

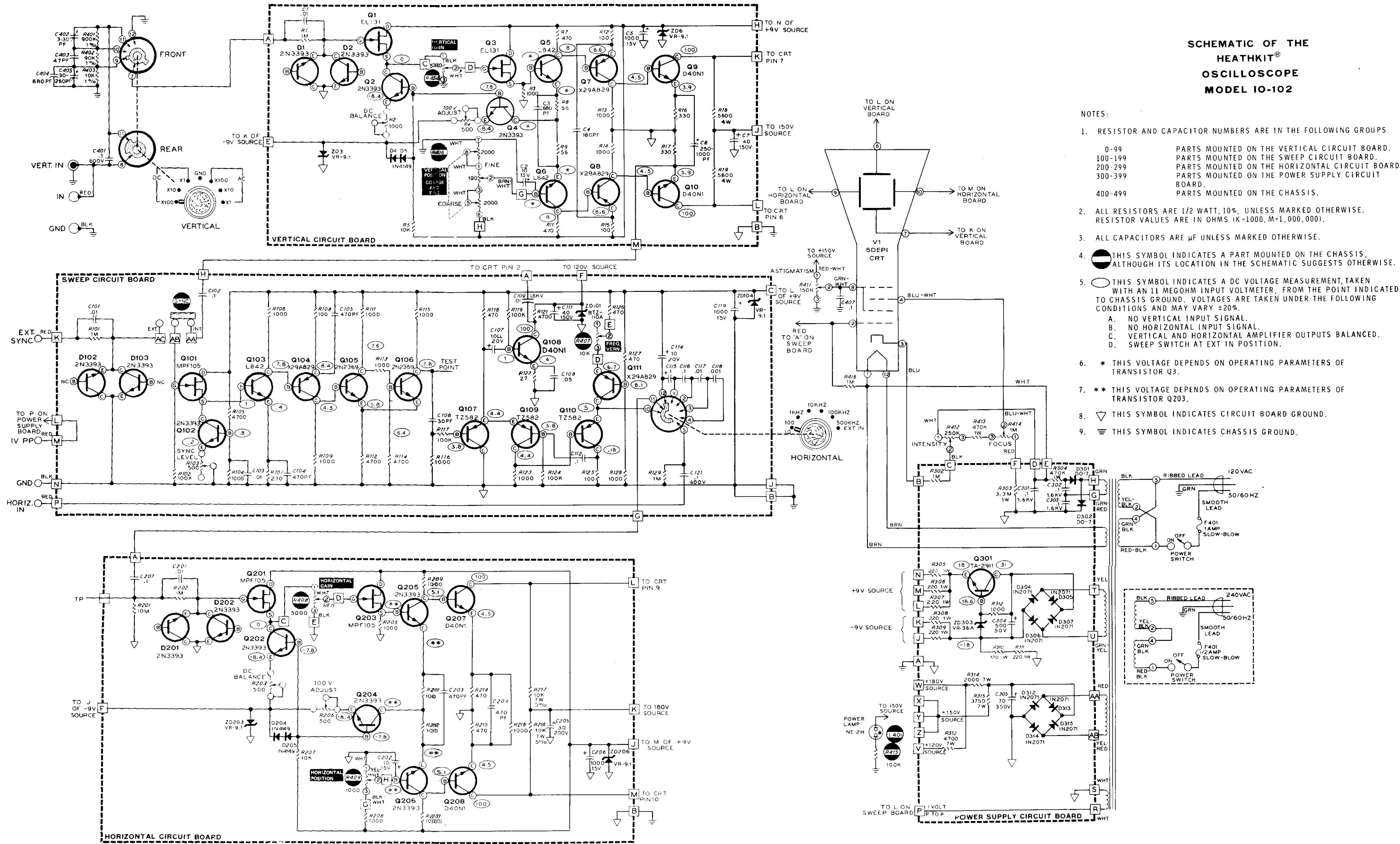
**SCHEMATIC OF THE
HEATHKIT®
OSCILLOSCOPE
MODEL 10-102**

NOTES:

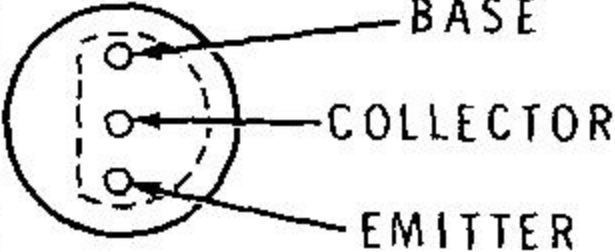
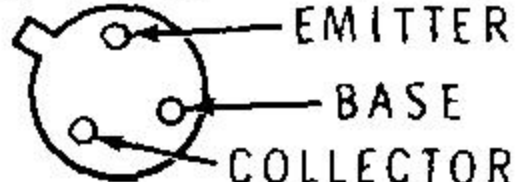
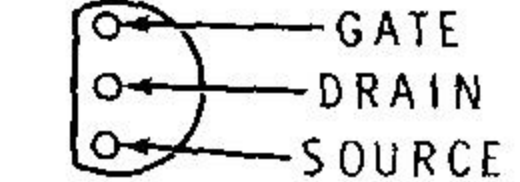
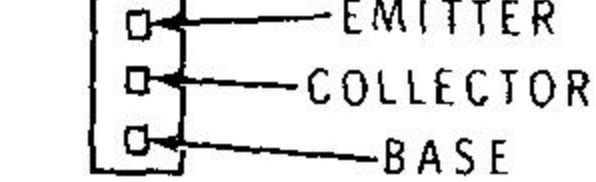
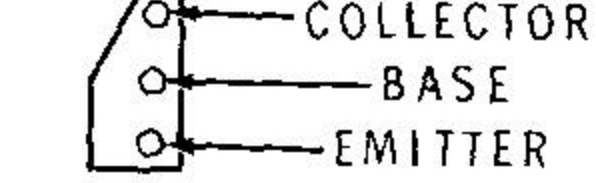
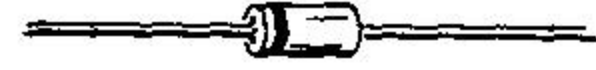




- RESISTOR AND CAPACITOR NUMBERS ARE IN THE FOLLOWING GROUPS.
 0-99 PARTS MOUNTED ON THE VERTICAL CIRCUIT BOARD.
 100-199 PARTS MOUNTED ON THE SWEEP CIRCUIT BOARD.
 200-299 PARTS MOUNTED ON THE HORIZONTAL CIRCUIT BOARD.
 300-399 PARTS MOUNTED ON THE POWER SUPPLY CIRCUIT BOARD.
 400-499 PARTS MOUNTED ON THE CHASSIS.
- ALL RESISTORS ARE 1/2 WATT, 10%, UNLESS MARKED OTHERWISE. RESISTOR VALUES ARE IN OHMS (K=1000, M=1,000,000).
- ALL CAPACITORS ARE μ F UNLESS MARKED OTHERWISE.
- THIS SYMBOL INDICATES A PART MOUNTED ON THE CHASSIS, ALTHOUGH ITS LOCATION IN THE SCHEMATIC SUGGESTS OTHERWISE.
- THIS SYMBOL INDICATES A DC VOLTAGE MEASUREMENT, TAKEN WITH AN 11 MEGOHM INPUT VOLTMETER, FROM THE POINT INDICATED TO CHASSIS GROUND. VOLTAGES ARE TAKEN UNDER THE FOLLOWING CONDITIONS AND MAY VARY $\pm 20\%$.
 A. NO VERTICAL INPUT SIGNAL.
 B. NO HORIZONTAL INPUT SIGNAL.
 C. VERTICAL AND HORIZONTAL AMPLIFIER OUTPUTS BALANCED.
 D. SWEEP SWITCH AT EXT IN POSITION.
- * THIS VOLTAGE DEPENDS ON OPERATING PARAMETERS OF TRANSISTOR Q3.
- ** THIS VOLTAGE DEPENDS ON OPERATING PARAMETERS OF TRANSISTOR Q203.
- THIS SYMBOL INDICATES CIRCUIT BOARD GROUND.
- THIS SYMBOL INDICATES CHASSIS GROUND.

IDENTIFICATION CHART

HEATH PART NUMBER	MANUFACTURER'S NUMBER	BASING
417-83	L842	BASE
417-118	2N3393	COLLECTOR
417-201	X29A829	EMITTER
417-221	TZ582	EMITTER
417-154	2N2369	EMITTER BASE COLLECTOR
417-241	EL131	GATE
417-169	MPF105	DRAIN SOURCE
417-175	2N5294	EMITTER COLLECTOR BASE
417-245	D40N1	COLLECTOR BASE EMITTER
56-19	VR-9.1, 9.1V, 25mA ZENER	
56-55	VR-36A, 36V, 4mA ZENER	
56-56	1N4149	
57-27	1N2071	
57-52	D0-7	







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SCHEMATIC OF THE HEATHKIT[®] OSCILLOSCOPE MODEL 10-102

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 - NO HORIZONTAL INPUT SIGNAL.
 - VERTICAL AND HORIZONTAL AMPLIFIER OUTPUTS BALANCED.
 - SWEEP SWITCH AT EXT IN POSITION.
- * THIS VOLTAGE DEPENDS ON OPERATING PARAMETERS OF TRANSISTOR Q3.
- ** THIS VOLTAGE DEPENDS ON OPERATING PARAMETERS OF TRANSISTOR Q203.
-  THIS SYMBOL INDICATES CIRCUIT BOARD GROUND.
-  THIS SYMBOL INDICATES CHASSIS GROUND.

