

Hakko DP-15-N

Instruction Manual

HAKKO CHP DP-15-N DEPANELING TOOL

Model: DP-15-N

1. Product Overview

The Hakko CHP DP-15-N Depaneling Tool is specifically designed for separating printed circuit boards (PCBs) in multi-circuit board production environments. This precision tool ensures clean cuts and prevents material delamination, making it an essential instrument for electronics manufacturing and assembly.



Image 1.1: The Hakko CHP DP-15-N Depaneling Tool. This image displays the tool with its red and black ergonomic handles and the precision cutting jaws at the top, designed for separating PCBs.

2. Key Features

- **Purpose-Built:** Specifically designed for depaneling printed circuit boards (PCBs) in multiple circuit board production.
- **Optimal Width:** Features a 1.5mm width, suitable for various PCB designs.
- **Isthmus Compatibility:** Can be used with boards having an isthmus (tab) up to 2.5mm.
- **Efficient Cutting Force:** Provides a 40kg cutting force, utilizing a shearing action to prevent delamination of the board material during separation.
- **Durable Construction:** Made from heat-treated carbon steel for enhanced durability and extended service life.
- **Precision Engineering:** Equipped with precision-ground holes and surfaces for accurate and smooth movement.
- **Ergonomic Design:** Features dolphin-style nonslip hand grips for comfortable and controlled operation.
- **Safety Feature:** A curved fore-edge protects hands from cutting surfaces during use.
- **Corrosion Resistance:** Parkerized surfaces prevent glare and increase resistance to corrosion.

3. Setup and Preparation

1. **Unpacking:** Carefully remove the Hakko CHP DP-15-N tool from its packaging. Inspect for any signs of damage during transit.
2. **Safety First:** Always wear appropriate personal protective equipment (PPE), including safety glasses, when operating the tool to protect against flying debris.
3. **Work Area:** Ensure your work area is clean, well-lit, and free from obstructions. A stable work surface is recommended.
4. **Inspect PCB:** Before cutting, inspect the PCB to identify the designated scoring lines or tabs (isthmus) for separation. Ensure the PCB material and thickness are within the tool's specifications (up to 2.5mm isthmus).

4. Operating Instructions

The Hakko CHP DP-15-N tool operates by a shearing action to cleanly separate PCBs.

1. **Grip the Tool:** Hold the tool firmly by its nonslip hand grips. The ergonomic design ensures a comfortable and secure hold.
2. **Position the PCB:** Carefully align the cutting jaws of the tool with the isthmus (tab) or scoring line on the printed circuit board that needs to be separated. Ensure the PCB is stable and does not shift during the cutting process.
3. **Apply Pressure:** Apply steady and firm pressure to the handles to close the jaws. The 40kg cutting force will shear through the PCB material.
4. **Clean Cut:** Continue applying pressure until the PCB sections are cleanly separated. The shearing action is designed to minimize stress on the board and prevent delamination.
5. **Repeat:** For PCBs with multiple connection points, reposition the tool and repeat the cutting process for each tab until the board is fully separated.

Note: Always ensure the cutting jaws are clean and free of debris before and after each use to maintain

5. Maintenance

Proper maintenance will extend the life and performance of your Hakko CHP DP-15-N Depaneling Tool.

- **Cleaning:** After each use, wipe the tool clean with a dry, lint-free cloth to remove any dust, debris, or PCB residue.
- **Lubrication:** Periodically apply a small amount of light machine oil to the pivot point to ensure smooth operation. Avoid over-lubrication.
- **Storage:** Store the tool in a dry, clean environment, away from excessive moisture or corrosive substances. Keep the jaws closed when not in use to protect the cutting edges.
- **Inspection:** Regularly inspect the cutting jaws for any signs of wear, nicks, or damage. Damaged jaws can affect cutting performance and may require replacement or professional sharpening.

6. Troubleshooting

- **Difficulty Cutting:**
 - Ensure the PCB is properly aligned with the cutting jaws.
 - Check if the PCB's isthmus thickness exceeds the tool's 2.5mm capacity.
 - Inspect the cutting jaws for wear or damage.
- **Rough Cuts or Delamination:**
 - Verify that the tool is positioned correctly on the isthmus.
 - Ensure a steady and firm pressure is applied during the cut.
 - Check for any foreign material in the jaws.
- **Stiff Operation:**
 - Apply a small amount of light machine oil to the pivot point.
 - Clean any accumulated debris around the pivot.

7. Specifications

Attribute	Value
Model Number	DP-15-N
Brand	Hakko
Tool Width	1.5mm
Max. Isthmus Cut	2.5mm
Cutting Force	40kg
Construction Material	Heat-treated Carbon Steel
Product Dimensions	6 x 3.7 x 0.75 inches
Item Weight	3.2 ounces
Manufacturer	Quality Hand Tools

8. Warranty and Support

This Hakko product is manufactured by Quality Hand Tools. For specific warranty information, technical support, or service inquiries, please contact the manufacturer directly.




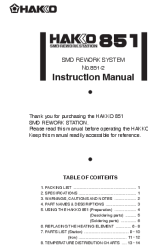
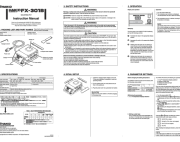
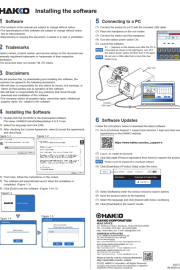
Refer to the product packaging or the official Hakko website for the most current contact details and warranty terms.

For general inquiries or to explore other Hakko products, you may visit the [Hakko Store on Amazon](#).

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This manual is for informational purposes only. Specifications are subject to change without notice.

Related Documents - DP-15-N

	<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 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>
	<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 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 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>

