

## 2 IN 1 REWORK STATION



Thank you for choosing this type of tools. The product is designed for soldering and unsoldering without lead. Please read this Manual thoroughly before use, and keep it in a safe place for future reference.

## **A.2 in 1 Hot Air Unsoldering station Features**

### **(A).852 (8000)Series**

1. Use traditional high-precision thermocouple temperature measuring circuit, dual operational amplifier controls to ensure work stability, large power, heating quickly, the temperature accuracy and stability, without the wind effect, the real lead-free soldering.
2. Air gun heater using the latest technology (skeleton type), high-quality heater production, significantly improved the stability and reliability and significantly improve avoid to shocking and fighting performance ( traditional techniques use quartz glass, can not afford to drop and re- shock, in the transport and use of the process is very easy to damage), and working life much longer than the traditional type.
- 3, While the air gun heater using new technology to make air gun' s outlet wind way :the diaphragm pump and brushless fan are two ways the perfect combination of wind, when using a large nozzle a spiral air flow for the soft wind, when using a small nozzle, the air flow is strong rotating winds, and even air flow is adjustable to accommodate a variety of purposes.
- 4, The handle (Brushless fan model) equipped with a sensor switch, as long as the grip handle, the system can quickly enter working mode; handle back into the handle frame, the system will enter standby mode, real-time operating convenience, meanwhile may be extended heater life.
- 5, Brushless fan / diaphragm pump as the air source, extremely long life, low noise .
- 6, The iron part of the heating element of high quality, rapid heating and long service life; anti-static design, to prevent electrostatic damage to the delicate SMD components.

### **(B)862/872(8000A)series**

1. 862/872 series Integrate all merits of 852 series, use the newest microcomputer processor PID program control technology, the precise digital show air gun and the iron temperature, the power is change bigger, the elevation of temperature is rapid, it won't influence by the air output , It is realized lead-free unsoldering. The procedure tracks the air gun and the iron actual temperature by highly speed take the millisecond as the unit, the mysterious temperature compensation speed strengthen the temperature stability, the temperature static error has been small, temperature compensation is very quick, which could adapt each kind of adverse circumstance.
2. Air gun's use is in sole possession of safety protection, when the machine is starting, it will automatic detect whether handle is in the handle frame, to protect hidden danger because of the handle to fall , various part components of machine are also equipped with the comprehensive self-measuring ability, whole intelligent highly temperature, short circuit, opening, overload will display and protection function
3. User-friendly design. the parts of 862 series air gun are equipped with the manual/automatic function to be possible to carry on the establishment according to the use environment situation, when the air gun use is frequently, it may omit elevates temperature time repeatedly to choose manual , it is convenient and quick, to raise the working efficiency!
4. 872 series products according to different regions market demands, with designed °F/°C temperature display accurate conversion, according to the country person custom method used to select the display preferences;
- 5, The internal micro-processor core with SAMSUNG very few external components, with the latest SMT process, the whole signal flow of clarity, stability and security of the machine performance is further improved.

6, The iron according to different demands and requirements ,can customizable ordinary domestic and import high-quality white light heater core handle , two type handle.

### B.Specification

Model	852(8000) Series	862/872(8000A)Series
Power Consumption	700W	700W
Measurement	124*187*249MM	124*187*249MM/124*187*157MM
Weight	4.5kg	3.2kg/4.4kg
Working environment	0~50℃/0~122℉	0~50℃/0~122℉
Storage environment	-20℃ ~80℃/-68℉ ~176℉	-20℃ ~80℃/-68℉ ~176℉
Hot Air Reworks		
Airflow type	brushless fan gentle wind	diaphragm pump spiral wind
Air Flow	≤120L/min	≤24 L/min
Temperature Range	100℃ ~480℃/100℃ ~500℃	100℃ ~480℃/100℃ ~500℃
Temperature Stability	±1℃	±1℃
Display Type	Digital Analog Display	Digital Display
Handle length	≥100cm	≥90cm
Soldering Iron		
Temperature Range	100℃ ~480℃/100℃ ~500℃	100℃ ~480℃/100℃ ~500℃
Temperature Stability	±2℃	±2℃
Tip of ground voltage	<2mV	<2mV
Tip ground impedance	<2ohm	<2ohm
Display Type	LED/ Digital Display	Digital Display
Handle length	≥100cm	≥100cm

### C.Performance comparison table

Function \ Model	852(8000) Series		862/872(8000A) Series	
Model	852D	852D+	862D+	872D+
LED Display	One LED	Two LED	Two LED	Two-LED
Fahrenheit/Celsius conversion	NO	NO	NO	YES
Control Temperature type	Analog	Analog	Digital PID	Digital PID
Manual/AUTO.	NO	NO	NO	YES
High-temperature Protection	NO	NO	YES	YES
Send air type	Diaphragm pump / brushless fan	Diaphragm pump / brushless fan	brushless fan	Diaphragm pump



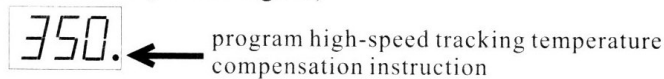
#### D.General Usage

- 1). Suitable for a various kind of soldering or desoldering (removals) purposes of the electronic components such as: SOIC, CHIP, QFP, PLCC, BGA, SMD, etc. (especially mobile phone's cable).
- 2). Shrinking, Paint drying, adhesive removal, thawing, warming, Plastic welding.

#### E.Operating instructions

##### (A)Hot air rework (brushless fan)operation

- 1.Unsoldering station will be a good place,connected air gun handle,the handle must be set in the handleracks, otherwise air gun will not work (it has the unique security features, effective prevention of air gun in unknown circumstances on hold in other parts of fire or other accidents ).
- 2.connected power supply ,the device the air nozzle (to make use of large-diameter nozzle)
- 3.open the air gun power switch ,display window dispalys “---” at this time desoldering station for standby .
- 4, Adjust the thermostat knob to set the desired temperature, pick up the soldering station handles, the soldering station heating normally and welding work. Work light (bottom right corner of 862 series of digital control, 852 Series LED light-emitting diode) when the temperature rising constant light,constant temperature with flashing, dropping temperature the light went out. Adjustment air volume knob to the suitable wind, the temperature can stabilize the normal operation. 862 Series lower right corner after constant light point high-speed digital pipe flashing, the program high-speed track the actual temperature compensation for air guns as milliseconds as a unit, air guns into temperature high-precision and extremely stability of constant temperature state. (Below figure)



- 5.work is completed,must be put the handle on the holder,at this time desoldering will automatic cut off the heating current into the body to send cold air cooling heating mode. When the temperature is below 100°C shows “---” desoldering station,that means the machine will enter into standby mode. When the heater temperature below 70°C,the machine enter into standby(when there are intermittent breeze,it means heater temperature higher than 70°C.Only the temperature is actually lower than 70°C, the air supply will stop working)

- 1, Unsoldering station is laid out, then set the pump at the bottom of the chassis transportation screws removed , otherwise the machine will issued a strong vibration or noise , will affect the machine overall performance. For transportation must be installed the fixed screw To prevent vibration during transportation or due to traumatic damage to pump.
- 2, Connect the power supply, the device required nozzle.
- 3 Turn on the power switch, then the machine will enter into normal work state, the display window will show the current actual temperature. Adjustable temperature knob to set the desired temperature, and the suitable airflow , temperature stable, can be normal operation.
4. The work is completed, please the handle put into the handle frame, turn off the corresponding power switch, the machine cut off the heating power, the display window crush out,enter into to send cool air cooling heating elements mode (period of about 2 minutes) to ensure that the heater body temperature lower than 70°C,soldering station automatic shutdown.
- 5, if long time do not use the machine, please unplug the machine power

Supply! Program high-speed tracking temperature compensation instructions.

### **(C) Soldering iron operation**

1. The soldering iron handle connected, it will handle on the iron frame.
2. Turn on the iron power switch, adjust the thermostat knob to set the desired temperature, in the heating process, the iron indicator lamp lit, when the light is flashing regularly, said the state into the thermostat, then can start working.

### **WARNING!!!**

In view of could cause serious injuries or fire accidents, please strictly observe the following:

1. Must be confirmed well- connected handle and the machine, after that open the power supply switch, all the parts removal or installed, must be turn off the power supply switch, then operate it (High-Pressure is dangerous!).
2. When the power supply is turned, the air gun or soldering iron outlet temperature higher than 100 to 480 degrees Celsius (212-896 degrees Fahrenheit); DO NOT touch metal parts of air gun or soldering iron, to replace nozzles or other parts of the tip, should turn off the power supply and cooling to room temperature, then operate it (High-temperature is risk!).
3. DO NOT use the machine near flammable things (Fire hazard is dangerous!).

### **F. Terms of use**

1. When turning on the main unit's power, the 'Hot Air rework's handle must be placed properly on the handle's rack.
2. Please ensure the Hot air's outlet is clear, must free from any blockages or obstructions. "---
3. After usage, the handle must be placed back on the handle's rack, let the unit cooling down (temperature gradually decreasing) until it displays "---" (Air flow Stop), then turn off the Hot Air power switch. (brushless fan)
4. The brushless fan comes with three standard nozzle sizes: large, medium, small. When using the smaller nozzle the Hot air volume must be adjusted to the maximum rate or set the temperature low and maintain it in a short time, to avoid prolonged use which could damage the Hot air unit.
5. In regards to the usage requirements, choose the appropriate Hot air flow, different Hot air flow will cause the temperature to be slightly different, and please maintain the distance between the outlet and the object must be at least 2 mm.
6. When the soldering iron used for the first time, pay attention to check the iron tip warming situation, let it temperature just be able to deepen the tin wire, then the iron tip layer deposited on the tin, then set to the desire temperature value.
7. Iron Tips temperature is not too high, high temperature will weaken tip function. Interval not in use, should be adjusted low temperature.
8. Should clean up iron tip by use of clean sponge periodically, after using it, please keep it clean, a new tin-plated layer to prevent tip oxidation.

### **G. Display Notes**

- A). When the LED digital displays "---", it means the outlet temperature is below 100°C; the hot air rework station is in standby mode, and the handle is placed on the handle's rack.
- B). When the LED digital displays "S-E", it means the soldering iron, Hot air rework's sensor is having a problem or handle is un-plugged, if this the case it needs to replace the heating element (heating core's element and sensor components).

### **H. Usage Notes:**

A) Use parts note:

- a). Only install nozzles when the unit is cool (room temperature).

B). When the first use the unit might started initially with white smoke, but this soon will go away.

**WARNING!**

- a). DO NOT install/Deinstall Nozzles with excessive force.
- b). DO NOT use pliers to pull the nozzle edge out, DO NOT tight the nozzle's bolt excessively.
- c). DO NOT use unit near flammable gas or liquid or any combustibile material WHATSOEVER especially when using the unit in high-temperature operation.
- d). DO NOT face the hot air outlet or touch the soldering Iron to the human body WHATSOEVER because it is very hot and can instantly burn the skin/body.

**B).Replacement Element**

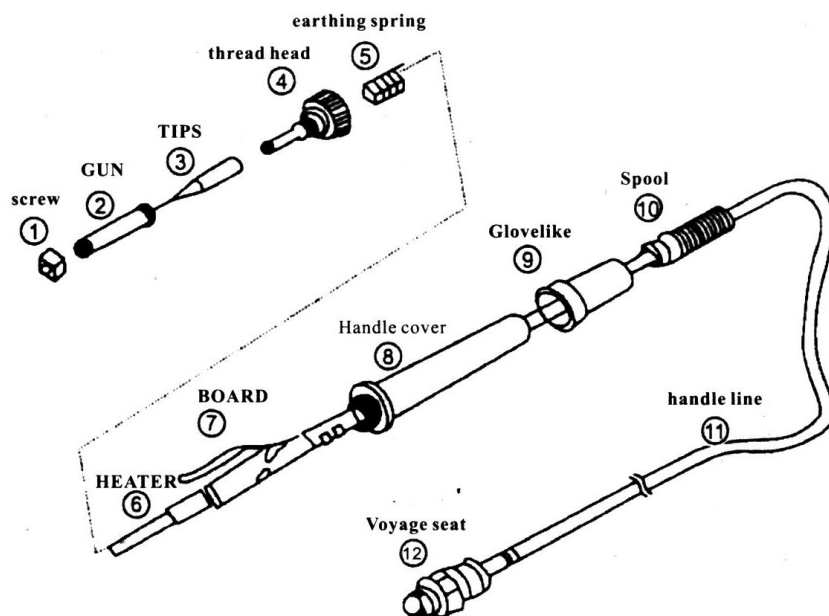
**Attention:**

- a). Replacement heater, be careful not to damage the grounding line! !
- b). Replace the cable should pay attention to the order and color, can not take a wrong! !
- c). Replace the same type of heater or heating core! !

**\*Machine through the standard tested, then the actual temperature of the aging test, part of the air gun steel barrel outlet slightly yellowish, are normal, hereby instruction!**

**I.Parts disassembly diagram**

picture 1.(soldering iron)

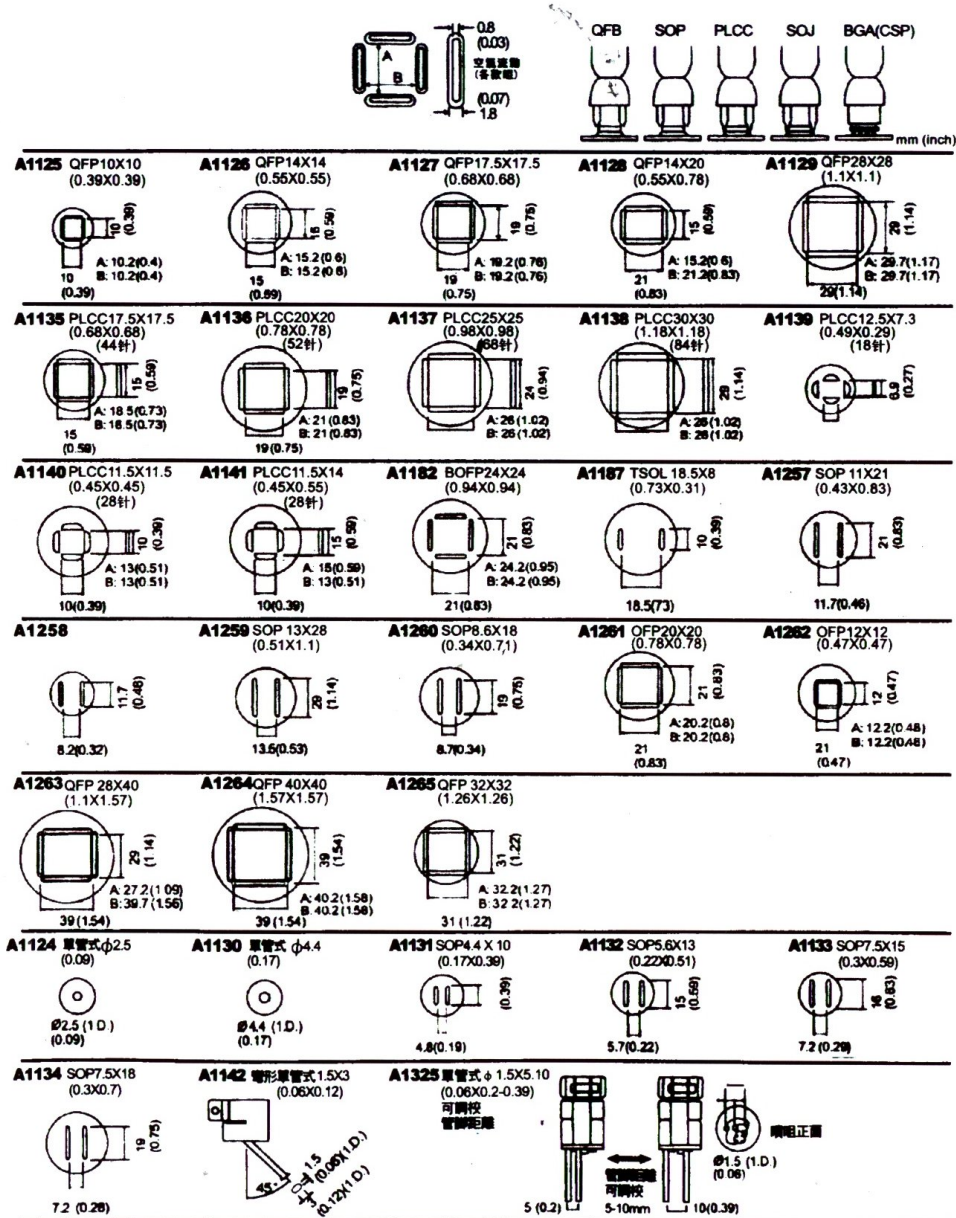




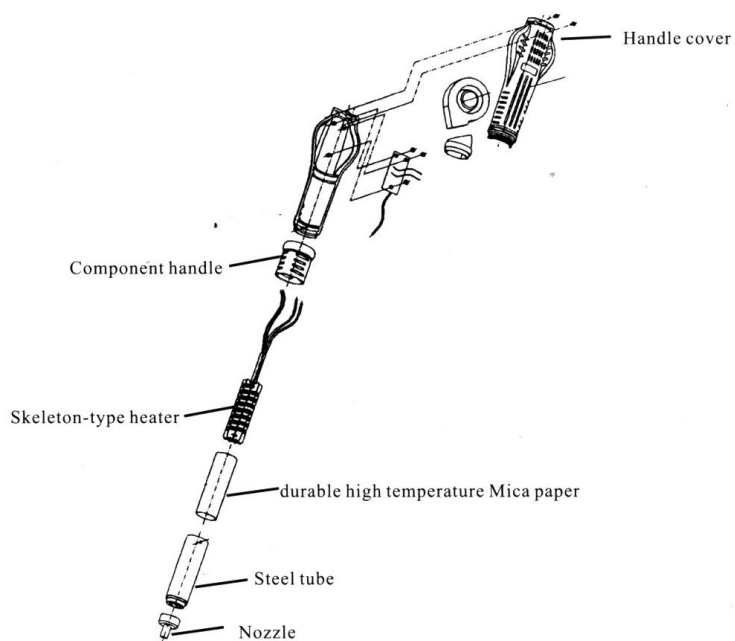
## common assembly parts

nozzels's specification and dimension

shows its IC dimension



**picture 2(Disassembly indicate) brushless fan**



**picture 3(Disassembly indicate) Diaphragm pump**

