

# **JBC**

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

## **INSTRUCTION MANUAL**



### **DT530**

Angled Desoldering Iron

This manual corresponds to the following reference:

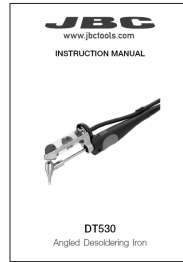
**DT530-A**

## Packing List

The following items are included:



**Angled Desoldering Iron** ..... 1 unit



**Manual** ..... 1 unit  
Ref. 0032496



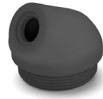
**Box with Accessories** ..... 1 box  
Ref. DT100

*It includes:* .....





**Glass Solder-Collector** ..... 2 unit  
Ref. DT20



**Frontal Gasket** ..... 1 set  
Ref. DT30 (contains 5 gaskets)



**Rearward Gasket** ..... 1 set  
Ref. DT35 (contains 5 gaskets)



**Spanner** ..... 1 unit  
Ref. DT50



**Wool Filter for DT530** ..... 1 set  
Ref. DT10 (contains 10 filters)



**Metal Filter for DT530** ..... 1 set  
Ref. DT11 (contains 10 filters)



**Heat-Resistant Gripper** ..... 1 unit  
Ref. DT60



**Cleaning Brush** ..... 1 unit  
Ref. 0008297



**Metal Brush** ..... 1 unit  
Ref. CL6217



**Tip Cleaning Set** ... 1 unit  
Ref. 0965970



**Helical Tip-Cleaning Rods** ..... 1 unit  
Ref. 0965760



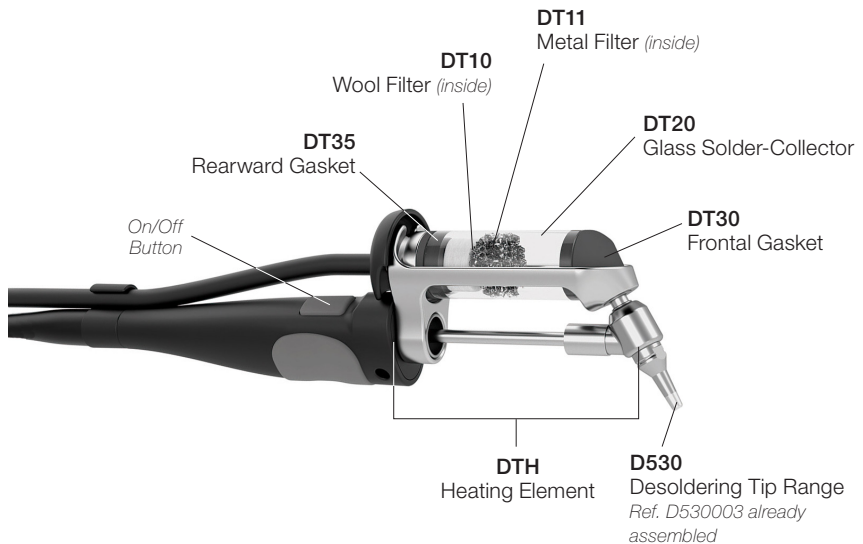
**Precision Allen Screwdriver 2.5** ..... 1 unit  
Ref. 0033474

## Features

DT530 Desoldering Iron is used for desoldering jobs of through-hole components and removing excess solder after SMD rework.

It must be connected to an electric (MSE\*) or pneumatic desoldering module (MVE\*) and to the tool stand\*. The suction power from MSE or MVE pumps ensure optimal work quality.

To control and operate DT530 and the desoldering module, DDE or DME control unit is needed.



## JBC Most Efficient Soldering System

JBC technology allows to recover tip temperature extremely quickly thanks to the temperature stability and heat control of the cartridge tip. This means that the user can work at a lower temperature.

Thanks to sleep and hibernation modes, the temperature of the cartridge tip is further reduced when the tool is not in used and resting in the stand. This increases the lifespan of the cartridge tip.

*\* Not included, sold separately*

## Connection Example

**DT530**  
Angled Desoldering Iron

**Note:** In order to operate with DT530, control units must be upgraded to the following software versions or higher:

**DDE\* 2-Tool Control Unit**  
*min. firmware version\*\* 8886903*

**DME\* 4-Tool Control Unit**  
*min. firmware version\*\* 8886909*

Control unit port connectors



Connect alternative with MSE or MVE



Stand cable

Tool cable



**MS20**  
Suction Filter Kit  
(Supplied with desoldering module)



Connect alternative with MSE or MVE

**MSE\***  
Electric Desoldering Module



Module cable

To another peripheral

To **P405** Pedal

**MVE** Pneumatic Desoldering Module



Module cable

To another peripheral

To **P405** Pedal

Air pressure input (4-6 bar)  
for tubing with outer  $\varnothing$  6 / inner  $\varnothing$  4 mm

\* Not included, sold separately

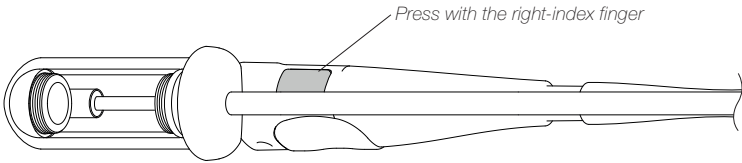
\*\* to download from [www.jbctools.com/jbcsoftware.html](http://www.jbctools.com/jbcsoftware.html)

# Right-handed Use / Left-handed Use

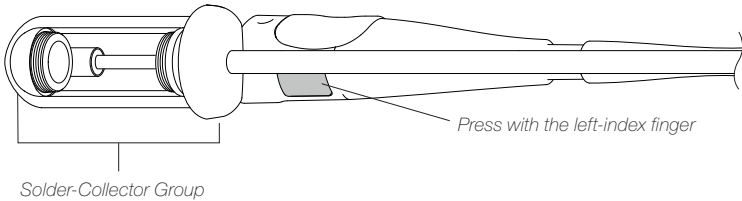
DT530 is designed so that the solder-collector group can be positioned on the left or right side of the push button. This allows for right-handed and left-handed users to find their most comfortable work position.

By default, the solder-collector group comes assembled for right-handed users, but it can be easily set up for left-hand use.

Position for Right-Handed Use:



Position for Left-Handed Use:



# Tool Set Up for Right-handed or Left-handed Use

To set up the tool from right-handed use to left-handed use (or vice versa) first disassemble the solder collector group. Afterwards disassemble the heating element and position it again, inserting the tool pin into the other hole of the heating element.

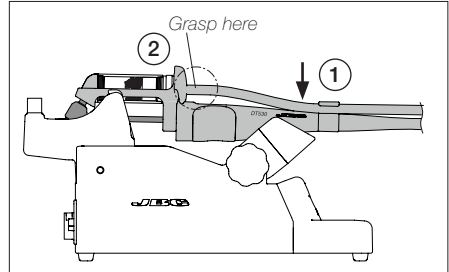
To do this, carry out the steps described in the following sections:

## Disassembling the Solder-Collector Group

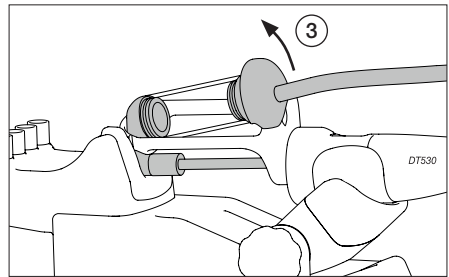


Be careful when handling the solder collector and the other spare parts they can be hot. Let them cool down first.

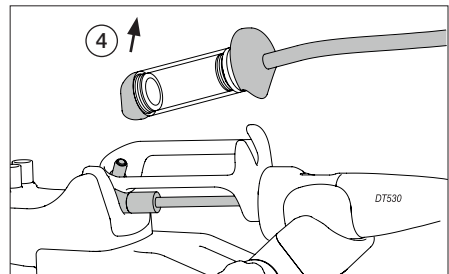
To disassemble the solder-collector group, place the desoldering iron in horizontal position onto the stand, hold the tool with one hand down onto the stand (1), grasp the suction hose beside the protective cover (2) ...



... and pull upward (3) to undock the protector area. Then undock the frontal gasket (5) from the heating element to disassemble the solder-collector group.



Then undock the frontal gasket (4) from the heating element to disassemble the solder-collector group.

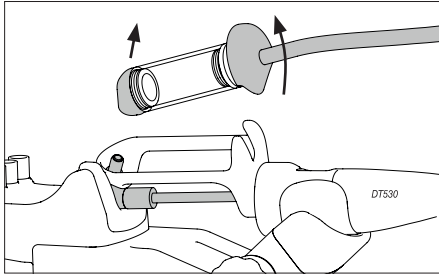


## Disassembling the Heating Element

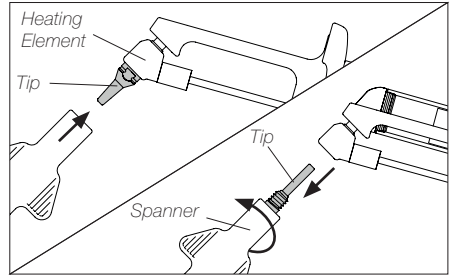
(to change position for right-handed or left-handed use)



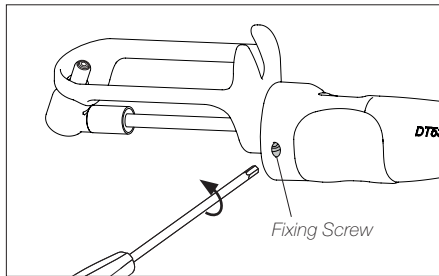
For this operation, turn off the station or disconnect the tool and wait until the equipment has cooled down to room temperature.



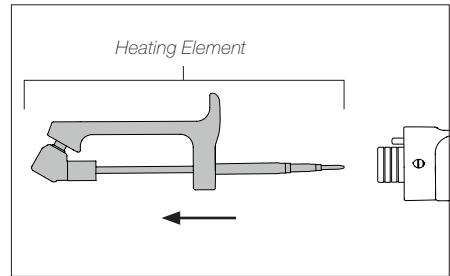
The solder collector group must be previously detached.



If the heating element has a tip on, remove it with the provided spanner.



Loosen the fixing screw.



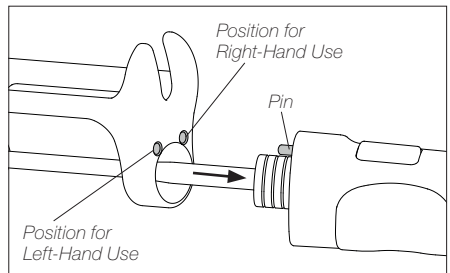
Then pull out the heating element.

## Reassembling the Heating Element

There are two different assembling positions for the heating element: for **left-hand use** and for **right-hand use**.

Assemble the heating element to the handle, making sure that the pin of the tool handle is then inserted into the desired hole at the heating element.

The possible assembling positions are shown on the illustration.



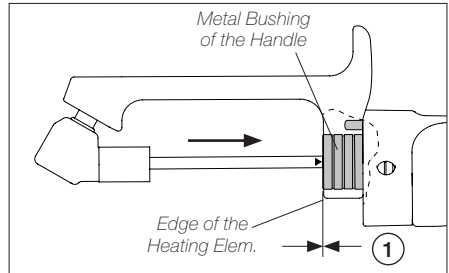


## Reassembling the Heating Element - continuation

Once the heating element is in the desired position make sure that it is pushed all the way in.



**Note:** The metal bushing of the handle must be aligned with the edge of the heating element (1) for a proper connection.



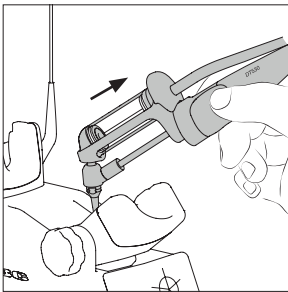
To fix the heating element in place, tighten the fixing screw.

To reassemble the solder-collector group, follow the instructions on page 7 in the section "Disassembling the Solder-Collector Group" but in reverse order.

Finally, screw in a desoldering tip.

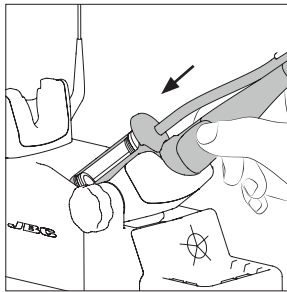
## Operation

### Work



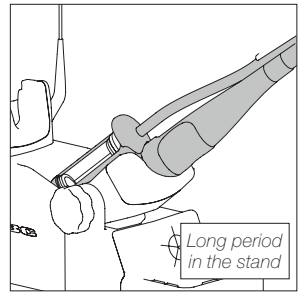
When the tool is lifted from the stand, the tip will heat up to the selected operating temperature.

### Sleep



When the tool is returned to the stand, the temperature falls to the preset Sleep temperature.

### Hibernation



After longer periods of inactivity, the tool goes into Hibernation Mode: the power is cut off and the tool gradually cools down to room temperature.

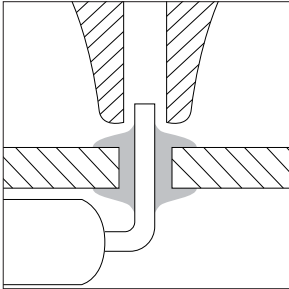
Through the Tool Settings of the control unit, it is possible to set and adjust:

- temperature levels (min. and max. operating temperature),
- leep temperature and the activation delay for Sleep Mode (0-9 minutes or no Sleep),
- and the activation delay for Hibernation Mode (0-60 minutes or no Hibernation).

# Desoldering Process

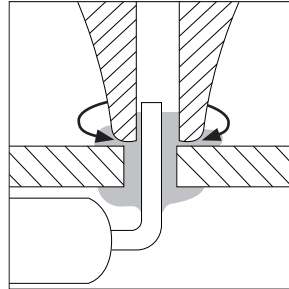
Use a D530 tip with a larger diameter than the diameter of the pin to be desoldered to achieve maximum aspiration and thermal efficiency.

## 1. Placing



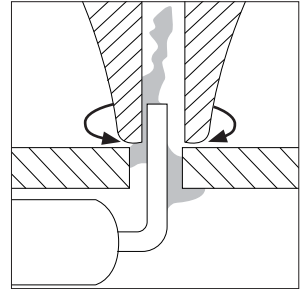
Place the tool so that the end of the component's pin fits inside the desoldering tip.

## 2. Circular Movement



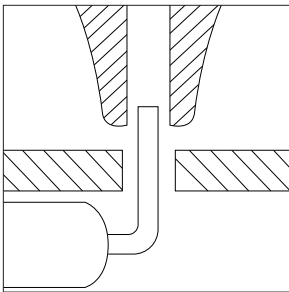
As the solder joint liquifies, gently describe circles around the pin, using the pin as the axis of your movement.

## 3. Aspirating



Press the tool button long enough to suction the liquified solder.

## 4. Finishing Desoldering



After releasing the tool button there is a slight delay until the vacuum pump of the desoldering module stops. This makes sure that the tip duct is completely empty.

If any solder remains are left after the desoldering process, resolder it with fresh solder and repeat the desoldering operation.

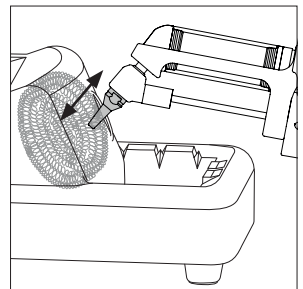
# Tip Cleaning

Select the option that best suits your needs to clean the tip and improve its thermal transfer.

## Brass Wool 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 cleaning it first with the wiper to remove excess solder.

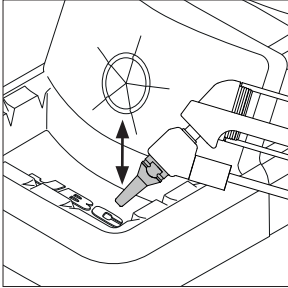


## Tip Cleaning - continuation

### Wiper CL7889

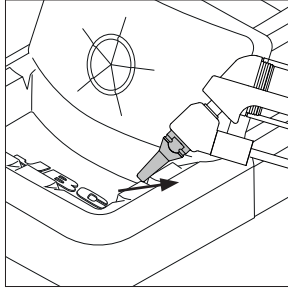
The integrated wiper offers different ways to clean the tips.

#### Tapping



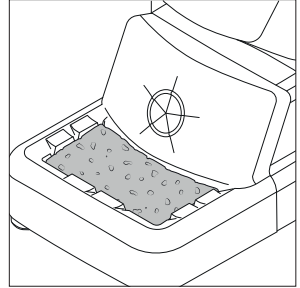
Tap gently to remove excess solder.

#### Wiping



Use the slots to remove the remaining particles.

#### Sponge

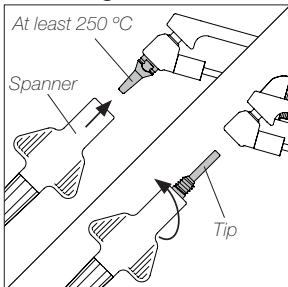


A damp sponge is the softest cleaning method. When working, keep the sponge damp using distilled water to avoid tip wear.

## Changing Tips

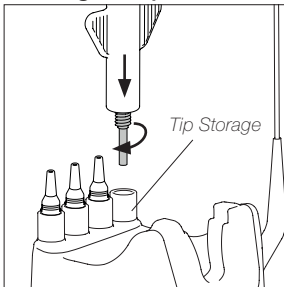
This operation should be done while the tip is hot and at a minimum temperature of 250 °C, so that any tin left inside is still molten, facilitating the removal of the tip.

#### Removing



Use JBC's spanner to unscrew the tip. The tip will remain attached to the spanner so that it can be moved safely.

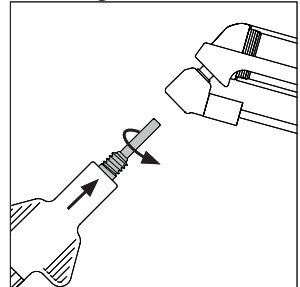
#### Placing in Tip Holder



To remove the tip from the spanner, simply place the tip in one of the holes of the tip storage, screw it in lightly (only approx. 1 turn) and pull the spanner out.

**Note:** Do not screw the tip in too tightly.

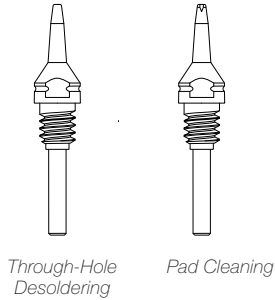
#### Inserting



Grab the new tip with the spanner. Fit it into the heating element and screw it in with the spanner. Screw the tip all the way in so that the union is air-tight.

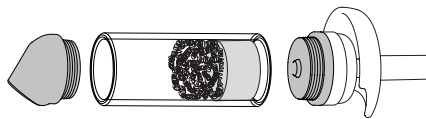
## Compatible Tips

DT530 uses D530 Tips. Different sizes are available for through-hole desoldering and for pad cleaning. Find the model that best suits your soldering needs at: [www.jbctools.com](http://www.jbctools.com)

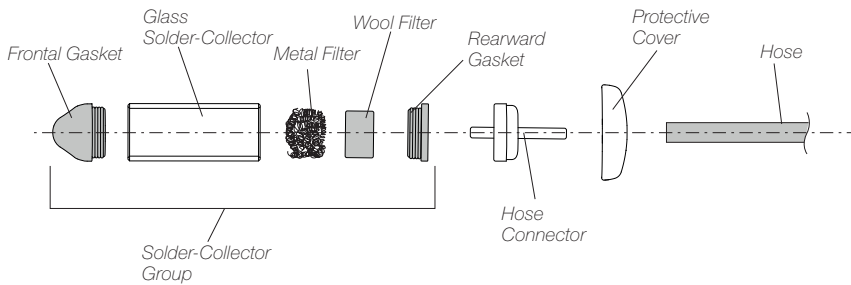


## Spare Part Assembly Sequence

Spare parts of the solder-collector group can be replaced when they are worn.



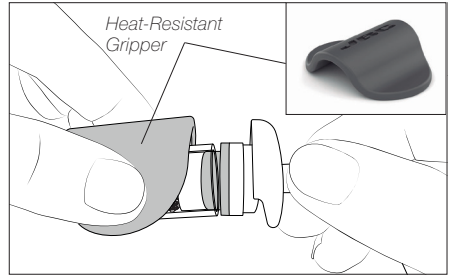
The following illustration shows the disassembly and reassembly sequence of the spare parts.



## Heat Resistant Gripper

Disassemble all spare parts from the glass solder-collector (the sequence is shown on the previous page).

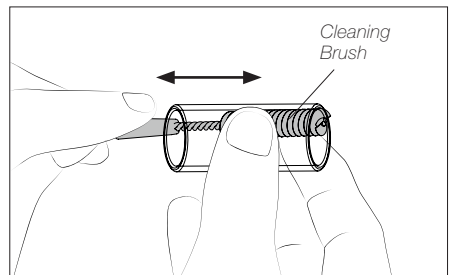
It is recommended to use the heat-resistant gripper to handle the solder collector, it could be still hot. The gripper shape adapts perfectly to that of the collector.



## Cleaning the Glass Solder-Collector

The provided cleaning brush can be used to push both filters out of the glass tube previous to the cleaning.

Then clean the glass tube with the cleaning brush. If necessary, use alcohol for stubborn residues.



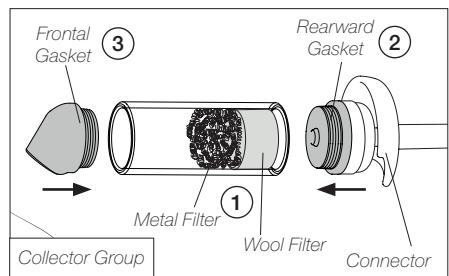
## Reassembling the Solder-Collector Group

The spare part assembly frequency is shown on the previous page.

First insert both filters into the collector (1), use new filters if necessary.

Then insert the connector and the rearward gasket into the glass tube on the side of the wool filter (2).

Push both filters as far as possible against the rearward gasket using the cleaning brush.



Afterwards insert the frontal gasket into the other side of the glass solder-collector (3).

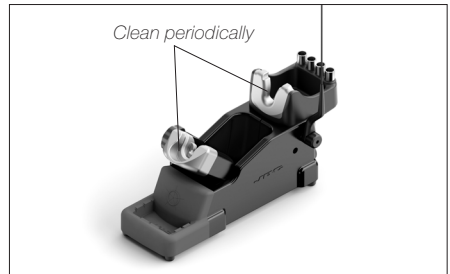
To reassemble the solder-collector group, follow the instructions on page 7 in the section "Disassembling the Solder-Collector Group" but in reverse order.

Finally, screw in a desoldering tip.

# Maintenance

## General Maintenance

- Before carrying out maintenance, always unplug the stand and the tool. Allow the equipment to cool down.
- Check periodically that the metal parts of the tool and the stand are clean to ensure detection of the tool when it is in the stand. Use a damp cloth or alcohol for cleaning.



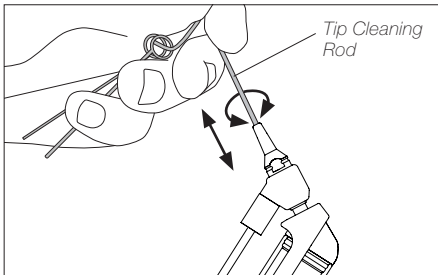
- Periodically check all cables and tubes connections.
- The wool, filter and gaskets of the solder-collector should be periodically checked and replaced when worn or clogged with solder residues.
- Replace any defective or damaged pieces. Use original JBC spare parts only.
- Repairs should only be performed by a JBC authorized technical service.
- Before storing the equipment, remember to tin the tips to prevent oxidation.



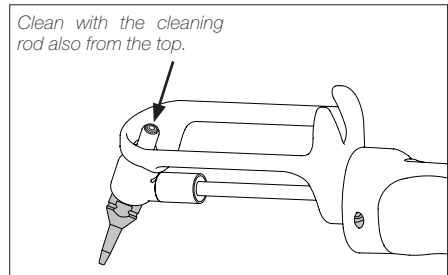
**Do not press** the tool button while tinning the desoldering tip, as the fumes given off by the flux would quickly block the ducts and the air filter.

## Duct Maintenance

To avoid clogging or pressure loss, carry out regular maintenance on the tip, solder-collectors, gaskets and filters.



Clean the inside regularly with the largest possible straight or helical rod.



Remove the solder collector group, leave the tool on the stand and clean the tip with the cleaning rod also from its top.

## Safety



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

- Do not use the device for any purpose other than soldering/desoldering or rework. Incorrect use may cause fire.
- 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. Tips and other metal parts of the tool and the stand may still be hot after the station is turned off. Handle with care, even when adjusting the stand position.
- Do not leave the appliance unattended when it is on.
- Avoid flux coming into contact with skin or eyes to prevent irritation
- Be careful with the fumes produced when working.
- Keep your workplace clean and tidy. Wear appropriate protection glasses and gloves when working 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.

# Specifications

## DT530

### Angled Desoldering Iron

Ref.: DT530-A

- |   |  |
|---|--|
| - Net weight:                                 | 335 g / 0.74 lb  |
| - Package Dimensions / Weight:<br>(L x W x H) | 245 x 185 x 45 mm / 412 g<br>9.65 x 7.28 x 1.77 in / 0.91 lb |

Complies with CE standards.  
ESD safe.

# JBC

## Warranty

JBC's 2 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.



This product should not be thrown in the garbage.

In accordance with the European directive 2012/19/EU, electronic equipment at the end of its life must be collected and returned to an authorized recycling facility.



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