

# PHILCO



# SERVICE

## HOME RADIO

### PHILCO TROPIC RADIO, MODEL 46-818

#### SPECIFICATIONS

CABINET .....	Model 46-818 (wood, walnut finish)
CIRCUIT .....	Four-tube superheterodyne (four-band); provision for phono input.
FREQUENCY RANGES .....	540 to 1680 kc., 3.0 to 9.8 mc., 9.3 to 12.0 mc. and 11.8 to 22.0 mc.
OPERATING VOLTAGE .....	6 volts, D.C.
POWER CONSUMPTION .....	2 amperes.
AERIAL .....	Philco Outdoor Aerial, Part No. 45-1494.
INTERMEDIATE FREQUENCY .....	455 kc.
PHILCO TUBES USED .....	7J7E, 7B7E, 7C6, 7B5.
VIBRATOR .....	Philco VB100, Part No. 41-3553.
PILOT LAMP .....	6-8-volt, bayonet base, Part No. 34-2068E.

#### PHILCO TROUBLE-SHOOTING PROCEDURE

The trouble-shooting procedure as given in Philco Service Manual for Model 46-816 is, in general, applicable to the Model 46-818. The use of this procedure, in conjunction with the test points indicated on the accompanying schematic of the Model 46-818, will permit quick localization of troubles which might arise.

#### ALIGNMENT PROCEDURE

The alignment procedure used for Model 46-818 is identical with that of Model 46-816. The placement of trimmers and the designations used are also the same. Therefore, the alignment information given in Philco Service Manual for Model 46-816 is directly applicable to the Model 46-818.



## REPLACEMENT PARTS LIST MODEL 46-818

NOTE: Parts marked with an asterisk (\*) are general replacement items and the part numbers may not be identical with those used on factory assemblies. Use only the "SERVICE PART NUMBER" shown in this parts list when ordering replacements.

SECTION 1			SECTION 4 (Continued)		
Reference No.	Description	Service Part No.	Reference No.	Description	Service Part No.
C100	Condenser, .2 mf.	45-3500-3*	C412	Condenser, trimmer	31-6411
C101	Condenser, .5 mf.	61-0133*	C413	Condenser, trimmer	31-6416
C102	Condenser, .01 mf.	61-0124*	L401	Coil, Ant. S.W. 2-3	32-3652
C103	Condenser, .5 mf.	61-0133*	L402	Coil, oscillator	32-3656
C104	Condenser, electrolytic	30-2479*	L402A:	coil, bdst. osc.	Part of L402
	C104A: condenser, 10 mf.	Part of C104	L402B:	coil, S.W.-1 osc.	Part of L402
	C104B: condenser, 10 mf.	Part of C104	R400	Resistor, 1 meg.	66-5103340*
C105	Condenser, 10 mf.	30-2540*	R401	Resistor, 8200 ohms	66-2823340*
C106	Condenser, .01 mf.	61-0124*	R402	Resistor, 68 ohms	66-0583340*
C107	Condenser, 270 mmf.	60-10245307*	R403	Resistor, 68,000 ohms	66-3683340*
I100	Light, pilot	34-2068E*	S400	Switch, band-change	42-1725*
L100	Choke, "A"	65-0151	T400	Transformer, bdst. antenna	32-3655
L101	Choke, B+	32-3522	T401	Transformer, oscillator S.W. 2 and 3	32-3651
R100	Resistor, 680 ohms	66-1683340*			
R101	Resistor, 2200 ohms	66-2223340*			
R102	Resistor, 22,000 ohms	66-3223340*			
S100	Switch	Part of S200			
T100	Transformer, power	32-8128*			
VB100	Vibrator	41-3553			
SECTION 2			MISCELLANEOUS		
C200	Condenser, .006 mf.	45-3500-7*	Cabinet, complete		10623
C201	Condenser, 270 mmf.	60-10245307*	Cabinet Hardware		
C202	Condenser, .006 mf.	45-3500-7*	Baffle-and-cloth assembly		40-6740
C203	Condenser, .03 mf.	45-3500-1*	Band, rubber		54-4177
C204	Condenser, .02 mf.	61-0108*	Feet, felt		W2190
C205	Condenser, .1 mf.	61-0113*	Scale, dial		27-5703
LS200	Speaker	36-1520*	Strap, scale		56-1752
PJ200	Jack, phono	27-6186*	Screw, baffle-mounting		1W24756
R200	Resistor, .5 meg., volume control	45-5007*	Screw, wood, back mtg.		1W25328FE11
R201	Resistor, 10 megs.	66-6103340*	Cabinet back		54-7107
R202	Resistor, 220,000 ohms	66-4223340*	Cable, Battery		41-3550
R203	Resistor, 470,000 ohms	66-4473340*	Chassis Mounting Hardware		
R204	Resistor, 100,000 ohms	66-4103340*	Grommet, rubber		27-4596
S200	Switch, tone control	42-1600*	Sleeve		28-2258FA3
T200	Transformer, output	32-8116*	Washer		1W52353FA3
SECTION 3			Dial-Mechanism Hardware		
C302	Condenser, .05 mf.	61-0122*	Bearing, drive-shaft, rear		27-9437
C303	Condenser, .1 mf.	61-0113*	Bracket assembly, scale		76-1485
R302	Resistor, 2.2 mega.	66-5223340*	Cord, pointer-drive (25-ft. spool)		45-1420*
Z300	Transformer, 1st i-f	32-3899*	Cord, tuning-condenser-drive (25-ft. spool)		45-1420*
	C300A: condenser	Part of Z300	Drum, drive, assembly		38-9883FA33
	C300B: condenser	Part of Z300	Hose, rubber, drive-shaft		27-9432
Z301	Transformer, 2nd i-f	32-3907*	Pointer		56-2228FCP
	C301A: condenser	Part of Z301	Screw, scale-bracket-assembly mounting		1W19670FA3
	C301B: condenser	Part of Z301	Shaft, drive		56-6199FA33
	C301C: condenser	Part of Z301	Spring, drive-shaft (hairpin)		57-1458FA3
	C301D: condenser	Part of Z301	Spring, pointer-drive		28-8953
	R301: resistor, 47,000 ohms	Part of Z301	Spring, condenser-drive		28-8751FA1
SECTION 4			Knob and Instruction Kit		
C400	Condenser, 22 mmf.	60-00205307*	Knob, bass-on-off		54-7091
C401	Condenser, 320 mmf.	30-1220-12*	Knob, band selector		54-7092
C402	Condenser, tuning	31-2690	Knob, dial tuning		54-7093
	C402A: condenser, trimmer	Part of C402	Knob, volume control		54-7094
C403	Condenser, trimmer	31-6416	Lamp, pilot socket assembly		76-1115
C404	Condenser, 100 mmf.	60-10105407*	Panel, terminal, assembly, 2-lug		12W45647
C405	Condenser, 100 mmf.	60-10105407*	Panel, terminal, assembly, 2-lug		12W45649
C406	Condenser, 250 mmf.	60-10245307*	Panel, terminal, assembly, 3-lug		12W45655
C407	Condenser, trimmer	31-6411	Panel, terminal, assembly, 5-lug		12W45673
C408	Condenser, trimmer	31-6411	Parts Mounting Hardware		
C409	Condenser, trimmer	31-6411	Clamp, elec. condenser-mounting		56-1466
C410	Condenser, 3500 mmf.	60-20335404*	Clip, coil-mounting		28-5002FA1
C411	Condenser, 280 mmf.	30-1220-8*	Screw, power-transformer		1W19672FA3
			Washer, condenser-mounting (brass)		2W54094
			Socket, Loktal		27-6138*
			Speaker Hardware		
			Screw and lock washer, speaker-mounting		1W32228FA3
			Tuning-Condenser Hardware		
			Bracket assembly		76-1485
			Screw		1W19672FA3
			Sleeve, mounting		56-1307FA15
			Washer, mounting		1W52237FA3

### CRITICAL LEAD DRESS FOR MODEL 46-818

1. The 7B5 plate lead should be dressed toward the end of the chassis and away from the 7C6 socket.
2. The plate lead of the output transformer, T200, should be dressed away from condenser C200.