OWNERS MANUAL

OF

Installation - Operation - Service

for

The NEW
"Balanced Reception" Radio

in

1938 FORD CARS

with

The Ford Adjustable Aerial

Manufactured Expressly for

FORD MOTOR COMPANY

DEARBORN, MICHIGAN

by

PHILCO

PHILADELPHIA, PENNSYLVANIA

KEEP THIS MANUAL IN THE GLOVE BOX

The Finest Radio — Built for the FORD AUTOMOBILE

Here are the Outstanding Features —

1. Single unit simplicity with two unit performance.
2. A specially designed Receiver, speaker and control to fit the instrument board grille.
3. A six tube Receiver with eight tube performance. Two multi-purpose tubes are used, thus giving the added performance of two additional tubes.
4. Exceptional tone quality and volume. Due to new circuit design and the type output tube used, there is usually fidelity of reproduction and more than ample undistorted volume.
5. Large six-inch dynamic speaker, using a newly designed outside spider cone. The speaker covers the complete tonal range, from treble to bass.
6. Precision-built, self-contained controls. All mechanism of the control is contained within the Receiver unit, and, due to its watch-like precision construction, there is unusual smoothness and ease of control. The absence of the usual flexible control cables adds to the appearance of the installation, as well as eliminates the possibility of service troubles and difficult operation.
7. The Receiver circuit is engineered to match the Ford Roof Antenna, thus insuring maximum performance at all times.
8. The tone control enables the operator to select the tone most pleasing to his ear for the particular program tuned in.
9. Ruggedly constructed of quality material. This means long life with minimum service requirements.

The New Ford Radio Receiver

SOLD EXCLUSIVELY BY FORD DEALERS

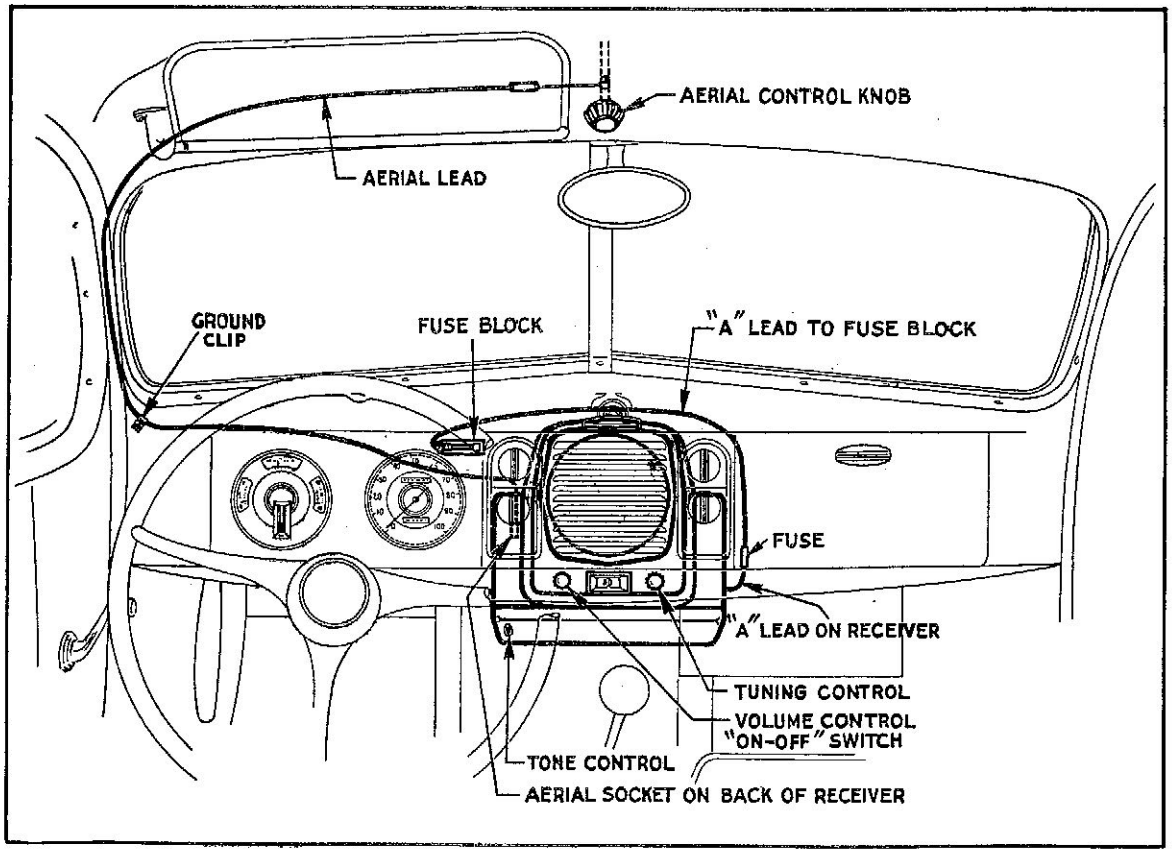


FIGURE 1

The Receiver, speaker and control assembly are installed between the instrument board and the dash. The speaker is located directly behind the ornamental grille in the center of the instrument board. (See Figure 1).

Many Happy Miles With a Ford Auto Radio

INSTALLATION PROCEDURE

1. Remove the emblem below the center grille, (see Figure 3). This uncovers the mounting holes for the control and the dial window for the radio.

Remove the round paper insert behind the grille, BUT DO NOT REMOVE THE CARDBOARD.

Open the cowl ventilator wide before starting the installation.

2. Drill a 7/16" hole on the engine side of the dash at the point shown in Figure 2. On the inside of the dash, cut out the cardboard (which is point pierced to provide room for the spacer). Be sure that the insulating material is cleaned away from the dash.

3. Insert the spacer in the mounting hole on the inside of the dash and loosely assemble the "Tee" bolt in this hole. Loosely assemble the hanger bracket to the set mounting bracket with

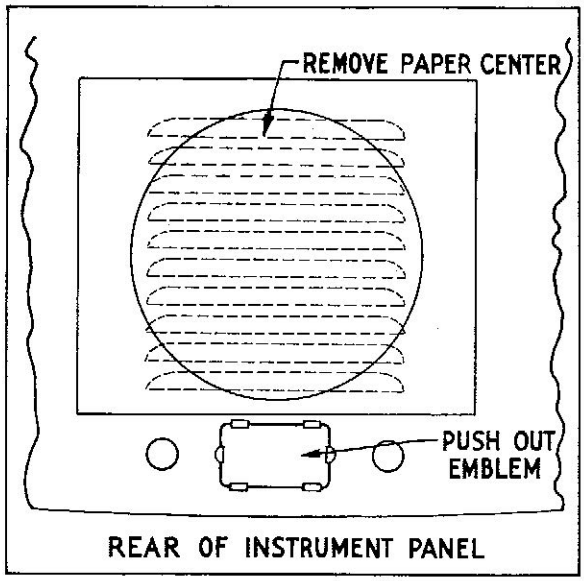


FIGURE 3

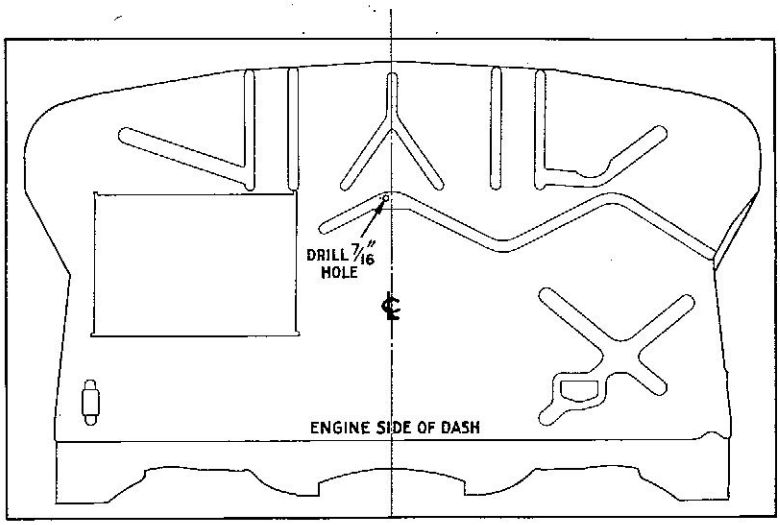


FIGURE 2

bolt, nut and washer provided. Then, place the chassis in position, as shown in Figure 4. Insert the head of the "T" bolt through the slot in the hanger bracket and turn the "Tee" bolt halfway around. Push up on the Receiver, until it is snugly in place, and then tighten the "Tee" bolt and the set mounting bolt securely.

4. Place the gland nuts over the control shafts and screw into place.

5. Apply the finish washers over the gland nuts and then install the knobs.

6. Place the fuse in the fuse housing of the separate "A" lead and couple this housing to the connector on the "A" lead on the right side of the Receiver. The end of this lead should now be connected to the left terminal of the fuse block on the dash.

7. Plug the aerial lead into the antenna socket on the back of the Receiver. (See Figure 1).

CAUTION — Care must be taken while placing the Receiver into position that it is not allowed to drop and thereby damage the face plate.

AERIAL

A special aerial is provided for installation on the front of the roof on closed cars and on the top windshield bar on open cars. It is important that ONLY the FORD ADJUSTABLE AERIAL be used with this Receiver for maximum performance See the detailed and illustrated installation instruction packed with the aerial.

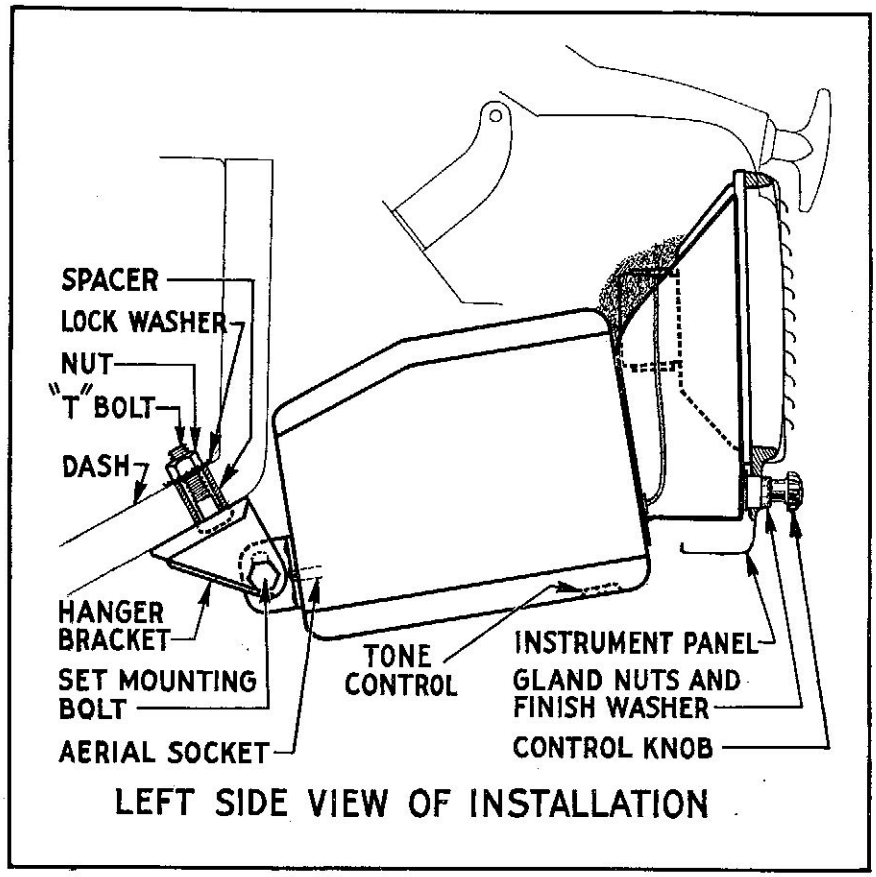


FIGURE 4

INTERFERENCE ELIMINATION

IMPORTANT — Use the utmost care with the following operations to insure freedom from interference. Be sure that clean contacts are made between the interference condensers and the car. If necessary, clean away paint or dirt with emery paper to make a good ground. Tighten all bolts securely.

IGNITION SWITCH CONDENSER

Drill a hole in the flange of the instrument board just above the ignition switch and mount the interference condenser, Part No. 78-18827. Connect the condenser lead to one of the terminals of the ignition switch.

GENERATOR INTERFERENCE

Remove the generator cut-out mounting screw and fasten the condenser, Part No. 78-18827, bracket on the generator cut-out mounting lug. Replace the cut-out mounting

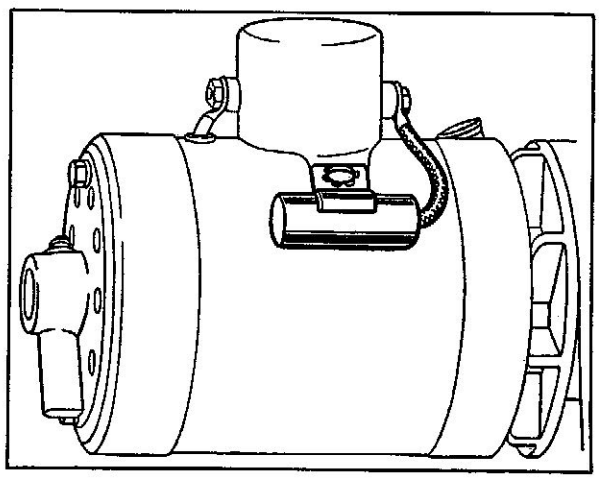


FIGURE 5

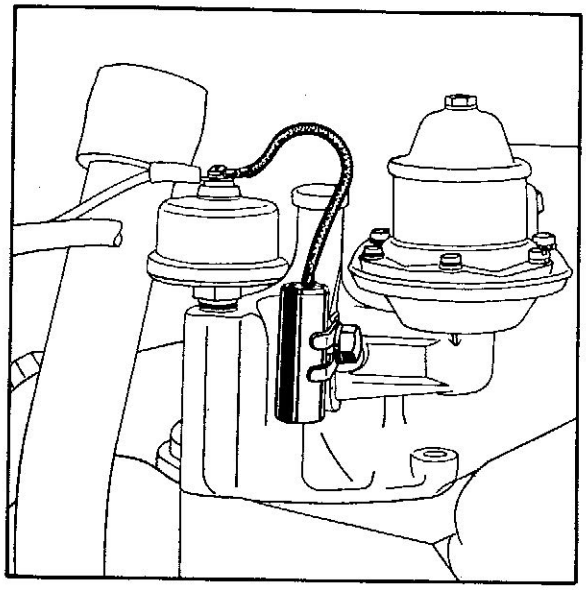


FIGURE 6

screw and tighten securely. Connect the condenser lead to the battery terminal of the cut-out. (See Figure 5).

OIL GAUGE INTERFERENCE

Connect an interference condenser, Part No. 48-18823, to the oil gauge. Figure 6 shows the mounting and connection for the Model 60 car, while Figure 7 shows the details for the Model 85 car. On the latter, the condenser must be mounted on the dash under a screw holding the gas line to the dash.

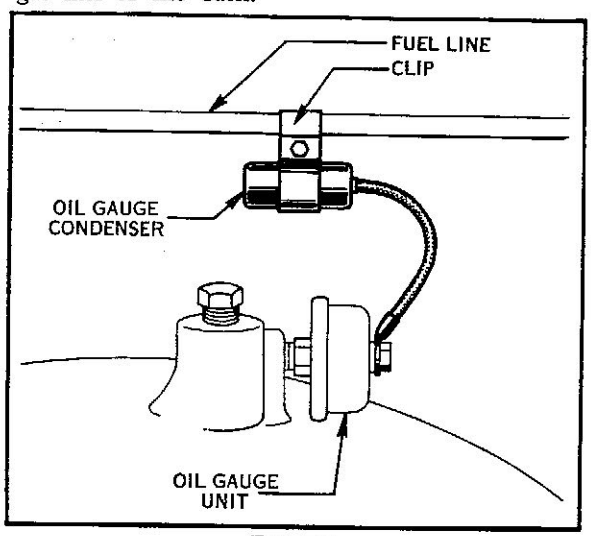


FIGURE 7

OPERATING INSTRUCTIONS

To Put the Set in Operation

Turn the left knob in a clockwise direction. The first range of motion will turn the Receiver on. From that point on, this knob acts as a manual volume control. (See Figure 1).

With the volume control turned on half-way, allow a few seconds for the tubes to heat up. Then turn the right-hand knob (tuning control) to tune in the various programs. The volume may then be adjusted by turning the left-hand knob either to the right or the left, until a suitable level is reached.

Recheck the tuning to be sure the Receiver is accurately tuned in to a station. Tuning off to one side of a station, even though the program may be heard, will result in distorted reception.

In certain locations, such as when driving under street car lines, or when near powerful electric lines, interference from these sources may be picked up. It will be found helpful to tune in strong local stations while in these locations, as less noise will be experienced.

A tone control is provided on this Receiver, so that the tone of a particular program may be changed to the desired pitch. This tone control is operated by the small lever located on the bottom side of the Receiver near the left-hand front corner. (See Figures 1 and 4). Moving this lever forward or backward will change the high frequency response as desired.

Another important use of the tone control is to modify the intensity of electrical interference picked up. Moving the tone control to the deep position will greatly reduce the intensity of such interference.

To Turn the Receiver Off

Turn the left-hand knob (volume control and On-Off knob) counter-clockwise until the dial light goes out, otherwise the Receiver will continue to operate and discharge the battery.

Aerial

The Ford Aerial is adjustable, so that it may be turned down parallel to the windshield center bar when the radio is used on local stations. In this position it will give satisfactory reception on local stations and still it will be quite inconspicuous.

The control knob, which is located in the center of the header bar (see Figure 1 for location), adjusts the aerial from the down to the up position when turned clockwise. In the up position, the aerial will give greater reception on more distant stations.

Where the radio is operated at points quite some distance from broadcasting stations, a further adjustment is provided. By pulling on the metal ball on the end of the antenna a sliding section can be pulled out which will add to the pickup ability of the antenna, thus providing better reception on weak stations.

SERVICE HINTS

No Reception

Remove top cover and check tubes and vibrator unit by replacing with ones known to be good.

Noisy Reception

Noisy reception may be from interference set up by street car lines, power lines, and static in bad weather, which cannot be entirely eliminated. It will prove helpful to tune to a strong local station and also to push the tone control to the "deep" position.

Check for noisy tubes. With the Receiver in operation, tap the tubes lightly with the rubber on the end of a lead pencil. If the noise occurs while a certain tube is tapped, the particular tube should be replaced.

Check for loose connections, in particular the antenna lead.

Intermittent Reception

Check for loose connections. This may also be caused by a tube. Check tubes as described above.

Ignition Interference

If there is objectionable ignition interference, refer to instructions on Pages 5 and 6 and follow in detail. Careful installation of suppression parts as outlined in the instructions will eliminate ignition interference.

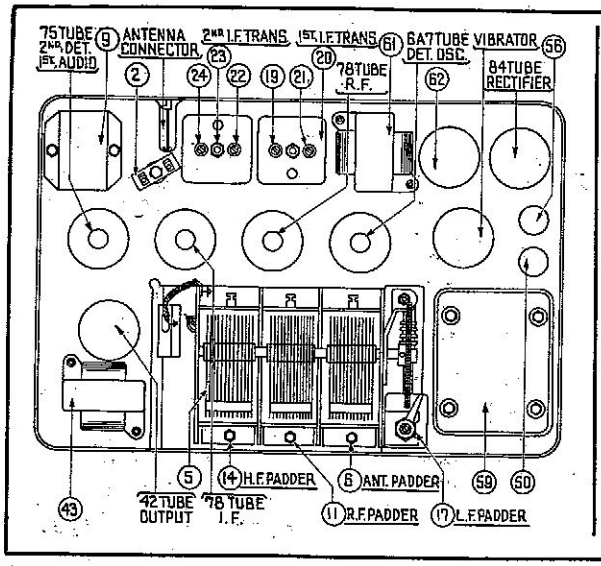


FIGURE 8

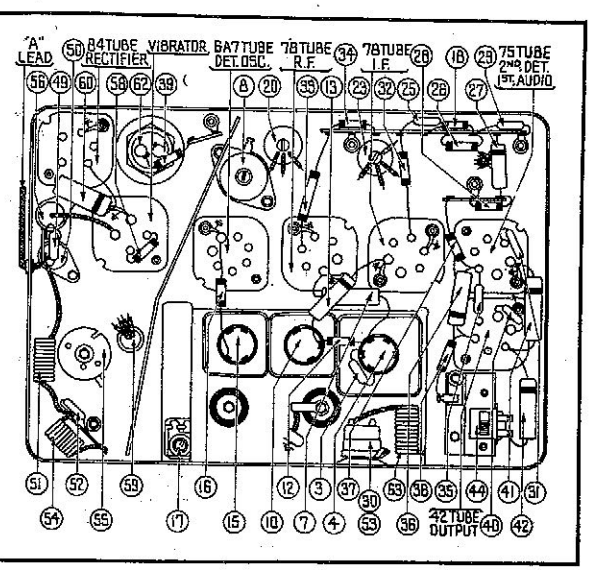
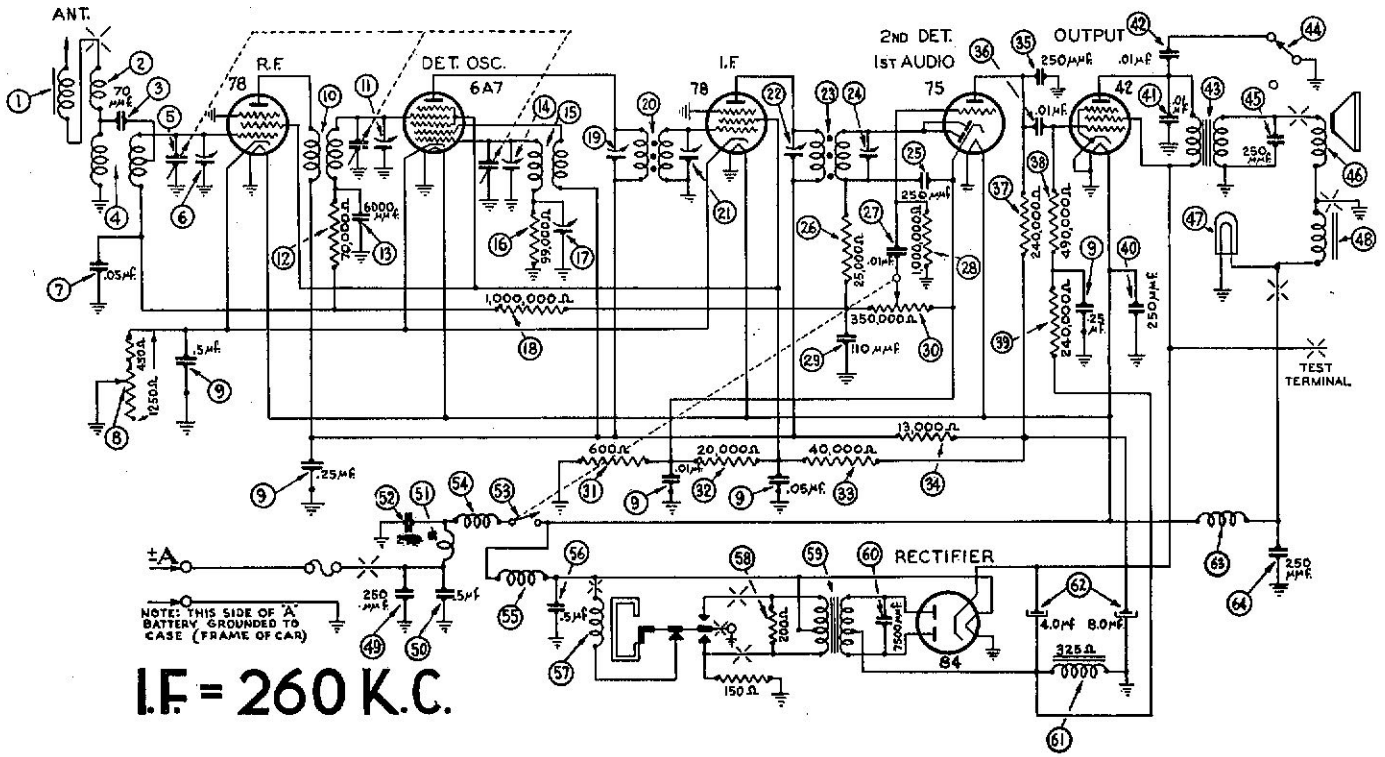


FIGURE 9

If your Ford Radio fails to perform satisfactorily, SEE YOUR FORD DEALER.



MODEL F-1540 PARTS LIST

No.	Description
1	Antenna Lead
2	Antenna Choke
3	Condenser (70 mmfd.)
4	Antenna Transformer
5	Tuning Condenser
6	First Padder (on Tun. Cond.)
7	Condenser (.05 mfd.)
8	Sensitivity Control
9	Condenser (.01-.05-.25-.25-.5 mfd.)
10	R. F. Transformer
11	Second Padder (on Tun. Cond.)
12	Resistor (70,000 ohms)
13	Condenser (6,000 mmfd.)
14	Third Padder (on Tun. Cond.)
15	Oscillator Transformer
16	Resistor (99,000 ohms)
17	Low Frequency Padder
18	Resistor (1,000,000 ohms)
19	Padder (Pri. 1st I. F. Trans.)
20	First I. F. Transformer
21	Padder (Sec. 1st I. F. Trans.)
22	Padder (Pri. 2nd I. F. Trans.)
23	Second I. F. Transformer
24	Padder (Sec. 2nd I. F. Trans.)
25	Condenser (250 mmfd.)
26	Resistor (25,000 ohms)
27	Condenser (.01 mfd.)
28	Resistor (1,000,000 ohms)
29	Condenser (110 mmfd.)
30	Volume Control (350,000 ohms)
31	Resistor (600 ohms)
32	Resistor (20,000 ohms)
33	Resistor (40,000 ohms)
34	Resistor (13,000 ohms)
35	Condenser (250 mmfd.)
36	Condenser (.01 mfd.)
37	Resistor (240,000 ohms)
38	Resistor (490,000 ohms)
39	Resistor (240,000 ohms)
40	Condenser (250 mmfd.)
41	Condenser (.01 mfd.)
42	Condenser (.01 mfd.)
43	Output Transformer
44	Tone Control Switch
45	Condenser (250 mmfd.)
46	Cone
47	Pilot Lamp
48	Field Coil Assembly
49	Condenser (250 mmfd.)
50	Condenser (.5 mfd.)
51	"A" Choke
52	Condenser (250 mmfd.)
53	On-Off Switch
54	Filament Choke
55	Vibrator Choke
56	Condenser (.5 mfd.)
57	Vibrator
58	Resistor (200 ohms)
59	Power Transformer
60	Condenser (7,500 mmfd.)
61	"B" Filter Choke
62	Filter Condenser (4—8 mfd.)
63	Choke
64	Condenser (250 mmfd.)

Part No. 39-5844—10—10-15-37

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