

# MODEL TP-21

## SPECIFICATIONS

Model TP-21 is a five tube, electric push-button tuning super-heterodyne radio with a manual tuning range covering 540 to 1580 K. C. In addition a loop aerial is built into the cabinet for portable use. Aerial connections are also provided on the rear of the cabinet for locations such as steel reinforced buildings, apartment houses or any other location where signal strength is weak. If an outside aerial is necessary, the Philco Utility Aerial, Part No. 40-6384, is recommended. Six electric push-buttons are provided on this model. Five 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.

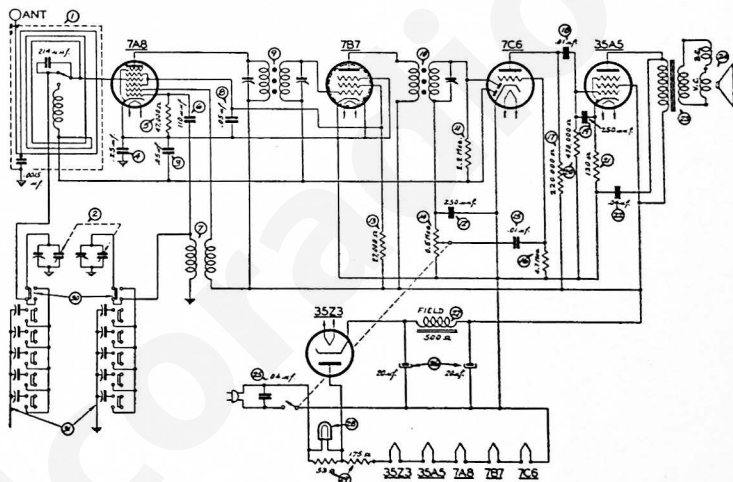
The procedure for adjusting and operating the electric push-buttons will be found on page 10.

INTERMEDIATE FREQUENCY: 455 K. C.

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

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

ALIGNING PROCEDURE: The aligning procedure for this model will be found on page (6).



## REPLACEMENT PARTS

SCHE. No.	DESCRIPTION	PART No.	SCHE. No.	DESCRIPTION	PART No.	SCHE. No.	DESCRIPTION	PART No.
1	Loop Antenna Assembly	38-9937	23	Output Transformer			Clip (Coil Mounting)	28-5002
2	Tuning Condenser	31-2414		(for Speaker 36-1469-1)	32-8047		Drive Arm (Pointer)	56-1376
3	Tubular Condenser (.05 mf., 200 v.)	40-4519S		(for Speaker 36-1469-2)	32-8044		Drive Drum (Tuning Cond.)	56-6033
4	Tubular Condenser (.25 mf., 400 v.)	30-4604S		(for Speaker 36-1469-9)	32-8044		Drive Cord (Dial Pointer)	31-2358
5	Resistor (47,000 ohms, 1/4 watt)	33-347154	24	Cone Assembly			Drive Shaft (Dial)	31-2370
6	Mica Condenser (110 mmf.)	30-1130		(for Speaker 36-1469-1)	36-4115		Handle	45-6053
7	Oscillator Transformer	32-3152		(for Speaker 36-1469-2)	36-4132		Knob (Volume Tuning)	27-4815
8	Tubular Condenser (.05 mf., 200 v.)	30-4519S		(for Speaker 36-1469-9)	36-4113		Knob (Push-button Switch)	27-4824
9	1st I. F. Transformer	32-3177	25	Tubular Condenser (.04 mf., 400 v.)	30-4119S		Rubber Grommet	
10	2nd I. F. Transformer	32-3178	26	Electrolytic Condenser			(Switch and Padder Mtg.)	27-4596
11	Resistor (2.2 megs., 1/4 watt)	33-522154	27	Field Coil	30-2382		Rubber Tubing (Driving Arm)	27-9334
12	Mica Condenser (250 mmf.)	61-0033	28	Field Coil	30-1469		Speaker	36-1469
13	Resistor (27,000 ohms, 1/4 watt)	33-327134	29	Pilot Lamp	34-2088		Spring (Drive Cord)	28-8751
14	Volume Control (500,000 ohms)	33-5306	29	Line Resistor	33-3367		Screws (Chassis Mounting)	W-2176
15	Tubular Condenser (.01 mf., 200 v.)	30-4479S	30	Push Button Switch	42-1485		Screw (Drive Drum Mounting)	W-1400
16	Resistor (4.7 megs., 1/4 watt)	33-547154	31	Padder Condenser Strip	31-6324		Screw (Drive Arm Mounting)	W-2036
17	Resistor (220,000 ohms, 1/4 watt)	33-422154					Screws (Cabinet Back Mtg.)	56-6056
18	Tubular Condenser (.01 mf., 400 v.)	30-4572S					Screw (Cabinet Back Mounting)	W-2029
19	Mica Condenser (250 mmf.)	61-0033					Screw (Cabinet Back Mounting)	W-2029
20	Resistor (470,000 ohms, 1/4 watt)	33-447154					Sockets (Tubes)	27-6130
21	Resistor (180 ohms, 1/4 watt)	33-118336					Socket (Pilot Lamp)	38-9825
22	Tubular Condenser (.04 mf., 400 v.)	30-4119S					Tab (Dial)	27-5528
							Tab Kit	40-6474