

JBC

www.jbctools.com

INSTRUCTION MANUAL



4 Tools DME Station with Pneumatic Pump

Ref. DMPVE-QA

Packing List

The following items are included:

DME Control Unit 1 unit
 Ref. DME-1A (120V)
 DME-2A (230V)
 DME-9A (100V)



Pneumatic Desoldering Module 1 unit
 Ref. MVE-A



ESD Tip Cleaner 1 unit
 Ref. CL8499



Stand2 units
 Ref. AD-SE



Stand 1 unit
 Ref. DR-SE



Stand 1 unit
 Ref. AM-SA



General Purpose Handle 1 unit
 Ref. T245-A



Precision Purpose Handle1 unit
 Ref. T210-A



Desoldering Iron 1 unit
 Ref. DR560-A



Adjustable Micro Tweezers1 unit
 Ref. AM120-A



Brass Wool 1 unit
 Ref. CL6210



Sponge 1 unit
 Ref. S0354



Metal Brush 1 unit
 Ref. CL6217



Cotton Filter1 unit
 Ref. 0781046
It contains 10 filters



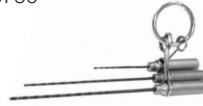
DR560 Accessories

Ref. 0022819

Tip cleaning set 1 unit
Ref. 0965970



Long Tip Cleaning set 1 unit
Ref. 0965760



Glass solder collector 1 unit
Ref. 0812620



Spanner 1 unit
Ref. 0780550



Filter Box 1 unit
Ref. 0780840
It contains 10 filters



Internal gasket 1 unit
Ref. 0019208
It contains 2 gaskets



Metal solder collector 1 unit
Ref. 0812630



Suction Filter 1 unit
Ref. 0821830



Filter Box 1 unit
Ref. 0005966
It contains 50 filters



Cartridge holder 1 unit
Ref. SCH-A



Venturi Filter 1 unit
Ref. 0008446



Pedal 1 unit
Ref. P-405



Cleaning stick 1 unit
Ref. 0786640



Power cord 1 unit
Ref. 0010569 (230V)
0013671 (100/120V)



Module Cable ... 1 unit
Ref. 0014874



Stand Cable 4 units
Ref. 0011283



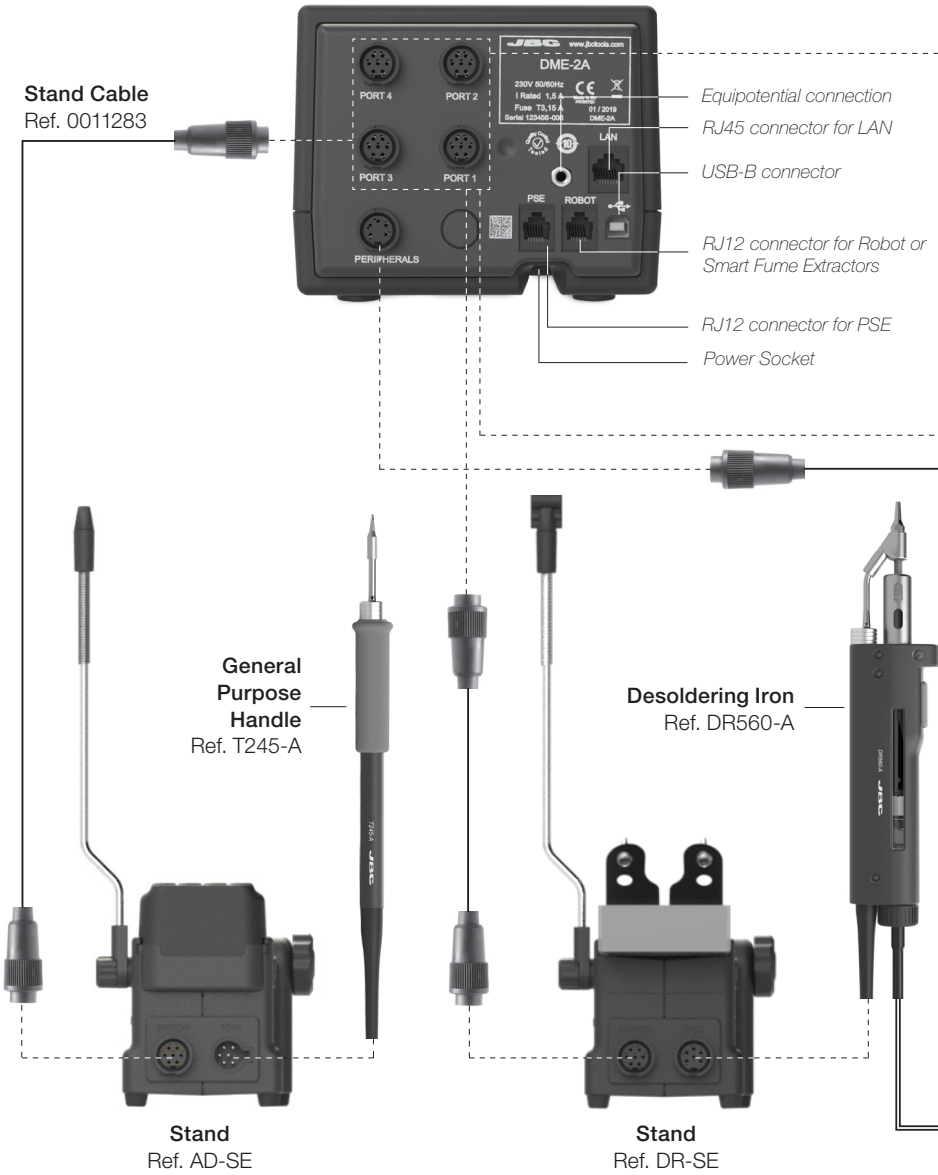
Union Flanges 1 unit
Ref. 0011356

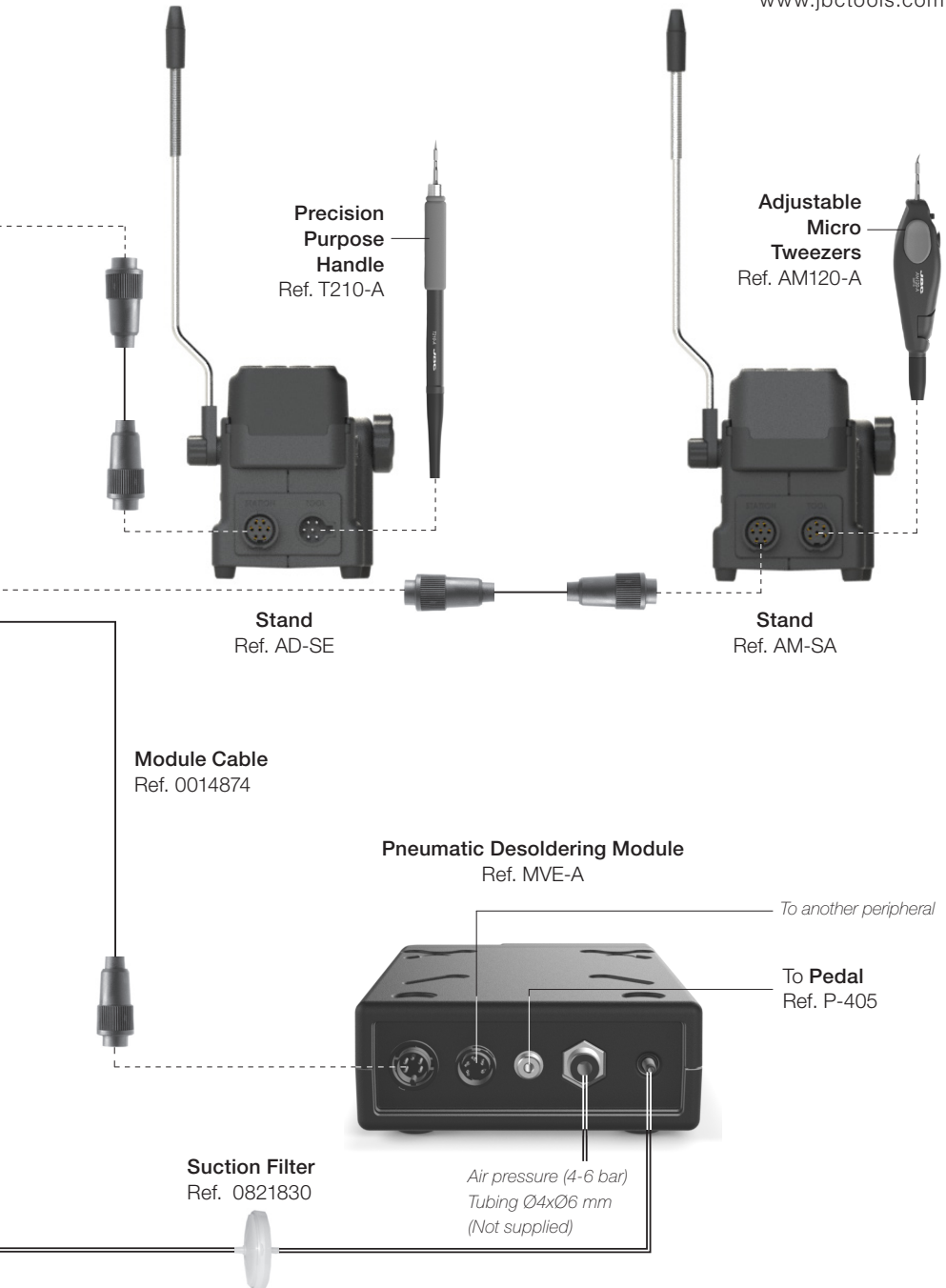


Manual 1 unit
Ref. 0023131



Connections





Features

3.5" Color TFT Touch screen

USB-A connector

Tilt the display for easy reading



Main Switch

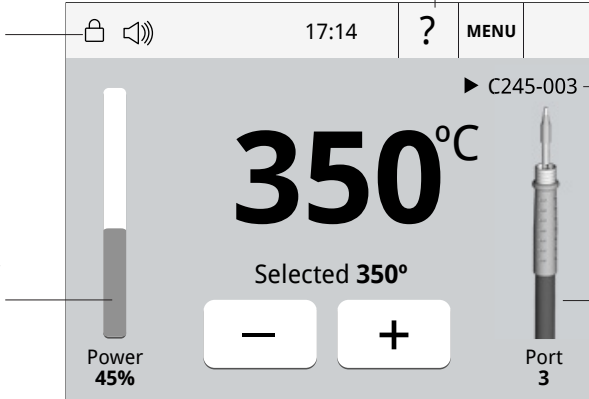
Work Screen

The DME-A offers an intuitive user interface which provides quick access to the station parameters.

Default PIN: 0105

Station Information
Help for each parameter

Station Lock
PIN required for unlocking



Cartridge in use
Introduce the reference for more precise temperature accuracy

Power indicator
Shows the % power delivered by the tool.

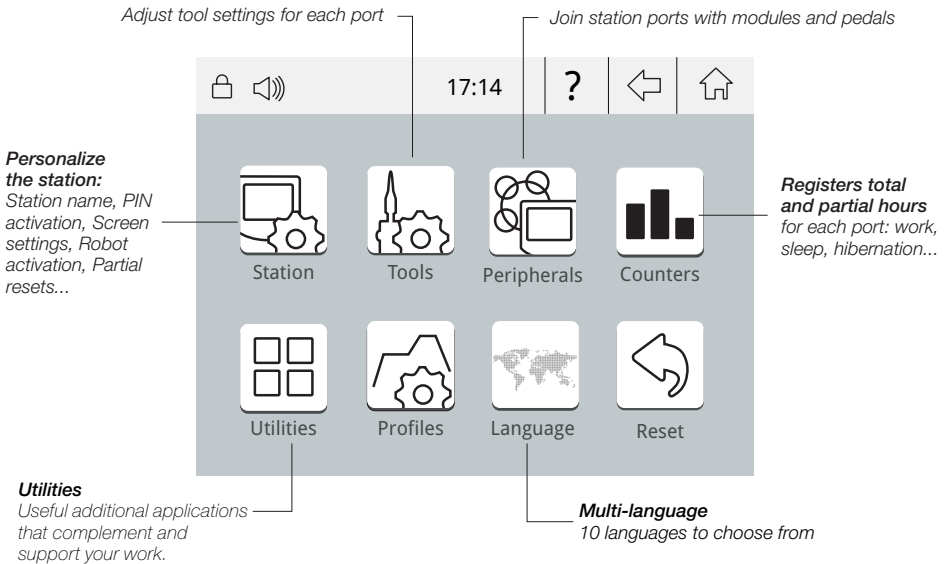
Tool in use
Press on the tool image to see the Ports Screen

Troubleshooting

Station troubleshooting available on the product page at www.jbctools.com

Menu Screen

Press the station information button (?) to get information of the different features being displayed.



Advanced functionalities



Graphics

It provides detailed graphics of tip temperature and power delivery in real time during solder joint formation for analysis purposes. This helps you decide how to adjust your process or which tip to use to obtain the best quality soldering.



The first system to optimize traceability in soldering

- Get greater quality and control in your production
- Manage your whole soldering process remotely in real time



Files

Export graphics

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



Update

Station update

Download the JBC Update File from

www.jbctools.com/software.html

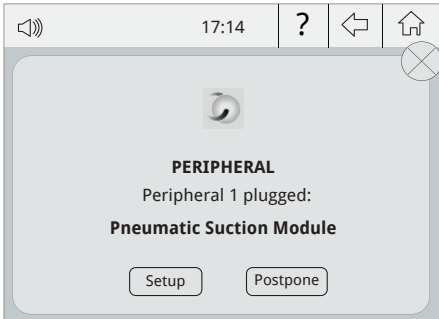
Insert the USB flash drive with the file downloaded to the station.

MVE Initial Setup

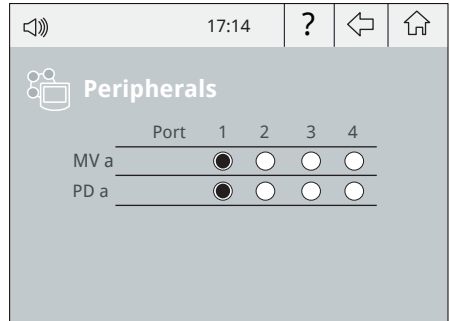


After connecting the pneumatic desoldering module (MVE-A), a popup window is opened.

Peripherals



1. To configure your Pneumatic Suction Module press Setup in the popup window.



2. Select the module from the list of peripheral connections. Remember your first connection is denoted as “a”, the second being “b”, etc. (e.g. MV_a, MV_b,...). Do the same with the pedal (e.g. PD_a,...)

3. Select the port of the tool you want to link to the peripheral.

4. Press Menu or Back to save changes. Once set up, you can change the module settings by entering the **Peripherals** Menu.

Simultaneous control of ports

See the information for all ports in real time when pressing the tool image on the Work screen.

Tool Status
Tip temperature,
Sleep or
Hibernation

Port 1
C560-903
Hibern.

Port 2
C560-001
Sleep

Port 3
C120-001
350°

Port 4
C210-001
Hibern.

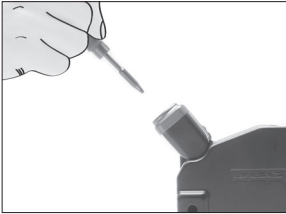
Tool port
Press any port
to show on the
Work Screen

Operation

The JBC Most Efficient Soldering System

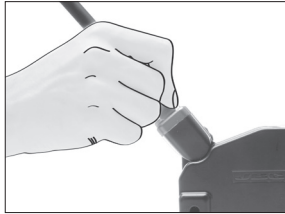
Our revolutionary technology is able to recover tip temperature extremely quickly. It means the user can work at a lower temperature and improve the quality of soldering. The tip temperature is further reduced thanks to the Sleep and Hibernation modes which increase up to 5 times the life of the tip.

1. Work



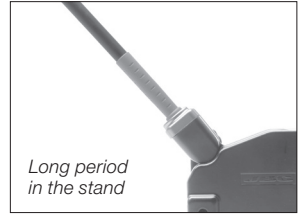
When the tool is lifted from the stand the tip will heat up to the selected temperature.

2. Sleep

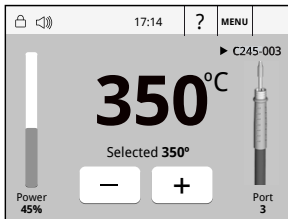


When the tool is in the stand, the temperature falls to the preset Sleep temperature.

3. Hibernation

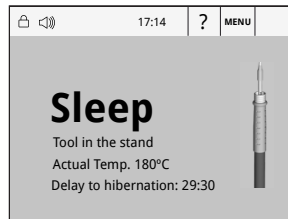


After longer periods of inactivity, the power is cut off and the tool cools down to room temperature.



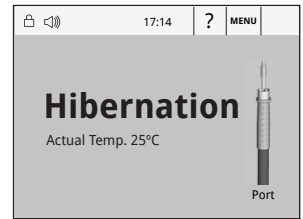
Tools Menu:

- Adjust temperature limits and cartridge.
- Set temperature levels.



Tools Menu:

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

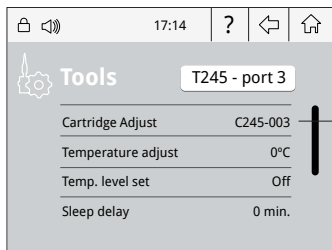


Tools Menu:

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

Cartridge Adjustment

Insert the cartridge model and the station will recognize its characteristics (size and shape) to provide better temperature precision.



After inserting the cartridge, introduce the last 3 numbers of its reference.

System notifications

The following icons will be displayed on the screen's 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.

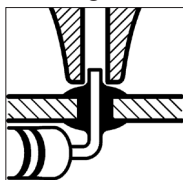
Error.
Press INFO for failure description, the type of error and how to proceed.

Indicates there is a peripheral to be installed.

Desoldering process

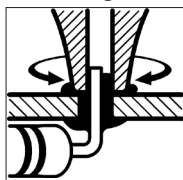
Use a tip with a larger diameter than the pad to achieve maximum aspiration and thermal efficiency.

1. Placing



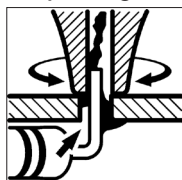
Place the tip over the lead.

2. Rotating



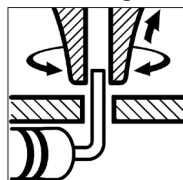
When the solder melts, gently move the tip in a circular motion.

3. Aspirating



Press and hold the tool button to start the suction and continue the movement completing 3 or 4 circles.

4. Removing



Remove the tip while maintaining the suction to make sure all the solder is removed from the joint.

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

If desoldering tips does not provide enough heat to desolder leads from ground planes, consider using a preheater PCB.

Quick Tip Changer

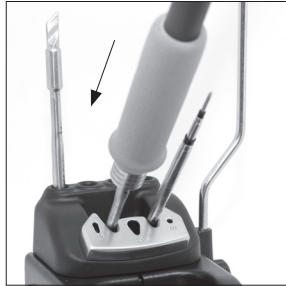
Save time and change cartridges safely without switching the station off. Be careful, the cartridges may be hot, when placing them in the storage rack.

1. Removing



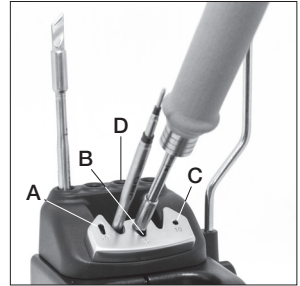
Place the cartridge in the extractor and pull the handle to remove it.

2. Inserting



Place the handle on top of the new cartridge and press down.

3. Fixing



Use the holes to fix the cartridge as follows:
A. For curved C210
B. For C245
C. For straight C210
D. cartridge Storage rack

Important: It is essential to insert the cartridge as far as the mark for a proper connection.



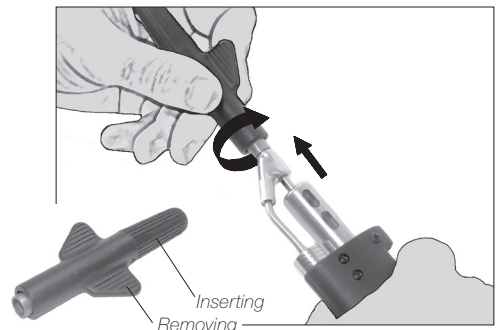
DR560 Changing Tips

1. Removing

Unscrew the tip using the spanner supplied.

2. Inserting

Fit the new tip and tighten with the spanner to make sure it is air tight.



The DR560 uses C560 tips.

Find the model that best suits your soldering needs in www.jbctools.com

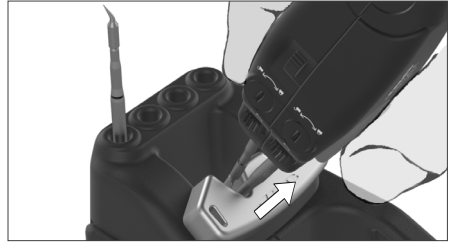
AM120 Changing cartridges

1. Unlocking

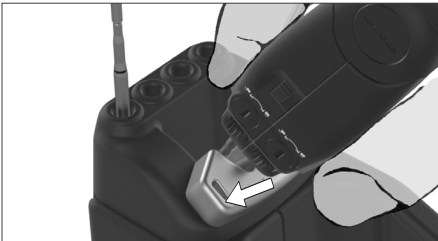


Unlock the fixing knobs.

2. Removing



Place the cartridges in the extractor and pull the tweezers to remove them.



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



Use the grooves to insert the cartridges as far as they stop.

*Important

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



3. Rotational and Vertical Cartridge alignment



Slightly turn the wheels to align the cartridges as required.



The tail wheel guarantees that the cartridges are equally aligned with vertical symmetry.

ⓘ Once the alignment has been made, do not forget to fix the cartridges by tightening the fixing knobs. A single turn of the knob is required to get them fixed.

Also make sure that the cartridges are in good condition so that the tweezers work properly.

Tip Cleaner

Improve thermal transfer by cleaning the tip after each solder joint.

Brass wool

Ref. CL6210

Very effective cleaning method. It leaves a small layer of solder on the tip to prevent oxidation between cleaning and reflowing.

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.

ESD Tip Wiper

Ref. CL0240

A temperature resistant receptacle lets the operator remove excess solder by gentle tapping or wiping.

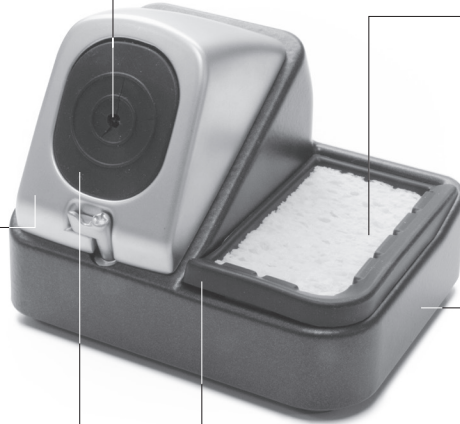
Sponge

Ref. S0354

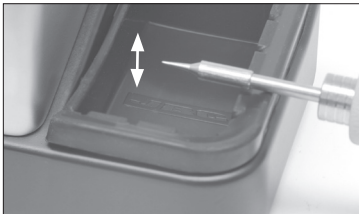
The least harmful cleaning method. Keep the sponge damp with distilled water when working to avoid tip wear.

Non-slip base

No need to hold the base while cleaning tips.



Tapping:



Tap to remove excess solder.

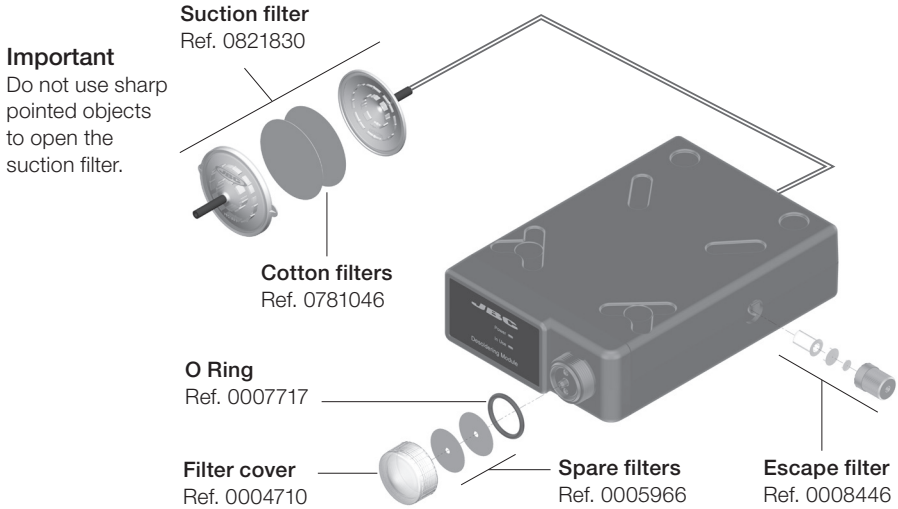
Wiping:



Use the slots to remove remaining particles.

MVE Changing filters

- Keep the casing clean by using a damp cloth. Periodically check all cable and tube connections.
- Keep filters clean to ensure proper solder suction and replace them when necessary.



Removing the pneumatic tubing

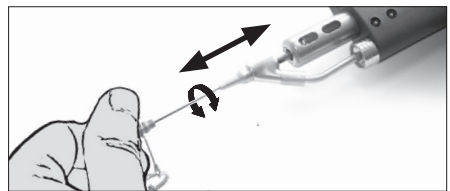
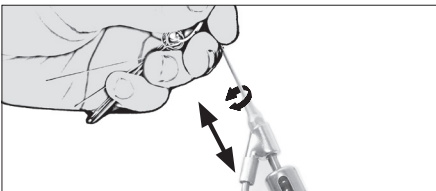
Push the release ring to remove the pneumatic tubing.



DR560 Maintenance

Tip Care

The intake tube should be periodically cleaned with the largest rod possible.

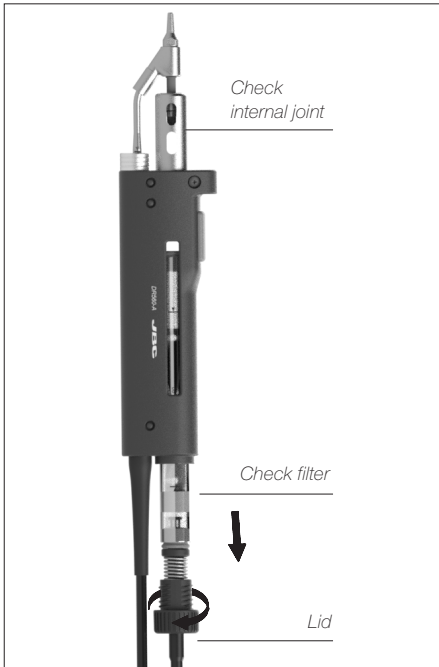


Important

DO NOT press the vacuum pump button while tinning the desoldering tip, as the fumes given off by the flux would quickly block the ducts and the air filter.

Glass Solder Collector Cleaning

1. Removing the lid

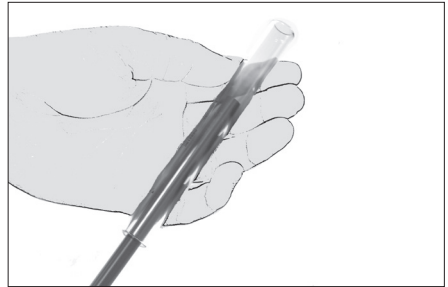


The lid must be unscrewed with the DR560 in a vertical position.

2. Cleaning



Remove the coil and clean the inside of the glass solder collector with the cleaning stick.



Check the filter and replace it if it is dirty or damaged.

3. Inserting the glass solder collector

The glass solder collector must be inserted with coil filter in place, positioned between the 2 lines marked.

Then the whole unit must be closed by screwing the lid.



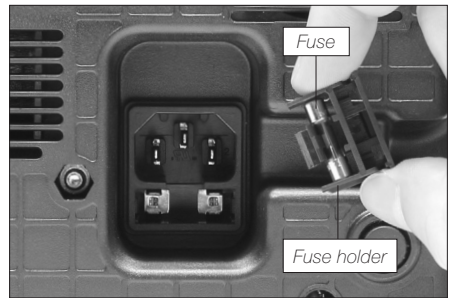
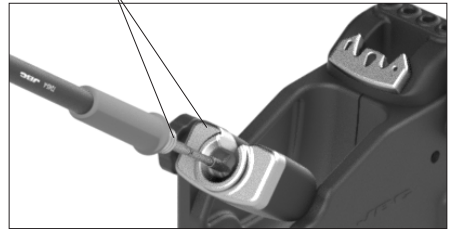
Maintenance

Before carrying out maintenance or storage, 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 a blown fuse as follows:



Clean periodically



1. Pull off the fuse holder and remove the fuse. If necessary use a tool to lever it off.

2. Press the new fuse into the fuse holder and replace it in the station.

- Replace any defective or damaged pieces. Use original JBC spare parts only.
- 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 cord must be plugged into approved bases. Be 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 even when 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 the contact of flux 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 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 and also persons with reduced physical, sensory or mental capabilities or lack of 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	○	○	○	○	○	○
手柄	○	○	○	○	○	○
电源线	○	○	○	○	○	○
主机	○	○	○	○	○	○
电源插座	○	○	○	○	○	○
保险丝	○	○	○	○	○	○
主开关	○	○	○	○	○	○
电位连接	X	○	○	○	○	○
变压器	○	○	○	○	○	○
线路板	X	○	○	○	○	○

○ 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。

Specifications

4 Tools DME Station with Pneumatic Pump DMPVE-1QA / DMPVE-2QA / DMPVE-9QA

DME-1A	120V 50/60Hz. Input fuse:	6A. Output: 23.5V
DME-2A	230V 50/60Hz. Input fuse:	3.15A. Output: 23.5V
DME-9A	100V 50/60Hz. Input fuse:	8A. Output: 23.5V
- Temperature Range:		90 - 450 °C (190 - 840 °F)
- Idle Temp. Stability (still air):		±1.5 °C (±3 °F)
- Output Peak Power:		160W per tool
- Tip to ground resistance:		<2 ohms
- Tip to ground voltage:		<2mV RMS
- Ambient Operating Temperature:		10 - 50 °C (50 - 122 °F)
- Connectors:		RJ12 for RS232 (robot) and for PSE Power Supply RJ45 connector for LAN (Ethernet) USB-A / USB-B / Peripherals connectors
- Control Unit Weight:		4,6 kg (10 lb)
- Control Unit Dimensions:		148 x 120 x 232 mm (5.83 x 4.72 x 9.13 in)
MVE-A		
- Ambient Operating Temperature:		10 - 50 °C (50 - 122 °F)
- Vacuum at 6 Bar:		90% / 680 mmHg / 26.8 inHg
- Flow rate:		15 SLPM
- Peripheral Weight:		0,7 kg (1.54 lb)
- Peripheral Dimensions:		145 x 55 x 225 mm (5.71 x 2.17 x 8.86 in)
- Connector:		Pedal for P-005
- Total Package:		480 x 370 x 380 mm / 14,71 kg 18.9 x 14.6 x 15.0 in / 32.43 lb

Complies with CE standards.
ESD protected.

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.

Get 1 extra year JBC warranty by registering here:
<https://www.jbctools.com/productregistration/>
within 30 days of purchase.



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