

PHILCO



SERVICE

HOME RADIO

PHILCO TROPIC RADIO, MODEL 46-817

SPECIFICATIONS

CABINET	Model 46-817 (wood, walnut finish)
CIRCUIT	Five-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 VOLTAGES	115 or 230 volts, A.C. or D.C.
POWER CONSUMPTION	33 watts at 115 volts, 68 watts at 230 volts
AERIAL	Philco Outdoor Aerial, Part No. 45-1494
INTERMEDIATE FREQUENCY	455 kc.
PHILCO TUBES USED	14J7E, 7B7E, 7C6, 35A5E, 35Z3

CAUTION: Before turning the receiver on, make certain that the plug-in ballast resistor is correctly inserted for the line voltage on which the set is to be used.

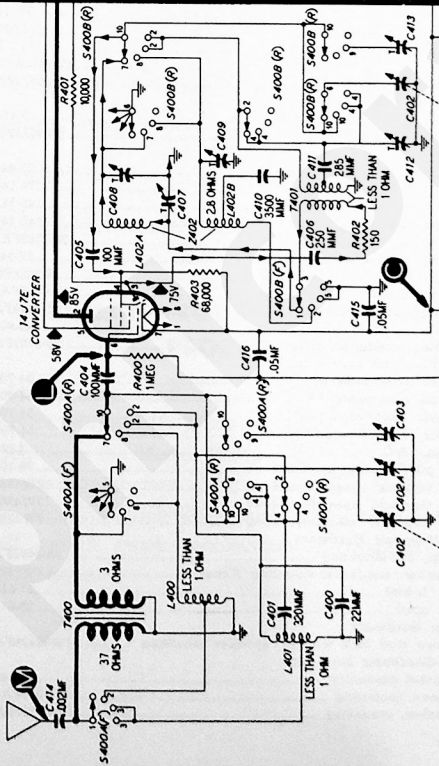
PHILCO TROUBLE-SHOOTING PROCEDURE

The trouble-shooting procedure as given in Philco Service Manual for Model 46-816 is, in general, applicable to the Model 46-817. The use of this procedure, in conjunction with the test points indicated on the accompanying schematic of the Model 46-817, will permit quick localization of troubles which might arise.

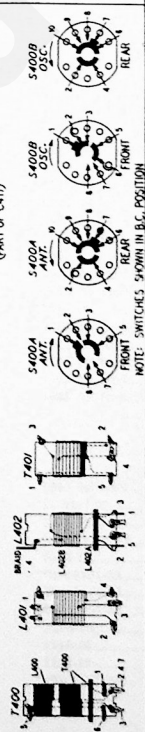
ALIGNMENT PROCEDURE

The alignment procedure used for Model 46-817 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 46-817.

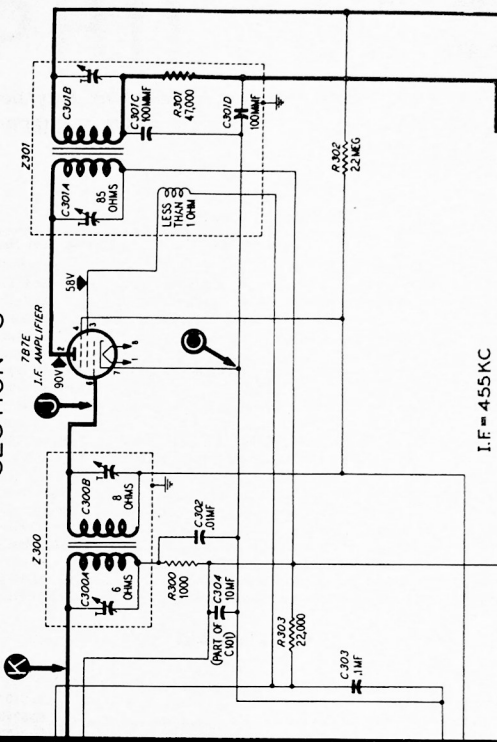
SECTION 4



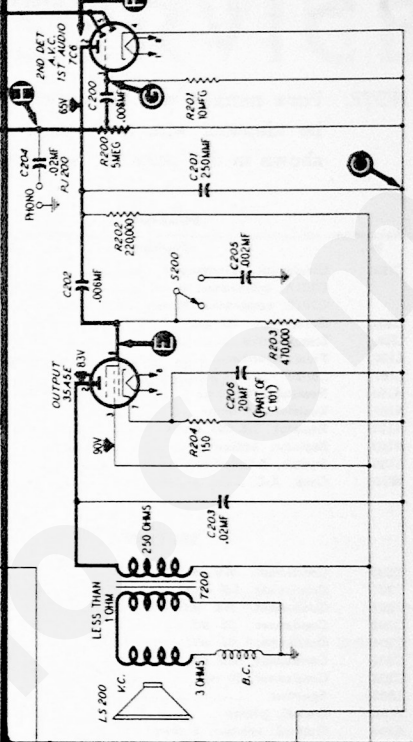
I.F. = 455KC



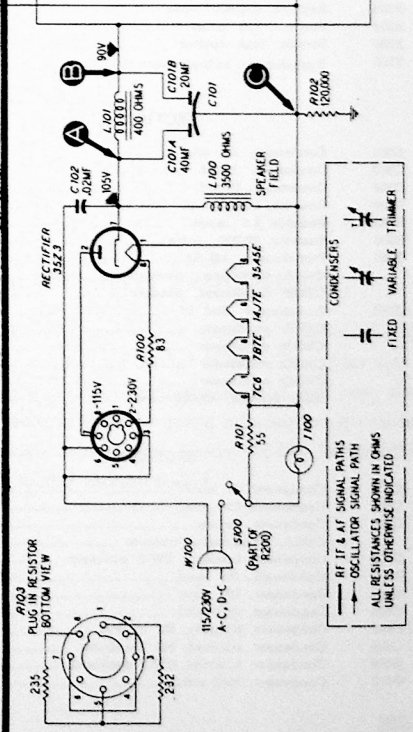
SECTION 3



SECTION 2



SECTION 1



- CONDENSERS
 ———— |———
 ALL R.F. & I.F. SIGNAL PATHS
 ←—→ OSCILLATOR SIGNAL PATH
 ALL RESISTANCES SHOWN IN OHMS
 UNLESS OTHERWISE INDICATED
- |—————
 FIXED
 ————|—————
 VARIABLE
 ————|—————
 TRIMMER

REPLACEMENT PARTS LIST

MODEL 46-817

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.

Reference No.	Description	Service Part No.
C101	Condenser, electrolytic	30-2506*
	C101A: condenser, 40 mf.	Part of C101
	C101B: condenser, 20 mf.	Part of C101
C102	Condenser, .02 mf.	61-0108*
L100	Lamp, pilot	34-2068*
L100	Field, speaker	Part of LS200
L101	Choke	32-8073
R100	Resistor, 83 ohms	33-3434*
R101	Resistor, 55 ohms	Part of R100
R102	Resistor, 120,000 ohms	66-4123340*
R103	Resistor, ballast	33-3389*
S100	Switch, A-C (off-on)	Part of R200
W100	Cord, A-C	L-3246

SECTION 2

C200	Condenser, .006 mf.	45-3500-7*
C201	Condenser, 250 mfd.	60-10245307*
C202	Condenser, .006 mf.	45-3500-7*
C203	Condenser, .02 mf.	61-0108*
C204	Condenser, .02 mf.	61-0108*
C205	Condenser, .002 mf.	61-0062*
C206	Condenser, 20 mf.	Part of C101
LS200	Speaker	36-1602
PJ200	Socket, phono	27-6186*
R200	Control, volume, 5 meg.	45-5007*
R201	Resistor, 10 megs.	66-6103340*
R202	Resistor, 220,000 ohms	66-4223340*
R203	Resistor, 470,000 ohms	66-4473340*
R204	Resistor, 150 ohms	66-1153340*
S200	Switch, tone control	42-1723*
T200	Transformer, output (part of LS200)	32-8296-5

SECTION 3

C302	Condenser, .01 mf.	61-0120*
C303	Condenser, .1 mf.	61-0113*
C304	Condenser, 10 mf.	Part of C101
R300	Resistor, 1000 ohms	66-2103340*
R302	Resistor, 2.2 megs.	66-5223340*
R303	Resistor, 22,000 ohms	66-3223340*
Z300	Transformer, 1st i-f	32-3899*
	C300A: condenser, trimmer	Part of Z300
	C300B: condenser, trimmer	Part of Z300
Z301	Transformer, 2nd i-f	32-3907*
	C301A: condenser	Part of Z301
	C301B: condenser	Part of Z301
	C301C: condenser	Part of Z301
	C301D: condenser	Part of Z301
	R301: resistor, 47,000 ohms	Part of Z301

SECTION 4

C400	Condenser, 22 mmf.	Part of L401
C401	Condenser, 320 mmf.	30-1220-12*
C402	Condenser, tuning	31-2690
	C402A: condenser, trimmer	Part of C402
C403	Condenser, trimmer, SW-2 antenna	31-6416
C404	Condenser, 100 mmf.	60-10105407*
C405	Condenser, 100 mmf.	60-10105407*
C406	Condenser, 250 mmf.	60-10245307*
C407	Condenser, trimmer, BC tracker	31-6411
C408	Condenser, trimmer, BC oscillator	31-6411
C409	Condenser, trimmer, SW-1 oscillator	31-6411
C410	Condenser, 3500 mmf.	60-20335404*

Reference No.	Description	Service Part No.
C411	Condenser, 285 mmf.	30-1220-9*
C412	Condenser, trimmer, SW-3 oscillator	31-6411
C413	Condenser, trimmer, SW-2 oscillator	31-6416
C414	Condenser, .002 mf.	61-0062*
C415	Condenser, .05 mf.	61-0122*
C416	Condenser, .05 mf.	61-0122*
C417	Condenser, and choke assembly (2 mf.)	76-1227
L400	Coil, SW-1 antenna	Part of T400
L401	Coil, SW-2, SW-3 antenna	32-3652
L402	Coil, BC and SW-1 oscillator	32-3656
	L402A: coil, BC oscillator	Part of L402
	L402B: coil, SW-1 oscillator	Part of L402
L403	Coil	Part of C417
R400	Resistor, 1 meg.	66-5103340*
R401	Resistor, 10,000 ohms	66-3103340*
R402	Resistor, 150 ohms	66-1153340*
R403	Resistor, 68,000 ohms	66-3683340*
S400	Switch, band-selector	42-1725*
T400	Transformer, BC and SW-1 antenna	32-3655
T401	Transformer, SW oscillator	32-3651

MISCELLANEOUS

Cabinet	10623
Cabinet Hardware	
Cabinet back	54-7107
Baffle-and-cloth assembly	40-6740
Band, rubber	54-4177
Feet, felt	W2190
Scale, glass dial	27-5703
Strap, scale	56-1752
Screw, wood, baffle-mounting	1W24756FA3
Screw, wood, back-mounting	1W25328FA3
Chassis Mounting Hardware	
Grommet, rubber	27-4596
Sleeve	28-2258FA3
Dial-Mechanism Hardware	
Bearing, drive-shaft, rear	27-9437
Bracket assembly, scale	76-1495
Cord, pointer-drive (25-ft. spool)	45-1420*
Cord, tuning-condenser-drive (25-ft. spool)	45-1420*
Drum, drive, assembly	38-9883FA33
Hose, rubber, drive-shaft	27-9432
Pointer	56-2228FCP
Shaft, drive	56-6199FA33
Spring, drive-shaft (hairpin)	57-1468FA3
Spring, pointer-drive	28-8953
Spring, condenser-drive	28-8751FA1
Knob, Plug and Instruction Kit	
Knob, band-selector	54-7092
Knob, bass-treble	54-7090
Knob, dial-tuning	54-7093
Knob, volume-on-off	54-7089
Plug, A-C	L3275
Lamp, pilot, socket assembly	76-1051
Panel, terminal, assembly, 4-lug	12W45649
Panel, terminal, assembly, 4-lug	12W45663
Panel, terminal, assembly, 5-lug	12W45673
Parts Mounting Hardware	
Clip, coil-mounting	28-5002FA1
Washer, condenser-mounting (brass)	2W54094
Socket, Loktal	27-6138*
Socket, octal	27-6143*
Speaker Hardware	
Screw and lock washer, speaker mounting	1W32228FA3
Tuning-Condenser Hardware	
Bracket assembly	76-1495
Sleeve, mounting	56-1307FA15
Washer, mounting	1W52237FA3