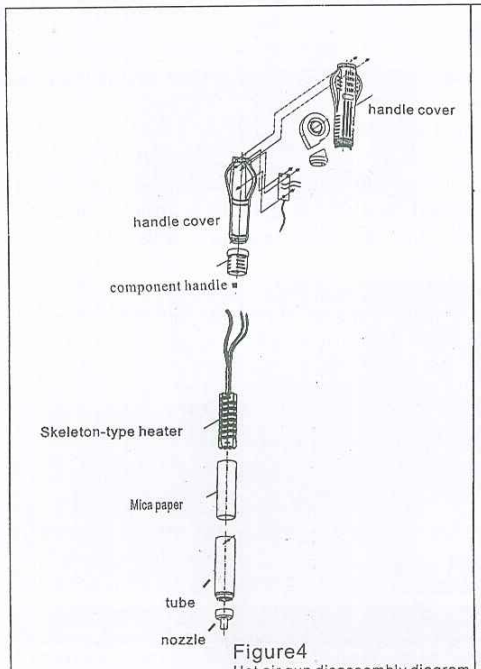

Figure4
Hot air gun disassembly diagram

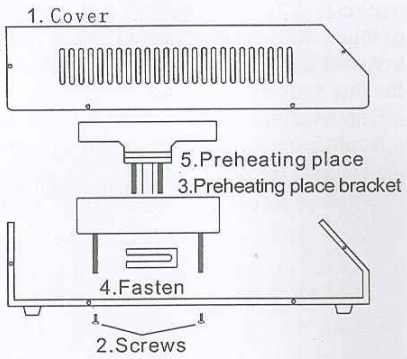

Figure6
Preheat plate disassembly diagram

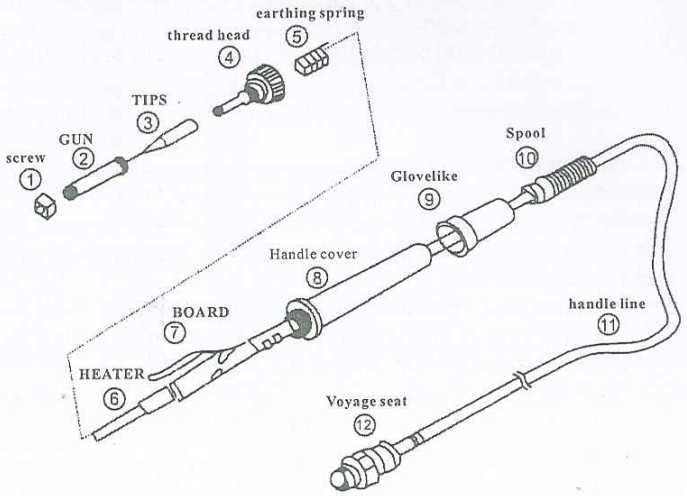

Figure5
Soldering iron disassembly diagram

H6 serise

Preheating station&Hot air reworks &soldering staiong combinationg

INSTRUCTION MANUAL

Thank you for choosing this type of Unsoldering Equipment with Hot Air. The product is designed for soldering and unsoldering without lead. Please read the User Guide thoroughly before use, and keep it in a safe place for future reference.

General Usage

1.Suitable for de-soldering and soldering BGA,SOIC,CHIP,QFP,PLCC package SMD IC, Particularly suitable for de-soldering BGA module ,computer motherboard north and south bridge, all kind of mobile phone motherboard SMT IC and LED lights.

2.Shrinking,Paint drying, adhesive removal, thawing, warming, Plastic welding etc.

Feature

1.Using microcomputer processor PID programmable temperature control technology, the program cycle every 20 milliseconds to detect the actual temperature of the heating element and a quick correction, rapid return temperature, temperature stability LED display, precise preheating station, air gun and soldering iron temperature.

2.Preheating station is to use a glaze layer having a high thermal effect, good thermal shock resistance of the ceramic as the substrate, high-quality nickel branded alloy wire once sintering. It has a high thermal effect, overall good ,good thermal stability, uniform heating, high dielectric strength, clean, easy to install and so on features.

3.Air Gun heater use ceramic heater, heating elements firmly wrapped around the model ceramic, rapid and uniform heating. Use the upgraded version fan, the airflow larger than the ordinary fan, spiral out of the wind, long life.

4.Soldering iron part using Hakko heater, heating up rapidly, temperature stability,long servic life; antistatic design to prevent electrostatic damage to delicate SMD components.

5.The machine has a self-test function full intelligent over-temperature, short-circuit,overload and fault display and protection functions.

6.853A preheating station practical and easy to operate,the card plate sliding bracket bearing technology,to move around treely durable, convenient card board,coupled with a fixed sliding bracket screws at the same time, the card board is solid and reliable.

7.853AA/ H6 preheating station using the user-friendly design, the cover affixed with a high-temp,insulated protection pads to prevent scalding operation.The stent uses magnetic induction technology, card board bracket to prevent protective pads suck hood above, can rotate 360 degrees, flexible card board, it is suitable for the circuit boards of different shapes and sizes.

8.853AA/H6 temperature correction function to adapt to the environmental impact: or replace the heating elements, soldering iron tips etc. spare parts caused by temperature deviation, can use this function calibration temperature.The correction temperature range is -50℃ +50℃.

9. 853AA/ H6 has Celsius/Fahrenheit temperature display function:meet different market needs to design the temperature display mod, you can choose under customary interest.

Specification

Model	853A	853AA	H6
Voltage	AC 220V ±5%	AC 220V ±5%	AC 220V ±5%
Max power consumption	500W	1200W	1270W
Measurement	220(W)×73(H)×247(D)mm	220(W)×80(H)×320(D)mm	220(W)×80(H)×320(D)mm
Weight	3.0Kg		
Working environment	0～50℃/0～122℉		
Storage environment	-20℃～80℃/-68℉～176℉		

Preheating station	
Temperature Range	50-300℃或50-400℃/122-572℉或 122-752℉
Temperature Stability	±2℃
Display Type	LED
Area	120x120mm

Hot Air Reworks	
Airflow type	无刷风机螺旋风
Air Flow	≤130L/min
Temperature Range	100℃～480℃/212℉～896℉
Temperature Stability	±1℃
Display Type	LED
Handle cable length	≥100cm

Soldering Iron	
Temperature Range	200℃～480℃/392℉～896℉
Temperature Stability	±1℃
Tip of ground voltage	<2mV
Tip ground impedance	<2ohm
Display Type	LED
Handle cable length	≥100cm

Performance comparison table

Function \ Model	853A	853AA	H6
Functional components	Preheating station	Preheating station +Hot air reworks	Preheating station +Hot air reworks+ Soldering station
Display type	LED	LED	LED
Fahrenheit/Celsius Conversion	NO	YES	YES
Temperature correction	NO	YES	YES
High temperature protection	YES	YES	YES
Gun Type	---	Brushless fan	Brushless fan
Control Temperature way	Digital PID	Digital PID	Digital PID

Operationg

1.Preheating station part

A.853A

1).Preheating station laid out⟶plugged

2).Move bracket card board will need to preheat the element is placed above the plate ⟶ move tighten the four screws on the bracket,tiexed need tto preheat components

3). —→set the appropriate temperature can be preheated

B.853AA/ H6

1).Preheating station laid out → plugged

2).Move bracket card board,select the appropriate orientation will need to preheat Note bracket above two pallets mouth.

Note that bracket above two card board ports,usually with the following,if use above bayonet,you need to preheat the components from the hot plate farther,preheat temperature is a little lower.

3).Open the master switch on the back of the chassis → the open the preheating stage switch,the preheat plate heating → set the appropriate temperature can be preheated

4). Preheat station, hot air reworks, soldering station can flexibility combination to use . Preheat station, hot air reworks, soldering station three functions are independent, you do not need to use

2、Hot air reworks part

1). The hot air gun rework station is laid out → handle frame is installed on the side of the chassis, air gun bracket rack installed in the back of the chassis → fixed to the handle in the air guns handle frame.

2).Open the back of the chassis whole switch → open air gun switch, air gun switch heating →press air gun temperature plus button "▲ or ↑ " and minus buttons "↓ or ▼" to set temperature → adjust the airflow knob to set the appropriate airflow → Gun to be wind indicator regularly means the flashing temperature stability will be able to normal operation.

3). After work, turn off the air gun switch, the machine automatically cut off the air gun heating body the power to enter the cooling heating element mode. When the temperature is below 100 ° C, the air gun display window goes off and stop the wind.

3.Soldering station part

1).The soldering iron handle → handle on the iron holder.

2).Open the soldering iron power switch, heating elements begin to heating → press soldering iron temperature plus button "▲or ↑ " and minus buttons" ↓ or ▼ "to set the appropriate temperature , when the soldering iron work indicator regular flash at high speed into the thermostat state can work properly!

3).After work, you can use the residue under high temperature cleaning sponge cleaning up the soldering iron lips and re-coated with a new layer of solder, the soldering iron into the iron hp;der can turn off the power!

4.Attached:technical article-Rework the process(for refeerence only)

Air gun with preheating station,to facilitate the large flat IC,dual-panel large components de-soldering.

● Remove the components

The successful rework first component removal location of the fault on mother board, and the solder is heated to the melting point,and then carefully scored the components from the board.

Heating control is key factor in the rework,the solder must be fully melted,so as to avoid injury in the removed component plate and copper.While the temperature is not too high, to prevent the circuit board is heated excessively caused Motherboard distorted.

● PCB and component heating

Advanced rework system uses a microcomputer to control the heating processs,with solder paste manufacturer specifications given parameters as possible, and using a combination of the top and bottom of heating.

Bottom heating to complement the board due to pass of heat, while elevated board temperature;the top heating is used heating components,in addition the use of coders bottom heater can be eliminated due to local over-heating the circuit board caused by distortions.

Motherboard heating can be used three methods, namely conduction, convection, and thermaleffe -rma effects. Conduction heating when the heat source with the motherboard contacts(for example, using a hot plate),which on the rear components of the circuit board not applicable(NA);The thermal effect of using an infrared(IR)energy,it is to be practical, but due to the board heating was proved is reword and assembled in the most effective and the most practical technology.

Components heating(or top heating)generally use a convection hot air nozzles,careful control of top heating components uniformly heated isextremely important,especially for small quality components is particularly critical(Figure 1).

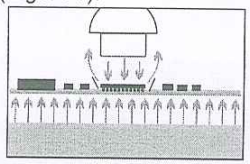

Figure 1

To pay attention to avoid rework station nearby components reflow or blow away small chip components,the hot gas stream discharged by the nozzle must be isolated with these elements, the thin layer of shielding plate or the mask can be put in the surroungding components of the reword station.Mask technology is quite effective,but more trouble consuming,but can be used dedicated BGA rework nozzles,it can reduce the damage to the components in the vicinity of the demolition components and circuit boards in the process of unsoldering.

Description for Function Setting

1.The temperature correction function setting(Figure 2)

In the case of the boot,to press the air gun and preheat the cool button for 3 seconds,then preheat window will show the factory default the correction temperature"00",If need to correct the working temperature of the preheating stage or electric iron, you can press button heating and cooling to make compensation of the respective temperature (compensation range:+50℃to-50℃). After4 seconds , the program and exit the automatic memory, display windows shows working temperature, the setting is completed.

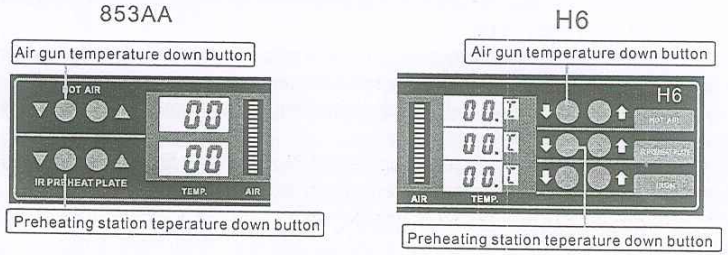

Figure 2

2.Celsius/Fahrenheit display the conversion feature setting(Figure 3)

In the case of the boot, pressing the air gun and the preheating station heating button for 3 seconds, then(853AA) the temperature display window shows"C or F", (H6) "C or F" are flashing in display window, then pressing air gun and preheat station warming button to set the status of Celsius or Fahrenheit, after set 4 seconds and the program is automatically memory setting and exit, the setting is completed.

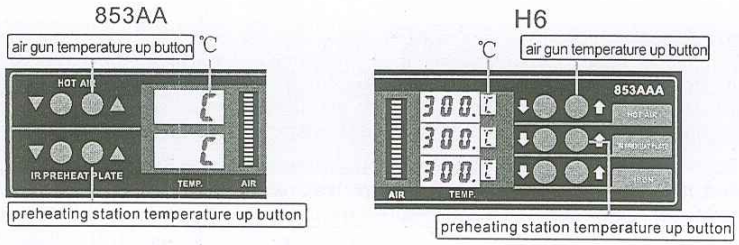

Figure3

WARNING

In view of could cause serious injuries of 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),the preheat plate surface temperature of 50-400 degrees Celsius(122-752 degrees Fahrenheit):DO NOT touch the air gun or soldering iron metal part and preheat plate near the chassis,aluminum mesh,to replace nozzles or the tips and the tips and other parts,should turn off the power supply and cooling to room temperature,then operate it(Hihg-temperaturn is risk!)
3.DO NOT use the machine near flammable things(Fire hazard is dangerous!)

Terms of Use

1.Please ensure the Hot's outlet is clear, must free from any blockages or obstructions.
2.After the work is completed , the air gun handle pot the frame or turn off air gun switch, the machine automatically cooled to display"---"stop the air,then turn off the whole device power switch in the back of the chassis.
3.When using the machine standard three nozzles:big,middle,small nozzles other than the smaller nozzle,must separate air volume was djusted to the maximum use of a lower temperature and in a short use.Avoid prolonged use of the damage to the air gun.
4.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 oulet and the object must be at least 2 mm.
5.When the iron is used for the first time,please pay attention to check the iron tip warming condition, when the tip can melt the tin wire,please plate some tini on tip,then adjust to the desired temperature.
6.The tip temperature should not be too high,too high temperature would weaken the tip function. when interval using ,can lowering the temperature.
7.Should be regularly use clean sponge to clear soldering tip, after finish use ,should wipe clean soldering iron tip,plate new tin to prevent soldering iron tip oxide.
8.Preheat plate non-turn on the water structure, therefore, do not install the storage and use of contact with oil,water,and plastic pellets to prevent leakage and other security risks.
9.The preheat plate should avoid being forced to tap or hard objects collided causing tiles fracture, alloy resistance wire exposed affect the operating life.
10.The preheat plate DO NOT for prolonged use,and prevent chassis overheating.

Special Instructions:

Dear User! Our air gun and soldering iron handle adopt high strength stainless steel tube, the machine must be inspected or calibrated four times in normal working condition during the production process,the copper tube could be slight yellowing due to high temperature!When use the new machine first time, it is normal that the steel tube at tube at a slight yellowing, please be assured!

The do's and don't s

1.DO NOT install/De-install Nozzles with excessive force.DO NOT use pliers to pull the nozzle edge out,DO NOT tight the nozzle's bolt exessively.
2.Only install nozzles when the unit is cool(room temperature)
3.DO NOT use unit near flammable gas or liquid or any combustible material WHATSOEVER especially when using the unit in high-temperature operation.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.When the first use the unit might starte initially with white smoke. but this soon will go away.
4.Replacement heater,be carful not to damage the grounding line!
5.Replacement the cable should pay attention to the order and color, can not.

Display Notes

A. When the LED digital displays"---", it means the outlet temperature is below 100℃; the hot air rework station is 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 and 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)

Interchangeable Component Desiption

A.Replacement of Hot Air rework heating element(Figure 4)
1.Ensure the Hot Rework is fully cooled down before replacing the element.
2.Figure, loosen the two screws on the handle.
3.Turns the handle antic-clockwise until it comes off and then remove the handle's cover.
4.Gently takes out the fan,loosen the three screws to remove the fixed wiring board.
5.The wiring board vice versa, apart from the heater wiring board connection cable, pay attention to the connection location.
6.Remove from the heat pipe heat body with mica paper,careful not broken ground wire of the steel.
7.Wraps well with the new heater mica,inserted into the tube, the attention heater to install in place.
8.According to the original location of the connection to connect heater.
9.When the revers process by open bottles and handle back.
B.Replacement of the soldering iron's tip and soldering iron heating core's element(Figure5)
1.Unscrews the nut NO.1,and then removes the steel tube NO.2,followed by removing the tip which is going to be replaced.
2.For the replacemnet of heating core's element can be performed by unscrewing the plastic cap NO.4,pulls out gently the heating core's element NO.6 along with the circuit board NO.7, please carefully remember the connection of spring NO.5.
3.The iron core from the circuit board welding, the replacement of the heating core, can be fitted well.Note that the order of the iron corewire connection.
C.Replacement of the preheating plate(Figure6)
1.Remove the topo cover1.
2.Unscrew the screws2.
3.Remove the warm-up bracket.
4.Pull out the clamp.
5.Remove the preheated plate.

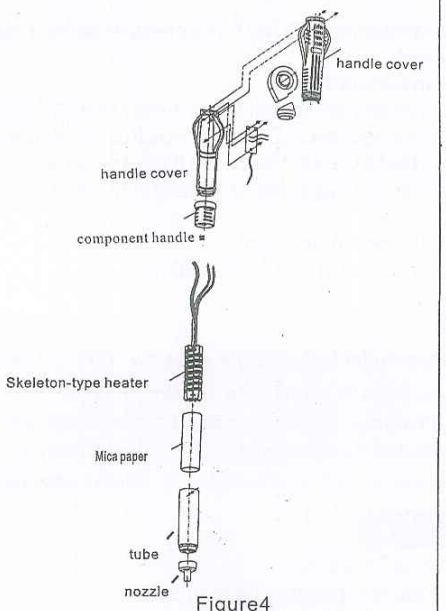

Figure4
Hot air gun disassembly diagram

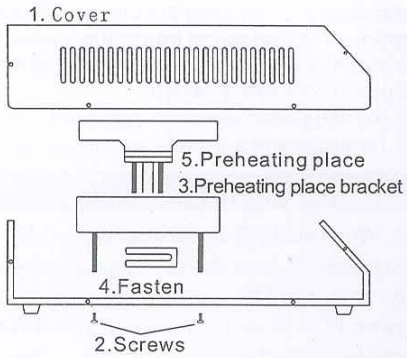

Figure6
Preheat plate disassembly diagram

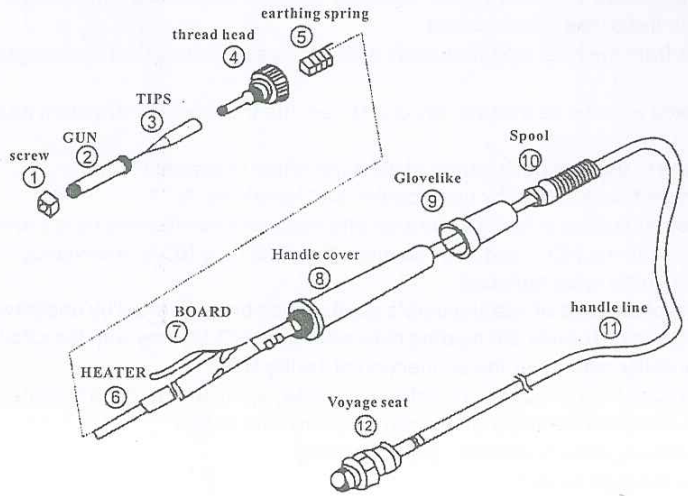

Figure5
Soldering iron disassembly diagram

H6 serise

Preheating station&Hot air reworks &soldering staiong combinationg

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