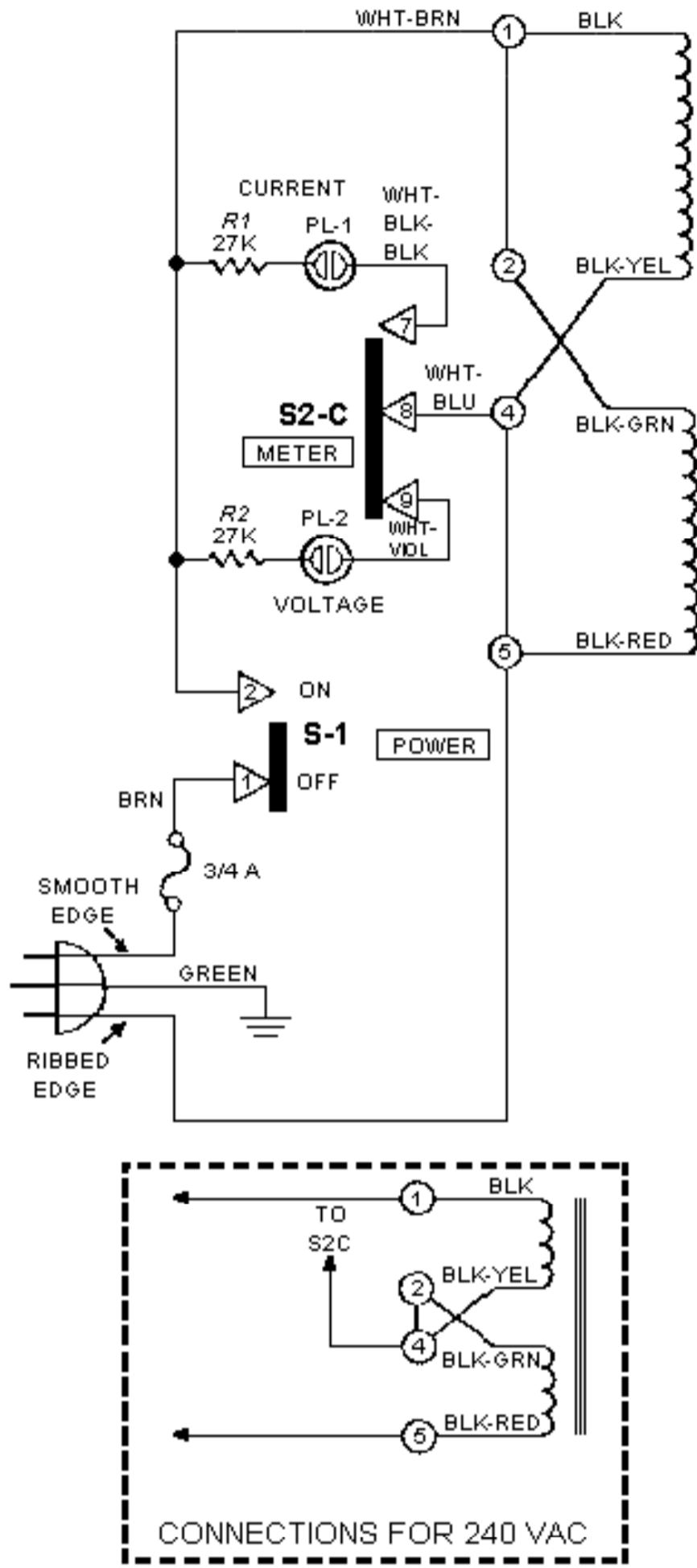
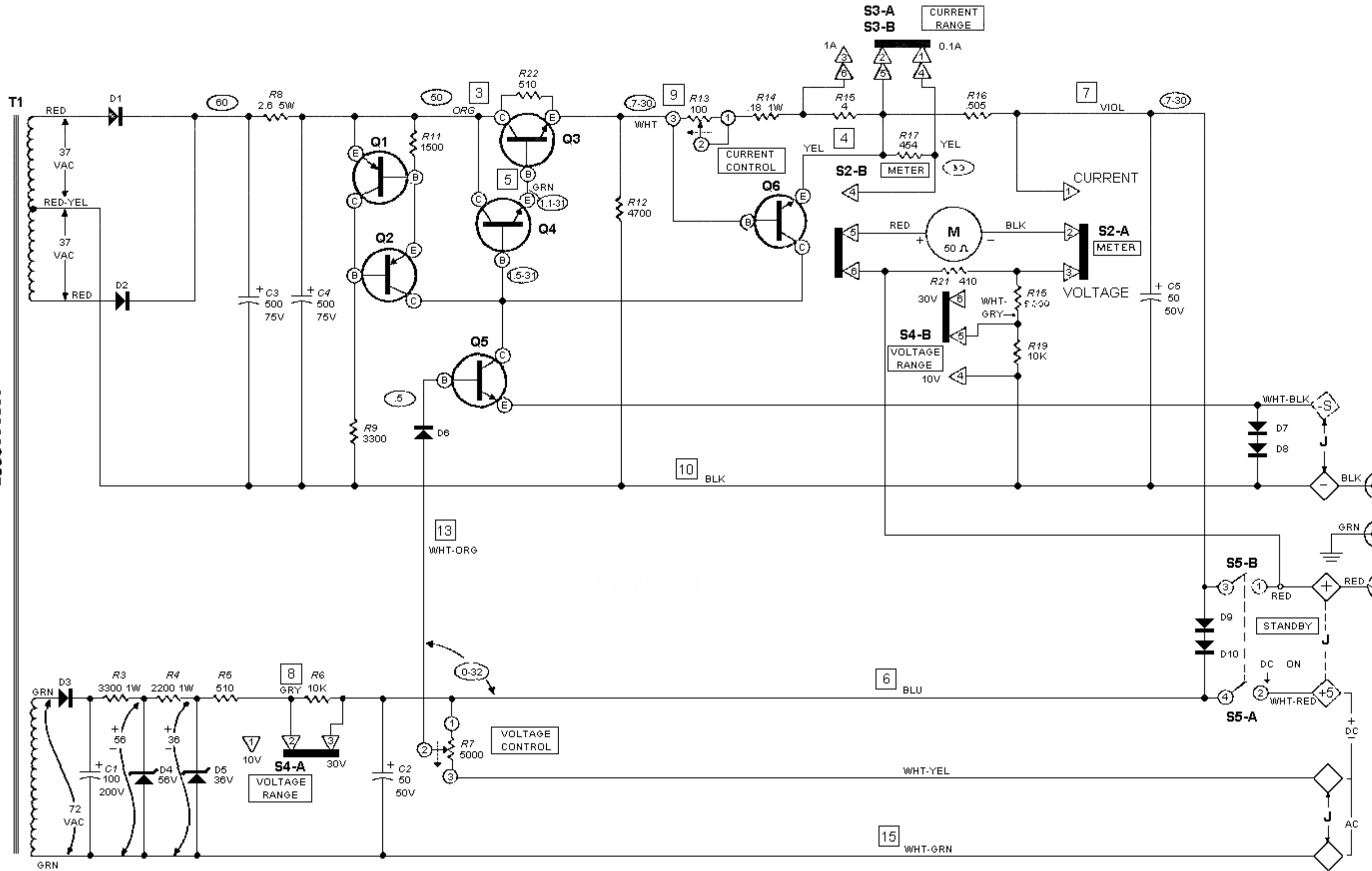


NOTE: TRANSFORMER LEAD NUMBERS REFER TO THE LUGS OF TERMINAL STRIP AS IN THE MANUAL.



CONNECTIONS FOR 240 VAC



SWITCH	SHOWN IN POSITION
S1	OFF
S2	VOLTAGE
S3	0.1A
S4	10V
S5	STANDBY

**SCHEMATIC OF THE HEATHKIT® 1-30V DC REGULATED POWER SUPPLY MODEL IP-28**

**NOTES:**

- RESISTOR VALUES ARE IN OHMS (K=1,000). RESISTORS ARE 1/2 WATT UNLESS OTHERWISE MARKED.
- CAPACITOR VALUES ARE IN MICROFARADS (μFD). CAPACITOR WORKING VOLTAGES ARE INDICATED.
- THE CROSS-ARROW OR A CONTROL ARM SYMBOL INDICATES CLOCKWISE ROTATION OF CONTROL.
- DC VOLTAGE MEASUREMENTS TAKEN WITH A HIGH IMPEDANCE VOLTMETER VOLTAGES MAY VARY ±10%.
  - ALL VOLTAGES WERE MEASURED WITH:
    - NO LOAD ON THE OUTPUT TERMINALS AND 115 VAC, 60HZ, ON THE POWER TRANSFORMER PRIMARY.
    - THE VOLTAGE CONTROL AND THE CURRENT CONTROL FULLY CLOCKWISE AND THE VOLTAGE RANGE SWITCH IN THE 30V POSITION.
  - WHERE TWO VOLTAGES ARE SHOWN, THE CIRCUIT VOLTAGE DEPENDS UPON THE SETTINGS OF THE VOLTAGE RANGE SWITCH (S-4) AND THE VOLTAGE CONTROL (R7).

**SPECIAL SYMBOLS**

- (Numbers or letters within symbol outlines will vary.)
- SLIDE SWITCH TERMINAL
  - CIRCUIT BOARD NUMBERED HOLES
  - TRANSISTOR TERMINAL
  - CONTROL OR SWITCH TERMINAL
  - REAR APRON TERMINAL STRIP
  - PANEL BINDING POST
  - DC VOLTAGE FROM POINT SHOWN TO BLACK BINDING POST.
  - JUMPER CONNECTION ON REAR APRON

PART NO.	COMPONENT	MAY BE REPLACED WITH	BASE DIAGRAM
417-201	Q1, Q2	2N3906	
417-102	Q3	2N3055	
417-109	Q4	2N3566	
417-94	Q5, Q6	2N3418	
57-27	D1, D2, D3, D7, D8, D9, D10	SILICON, 600 PIV, 1A	
58-13	D4	56 V ZENER, 1W	
58-55	D5	36 V ZENER, 1W	
58-26	D6	1N191	