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SMD REWORK STATION

CSI 906

Instruction Manual

Caution !

Please remove the pump securing screw (M5 x1 0 marked red)

from the bottom of the station.

Failure to do so may result in serious problems

INSTRUCTION

FEATURE:

- this product designed is aimed at repairing of BP. Mobile phone and other communication apparatus.
- Multi-functional design of protecting against static electricity . to prevent any damage from leaking electricity.
- The ceramic heating element and advanced RTD sensor are im – port from JAPAN. They accurately control the temperature, and they also can rise the temperature to a high Level in a very short time, big adjustable range of air as well. The mode and specification of iron and heating element are same as the ones of any intemational brand name brand name , so they can be exchanged very easily.
- After the power switch is turned off , an automatic blowing function would keep sending cool air in order to prolong the life of the pipe and handle.
- INSTALLATION AND OPERATION:

1. to set the hot air tool and iron holder, as well as suitable angle of them
2. to connect the 5pins socket that located just under the iron tool and the station, and in the left side.

CONTROL STATIO

In the right side of the control panel, there is the control part of the hot air soldering that is around by the golden square frame. Under it, there has a big switch , two liner stepless adjustable knob . one is AIR that adjusts the airflow, another one is HEATER that adjusts the temperature .In the left side of the control panel, there is the control part of the iron tool. The small knob is the power switch for iron, and the left one is the liner stepless adjustable knob for adjusting the iron's temperature

Operation instruction

PRECAUTION

1.thermal protector

For safety, power is automatically shut off should the unit exceed a certain temperature once the temperature has dropped to a safety level, power is automatically turned on.

Turn of the switch and cool the iron. after that, to continue operation, reduce the temperature setting or increase the air flow . should the thermal protector be tripped and you do not continue the operation or if you leave that place, be sure to turn the POWER SWITCH OFF.

2.Caution-High Temperature Operation.

Do not use the soldering station unit near ignitable gases, paper, or other inflammable materials, both the nozzle and the heated air are extremely hot and can cause painful burns, never touch the heater pipe or allow the heated air to blow against your shin. initially, the iron may emit white smoke, but this will soon disappear.

3. after use, be sure to cool the unit

after turning off the power switch , the unit will automatically blow cool air through the pipe for a shirt period of time .do not disconnect the plug during this cooling process.

4. never drop or sharply jolt the unit

the pipe contains quartz glass, which can break if the unit is dropped or jolted sharply .

5. do not disassemble the pump.

6.disconnect the plug when you don't use the unit for a long time.

When the power cord is connected into the power supply the unit has a little flow of electricity, even the power switch is in off position . so when you don't use the unit for a long time ,disconnect the plug.

OPERATION INSTRUCTION

QFP Disoldering

1. plug the power cord into the power supply

after connection the automatic blowing will shart sending air through the pips but the heating element remains cool.

2. Turn the power switch on

the power switch may be turned on at any time while the automatic blowing function is operating . once the power switch is turned on the teating element will begin to warm up .

3, adjust the air flow and temperature control knobs

after adjusting the airflow and temperature control knob , wait for the temperature to stabilize for a while. Refer to the temperature distribution chart , for your reference, we recommend you to adjust the temperature around 300 ℃to 350℃ , as for airflow in case of single nozzle, set the knob 1-3, in another nozzle, set it from 4-6, when using a single nozzle, never set the temperature control knob to higher than 6

4. place the FP Pick-up under the IC lead

slip the pick- up wore under the IC lead. If the width of the IC dose not match the size of the size of the Pick-up , adjust the width of the wire by suppressing the wire.

5. Melt the solder

hold the iron so that the nozzle is located directly over, but not touching the IC , and allow the hot air to melt the solder, be careful not to touch the leads of the IC with the nozzle.

6, Remove the IC

once the solder has melted , remove the IC by the FP Pick- up.

7. Turn the power switch off

after the power switch is turned off, an automatic blowing function begins sending cool air through the pipe in order to cool both the heating element and the handle. So do not disconnect the plug during this cooling process.

In case you don't use the unit for a long time , disconnect the plug.

8. Remove any remaining solder.

After removing the IC remove remaining solder with a wich or desoldering tool.

NOTE: In case of SOP, PLCC, desolder it by using tweezers, tec

QPF Soldering

1. **Apply the solder paste.**
   Apply the proper quantity of solder paste install the SND on the PWB
2. **Preheat SMD**
   Refer to the photo to preheat SMD (Fig . 1)
3. **Soldering**
   Heat the lead frame evenly (Fig II)
4. **Washing**
   When soldering is completed , wash away the flux

NOTE : while there is merits to solder by hot air, it's also possible to cause the defects such as solder balls, solder bridges. We recommend you to examine the conditions of soldering sufficiently.

REPLACEMENT PARTS

NO	DESCRIPTION/ SPECICATION
A1143	100V/ 250W Heating Element
A1144	110V/ 250W Heating Element
A1145	120v/ 25W Heating Element
A1146	220V-240V/ 250W Heating Element

REPLACING THE HEATING ELEMENT

1. remove the screws, slide the tube.
   Remove the 3 screws (Fig.I-1, 2, 3)which secure the handle and slide the cord tube.
2. open the handle
   disconnect the ground wire sleeve (Fig.II-1) and remove the pipe. In the pipe, the quartz glass and heat insulation .Do not drop or miss it.
3. Remove the Heating Element.
   Disconnect the terminal (Fig II-2)and remove the Heating Element
4. Insert a new Heating Element.
   Handle it with care ,Never rub the Heating Element wire , insert a new Heating Element and reconnect the terminal .Reconnect the ground wire after replacing the element .Assemble the handle in the reverse order of disassemble. Insert the handle's projection into the hole in the pipe.

Temperature Distribution Chart

Test criteria ㊣A1124-A1129) Measured at the point 3mm from the Nozzle by recorder. Room Temperature 23℃ (73.4℉)

A1124 (Single Φ 2.5)(0.09inch)

Airflow	airflow 4
Temperature	airflow 1
Celsius	airflow 6
	Airflow 8

Temperature control knob

A1125(QFP 1 0 x 10)

Air

Temperature

Celsius

airflow 4

airflow6

Airflow8

Temperature control knob

A1126(QFP 14x 14)

Air

Temperature

Celsius

airflow 4

airflow6

Airflow8

Temperature control knob

A1127(QFP 17.5x 17.5)

Air

Temperature

Celsius

airflow 4

airflow6

Airflow8

Temperature control knob

A1128(QFP 14 x 20)

Air

Temperature

Celsius

airflow 4

airflow6

Airflow8

Temperature control knob

A1129(QFP 28x 28)

Air	
Temperature	airflow 3
Celsius	airflow4
	Airflow6
	Airflow8

Temperature control knob,

Test criteria (A1130-A1142) Measured at the point 3mm from the Nozzle by recorder Room Temperature 21℃ (67℉)

A1130[Single ϕ (0. 17inch)]

Air	airflow 1
Temperature	airflow 4
Celsius	airflow6
	Airflow8

Temperature control knob

A1131(SOP 4.4x10)

Air	airflow 1
Temperature	airflow 4
Celsius	airflow6
	Airflow8

Temperature control knob

A1132(SOP 5.6x13)

Air	airflow 2
Temperature	airflow 4
Celsius	airflow6
	Airflow8

Temperature control knob

Test criteria (A1133-A1142) Measured at the point 3mm from the Nozzle by recorder Room Temperature 21℃ (67℉)

A1133(SOP 7.5x15)

Air	airflow 2
Temperature	airflow 4
Celsius	airflow6
	Airflow8

Temperature control knob

A1134(SOP 7.5x18)

Air	airflow 4
Temperature	airflow 5
Celsius	airflow6
	Airflow8

Temperature control knob

A1135(PLCC 17.5x17.5) 44PINS

Air	airflow 4
Temperature	airflow 5
Celsius	airflow6
	Airflow7-8

Temperature control knob

A1136(PLCC 20x20) 52PINS

Air	airflow 4
Temperature	airflow 5
Celsius	airflow6
	Airflow7-8

Temperature control knob

A1137(PLCC 25x25) 68PINS

Air	airflow 4
Temperature	airflow 5
Celsius	airflow6
	Airflow8

Temperature control knob

A1138(PLCC 30x30) 84PINS

Air	airflow 4
Temperature	airflow 5
Celsius	airflow6
	Airflow7-8

Temperature control knob

A1139(PLCC 7.3x12.5) 18PINS

Air		airflow 5
Temperature		airflow 6
Celsius	airflow4	airflow7-8

Temperature control knob

A1140(PLCC 11.5x11.5) 28PINS

Air	airflow 4
Temperature	airflow 5
Celsius	airflow6
	Airflow7-8

Temperature control knob

Caring and using of Soldering iron

Turn on the Power Switch

The heater lamp blinks on and off when the tip temperature reaches the set temperature. The unit is now ready to perform soldering work.

Temperature of welding tip

High soldering temperatures can degrade the tip. Use the possible lowest soldering temperatures. The excellent thermal recovery characteristics ensure efficient and effective soldering even at low temperatures. This also protects the soldered items from thermal damage.

Cleaning

Clean the tip regularly with a cleaning sponge, as oxides and carbides from the solder and flux can form impurities on the tip. These impurities can result in defective joints or reduce the tip's heat conductivity.

When using the soldering iron continuously, be sure to loosen the tip and remove all oxides at least once a week.

This helps prevent seizure and reduction of the tip temperatures.

When Not In Use

Never leave the soldering iron sitting at high temperature for long periods of time, as the tip's solder plating will become covered with oxide, which can greatly reduce the tip's heat conductivity.

After Use

Wipe the tip clean and coat the tip with fresh solder. This helps prevent tip oxidation.

Maintenance

Inspection and cleaning the welding tip

1. Set the temperature to 250℃ (482℉)
2. When the temperature stabilizes, clean the tip with the cleaning sponge and check the condition of the tip

3.If there is black oxide on the solder-plated portion of the tip, apply new solder(containing flux) and wipe the tip on the cleaning sponge. Repeat until the oxide is completely removed. Coat with new solder.

4.If the tip is deformed or heavily eroded replace it with a new one.

Caution: Never file the tip to remove oxide

Calibrating the Iron Temperature

The soldering iron should be recalibrated after changing the iron, or replacing the heating element or tip.

1.Connect the cord assembly plug to the receptacle on the station.

2.Set the temperature control knob to 400℃ (750℉)

3.Turn the power switch to "ON" and wait until the temperature stabilizes. Remove the CAL pot plug.

4.When the temperature stabilizes, use a straight –edge (-) screwdriver or small plus (+) screwdriver to adjust the screw (marked CAL at the station) until the tip thermometers indicates a temperature of 400℃ (750℉) Turn the screw clockwise to increase the temperature and counterclockwise to reduce the temperature. Replace the CAL pot plug.

Note: we recommend the 191/192 thermometer for measuring the tip temperature

Tips

The tip temperature will vary according to he shape of the tip. The preferred method of adjustment uses a tip thermometer. (See "calibrating the Iron Temperature" on page 3).

A less accurate method involves adjusting the temperature control knob according to the adjustment value for each tip.

Example: when using a 900M-T-H tip at 400℃(750℉),the difference between this tip and a 900M-T-B tip is -20℃(-36℉)
Set the temperature control knob to 420℃ (786℉)
Refer to the chart for the correct adjustment values on page 15.

Troubleshooting Guide

WARNING: Disconnect the power plug before servicing.
Failure to do so may result in electric shock.
If the power cord is damaged, it must be replaced by the Manufacturer, its service agent or similarity qualified Person in order to avoid personal injury or damage to the Unit.

Problem 1: the heater lamp does not light up
Check 1.Is the power cord and /or connecting plug disconnected?
Reconnected!
Check 2. Is the fuse blown?
Determined why the fuse blew and eliminates the cause, then replace the fuse.
a. Is the inside of the iron short – circuited?
b. Is the grounding spring touching the heating element?
c. Is the heating element lead twisted and short-circuited?

Problem 2 : The heater lamp lights up but the tip does not heat up
Check 3. Is the soldering iron cord broken?
Refer to 'checking for breakage in the cord assembly .
Check 4. Is the Heating Element broken?
Refer to 'Checking for breakage in the heating element .

Problem 3 : The tip heats up intermittently
Check3

Problem 4: The tip is not wet

Check 5: Is the tip temperature too high?

Set an appropriate temperature

Check 6: is the tip clean

Refer to 'Tip Care and Use'.

Problem 5: The tip temperature is too low.

Check 7: Is the tip coated with oxide?

Refer to 'Inspection and cleaning the tip'.

Check 8: Is the iron calibrated correctly?

Recalibrate.

Problem 6: The tip can not be pulled off.

Check 9: Is the tip seized?

Is the tip swollen because of deterioration?

Replace the tip and the heating element.

Problem 7: The tip doesn't hold the desired temperature

Check 8

SPECIFICATION:

	Solder station	Iron station
Power consumption	250W	60W
Air pump	Diaphragm pump	
Capacity	0.3-7L/mm	
Pump power	25W	
Heating element		
Temperature	100 ℃–500 ℃	100℃ -500℃

Precautions

WARNING

1. When using the single iron A1124, please attention that the air control knob can not exceed position "3". Temperature knob can not exceed position"6", Otherwise, the part of air will come out from connecting place of NOZZLE and iron, the hot air will melt plastic handle.

2. When attaching the NOZZLE to the Pip, please make sure that they are matching and let them connect tightly. If you found the obvious phenomenon of air flowing back wards, please change the Nozzle immediately or put one heat-resis tant slice between the NOZZLE and Pip.

3. If you use the other model of Nozzle, you should adjust the airflow knob and temperature knob basing on the actual need, also operating according to the English instruction manual.

CAUTION

1. when the first time of using the iron, please attention the situation of temperature rising. When the temperature is just rising to the temperature, which can melt the bar tin, then plating tinning on the iron, after that increase temperature to the teM-perature you asked . please remember to plat a tier of tinning around the iron always, then you can always have the best function of jointing.

2. If there has a tier of oxide around the surface of iron , it can not melt tinning and plate tinning , and it also makes you misled that the temperature of iron is low, but in fact , both of the heating element and the iron are in very high temperature state . if the above situation appear, don't increase the temperature blindly. You should clean the oxide with cleaning cotton . if it can't be got rid of, shut down the power till the tem-perature of iron coming down as the room temperature .after that , use the NO"0"sand paper to clean the oxide carefully. the latest, follow up the above NO1 to operate the iron again.

3. Attention: when the iron is put on the handle holder that is in the high temperature state, adjust the temperature control knob to decrease the temperature under 250℃, if it exceed 20 minutes, turn off the power .because it can accelerate the heating element aging, and appear something derive from oxide as well as weakening the joining function, if the iron is in the state of high temperature for a long time .the worst is can makes is that the nut of handle is melt or heating element is short circle.

Welded part is the same as 850; anti-static welded searing iron with the same configuration with 936

Oringinal, s patent intelligent telescopic manipulator