JBC

Hot Air Station

Ref. JTSE-A

Packing List

The following items should be included:

JTSE Control Unit ....1 unit
Ref. JTSE-1A (100V / 120V)
    JTE-2A (230V)

Stand ....1 unit
Ref. JT-SD

Heater hose set ....1 unit
Ref. JT-T1A (100V / 120V)
    JT-T2A (230V)

Extractor desk ....1 unit
Ref. 0008752*
Not supplied with JT-Q stations

Thermocouple type K ....1 unit
Ref. PH218

JT Accessory set
Ref. 0012332

Extractors*	**Protectors***
Ref. E2184	Ref. P2220
E2064	P2230
E2052	P2235
	P4000
	P4010
Tripods*	**Suction Tube***
Ref. T2050	Ref. 0932330
T2250	
Suction Cups*	**Nozzles**
Ref. 0930110	Ref. JN2015
Ø 10 - 0934050 (x3)	JN2012
Ø 4.7 - 0934070	JN2020

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

Manual ....1 unit
Ref. 0017172

JBC

www.jbctools.com

Features

USB-A connector

Thermocouple type K

Activates the suction pump

Suction Tube
For tripods and extractors

Heating element

Hot Air button
(On / Off)

Heater Hose set
Ref. JT-T1A (100V/120V)
JT-T2A (230V)

Stand
Ref. JT-SD

JTSE - 2A   Control Unit
230V 50/60Hz
I Rated   3 A
Fuse   T4 A
Serial 176279   3

Auxiliar connector

Equipotential connector
USB connector

Robot RS232 connector

Power Socket
Fuse

P-005 Pedal connector

Adjustable Stand

Adjust the tool holder angle to suit your work position.
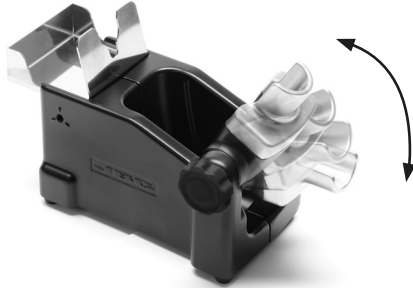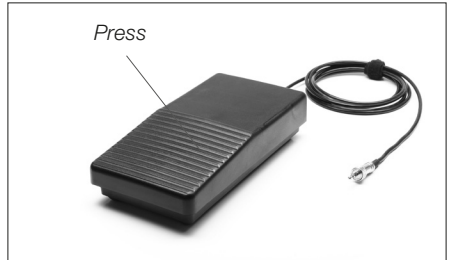

Operation Modes

1. From the Tool Settings Menu, select the mode to activate the tool depending on the task.

Tool button

Press

Press the start/stop button to blow hot air.

Pedal*

Press

Press the Pedal to blow hot air and release to stop.
*The P-005 Pedal is not supplied with this station. See our website.

2. The tool stops blowing when pressing the start/stop button.
If the stand is connected to the station and for safety it will also stop when returned to the stand.

Quick Nozzle Changer

Changing nozzles quickly and safely.

⚠ Turn the tool off and handle with care. The heating element and the nozzle are still hot.
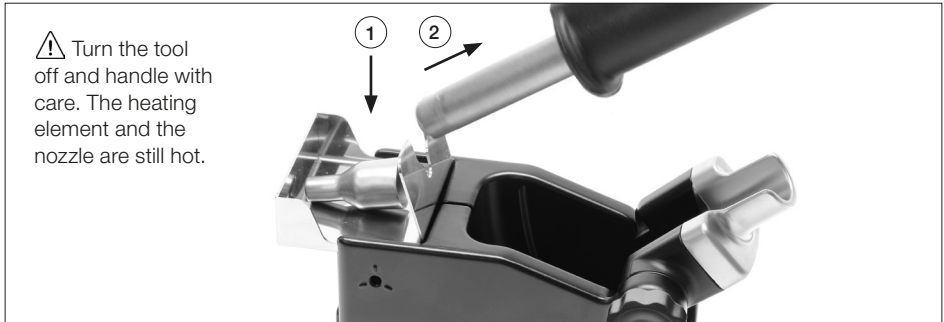
Compatible Nozzles

The JT-TA works with JT nozzles. Find the model that best suits your soldering needs in **www.jbctools.com**

Straight   Bent   Flat

Ø   Ø   A x B
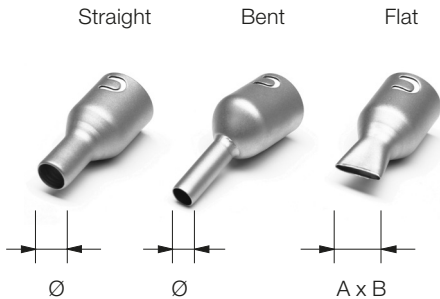
| *	Ref.	Shape	Ø Size (mm)	Ø Size (in)
*	JN2020	Straight	Ø 8	Ø 0.31
	JN8417	Straight	Ø 10	Ø 0.4
*	JN2015	Bent	Ø 4	Ø 0.16
*	JN2012	Bent	Ø 6	Ø 0.24
	JN6633	Bent	Ø 8	Ø 0.31
	JN7637	Flat	10 x 2	0.4 x 0.08
	JN7638	Flat	20 x 2	0.8 x 0.08
	JN7639	Flat	30 x 2	1.18 x 0.08

* Included in JT Accessory set (Ref. 0012332)

In case of a loosely fitting nozzle:

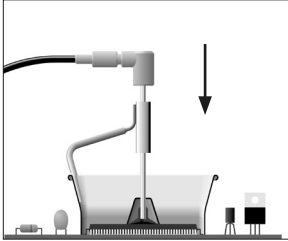**1.** Push the nozzle tab inwards with a screwdriver or flat-nosed pliers.
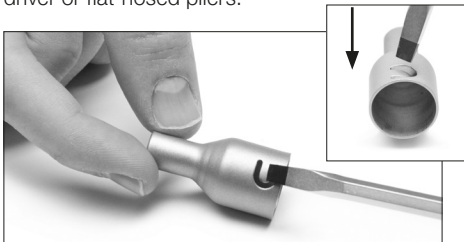
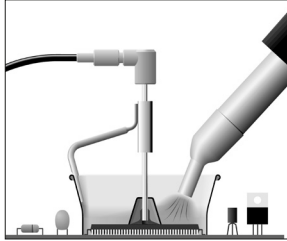**2.** Insert the nozzle into the JT-TA again.
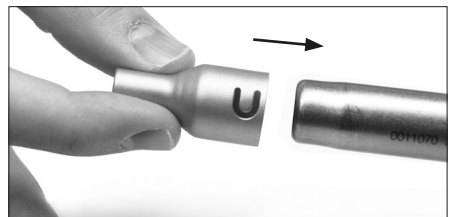
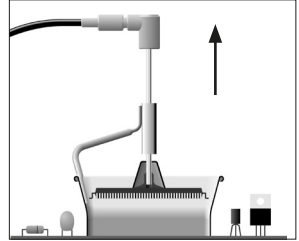# Operation

1. Placing

Position the extractor with the appropriate suction cup and press the suction button.

2. Heating

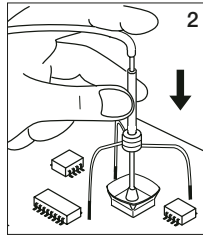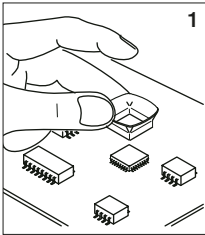Heat the component.

3. Extracting

The component lifts off automatically when the solder melts.
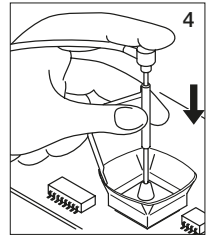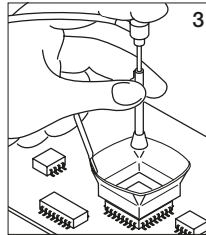
Protectors & Extractors

For small components (fig. 1 and 2). We recommend using the protector + tripod

For large components (fig. 3 and 4). We recommend using the manual extractors

Using the Thermocouple type K

Connect a TC type K (PH218) to the station and use it as a protection or regulation sensor.
You can define its use mode by means of the "Ext TC mode" option in the "Tool" menu.

You can choose from **two work modes**:

Regulation: the station regulates the air temperature automatically to maintain the External Thermocouple (TC) temperature.

Protection: the station cuts the air supply off when the External Thermocouple (TC) temperature is reached.

Fix the TC with Kapton Tape (Ref. PH217) as near as possible to the component being worked on. If Kapton tape is not ESD you must use an ionizer.
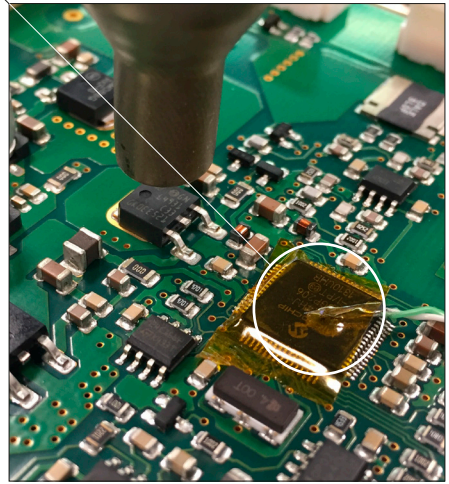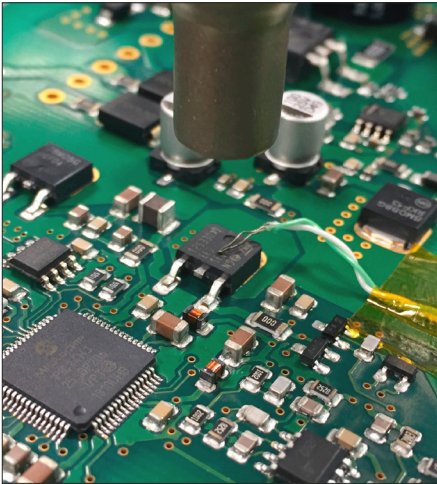
IPC* does not recommend exceeding ramp-up rates over 3-4ºC / sec. (5-7ºF / sec) so as to reduce the risk of thermal stress on the PCB.

* IPC was founded in the U.S. in 1957 as the Institute for Printed Circuits.
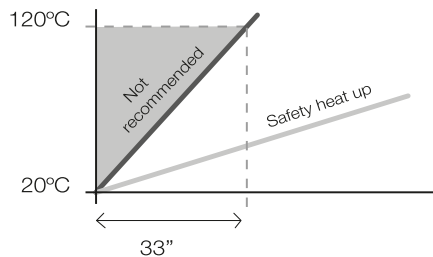
Process Control

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

Status bar

Instant power supplied to heater

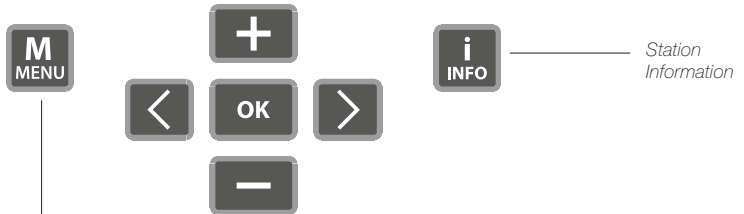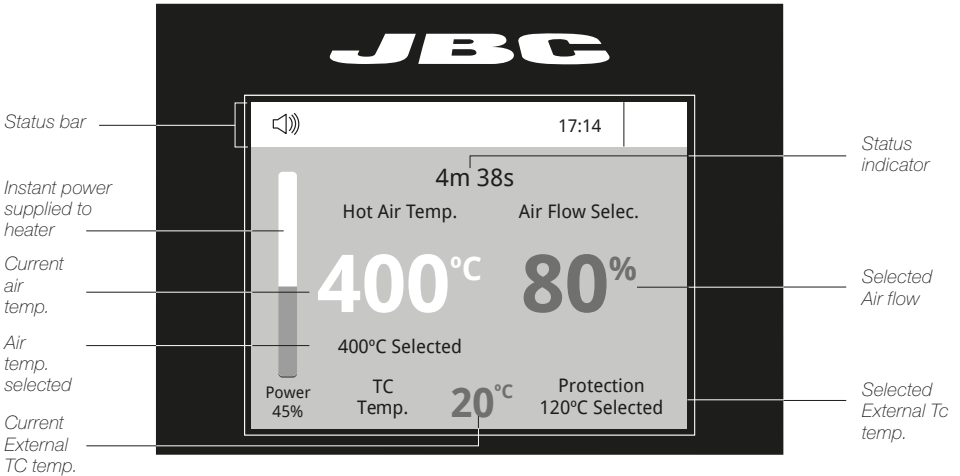Current air temp.

Air temp. selected

Current External TC temp.

JBC

🔊)) 17:14

4m 38s

Hot Air Temp.   Air Flow Selec.

400°C **80%**

400ºC Selected

Power 45%   TC Temp. **20°C**   Protection 120ºC Selected

Status indicator

Selected Air flow

Selected External Tc temp.

M MENU

+

< OK >

—

i INFO

Station Information

Menu Options

Press INFO for each parameter description.

Station

Tools

Profiles

Files

Graphics

Reset

Available languages: English, Spanish, German, French, Italian, Portuguese, Japanese, Chinese, Russian and Korean.

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.

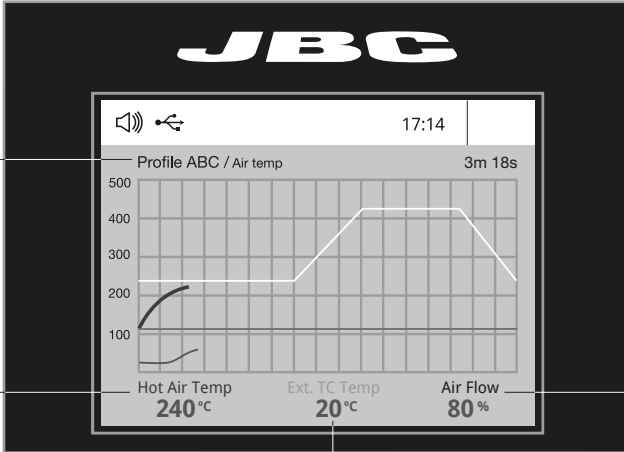✖ Error. Press INFO for failure description, the type of error and how to proceed.

Profiles

In this mode you can **set up or edit** as many as 25 profiles of temperature and air flow.

Profiles

Profile name

17:14

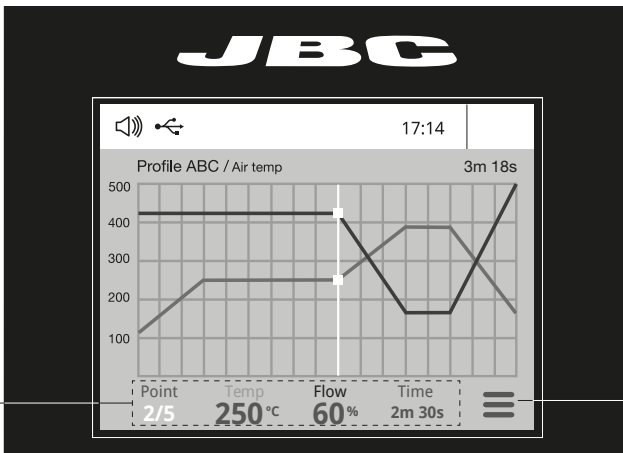Profile ABC / Air temp   3m 18s

500
400
300
200
100

Current air temp.   Hot Air Temp   Ext. TC Temp   Air Flow   *Current air flow*
                       240 °C   **20** °C   **80** %

Current External TC temp.

Edit Mode

17:14

Profile ABC / Air temp   3m 18s

500
400
300
200
100

Data for these points   Point   Temp   Flow   Time
                           2/5   **250** °C   **60** %   **2m 30s**

Menu Options
· Add point
· Delete point
· Load profile
· Save profile
· Exit

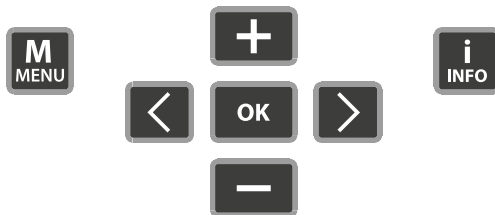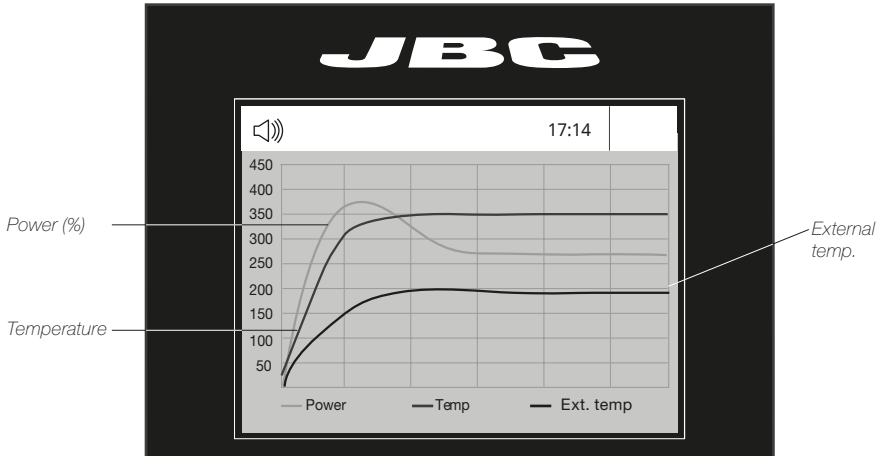M MENU   ＋   i INFO   ＜   OK   ＞   －

Process analysis

Graphics

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

Power (%)

External temp.

Temperature

Files

Files

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

Export / Import profiles
Insert a USB flash drive into the USB-A connector to export / import profiles.

Soldering Net (Soon available)

Remotely manage and monitor your stations.

1. Download the **JBC Manager software** and the user manual from
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 use.
- Analyze the soldering graphics of the stations
  on your PC and export them.

*JBC
Manager
software*

*any JBC
station* — — — — — — — — — — *USB Hub*
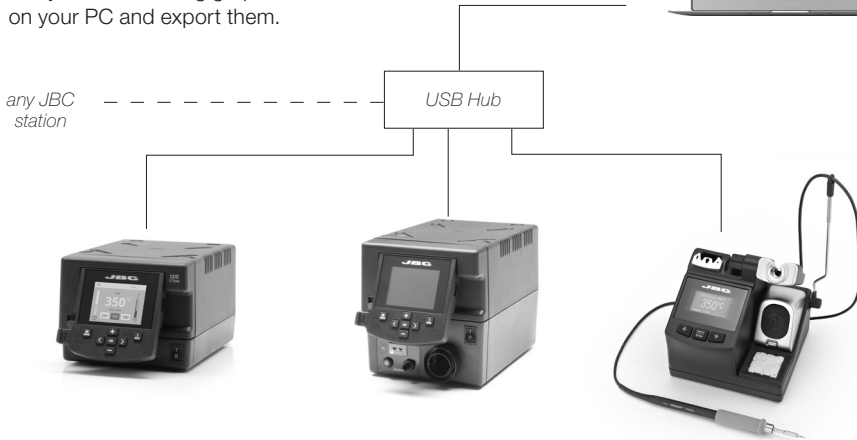
Update the station software

1. Download the JBC Update File from
www.jbctools.com/software.html and save
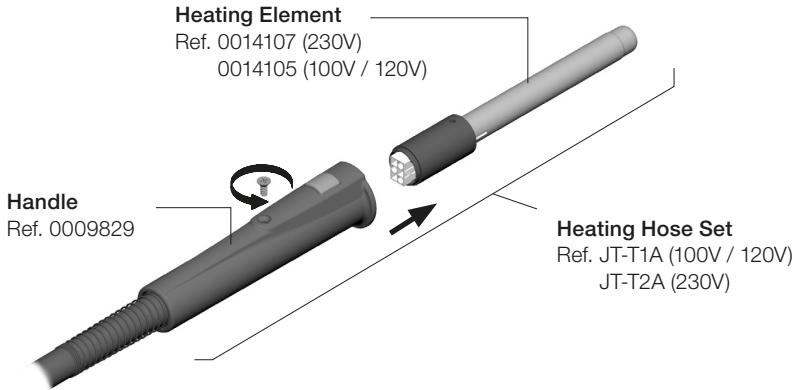it on a USB flash drive. (Preferably one with no
other files).

2. Insert the USB flash drive to the station.
The icon ♺ is diplayed while updating.

*JBC
Update File*

Replacing the Heating Element

Only perform this operation when the element is cold and the unit is disconnected from the mains.

1. Loosen the screw.
2. Pull the heating element out of the handle.
3. Connect the new heating element, ensuring it is pushed all the way in.
4. Tighten the screw.

Heating Element
Ref. 0014107 (230V)
　　　0014105 (100V / 120V)

Handle
Ref. 0009829

Heating Hose Set
Ref. JT-T1A (100V / 120V)
　　　JT-T2A (230V)

Changing the JT-TA Heater Hose Set

1. Unplug the power cable.
2. Use a spanner to unscrew the nut.
3. Make sure that the new heater tube fits into the grooves in the socket.
4. Tighten the screw.
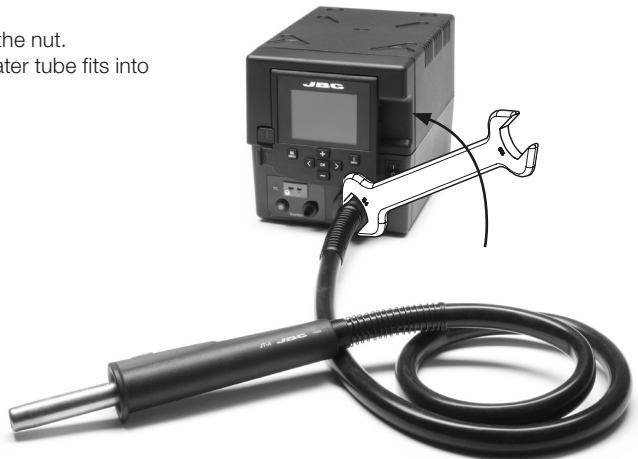
Pick & Place *(not supplied with JT)*

This tool helps you place and remove SMDs of any size easily thanks to the suction pump.

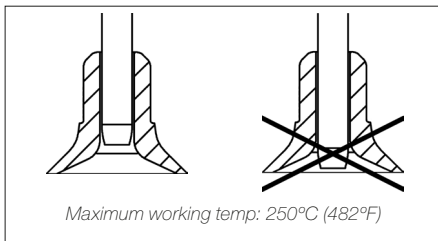| **Pick & Place** Ref. T260-A	**Bent Needles Set** Ref. 0861660	**Straight Needles Set** Ref. 0901546

Operation
Choose the needle and the suction cup that best fits the component and start as follows:

Press the button to start/stop the suction

Suction cups

Maximum working temp: 250ºC (482ºF)
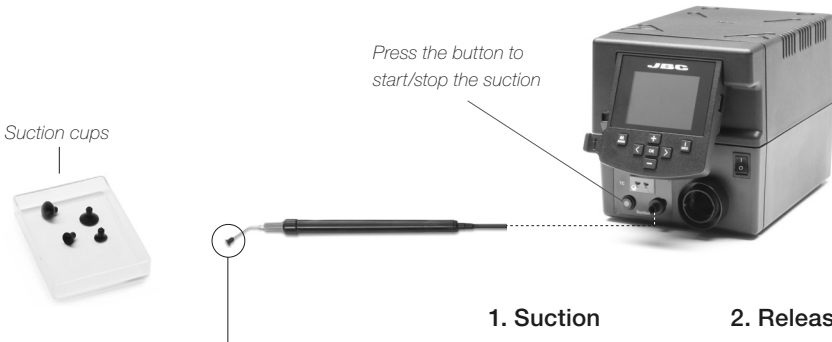
1. Suction

2. Release

Insert the needle with the appropriate cup for a correct suction process.

Make sure the needle does not protrude from the cup.
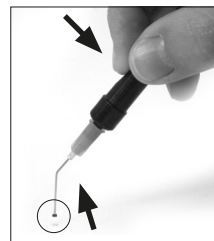
Once the suction is activated, cover the pen hole with your finger and lift off the component.

Lift your finger to release the component.

Accessories

Protectors

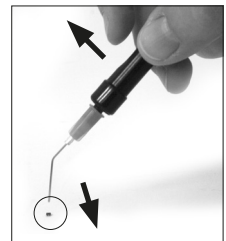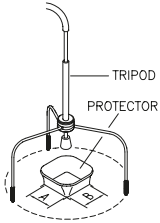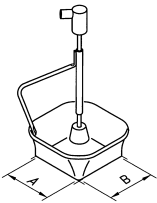| *	Ref.	AxB (mm)	AxB (in)	*	Ref.	AxB (mm)	AxB (in)
	P3353	4,3 x 3	0.16 x 0.12		P1249	12 x 23	0.47 x 0.9
	P3786	5,2 x 5,2	0.20 x 0.20	44	P4000	12,5 x 12,5	0.49 x 0.49
	P3352	5,2 x 7,5	0.20 x 0.29		P3354	13,2 x 13,2	0.52 x 0.52
	P3355	5,2 x 9,5	0.20 x 0.37		P4025	13,5 x 21,5	0.53 x 0.85
	P3356	6,2 x 4,2	0.24 x 0.16	48	P2230	15 x 15	0.59 x 0.59
	P3785	7,2 x 7,2	0.28 x 0.28	60	P4010	17 x 17	0.67 x 0.67
	P3784	8,2 x 8,2	0.32 x 0.32		P4005	18 x 29	0.71 x 1.14
	P4035	9 x 13	0.35 x 0.51		P4030	18,5 x 18,5	0.73 x 0.73
	P4040	9,5 x 19	0.7 x 0.74		P1068	18,5 x 24	0.73 x 0.94
	P4080	9,5 x 21	9.5 x 0.83		P2685	28,5 x 28,5	1.12 x 1.12
32	P2220	10 x 10	0.39 x 0.39		P4085	31,5 x 31,5	1.24 x 1.24
	P4045	10,5 x 21	0.14 x 0.82		P2672	33 x 46	1.30 x 1.18
	P4090	11 x 16	0.43 x 0.63		P4002	50 x 50	1.97 x 1.97
24	P2235	12 x 17	0.47 x 0.67		P3357	52,5 x 14	2.06 x 0.55

Extractors

*	Ref.	AxB (mm)	AxB (in)	*	Ref.	AxB (mm)	AxB (in)
52	E2052	20 X 20	0.79 x 0.79		E4015	31,5 X 31,5	1.24 x 1.24
64	E2064	20 X 26	0.79 x 1.02		E2084	33 X 33	1.30 x 1.30
80	E2184	24 X 24	0.94 x 0.94		E2100	38 X 38	1.50 x 1.50
	E2068	27 X 27	1.06 x 1.06		E2124	45 X 45	1.77 x 1.77
	E4020	28,5 X 28,5	1.12 x 1.12				
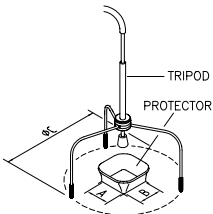
Tripods

Ref.	øC (mm)	øC (in)
T2050	39	1.53
T2250	85	3.35

øD

Manual extractor

Ref.	øD (mm)	øD (in)
E2190	7	0.27

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.

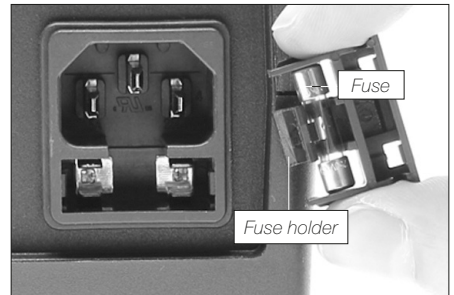- Periodically check all cables and tubes.

Clean periodically

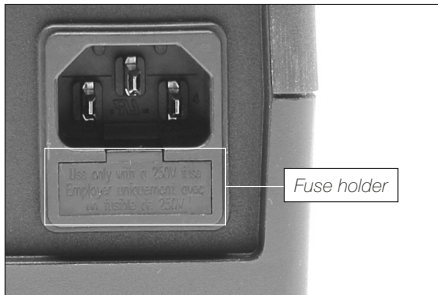- Replace a blown fuse as follows:

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

Fuse holder

2. Insert the new fuse into the fuse holder and return it to the station.

Fuse

Fuse holder

- 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. 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 to turn off the hot air.
  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 inflamable 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

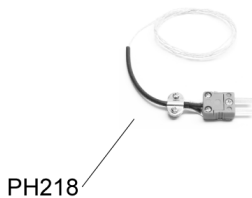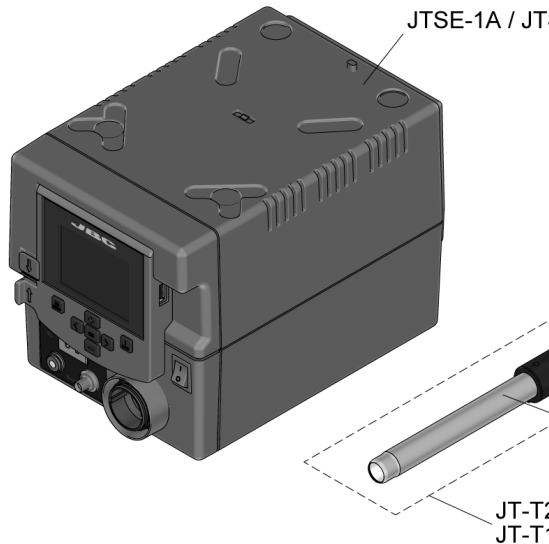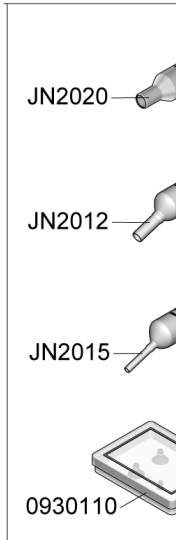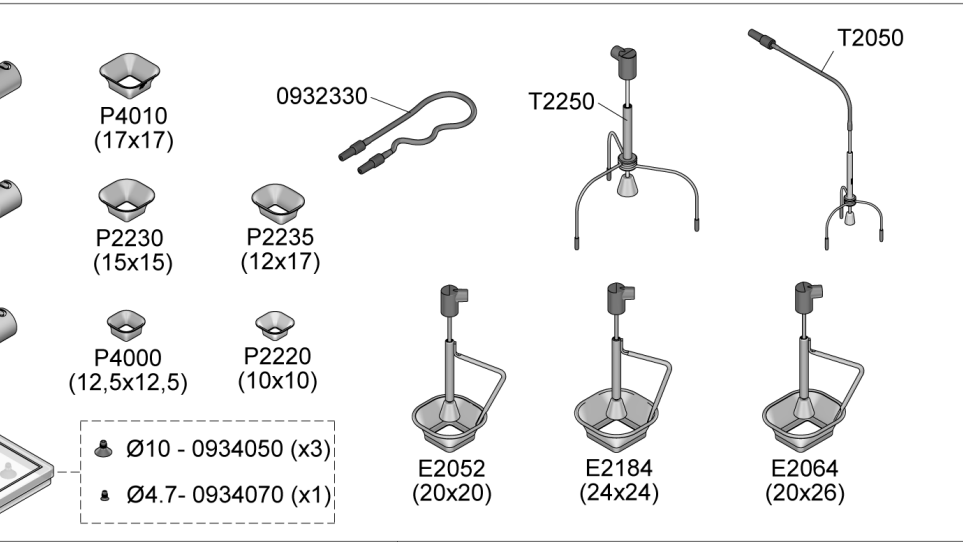| 部件名称	有害物质					
	铅(Pb)	汞(Hg)	镉(Cd)	六价铬 (Cr(VI))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
烙铁头	O	O	O	O	O	O
手柄	O	O	O	O	O	O
电源线	O	O	O	O	O	O
主机	O	O	O	O	O	O
电源插座	O	O	O	O	O	O
保险丝	O	O	O	O	O	O
主开关	O	O	O	O	O	O
电位连接	X	O	O	O	O	O
变压器	O	O	O	O	O	O
线路板	X	O	O	O	O	O
O 表示该有害物质在该部件所有均质材料中的含量均在GB/T 26572 规定的限量要求以下。 X 表示该有害物质至少在该部件的某一均质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

Exploded View

JTSE-1A 100/120V
JTSE-2A 230V

HOT AIR STATION

SPARE PARTS

JTSE-1A / JTSE-2A

-ENCLOSURES:
    ·TOP   0011035
    ·BOTTOM   0013486
    ·FRONT   0016862
    ·BACK   0016812

JTSE-1A

-CIRCUIT   0017185
-SUCTION PUMP 0008723
-HOT AIR PUMP   0015970

JTSE-2A

-CIRCUIT   0017671
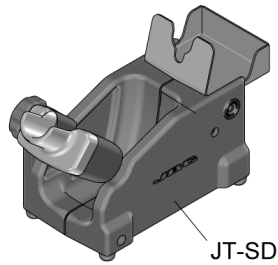-SUCTION PUMP 0008722
-HOT AIR PUMP   0015970

JTSE-1A 100/120V FUSE T-8A
JTSE-2A 230V   FUSE T-4A

JN2020

JN2012

JN2015

0930110

JTSE-1A / JT

JT-T2
JT-T1

PH218

P4010
(17x17)

0932330

T2250

T2050

P2230
(15x15)

P2235
(12x17)

P4000
(12,5x12,5)

P2220
(10x10)

Ø10 - 0934050 (x3)
Ø4.7- 0934070 (x1)

E2052
(20x20)

E2184
(24x24)

E2064
(20x26)

0012332

SE-2A

JT-A

JT-SD

0014107 (230V)
0014105 (100V, 120V)
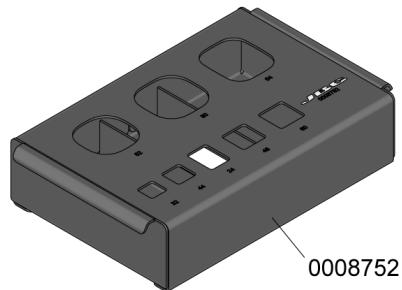
2A (230V)
1A (100V, 120V)

0008752
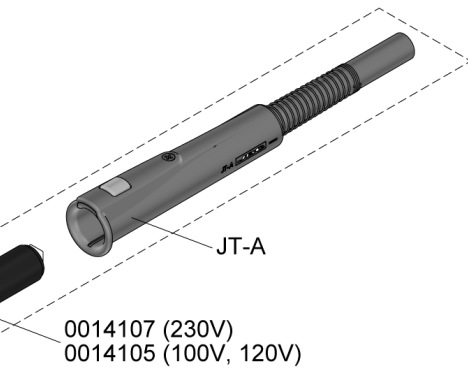
Specifications

JTSE-1A 100V - 120V 50/60Hz. Input fuse: 8A. Rated current: 7A
JTSE-2A 230V 50/60Hz. Input fuse: 4A. Rated current: 3A

- Weight: 4,927 kg (10.86 lb)
- Dimensions (control unit):   148 x 184 x 140 mm (5.83 x 7.24 x 5.51 in)
- Nominal power: 700W
- Temperature selection: Room temp. / 150 - 450 °C (300 - 840 °F)
                                   Cool mode: temp. Off.
- Ambient operating temp: 10 - 40 °C (50 - 104 °F)
- Air flow regulation: 5 - 50 SLPM
- Vacuum: 30% / 228 mmHg / 9 inHg
- Connectors: USB station-PC
                                   Robot RS232
                                   P-005 Pedal

Complies with CE standards.
ESD protected.

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.
**Register your warranty within 30 days of purchase
in 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