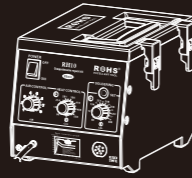


**SOLDERING STATION & SMD REWORK
Comprehensive repair kit
Instruction Manual**



Thank you for using this product. Please read the instructions carefully before use to avoid errors in operation.

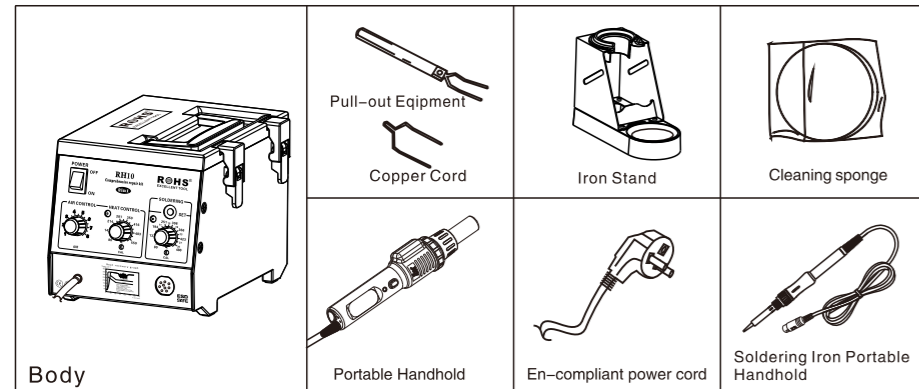
Remark:

The "warning" and "note" in the specification are defined as follows:
Warning: wrong operation shall result in death or serious injury.
Note: wrong operation shall result in damage to the users or the objects.

Packing list

Mainframe.....1	Portable Handhold.....1
Cord Assembly.....1	Soldering Iron Portable Handhold.....1
FP Pick-up.....1	Iron Stand.....1
FP Pick-up wire (L).....1	Instruction manual.....1
FP Pick-up wire (S).....1	

※ This type is not contain spurt-tip, you will buy tips in addition.



Features

- ★ Small volume, saving working space with the new design.
- ★ Small body volume, saving working space, portable handle domination, saving working time.
- ★ Automatic sleeping function which saves power.
- ★ Adjustable air volume & temperature, adapting to de-soldering chips of QFP, SOP, PLCC, & SOJ.
- ★ Setting cooling function; turning off the power, the system continues sending cool air until the temperature is lower down to 100°C, protecting the elements from high temperature damage.
- ★ Inside temperature sensor setting, ensuring stable temperature for different air volume.
- ★ Static elimination design that is safe for sensitive elements.

Product Specifications

Comprehensive repair kit

Part No.	ROHS-RH10
Display Screen	With lamp display
Peak Power	1600W
Power supply	220VAC/50Hz 110VAC/60Hz
Dimensions	185(L)*130(W)*137(H)mm
Weight	1.1kg(W/O Cord)

Soldering Station

Part No.	ROHS-90W
Power consumption	90W
Temperature Range	80 – 480°C
Tip to Ground Resistance	Under 2Ω
Tip to ground potential	Under 2Mv
Tip Style	T Series tip(Soldering tip)
Exothermic material	A1529
Output Voltage	24V
High temperature resistance sleeve	GT04
Cord Length	1.2m
Portable handle weight	100g

Removable Soldering Station

Part No.	ROHS-RH10
Peak Power	1500W
Temperature Range	80 – 550°C
Stable temperature	± 5°C(No loaded)
Air-volume	Level 1-8
DC turbine fan	24V/8300 Rotation
High temperature resistance sleeve	GP5/GP6(Purchase additionally)
Exothermic material	220V/A1626 110V/A1625
Output Voltage	220V/110V
Cord length	1.2m
Weight	200g

Removable Accessories

Part No.	Produce Instruction
ZBC00002	FP Removable Connection(S)and(L)Copper Core
WWJ00087	FP Removable Copper Core(S)
WWJ00086	FP Removable Copper Core(L)

※This product is protected against electrostatic discharge.
※Specifications and design are subject to change without notice.

Note:
Do not touch the metallic parts near the tip.

Warning:
Do not operate nearby the tinder.

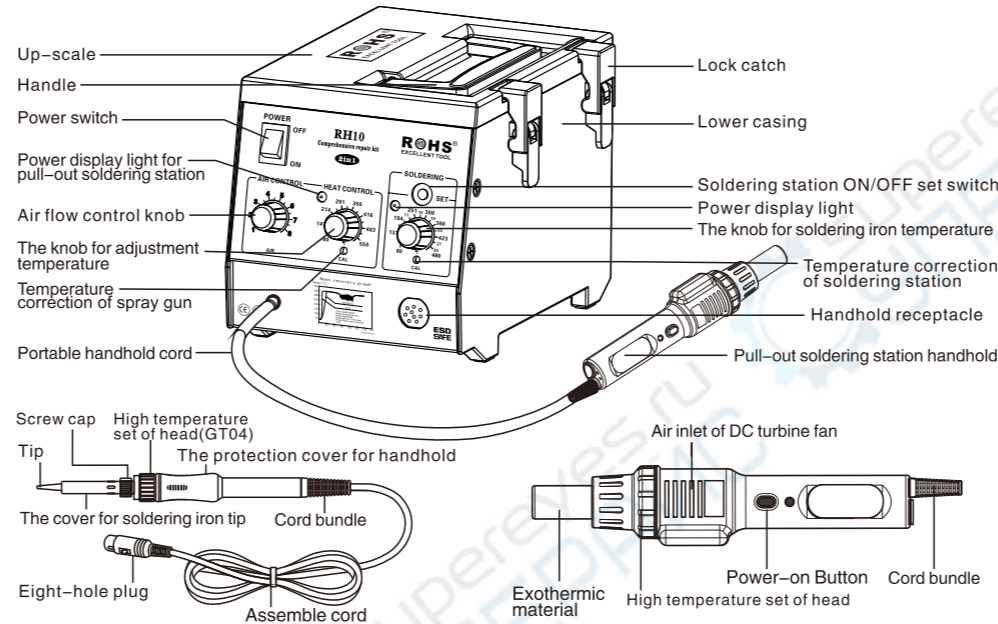
CAUTION

- Do not touch the metallic parts near the tip.
- Do not use the produce near flammable items.
- Do not face the spurt-tip to the worker face.
- Advise other people in the work area that the unit can reach a very high temperature.
- Turn the power off while taking breaks and when you are finished using it.
- While replacing parts or picking up this unit, shut off the power and unplug the power cord after cooling.
- Do not close the flammable, paper, or other flammable material, is damage to the worker. For new equipment, do not touch the heating tube or hot air spurting.
- Please avoid falling off or violent shaking for fear of damage.
- Instead of the exothermic material parts must be same parts in a opposite direction.
- Make sure turn off the power when you are not working.



⚠ Note: Turning off the power, the system continues sending cool air until the temperature is lower down to 100°C, protecting the elements from high temperature damage.

Part name



Operation

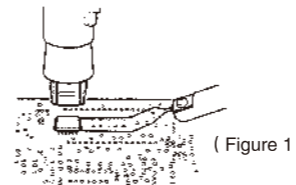
QFP Desoldering

A: Preparation for working

Choose the proper dimension(integration model, pull-out copper cord, spurt-tip and fixed them completely.

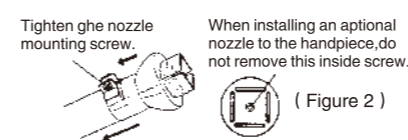
1. Place the FP pick-up under the IC lead.

Slip the FP pick-up wire under the IC lead. (Figure 1) If the width of the IC does not match the size of the FP pick-up, adjust the width of the pick-up by squeezing the wire. In case of PLCC or small components such as chip resistors, desolder by using tweezers, etc.



2. Attach the nozzle.

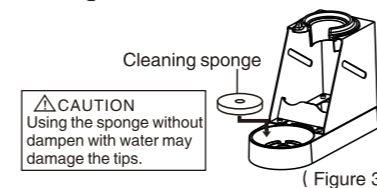
Loosen the nozzle mounting screw. Attach the nozzle as shown in the drawing. (Figure 2)



B. Iron holder

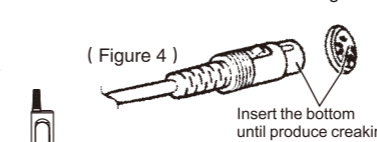
CAUTION: The sponge is compressed. It will swell when moistened with water. Before using the unit, dampen the sponge with the water and squeezed it dry. Failure to do so may result in damage to the soldering tip.

1. Small cleaning sponge
Dampen the small cleaning sponge with water and then squeeze it dry. Place it in one of the 4 openings of the iron holder base.
2. Add water to approximately the level as shown. The small sponge will absorb water to keep the larger sponge above it wet at all times. The large sponge may be used alone(w/o small sponge & water).
3. Dampen the large cleaning sponge and place it on the iron holder base.



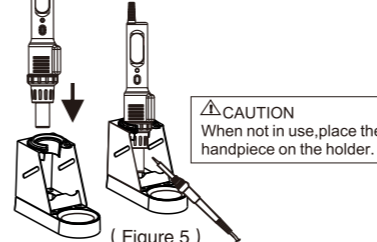
C. Soldering iron handle connection

1. Put the welding iron the bottom of receptacle.
2. Putting the soldering iron cord with the receptacle (picture 2).
3. Insert the pin into the handhold receptacle.



D. Electrical connection and power ON

1. Place the handpiece on the holder. (Figure 5)
2. Plug the power cord into a grounded wall socket.



CAUTION
This product is protected against electrostatic discharge. Be sure to use a grounded wall socket.

E. Turn on Operation

1. Connect power and remember to use the equipment after grounded;

For two-in-one comprehensive maintenance tool kit, there are two functions including the soldering station and de-soldering station, and it is possible to choose one and choose two of them together.

2. Turn on the power switch of host :

- Hot air welding gun station display;
The pulling station indicator is on, showing red, the system is in standby state, but it does not work.
- Soldering station display;
LED indicator light shows red, and the system is in standby state, but it doesn't work.

F. Operation Temperature

- HEAT CONTROL knob on panel is a knob for adjustment of temperature and the adjustable range is 80°C~550°C.
- SOLDERING knob on panel is a knob for soldering-iron of temperature and the adjustable range is 80°C~480°C. Rotate the knob right to increase temperature and left to decrease temperature.

G. Operation Air Quantity

AIR knob on panel is a knob for adjustment of air volume and the scope of air volume is grade 1-8. Rotate the knob right to increase air volume and left to decrease air volume. the pointer should point at the required air volume.

CAUTION: During the cooling process, the amount of air is controlled by the setting of the air flow adjustment knob. It recommends setting the knob at maximum when cooling for greatest efficiency.

H. Cleaning tin course

1. After temperature and air volume are set, keep pressing the start button to enter working condition;
2. If long-time work is required, continuously press the start button twice to maintain the working condition;

The indicator light displays blue when it is under working condition.

3. Heating

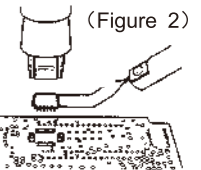
After the stability temperature, the pull-out equipment is on integration model, letting the tip shoot at the part by heating air melting (the spurt-tip is above the integration).

4. Remove the IC

Once the solder has melted, remove the IC by lifting the FP pick-up. (Figure 2)

5. Remove any remaining solder.

After removing the IC, remove remaining solder with a soldering iron and wick or desoldering tool.



I. Soldering station heating (soldering machine)

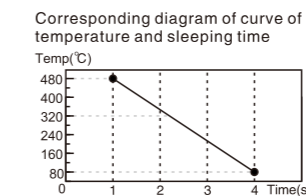
After the power supply is connected, open the power switch, press the SET key on the panel, and it enters the working state if LED lamp shows blue.

J. SLEEP function settings (soldering machine)

1. The initial setting is the setting without sleeping function.

After the power is connected, turn on the power switch, the indicator light of the power of soldering station soldering iron of turn red. Press SET key on laminated panel, LED light turns blue, the system is under the operating state without the setting of the sleeping function.

2. Setting of sleeping function: Under operating state, long press SET key, the LED light of soldering station turns purple (red plus blue), it enters the operating state with sleeping function. The sleeping time is 1-4 minutes. At 80°C, the sleeping time is around 4 minutes. At 480°C, the sleeping time is around 1 minute. The corresponding diagram of the curve of the temperature and sleeping time is shown as chart:



At 480°C, the sleeping time is 1 minute. When the electric soldering iron eaves unused for 1 minute and it enters the power saving mode. LED red and blue light twinkles. at this time the constant temperature of soldering station is 80°C. If it needs to be used, it only needs to touch handle to awake. It is still not used after enter power saving mode for 30 minutes, LED shows red. It means it is standby. If it needs to be used, press SET key of panel to enter operating state.

If the function with sleeping function and without sleeping function should be switched, under the operating state, long press SET key, it can be switched immediately.

3. Awake the sleeping of handle : Electric soldering iron enters sleeping state. It only needs to take the electric soldering iron again to restore the previous setup work.

K. Turn off Operation

- Soldering station of heat gun

a. If you want turn off please long press and hold the switch button , the LED light will be red, and the machine will stop heating. At this stage, do not unplug the power plug until the temperature inside the nozzle sleeve drops below 80°C, the fan will automatically shut down. After the fan stops working, the power switch can be turned off to prevent overheating damage to the heating element.


b. Automatic air supply of power switch completes, and the power cord must be unplugged under electric leakage to complete the work.


- Electric welding machine

a. When the system is in working state, press the panel SET setting button, the LED light will display red, and enter the standby state.

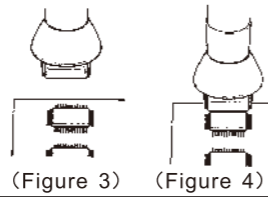
b. If the LED light of the desoldering station and the soldering station both are red, press the power switch, that is, turn off the power. After turning off the power switch, unplug the power cord to complete the work.

QFP Soldering

1. Apply the solder paste. Apply the proper quality of solder paste and install the SMD on the PWB.
2. Preheat the SMD. Refer to the figure 3 to preheat SMD.
3. Soldering. Heat the lead frame evenly. (Figure 4)
4. Cleaning. When soldering is completed, clean the residual flux from the board with an appropriate cleaner.
5. Keep pressing start button  to close the heating state

Long press and hold the switch button , the LED light will be red, and the machine will stop heating. At this stage, do not unplug the power plug until the temperature inside the nozzle sleeve drops below 80 ° C, the fan will automatically shut down. After the fan stops working then the power switch can be turned off .

6. Turn the power switch off. After the flowing function finished, turn off the power switch.



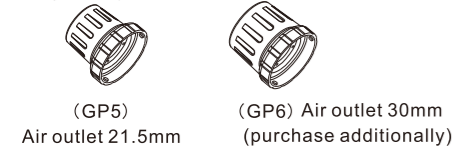
CAUTION
Soldering with hot air has many advantages, such as the inherent ability to pre-heat the component being replaced. As with any soldering process, however, there is always the possibility of forming solder balls, bridges between leads, and inadequate solder joints. Always inspect the finished solder joints for structural and electrical integrity.

Removable Accessories

1. Welding nozzle using:
Too high temperature will weaken the welding nozzle function, so choose the temperature as low as possible. The welding nozzle of restoring force is good, even under the low temperature it can also fully complete the welding work. What is more, it can protect temperature sensitive elements.
2. Do not use welding nozzle:
When do not use welding nozzle, do not let welding nozzle in high temperature condition for long time. Or you will make the flux of welding nozzle on change to oxide, which will make the heat conduction of welding nozzle weaker.
3. After use welding nozzle:
After the use, should wipe clean the welding nozzle and plate new tin layer on it to prevent the welding nozzle from oxidation.
4. Elding nozzle maintain; Check and clean the welding nozzle:
Note: do not file the oxide on welding nozzle with rasper!
 - a. The setting temperature at 250 °C.
 - b. After the temperature stability, clean the welding nozzle with cleaning sponge, and check it.
 - c. If welding nozzle on tin part contains black oxide, plate a new tin layer on the welding nozzle, then use cleaning sponge to wipe welding nozzle. So repetitive operation to remove the oxide and then plate a new tin layer on the welding nozzle.
 - d. If welding nozzle becomes deformation or serious erosion, must replace the welding nozzle with a new one (Suggest using the original nozzle).
5. Welding nozzle cleaning:
Should periodically clean the weld nozzle with the cleaning sponge (or with a cleaning wet cloth). Because after welding, the residual slag will produce oxide and carbide which can damage the welding nozzle or cause welding error or make the heat conduction of welding nozzle weaker. Long time continuously using welding nozzle, once a week the welding nozzle should be taken apart to clean the residual slag on the surface, so to prevent welding nozzle damaged and reduce temperature.
6. Extend the welding nozzle life:
 - a. After each finish the welding work, plate a new tin layer on the welding nozzle to prevent welding nozzle from oxidation and extend the using life.
 - b. Under the condition of normal working please set the temperature as low as possible. Low temperature can reduce welding nozzle oxidation, as well as can easily to weld components.
 - c. Only in necessary condition to use thin welding nozzle, because of the thin welding nozzle less durable than the coarse one.
 - d. Don't use welding nozzle as detection tools, because welding nozzle bending will make coating rupture and shorten its service life.
 - e. Use less active rosin flux, because the high content of active rosin will accelerate welding nozzle coating corrosion.
 - f. When not using welding nozzle, please turn off it's power as far as possible to prolong its service life.
 - g. Don't butt welding nozzle with great heavy stress, because that is not equal to faster heat.

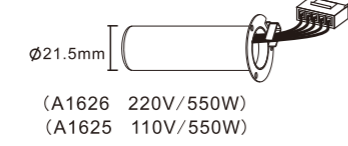
Removable Accessories

1. High temperature set of head:



High temperature set of head	GP5
High temperature set of head	GP6 (purchase additionally)

2. Exothermic material:



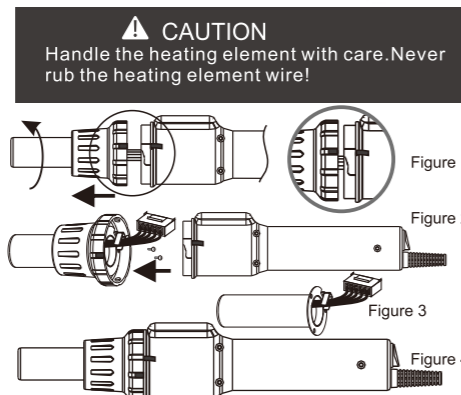
Exothermic material	A1625	110V/550W
Exothermic material	A1626	220V/550W

Maintenance/Inspection

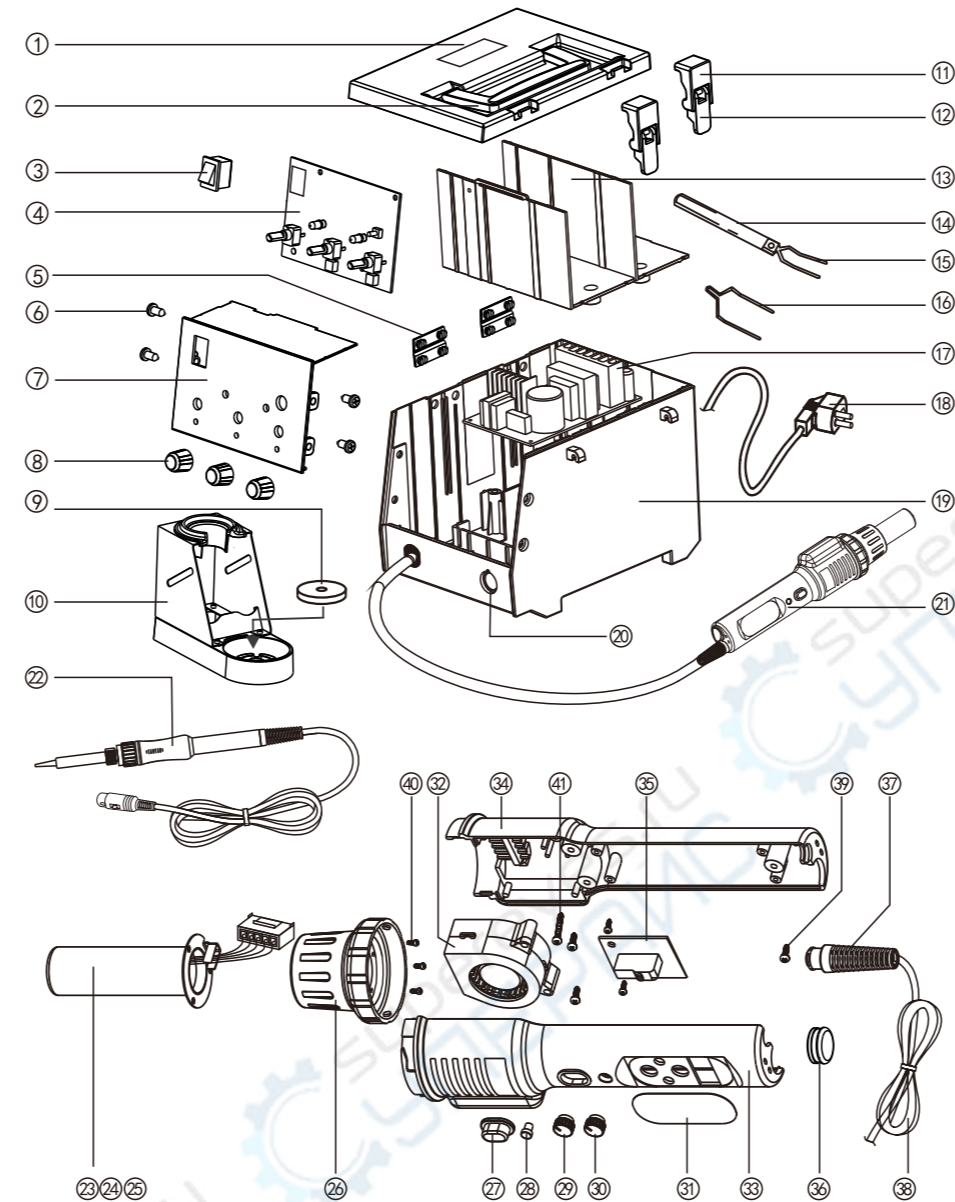
- Broken heating element

CAUTION
It is very dangerous to replace the heating element, and you must turn off the power and unplug the power plug, then follow the following procedures for replacement.

1. Take out the high-temperature casing head: firstly, rotate the casing head, and then take off it when the two mark at back are aligned (as shown in Figure 1).
2. Take off the 5P extension cord (as shown in Figure 2) connected with handle, then take off the 3 screws fixing sleeve of heating element, and last, take off the sleeve and heating element (as shown in Figure 3).
3. Replace new heating element as well as the sleeve.
4. Assembled to the original shape (as shown in Figure 4).



Parts list



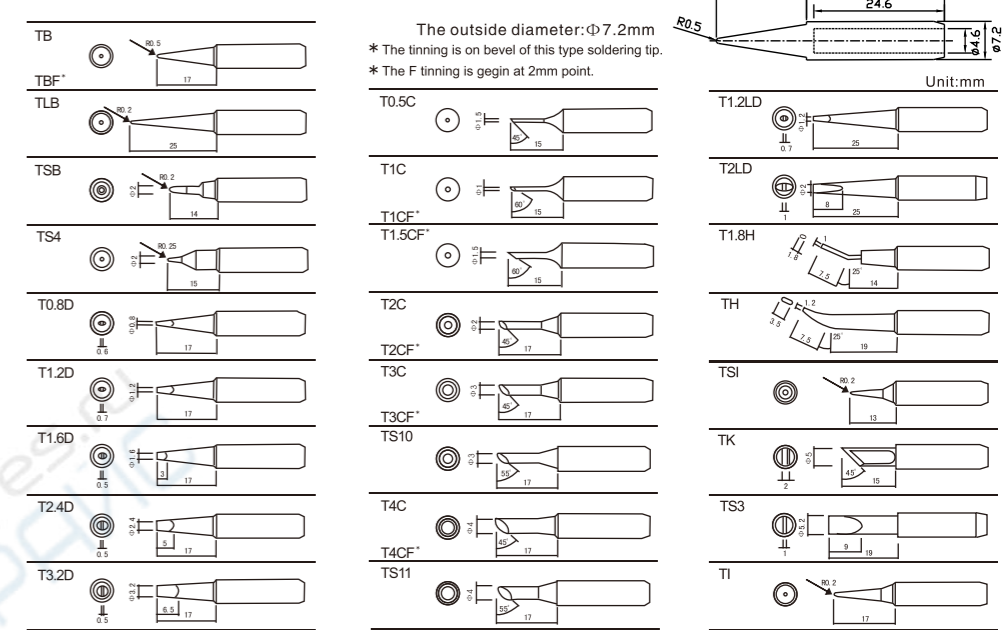
Comprehensive repair kit

Item NO.	Part No.	Part Name	Spec
①	SSJ00179	Upper casing	
②	SSJ00183	Handle	
③	DKG00002	Power switch	6A/250V
④	ZDL00059	PCBA pane With the parts'	
⑤	SSJ00187	Hinges	
⑥	WLS00070	Tapping screw 1	PA5*12
⑦	SSJ00181	Panel	
⑧	SXN00003	Knob	
⑨	BJZ00001	Clean sponge	
⑩	ZLZ00008	Soldering iron station L015	
⑪	SSJ00184	Upper locking fastener	
⑫	SSJ00185	Lower locking fastener	
⑬	SSJ00182	Storage shell	
⑭	ZBC00002	Extractor	
⑮	WWJ00087	Pull-out steel wire (minor)	
⑯	WWJ00086	Pull-out steel wire (major)	
⑰	ZDL00057	PCBA power panel	with parts
⑱	DXC00045	Power cord, 3wired cord&European plug	220V KTL230V CE
	DXC00008	Power cord, 3wired cord&Chinese plug	China
⑲	SSJ00180	Lower casing	
⑳	DCZ00019	Nine-hole aerial socket	with parts
㉑	CSB00049	Soldering iron handle	with parts

Hot-jet De-soldering station series

Item NO.	Part No.	Part Name	Spec
㉒	CSB00048	Portable Handhold(H91)	with parts
㉓	WGL00025	Heating element casing	
㉔	CFR00108	Heating element A1625	110V 550W
㉕	CFR00109	Heating element A1626	220V 550W
㉖	SSJ00147	High-temperature pullover	GP5
	SSJ00158	High-temperature pullover	GP6 (separately purchased)
㉗	SSJ00148	Start switch button	
㉘	SSJ00119	CAL stopper	
㉙	SSJ00149	Rotary knob 1	φ 9mm
㉚	SSJ00149	Rotary knob 2	φ 9mm
㉛	SMB00076	PVC panel	22*50mm
㉜	DDJ00007	DC turbo fan	40*40*20mm
㉝	SSJ00150	Upper casing	
㉞	SSJ00151	Lower casing	φ 44*176mm
㉟	ZDL00034	Printed circuit board	φ 44*176mm
㊱	SSJ00193	Rubber plug	φ 16.5
㊲	SSJ00001	Line set	Silicone
㊳	DXC00022	Handle-style spray gun line	Nine-core
㊴	WLS00060	Cross self tapping screw	PT2. 6*10mm
㊵	WLS00034	Cross machine screw	PM2*5mm
㊶	WLS00067	Cross self tapping screw	PA3*20mm

T Free-lead soldering tip series



OPTIONAL NOZZLES

CAUTION
The size in Name/ Specification indicates the size of IC package.

Unit:mm

● Air nozzle with vacuum function

N1125B QFP 10X10	N1126B QFP 14X14	N1127B QFP 17.5X17.5	N1128B QFP 14X20	N1129B QFP 28X28	N1135B PLCC 17.5X17.5 (44 Pins)
N1136B PLCC 20X20 (52 Pins)	N1137B PLCC 28X28 (88 Pins)	N1138B PLCC 30X30 (64 Pins)	N1139B PLCC 12.5X7.3 (16 Pins)	N1140B PLCC 11.5X11.5 (28 Pins)	N1141B PLCC 11.5X14 (32 Pins)
N1181B BQFP 19X19	N1182B BQFP 24X24	N1184B SOJ 18X8	N1185B TSOL 13X10	N1186B TSOL 18X10	N1187B TSOL 18.5X8
N1188B PLCC 8X9 (20 Pins)	N1189B PLCC 34X34 (100 Pins)	N1203B QFP 35X35	N1214B SOJ 10X28	N1215B QFP 42.5X42.5	N1257B SOP11X21
N1258B SOP7.8X12.7	N1259B SOP13X28	N1260B SOP8.8X18	N1261B QFP 20X20	N1262B QFP 12X12	N1263B QFP 28X40
N1264B QFP 40X40	N1265B QFP 32X32	N1470 BGA 8X8	N1471 BGA 12X12	N1472 BGA 13X13	N1473 BGA 15X15
N1474 BGA 18X18	N1475 BGA 27X27	N1476 BGA 35X35	N1477 BGA 38X38	N1478 BGA 40X40	

● Air nozzle without vacuum function

N1124B 2.5 Single	N1130 4.4 Single	N1131 SOP 4.4X10	N1132 SOP 5.6X13	N1133 SOP 7.5X15	N1134 SOP 7.5X18	N1170A 07 Single	N1110 10 Single
N1142B 1.5X3 Bent Single	N1183 SOJ 15X8	N1190 Dual Single 2.5X9.5 Pitch	N1191 SIP 25L	N1192 SIP 50L	N1325 Dual single 1.5X5-10 Adjustable pitch		

Front of air nozzle
Bolt φ 1.5 (I.D.)
Variable gaps between air nozzles

※ We are entitle to restore the produce capability & technique parameter, without noticing additional.