

# MODELS PT-49 and PT-51

## SPECIFICATIONS

Models PT-49 and PT-51 are five tube electric push button tuning superheterodyne radios with a manual tuning covering 540 to 1720 K. C. on the broadcast range and 2.3 to 2.5 megacycles (M. C.) on the local police range. These models are similar with the exception of the cabinet. The circuit diagram and parts lists shown below applies to both models.

Six electric push-buttons are provided on these models. Five of the push-buttons are used for stations and one push-button for selecting dial tuning. The push-buttons cover a frequency range as follows: 540 to 1600 kilocycles.

INTERMEDIATE FREQUENCY: 470 K. C.

POWER SUPPLY: Operates on either a 115 volt alternating current (A. C.) or 115 volt direct current (D. C.) power supply.

Note—If no sound is heard on D. C. circuits, after the tubes are sufficiently heated, reverse the plug in the power outlet. If a slight hum is heard when operating on an A. C. power supply, the power plug should also be reversed.

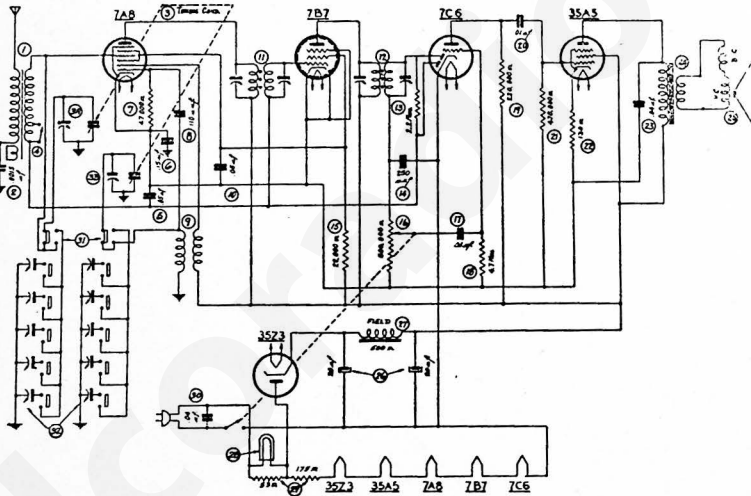
PHILCO TUBES USED: One 7A8, converter; one 7B7, I. F. amplifier; one 7C6, 2nd detector, 1st audio, A. V. C.; one 35A5, audio output and one 35Z3, rectifier.

AERIAL: A twenty foot indoor aerial wire is attached to the radio for average receiving conditions. To obtain best reception, however, in apartment houses, hotels, or steel reinforced buildings where signal strength is weak, an outside aerial, such as a Philco Utility Aerial, Part No. 40-6384, is recommended.

ALIGNING PROCEDURE: The instructions for adjusting the R. F. and I. F. compensators will be found on page 7.

### PRODUCTION CHANGE

To stabilize the oscillator circuit and prevent oscillation at the high frequency end of the tuning dial, the oscillator grid leak was changed from 47000 ohms to 22000 ohms.



## REPLACEMENT PARTS

SCHE. No.	DESCRIPTION	PART No.	SCHE. No.	DESCRIPTION	PART No.	SCHE. No.	DESCRIPTION	PART No.
1	Antenna Transformer	32-3168	23	Tubular Condenser (.04 mf., 400 v.)	30-4119S		Clip	28-5002
2	Tubular Condenser (.0015 mf., 200 v.)	30-4555S	24	Output Transformer			Clip Assembly	
3	Tuning Condenser	31-2428		(for Speaker 36-1469-1)	32-8047		(for Speaker 36-1469-1)	36-4115
4	Switch	42-1408		(for Speaker 36-1469-2)	32-8044		(for Speaker 36-1469-2)	36-4132
5	Tubular Condenser (.05 mf., 200 v.)	30-4519S		(for Speaker 36-1469-9)	32-8044		(for Speaker 36-1469-9)	36-4113
6	Tubular Condenser (.15 mf., 400 v.)	30-4505S	25	Speaker	36-1469		Dial Drive Shaft	31-2355
7	Resistor (47,000 ohms, 1/2 watt)	33-347154	26	Electrolytic Condenser			Dial Drive Cord	31-2358
8	Mica Condenser (110 mmf.)	30-1130		(20-20 mf., 150 v.)	30-2382		Dial Window	27-5472
9	Oscillator Transformer	32-3187	27	Field Coil Part of Speaker No.	36-1469		Grille Cloth Assembly	318-1134
10	Tubular Condenser (.05 mf., 200 v.)	30-4519S	28	Pilot Lamp	34-2068		Knob (Push-Button—PT-49)	27-4824
11	1st I. F. Transformer	32-3149	29	Line Resistor	33-3367		Knob (Tuning & Volume—PT-49)	27-4809
12	2nd I. F. Transformer	32-3150	30	Tubular Condenser (.04 mf., 400 v.)	30-4119S		Knob (Push-Button—PT-51)	27-4831
13	Resistor (2.2 meg., 1/2 watt)	33-522154	31	Push Button Switch	42-1485		Knob (Tuning and Volume)	27-4810
14	Mica Condenser (250 mmf.)	61-0033	32	Padding Condenser Strip	31-6293		Pointer	27-4891
15	Resistor (22,000 ohms, 1/2 watt)	33-322334					Speaker	36-1469
16	Volume Control (500,000 ohms)	33-5308					Spring (Drive Cord)	28-8954
17	Tubular Condenser (.01 mf., 200 v.)	30-4479S					Snap Fastener	56-1387
18	Resistor (4.7 meg., 1/2 watt)	33-547154					Socket (Pilot Lamp)	38-9825
19	Resistor (220,000 ohms, 1/2 watt)	33-422154					Socket (Tubes)	27-6130
20	Tubular Condenser (.01 mf., 400 v.)	30-4572S					Tax Kit	40-6474
21	Resistor (470,000 ohms, 1/2 watt)	33-447154					Tab Dial	27-5528
22	Resistor (180 ohms, 1/2 watt)	33-113336						

### MISCELLANEOUS PARTS

Cable (Power)	L-3199
Cabinet (PT-49)	10366A
Cabinet back (PT-49)	27-9314
Cabinet (PT-51)	10366B
Cabinet back (PT-51)	27-9328