

SPECIFICATIONS

TYPE OF CIRCUIT: Model 39-8T is a 5 tube superheterodyne receiver designed for operation on AC or DC current in a frequency range from 25 to 100 cycles. In addition, other features of design are: Automatic Volume Control and Pentode Audio Output.

FREQUENCY RANGE: 530 to 1720 K.C.

INTERMEDIATE FREQUENCY: 470 K.C.

PHILCO TUBES USED: 6A7, First Detector, Oscillator; 78, I. F. Amplifier; 75, Second Detector, A. V. C., First Audio; 43, Audio Output and 25Z5, Rectifier.

POWER SUPPLY: 100 to 125 volts AC 25 to 60 cycles or D. C.

POWER CONSUMPTION: 30 watts.

AUDIO OUTPUT: One (1) watt.

ALIGNMENT OF COMPENSATORS

EQUIPMENT REQUIRED:

- (1) Signal Generator; philco Model 077 Signal Generator which has a fundamental frequency range from 115 to 36,000 K.C. is the correct instrument for this purpose.
- (2) Output Meter, Philco Model 027 Circuit Tester, incorporates a sensitive output meter and is recommended.
- (3) Philco Fiber Handle Screw Driver, Part No. 45-2610 and Fiber Wrench, Part No. 3164.

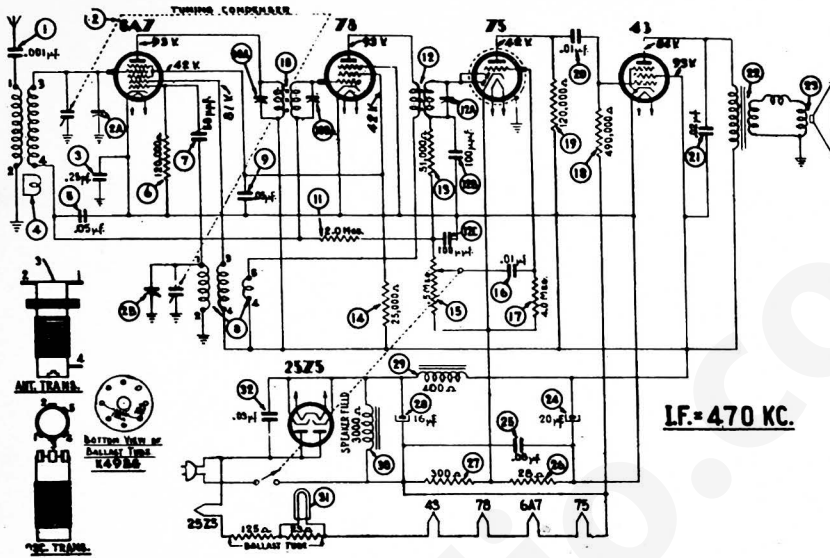
OUTPUT METER:

The Philco 027 Output Meter is connected to the plate and screen terminals of the type 43 tube and adjusted for the 0 to 30 A.V.C. scale. After connecting the output meter, adjust the compensators in the order as shown in the tabulation below. Locations of the compensators are shown on Fig. 2. If the output meter pointer goes off scale when adjusting the compensators, reduce the strength of the signal from the generator.

Signal Generator				Receiver			
Operation In Order	Output Connections to Receiver	Dummy Antenna (Note A)	Dial Setting	Dial Setting	Control Setting	Adjust Compensators in order	Special Instructions
1	6A7 Grid Cap	.1 mf.	470 K.C.	580 K.C.	Vol.Cont. Max.	12A, 10B, 10A	Adjust for max. output
2	Ant. Lead	100 mf.	1550 K.C.	1550 K.C.	Vol.Cont. Max.	2B, 2A	Adjust for max. output Note A, B.

NOTE A--The "Dummy Antenna" consists of a condenser connected in series with the signal generator output lead (high side). Use the capacity as specified in each step of the above procedure.

NOTE B--DIAL CALIBRATION: With the tuning condenser in "maximum capacity" position (plates fully meshed), set the dial pointer between the two horizontal lines at the low frequency end of the scale (550 K.C.).



REPLACEMENT PARTS MODEL 39-8

Schem. No.	Description	Part No.	Schem. No.	Description	Part No.
1	Tubular Cond. (.001 mfd.).....	30-4453	14	Resistor (25,000 ohms, 1/2 watt)	33-325339
2	Tuning Cond. Assy.....		15	Volume Control (.5 meg.).....	33-5254
2A	Part of No. 2.....		16	Tubular Cond. (.01 mfd.).....	30-4479
2B			17	Resistor (4.0 meg., 1/2 watt)...	33-540339
3	Tubular Cond. (.25 mfd.).....	30-4146	18	Resistor (490,000 ohms, 1/2 watt)	33-449339
4	Antenna Trans.....	32-2583	19	Resistor (120,000 ohms, 1/2 watt)	33-412339
5	Tubular Cond. (.05 mfd.).....	30-4444	20	Tubular Cond. (.01 mfd.).....	30-4479
6	Resistor (120,000 ohms, 1/2 watt)	33-412339	21	Tubular Cond. (.02 mfd.).....	30-4215
7	Mica Cond. (50 mmfd.).....	30-1029	22	Output Transformer.....	32-7874
8	Oscillator Trans.....	32-2880	23	Cone & Voice Coil Assembly.....	
9	Tubular Cond. (.05 mfd.).....	30-4444		Speaker Part No. 36-1362-1).....	36-3981
10	1st I.F. Trans. Assy.....	32-3018	24	Electrolytic Cond. (20 mfd., 150V)	30-2245
10A	Part of No. 10.....		25	Tubular Cond. (.05 mfd.).....	30-4444
10B			26	Resistor (27 ohms, 1/2 watt)...	33-027339
11	Resistor (2.0 meg., 1/2 watt)....	33-520339	27	Resistor (300 ohms).....	33-1214
12	2nd I.F. Trans. Assy.....	32-2674	28	Electrolytic Cond. (16 mfd., 150V)	30-2246
12A	Part of No. 12.....		29	Filter Choke.....	32-7868
12B			30	Field Coil (Replace Speaker)....	
12C			31	Pilot Lamp.....	34-2068
13	Resistor (51,000 ohms, 1/2 watt).	33-351339	32	Tubular Cond. (.03 mfd.).....	30-4449

MISCELLANEOUS PARTS

Bezel & Glass Assembly.....	13105
Bezel Clamp.....	20162
Dial Scale.....	16104P
Drive Drum & Set Screw.....	31-1283
Drive Shaft Assembly.....	31-2140
Drive Cord Assembly.....	90325
Output Transformer.....	32-7874
Painter (Dial).....	28-5468
Spring Drive Cord.....	28-8751
Speaker.....	36-1362-1
Socket (7 prong).....	27-8037
Socket (6 prong).....	27-8036
Socket (8 prong).....	27-8058