



- NOTES:
1. ALL RESISTORS ARE 1/2 WATT (10% UNLESS MARKED OTHERWISE. RESISTOR VALUES ARE IN OHMS (K=1000).
 2. ALL CAPACITORS ARE IN μ F.
 3. THIS SYMBOL DENOTES THE CLOCKWISE ROTATION OF A CONTROL OR SWITCH WHEN VIEWED FROM THE FRONT OF THE PANEL OR THE COMPONENT SIDE OF THE CIRCUIT BOARD.
 4. THIS SYMBOL INDICATES A DC VOLTAGE MEASURED FROM THE POINT INDICATED TO GROUND. (POINT D ON THE CIRCUIT BOARD.)
 5. VOLTAGE MEASUREMENTS ARE TAKEN UNDER THE FOLLOWING CONDITIONS:
FUNCTION SWITCH SET AT DWELL POSITION
CYCLE SWITCH SET AT 2-CYCLE POSITION
RED AND BLACK TEST LEADS CONNECTED TOGETHER.
 6. ALL VOLTAGES ARE MEASURED WITH A HIGH IMPEDANCE VOLTMETER.
 7. * DENOTES PARTS NOT MOUNTED ON CIRCUIT BOARD.
 8. THE WAVERS OF ROTARY SWITCH SW1 ARE MARKED WITH A LETTER AND NUMBER. THE DESIGNATION 1F MEANS WAFER 1 FRONT AND 2R MEANS WAFER 2 REAR. THE WAVERS ARE VIEWED FROM THE FRONT (KNOB END).
 9. RESISTORS, CAPACITORS, AND COMPONENT NUMBERS ARE IN THE FOLLOWING GROUPS:
1-10 TACHOMETER CIRCUIT.
11-19 DWELL CIRCUIT.
21-29 VOLTS CIRCUIT.
31-39 OHMS CIRCUIT.
41-49 METER CIRCUIT.
51-59 VOLTAGE REGULATOR CIRCUIT.
61-69 DWELL AND VOLTAGE REGULATOR COMMON CIRCUIT.
71-79 CONTINUITY CIRCUIT.

SCHEMATIC OF THE HEATHKIT® SMALL ENGINE TUNE-UP METER MODEL CM-1045

COMPONENT NUMBER	HEATH PART NUMBER	MAY BE REPLACED BY	DESCRIPTION	LEAD IDENTIFICATION
D1	57-50	T1C44	SCR 600 ma, 30V.	FLAT
D11, D71	57-27	1N2071	SILICON RECTIFIER 1A, 600V.	NOTE: HEATH PART NUMBERS ARE STAMPED ON MOST DIODES.
D61	56-99	1N5223B	ZENER DIODE 20ma, 2.7V.	
Q1, Q2, Q51	417-118	2N3393	TRANSISTOR	FLAT
Q3, Q4, Q5, Q11, Q12, Q13	417-201	X29A829	TRANSISTOR	OR

W8DOW