

PARTS LIST

IM-28

From manual 595-1149-07

PART No.	PARTS Per Kit	DESCRIPTION
-------------	------------------	-------------

RESISTORS

1-3	1	100 Ω 1/2 watt (brown-black-brown)
1-20	1	10 K Ω 1/2 watt (brown-black-orange)
1-23	1	27 K Ω 1/2 watt (red-violet-orange)
1-27	3	150 K Ω 1/2 watt (brown-green-yellow)
1-126	1	180 K Ω 1/2 watt (brown-gray-yellow)
1-35	1	1 megohm 1/2 watt (brown-black-green)
1-38	1	3.3 megohm 1/2 watt (orange-orange-green)
1-40	1	10 megohm 1/2 watt (brown-black-blue)
1-70	6	22 megohm 1/2 watt (red-red-blue)
2-24	1	90 Ω 1/2 watt precision
2-29	1	900 Ω 1/2 watt precision
2-35	1	9 K Ω 1/2 watt precision
2-50	1	10 K Ω 1/2 watt precision
2-39	1	21.62 K Ω 1/2 watt precision
2-40	1	68.38 K Ω 1/2 watt precision
2-41	1	90 K Ω 1/2 watt precision
2-86	1	150 K Ω 1/2 watt precision
2-42	1	216.2 K Ω 1/2 watt precision
2-138	1	400 K Ω 1/2 watt precision

PART No.	PARTS Per Kit	DESCRIPTION
-------------	------------------	-------------

Resistors (cont'd.)

2-45	1	683.8 K Ω 1/2 watt precision
2-123	1	800 K Ω 1/2 watt precision
2-51	1	900 K Ω 1/2 watt precision
2-146	1	2.162 megohm 1/2 watt precision
2-147	1	6.838 megohm 1/2 watt precision
2-52	1	9 megohm 1/2 precision
3-4-2*	1	9.1 Ω 2 watt precision (white-brown-gold)

*NOTE: This resistor is a 2 watt wire-wound resistor, but is the same size as a 1watt composition resistor.

CAPACITORS

21-27	2	005 μ fd disc ceramic
23-91	1	.047 μ fd 1600 V tubular
23-61	2	.05 μ fd 400 V tubular
25-19	1	20 μ fd 150 V electrolytic

CONTROLS-SWITCHES

10-57	3	10 K Ω tab-mounting control
10-142	2	10 K Ω vernier control
63-500	1	Range switch
63-501	1	Function switch



PART No.	PARTS Per Kit	DESCRIPTION
-----------------	----------------------	--------------------

TUBES-LAMP-DIODE

411-275	1	12AU7 tube
411-40	1	6AL5 tube
412-36	1	Neon lamp
57-27	1	Silicon diode

TERMINAL STRIPS-SOCKETS-JACK-PLUG

431-50	1	1-lug terminal strip
431-5	1	4-lug terminal strip
431-12	2	4-lug terminal strip
431-40	1	4-lug terminal strip
431-77	1	5-lug terminal strip
434-15	1	7-pin tube socket
434-16	1	9-pin tube socket
436-20	1	Phone jack
438-28	1	Phone plug

PROBE PARTS

253-51	1	E washer
256-15	2	1/16" x 1/8" rivet
258-53	1	Probe contact loading spring
459-46	1	Probe switch lever
459-47	1	Probe insert insulator
459-44	1	Front section of probe body
459-45	1	Center section of probe body
459-43	1	Rear section of probe body
477-11	1	Probe spike

WIRE-SLEEVING

340-2	1	Bare wire
341-1	1	Black test lead
343-11-1	1	Shielded test lead
344-59	1	Hookup wire
346-1	1	Sleeving

METAL PARTS

90-262-4	1	Cabinet
200-524	1	Chassis
203-351-2	1	Front panel
204-254	1	Battery bracket
204-542-4	1	Gimbal bracket
214-2	1	Battery housing cup
258-7	1	Battery spring

PART No.	PARTS Per Kit	DESCRIPTION
-----------------	----------------------	--------------------

HARDWARE

250-49	4	3-48 x 1/4" screw
250-116	1	6-32 x 1/4" screw (black)
250-89	7	6-32 x 3/8" screw
250-54	2	10-32 x 5/8" screw
250-155	12	#6 sheet metal screw (black)
250-68	3	#7 x 3/4" wood screw
252-1	4	3-48 nut
252-3	8	6-32 nut
252-7	5	Control nut
252-32	1	Push-on speednut
252-49	2	Thumbnut
253-2	3	#6 fiber shoulder washer
253-10	5	Control flat washer
253-19	4	#10 flat washer
254-7	4	#3 lockwasher
254-1	13	#6 lockwasher
254-4	5	Control lockwasher
255-44	2	Threaded spacer
259-1	1	#6 solder lug

MISCELLANEOUS

54-2-24	1	Power transformer
75-30	1	Strain relief, round cord
75-71	1	Strain relief, flat cord
89-23	1	Line cord
260-1	1	Alligator clip
260-51	1	Alligator clip, threaded
73-20	1	Alligator clip insulator, red
73-21	1	Alligator clip insulator, black
261-29	4	Plastic foot
391-34	1	Identification label
407-75	1	Meter
413-11	1	Neon lamp lens
455-50	2	Knob bushing
462-245	2	Knob
490-5	1	Nut starter
597-260	1	Parts Order Form
597-308	1	Kit Builders Guide
595-1149-07	1	Manual (See front cover for part number.)
		Solder

NOTE: One size C 1.5 volt flashlight battery will also be needed before the ohmmeter function of your VTVM can be used. By purchasing the battery now, you will be able to use your VTVM as soon as assembly is completed.

IM-13 to IM-28 Parts Changes

<u>IM-13 Parts Changed or Not Used</u>			<u>New and Changed Parts in IM-28</u>		
Part #	#	Description	Part #	#	Description
3B-4	1	9.1Ω 2 watt precision	3-4-2	1	9.1Ω 2 watt precision
63-79	1	Range switch	63-500	1	Range switch
63-80	1	Selector switch	63-501	1	Function switch
411-25	1	12AU7 tube	411-275	1	12AU7 tube
412-12	1	Neon lamp w/lens	412-36	1	Neon bulb
		(Not used on IM-13)	413-11	1	Neon lamp lens
		(Not used on IM-13)	431-77	1	5-lug terminal strip
459-6	1	Probe switch lever	459-46	1	Probe switch lever
459-7	1	Probe insert insulator	459-47	1	Probe insert insulator
459-13	1	Front section of probe body	459-44	1	Front section of probe body
459-14	1	Center section of probe body	459-45	1	Center section of probe body
459-15	1	Rear section of probe body	459-43	1	Rear section of probe body
477-6	1	Probe spike	477-11	1	Probe spike
346-12	1	Probe spike rubber insulator			(Not used on IM-28)
343-6	1	Length shielded test lead	343-11-1	1	Length shielded test lead
90-M262F	1	Cabinet	90-262-4	1	Cabinet
200-M381			200-524		
	1	Chassis		1	Chassis
203-M351F913, 914, 915			203-351-2		
	1	Front Panel		1	Front Panel
204-M542F			204-542-4		
	1	Gimbal bracket		1	Gimbal bracket
54-2	1	Power Transformer 120 V	54-2-24	1	Power Transformer 120/240 V
		(Not used on IM-13)	75-30	1	Strain relief, round cord
75-24	1	Strain relief	75-71	1	Strain relief, flat cord
89-1	1	Power cord (2-wire)	89-23	1	Power cord (3-wire)
		(Not used on IM-13)	260-51		Alligator clip, threaded
(Continued)					

IM-13 to IM-28 Parts Changes

<u>IM-13 Parts Changed or Not Used</u>			<u>New and Changed Parts in IM-28</u>		
Part #	#	Description	Part #	#	Description
		(Not used on IM-13)	73-20	1	Alligator clip insulator, red
		(Not used on IM-13)	73-21	1	Alligator clip insulator, black
263-7	4	Felt feet	261-29	4	plastic foot
		(Not supplied on IM-13)	391-34	1	Identification label
		(Not used on IM-13)	455-50	2	Knob bushing
462-187	2	Knob	462-245	2	Knob
		(Not supplied on IM-13)	597-260	1	Parts Order Form
		(Not supplied on IM-13)	597-308	1	Kit Builders Guide
595-629	1	Manual	595-1149 -07	1	Manual
(End)					