Stromberg-Carlson

SERVICE MANUAL

STROMBERG-CARLSON VIBRATOR UNIT
V. 140

For operating 1.4-volt Battery Receivers from a 6-volt Accumulator

This Service Manual is issued free of charge to all Authorised Stromberg Carlson Dealers. Applications for additional copies should be made direct to the nearest Distributor.

Stromberg-Carlson (Australasia) Pty. Ltd. reserves the right to make changes in design details at any time without incurring any obligations to install same on radio receivers previously sold.

circuit diagram clearly shows the arrangement. No Dial Lamp batteries are necessary.

The "C" bias battery must still be used on the receiver. This is held in the metal clip on top of the chassis, and connected by means of the two short wires alongside. Of these, the red wire should connect with the C+ terminal and the black wire to the C–9. Care should be taken not to reverse these connections, as by so doing the tube consumption is considerably increased and their life appreciably shortened.

OPERATION: The V.140 unit has been designed to deliver 350 mA. at 1.4 volts for filament supply and 11 mA. at 90 volts for "B" supply. The points at which these voltages should be checked are indicated in the circuit diagram. Such measurements should be made with a receiver load connected, and using a voltmeter having a resistance of 1000 ohms per volt.

GENERAL: The V.140 Vibrator Unit has been designed for use with all the 5-Valve Stromberg-Carlson Battery Receivers released since January, 1940, which employ the new low-consumption 1.4-volt tubes, and permits operation of these receivers from a single 6-volt accumulator instead of the usual combination of "A" and "B" batteries. Conversion from battery to vibrator operation is merely the substitution of a plug on a cable from the unit for the normal cable used with batteries.

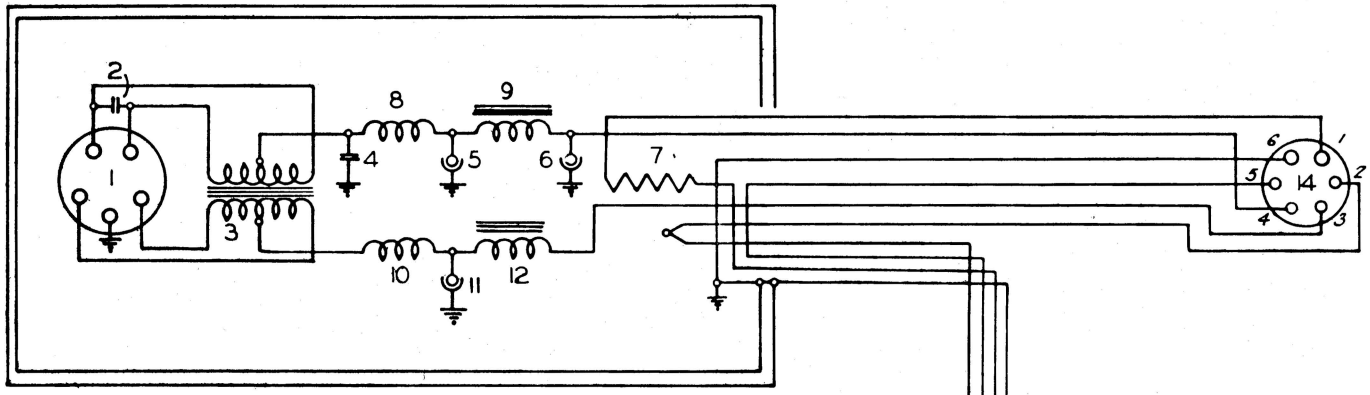
The conversion eliminates the need for "A," "B," and Dial Lamp batteries, although the normal "C"-bias battery remains in use. Provision has been made in all the 1940 5-valve Battery Receiver Series for the normal ON/OFF Switch to also operate the vibrator, and this precludes the need for any additional switches within the cabinet or on the battery.

Economy of battery current consumption can still be effected by switching off the Dial Lamps when the tuning process has been completed.

IMPORTANT: WHEN USING THIS VIBRATOR UNIT THE RECEIVER MUST BE SWITCHED OFF BEFORE ACCUMULATOR IS EITHER CONNECTED OR DISCONNECTED.

MODE OF CONNECTION: The Vibrator Unit has two cables emerging from it, one of them terminating in a 6-way socket, and the other in four battery clips. The existing battery cable from the receiver should be unplugged from the chassis, and the first-named vibrator cable substituted. Note that the plug can be fitted in one way only—the correct way. Two pins are thicker than the rest, and these fit two corresponding holes in the socket.

The second cable from the Vibrator comprises four wires terminating in battery clips. The red wire is to be connected to the +6-volt battery terminal, the black to the negative terminal, and the two green wires to the +2-volt terminal. Care should be taken not to touch the +2-volt clips on the wrong battery terminals. The accompanying



Nº	PART Nº	DESCRIPTION.
1	4799	VIBRATOR "FERROCART" TYPE 18978 6 VOLT.
2	4248	CAPACITOR 0·006 MF. MICA 2000V. TEST
3	6879	TRANSFORMER VIBRATOR
4	4250	CAPACITOR 0·01 MF. MICA .
5	4169	ELECTROLYTIC 8 MF. 525 PV. TYPE EE 10774
6	4170	ELECTROLYTIC 16 MF. 525 PV. TYPE EE 10783
7	6888	RESISTOR 1·45 OHMS ± 3%
8	6881	CHOKE H.T.R.F.
9	6326	CHOKE H.T.L.F.
10	1440	CHOKE L.T.R.F.
11	4177	ELECTROLYTIC 500 MF 12 PV. TYPE EE 10778
12	6883	CHOKE L.T.L.F.
13	6354	FUSE 2 AMP.
14	6349	AMPHENOL CABLE CONNECTOR PF. 6.

STROMBERG-CARLSON
A/ASIA PTY. LTD

CIRCUIT V140.

DRN.	Nº	6942
TRD		
CKD	APP	DATE 2 / 40