HOW TO INSTALL FUSE AND BATTERY

Unscrew base of ohmmeter battery/fuse attachment. Insert fuse (Use Linoleum Type BAG-360x023, 1 AMP last blow) and AAA battery (Cat. No. 912, not supplied) into probe end as shown in figure. Screw base on to probe.

NOTE: If you fail to get an ohmmeter indication or the indication is intermittent, before replacing the battery or fuse, lightly sand the base of the battery with fine sandpaper. This will remove any oxidation that could be causing poor or intermittent contact.

HOW TO USE AS AN OHMMETER

IMPORTANT:
Read "Precautions for Personal and Instrument Safety" before using instrument.

CAUTION FOR RS-1 SUPER MODELS:
Make certain no voltage is present in circuit before connecting ohmmeter. The ohmmeter is fused to help protect it against a misapplication of voltage but under certain conditions it is still possible to damage the meter and/or cause personal injury. Use only 3/8"x3/4" ohmmeter attachment with fuse BAG-360x023 1AMP 600V.

1. Insert either the Red or Black Voltage Lead into the Left Voltage Receptacle at bottom of instrument case (Fig. 14).

2. Insert ohmmeter battery/fuse attachment into the jack on the right side of the instrument unit below the ohmmeter Zero Adjust Knob. Seat plug to bottom for good connection (Fig. 15).

3. Set Range Selector so that the 150 volt red scale appears in window.

4. Ohmmeter Scale Adjustment with Test Leads Open—Pointer should line up with division marked "oo" on OHMS SCALE. Turn Pointer Zero Adjust Screw if necessary (Fig. 16).

5. With Test Leads Shorted—Line up pointer with "ohms" mark on ohms scale by turning Small Black Knob on right side of instrument (Fig. 17).

NOTE: If ohmmeter zero adjust knob does not line pointer up on zero mark, replace battery with a new one. Oxidation on base of battery can cause poor contact. Sand lightly to assure good contact.

6. To Measure Resistance between any two points on a device, simply apply the clip lead and the ohmmeter attachment probe tip and read pointer.

CAUTION:
Make certain that circuit is disconnected from line before taking any resistance measurements.

HOW TO READ OHMMETER SCALE

The ohmmeter scale is located on the flat plate along the right hand edge of the window. The zero mark (beginning) is on top of the scale while the infinity mark (oo) ends the scale.

OPTIONAL EXTENDING LEADS FOR FASTER AND EASIER VOLTAGE TESTING

EXTENDING TEST LEADS, Cat. No. VLM-411R, have 5' inch long insulated probes for a man-sized grip. One probe clamps between instrument jaws. Optional alligator clip adapter (Cat. No. VLM-320) converts probe so it can be fastened to test point. Probe tips are replaceable (Cat. No. VPT), Fig. 19.

FACTORY SERVICE

For factory service, package instrument and packing slip with sufficient cushioning material in a shipping carton. Make certain your name and address appear on box and packing slip. Ship prepaid via U.P.S. (where available) or Air Parcel Post insured to Service Division, AMPROBE INSTRUMENT, 630 Merrick Rd., Lynbrook, N.Y. 11563. Outside of the U.S.A., the local AMPROBE representative will assist you.

RANGE-EXPANDING ACCESSORIES

<table>
<thead>
<tr>
<th>Model</th>
<th>Ratio</th>
<th>Maximum Range Capability</th>
</tr>
</thead>
<tbody>
<tr>
<td>550-1</td>
<td>10 to 1</td>
<td>1,200 amperes*</td>
</tr>
<tr>
<td>CT-50-1</td>
<td>50 to 1</td>
<td>5,000 amperes*</td>
</tr>
<tr>
<td>CT-50-2</td>
<td>50 to 1</td>
<td>5,000 amperes*</td>
</tr>
</tbody>
</table>

*Intermittent duty
All of the above are clamp-on type transformers. Models CT-50-1 (six link) and CT-50-2 (four link) are flexible link construction. Request Cat. No. AA38.

OTHER ACCESSORIES & REPLACEMENT PARTS

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>VLM-11R</td>
<td>Leads</td>
</tr>
<tr>
<td>VLM-411R</td>
<td>Extend Leads</td>
</tr>
<tr>
<td>VPT</td>
<td>Replacement Tips</td>
</tr>
<tr>
<td>DHB-3HE</td>
<td>Ohmmeter Attachment</td>
</tr>
<tr>
<td>A-47L</td>
<td>Fuse 600V, 1 Amp</td>
</tr>
<tr>
<td>END-46</td>
<td>Energizer</td>
</tr>
<tr>
<td>912</td>
<td>Ground Adapter</td>
</tr>
<tr>
<td>VRC-320</td>
<td>Battery AAA</td>
</tr>
<tr>
<td>Alligator Clip</td>
<td></td>
</tr>
</tbody>
</table>

See Precautions for Personal and Instrument Safety on Page 1

SPECIFICATIONS

AC Voltage Ranges: 0-150/300/600 AC Amp Ranges: 0-6/15/40/100/300 DCms: 25 Ohms per scale. Frequency Response: 50/60/400 Hz. Accuracy: Volts and Amps ± 3% of Full Scale 50/60 Hz, ± 5% at 400 Hz based on sinusoidal waveform. 0Ohms ± 3% of arc.
Duty: Continuous
Case Breakdown: 3500 Volts
Ohmmeter Protection: Ohm circuit is fuse protected to 600 Volts
Drop Proof to 5 feet
PRECAUTIONS FOR PERSONAL AND INSTRUMENT SAFETY.

IMPORTANT:
1. Read these instructions thoroughly and follow them carefully.
2. In many instances you will be working with dangerous levels of voltage and/or current, therefore, it is important that you avoid direct contact with any uninsulated, current-carrying surfaces. Appropriate insulating gloves and clothing should be worn.
3. Before connecting or disconnecting the voltmeter to or from the circuit to be tested, turn off all power to the circuit.
4. Before applying test leads to circuit under test, make certain:
   a. Proper test leads are plugged into correct instrument jacks, and
   b. Selector switch is set to proper range.
5. Before using any electrical instrument or tester for actual testing, the unit should be checked on a known live line to make certain it is operating properly.
6. Make certain no voltage is present in circuit, before connecting ohmmeter to circuit.
7. The jaws of clamp-on instruments should not, under any circumstances, be used as a device to hold or hang the instrument. When using the instrument as a voltmeter or ohmmeter, never clamp the jaws around or on a conductor, wire, or anything else—conducting or non-conducting. For easier and faster voltage and resistance tests, we recommend Leads, available from your AMPROBE distributor.
8. When measuring voltage or current with models that have an ohmmeter, remove the ohmmeter battery or fuse attachment from the instrument.
9. When making ohms measurements, be sure that the ohmmeter attachment is modeled OMB-3HE. This is the only attachment that should be used with the OJ-1 SUPER.
10. Failure to follow these precautions can result in instrument damage and/ or personal injury.
11. Before interpreting a reading on the instrument, be sure that the Pointer lock is free or in the OFF position. The pointer is free when button is at left position (See Fig. 2).

ZERO ADJUSTMENT

For greater accuracy, the pointer should be zeroed on the zero line. This is done with the zero adjust screw. While turning the zero adjust screw, the pointer swings away from the zero line, and will not come to rest directly over it, it is possible that the scale window is statically charged. To neutralize—clean window with fluid from SCK-100 Anti-Static Cleaning Kit.

HOW TO TAKE VOLTAGE READINGS

(All voltage ranges are printed red)

IMPORTANT:
Read "Precautions for Personal and Instrument Safety" before using instrument.

1. Insert bayonet type voltage test leads into Voltage Jacks at bottom of instrument. Push against receptacle spring and twist to lock in place (Fig. 8).
2. Turn Rotary Scale Selector until highest voltage range—600 volts—appears in window.
3. Connect one alligator clip to one side of line. Then with meter in one hand, touch the other side of the line with the other alligator clip. If voltage does not exceed 600 volts, attach second alligator clip and read voltage on red scale.
4. If voltage does not exceed 300 volts, turn rotary scale selector clockwise until the 300 volt range is visible.
5. If voltage does not exceed 150 volts, turn rotary scale selector clockwise once more until 150 volt scale is visible in window.

HOW TO TAKE CURRENT READINGS

(See Pages 2 and 5 for range-expanding accessories)
(All ampere ranges are printed black)

IMPORTANCE:
Read "Precautions for Personal and Instrument Safety" before using instrument.

1. Make certain Pointer Lock is in "OFF" position.

HOW TO READ THE SCALE

Let us assume the pointer is at the position indicated in the illustration. The reading will be as follows, depending on the setting of the range selector.

Fig. 10 Pointer Reads 440 Volts. Each subdivision between 400 & 500 is 20 volts.
Fig. 11 Pointer Reads 78 Amps. Heavy mark between 60 & 80 is 70 amperes. Each subdivision between 60 & 80 is 2 amperes.
Fig. 12 Pointer Reads 0 Amps. Heavy mark above 12 is 13 amperes. Each subdivision between 12 & 15 is .5 amp.

Ground Adaptor ADP-46

Energizer Model A-47L

Fig. 7

Fig. 8

Fig. 9

Fig. 10

Fig. 11

Fig. 12