

Hakko T15-IL

Hakko T15-IL Conical Soldering Tip Instruction Manual

Model: T15-IL | Brand: Hakko

INTRODUCTION

This instruction manual provides essential information for the proper use, maintenance, and care of your Hakko T15-IL Conical Soldering Tip. Adhering to these guidelines will ensure optimal performance and longevity of the tip. This tip is designed for precision soldering applications, offering a fine point for intricate work.

PRODUCT OVERVIEW

The Hakko T15-IL is a conical soldering tip, measuring 0.1mm at its point and 12.7mm in length. It is specifically designed for use with Hakko FM-2027 soldering handpieces and compatible soldering stations. This tip is ideal for fine pitch components and delicate soldering tasks where precision heat application is critical.



Image 1: Hakko T15-IL Conical Soldering Tip. This image shows the slender, conical shape of the soldering tip, designed for precision work. The tip is metallic grey with a white band near the base, indicating its model number and manufacturing details.

Key Features:

- **Conical Shape:** Provides a fine point for precision soldering.
- **Dimensions:** 0.1mm tip diameter, 12.7mm length.
- **Compatibility:** Designed for use with Hakko FM-2027 soldering handpieces.
- **Material:** Constructed for efficient heat transfer and durability.

Safety Information

Always prioritize safety when working with soldering equipment. Failure to follow safety precautions can result in injury or damage to property.

- **Hot Surfaces:** Soldering tips reach very high temperatures. Always assume the tip is hot. Do not touch the tip or the metal parts of the handpiece.

- **Eye Protection:** Always wear safety glasses to protect your eyes from solder splashes and fumes.
- **Ventilation:** Solder fumes can be harmful. Work in a well-ventilated area or use a fume extractor.
- **Flammable Materials:** Keep flammable materials away from the soldering area.
- **Power Off:** Always turn off and unplug the soldering station when not in use or before performing maintenance.
- **Proper Tools:** Use appropriate tools for handling hot tips, such as heat-resistant pads or stands.

SETUP

Before using the Hakko T15-IL tip, ensure your soldering station and handpiece are compatible and in good working order. This tip is designed for Hakko FM-2027 handpieces.

1. **Power Off:** Ensure the soldering station is turned off and unplugged from the power outlet.
2. **Cool Down:** If replacing an existing tip, allow the old tip and handpiece to cool completely to a safe temperature.
3. **Remove Old Tip (if applicable):** Carefully remove the old tip from the FM-2027 handpiece. Refer to your handpiece's manual for specific instructions on tip removal.
4. **Insert New Tip:** Gently insert the T15-IL conical tip into the heating element of the FM-2027 handpiece. Ensure it is fully seated and secure. Do not force the tip.
5. **Secure Handpiece:** Place the handpiece securely in its stand.
6. **Power On:** Plug in and power on your soldering station. Allow the tip to reach the set temperature.
7. **Pre-tinning:** Once the tip reaches operating temperature, immediately apply a small amount of solder to the tip. This "tins" the tip, protecting it from oxidation and ensuring efficient heat transfer.

OPERATING INSTRUCTIONS

Proper operating technique is crucial for effective soldering and tip longevity.

1. **Temperature Setting:** Set your soldering station to the appropriate temperature for the solder and components you are using. Consult your solder's datasheet for recommended temperatures.
2. **Clean Tip:** Before each use, and periodically during use, clean the tip using a damp sponge or brass wool to remove old solder and oxidation.
3. **Apply Solder:** Bring the clean, tinned tip into contact with both the component lead and the PCB pad simultaneously.
4. **Feed Solder:** Once heat is transferred, feed solder onto the joint, not directly onto the tip. The solder should flow smoothly and create a shiny, concave fillet.
5. **Remove Solder and Tip:** Remove the solder wire first, then the soldering tip. Avoid dragging the tip across the board.
6. **Re-tinning:** After each joint, or if the tip appears dull, re-tin the tip with a small amount of fresh solder. This helps prevent oxidation.

MAINTENANCE

Regular maintenance extends the life of your soldering tip and ensures consistent performance.

- **Daily Cleaning:** Clean the tip frequently during use with a damp cellulose sponge or brass wire cleaner.
- **Re-tinning:** Always re-tin the tip with fresh solder before placing the iron back in its stand and before turning off the station. This protective layer prevents oxidation.
- **Avoid Excessive Heat:** Do not operate the tip at excessively high temperatures for prolonged periods, as this can accelerate oxidation and reduce tip life.

- **Inspect for Wear:** Periodically inspect the tip for signs of wear, pitting, or excessive oxidation that cannot be removed by cleaning. Replace the tip if it is significantly degraded.
- **Proper Storage:** Store tips in a dry, clean environment when not in use.

TROUBLESHOOTING

If you encounter issues with your soldering tip, consider the following common problems and solutions:

| Problem | Possible Cause | Solution |
|--|---|---|
| Tip not heating or heating slowly | Poor connection to handpiece; faulty handpiece or station; incorrect tip for station. | Ensure tip is fully seated. Check handpiece and station connections. Consult your soldering station manual. |
| Solder does not wet the tip (beads up) | Tip is oxidized; insufficient temperature; tip is worn out. | Clean and re-tin the tip thoroughly. Increase temperature if safe for components. Replace tip if severely oxidized or worn. |
| Poor solder joints | Insufficient heat transfer; dirty tip; incorrect temperature. | Ensure tip is clean and tinned. Verify correct temperature setting. Ensure good contact with both pad and lead. |

SPECIFICATIONS



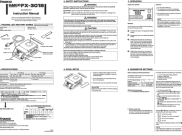
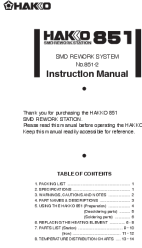
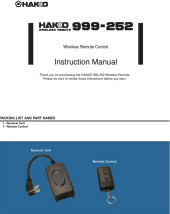

Detailed specifications for the Hakko T15-IL Conical Soldering Tip:

| Attribute | Value |
|------------------------|-----------------------|
| Model Number | T15-IL |
| Tip Type | Conical |
| Tip Diameter | 0.1mm |
| Length | 12.7mm |
| Compatible Handpiece | Hakko FM-2027 |
| Product Dimensions | 8.5 x 2 x 0.25 inches |
| Item Weight | 0.16 ounces |
| Manufacturer | Hakko |
| Country of Manufacture | Japan |

WARRANTY AND SUPPORT

For specific warranty information regarding your Hakko T15-IL soldering tip, please refer to the documentation provided with your original purchase or visit the official Hakko website. Warranty terms typically cover manufacturing defects. For technical support, product inquiries, or to purchase additional Hakko products, please visit the official Hakko store or contact their customer service directly.
Official Hakko Store: [Hakko Store on Amazon](#)

Related Documents - T15-IL

| | |
|---|--|
|  | <p>HAKKO 456 Soldering Iron Service Manual and Replacement Guide</p> <p>Detailed instructions for disassembling, replacing the heating element, and reassembling the HAKKO 456 soldering iron, including safety warnings and specifications for HAKKO 455 and 456 models.</p> |
|  | <p>HAKKO FX-805 Control Software Installation and Operation Guide</p> <p>This guide provides detailed instructions for installing and operating the HAKKO FX-805 Control Software. It covers software installation steps, connecting the FX-805 station to a PC, software updates, and a comprehensive overview of the software's features including temperature control, calibration, and parameter settings.</p> |
|  | <p>HAKKO FX-301B Soldering Station Instruction Manual</p> <p>Comprehensive instruction manual for the HAKKO FX-301B soldering station, covering specifications, safety instructions, operation, maintenance, and troubleshooting.</p> |
|  | <p>HAKKO 851 SMD Rework System Instruction Manual</p> <p>Comprehensive instruction manual for the HAKKO 851 SMD Rework System, covering specifications, safety warnings, operating procedures for soldering and desoldering, heating element replacement, parts lists, and temperature distribution charts.</p> |
|  | <p>HAKKO 999-252 Wireless Remote Control Instruction Manual</p> <p>Instruction manual for the HAKKO 999-252 Wireless Remote Control system, detailing setup, usage, battery replacement, and specifications for controlling the HAKKO FA-430 Fume Extraction System.</p> |
|  | <p>HAKKO HJ4000 Split Vision Fixture Instruction Manual</p> <p>Comprehensive instruction manual for the HAKKO HJ4000 Split Vision Fixture, detailing setup, operation, optics adjustment, maintenance, and support for precise electronic component rework.</p> |