

## NOTES

All resistors 1/2 watt, carbon.

All condenser values in ufd unless otherwise stated.

Voltages measured with a V.T.V.M. from point indicated to ground, under "No Signal" condition, with volume control at minimum and 2.6 volts from the battery supply.

\*Audio collector voltage may vary between —.6 and —1.0 volt depending upon the transistor.

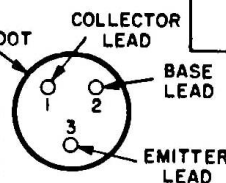
Coil resistances measured with coil in the circuit.

## AUDIO TRANSISTOR — CODE VARIATIONS

The only differences between the four codes are the audio transistor type and the value of the audio base resistor. These value differences are indicated in the chart below. Code 124, using transistor T-0038, omits the resistor, R5; for the other codes, the value of R5 is as stated.

For audio transistor replacement purposes, only one type is used, the T-0041 of code 130, part number 34-6001-21. When this transistor is used as replacement in codes 124, 126 or 128, R5 must be changed in value as indicated in the chart.

There will be no difference in performance between the four audio transistors provided the base resistor, R5, is of the correct value.

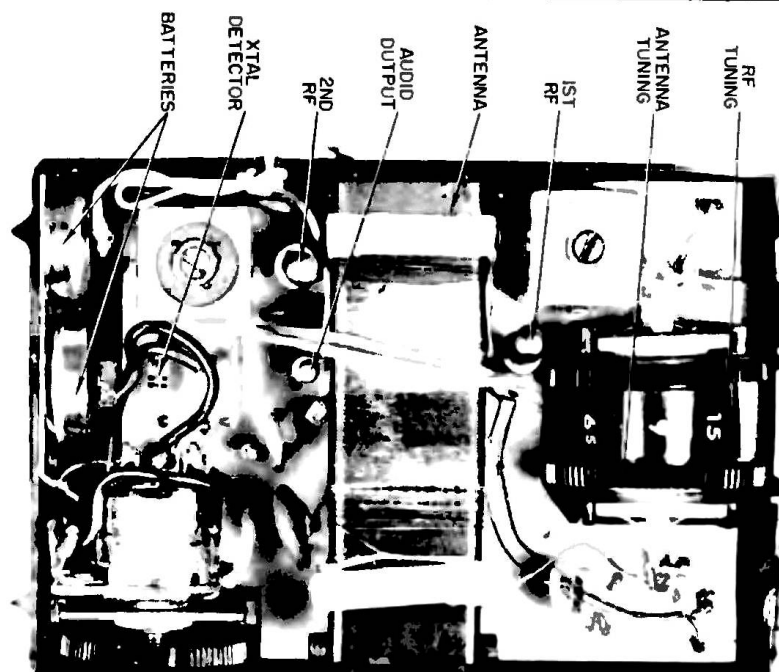


BATTERY VOLTAGE 2.6V  
APPROX. BATTERY DRAIN  
= 2.2 MA.

| CODE | AUDIO TRANSISTOR | BASE RESISTOR R5 |
|------|------------------|------------------|
| 124  | T-0038           | NONE             |
| 126  | T-0039           | 100K Ω           |
| 128  | T-0040           | 330K Ω           |
| 130  | T-0041           | 180K Ω           |

MODEL T-3 — CODES 124, 126, 128 & 130

# PHILCO



The T-3 Radio with Back Removed

## ALIGNMENT PROCEDURE

**GENERAL**—Allow the test equipment to warm up for fifteen minutes before starting the alignment procedure.

**OUTPUT INDICATOR**—Connect the output indicator (a V.T.V.M. using the low voltage AC range or a calibrated oscilloscope) across the ear phone terminals.

**SIGNAL GENERATOR**—Use an AM r-f signal generator. Radiate the signal to the radio antenna. Use a 6 to 8 turn, 6-inch diameter loop made up of insulated wire. Connect to generator terminals and place about one foot from the radio antenna.

**OUTPUT LEVEL**—During alignment, attenuate the signal-generator output so as to maintain the output level at 0.63 volts.

**RADIO CONTROLS**—Set the volume control to maximum. Set the antenna tuning knob (the right-hand knob with the dial scale) to 600 KC. Without moving the antenna tuning, adjust the RF tuning knob to the mid-position of its fine-tuning range. DO NOT DISTURB the radio tuning once it is set.

**Step #1**—Set generator to 600 KC. Adjust the core of T1 (the 1st RF transformer) for peak. Rock the generator — NOT the radio tuning — and adjust for maximum.

**Step #2**—Set generator to 600 KC. Adjust the core of T2 (the 2nd RF transformer) for maximum. This transformer is very broad; there will be only a slight peak. The core may not extend above the top of the can.