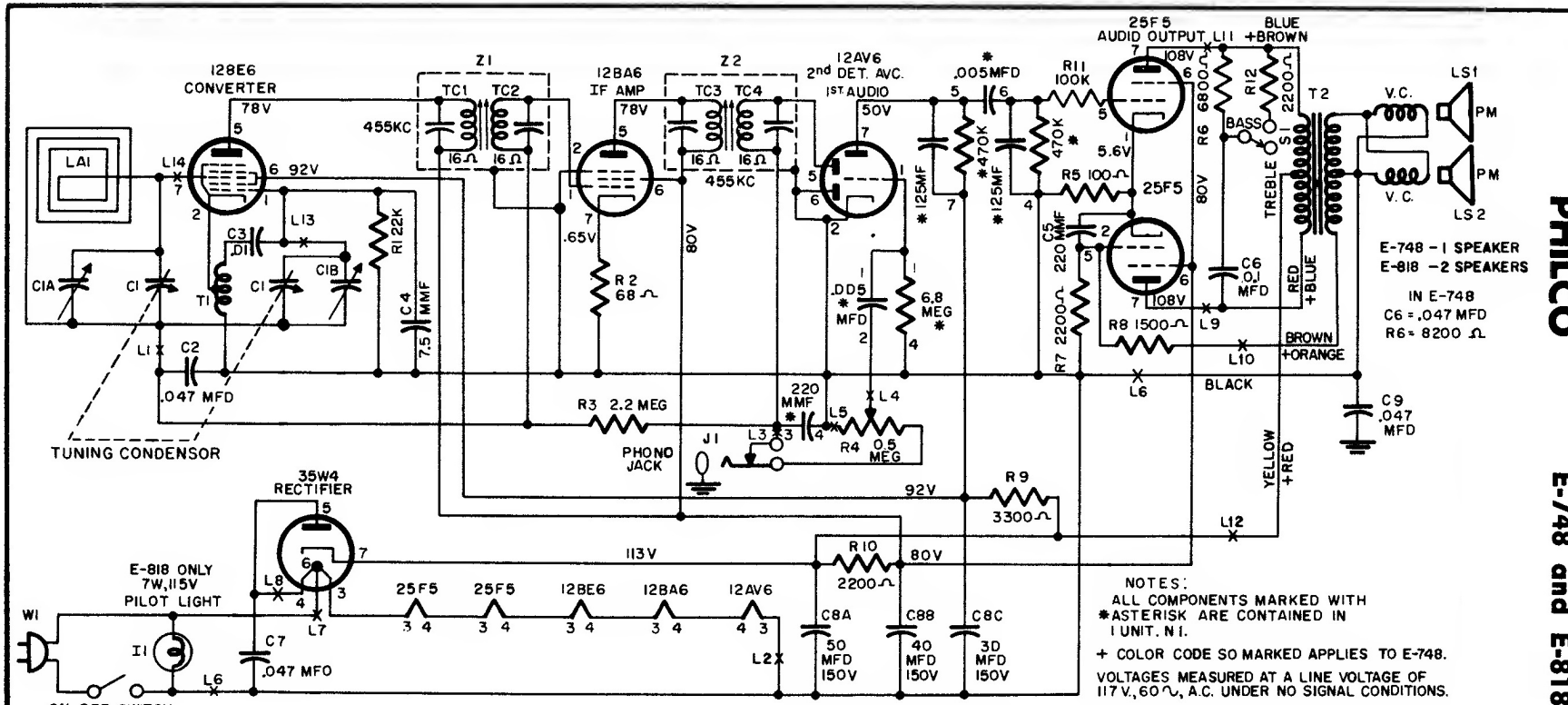
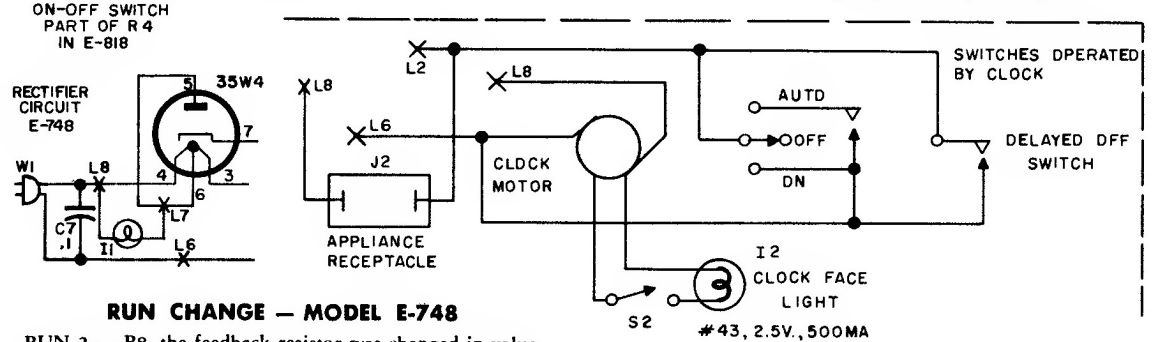




RUN CHANGE — MODEL E-748

RUN 2 — R8, the feedback resistor was changed in value to 2200 ohms, part number 66-2228340. This change was made to improve the audio feedback characteristics. When replacing, use the new value, 2200 ohms.

(Alignment and other service material is printed on the next page adjacent at right.)

NOTES:
ALL COMPONENTS MARKED WITH *ASTERISK ARE CONTAINED IN 1 UNIT, N1.

+ COLOR CODE SO MARKED APPLIES TO E-748.

VOLTAGES MEASURED AT A LINE VOLTAGE OF 117 V., 60 ∿, A.C. UNDER NO SIGNAL CONDITIONS.

S1, TONE SWITCH, AND R12 ARE USED IN THE MODEL E-818 ONLY.

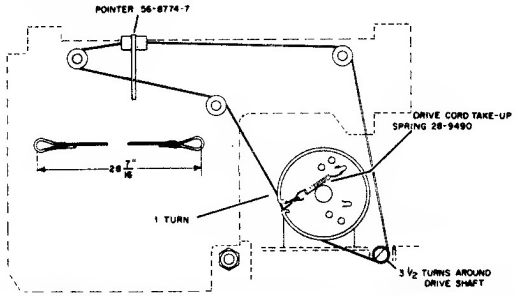
CLOCK CIRCUIT, LIGHT AND SWITCH ARE USED IN MODEL E-748 ONLY.

IN MODEL E-748, THE RADIO ON-OFF SWITCH IS PART OF THE CLOCK ASSY. AND WIRES BETWEEN L2-L6 IN THE FILAMENT RETURN. THIS PROVIDES THE SLOW SHUT-OFF "LULLA-WAY" FEATURE.

E-818, PILOT LAMP WIRES ACROSS L6-L7.

E-748, PILOT LAMP WIRES ACROSS L7-L8; ALSO JUMPER MOVES, CONNECTING RECTIFIER PLATE (PIN 5) TO L7, FILAMENT TAP (PIN 6).

T2 RESISTANCE	E-748	E-818
TOTAL PRI.	390 Ω	395 Ω
FEEDBACK	13.8 Ω	12.5 Ω
SEC.	0.53 Ω	0.125 Ω



Dial Cord Stringing — Model E-748

PHILCO

E-748 and E-818

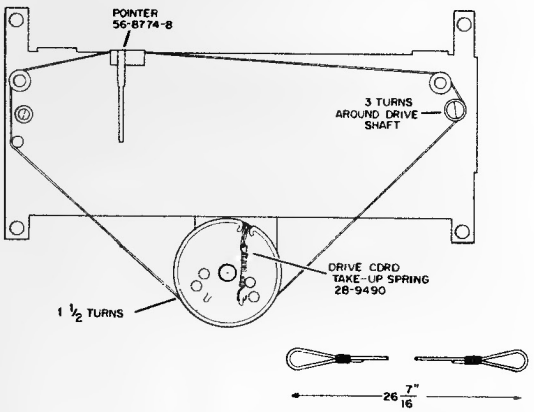
CHASSIS REMOVAL — MODEL E-748

1. Remove knobs. Remove (2) 1/4-in. hex head drive screws from cabinet back. Disengage A.C. interlock. Remove back by freeing clock time set shaft and then swivel back around left side.
2. Remove (2) 1/4-in. hex head drive screws from top corners of dial back plate.
3. Remove (2) 1/4-in. hex head drive screws from cabinet bottom.
4. Remove (2) 1/4-in. hex head drive screws from rear bottom of chassis frame.

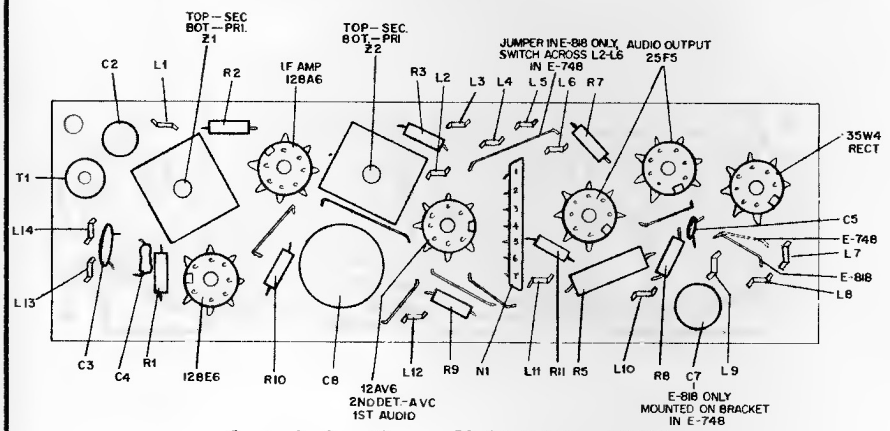
Tie Lug No.	E-748 Connection
L1	A-G-C to Ant. and Gang
L2	Filament side of A-C Switch
L3	Detector Output to J1
L4	Arm of Volume Control
L5	Volume Control Return to B—
L6	A-C line, line side of A-C Switch, and Black lead from T2
L7	One side of Pilot Lamp
L8	A-C line and one side of Pilot Lamp
L9	Blue lead to T2, Output Transformer
L10	Orange Lead to T2
L11	Brown lead to T2
L12	Red lead to T2
L13	Oscillator section of Gang
L14	Ant. and Ant. section of Gang

CHASSIS REMOVAL — MODEL E-818

1. Remove knobs. Remove (6) Phillips head wood screws from back. Disengage A.C. interlock. Remove back by swiveling toward left.
2. Remove (2) 1/4-in. hex head screws and washers holding A.C. interlock bracket.
3. Unsolder the two leads, from receiver panel, from the right hand speaker.
4. Remove (4) 1/4-in. hex head drive screws that mount set to cabinet front from the chassis bracket.



Dial Cord Stringing — Model E-818



Composite Base View — Models E-748 and E-818

E-818 Connection

A-G-C to Ant. and Gang
Not used
Detector Output to J1
Arm of Volume Control
Volume Control Return to B
Set side of A-C Switch, one side of Pilot Lamp, and Black lead from T2
A-C line
Not used
Red lead to T2, Output Transformer
Brown lead to T2
Blue lead to T2
Yellow lead to T2
Oscillator section of Gang
Ant. and Ant. section of Gang

ALIGNMENT PROCEDURE

Radio Controls — Set volume control to maximum. Set tuning control as indicated in chart.

Output Meter —Connect across voice coil terminals.

Signal Generator — Connect generator and set frequency as indicated in chart. Use modulated output, 30%.

Output Level — During alignment, adjust signal-generator output to hold output-meter reading below .5 volts.

ALIGNMENT CHART

STEP	SIGNAL GENERATOR		RADIO		ADJUST
	CONNECTION TO RADIO	DIAL SETTING	DIAL SETTING	SPECIAL INSTRUCTIONS	
1	Ground lead to B —; output lead through a .1 mf condenser to grid (pin 7) of 12BE6.	455 kc.	Tuning gang fully open.	Adjust tuning cores, in order given, for maximum output. TC1 and TC3 are located on top of transformers.	TC4—2nd i-f sec. TC3—2nd i-f pri. TC2—1st i-f sec. TC1—1st i-f pri.
2	Radiating loop. (See note below).	1620 kc.	1620 kc. *	Adjust for maximum output.	C1-B—osc.
3	Same as Step 2.	1500 kc.	1500 kc.	Adjust for maximum output.	C1-A—aerial.

Note: Make up a 6-8 turn, 6 inch diameter loop from insulated wire, connect to signal-generator leads, and place near radio loop.

* For proper adjustment of the oscillator trimmer, fully open the tuning gang and insert a .006 inch non-metallic shim between the heel of the rotor and the top of the stator plates. Close the tuning gang sufficiently to hold the shim in place, and then remove the shim without disturbing the gang setting.