Oumefar P50-J1/P50-B1/P75-B1/P75-E2/P100-E2

Oumefar Spring Pressure Test Probe Pogo Pins User Manual

Models: P50-J1, P50-B1, P75-B1, P75-E2, P100-E2

1. Introduction

This manual provides essential information for the safe and effective use of Oumefar Spring Pressure Test Probe Pogo Pins. These probes are designed for conductive testing on Printed Circuit Board (PCB) assemblies, ensuring reliable contact and durability. Please read this manual thoroughly before use and retain it for future reference.

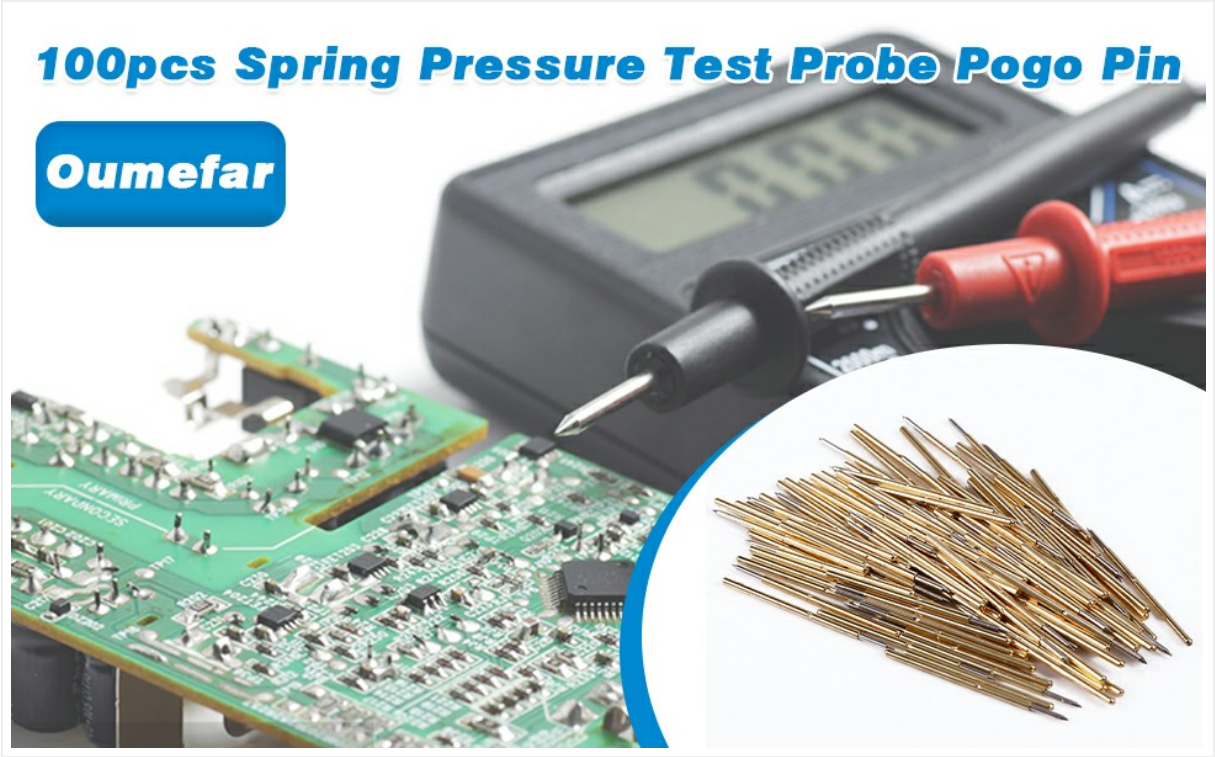

Image 1.1: Oumefar Spring Pressure Test Probe Pogo Pins in a testing environment, showing their application with a multimeter and a circuit board.

2. Safety Information

Always observe the following safety precautions to prevent injury or damage to equipment:

- Ensure power is disconnected from the circuit under test before inserting or removing probes, unless specifically designed for live circuit testing and appropriate safety measures are in place.
- Avoid touching the metal tips of the probes when connected to a live circuit.
- Use probes only for their intended purpose.
- Inspect probes for damage before each use. Do not use damaged probes.
- Keep out of reach of children.

3. Product Overview

The Oumefar Spring Pressure Test Probe Pogo Pins are essential tools for electrical testing, particularly for Printed Circuit Boards (PCBs). Each set includes 100 pieces, providing ample supply for various testing needs.

3.1 Key Features

- **High-Quality Material:** Constructed with a heat-treated copper plunger, gold-plated phosphor bronze barrel, and a gold-plated stainless steel wire spring for durability and reliable conductivity.
- **Cone Head Design:** Features a cone-shaped head, ideal for testing through-hole components on PCBs.
- **Essential for PCB Testing:** Designed to access components on printed circuit assemblies for conductive testing, ensuring stability and durability.
- **Quantity:** Supplied in packs of 100 pieces, suitable for long-term use or replacement of worn probes.

3.2 Probe Types and Dimensions

This product includes various models such as P50-J1, P50-B1, P75-B1, P75-E2, and P100-E2, each designed for specific testing requirements. The cone head design (Type B) is particularly suited for precise contact.

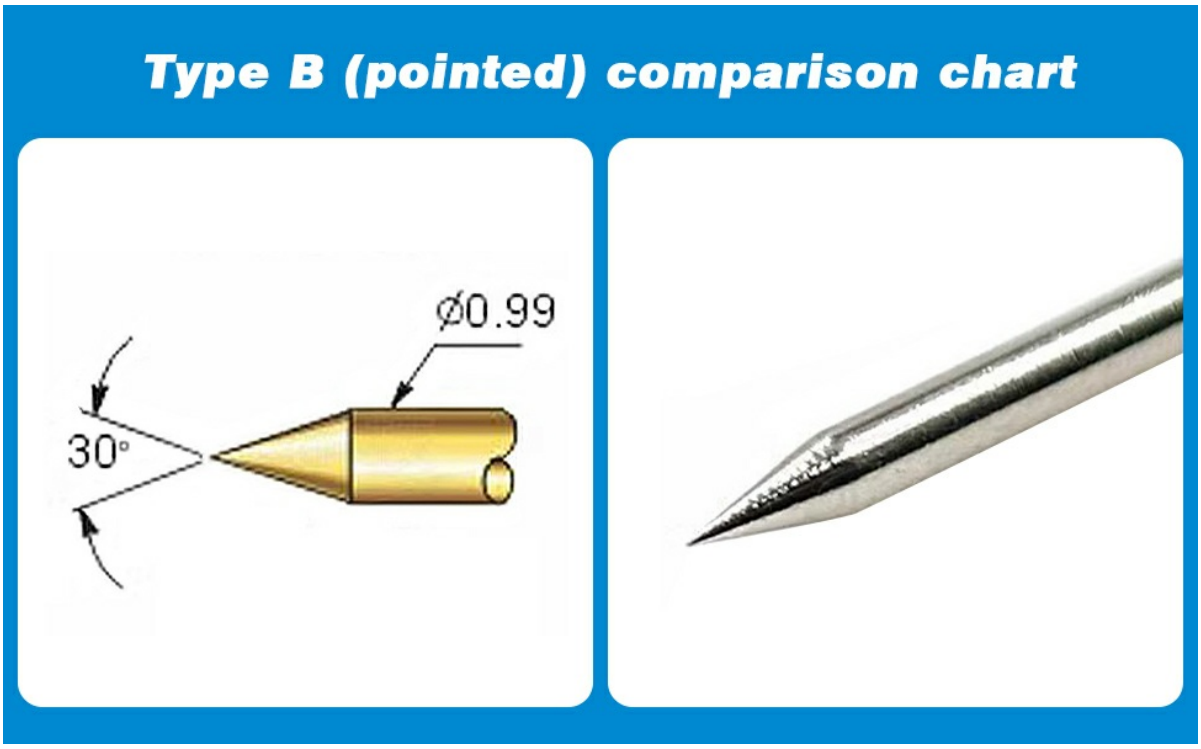

Image 3.1: Diagram illustrating the dimensions and pointed tip of a Type B pogo pin, suitable for precise contact.

Image 3.2: A collection of Oumefar Spring Pressure Test Probe Pogo Pins, showcasing their uniform design and quantity.

4. Specifications

Feature	Detail
Product Dimensions	2.76 x 1.97 x 0.39 inches
Item Weight	0.01 Kilograms (approx. 0.35 ounces)
Material	Copper plunger (heat treated), Phosphor bronze barrel (gold plated), Stainless steel wire spring (gold plated)
Head Type	Cone (pointed)
Quantity	100 pieces
Manufacturer	Oumefar
Model Numbers	P50-J1, P50-B1, P75-B1, P75-E2, P100-E2

5. Setup

These pogo pins are designed to be inserted into appropriate receptacles or test fixtures. Ensure the receptacle size matches the probe's barrel diameter for a secure fit and reliable electrical contact.

1. **Select the Correct Probe:** Choose the appropriate pogo pin model (e.g., P50-J1, P50-B1) based on the specific testing requirements and the size of the test point on the PCB.
2. **Prepare the Test Fixture:** If using a test fixture, ensure the holes for the pogo pins are clean and correctly sized.
3. **Insert Probes:** Carefully insert the pogo pins into their designated receptacles in the test fixture or directly into the test leads. Ensure they are fully seated.
4. **Connect to Test Equipment:** Attach the test leads, now equipped with the pogo pins, to your multimeter or other electrical testing equipment.

Image 5.1: A detailed view of a single Oumefar pogo pin, highlighting its cone-shaped tip and spring mechanism.

6. Operating Instructions

These pogo pins are designed for making temporary electrical contact with test points on PCBs or other electronic components.

1. **Position the Probe:** Carefully align the tip of the pogo pin with the desired test point on the PCB or component.
2. **Apply Pressure:** Gently press the probe onto the test point. The internal spring will compress, ensuring a firm and consistent electrical connection.
3. **Perform Measurement:** With the probe making contact, use your connected test equipment (e.g., multimeter) to perform the required electrical measurement (voltage, current, resistance, continuity).
4. **Remove Probe:** Once the measurement is complete, gently lift the probe from the test point.

6.1 Application Scenarios

Oumefar pogo pins are suitable for various applications, including:

- Testing through-hole components on PCBs.
- Accessing lead pins and solder joints for electrical verification.

- Testing contaminated PCB boards or puncturing contaminated layers to establish contact.
- Use in automated test equipment (ATE) fixtures.

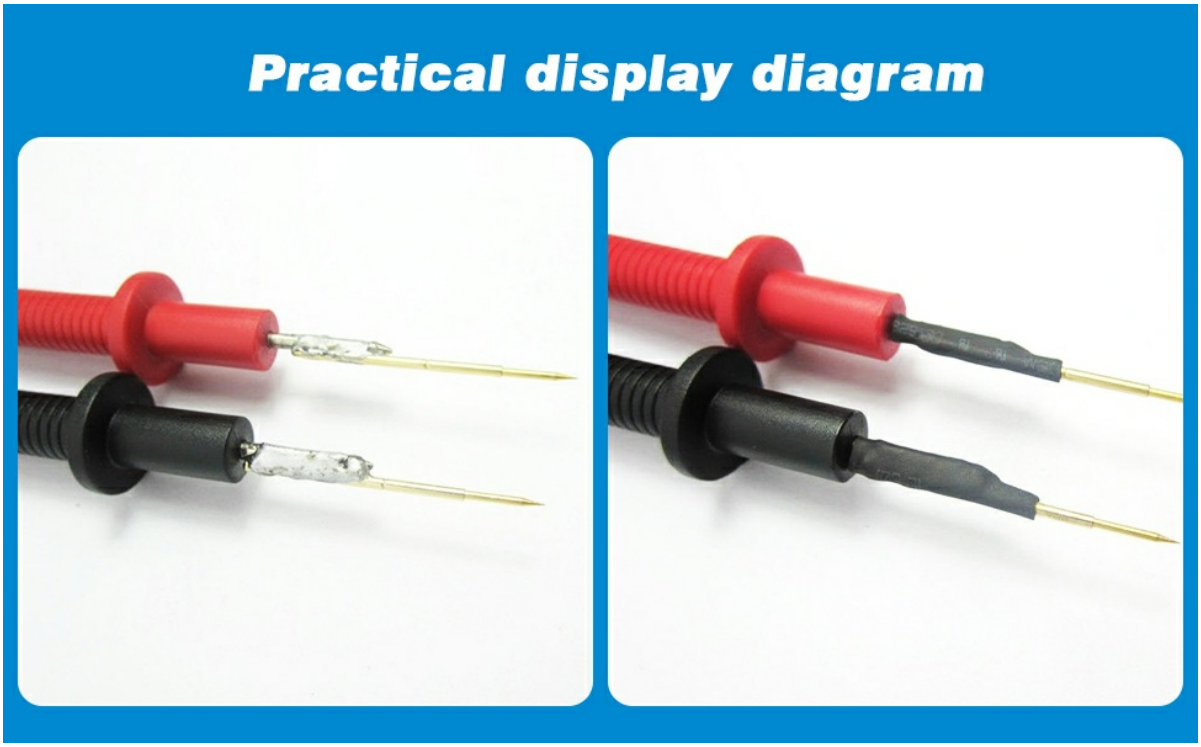

Image 6.1: Pogo pins integrated into test leads, demonstrating their practical application for electrical measurements.

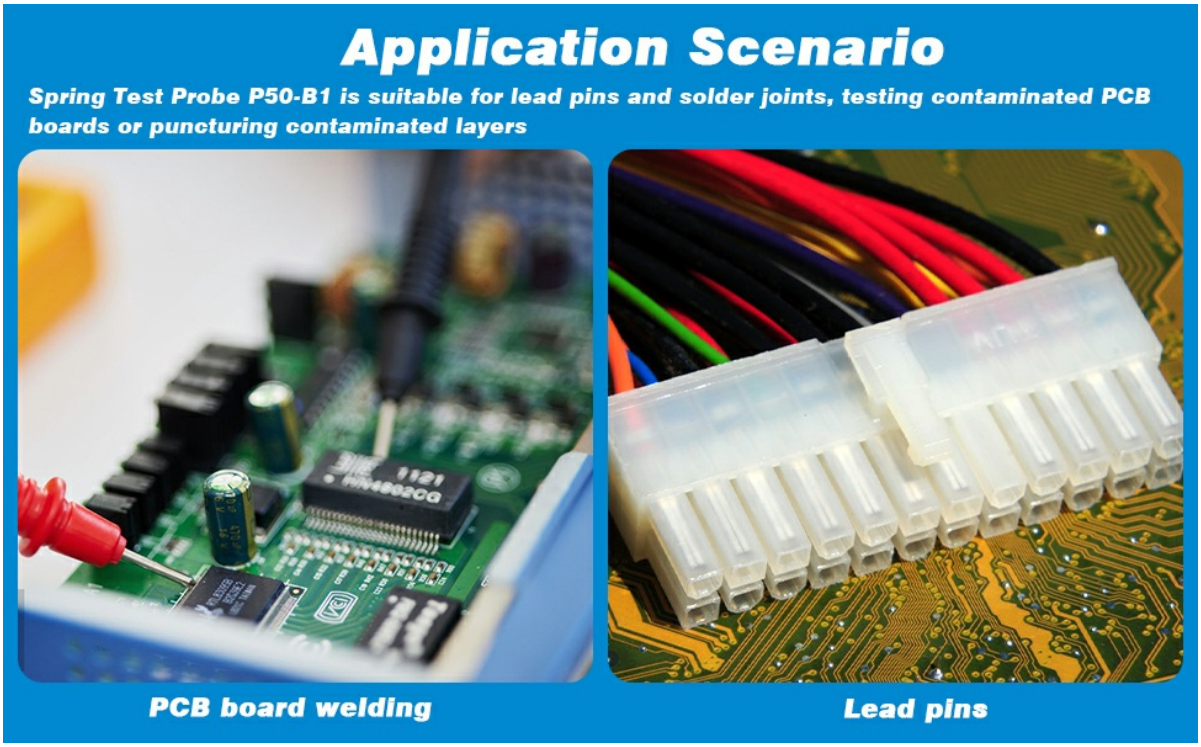

Image 6.2: Visual representation of pogo pin applications, including testing PCB board welding points and lead pins.

7. Maintenance

Proper maintenance ensures the longevity and accuracy of your pogo pins.

- **Cleaning:** Periodically inspect the probe tips for dirt, flux residue, or oxidation. Clean gently with a non-abrasive cleaner suitable for electronics and a soft cloth or brush. Ensure probes are dry before

use.

- **Storage:** Store probes in a clean, dry environment, preferably in their original packaging or a dedicated container to prevent damage to the tips and springs.
- **Inspection:** Regularly check for bent or damaged tips, weakened springs, or corrosion. Replace any damaged probes immediately to maintain testing accuracy and safety.

8. Troubleshooting

If you encounter issues during testing, consider the following:

- **Poor Contact/Inconsistent Readings:**
  - Ensure the probe tip is clean and free of debris.
  - Verify the probe is correctly aligned with the test point.
  - Check if the spring mechanism is functioning correctly; a weak spring may not provide adequate pressure.
  - Confirm the probe type is suitable for the test point (e.g., cone head for through-holes).
- **Probe Damage:**
  - Bent or broken tips indicate excessive force or improper handling. Replace damaged probes.
  - Corrosion on the barrel or tip can affect conductivity. Clean or replace as necessary.

9. Warranty and Support

For information regarding product warranty, returns, or technical support, please refer to the purchase documentation or contact the seller directly. You may also visit the official Oumefar store for additional resources:
Oumefar Official Store

10. Disposal Information

When the product reaches the end of its useful life, please dispose of it responsibly according to local regulations for electronic waste. Do not dispose of with general household waste.