



[www.jbctools.com](http://www.jbctools.com)

## INSTRUCTION MANUAL



## Compact Soldering Station

Ref. CDE-BA

# Packing List

The following items should be included:

**CDE Control Unit** ..... 1 unit  
 Ref. CDE-1BA (120V)  
 CDE-2BA (230V)  
 CDE-9BA (100V)



**General Purpose Handle** ..... 1 unit  
 Ref. T245-A



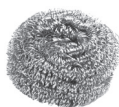
**Power Cord** ..... 1 unit  
 Ref. 0009417 (100V/120V)  
 0009401 (230V)



**Cartridges** ..... 2 units  
 Ref. C245903 (x1)  
 C245741 (x1)



**Brass Wool** ..... 1 unit  
 Ref. CL6210



**Sponge** ..... 1 unit  
 Ref. S0354



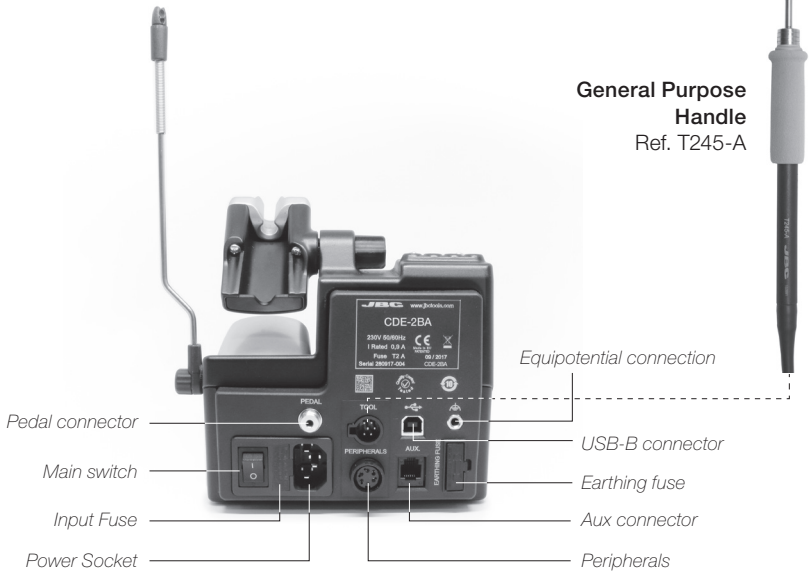
**Manual** ..... 1 unit  
 Ref. 0020588



## Features

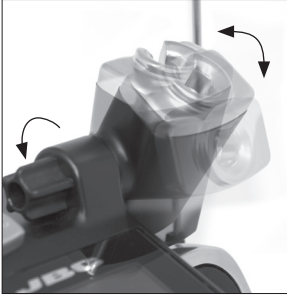


**General Purpose  
Handle**  
Ref. T245-A



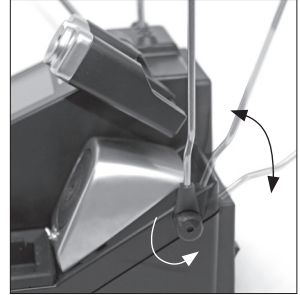
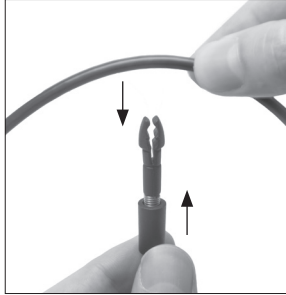
## Adjustable stand

Adjust the tool stand to suit your work position.



## Cable collector (Ref. CC3702)

Place the cable on the collector so that the working area is free of cable.



## Tip Cleaner

Select the option to suit your needs and improve the thermal transfer of the tip.

### Splashguard

Ref. 0017576

It prevents splashing of solder particles when using the brass wool.

### Antisplash Membrane

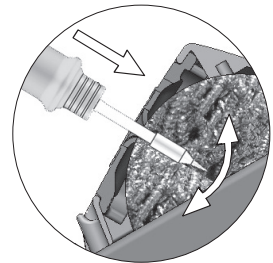
Ref. 0017574

Prevents splashing to maintain the work area clean.

### Brass Wool

Ref. CL6210

Very effective cleaning method. Leaves a small layer of solder on the tip preventing oxidation between cleaning and reflowing.



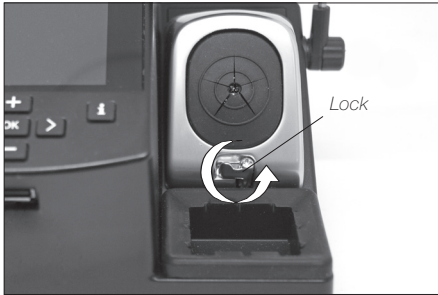
*If the tip is very dirty, JBC recommends first cleaning it with the wiper to remove excess solder.*

### Wiper Ref. CL0160

A temperature resistant receptacle for removing excess solder by gently tapping or wiping.

## Removing the Splashguard

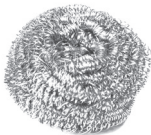
1. Unlock the splashguard.



2. Remove it.



More cleaning options (not supplied):



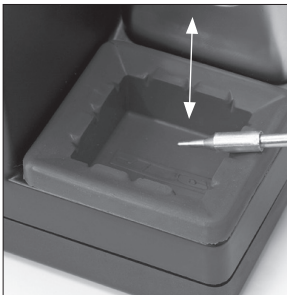
**Inox Wool**  
Ref. CL6205  
Provides a superior  
cleaning of the tip.



**Metal Brush**  
Ref. CL6220  
When used carefully,  
it provides a more  
thorough cleaning.

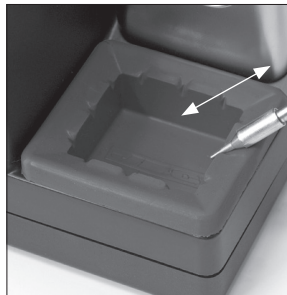
## Wiper

Ref. CL0160



### Tapping:

Tap gently to remove excess  
solder.

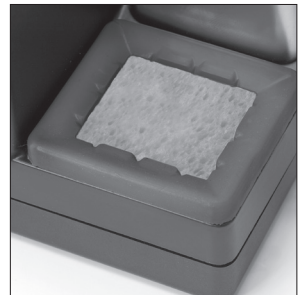


### Wiping:

Use the slots to remove  
remaining particles.

## Sponge

Ref. S0354

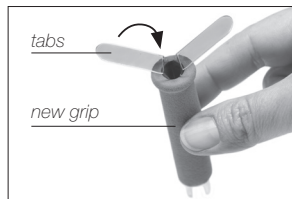


The least harmful cleaning  
method. Keep the sponge  
damp with distilled water when  
working to avoid tip wear.

## Changing the Grips

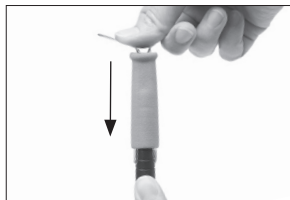
Easily replace the **Grips for T245-A and T245-C** using the slip-on tabs (Ref. 0016057)

### 1. Inserting tabs



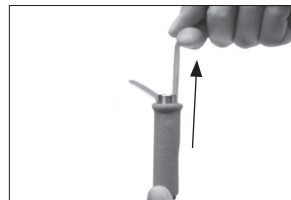
Put the slide-on tabs into the new grip.

### 2. Inserting handle



Push the grip with the tabs onto the handle.

### 3. Removing tabs

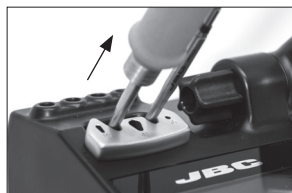


To remove the tabs, hold the grip and pull. Use a pliers if necessary.

## Quick Tip Changer

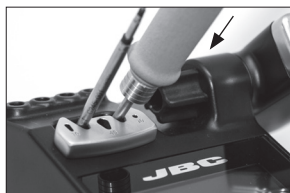
Save time and change cartridges safely without switching the station off.

### 1. Removing



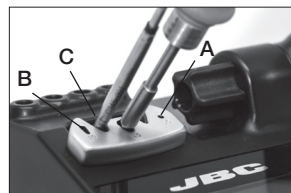
Place the handpiece in the extractor and pull to remove the cartridge.

### 2. Inserting



Place the handpiece on top of the new cartridge and press down slightly.

### 3. Fixing



Use the holes for fixing the cartridge\* as follows:

**A.** For straight C210.

**B.** For curved C210.

**C.** For C245.

### \*Important

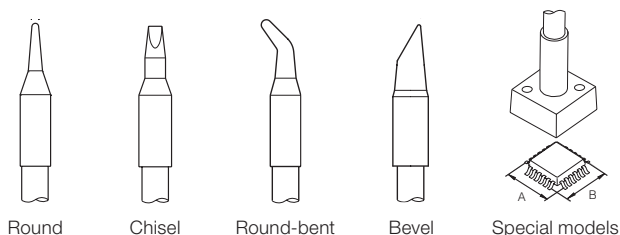
It is essential to insert the cartridges as far as the mark for a proper connection.



### Compatible cartridges

The CD-B stations work with C245 cartridges.

Find the model that best suits your soldering needs in [www.jbctools.com](http://www.jbctools.com)



## USB Connector

Download the latest software from our website to improve your soldering station.


### JBC Updater

Update the station software via USB connection:



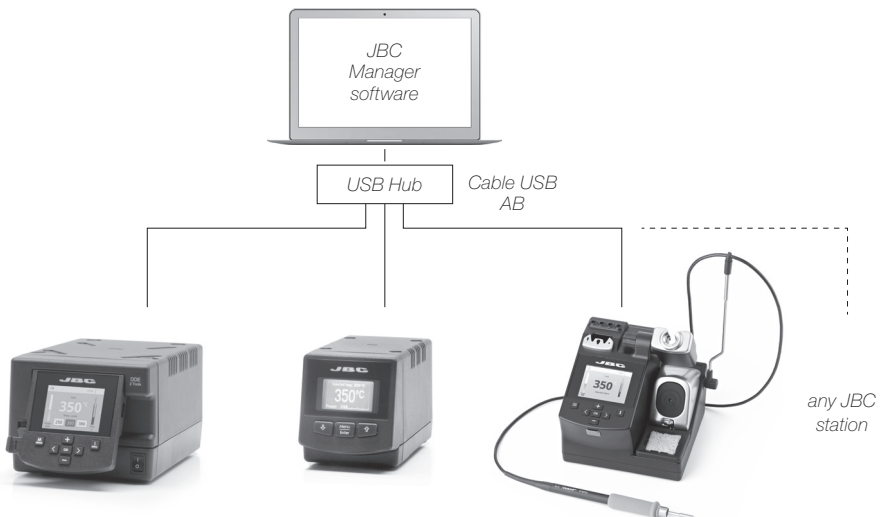
### JBC Net

Remotely manage and monitor as many stations as your PC can handle.

1. Download the **JBC Manager software** and the user manual from [www.jbctools.com/manager.html](http://www.jbctools.com/manager.html)
2. Connect the stations via USB-B connector and the PC will automatically detect them.
3. The notification  will be displayed on the station.

#### Functions:

- Set all the station parameters from your PC.
- Organize groups of stations and set all their parameters at the same time.
- Store specific configurations for later uses.
- Analyze the soldering graphics of the stations on your PC and export them.



# Operation

## The JBC Exclusive Heating System

This revolutionary technology is able to recover tip temperature extremely quickly. This allows the user to work at a lower temperature. As a result, tip life increases up to 5.

### 1. Work



When the tool is lifted from the stand the tip will heat up to the selected temperature.



### 2. Sleep



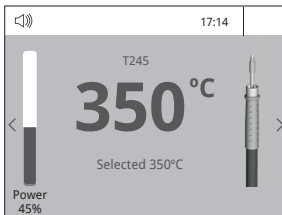
When the tool is in the stand, the temperature falls to the preset sleep temperature.



### 3. Hibernation



After longer periods of inactivity, the power is cut off and the tool cools down to room temperature.



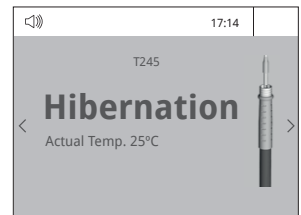
#### Tools Menu:

- Set temperature limits
- Select temperature levels



#### Tools Menu:

- Set Sleep temperature
- Set Sleep delay (from 0 to 9 min or no Sleep)



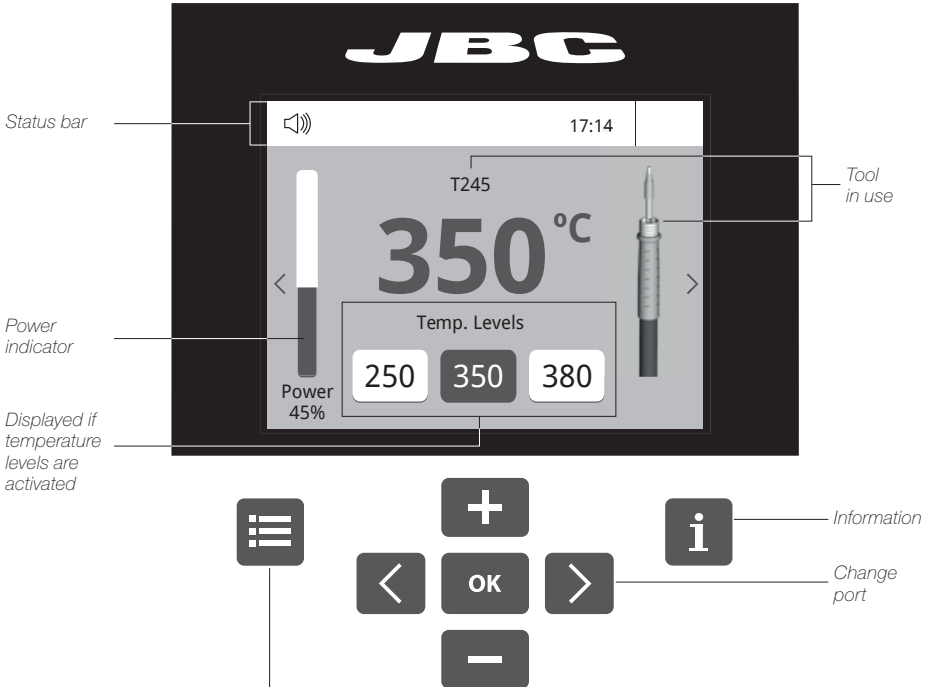
#### Tools Menu:

- Set Hibernation delay (from 0 to 60 min or no hibernation)



## Work Screen

The CDE offers an **intuitive user interface** which provides **quick access** to station parameters.  
**Original PIN: 0105**



### Menu Options

Press INFO for each parameter description.



**Station**



**Tools**



**Counters**



**Peripherals**



**Graphics**



**Reset**

### System notifications (Status Bar)

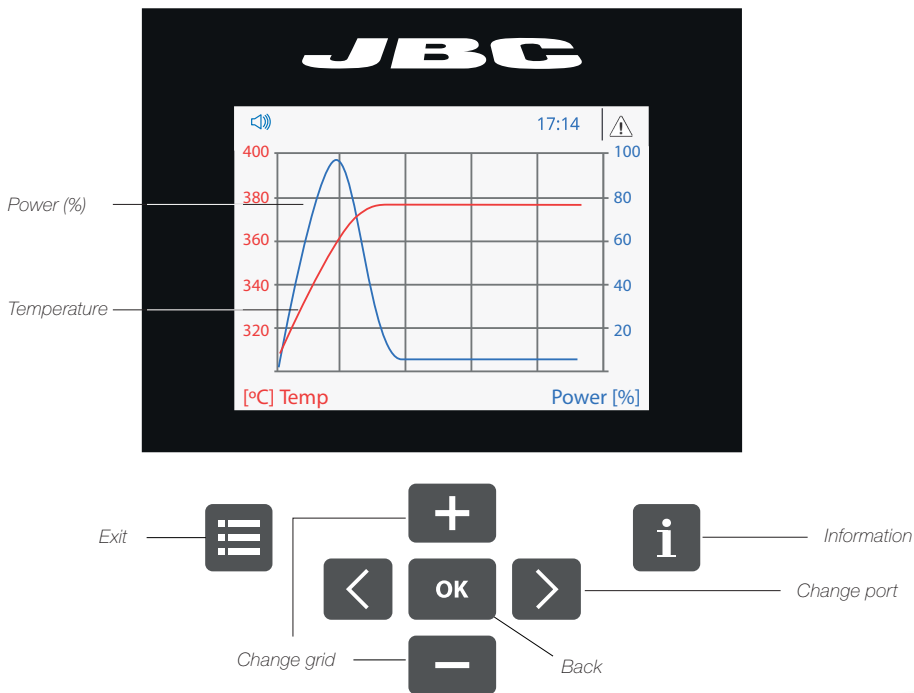
- USB flash drive is connected.
- Station is controlled by a PC.
- Station is controlled by a robot.
- Station software update.  
Press INFO to start the process.
- Warning.  
Press INFO for failure description.
- Error. Press INFO for failure description,  
the type of error and how to proceed.

# Process analysis



Graphics

By pressing **Graphics** in the main MENU, temperature and power figures in real time are displayed for each port. This helps you decide which tip to use to obtain the best quality solder joints.



## Export graphics


Insert a USB flash drive into the USB-A connector to save your soldering process in csv format.




## Parameters

Be careful when using these parameters as they may reduce the tip life if not used properly. Please follow the recommended guidelines:



### Station Settings

Parameter description	Recommendations	Warnings
<b>Temperature unit</b> Celsius (°C) or Fahrenheit (°F)	N/a	
<b>Maximum temperature</b> Set the maximum temperature to work with. Max. temp by default is 400°C (750°F). This is considered high enough to work with most lead-free applications.	The station temperature range is 90-450°C (190-840°F). Change the temperature limits when working with less common applications such as low / high melting point soldering (HMP) or plastics (e. g. riveting).	 In most cases, working with temperatures over 400°C (750°F) can damage the PCB and its components. Even in short time periods of tip contact with the soldering joint, the flux may not work properly and could seriously reduce tip life. If the solder joint requires more power (e.g. multilayered or high dissipation boards), JBC strongly recommends using other aids like preheaters.
<b>Minimum temperature</b> Set the minimum temperature to work with. Min. temp. by default is 200°C (392°F). This is considered to be a proper starting point for leaded applications.		
<b>Help text</b> Activate this parameter to receive info from the system.	N/a	N/a
<b>Beep</b> Enable/disable the beep sound of the keypad.	N/a	N/a
<b>Change pin</b> Change the default security PIN number (0105).	The PIN must be entered every time a parameter is changed.	N/a

# Tool Settings

Parameter description	Recommendations	Warnings
<b>Fix one temperature</b> Fix a value within the temperature range of the station (90-450°C/190-840°F).	Ideal for soldering more than one component at a specific temperature. The station will reject any attempt to change the temperature.	N/a
<b>Temperature levels set</b> Similar to “Fix one temp” parameter. In this case, the user can set up to 3 values for different power requirements.	This allows a quick change between 3 different temperatures. Set them according to the allowed values for your soldering applications.	N/a
<b>Sleep delay</b> Set the time that the tool will remain at the selected temperature when in the stand before entering sleep mode. The tip temperature will then drop to the Sleep temperature.	Because our tools reach the working temperature from the default Sleep mode in only a few seconds, this parameter is preset to 0 min. Once the tool is returned to the stand the temperature will automatically drop to the sleep temperature, extending tip life and avoiding oxidation. Retinuing the tip before placing the tool in the stand will protect the tip and extend its life.	 Setting these parameters to higher values will unnecessarily accelerate oxidation and shorten tip life especially when working with temperatures up to 450°C (840°F).
<b>Sleep temperature</b> This is the set temperature the tip reaches when returned to the stand.	The sleep temperatures are set to achieve a balance between preventing oxidation and reaching the working temperature in a few seconds.	

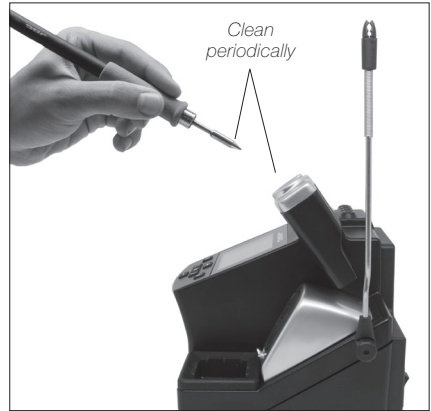
## Tool Settings

Parameter description	Recommendations	Warnings
<p><b>Hibernation Delay</b> Set the time the tool will remain at Sleep temperature before entering the Hibernation mode. At this time, the power supply is cut off and the tip remains at room temperature.</p>	<p>This function completely protects the tip from oxidation during long periods of inactivity while the tool is in the stand. Retinning the tip before placing the tool in the stand also helps prevent oxidation and extends the life of the tip.</p>	<p> Increasing the default value will accelerate oxidation and shorten the tip life.</p>
<p><b>Temp Adjustment</b> It provides a more precise adjustment between the selected temperature and the actual one.</p>	<p>Set values within <math>\pm 50^{\circ}\text{C}</math> (<math>\pm 90^{\circ}\text{F}</math>) to achieve zero error. JBC strongly recommends the use of TID-A or TIA-A Thermometers to obtain precise readings.</p>	<p> When the user changes the cartridge type, the parameter should be reset to <math>0^{\circ}\text{C}/\text{F}</math> or to the value needed for this cartridge. E.g. If a correction of <math>+20^{\circ}\text{C}</math> (<math>+36^{\circ}\text{F}</math>) is set for the C245966 (thick type) and then the user changes the cartridge for a C245030 (which is thinner) without resetting, they would be working at a temperature of <math>+20^{\circ}\text{C}</math> (<math>+36^{\circ}\text{F}</math>) lower for the C245030 which does not need any temperature adjustment.</p>

# Maintenance

Before carrying out maintenance, always allow the equipment to cool.

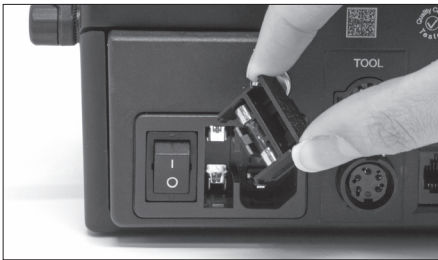
- Clean the station screen with a glass cleaner or a damp cloth.
- Use a damp cloth to clean the casing and the tool. Alcohol can only be used to clean the metal parts.
- Periodically check that the metal parts of the tool and stand are clean so that the station can detect the tool status.
- Maintain tip surface clean and tinned prior to storage in order to avoid tip oxidation. Rusty and dirty surfaces reduce heat transfer to the solder joint.
- Periodically check all cables and tubes.



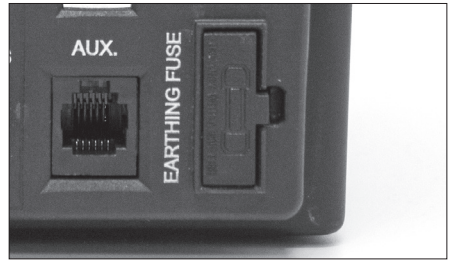
## Replace the blown fuse as follows.

1. Pull off the fuse holder and remove the fuse. If necessary use a tool to lever it off.
2. Insert the new fuse into the fuse holder and return it to the station.

### Input Fuse



### Earthing Fuse \*



\*The **Earthing Fuse** minimize the risk of damaging the equipment when the tip touches a part with an active voltage. If the Earthing Fuse is blown, the station will show a message indicating that the fuse needs to be replaced.

Be aware that if the station keeps working in this conditions, the tip to ground resistance would not meet the specifications.

- Replace any defective or damaged pieces. Only use original JBC spare parts.
- Repairs should only be performed by a JBC authorized technical service.

## Safety



**It is imperative to follow safety guidelines to prevent electric shock, injury, fire or explosion.**

- Do not use the units for any purpose other than soldering or rework. Incorrect use may cause fire.
- The power cable must be plugged into approved bases. Make sure that it is properly grounded before use. When unplugging it, hold the plug, not the wire.
- Do not work on electrically live parts.
- The tool should be placed in the stand when not in use in order to activate the sleep mode. The soldering tip, the metal part of the tool and the stand may still be hot after the station is turned off. Handle with care, including when adjusting the stand position.
- Do not leave the appliance unattended when it is on.
- Do not cover the ventilation grills. Heat can cause inflammable products to ignite.
- Avoid flux coming into contact with skin or eyes to prevent irritation.
- Be careful with the fumes produced when soldering.
- Keep your workplace clean and tidy. Wear appropriate protection glasses and gloves when working off to avoid personal harm.
- Utmost care must be taken with liquid tin waste which can cause burns.
- This appliance can be used by children over the age of eight as well as persons with reduced physical, sensory or mental capabilities or lacking experience provided that they have been given adequate supervision or instruction concerning use of the appliance and understand the hazards involved. Children must not play with the appliance.
- Maintenance must not be carried out by children unless supervised.

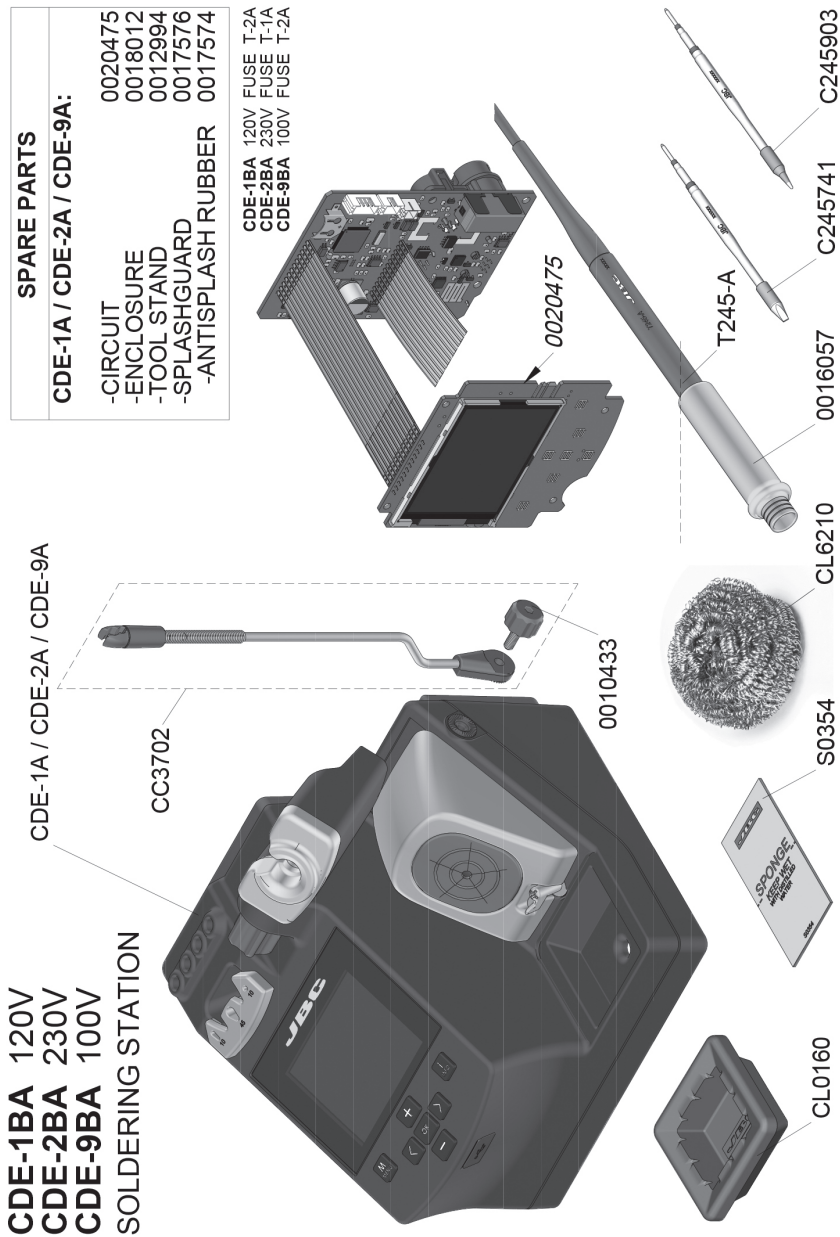
# 有害物质含量表

产品中有害物质的名称及含量

部件名称	有害物质					
	铅(Pb)	汞(Hg)	镉(Cd)	六价铬 (Cr(VI))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
烙铁头	O	O	O	O	O	O
手柄	O	O	O	O	O	O
电源线	O	O	O	O	O	O
主机	O	O	O	O	O	O
电源插座	O	O	O	O	O	O
保险丝	O	O	O	O	O	O
主开关	O	O	O	O	O	O
电位连接	X	O	O	O	O	O
变压器	O	O	O	O	O	O
线路板	X	O	O	O	O	O
O 表示该有害物质在该部件所有均质材料中的含量均在GB/T 26572 规定的限量要求以下。 X 表示该有害物质至少在该部件的某一均质材料中的含量超出GB/T 26572 规定的限量要求。						



# Exploded View



## Notes

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This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

## Specifications

**CDE-1BA** 120V 50/60Hz.

Input fuse: 2A. Earthing fuse: 1.25 A. Output: 23,5V. Control Unit model: **CDE-1A**

**CDE-2BA** 230V 50/60Hz.

Input fuse: 1A. Earthing fuse: 1.25 A. Output: 23,5V. Control Unit model: **CDE-2A**

**CDE-9BA** 100V 50/60Hz.

Input fuse: 2A. Earthing fuse: 1.25 A. Output: 23,5V. Control Unit model: **CDE-9A**

- Weight: 2,8 kg (6.17 lb)
- Dimensions: 150 x 175 x 145 mm (5.9 x 6.9 x 5.7 in)
- Output Peak Power CD-BE: 130W
- Temperature Range: 90 - 450 °C (190 - 840 °F) (±5%)
- Idle Temp. Stability (still air): ±1.5 °C / ±3 °F
- Tip to ground resistance: <2 ohms
- Tip to ground voltage: <2mV RMS
- Ambient operating temp: 10 - 40 °C (50 - 104 °F)
- USB connector station-PC

Complies with CE standards.

ESD protected housing.

# JBC

### Warranty

JBC's two-year warranty covers this equipment against all manufacturing defects, including the replacement of defective parts and labour. Warranty does not cover product wear or misuse. In order for the warranty to be valid, equipment must be returned, postage paid, to the dealer where it was purchased.

**Register your warranty within 30 days of purchase in [www.jbctools.com/productregistration](http://www.jbctools.com/productregistration)**



This product should not be thrown in the garbage.

In accordance with the European directive 2002/96/EC, electronic equipment at the end of their life must be collected and returned to an authorized recycling facility.



Manual in other languages available on our website

**[www.jbctools.com](http://www.jbctools.com)**