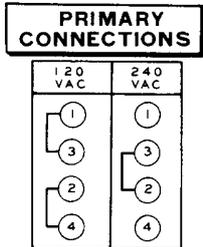
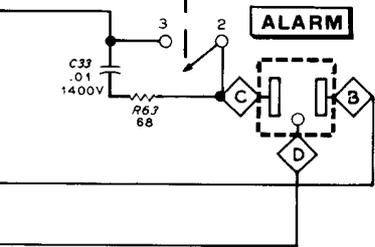
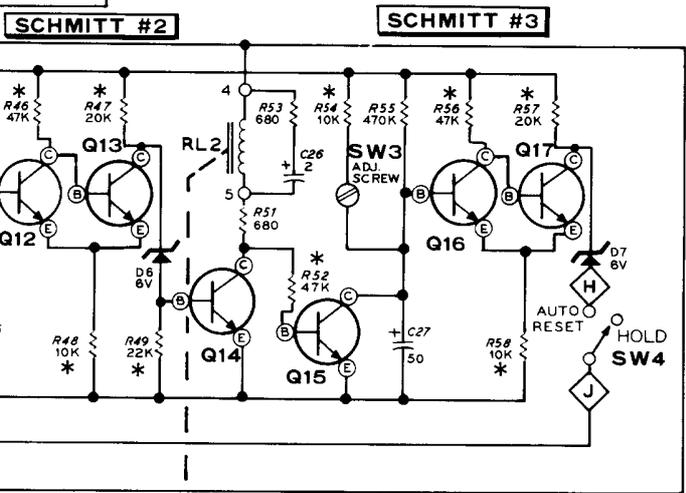


**SCHEMATIC OF THE
HEATHKIT®
MODEL GD-39
ULTRASONIC INTRUSION ALARM**



NOTES:

- ALL RESISTORS ARE 1/2 WATT. RESISTOR VALUES ARE IN OHMS UNLESS OTHERWISE MARKED (K=1,000; M=1,000,000.) 5% TOLERANCE RESISTORS ARE MARKED WITH AN ASTERISK.
- ALL CAPACITOR VALUES ARE IN μ F UNLESS OTHERWISE MARKED.
- SYMBOLS:
 * 5% TOLERANCE RESISTORS (4th BAND GOLD)
 A CIRCUIT BOARD CONNECTION HOLE. A LETTER IN THE SQUARE IS THE LETTER PRINTED ON THE CIRCUIT BOARD.
 TRANSducer.
 A DC VOLTAGE OF THE SAME VALUE AS THE CONTAINED FIGURE.
 AC SOCKET.
- REFER TO THE TRANSISTOR AND DIODE IDENTIFICATION CHART FOR IDENTIFICATION INFORMATION OF THESE DEVICES.
- REFER TO THE X-RAY VIEWS AND THE CHASSIS PHOTOGRAPHS FOR THE PHYSICAL LOCATION OF PARTS.
- REFER TO THE VOLTAGE CHART FOR VOLTAGES AT TRANSISTOR BASES AND DIODE LEADS.

Assembly
and
Operation
of the



ULTRASONIC
INTRUSION ALARM
MODEL GD-39

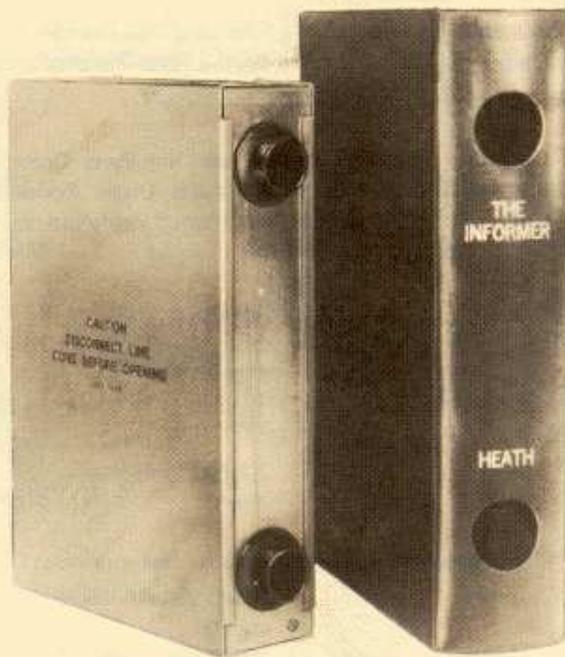


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TRANSISTOR AND DIODE IDENTIFICATION

| COMPONENT | HEATH PART NUMBER | REPLACEMENT TYPE | IDENTIFICATION |
|-------------------|-------------------|----------------------------------|--|
| Q1, Q2 | 417-91 | 1N191 (BROWN-WHITE-BROWN) | <p>HEATH PART NUMBERS OR THE TYPE NUMBERS ARE STAMPED ON MOST DIODES.</p> |
| Q3 THRU Q9 | 417-118 | 2N3393 | |
| D9, D10, D11, D12 | 57-45 | 1N4002 | <p>BAND OR BANDS</p> |
| Q8 | 56-57 | 1N716A (VIOLET-BROWN-BLUE-BROWN) | <p>COLOR BANDS</p> <p>NARROW SPACE WIDE SPACE (CATHODE END)</p> |
| Q1, Q2 | 417-91 | 2N5222A | <p>FLAT OR E C B E C B</p> |
| Q3 THRU Q9 | 417-118 | 2N3393 | |