

RCA VICTOR MODEL CV-8 PAK-O-POWR

Technical Information and Service Data

Battery Required: One 6-volt storage battery tapped at +4 volts (4 volts for CV-8 and 2 volts for receiver tubes).

Current Drain: 1.65 amperes to supply 4 ma. at 180 volts and 18 ma. at 135 volts.

Fuse Rating: 5 amperes

Height, 6-5/8 inches.....Width, 7 inches.....Depth, 3 1/8 inches

Weight (net), 7 1/2 pounds.....Weight (shipping), 8 3/4 pounds

The RCA Victor Model CV-8 Pak-O-Powr is a compact, self-contained, power-conversion unit which operates from a 6-volt storage battery and supplies all "A" and "B" power required to operate RCA Victor Receiver Models 85BK, 85BK-1, 85BT, 85BT-1, 86BK, or 86BT.

Four clip-leads extend from the cable for connection to the storage battery. Two leads, the Brown (-) and Yellow (+4 v.), supply power for the CV-8 vibrator; while the remaining two leads, Blue (+4 v.) and Red (+6 v.), supply 2 volts for the receiver-tube filaments. It is important that the battery leads be connected correctly, as a wrong connection of the Red and/or Blue leads will burn out the tubes. Refer to the Wiring Diagram, figure 2, for proper connections and also note that the two 4-volt leads, Blue and Yellow, should make separate connections to the same battery strap to avoid vibrator buzz. The four pairs of twisted leads must each be twisted their full length to avoid vibrator buzz. The seven-contact female receptacle plugs into the power plug on the rear of the receiver chassis. The battery cable supplied with the receiver is not required.

The seven plug connections are as follows: No. 1, battery side of vibrator switch. No. 2, vibrator side of vibrator switch. No. 3 +180 volts for power-output tube. No. 4, receiver chassis ground. No. 5, +135 volts for all tubes except power output. No. 6, jumper to No. 4. No. 7, battery side of filament switch.

To check the CV-8 when a receiver is not available, resistors may be used for loading as follows: a 56,000-ohm, 1-watt resistor from contacts 3 to 2, and an 8,200-ohm, 3-watt resistor from contacts 5 to 2. Under such conditions, the voltage from contacts 3 to 2 should be 180 volts and from contacts 5 to 2 should be 135 volts. It will be necessary to connect a jumper from contacts 1 to 2 to turn the CV-8 on.

When operating or servicing, the CV-8 chassis should be insulated from the receiver chassis to avoid vibrator buzz.

REPLACEMENT PARTS

| STOCK NO. | DESCRIPTION | LIST PRICE |
|-----------|---|------------|
| 4289 | Body - Fuse holder female body - Pkg. of 4..... | \$.21 |
| 4286 | Bushing-Fuse holder bushing and ferrule--Pkg. of 4..... | .21 |
| 14423 | Cable-Battery cable complete, connects battery to vibrator to receiver..... | 4.69 |
| 4288 | Cap-Fuse holder male cap - Pkg. of 4..... | .21 |
| 11654 | Capacitor-0.01 Mfd. (C3,C4)..... | .22 |
| 4841 | Capacitor-0.1 Mfd. (C6)..... | .31 |

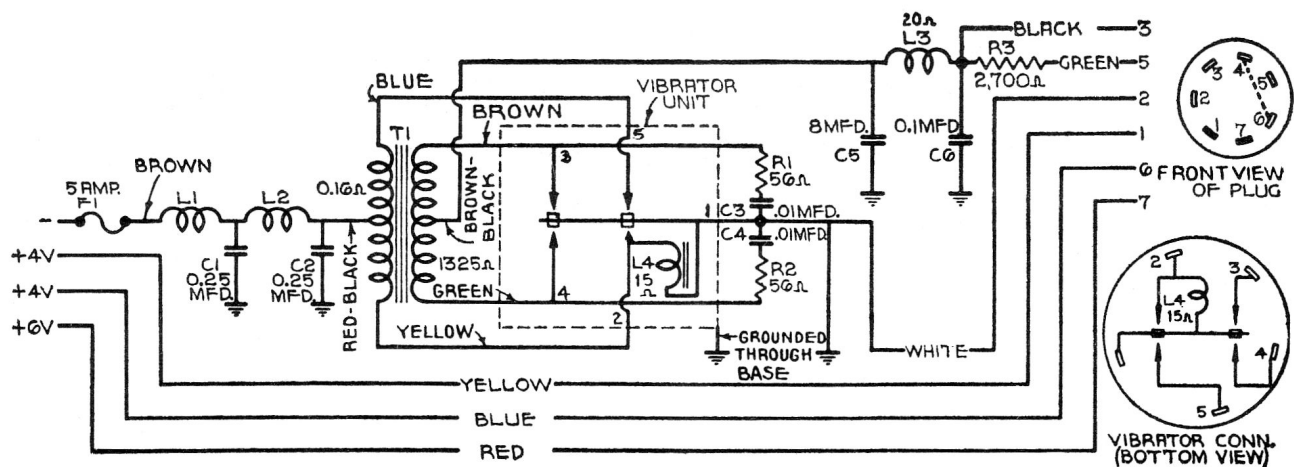


Figure 1. - Schematic Circuit Diagram

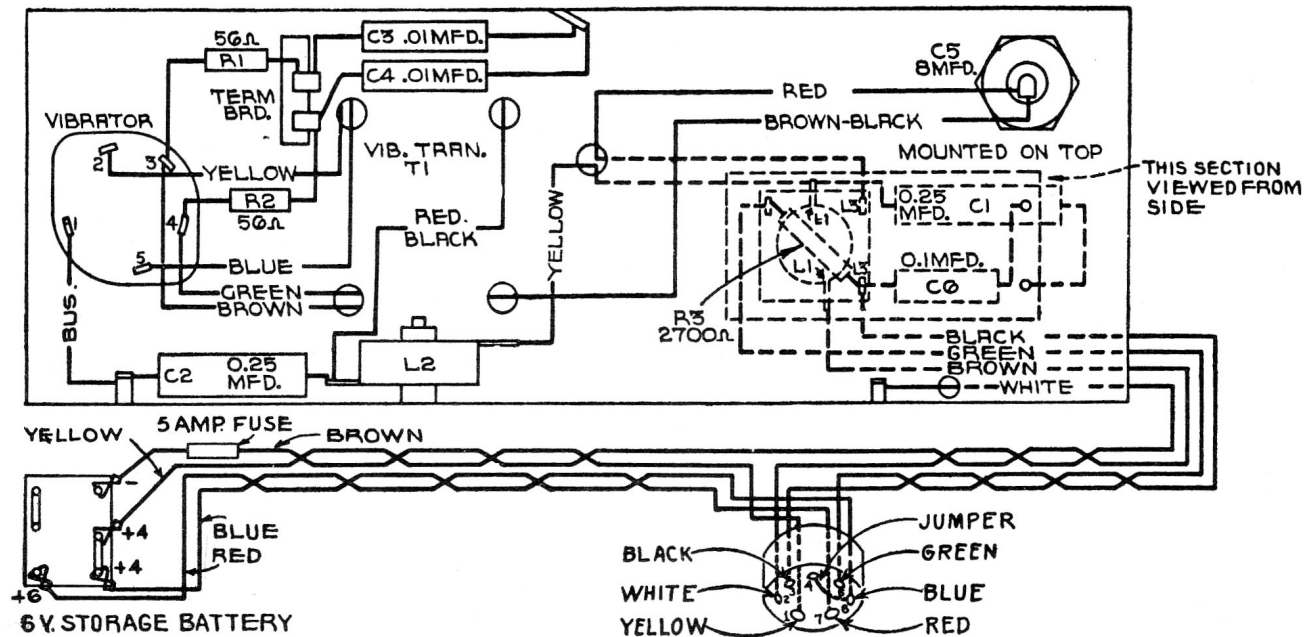


Figure 2. - Chassis Wiring Diagram

| STOCK NO. | DESCRIPTION | LIST PRICE |
|-----------|--|------------|
| 4840 | Capacitor-0.25 Mfd. (C1,C2)..... | \$.42 |
| 13046 | Capacitor- 8 Mfd. (C5)..... | 1.61 |
| 14289 | Clip-Two battery clips, one marked "+" and one unmarked... | .28 |
| 12819 | Coil-Choke coil and terminal board assembly (L3)..... | .56 |
| 12179 | Coil-Choke coil (L1,L2)..... | .63 |
| 5140 | Fuse-5 Ampere (F1)-Pkg. of 2..... | .22 |
| 4290 | Insulator-Fuse holder insulating sleeve, Pkg. of 5..... | .21 |
| 14419 | Mounting-Rubber mounting for vibrator chassis..... | .21 |
| 14409 | Plug-7 contact female plug for battery cable..... | .35 |
| 13220 | Resistor-56 ohms, carbon type, 1/4 watt (R1,R2)..... | .20 |
| 14421 | Resistor-27,000 ohms,insulated, 1 watt (R3)..... | .22 |
| 4284 | Spring-Fuse holder tension spring-Pkg. of 5..... | .21 |
| 14420 | Transformer-Vibrator transformer (T1)..... | 5.32 |
| 14422 | Vibrator-Plug-in vibrator unit (L4)..... | 5.67 |
| 4285 | Washer-Fuse holder insulating washer-Pkg. of 10..... | .32 |