

PARTS LIST

Check each part against the following list. Make a check (✓) in the space provided as you identify each part. Any part that is packed in an individual envelope with a part number on it should be placed back in the envelope after you identify it until called for in a step. Do not throw away any packing material until all parts are accounted for.

To order a replacement part, use the *Parts Order Form* furnished with this kit. If a *Parts Order Form* is not available, refer to "Replacement Parts" inside the rear cover of the *Manual*. For pricing information, refer to the separate "Heath Parts Price List."

Each circuit part in this kit has its own component number (R2, R4, etc.). Use these numbers when you want to

positively identify the same part in the various sections of the *Manual*. These numbers, which are especially useful if a part has to be replaced, appear:

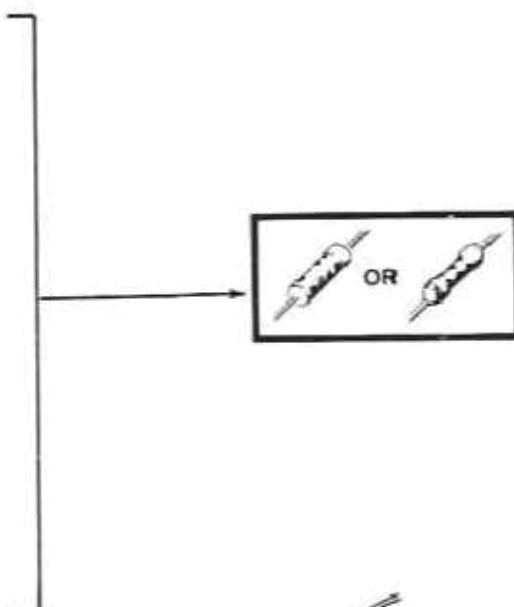
- In the *Parts List*,
- At the beginning of each step where a component is installed,
- In some illustrations,
- In the *Schematic*,
- In the sections at the rear of the *Manual*.

QTY.	DESCRIPTION	PART No.	CIRCUIT Component No.
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RESISTORS, 1/4-Watt

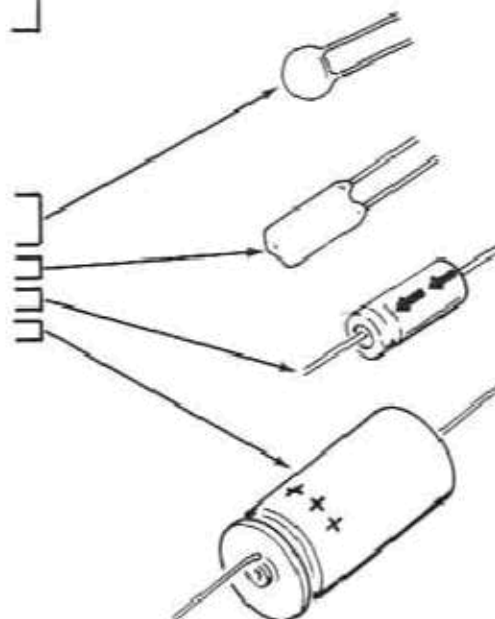
NOTE: The following resistors have 5% tolerance and have a gold fourth band.

()	2	4.7 Ω (yellow-violet-gold)	6-479-12	R107, R117
()	2	47 Ω (yellow-violet-black)	6-470-12	R12, R13
()	2	220 Ω (red-red-brown)	6-221-12	R104, R114
()	1	560 Ω (green-blue-brown)	6-561-12	R15
()	2	1000 Ω (brown-black-red)	6-102-12	R14, R4
()	1	2200 Ω (red-red-red)	6-222-12	R18
()	5	3300 Ω (orange-orange-red)	6-332-12	R2, R3, R8, R9, R16
()	1	4700 Ω (yellow-violet-red)	6-472-12	R17
()	1	27 k Ω (red-violet-orange)	6-273-12	R101
()	2	56 k Ω (green-blue-orange)	6-563-12	R105, R115



CAPACITORS

()	4	.001 μ F disc	21-163	C2, C4, C103, C113
()	2	.01 μ F Mylar*	27-74	C1, C3
()	2	10 μ F electrolytic	25-865	C102, C112
()	2	1000 μ F electrolytic	25-876	C101, C111

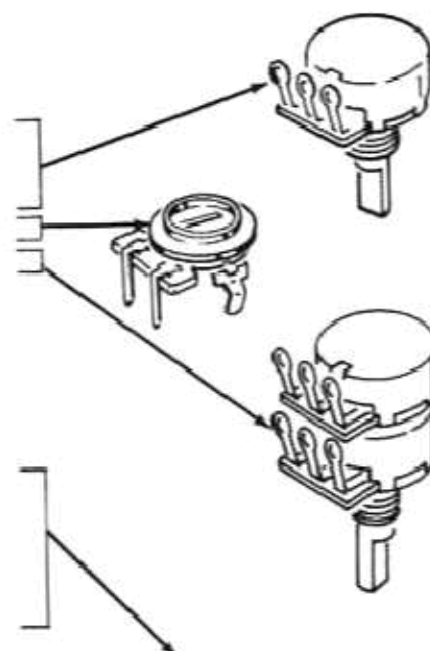


*DuPont Registered Trademark.

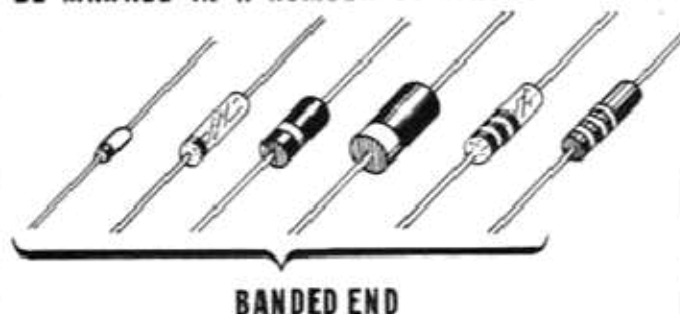
QTY.	DESCRIPTION	PART No.	CIRCUIT Component No.
CONTROLS			
()	1 1000 Ω (1K)	10-1054	R122
()	2 3000 Ω	10-1053	R106, R116
()	1 100 k Ω	10-1055	R121
()	1 1000 Ω	10-391	R4
()	1 100 k Ω dual	12-146	R1/R5

DIODES

()	5	1N4149	56-56	D1, D2, D3, D106, D107
()	2	15-volt zener	56-620	ZD101, ZD102
()	4	1N4002	57-65	D101, D102, D104, D105



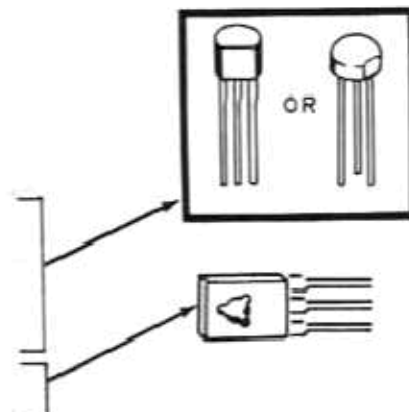
IMPORTANT: THE BANDED END OF DIODES CAN BE MARKED IN A NUMBER OF WAYS.

**TRANSISTORS-INTEGRATED CIRCUIT**

NOTE: Transistors and integrated circuit are marked for identification in one of the following four ways:

1. Part number.
2. Type number. (On integrated circuits this refers only to the numbers, the letters may be different or missing.)
3. Part number and type number.
4. Part number with a type number other than the one listed.

()	4	2N4121 transistor	417-235	Q2, Q105, Q107, Q108
()	6	MPSA20 transistor	417-801	Q1, Q3, Q4, Q101, Q103, Q104
()	1	MJE181 transistor	417-818	Q102
()	1	MJE171 transistor	417-819	Q106



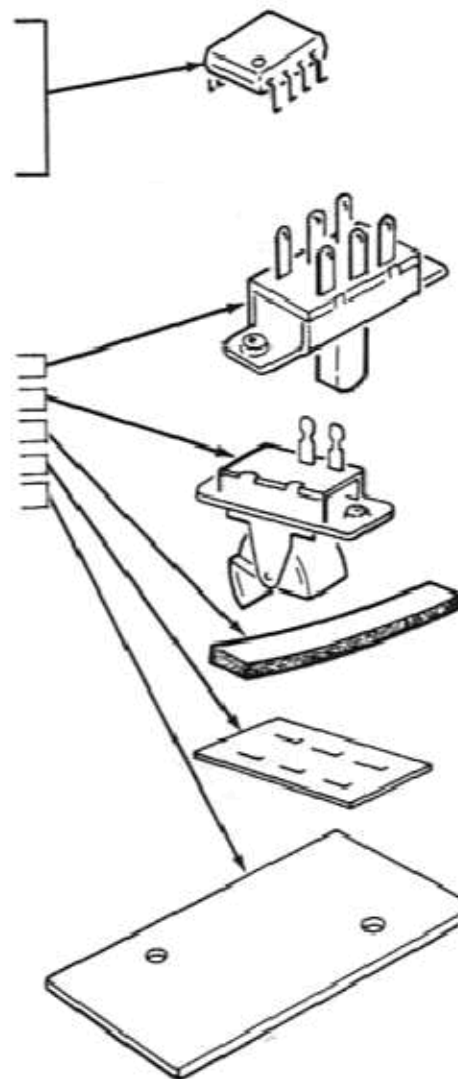
QTY.	DESCRIPTION	PART No.	CIRCUIT Component No.
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TRANSISTORS—INTEGRATED CIRCUITS (cont'd.)

()	1	N5741V or MC1741CPI or μ A7417C or LM741CN integrated circuit	442-22	IC1
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SWITCHES-INSULATORS

()	1	DPDT slide switch	60-78	SW1
()	1	SPST rocker switch	60-607	SW101
()	1	Foam tape (5" x 3/4")	73-92	
()	1	Switch insulator	75-52	
()	1	Insulator plate	75-724	

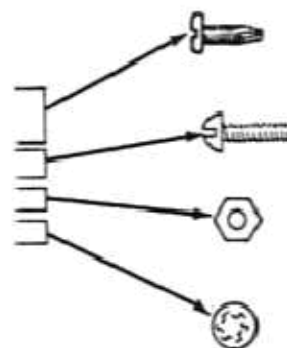


HARDWARE

NOTE: The hardware may be in more than one packet. Open all the hardware packets before you check the hardware against the Parts List.

#4 Hardware

()	3	#4 x 5/16" self-tapping screw	250-163
()	2	4-40 x 3/8" screw	250-4
()	2	4-40 nut	252-2
()	2	#4 lockwasher	254-9



QTY.	DESCRIPTION	PART No.	CIRCUIT Component No.
#6 Hardware			
() 4	6-32 x 1/4" black screw	250-116	
() 1	6-32 x 3/8" flat head screw	250-32	
() 10	#6 x 3/8" self-tapping screw	250-592	
() 8	#6 x 5/8" self-tapping screw	250-559	
() 2	#6 x 1-1/8" self-tapping screw	250-1137	
() 1	6-32 nut	252-3	
() 2	6-32 brass insert nut	252-170	
() 2	#6 lockwasher	254-1	

Other Hardware

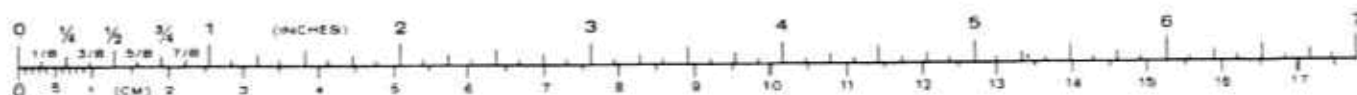
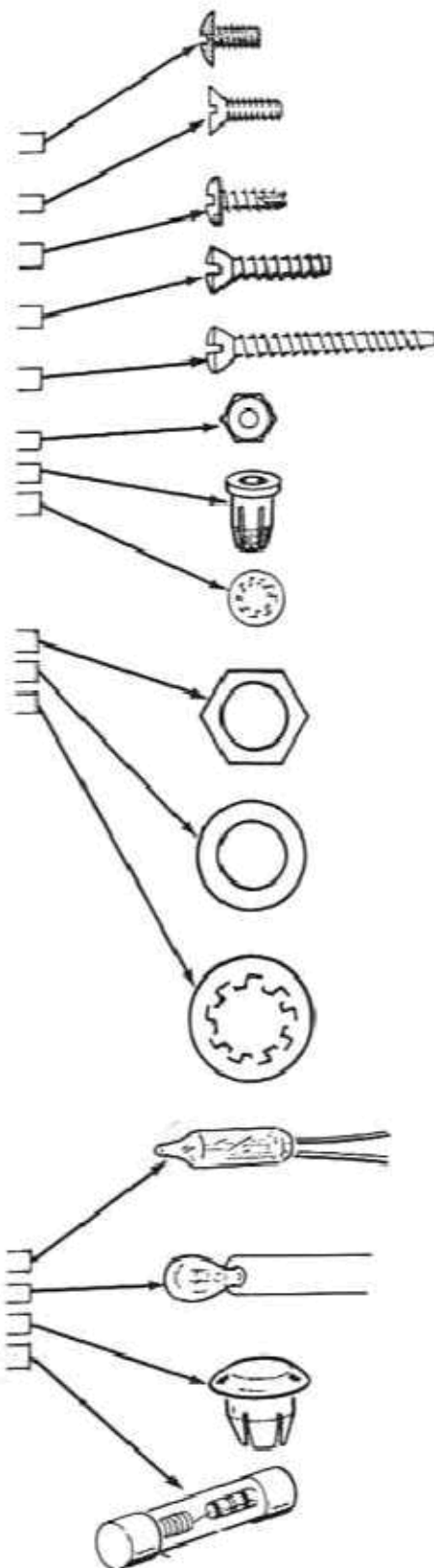
() 5	Control nut	252-7
() 5	Control flat washer	253-10
() 5	Control lockwasher	254-4

WIRE-SLEEVING-LINE CORD

() 2'6"	Red stranded wire	344-3
() 5'	Red solid wire	344-52
() 5'	Black wire	344-50
() 3'	Brown wire	344-51
() 3'	Orange wire	344-53
() 5'	Yellow wire	344-54
() 3'	Green wire	344-55
() 3'	Blue wire	344-56
() 6"	Sleeving	346-1
() 1	Line cord	89-49

LAMPS-LENS-FUSE

() 1	Neon lamp	412-15	PL101
() 1	Incandescent lamp	412-83	L1
() 1	Red lens	413-15	
() 1	1/8-ampere slow-blow fuse	421-26	F101



QTY.	DESCRIPTION	PART No.	CIRCUIT Component No.
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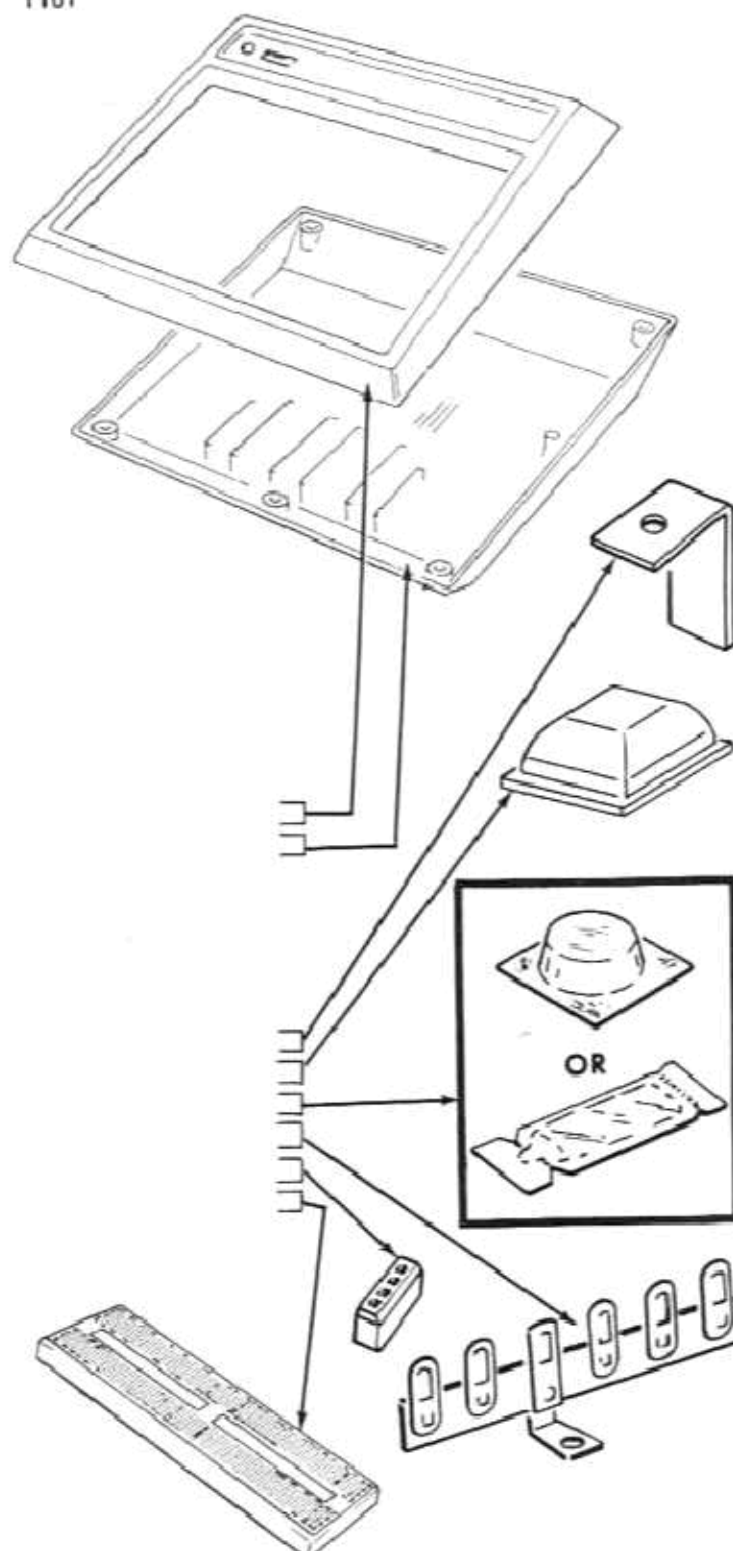
MISCELLANEOUS

()	1	Power transformer	54-892
()	1	Circuit board	85-1596-2

T101

()	1	Cabinet top	92-611
()	1	Cabinet bottom	92-612

()	2	Heat sink	215-99
()	4	Plastic foot	261-34
()	1	Silicone grease	352-13
()	1	Terminal strip	431-86
()	15	Connector block	432-874
()	1	Breadboarding socket (with vinyl strip and connectors)	432-875



QTY.	DESCRIPTION	PART No.	CIRCUIT Component No.
Miscellaneous (cont'd.)			
()	1 IC socket	434-230	
()	5 Knob bushing	455-50	
()	5 Knob	462-399	
()	2 Fuse clip	260-56	
()	1 IC puller	490-111	
()	1 Nut starter	490-5	
()	1 Fuse label	390-1255	
()	1 Warning label	390-1135	
()	1 ETI label	390-1136	
()	1 Blue and white label	391-34	
()	1 Parts Order Form	597-260	
()	1 Assembly Manual (See front cover for part number.)		
()	Solder		

