

PHILCO RADIO MODEL 48-300, SECTIONALIZED SCHEMATIC DIAGRAM, SHOWING TEST POINTS

Section 1 POWER SUPPLY

Make the tests in this section with a d-c voltmeter connecting the leads between B-, test point B, and the test points indicated in the chart. The voltage readings given were taken with a 20,000-ohms-per-volt meter, at a line voltage of 117 volts, a.c.

With the power-cord plug connected to a source of power (a.c. or d.c.), turn on the power, and set the volume control to minimum (clockwise).

Follow the steps in the order given. If the "NORMAL INDICATION" is obtained in step 1, proceed with the tests for Section 2 (audio circuits); if not, isolate and correct the trouble in this section.

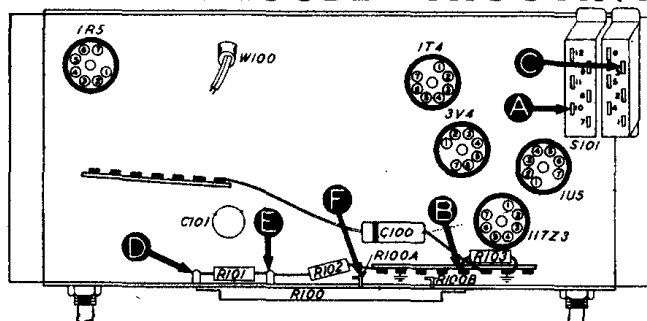


FIGURE 1. BOTTOM VIEW, SHOWING SECTION 1 TEST POINTS

STEP	TEST POINT	NORMAL INDICATION	ABNORMAL INDICATION	POSSIBLE CAUSE OF ABNORMAL INDICATION
1	A	7.5v		Trouble in this section. Isolate by the following tests.
2	C	00v		
2	D	107v	Low voltage No voltage	Defective: 117Z3. Open: C101A. Defective: 117Z3. Open: S100, S101.
3	E	103v	Low voltage No voltage	Changed Resistance: R101. Leaky: C101A. Open: R101. Shorted: C101A.
4	F	55v	Low voltage No voltage	Changed Resistance: R100A. Leaky: C101B. Open: R100A. Shorted: C101B.
5	A	7.5v	Low voltage High voltage No voltage	Changed Resistance: R100A. Open: filament of one or more tubes. Open: R100A.
6	C	00v	Low voltage High voltage No voltage	Changed Resistance: R102. Leaky: C101C. Open: R207*, T200*. Open: R102. Shorted: C101C.

Listening Test: Hum may be caused by open C101B, C101C, C100, or R103.

* This part, located in another section, may cause abnormal indication in this section.

BATTERY VOLTAGE: Replace battery when (with radio turned on) "B" voltage falls below 60 volts, or "A" voltage falls below 6 volts.

Section 2 AUDIO CIRCUITS

For the tests in this section, use an audio-frequency signal generator. Connect the generator ground lead to B-, test point B; connect the output lead through a .1-mf. condenser to the test points indicated in the chart.

With the power-cord plug connected to a source of power (a.c. or d.c.), set the volume control to maximum (counterclockwise). Adjust the signal-generator output as required for each step.

If the "NORMAL INDICATION" is obtained in step 1, proceed with the tests for Section 3 (i-f, detector, and a-v-c circuits); if not, isolate and correct the trouble in this section.

