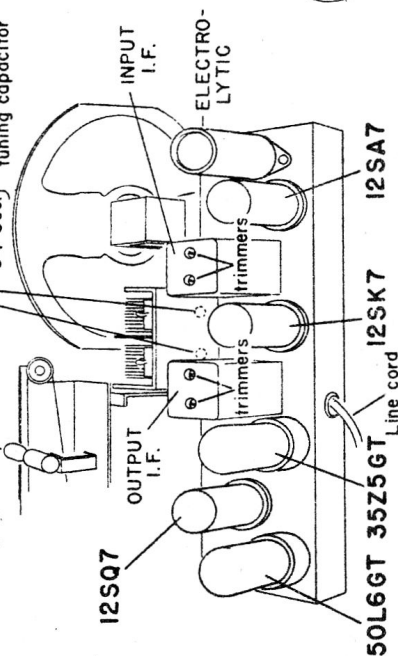


Power Supply 105-125 volts, DC or 50-60 cycle AC, 27 watts. 25-cycle model also made.

Frequency Range 530-1650 kc.

Pilot light
6-8 volt

TRIMMERS
C2 Ant. } on bottom of
C4 Osc. } tuning capacitor



Intermediate Freq 455 kc.

Antenna Built-in loop; provisions also for external antenna connection.

Tuning Speaker Two-gang capacitor.
5-inch, P.M., voice coil impedance 3.2 ohms.

Power Output 0.94 watt undistorted.
1.4 watts maximum.

Sensitivity 30 microvolts average for 50-milli watt output.

Selectivity 52 kc broad at 1000 times signal at 1000 kc.

Replacement of Dial

Pointer Drive Cord

After stringing as shown tune in station of a known frequency and set pointer at proper position along dial. Apply a drop of glue to secure pointer to string.

turn pulley to extreme counter-clockwise position.

-6-18-46

BELMONT RADIO CORP.

ALIGNMENT PROCEDURE

- Output meter across 3.2-ohm output load.
- Volume control at maximum.
- Chassis must be removed from cabinet for proper alignment. Slight adjustments of the oscillator and antenna trimmers can be made, without removing the

- chassis, through holes provided on the bottom of the cabinet.
- Connect ground post of signal generator to B— of radio.
- Align for maximum output. Reduce input as needed to keep output near 0.4 volts.

| SIGNAL GENERATOR | | | TUNER SETTING | ADJUST TRIMMERS TO MAXIMUM OUTPUT (in order shown) |
|------------------|--------------------|---------------------|--------------------------------------|--|
| Frequency | Coupling Capacitor | Connection to Radio | | |
| 455 kc | .1 mf | 12SA7 grid | Rotor full open (plates out of mesh) | Input and output trimmers on IF cans |
| 1650 kc | .1 mf | 12SA7 grid | Rotor full open (plates out of mesh) | Oscillator trimmer C4 |
| 1400 kc† | None | See note below | 1400 kc | Antenna trimmer C2 |

† For this adjustment chassis should be remounted in cabinet and loop connected. Lay generator lead near loop and turn up output. Loop will pick up energy. Antenna trimmer can be reached through a hole in the bottom of the cabinet.

REPLACEMENT PARTS LIST

When ordering parts, specify part number, model number, and series

Ref. No. Part No. Description

CAPACITORS

| | | |
|----------|------------|--|
| C1 | C-8D-10761 | .01 mf, 400 volts, 20% |
| C3-A, B | B-8A-10754 | Two-gang, including antenna and oscillator trimmers. Range of gang: 11-388 mmf (ant.) and 8.5-162 mmf (osc.) |
| C2, C4 | | |
| C5, C7 | C-8F3-8 | 100 mmf, 20%, mica |
| C6, C15 | C-8D-10770 | .05 mf, 200 volts, 20% |
| C8 | C-8D-10789 | .002 mf, 600 volts, 20% |
| C9 | C-8F3-10 | 220 mmf, 20%, mica |
| C10 | C-8D-10788 | .004 mf, 600 volts, 20% |
| C11 | C-8D-10774 | .02 mf, 400 volts, 20% |
| C12 | C-8D-10760 | .1 mf, 400 volts, +20%—10% |
| C13 | C-8D-10953 | .15 mf, 400 volts, +20%—10% |
| C14-A, B | 11992 | Electrolytic, 60 cycles, 40 mf-20 mf, 150 volts |
| | or | |
| | 11993 | Electrolytic, 25 cycles, 60 mf-40 mf, 150 volts |

RESISTORS*

| | | |
|---------|----------|---|
| R1 | C-9B1-13 | 1000 ohms, 1/2 watt, 20% |
| R2 | C-9B1-82 | 47,000 ohms, 1/2 watt, 10% |
| R3 | C-9B1-46 | 47 ohms, 1/2 watt, 10% |
| R4 | C-9B1-34 | 3.3 megohms, 1/2 watt, 20% |
| R5 | C-9B1-85 | 82,000 ohms, 1/2 watt, 10% |
| R6, S1 | 101198 | Volume control (1 megohm) and on-off switch |
| R7 | C-9B1-37 | 10 megohms, 1/2 watt, 20% |
| R8, R11 | C-9B1-27 | 220,000 ohms, 1/2 watt, 20% |
| R9 | C-9B1-29 | 470,000 ohms, 1/2 watt, 20% |
| R10 | C-9B1-53 | 180 ohms, 1/2 watt, 10% |
| R12 | C-9B1-41 | 18 ohms, 1/2 watt, 10% |
| R13 | C-9B1-43 | 27 ohms, 1/2 watt, 10% |
| R14 | C-9B2-64 | 1500 ohms, 1 watt, 10% |

COILS AND TRANSFORMERS

| | | |
|----|-------------|--|
| L1 | 12311 | Load coil |
| T1 | C-212-10895 | Loop antenna assembly, including coil L1, resistor R1, and capacitor C1 |
| T2 | A-13D-10748 | Oscillator coil |
| T3 | B-13B-10091 | Input I.F. transformer, complete in can. Range of trimmers: 45-85 mmf each |

NOTE ON TUBE REPLACEMENT

Replace a defective metal 12SK7 tube with another metal tube. Replace a glass 12SK7 tube with a metal tube or with an exact duplicate of the tube now in the set.

Ref. No. Part No. Description

| | | |
|----|-------------|---|
| T4 | B-13B-10812 | Output I.F. transformer complete in can. Range of trimmers: 56-104 mmf each |
| T5 | B-12C-10735 | Output transformer |

DIAL AND TUNING PARTS

| | |
|--------------|--|
| B-5B-10994-9 | Tuning knob |
| 128523-8 | Volume knob |
| A-3F-10995 | Locking screw for tuning knob |
| 120388 | Locking spring for tuning knob |
| 128292B-8 | Pushbutton |
| A-6D-10758 | Dial scale |
| 112857 | Dial crystal |
| 112745 | Dial pointer |
| 131211 | Snap-in rivets for dial scale and crystal |
| 115361R | Lever and roller (roller faces away from gang) |
| 115361L | Lever and roller (roller faces gang) |
| 120283 | Return spring for lever |
| 115146 | Cams |
| 115145 | Keywasher (11 used) |
| 1209 | Cord for dial pointer drive (15") |
| 120285 | Spring for drive cord |

MISCELLANEOUS

| | |
|-------------|-----------------------------------|
| 114201 | Speaker, 5-inch, P.M. |
| A-15B-10440 | Tube socket (all tubes but 12SK7) |
| 121171 | Tube socket (for 12SK7) |
| B-15B-10076 | Socket for electrolytic |
| 10798 | Line cord and plug |
| 107249 | Pilot light, type T-47 |
| 107342 | Pilot light socket assembly |
| 128561-9 | Cabinet |
| 131193 | Snap-in rivets, for cabinet back |
| 134123 | Rubber foot |
| 112784 | Set of call letters |
| 112606 | Acetate tabs for pushbuttons |

* The values of the resistors listed above are based on RMA standards, equally well with resistors of either group. An illustration of the difference follows: Pre-standardized value—200,000 ohms, 1/2 watt, 10% with resistors of pre-standardized values. This receiver will operate RMA value—220,000 ohms, 1/2 watt, 10%

DIAL LIGHT—If the dial lamp burns out the set should not be operated until a new lamp has been installed. Failure to heed this caution may result in a burned-out 35Z5GT tube. To replace the lamp it is necessary to remove the back (see under "Tubes" below). Use only a type T-47 lamp for replacement.

TUBES—Tubes which have weakened with age may cause poor or erratic reception; therefore have the tubes tested periodically and replace those which are weak. To reach the tubes, pry off the four snap-in rivets which secure the back to the cabinet. Take care not to break the connections of the three wires to the loop antenna

on the inside of the back. Tubes are removed most easily by rocking them back and forth gently while lifting. When replacing tubes, refer to the Chassis View to make sure that the replacements are properly made. **IMPORTANT:** See note in parts list concerning tube replacement.

SETTING THE PUSHBUTTONS—The pushbuttons may be used, after proper adjustment, for the automatic tuning of any five stations on the standard broadcast band. They can be set up in any order.

1. Turn on the radio.
2. Push out the call letters of the five stations from the call-letter sheets supplied with this manual.
3. Insert one call-letter tab in the rectangular opening in the front of each pushbutton, in any order. Press an acetate tab (supplied in small envelope) into each of the pushbuttons.
4. With the screwdriver supplied, check to see that the locking screw in the center of the tuning knob (see front view) is loose. If it is not, turn it several turns to the left (counterclockwise).

5. Press the first pushbutton down *all the way*. With one hand hold the button down firmly and with the other carefully tune in the desired station. Release the pushbutton.

6. Follow this procedure for each of the four other buttons, setting each one for a different station.

7. Rotate the tuning knob on the side of the cabinet as far to the right as it will go. Tighten the locking screw in the center of the knob. *It is important that this screw be tightened very firmly.*

8. The pushbuttons are now properly set for automatic tuning. Any of the five stations may be tuned in simply by pressing the proper button down as far as it will go. If you wish to reset any of the buttons for a new station, loosen the locking screw, set the pushbutton as described above, and re-tighten the locking screw.

REMOVAL OF CHASSIS—If for any reason you wish to remove the radio chassis from the cabinet, proceed as follows: First be sure the line cord is disconnected from the house power receptacle. Then take off the back as described under "Tubes" above.

Pull the volume control knob off its shaft. Unscrew the locking screw in the center of the tuning knob and pull the knob off its shaft. Remove the four chassis mounting screws from the bottom of the cabinet. The chassis can now be slipped out.

After the chassis is replaced the automatic pushbuttons will probably have to be reset.

ANTENNA AND GROUND—If an external antenna is used, check it periodically to make sure that all connections are clean and tight and that the antenna is insulated from the ground at all points.