### 1. Safety Precautions

- This instruction manual contains warnings and safety rules that must be observed by the user to ensure safe operation of the instrument and retain it in safe condition. Therefore, read these operating instructions thoroughly and completely before using the instrument.
- The symbol \( \Delta \) on the instrument means that the user must refer to the relevant section of this instruction manual for safe operation of the instrument.
- Pay particular attention to all WARNINGS and CAUTIONS in this instruction manual. WARNING indicates warnings to avoid electric shock and CAUTION indicates cautions to avoid damage to the instrument.

#### 1.1. Operating Instructions

1. Connect the test leads to the circuit under test.
2. Check that the meter is connected to the circuit before testing.
3. Ensure that the meter is in the correct measuring range.
4. Discharge capacitance of the circuit under test before testing.
5. Do not touch the test leads immediately after testing.

#### 1.2. Testing Procedures

- **WARNING**
  - To avoid electric shock, do not connect the test leads to the circuit under test.

- **CAUTION**
  - To avoid damage to the instrument, insulation measurement must be performed on de-energized circuits only. Make sure that the circuit or equipment is disconnected before proceeding with an insulation test.

#### 1.3. Instructions

1. **Test Voltage**
   - When testing circuits under voltage, ensure that the meter is properly grounded to avoid shock hazard.

2. **Battery Voltage**
   - Do not connect the test leads to the circuit under test immediately after testing.

3. **Capacitance Storage**
   - Capacitance stored in the circuit may cause electric shock.

#### 1.4. Insulation Testing

1. **Calibration Service**
   - Calibration service charges are not covered by the terms and conditions of warranty.

2. **Attention to Detail**
   - The attention to detail of this fine snap-around instrument is further emphasized by its design and construction.

### 2. Features

- **AC Voltage Measurement**
  - Can be made without depressing the test button.

- **Battery Check**
  - Uses only \( \frac{1}{2} \) 1.5 V battery type R6, AA, or equivalent.

- **Insulation Resistance**
  - Rated test voltage +/− 20%.

### 3. Specifications

#### 3.1. Measuring Ranges

- **Accuracy**
  - +/- 2% of scale length.

- **Power Supply**
  - \( 100 \text{mV} + \text{warning range} \)

#### 3.2. Operating Environment

- **Humidity**
  - Relative humidity up to 75%.

- **Temperature**
  - 0°C to 40°C.

- **Weight**
  - 330g.

### 4. Calibration and Repair

- **Warnings**
  - Never exceed the maximum allowable input of any measuring range when making measurements.

- **Cautions**
  - Always make sure that the test leads are fully inserted into the test lead connectors.

### 5. Battery Replacement

- **WARNING**
  - To avoid shock hazard, disconnect the test leads from the circuit before replacing the batteries.

- **CAUTION**
  - To avoid damage to the instrument, replace all batteries at the same time.

### 6. Notes on Housing Case & Accessories

- **For service**
  - Open the case lid as shown.

- **For use**
  - Turn it 180 degrees.

### 7. Cleaning Meter Cover

- **CAUTION**
  - Never use paint thinner, benzine or other solutions containing solvents for cleaning the instrument.

- **Otherwise**
  - Do not use solvents that can damage the instrument.

#### 8. Operation

1. **Preparation for testing**
   - Connect the test leads to the circuit under test.

2. **Test Lead Connection**
   - Insert the test leads into the terminals of the instrument.

3. **Battery Voltage Check**
   - Check the battery voltage using the test leads.

4. **Battery Replacement**
   - Replace the batteries when the LED stops flashing.

### 9. Warranty

- **Technical Support**
  - A.W. Sperry will not accept liability for any damage or injury caused by the user.

- **Customer Service**
  - The warranty is not applicable if the instrument has been: misused, altered, subjected to excessive shock or vibration, or not operated in strict accordance with the instructions. A.W. Sperry reserves the right to limit support for non-warranty claims.

### 10. Accessories

- **Test Lead Pouch**
  - Made of durable material.

- **Battery Check LED**
  - Flashing to indicate normal battery condition.

### 11. Instructions on Use

- **For service**
  - Open the battery compartment cover by unscrewing the metal captive screw to reveal the battery compartment.

- **For use**
  - Always replace all \( \frac{1}{2} \) 1.5 V batteries of the same type in the compartment.

### 12. Additional Information

- **Notice**
  - Handle the instrument with care and follow the instructions in order to maintain it in good condition for a long period of time.

- **Lifelong Warranty**
  - The warranty is not applicable if the instrument has been: misused, altered, subjected to excessive shock or vibration, or not operated in strict accordance with the instructions. A.W. Sperry reserves the right to limit support for non-warranty claims.

- **Replacement**
  - If a new replacement instrument is needed, return the old one to A.W. Sperry for an exchange.

- **Contact Information**
  - Visit www.awsperry.com for more information.

- **Regulatory Information**
  - The instrument is compliant with all relevant safety and performance standards.

- **Technical Specifications**
  - Complete technical specifications are available for download from our website.