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› BAKON BK701D 700W Hot Air Rework and Soldering Station Instruction Manual

## BAKON BK701D

# BAKON BK701D 700W Hot Air Rework and Soldering Station Instruction Manual

Model: BK701D

## INTRODUCTION

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The BAKON BK701D is a versatile 2-in-1 hot air rework and soldering station designed for precision electronic work. This manual provides essential information for the safe and effective operation, maintenance, and troubleshooting of your device. It is suitable for desoldering and welding various components, including SOIC, CHIP, QEP, PLCC, BGA, and SMD, and can also be used for tasks such as heat shrinking, drying, and glue welding.

## SAFETY INFORMATION

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### Important Safety Precautions:

- Do not operate the machine near flammable materials such as gas or paper.
- Ensure the unit is properly grounded before use to prevent electrical hazards.
- When replacing heating elements, ensure the model number matches the original, and follow the reverse process of disassembly for installation.
- Always turn off the power and allow components to cool to room temperature before replacing any parts.
- Avoid physical impact or dropping the main unit or handle.
- Do not disassemble or modify the main unit or handle. Use only original BAKON replacement parts.
- Do not operate the machine with wet hands.
- Ensure adequate ventilation in your workspace during operation.
- Be aware that the soldering iron tip temperature can reach 212°F-896°F (100°C-480°C) and the hot air nozzle temperature can reach 212°F-932°F (100°C-500°C). Handle with extreme care to prevent burns.

## PRODUCT FEATURES

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- **2-in-1 Functionality:** Combines a hot air rework station and a soldering station for independent or simultaneous use.
- **Efficient Heating:** Features a C1321 plug-in heating core for convenient replacement and a long-life heating body made from imported temperature-resistant materials.
- **Air Pump Air Supply:** Provides rapid warming and stable air volume for precise hot air applications.
- **Adjustable Controls:** Independent knob-type controls for adjusting temperature and air volume for both hot air and soldering

iron functions.

- **PID Temperature Control:** Advanced PID technology ensures stable and accurate temperature regulation, cycling every 20 milliseconds for precise adjustments.
- **Temperature Calibration & Compensation:** Functions to calibrate and compensate for temperature variations, ensuring consistent performance.
- **°C/°F Conversion:** Easily switch between Celsius and Fahrenheit temperature displays.
- **Automatic Cooling System:** The hot air gun features an automatic cooling system that activates when the heating switch is turned off, preventing overheating and extending heating element lifespan.
- **LED Digital Display:** Clear LED displays for precise temperature and air volume readings.

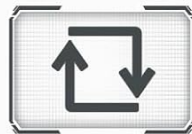
# HOT AIR REWORK STATION SOLDERING STATION



Temperature compensation



PID temperature control



°C/°F conversion



Automatic Cooling



Image: The BAKON BK701D station showcasing its dual functionality with separate controls and LED displays for rework and soldering.

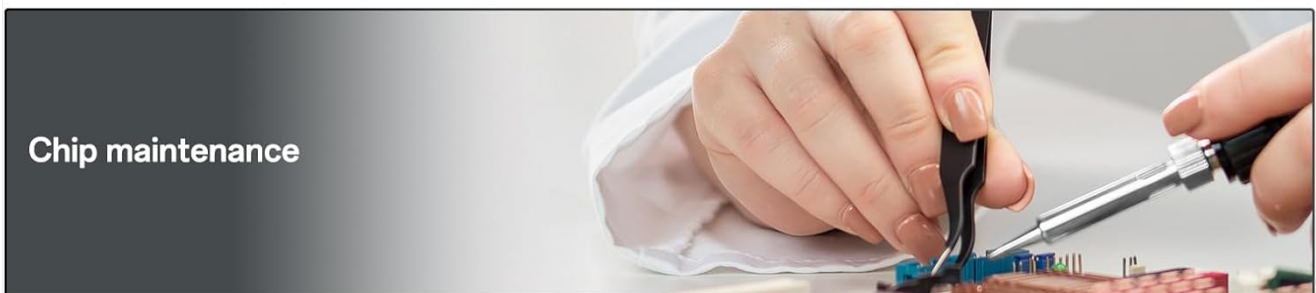
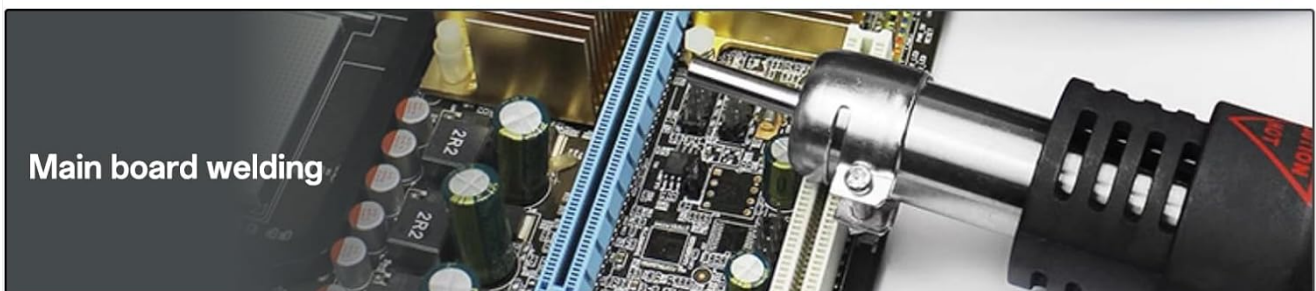
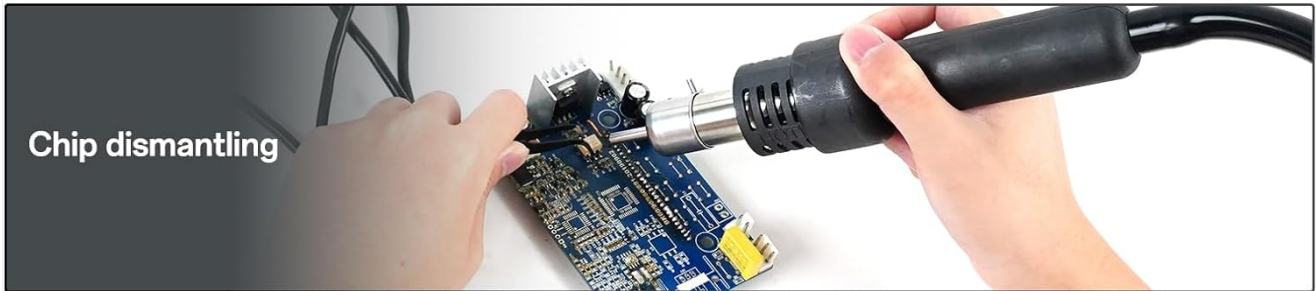
## PACKAGE CONTENTS

The BAKON BK701D kit includes the following components:

- BAKON BK701D Main Unit (Hot Air Rework and Soldering Station)
- Hot Air Gun Handle
- Soldering Iron Handle

- Soldering Iron Stand with Cleaning Sponge and Brass Cotton
- Soldering Wire (10g)
- 5 Soldering Tips (I/B/K/3.2D/3C)
- Solder Suction Tape
- Desoldering Pump
- 1 Pair of Tweezers
- 2 Hot Air Nozzles

## USE SCENARIOS



*Image: A comprehensive view of the accessories included with the BAKON BK701D kit.*

## SETUP

1. **Unpacking:** Carefully remove all components from the packaging.
2. **Remove Shipping Screws:** Before initial use, locate and remove the two shipping screws on the bottom of the main unit. These screws secure the internal air pump during transit and must be removed for proper operation.
3. **Connect Hot Air Gun:** Plug the hot air gun handle into its designated socket on the main unit.
4. **Connect Soldering Iron:** Plug the soldering iron handle into its designated socket on the main unit.
5. **Place Soldering Iron:** Position the soldering iron in its stand. Ensure the stand is stable and the cleaning sponge is moistened.

6. **Power Connection:** Connect the power cord to the main unit and then to a 110V US specification power outlet.

Your browser does not support the video tag.

Video: Demonstrates the initial setup of the BAKON BK701D, including connecting the hot air gun and soldering iron, and powering on the unit.

# PRODUCT PARAMETER



Image: Detailed diagram illustrating the components and controls of the BAKON BK701D station.

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Video: Shows the operation of the BAKON BK701D, including hot air desoldering and soldering iron use, highlighting independent control and temperature settings.

## OPERATING INSTRUCTIONS

### Hot Air Rework Station

1. **Power On:** Flip the "WORK" switch for the Rework section to the ON position. The LED display will show the current temperature.
2. **Adjust Temperature:** Use the "TEMP UP" and "TEMP DOWN" buttons to set the desired hot air temperature (range: 212°F-932°F / 100°C-500°C).
3. **Adjust Air Volume:** Use the "AIR UP" and "AIR DOWN" buttons to set the desired air volume.
4. **Operation:** Direct the hot air nozzle towards the component to be desoldered or reworked. Maintain a safe distance to avoid damaging surrounding components.

5. **Automatic Cooling:** When you finish using the hot air gun, turn off its "WORK" switch. The automatic cooling system will activate, blowing cool air until the handle reaches a safe temperature, then it will shut off. This prolongs the life of the heating element.

# HOT AIR REWORK STATION



*Image: The hot air gun in operation, demonstrating its temperature range and automatic cooling function.*

## Soldering Station

1. **Power On:** Flip the "WORK" switch for the Soldering section to the ON position. The LED display will show the current temperature.
2. **Adjust Temperature:** Use the "TEMP UP" and "TEMP DOWN" buttons to set the desired soldering iron temperature (range: 212°F-896°F / 100°C-480°C).
3. **Tinning the Tip:** Before first use and periodically during operation, tin the soldering iron tip by applying a small amount of solder. This helps with heat transfer and prevents oxidation.
4. **Soldering:** Apply the heated tip to the joint, then feed solder onto the joint, not directly onto the iron tip. Allow the solder to flow evenly.
5. **Desoldering:** Use the desoldering pump or solder suction tape to remove excess solder.
6. **Temperature Compensation:** The soldering iron features temperature compensation to maintain stable tip temperature during use.
7. **°C/°F Conversion:** Press and hold the temperature adjustment buttons to switch between Celsius and Fahrenheit.

# SOLDERING STATION



212°F~896°F  
(Temperature range)

Temperature Compensation  
+210°F~-210°F  
(Use when the actual temperature  
is different from the set temperature)

°C/°F Conversion

Image: The soldering iron in operation, illustrating its temperature range, compensation, and unit conversion capabilities.

## MAINTENANCE

### Soldering Iron Tip Maintenance

- **Cleaning:** Regularly clean the soldering iron tip using the brass cotton tip cleaner or a damp sponge (ensure it's not dripping wet). This removes oxidation and old solder, improving heat transfer.
- **Tinning:** Always tin the tip with a fresh layer of solder after cleaning and before storing to prevent oxidation.
- **Replacement:** The kit includes 5 different soldering tips. To replace a tip, ensure the iron is cool, unscrew the retaining nut, remove the old tip, insert the new tip, and re-secure the nut.

# POWERFUL & PRECISE

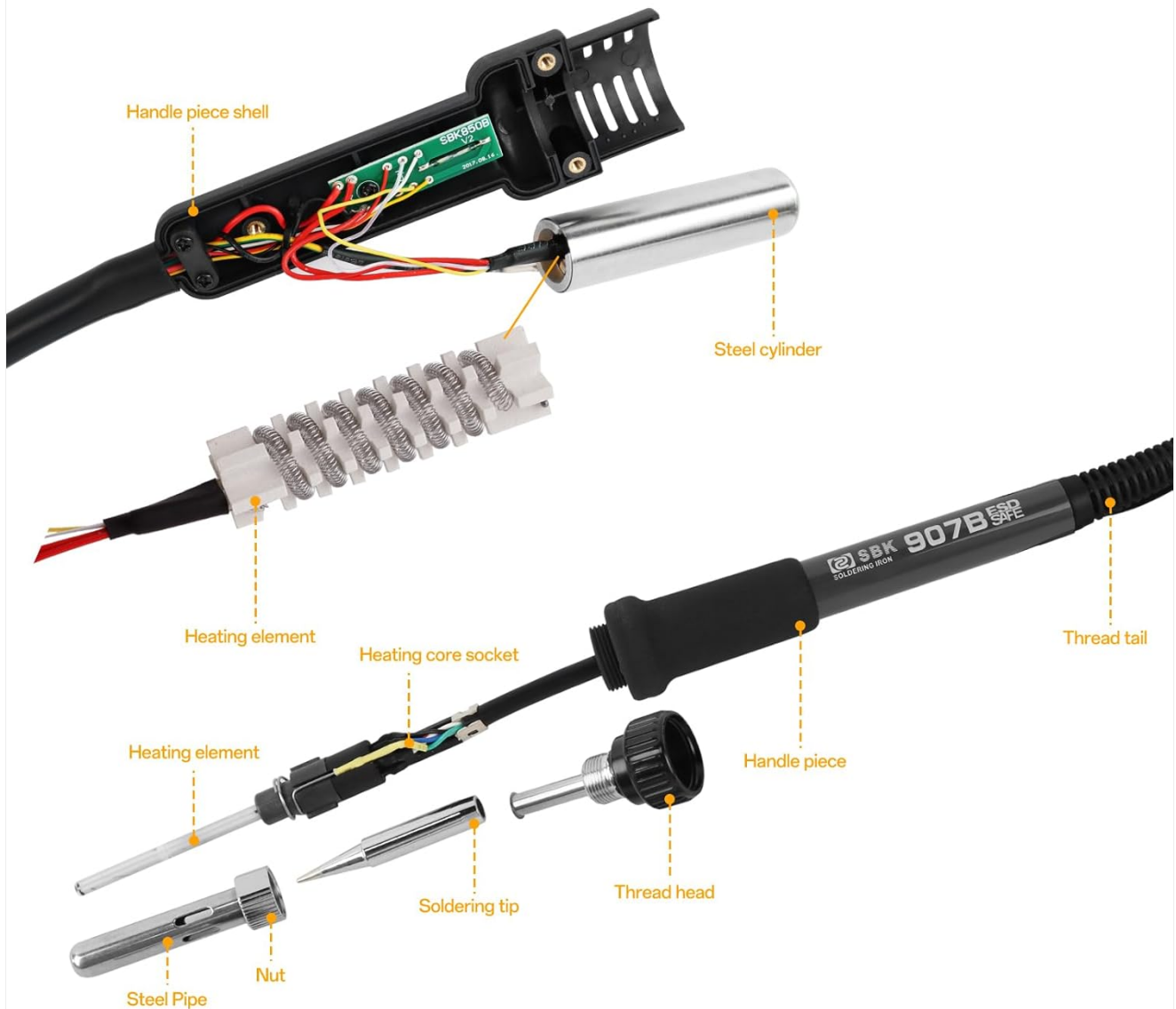


Image: Exploded view of the soldering iron handle, detailing its components and how the heating element and tip are assembled.

## Heating Core Replacement

The BAKON BK701D uses a C1321 plug-in heating core. If replacement is necessary, ensure the unit is powered off and cooled. Follow the reverse process of disassembly to replace the heating core, ensuring the new core is the correct model (C1321).

## TROUBLESHOOTING

- **"H-E" Error During Calibration:** If you encounter an "H-E" (heating element) error during temperature calibration, it is likely because the heating element was not pre-heated. Ensure the unit is warmed up before attempting calibration.
- **No Heat/Unstable Temperature:**
  - Check all cable connections to ensure they are secure.
  - Verify the power switch is ON for the respective tool (hot air or soldering iron).
  - Ensure the heating core is correctly installed and not damaged.
  - If the issue persists, contact customer support.
- **Low Air Volume (Hot Air Gun):**
  - Check if the air volume setting is too low.
  - Ensure the hot air gun nozzle is not obstructed.

- Verify that the shipping screws on the bottom of the unit have been removed.

## SPECIFICATIONS

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Feature	Specification
Brand	BAKON
Model Name	BK701D
Voltage	110 Volts
Wattage	700 watts
Display Type	LED
Temperature Stability (Hot Air)	212 to 932 degrees Fahrenheit (100°C-500°C)
Temperature Stability (Soldering Iron)	212 to 896 degrees Fahrenheit (100°C-480°C)
Number of Channels	2 (Hot Air & Soldering Iron)
Package Weight	4.44 Kilograms

## WARRANTY AND SUPPORT

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The BAKON BK701D Hot Air Rework and Soldering Station is covered by an exclusive 1-year product warranty in the U.S.A. If you encounter any problems or require technical assistance, please contact BAKON customer support. Our technical support team is available to provide 24-hour support and consultation.

**Manufacturer Contact Information:** BAKON