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Model: ZB-T12S

INTRODUCTION

The ZIBOO ZB-T12S Automotive Wire Piercing Probe is a specialized tool designed for non-destructive electrical testing in automotive and other electrical systems. This probe allows for secure and accurate measurements by piercing the insulation of a wire without requiring the wire to be cut or stripped. It is compatible with standard 4mm banana plugs, making it a versatile addition to your test equipment.

Key Features:

- **Secure Connection:** Spring-loaded press pin made of copper securely grasps conductors up to 4mm thickness.
- **Versatile Compatibility:** Sheathed 4mm receptacle accepts both shrouded and unshrouded banana plugs.
- **Non-Destructive Testing:** Allows for testing without damaging wire insulation.
- **Durable Construction:** Fine workmanship ensures long service life.





Image: ZIBOO ZB-T12S Automotive Wire Piercing Probe in its retail packaging, showing the red and black probes.

SETUP INSTRUCTIONS

1. **Unpack the Probes:** Carefully remove the two (red and black) wire piercing probes from their packaging.
2. **Inspect Components:** Verify that both probes are intact and the piercing needles are sharp and straight.

3. **Connect to Test Leads:** Insert the 4mm banana plug of your multimeter or test equipment into the sheathed receptacle at the base of the piercing probe. Ensure a firm and secure connection. The receptacle is designed to accommodate both shrouded and unshrouded 4mm banana plugs.



Image: A close-up view of the ZIBOO ZB-T12S probe's base, illustrating how a 4mm banana plug connects to its sheathed receptacle.

OPERATING INSTRUCTIONS

1. **Identify Target Wire:** Locate the insulated wire you wish to test. Ensure the wire's diameter is suitable for the probe (up to 4mm conductor thickness).
2. **Position the Probe:** Gently open the piercing clip by pressing the spring-loaded mechanism. Position the wire within the jaws of the clip, ensuring the piercing needle is aligned with the desired test point on the wire's insulation.
3. **Pierce the Insulation:** Release the spring-loaded mechanism. The sharp copper needle will pierce the wire's insulation and make contact with the conductor. Ensure a firm connection for accurate readings.
4. **Perform Measurement:** Once the probe is securely attached, use your connected multimeter or test equipment to perform the necessary electrical measurements.
5. **Remove the Probe:** After testing, gently open the piercing clip and remove it from the wire. The small

puncture hole in the insulation typically self-seals, minimizing damage.



Image: Two ZIBOO ZB-T12S probes, red and black, crossed to highlight the piercing tip mechanism and how it engages with a wire.

MAINTENANCE

- **Cleaning:** After each use, wipe the probes with a clean, dry cloth to remove any dirt, grease, or residue. Ensure the piercing needle is free of debris.
- **Inspection:** Regularly inspect the piercing needle for sharpness and straightness. If the needle becomes dull or bent, it may affect performance. Also, check the probe body for any signs of damage or wear.
- **Storage:** Store the probes in a clean, dry environment, away from direct sunlight and extreme temperatures. Keep them in their original packaging or a suitable tool case to protect the piercing tips.
- **Safety:** Always handle the probes with care due to the sharp piercing needle. Keep out of reach of children.



Image: A ZIBOO ZB-T12S probe disassembled, clearly showing the removable piercing needle component and its connection point.

TROUBLESHOOTING

- **No Reading or Intermittent Connection:**

- Ensure the banana plug from your test equipment is fully and securely inserted into the probe's receptacle.
- Verify that the piercing needle has made solid contact with the wire's conductor by fully penetrating the insulation.
- Check the wire itself for breaks or damage that might prevent a circuit.

- **Difficulty Piercing Insulation:**

- Ensure the piercing needle is sharp and not bent. Replace if necessary.
- Confirm the wire's conductor thickness does not exceed 4mm.
- For very small wires (e.g., 20AWG), careful alignment of the needle to the center of the wire is crucial.

- **Banana Plug Does Not Fit:**

- Ensure your banana plug is a standard 4mm type. The probe's receptacle is designed for both shrouded and unshrouded 4mm banana plugs.
- Do not force oversized plugs into the receptacle, as this can cause damage.

SPECIFICATIONS

Model	ZB-T12S
Color	Red & Black
Gripping Diameter (Max)	Approx. 4mm
Size	Approx. 160mm (Length) x 16mm (Width)
Current Rating	10A
Material Type	Copper (pin), Durable Plastic (body)
Number of Items	2 (one red, one black)
Compliance	IEC/EN: 61010 Standards



Image: A ZIBOO ZB-T12S probe illustrating its 16cm overall length.

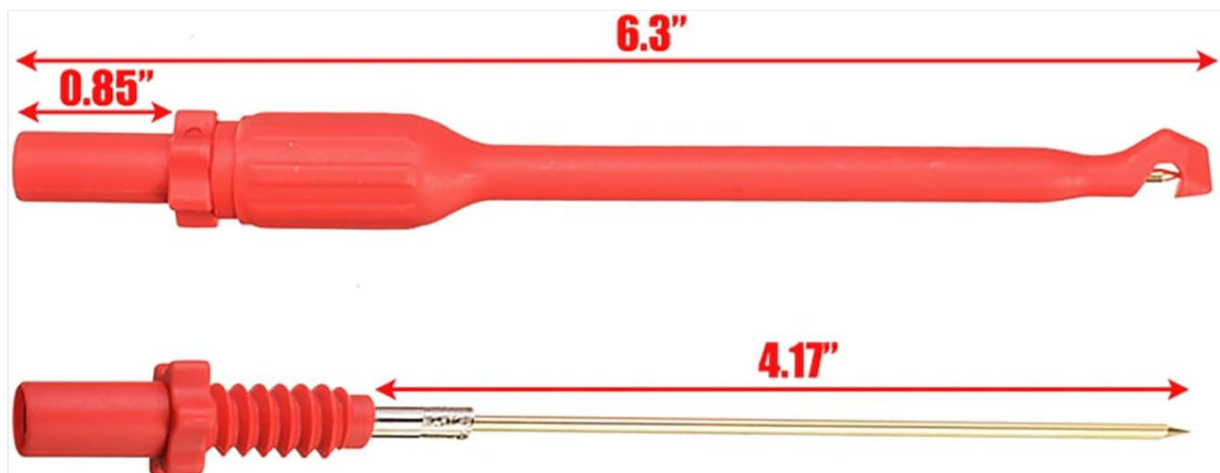


Image: Detailed dimensions of the ZIBOO ZB-T12S probe, indicating a total length of 6.3 inches and a needle length of 4.17 inches.

WARRANTY INFORMATION

The ZIBOO ZB-T12S Automotive Wire Piercing Probe comes with a **1 Year Warranty** provided by ZIBOO. This warranty covers manufacturing defects and ensures the product meets specified quality standards. For warranty claims or further details, please retain your proof of purchase and contact ZIBOO customer support.

CUSTOMER SUPPORT

For any questions, technical assistance, or support regarding your ZIBOO ZB-T12S Automotive Wire Piercing Probe, please contact ZIBOO customer service. Refer to the product packaging or the official ZIBOO website for the most current contact information.

We are committed to providing high-quality products and support to ensure your satisfaction.