

## Model 37-116 - Codes 121-122

### Electrical Specifications

**Type Circuit:** Superheterodyne, with magnetic tuning; Fidelity-Selectivity control in the intermediate frequency circuit and pushpull class "A" audio output. The Code 122 Receiver uses the Philco Automatic Dial tuning system.

**Power Supply:** 115 Volts A.C. 50 to 60 cycles. For 25 to 40 cycle operation use power transformer listed in the parts list for this purpose.

**Power Consumption:** 165 Watts.

**Intermediate Frequency:** 470 K. C.

**Undistorted Output:** 15 Watts.

**Philco Tubes Used:** 4-6K7G; 3-6J5G; 1-6L7G; 1-6N7G; 1-6A8G; 1-6H6G; 2-6B4G; 1-6F6G; 1-5U4G.

**Tuning Ranges:** Five. Range 1-530 to 1600 K.C.; Range 2-1.58 to 4.75 M.C.; Range 3-4.7 to 7.4 M.C.; Range 4-7.35 to 11.6 M.C.; Range 5-11.5 to 18.2 M.C.

**Speaker:** "W" High-Fidelity Cathedral type.

### Precaution

**DO NOT APPLY POWER TO THE RECEIVER WITH THE SPEAKER UNIT DISCONNECTED**

### Replacing Dial Control Screws

#### REMOVING CONTROL SCREWS Code 122

A. First remove the tuning knobs, then detach the metal plate, covering the control handle by removing the three screws in the center of the plate.

B. When the metal cover is removed, two screws will be noted holding the indexing handle to the rotary hub. Remove these screws and detach the handle. See Fig. 1.

C. Referring to Fig. 1, five screws will be seen which hold the dial escutcheon to the dial body. Remove these screws and lift the escutcheon from the dial body.

D. After removing the dial cover insert a screw-driver blade into the control (indexing) screw, then push in and turn the control screw until the indexing pin on the side end of the screw is centered in the small semi-circular slot on the housing adjacent to the hole. When the screw is in this position release the tension on the screw-driver and lift the screw from the hole.

**NOTE:** It may be necessary to move the screw slightly to the right or left to mesh the teeth on the screw with those in the screw hole.

#### REPLACING THE CONTROL SCREWS

A. Insert the control screw in the screw hole. After it is inserted press the screw in and turn it 180 degrees, until the stop on the side of the screw will be in a position to clear the stopping shoulder in the dial cover hole of this screw. When the screw is in position replace the dial escutcheon and Indexing Handle.

#### REPLACING THE DIAL OR MASK ARM ASSEMBLY Code 122

To replace the dial or mask arm assembly, remove the chassis from the cabinet. Then remove the tuning knobs, indexing handle, handle cover and dial cover as given in the procedure for the removal of the indexing screw.

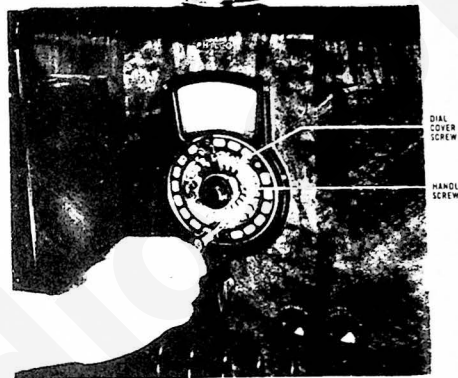


Fig. 1—Automatic Tuning Dial, Code 122, Receiver

With these parts removed the scale may be lifted from the dial housing.

#### MASK ASSEMBLY Code 122

The removal of the mask and arm assembly necessitates the removal of the two fibre and one metal rings around the outer edge of the dial housing. The mask arm can then be slipped off. Care should be taken on replacing the metal ring to have the spring located along the bottom edge of the ring in position, otherwise the mask will vibrate.

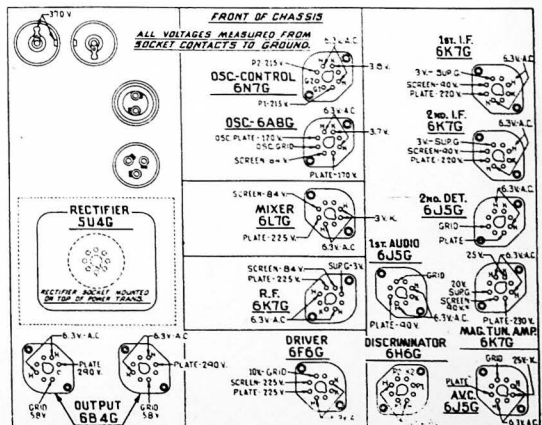


Fig. 2—Socket Voltages, Measured from Underside of Chassis

The voltages indicated by arrows were measured with a Philco 925 Circuit Tester which contains a voltmeter having a resistance of 1000 ohms per volt. Volume Control at minimum, range switch in broadcast position, line voltage 115 A. C.

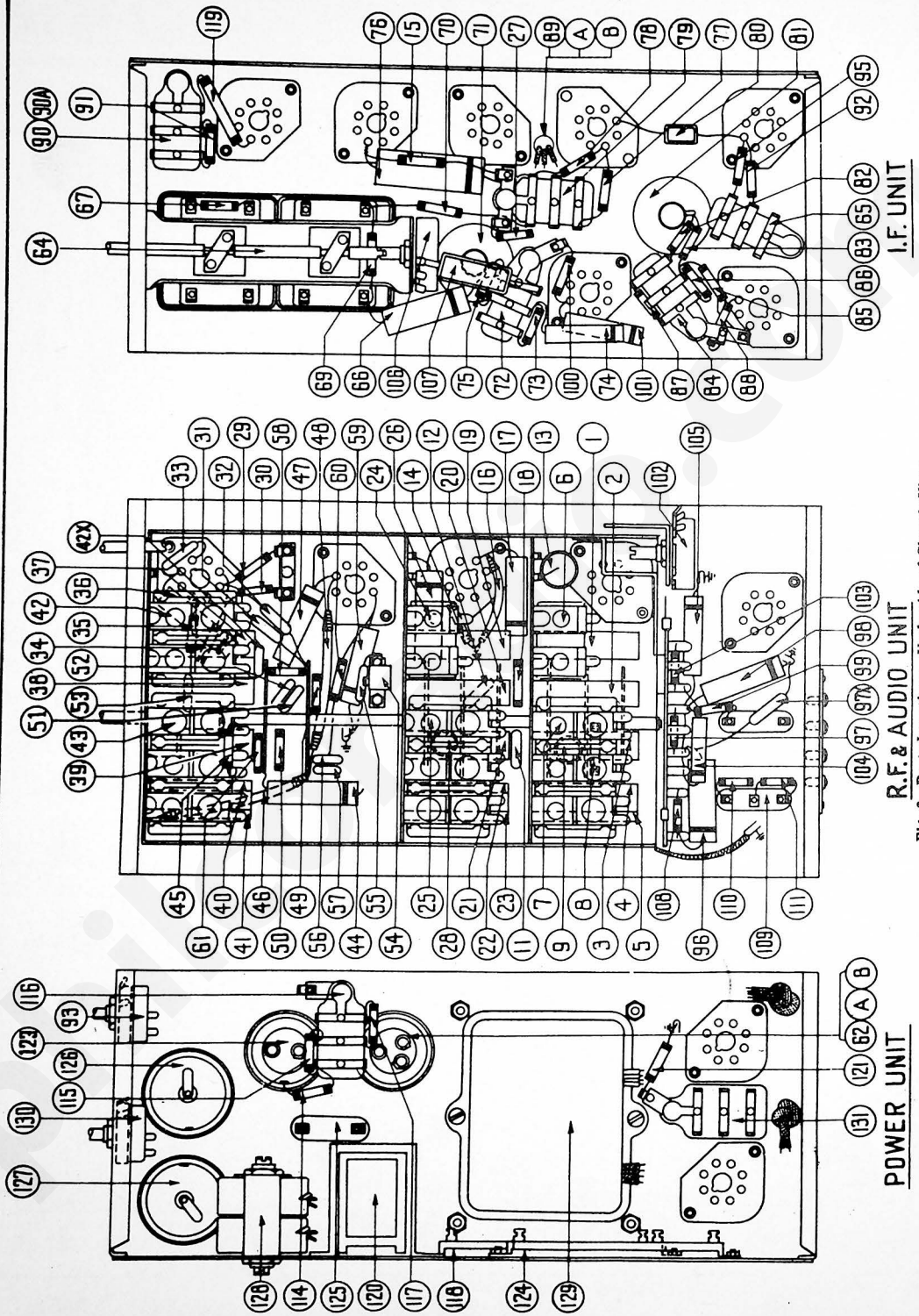


Fig. 3—Parts Locations—Underside of Chassis View



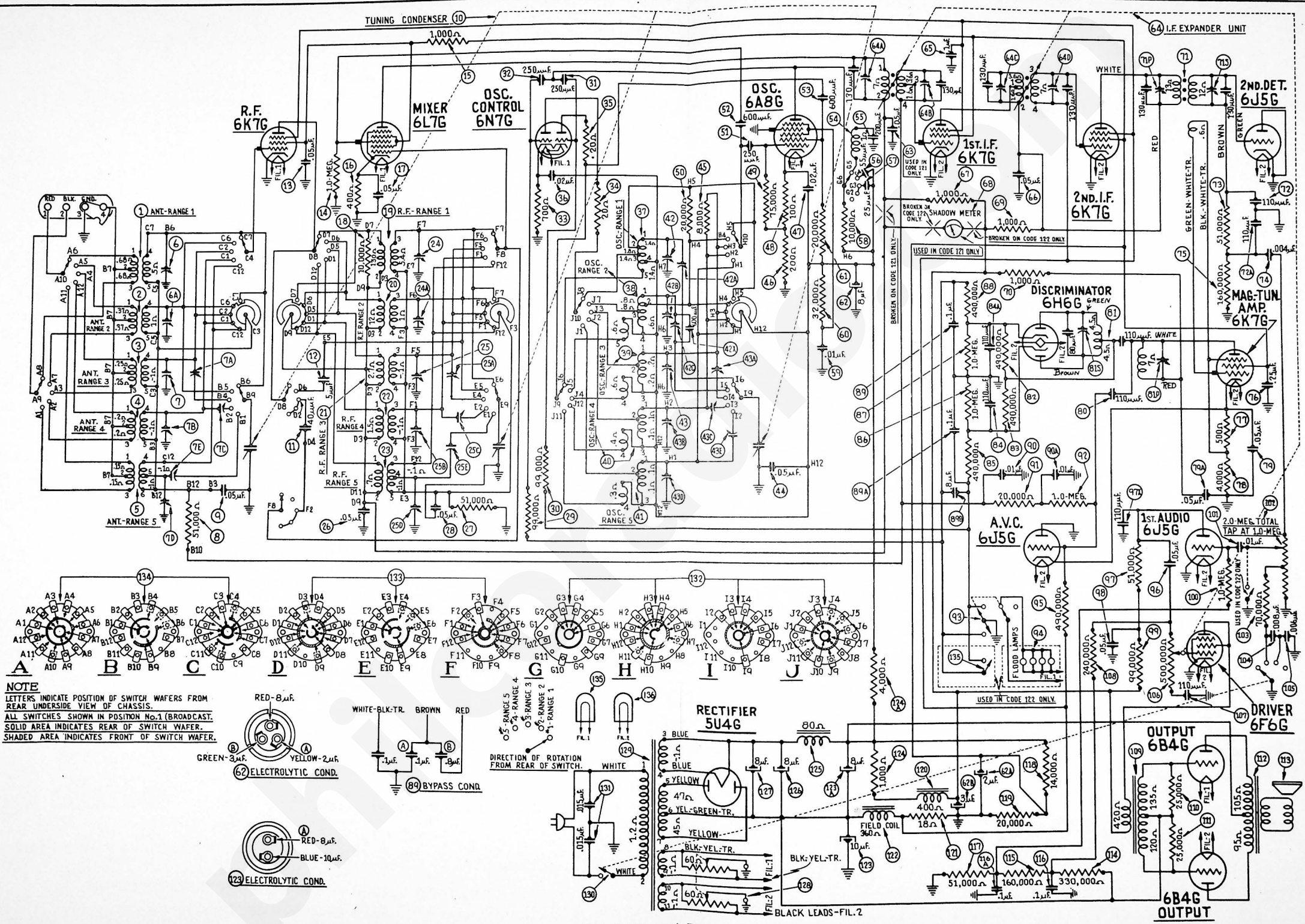


Fig. 4—Schematic Diagram  
 Model 37-116—Codes 121-122

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