instruction sheet

FOR THE HEATHKIT HIGH VOLTAGE PROBE MODEL NO. 336

PARTS LIST

432-1	1	Connector
476-2	1	Probe body
2-47	1	1090 megohm resistor
250-6	1	Hex collar screw
260-1	1	Alligator clip
258-2	1	Tip spring
258-3	1	Body spring
70-1	1	Insulator sleeve
438-3	1	Phone plug
341-1	1	Length black test lead
341-2	1	Length red test lead
595-490	1	Instruction manual

NOTE: HANDLE THE 1090 MEGOHM RESISTOR WITH CARE.

ASSEMBLY INSTRUCTIONS

( ) Remove the screw from one end of the 1090 megohm resistor and replace it with the collar screw. Now screw the body spring onto the long part of the collar screw.

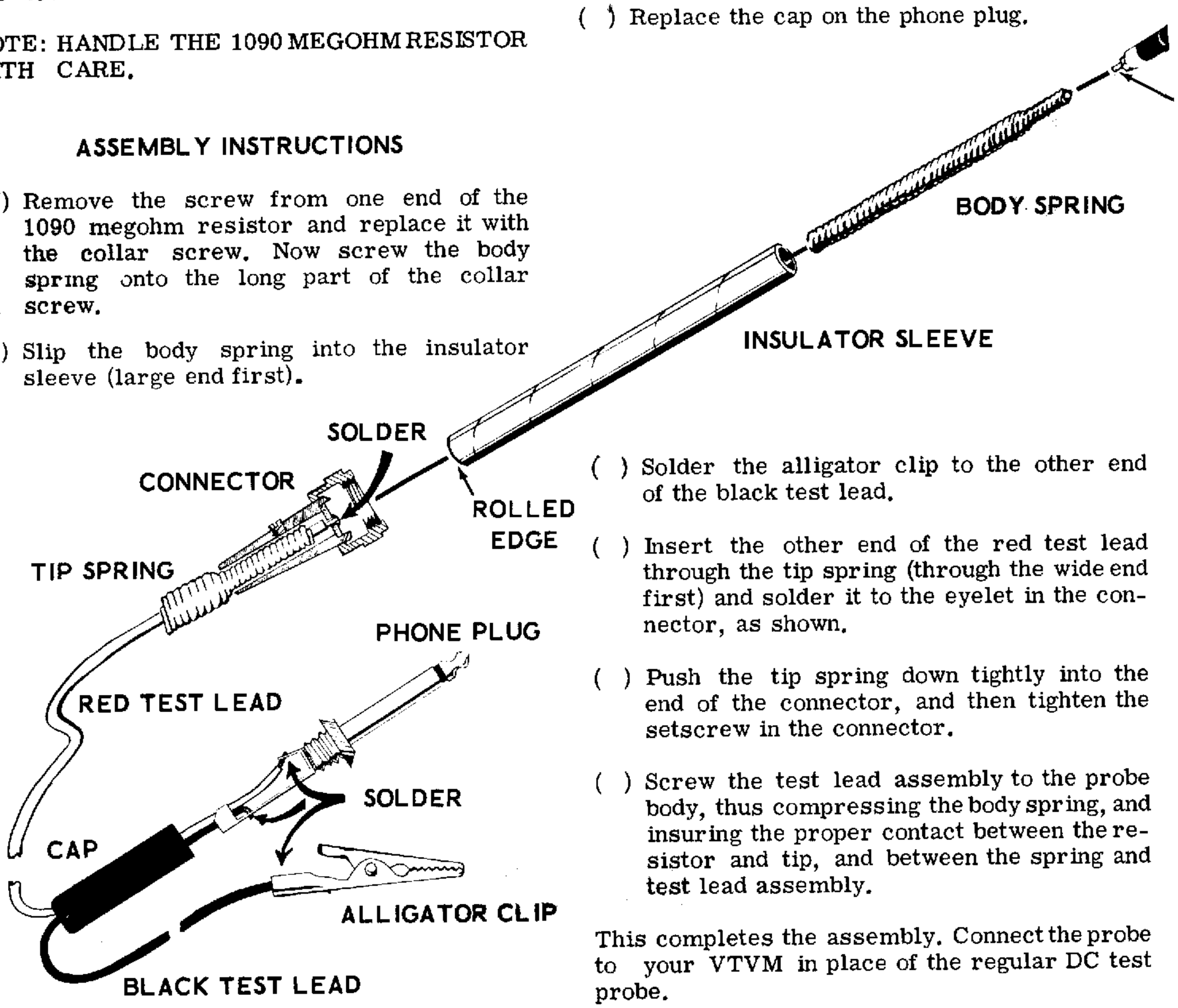
( ) Slip the body spring into the insulator sleeve (large end first).

( ) Insert the resistor and body spring-insulator sleeve assembly into the probe body with the resistor toward the tip. Refer to the accompanying drawing.

( ) Strip 1/4" of insulation from both ends of both test leads.

( ) Unscrew the cap from the phone plug and insert one end of each test lead through the cap as shown. Solder the red test lead to the center lug, and solder the black test lead to the outside lug.

( ) Replace the cap on the phone plug.



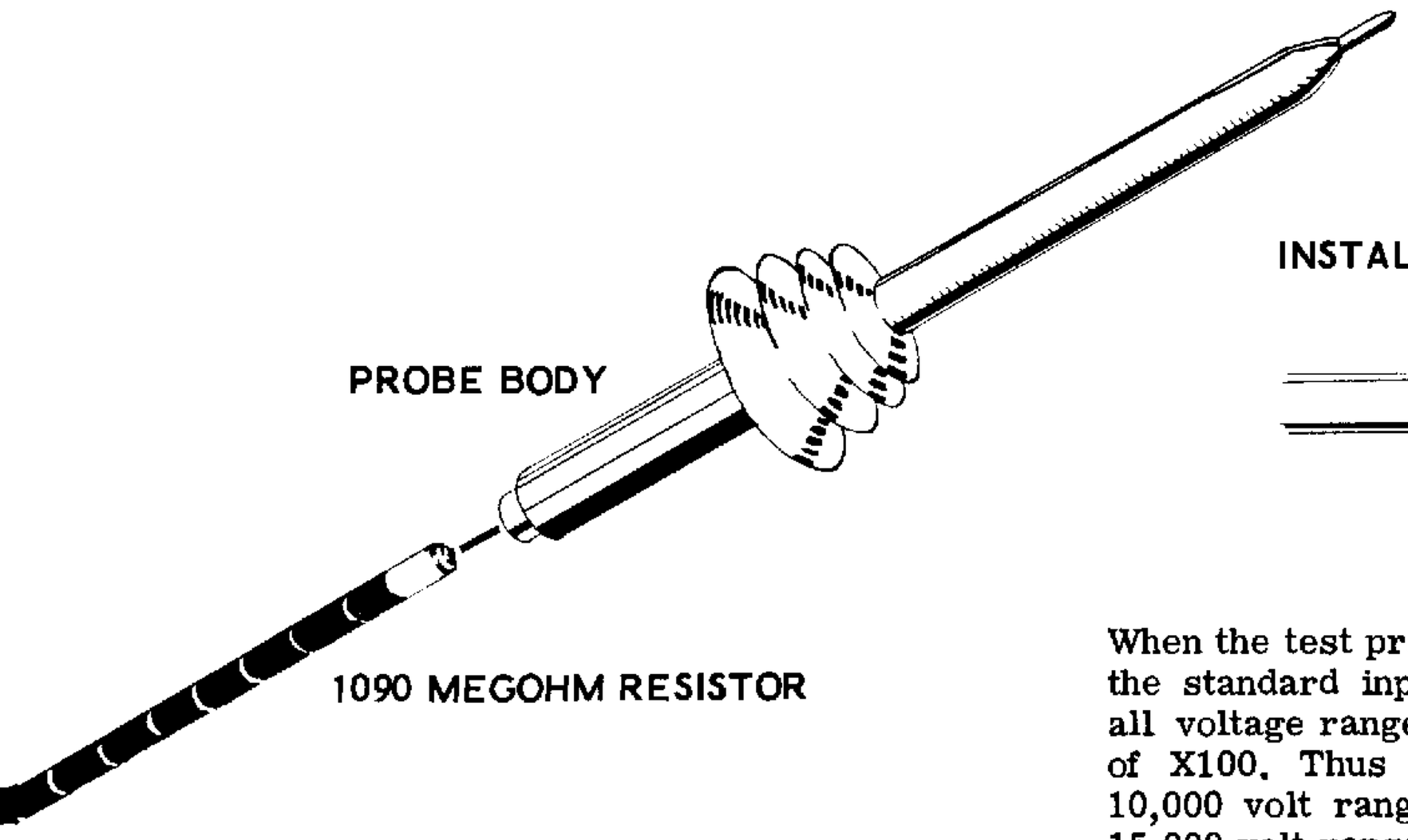
( ) Solder the alligator clip to the other end of the black test lead.

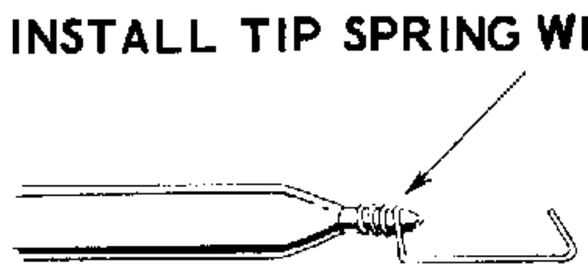
( ) Insert the other end of the red test lead through the tip spring (through the wide end first) and solder it to the eyelet in the connector, as shown.

( ) Push the tip spring down tightly into the end of the connector, and then tighten the setscrew in the connector.

( ) Screw the test lead assembly to the probe body, thus compressing the body spring, and insuring the proper contact between the resistor and tip, and between the spring and test lead assembly.

This completes the assembly. Connect the probe to your VTVM in place of the regular DC test probe.





USING THE HIGH VOLTAGE PROBE

CAUTION: HIGH VOLTAGES ARE EXTREMELY DANGEROUS. NEVER MEASURE DC VOLTAGES IN EXCESS OF 30,000 VOLTS.

This probe is designed to permit high voltage measurements to be made as safely as possible.

ALWAYS MAKE SURE THAT THE GROUND CLIP IS CONNECTED TO THE CHASSIS OF THE UNIT UNDER TEST AND THAT THE PROBE IS CONNECTED TO THE VTVM.

Wherever possible, contact the high voltage by hooking the tip spring to the terminal under test. This should be done with the power turned off. Then without touching the probe, turn power on, take the reading, turn the power off, carefully discharge any high voltage capacitors which may be in the circuit, and remove the probe from the circuit.

While the conductors inside the handle and the test lead assembly never carry more than 300 volts when the probe is properly connected, THESE PARTS WILL BE EXPOSED TO THE FULL 30,000 VOLTS, IF NOT CONNECTED TO THE VTVM.

When the test probe is connected to a VTVM with the standard input resistance of 11 megohms, all voltage ranges will be increased by a factor of X100. Thus a 100 volt range becomes a 10,000 volt range, a 150 volt range becomes a 15,000 volt range, and a 300 volt range becomes a 30,000 volt range.

NOTE: Although multiplying a 500 volt range by 100 gives a range of 50,000 V, never use the probe on DC voltages above 30,000 volts.

This probe increases the input resistance of the VTVM to 1100 megohms. This permits measurements to be made in high resistance circuits with negligible loading. This high input resistance can even be used with lower voltages by using a 1.5 volt, 3 volt, or 5 volt range of the VTVM; the 1.5 volt range would become a 150 volt range, the 3 volt range would become a 300 volt range, and the 5 volt range would become a 500 volt range.

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