Vacuum Tube Voltmeter. A second voltage reading is shown made with a 1000 ohm per voltmeter, when use of this instrument would result in appreciably lower readings. Measured with a fresh battery, volume control full on, dial at the high frequency end, no signal.

VOLTAGE CHART



BACK OF CHASSIS

BOTTOM VIEW

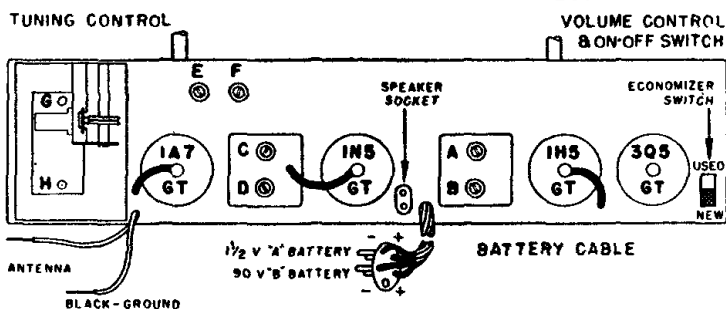
ALIGNMENT PROCEDURE

1. **IMPORTANT**—Check to see that dial pointer reaches each end of dial scale when Station Selector Control is turned from one end to the other.
2. **Volume control**—Maximum for all adjustments.
3. Connect radio chassis to ground post of signal generator with a short heavy lead.
4. Connect output meter across voice coil of speaker.
5. Connect dummy antenna value in series with generator output lead, when needed (see below).
6. Allow chassis and signal generator to "heat up" for several minutes.
7. Use lowest Output setting of Signal Generator capable of producing adequate Output Meter indication and then proceed in the following sequence.

BAND	SIGNAL GENERATOR		Connection to Radio	Receiver Dial Setting	Trimmers Adjusted (In Order Shown)	Trimmer Function	Type of Adjustment
	Frequency Setting	Dummy Antenna					
I.F.	455 KC.	.1 mfd.	Grid of 1A7 (Cap)	High Frequency end of dial	C-D—2nd I.F.	Output I.F.	Adjust to maximum output
I.F.	455 KC.	.1 mfd.	Grid of 1A7 (Cap)	High Frequency end of dial	A-B—1st I.F.	Input I.F.	Adjust to maximum output
Broad-cast	1630 KC.	.00025 mfd. Mica	Antenna Lead	High Frequency end of dial	E-(See note below) F-(See note below)	Oscillator Antenna	Adjust to maximum output
Broad-cast	1300 KC.	.00025 mfd. Mica	Antenna Lead	1300 KC.	G H	Oscillator Antenna	Adjust to maximum output

NOTE: Before adjusting trimmers "E" and "F," make sure that each iron core is $1\frac{1}{8}$ " or more outside of its coil form. If necessary, turn adjustments "G" and "H" to accomplish this.

TUBE AND TRIMMER LOCATION



CIRCUIT

Battery operated 4 Tube Superheterodyne with Single Tuning Range 535 KC. to 1630 KC. Covers standard broadcast band, using antenna and ground. Permeability tuning on Ant. and Osc. circuits. I.F. 455 KC.

POWER SUPPLY

Single unit "AB" battery pack. 90 volt "B" 1½ volt "A." Plug in connection. Use Ensign AB48, Burgess 17G-D60, Eveready 748, General 60DL-11L, Ray-O-Vac AB-82, or Bond 0528 Battery or Equivalent.

ECONOMIZER SWITCH

The battery economizer switch is located on the top of the chassis, right side.

Always have this Economizer Switch in the "NEW" battery position when first placing radio in operation or when installing a new battery.

STRINGING DIAGRAM

