

Welcome to use **GORDAK** series rework station and soldering station produce in our factory.

● **Packing list:**

Main machine-----1

Soldering handle----1 (only soldering station have this)

Hot air handle-----1

Soldering stand (including clean sponge )-----1 (only soldering station have this)

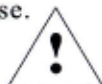
Hot air station stand -----1

Nozzle -----4

Manual---1

Maintenance card ---1

Please check and confirm the above items in the package when you purchase.

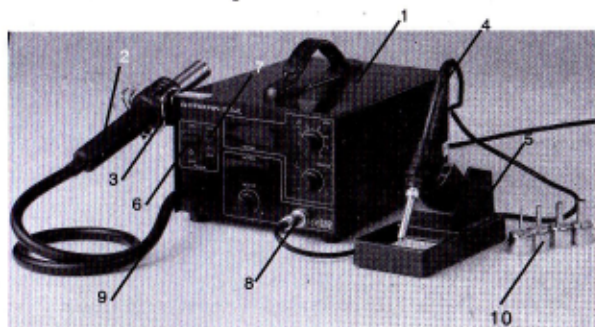


**WARNING :**

1. Read the manual carefully before you use this machine.
2. Ground must be connected for prevention of static release and released the pump securing screw on the button of the machine before use. Otherwise serious problem may occur.
3. Please connect the soldering iron handle first before turn on the power. Don't touch the connect part or turn on power before connect the handle, otherwise electric shock will be caused.
4. Don't put any other metal article or other things near the air outlet. Otherwise damage the machine or electric shock will be caused.
5. Please don't damage the item. Otherwise guaranteed service will be invalid.
6. Please contact with the supplier or find the Professional to mend it if the machine is in trouble. Non-professional is not allowed to open the box, preventing shock.
7. Please don't use the machine near flammable gas and liquid or other flammable goods like paper, preventing fire.
8. The outlet and tip are in high temperature when using. Never touch them or blow the body skin directly with the hot air. Otherwise hurt will be cause.
9. Please don't move the handle element inadvertent, dropping down or shaking violently. Otherwise damage the heating element or the machine.
10. The machine automatism cooling after shut off. Intelligent saving power when temperature is below 100°C. Please don't shut off or unplug the plug during cooling period.
11. This machine is zero loss after switch off. But in order to safe, please unplug the plug if it is not used for a long time.

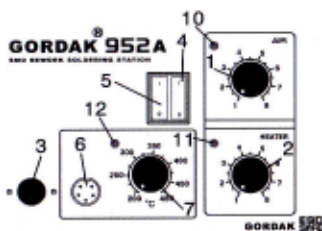
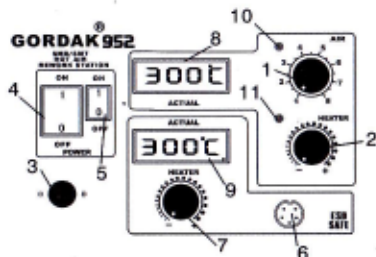
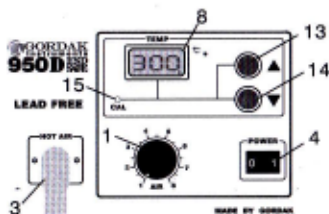
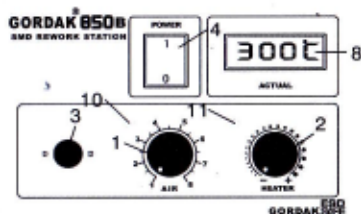
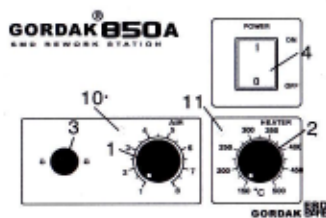
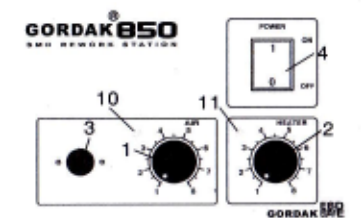
## Names of the parts:

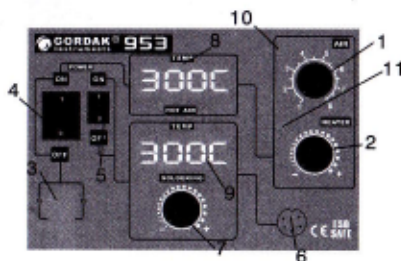
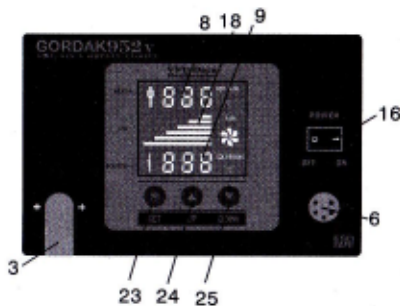
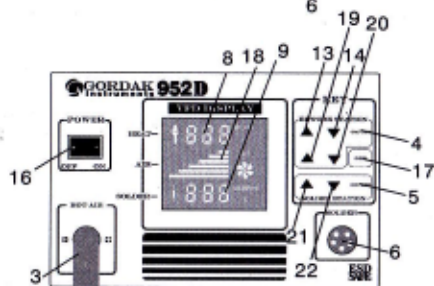
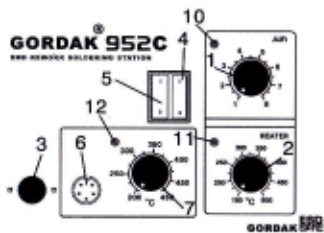
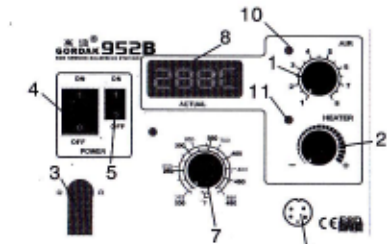
Take 952 for example:



1. Economy
2. Hot air handle
3. hot air handle stand
4. Soldering iron handle
- 5 soldering iron handle Stand
6. hot air station function button
7. soldering station function button
8. soldering handle connector
9. hot air handle pipe
10. nozzle

## **Above model introduce of the board:**





1.air speed setting button 2. rework station temperature setting button 3. hot air outlet pipe 4. rework station switch 5.soldering station switch 6.soldering handle connector 7.soldering iron temperature setting button 8.rework station temperature display screen 9.soldering station temperature display screen 10.air speed indicate light 11.hot air indicate light 12.soldering iron heating indicate light 13.hot air temperature setting "+"button 14.hot air temperature setting "-"button 15. hot air temperature calibration fine-tuning 16.the host start switch 17.data view 18. wind speed showing article 19.wind speed setting "+"button 20. wind speed setting "-"button 21.soldering iron temperature setting "+"button 22.soldering iron temperature setting "-"button 23.setting button 24.data setting "+"button 25.data setting "-"button

## Intelligent digital model breakdown self check code's meaning:

S-E	Sensor abruption or other relate electric breakdown
H-E	Heating element abruption and other relate electric breakdown
H-E <sub>(Flash)</sub>	Heating element high temperature is out of control, control board breakdown

### Use explanation

Machine use knobs to operation, just need to adjust the knobs could change the data of the machine, plugged in, switch on the corresponding function, the function will start to work, heater begin to heat.

### Below introduce the button type machine:

#### 1.950D

This model use knobs to control wind, move the knobs could change the speed, counterclockwise to reduce, clockwise to increase. When setting temperature, just need to press the function button could change the data., 13 is temperature setting "+" button and 14 is temperature setting "-" button, resolution is 1°C.

#### 2.952V

This model use microcomputer control, keyboard adopt 3 compound function design, with soldering and de-soldering function, could use separate or together.

Specific operation as follows:

The machine use 3 keyboard control, \* is setting button, UP is data add button, DOWN is data reduce button, when press the \* button, the VFD screen will show all the data for 1 second, if you want to change the data, then press the \* for longtime, then the machine will automatic go to the setting model, choose the function you need to change, then indicate light will flashing. Setting order is hot air temperature-hot air-soldering iron temperature-exit.

Hot air station and soldering station start and shut: you could start or shut each function as you need when you use.

Start and shut the hot air station:

Press the setting button "\*", then press the data "UP" button, then could close or start the hot air gun.

Close the soldering iron function:

Press the setting button "\*", then press the data "DOWN" button, then could close or start the soldering iron.

Notice: when the hot air station shut off, machine will automatic go to cool program, only the temperature cool lower 100°C. the air pump will stop to work, to cool the soldering handle and heater, so don't pull the plug at this stage.

### 3. 952D

This model use microcomputer control, 9 keyboard design, with soldering and de-soldering function, could use separate or together, with VFD color display, Specific operation as follows:

This model use 9 keyboard operate, press setting button "DISP", then the display will show all the data now setting for 1 second, if you need to change the data, just need to press the button you need, when operate, the machine will go to the data change mode automatic, the chose item light will flashing.

You could start or shut each function as you need when you use.

Start and shut the hot air station:

Press the hot air station ON/OFF(4), then could start or shut the hot air station.

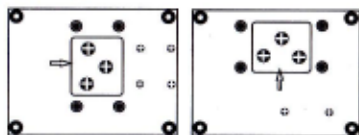
Start and shut the soldering station:

Press the hot air station ON/OFF(5), then could start or shut the hot air station.

Notice: when the hot air station shut off, machine will automatic go to cool program, only the temperature cool lower 100°C, the air pump will stop to work, to cool the soldering handle and heater, so don't pull the plug at this stage.

### Hot air soldering station use explanation

1. Before use, please remove the 3 screws at the bottom. Connect the machine and the handle and choose the right nozzle suitable for the integrated IC before use.



2. When installs the spray nozzle, put the nozzle into the air outlet, just light tighten the screws. When takes down the spray nozzle, just release the screws and take it off. If you need to replace the nozzle when using, please wait until it cool down. You can do it after it safe.

3. The heating element will begin to heat when you turn on the power after nozzle setting. When the temperature reaches the setting value, the heating indicate light will glisten.

4. Air flow setting: You can set it according to your need. We suggest you do not flowing the element be suitable. But please try your best to set the wind a little bigger to avoid low wind high temperature, because if you work for a long time in this state, the heater will damage very easier or have problem.

5. Temperature setting: We suggest you to adjust the temperature between 300 °C to 350°C, but it depend on your need. To prevent the sensitive unit or PCB, we suggest you reference the soldering tin melting point and use low temperature solder as possible. Please don't operate it in low air flow and high temperature for a long time. Otherwise damage the handle plastic element and reduce the service life of heating element in large scale.

6. You can carry on the hot air welding work after setting:

#### During tin removal process:

First put right amount soldering material on primary pin welding spot, then aim at primary pin welding spot with hot air from the nozzle to even heating. After the welding tin melt, use the IC pulls out device (or IC attracts pen) to take out primary devices like IC.

#### During welding process:

First, put right amount tin on the primary devices welding spot, then put the necessary install SMD on the PCB welding spot to pre-heating .Thirdly, spay hot air to primary device to welding. When welding finish, clean away the unnecessary welding material .Use hot air to weld is effective, but it may cause soldering material ball or cause connection of the material. We suggest you to check the welding unit carefully after welding.

When deal with the over processing SMD on the PCB, we suggest you clean away the unit leg's welding tin and the welding plate first when weld the SMD. You can weld the SMD after it smooth .That can enhance the welding quality and successful rate.

7. when deal with the big BGA, you could use hot air station, preheat station and mending stand to cooperate with the operation.



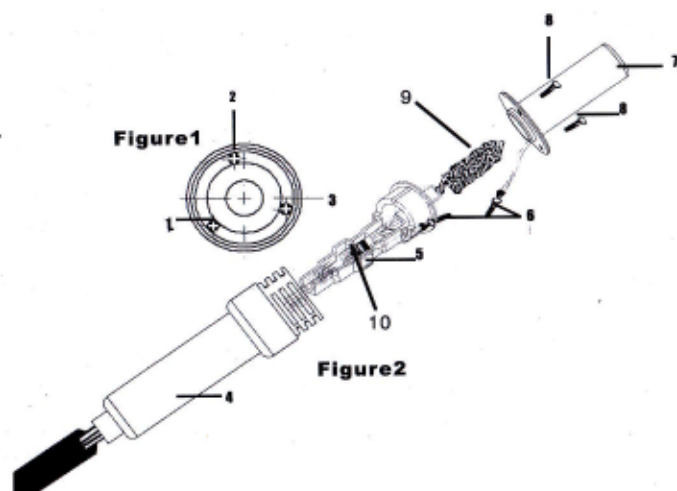
## **WARNING:**

The nozzle can't touch the leg of the IC when operate!

When using hot air station, ground wire must be connected to electrostatic discharge.

Please even heating primary devices and keep the nozzle in the same altitude when removal tin or welding of the SMD.

## **Replacing the heating element**



See chart 1: First anti-clockwise release the screws ((see 1, 2, 3 in chart ) inside the handle, then take out the steel pipe 7 outside. Secondly, separate part, then replace the heating element. After replace, assemble the handle on opposite procedure.

Like figure 2 show, you can see the element below after you open it: 4 is handle, 5 is heater stents, 6 is the ground line connect side, 7 is steel tube, 8 is fix screw of the tube, 9 is heater, 10 is heater connector.

## Heating element replace the instructions

Take out the soldering steel after open the handle elements, unplug the ground connection plug, taking out the heating element. Be careful the mica heat insulator in the pipe when extract.

Be careful to connect new heating material. Don't friction or press the heating element. According to dismantles

## Notice for replace heating element:

1. Please use our original element to replace after damage. Otherwise damage the machine or make the machine work unusual.
2. When connect the heating element leads, please connect each leads correctly and attention discrimination the polarity of sensor lead. There are four leads of the heating material. Two in sensor, there are open model and acme model according to the port model .Open model is the positive electrode of the sensor, acme port is cathode. The rest two are coupling of heating element.

3. Take out the heating material from the soldering iron steel pipe and make sure not damage the mica heat insulator in it. Please carefully inspect the mica heat insulator is perfect after replacing heating material each time. You must replace it first when finding damage. Otherwise serious leakage accident may occur.

Make sure the front of heating element not touch the front steel mesh. Otherwise serious leakage accident may occur

### **Replacing the fuse:**

Like figure show: take out the fuse box and change the same specification fuse.

(Please check the reason why the fuse damage before replacement.)

### **Soldering setting and use explanation**

Before use, please connect the soldering handle and the machine. Notice the connection gap position when connect. Tighten the outside nut after insert.

Put the soldering handle on the soldering station stand.

Setting the temperature, you can work after the temperature is stable.

### **Soldering station use notice:**

When the soldering station is working, the temperature of the tips reaches 200°C--480°C. It is very hot, wrong use may lead hurt or fire. Please comply with the following rules strictly:

Don't touch the tips and the near metal when using.

Don't use tips near the flammable goods. Notice the factory and other people the tips are very hot, accident may occur, so turn off the power when rest or not use.

Don't use the tips to do other operation except welding. Don't use the tip to rap the working desk. Otherwise damage the tips or heating element.

Soldering station or soldering iron will produce smog when using, so please keep good ventilate facility in working place.

Sponge is used to clean the tip. Before you use it, let it absorb water and then depress it dry. Otherwise it will damage the soldering tip.

Please put the soldering station on the stand if not use.

### **Maintenance and use of the soldering tip**

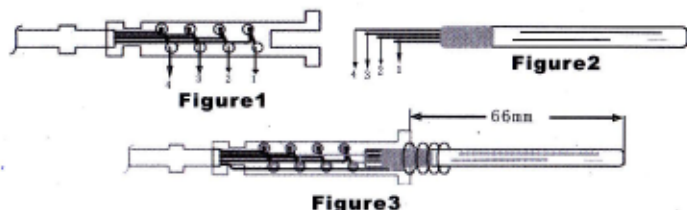


1. Choose a soldering iron with the solder have the bigger area. Why? Because the bigger can bring the effective heat transfers, let the missionary be able to swift jointing good quality soldering point.
2. When the first to use a new soldering iron tip, must at the 200°C after go along put on tin.
3. Clean the soldering iron tip regularly, long time to use, should disconnect soldering iron tip clean out the oxide compound every week to enhance the heating efficiency.
4. Avoid soldering iron tip suffer high temperature for along time if not use. That will lead the welding fluid on soldering iron tip translate into oxide, let soldering iron tip heating function greatly slack up.
5. Don't band the tip by your own, that will let embed face breakage, seriously damage the tip.
6. Adopt less active colophony welding fluid, high content active welding fluid will accelerate embed face corrosion, reducing the service life.
7. If necessity, please adjust the temperature of the tip again after replace the tip or heating element each time. Because there are different types of tips, they are made in different materials, having different size and other factors, so the temperature of them is different. Please refer the temperature distance coefficient of different types

Please contact us for different types of tips.

### **Replace the soldering station heating element:**

After the soldering station heating element damage, waits until it cool. Then remove the nut, tip enclosure, tip and nipple, extracts the connection board of the heating element outward (show in chart 1), welding the damage heater off. Then replace it.

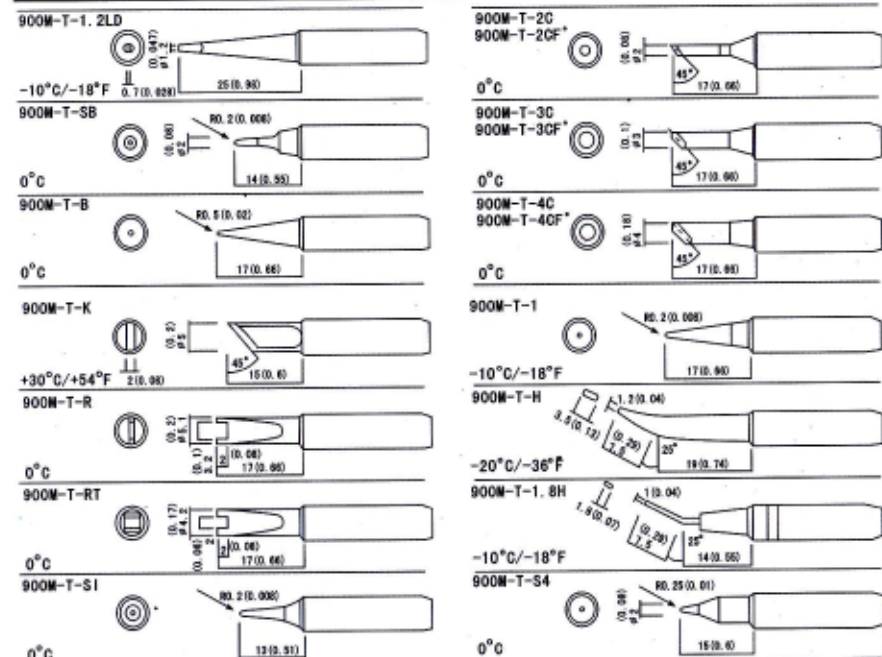


Like chart 1,2 show when replace. Connect the leads according to the same serial number. Don't connect wrong. There are 4 leads in the heating element. According to the length divide into: (1) and (2) are leads of heating element, the normal resistance value is 13Ω. (3) and (4) are sensor leads, the normal resistance value near 0 Ω. (3) is positive electrode of sensor, the cover is red. (4) is cathode of sensor, the cover is blue.

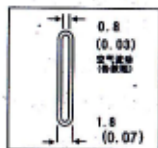
### Notice for replace heating element:

1. Please use our original element to replace after damage. Otherwise damage the machine or make the machine work unusual.
2. Pay attention to the polarity of sensor. Don't connect wrong. The heating element is ceramic, easy damage, so don't friction or press it. Like chart 3 show after replace, the heating element top to the distance between the

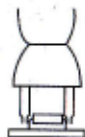
### Free to change the specs and size of tip to display the flat IC



Like the later page show:  
(If you need other size, please contact us.)



QFP



SOP



PLCC



A1124

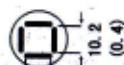
■ 形式



φ2.5 (内径)  
(0.09)

A1125

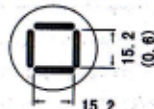
QFP10X10 (0.39X0.39)



10.2  
(0.4)

A1126

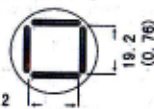
QFP14X14 (0.55X0.55)



15.2  
(0.6)

A1127

QFP17.5X17.5 (0.68X0.68)

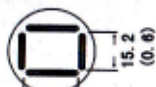


19.2

(0.76)

A1128

QFP14X20 (0.55X0.78)



21.2  
(0.83)

A1129

QFP28X28 (1.1X1.1)



28.2  
(1.11)

A1130

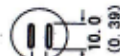
■ 形式



φ4.4 (内径)  
(0.17)

A1131

SOP4.4X10 (0.17X0.39)



4.8  
(0.19)