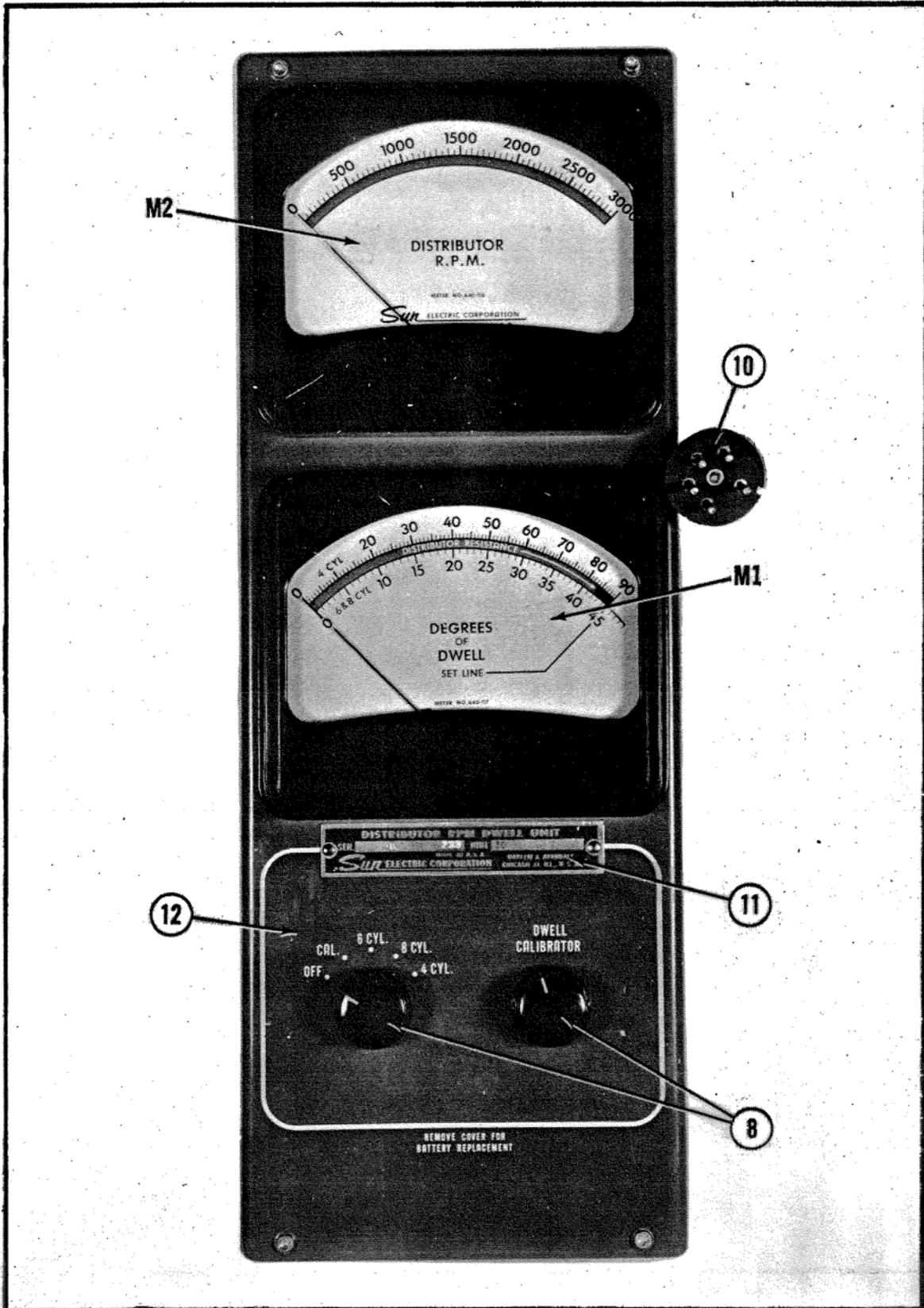
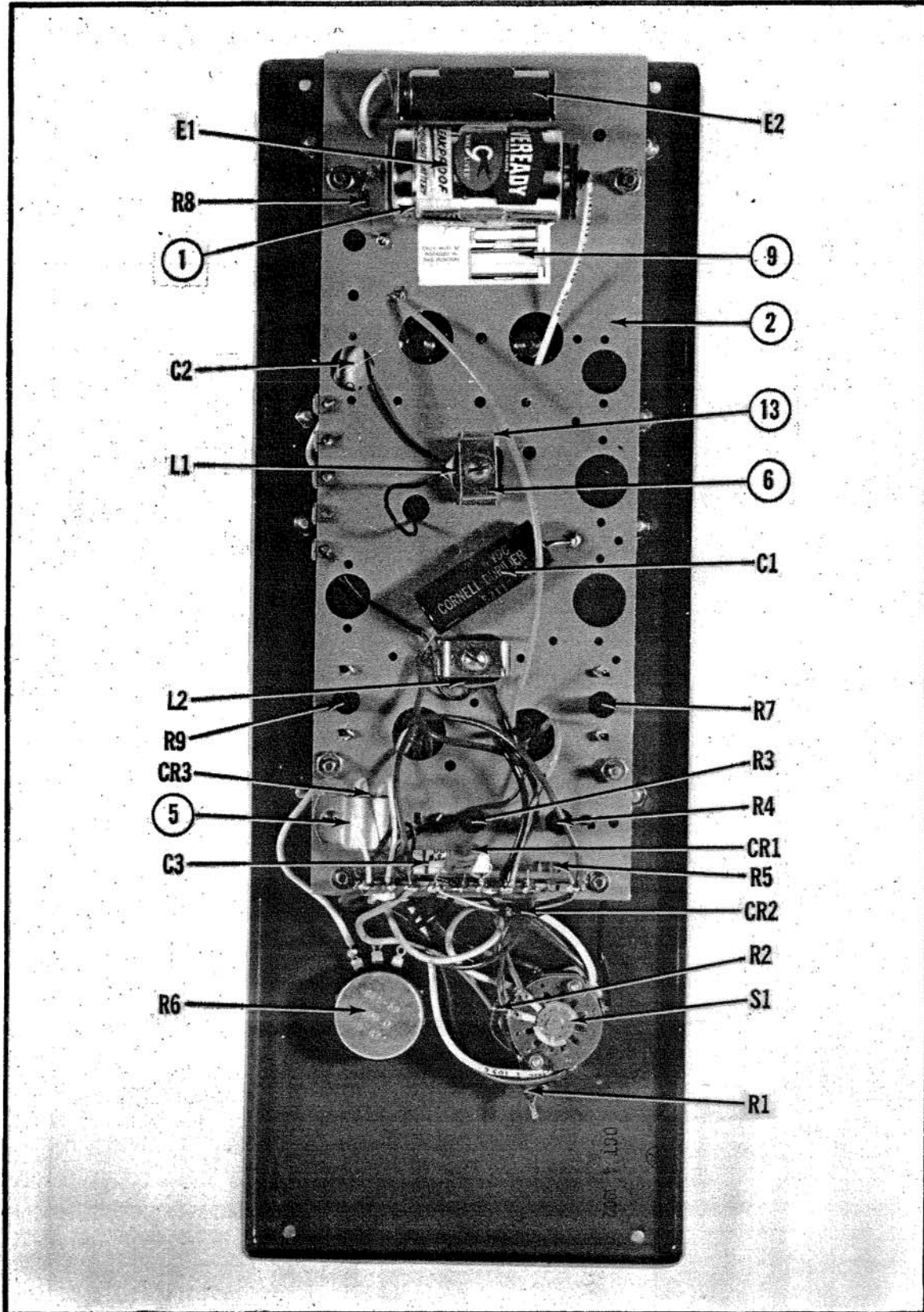


REPAIR MANUAL





REPAIR PARTS

ITEM	DESCRIPTION	QUAN. USED	PART NO.
C1	CAPACITOR, 250 MFD., 0.6 V	1	679-130
C2	CAPACITOR, 1.5 MFD., 150 V	1	679-166
C3	CAPACITOR, .01 MFD., 200 V	1	679-145
CR1	DIODE, Selenium; 1Y1	1	774-103
CR2	DIODE, Silicon	1	771-117
CR3	BRIDGE, Selenium; EU049	1	774-402
E1	BATTERY, Size D	1	768-1
E2	CELL, Mercury	1	1766-7
L1	COIL, Relay	1	484-2
L2	COIL, Relay	1	484-4
M1	METER, Dwell	1	640-117
	Case, w/Glass	1	4-306-A
M2	TACHOMETER; (0) - 3000 RPM) (Unit U-50)	1	640-118
	Case, w/Glass	1	4-306-A
M2	TACHOMETER; (0-4000 RPM) (Unit U-50-1)	1	640-120
	Case, w/Glass	1	4-306-A
R1,R10	RESISTOR; 300 Ohm, 1/2W	3	680-9
	NOTE: R1 is shown as 600 Ohm on schematic. Actually is 2-300 Ohm resistors in series.		
R2	RESISTOR; 150 Ohm, 1/2W	1	680-3
R3	POTENTIOMETER; 600 Ohm, 1/2W	1	685-104
R4, 7, 9	POTENTIOMETER; 3000 Ohm, 1/2W	3	685-102
R5	RESISTOR; 270 Ohm, 1/2W	1	680-160
R6	PONTENTIOMETER; 300 Ohm, 2W	1	685-59
R8	RESISTOR; 100 Ohm, 1/2W	1	680-6
S1	SWITCH, Wafer; 5 Position	1	762-60
1.	BATTERY, Clip	1	768-901
2.	BOARD, Mounting Assy	1	7008-028
	Strip, Terminal	1	1039-035
	Holder, Battery	1	718-601
	Holder, Mercury Cell	1	5933A
3.	BOX ASSEMBLY	1	7020-188
4.	BUSHING, Heyco	1	2035
5.	CLAMP, Capacitor	1	1131-12 718-110
6.	CLAMP, Mounting	2	1419
7.	CLIP, Wire Holder	1	718-105
8.	KNOB, Black; 1 1/8" Dia.	2	1492-6
9.	LABEL, Instruction Cell Mounting	1	681-140

FOR EXPORT MODEL VARIATIONS . . . SEE ATTACHED SHEET

REPAIR PARTS

ITEM	DESCRIPTION	QUAN. USED	PART NO.
10.	LEAD ASSEMBLY, Complete	1	6004-4
	Tubing, Vinyl; #2 Black 26" Lg.	1	669-80
	Receptacle, Faston	5	676-71
	Plug, 5 Prong; Type 4A	1	1020-5
11.	NAMEPLATE	1	1242-27
12.	PANEL, Front	1	4-455-10
13.	PLATE, Mounting	2	1426
14.	SPACER, Stl.; Cad Pl 2 1/4" Lg.	4	401-185

ADJUSTMENT AND CALIBRATION
OF
TACH DWELL UNIT, MODEL 50 & 50-1

EQUIPMENT NEEDED

DT Distributor Tester
IS Ignition Simulator
SRT-1 Variable DC Voltage Supply
SRT-15 Line Frequency Switch

PRELIMINARY INSPECTION

1. Perform visual inspection as outlined in the "Introduction to Repair Manual."

BATTERY CHECK

1. Install fresh flashlight cell.
2. Test Mercury Cell. Replace if needed.

BALANCE VOLTAGE TEST

1. Turn U-50 Selector Switch to 6 Cylinder position.
2. Connect SRT-1 DC Voltage supply to top two terminals on U-50 inner panel.
3. The U-50 Dwell meter should fall back to zero at a 4.0 volt DC reading on SRT-1 and remain on zero, plus or minus 1/2 division, up to 8 volt reading.

TACHOMETER CALIBRATION

1. Connect the U-50 five-prong plug into the 5 Pin socket at the rear of the distributor tester.
2. Use SRT-15 to strobe the distributor tester speed at 1800 RPM for 60 cycles, or at 1500 RPM for 50 cycles.

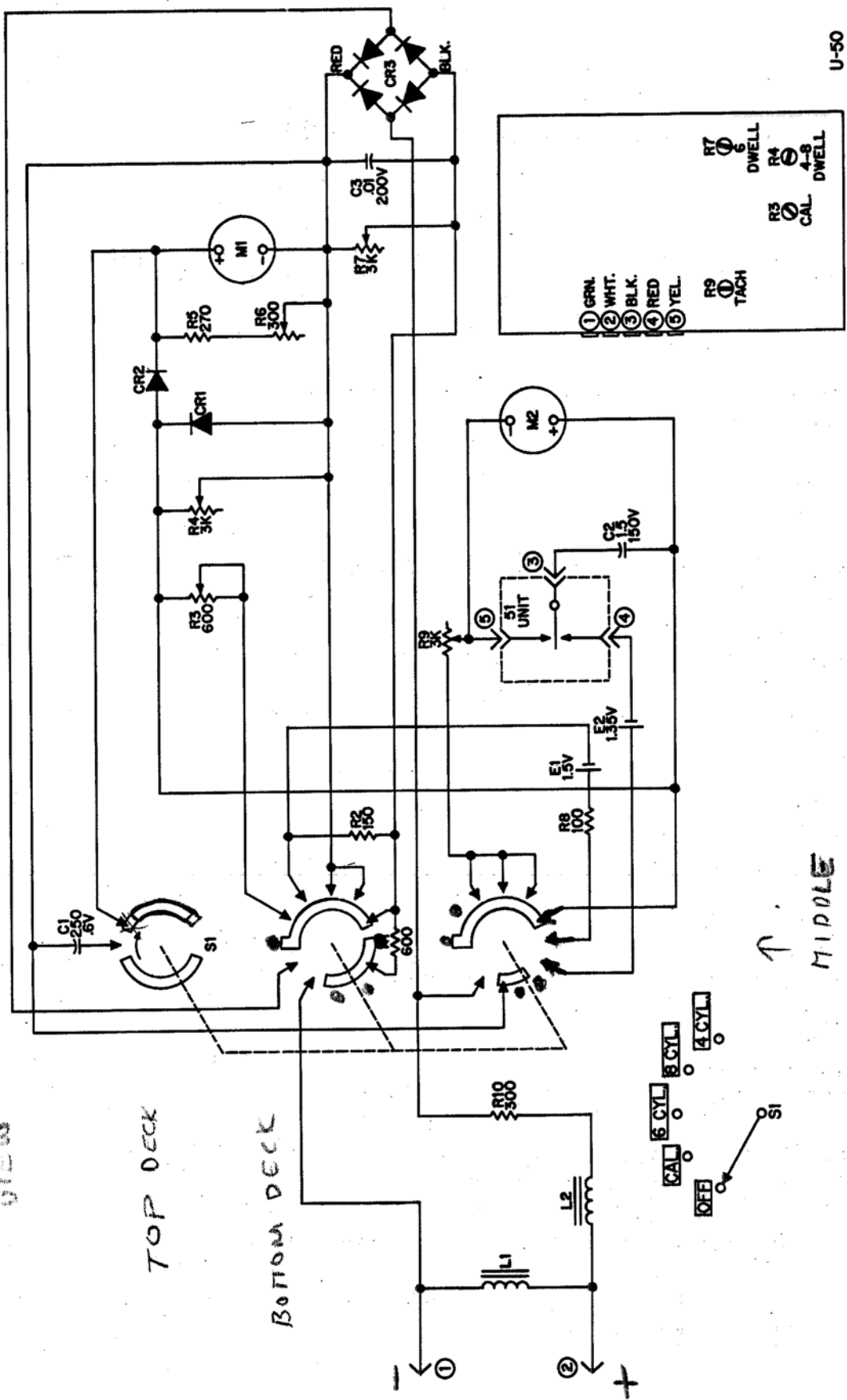
3. Adjust the U-50 tachometer calibration rheostat (R9) for the readings shown in the following table.

<u>LINE</u> <u>FREQUENCY</u>	<u>RPM</u>
60 Cycle	1800
50 Cycle	1500

DWELL METER CALIBRATION

1. Turn U-50 Selector Knob to the 6 Cylinder position.
2. Set the U-50 Dwell Calibrator Knob on the front panel of unit to 1/4 of its full clockwise range.
3. Adjust the U-50 6 Cylinder rheostat (R7) on rear panel until the U-50 dwell meter reads on Set Line.
4. Attach the U-50 five prong plug into the five prong receptacle at the rear of the distributor tester.
5. Operate distributor tester at 1000 RPM and adjust breaker points in distributor until U-50 dwell meter reads $22\ 1/2^{\circ}$ on the 45° scale. The distributor will now be adjusted to 50% of dwell.
6. Readjust U-50 6 Cylinder rheostat (R7) until U-50 meter reads 30° on the 45° scale.
7. Reduce speed on distributor tester. Turn Distributor Tester OFF.
8. Place U-50 Selector Knob in Calibrate position. Place a jumper between dwell input leads (Terminals 1 & 2 on schematic). Adjust the U-50 calibrate control (R3) until U-50 meter reads on Set Line. Remove jumper.
9. Place U-50 Selector Knob in 8 Cylinder position, and adjust the 4 and 8 cylinder calibrate control (R4) until U-50 meter reads on Set Line.
10. With Distributor Tester operating, check for the following:
 - 6 cylinder position 30° on the 45° scale.
 - 8 cylinder position $22\ 1/2^{\circ}$ on the 45° scale.
 - 4 cylinder position 45° on the 90° scale.
11. Remove U-50 five prong plug from the five prong receptacle at the rear of the distributor tester.

Knob End
 View



U-50

MIDDLE
 DECK