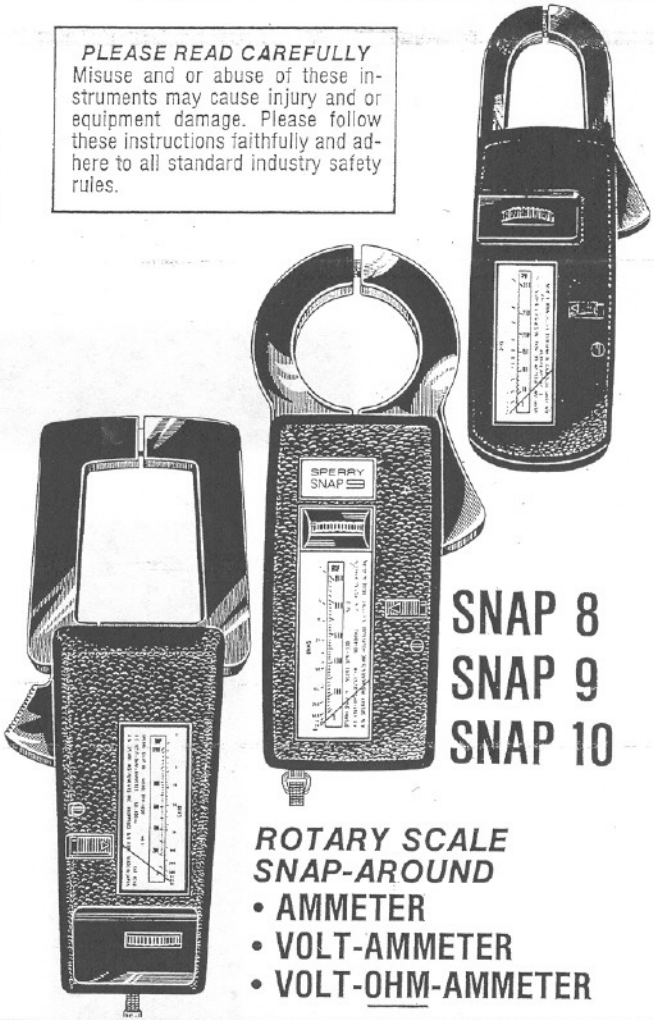
OPERATING INSTRUCTIONS

PLEASE READ CAREFULLY

Misuse and or abuse of these instruments may cause injury and or equipment damage. Please follow these instructions faithfully and adhere to all standard industry safety rules.



SNAP 8
SNAP 9
SNAP 10

ROTARY SCALE
SNAP-AROUND

- **AMMETER**
- **VOLT-AMMETER**
- **VOLT-OHM-AMMETER**

A.W. SPERRY INSTRUMENTS INC.
245 MARCUS BLVD., HAUPPAUGE, N.Y. 11788 • 516-231-7050

SNAP 8

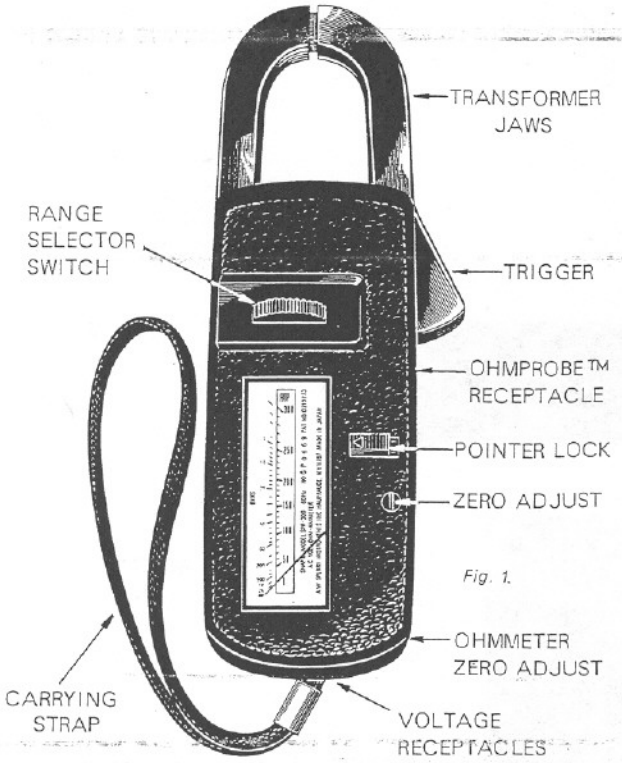


Fig. 1.

SPR-100	**AMMETER, IN STEEL BLUE PLASTICS** 0-6/15/40/75/100/150/200/300 AMPS* AC
SPR-200	**VOLT-AMMETER, IN GREY PLASTICS** 0-6/15/40/100/300 AMPS AC 0-150/300/600 VOLTS AC
SPR-300	**VOLT-OHM-AMMETER, IN BLACK PLASTICS** 0-6/15/40/100/300 AMPS AC 0-150/300/600 VOLTS AC 25Ω MID-SCALE
SPR-300CL	**SAME AS MODEL SPR-300, EXCEPT WITH CLEAR PLASTICS**

*Instrument designed for current readings on circuits with a maximum of 600 V.A.C.

SNAP 9

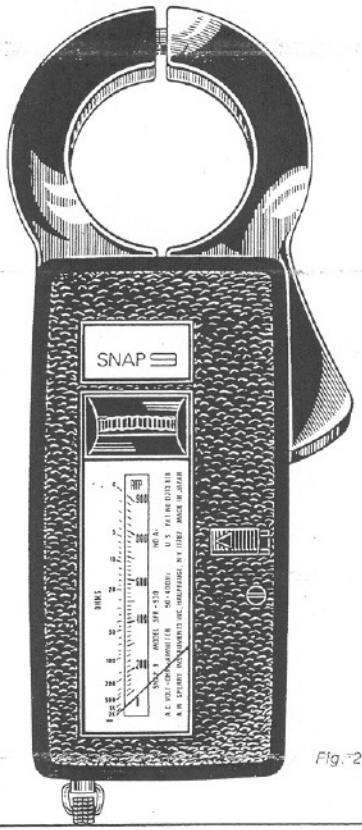


Fig. 2.

SPR-910	**AMMETER, IN STEEL BLUE PLASTICS** 0-10/30/60/100/200/300/600/900 AMPS* AC
SPR-920	**VOLT-AMMETER, IN GREY PLASTICS** 0-10/30/100/300/900 AMPS AC 0-150/300/750 VOLTS AC (SELF-CONTAINED)
SPR-931	**VOLT-OHM-AMMETER, IN BLACK PLASTICS** 0-10/30/100/300/900 AMPS AC 0-150/300/750 VOLTS AC (SELF-CONTAINED) 25Ω MID-SCALE

*Instrument designed for current readings on circuits with a maximum of 750 V.A.C.

SNAP 10

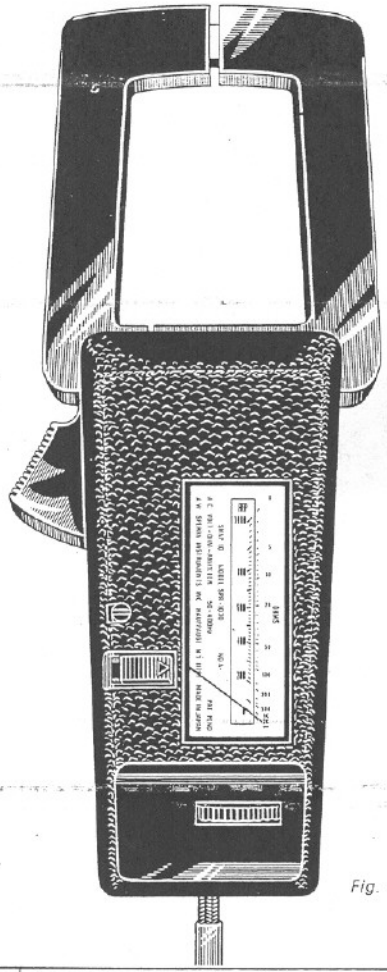


Fig. 3.

PR-1030	**VOLT-OHM-AMMETER, IN BLACK PLASTICS** 0-10/30/100/300/1000 AMPS* AC 0-150/300/750 VOLTS AC (SELF-CONTAINED) 25Ω MID-SCALE

*strument designed for current readings on circuits with a
aximum of 750 V.A.C.

HOW TO USE THE SNAP 8, 9 & 10
AS AN AMMETER

AMPERE RANGES ON DIAL DRUM ARE PRINTED BLACK

CAUTION

Before measuring amperes make certain that the OHMPROBE® Fuse & Battery Attachment is removed from the instrument. If not removed, inaccurate ampere readings will result. Use the OHMPROBE® only for OHMS readings as instructed on pages 11, 12 & 13.

1. Release Pointer Lock by sliding button to extreme right.

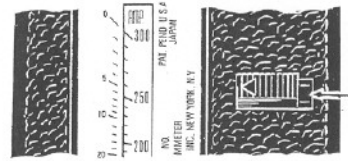


Fig. 4.

2. Set Range Selector Switch so that the HIGHEST current range appears in the window.
3. Open transformer jaws by pressing against trigger.
4. Snap transformer jaws around <u>one</u> conductor.

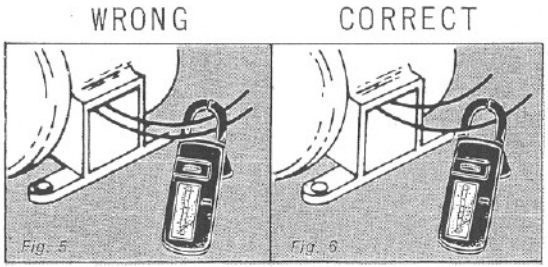


Fig. 5 Fig. 6

SNAP 8 ILLUSTRATED

HOW TO USE THE SNAP 8, 9 &10
AS AN AMMETER

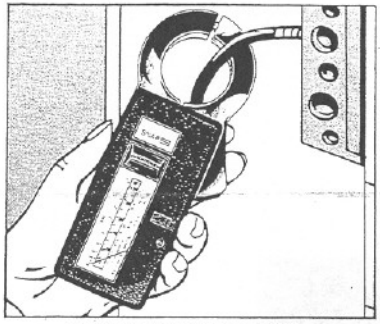
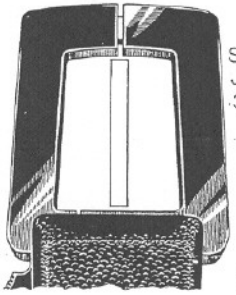


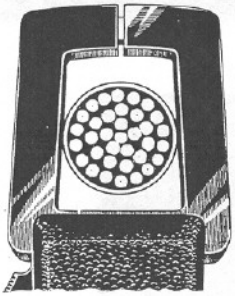
Fig. 7.

SNAP 9 ILLUSTRATED



SNAP 10
JAWS OVER
3" BUS-BAR

Fig. 8.



SNAP 10
JAWS OVER
ONE ROUND
CONDUCTOR

Fig. 9.

5. Make certain that the jaws are snapped shut before reading is taken.

6. If reading is in the lower half of the scale, turn Range Selector Switch to next lower range. Repeat until the reading is in the UPPER HALF of the scale.

HOW TO READ AMPERE SCALES

7. With the Pointer in the position shown, the reading will be as indicated, depending on the setting of the Range Selector Switch.

Scales illustrated below are actual size for Snap 8

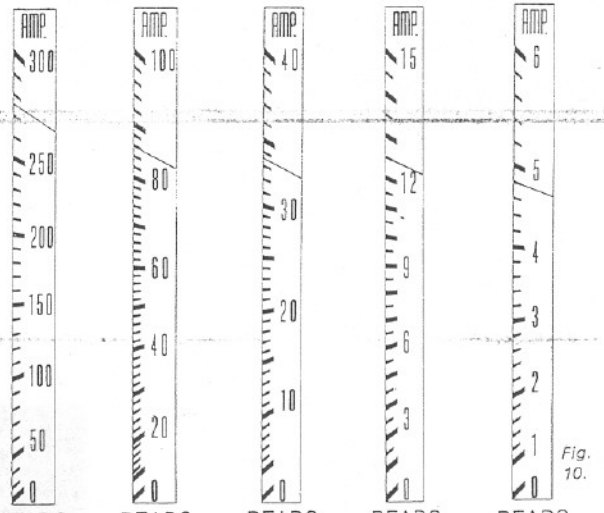


Fig. 10.

Scales illustrated below are actual size for Snap 10

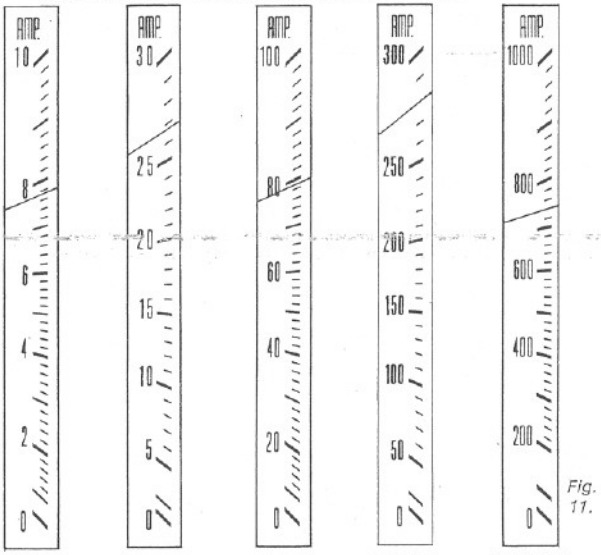


Fig. 11.

HOW TO USE THE SNAP 8, 9 &10
AS AN AMMETER

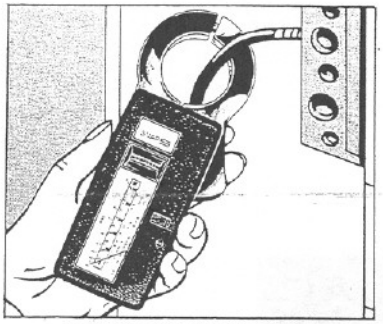
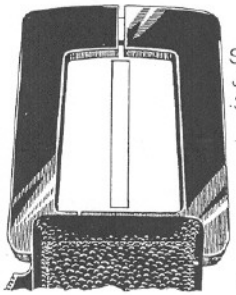


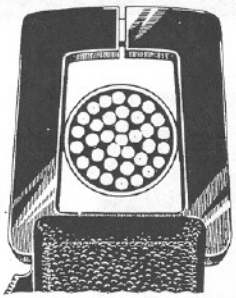
Fig. 7.

SNAP 9 ILLUSTRATED



SNAP 10
JAWS OVER
.3" BUS-BAR

Fig. 8.



SNAP 10
JAWS OVER
ONE ROUND
CONDUCTOR

Fig. 9.

5. Make certain that the jaws are snapped shut before reading is taken.

6. If reading is in the lower half of the scale, turn Range Selector Switch to next lower range. Repeat until the reading is in the UPPER HALF of the scale.

HOW TO READ AMPERE SCALES

7. With the Pointer in the position shown, the reading will be as indicated, depending on the setting of the Range Selector Switch.

Scales illustrated below are actual size for Snap 8

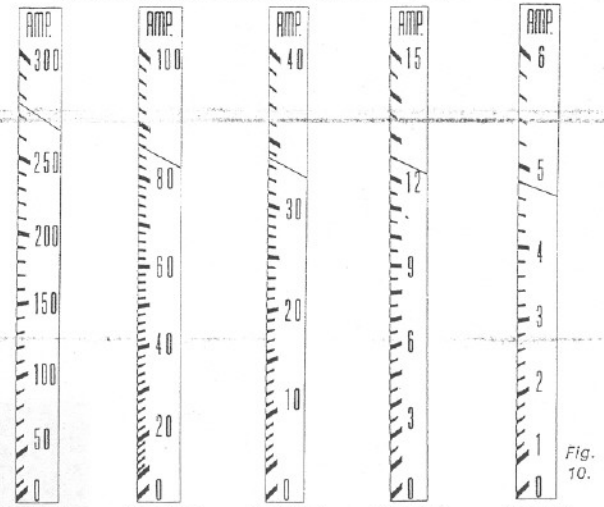


Fig. 10.

Scales illustrated below are actual size for Snap 10

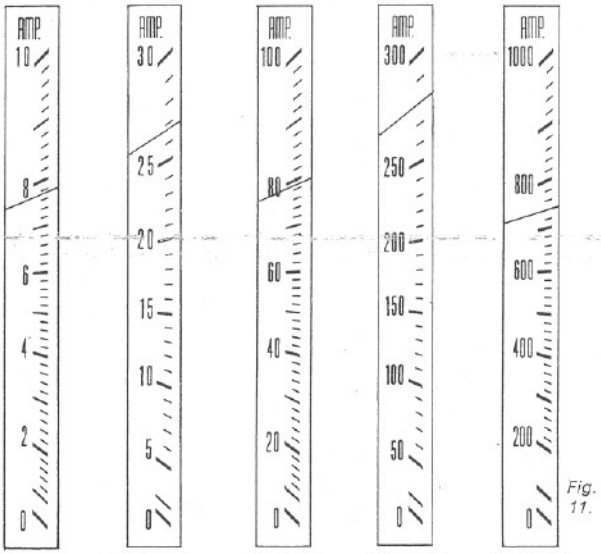


Fig. 11.

HOW TO USE THE SNAP 8, 9 & 10
AS A VOLTMETER

VOLT RANGES ARE PRINTED RED

CAUTION

Before measuring volts, make certain that the OHMPROBE® Fuse & Battery Attachment is removed from the instrument. If not removed, the fuse will burn out, rendering the OHMPROBE® inoperative. Use the OHMPROBE® for Ohm readings only as instructed on pages 11, 12 & 13.

1. Insert test lead plugs into the voltage receptacles on the bottom of the instrument and twist clockwise to lock in position.

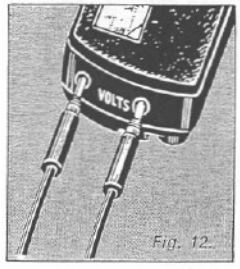


Fig. 12.

2. Set Range Selector Switch so that the HIGHEST voltage range appears in the window.

3. For safe voltage measurement, the following procedure is recommended. Connect alligator clip to any side of the line to be measured. Hold instrument in one hand and touch the other side of the line with the second test lead. If reading does not exceed 600 Volts for the SNAP 8 and 750 Volts for the SNAP 9 & 10, connect the second alligator clip to the other side of the line and take voltage reading. See Fig. 8.

   If reading is in the lower half of the scale, set Range Selector Switch to next lowest voltage range. Repeat until reading is in the UPPER HALF of the scale.

HOW TO USE THE SNAP 8, 9 & 10
AS A VOLTMETER

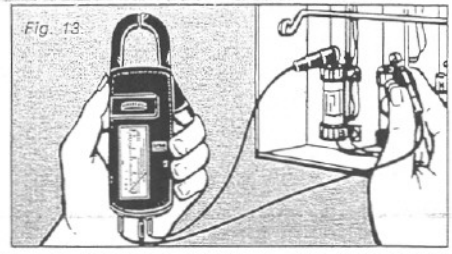


Fig. 13.

HOW TO READ VOLTAGE SCALES

4. With the Pointer in position shown, the reading will be as indicated, depending on the setting of Range Selector Switch.

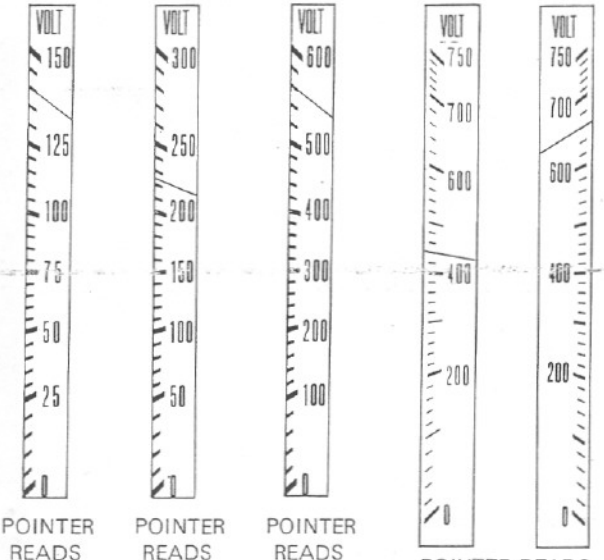


Fig. 14.

Fig. 15.

HOW TO USE THE SNAP 8 MODEL EXP-300 **AS A VOLTMETER**

VOLT RANGES ARE PRINTED RED

CAUTION

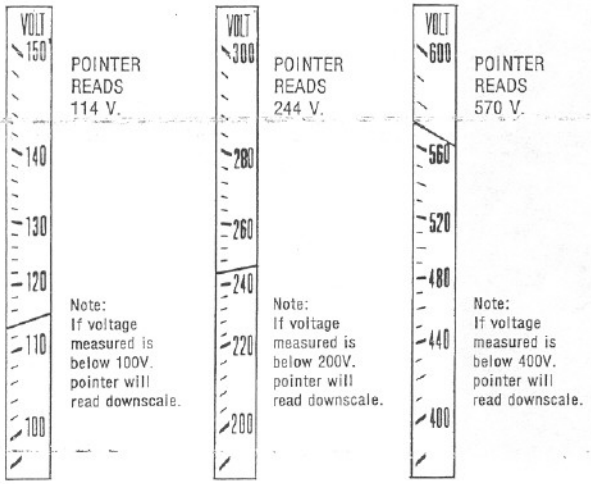
Before measuring volts, make certain that the OHMPROBE® Fuse & Battery Attachment is removed from the instrument. If not removed, the fuse will burn out, rendering the OHMPROBE® inoperative. Use the OHMPROBE® for Ohm readings only as instructed on pages 11, 12 & 13.

Follow set-up and preparatory instructions in Sect. 1, 2 and 3 of Page 8.

HOW TO READ VOLTAGE SCALES

4. With the Pointer in position shown, the reading will be as indicated, depending on the setting of Range Selector Switch.

Actual Size for Snap 8 Model EXP-300



HOW TO USE THE SNAP 8 **AS AN OHMMETER**

1. Set Range Selector Switch to any voltage range.

2. A. Insert banana plug of OHMPROBE® into receptacle on the middle right side of instrument marked 'OHMPROBE'. Twist & lock in position.

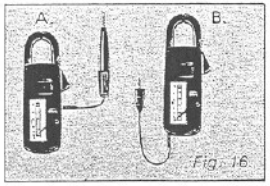


Fig. 16

B. Insert either Red or Black Test Lead into LEFT Voltage Receptacle at bottom of instrument. Twist & lock in position.

3. **ZERO BOTTOM WITH LEADS OPEN**
Line pointer over '00' (infinity) mark at the extreme bottom of ohm scale. Use Zero Adjust Screw if necessary for this adjustment.

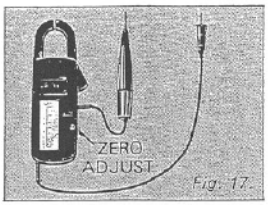


Fig. 17

4. **ZERO TOP WITH LEADS SHORTED**
Line pointer over '0' mark at extreme top of ohm scale, using Ohmmeter Adjust Knob.
Note: If Ohmmeter Adjust Knob will not bring pointer over the '0' mark, check & replace battery. See Fig. 29 on page 15.

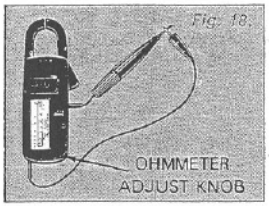


Fig. 18

5. Connect alligator clip to one end of circuit, touch the other end with OHMPROBE® point. Read resistance on Ohm scale.

6. Remove OHMPROBE® from its terminal when finished with Ohm check.

CAUTION

Disconnect line voltage from circuit to be checked before taking any resistance measurement. The OHMPROBE® is fused to prevent damage to the instrument if a resistance measurement is taken on a live circuit.

HOW TO USE THE SNAP 9
AS AN OHMMETER

1. Set Range Selector Switch to OHM range for SPR-931, 150 volt range for SPR-930.
2. Insert banana plug of OHMPROBE® into receptacle marked 'ΩPROBE' right under trigger on right side of instrument. Twist & lock in position. Insert either red or black voltage lead into right volt receptacle marked V.Ω. Twist & lock in position.

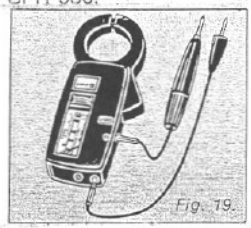


Fig. 19.

3. **ZERO BOTTOM WITH LEADS OPEN**
Line pointer over '∞' (infinity) mark at the extreme bottom of ohm scale. Use Zero Adjust Screw if necessary for this adjustment.

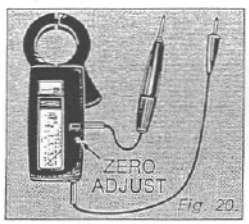
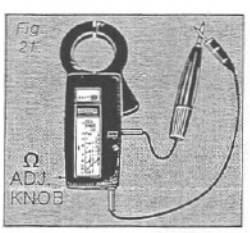


Fig. 20.

4. **ZERO TOP WITH LEADS SHORTED**
Line pointer over '0' mark at extreme top of ohm scale, using Ohmmeter Adjust Knob.
Note: If Ohmmeter Adjust Knob will not bring pointer over the '0' mark, check & replace battery. See Fig. 29 on page 15.



5. Connect alligator clip to one end of circuit, touch the other end with OHMPROBE® point. Read resistance on Ohm scale.
6. Remove OHMPROBE® from its terminal when finished with Ohm check.

CAUTION
Disconnect line voltage from circuit to be checked before taking any resistance measurement. The OHMPROBE® is fused to prevent damage to the instrument if a resistance measurement is taken on a live circuit.

HOW TO USE THE SNAP 10
AS AN OHMMETER

1. Set Range Selector Switch to 150 volt range.
2. Insert banana plug of OHMPROBE® into receptacle marked 'ΩPROBE' on lower left side of instrument. Twist & lock in position. Insert either Red or Black Voltage Test Lead into left voltage receptacle marked 'V.Ω.' Twist & lock in position.

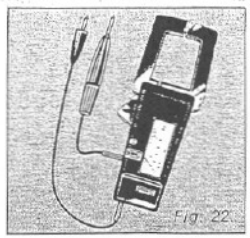


Fig. 22.

3. **ZERO BOTTOM WITH LEADS OPEN**
Line pointer over '∞' (infinity) mark at the extreme bottom of ohm scale. Use Zero Adjust Screw if necessary for this adjustment.

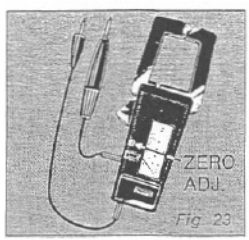


Fig. 23

4. **ZERO TOP WITH LEADS SHORTED**
Line pointer over '0' mark at extreme top of ohm scale, using Ohmmeter Adjust Knob on lower left side of instrument. Note: If this will not bring pointer over the '0' mark, check & replace battery. See Fig. 29 on page 15.

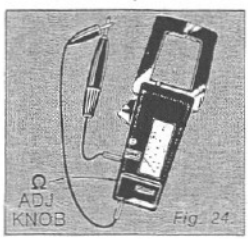


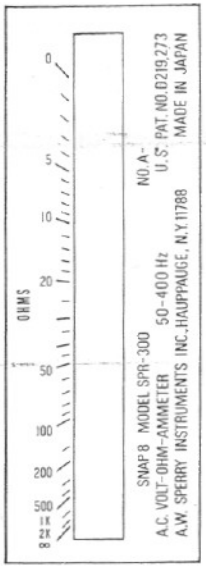
Fig. 24

5. Connect alligator clip to one end of circuit, touch the other end with OHMPROBE® point. Read resistance on Ohm scale.
6. Remove OHMPROBE® from its terminal when finished with Ohm check.

CAUTION
Disconnect line voltage from circuit to be checked before taking any resistance measurement. The OHMPROBE® is fused to prevent damage to the instrument if a resistance measurement is taken on a live circuit.

OHM SCALES

Shown Actual Size



SNAP 8

Fig. 25.

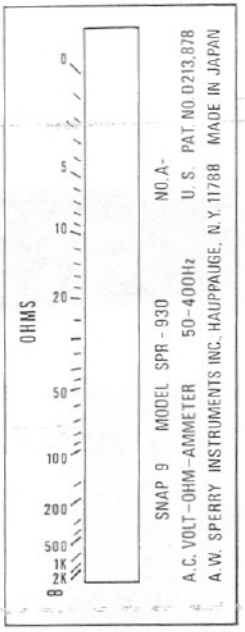
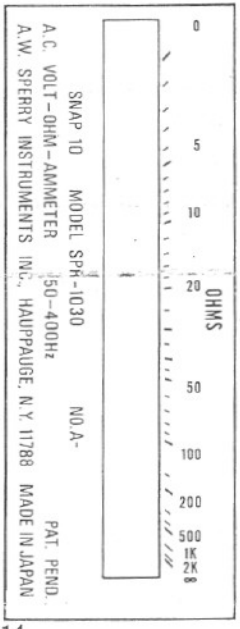


Fig. 26.

SNAP 9



SNAP 10

Fig. 27.

NOTE:
For SPR-931 OHM range is on dial drum not scale plate.

ZERO ADJUSTMENT

For greatest accuracy, make certain that the pointer is set exactly on the Zero line. Rotate the Zero Adjust Screw until the pointer is directly over the zero line.

Fig. 28

TO REPLACE FUSE OR BATTERY

Fig. 29.

Unscrew halves of OHMPROBE® plastic case. Components are spring loaded and come apart readily.

FUSE

Use Type F-1, Glass Instrument Type, ½ Amp, 250V, ¼" x 1¼", Type AGC-½ or equal. Insert fuse into fluted well in the lower section (with prod) of the OHMPROBE® plastic case.

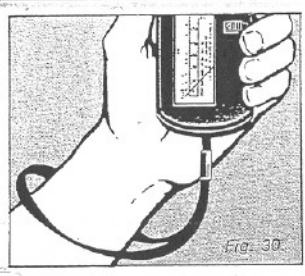
BATTERY

Use Type B-1, Type 'AA', 1.5V, Type #915 or equal. Insert battery with (+) side facing fuse in the lower section of OHMPROBE® plastic housing as shown in Fig. 29. After replacement is made, assemble the two halves of the OHMPROBE® plastic housing.

NOTE: If the OHMPROBE® is taken out of use for any length of time, it is best to remove the battery before storing the attachment. Insert a fresh battery when the unit is restored to use.

SAFETY CARRYING STRAP
FOR SNAP 8, 9 & 10

To prevent damage should the instrument fall out of the hand, use the carrying strap (over the wrist) as recommended. Thus, the instrument can drop safely away when the reading is taken.



FOR BETTER INSTRUMENT SERVICE

DO

Return the Warranty Card.
Read published ratings.
Read Operating Instructions.
Start with highest scale.
Read in upper half of scale.
Check leads periodically for damage.
OBSERVE ALL SAFETY RULES.

DON'T

Alter circuitry.
Solder leads in terminals.
Overload needlessly.
Polish Window.
Subject to severe shock.
Exceed instrument rating.
Attempt repairs yourself.
Attempt to read amps and volts at same time.

WARRANTY REGISTRATION

To validate warranty, please complete the warranty registration card enclosed with your Snap-Around and return to A. W. Sperry Instruments Inc., 245 MARCUS BLVD., HAUPPAUGE, N.Y. 11788 within 10 days of purchase. No postage required.

Printed in U.S.A.