Hot Air 626

S.M.D. Rework System

Operating Manual

Thank you for choosing XYTRONIC 626 SMD Rework system. This tool is specially designed for soldering, desoldering Surface Mount Devices with hot air. When used in conjunction with our 628 Preheat System, the 626 will achieve marked improvements in quality and efficiency of your rework tasks.

Please read the operating manual carefully to maximize the advantages of using your new 626 Hot Air rework system and keep this manual readily accessible for future reference.

Catalogue

⚠ : **[WARNING] and [CAUTION]** ⚠ : **[ELECTRICAL SHOCK]**

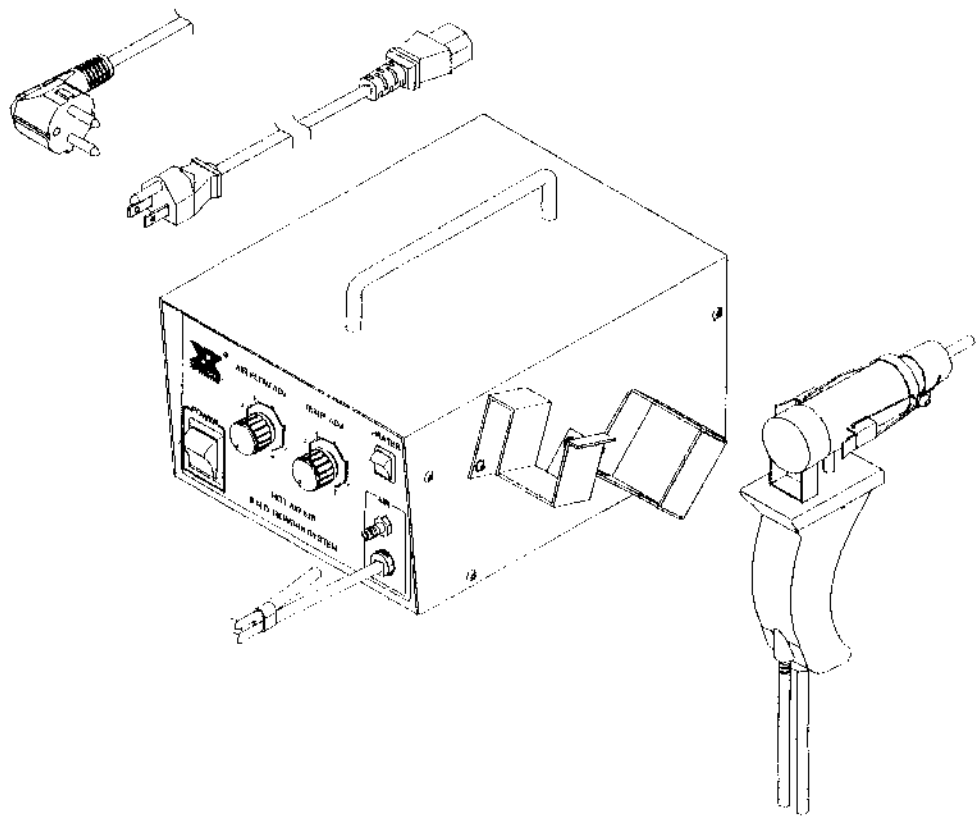
Warning and caution are positioned at critical points in the manual to draw the user's attention to significant items. Be sure to comply with the following warnings and cautions for operator safety.

1. Ensure the working voltage of the unit is the same as that of your electrical supply prior to use.
2. Check carefully for any damage during transportation.
3. Put the product on a safe and stable working table. Table surface should consist of fire and heat resistant material due to the fact that this unit can reach very high temperatures and potentially dangerous.
4. During operation, the barrel and nozzle of the heat gun is extremely hot, and will cause serious burns if allowed to contact the skin. The heat gun must be returned to its holder after each use to minimize the danger of burns.
5. Keep this unit and all industrial tools out of the reach of children. Young children should be supervised to ensure that they do not play with the appliance.
6. Do not aim at the hot air directly toward personnel or touch the metal parts near the nozzle.
7. Do not use the product near combustible gases or flammable materials.
8. Allow the heater to cool and then turn the power switch OFF before replacing parts or storing the unit.
9. This unit is designed for SMD rework not for unintended use.
10. Turn off the power switch and remove the AC power cord by pulling the plug (not the power cord) when the unit will remain unused for a long period of time.

To prevent electrical shock, be sure to take the following precautions:

1. Make sure the unit is grounded. Always connect power to a grounded receptacle.
2. Do not put undue pressure on the power cord (place equipment on it or squeeze between surfaces). Always connect the unit to a grounded receptacle.
3. Do not strike the hand piece against hard surfaces or otherwise subject it to physical shock. This may damage the ceramic heater.
4. Do not disassemble the pump.
5. Do not modify the unit.
6. Do not expose the unit to moisture nor use the unit with wet hands.
7. Remove AC power cord by pulling the plug – not the cable.

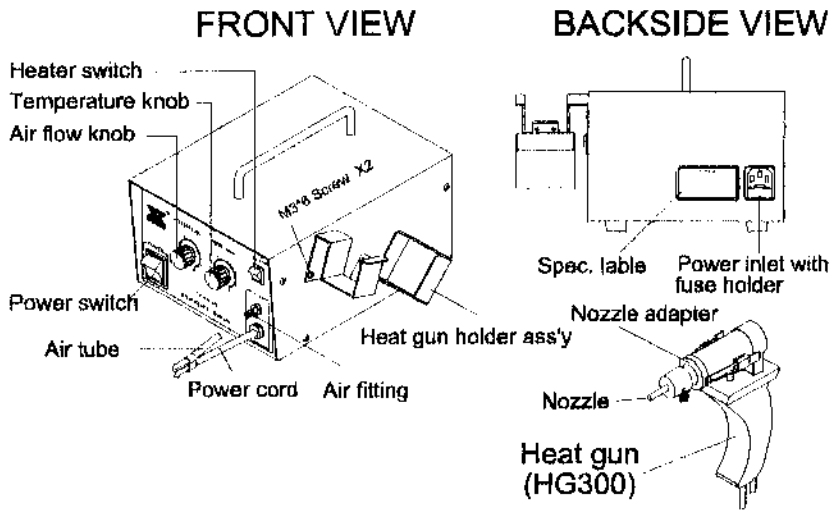
Packing List



Specifications

Model No.	**626**
Power Consumption	300W
Fuse	Delay Type ： 115V：T5A，230V：T3.15A
IR Heater	240W
Pump	115V／32W ； 230V／28W
Air Flow	115 V：4.2～42.4L／min. 230 V：5.0～39.6L／min.
Temperature	150℃～450℃ (302℉～842℉)
Outside Dimensions	195(W)x235(D)x125(H), mm
Weight	4.9Kg (10.78lbs)

PART NAME



PREPARATION :

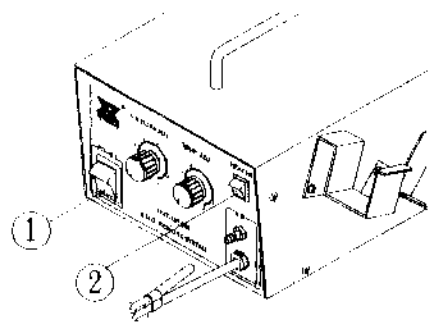
ASSEMBLY AND ELECTRICAL CONNECTION

1. Accessories: AC power cord with plug, IC Popper, Heat gun holder, Sponge48x48mm, Adapter #A1130 nozzle, Asbestos washer, M3*6 screwsx2pcs.
2. Fix the heat gun holder on the right side of the station by M3*6 screws.
3. Clip on the adapter and a fix the standard nozzle provide or any of our assorted sizes nozzles depending on the application. To date, we offer 19 different nozzles sizes.

OPERATION

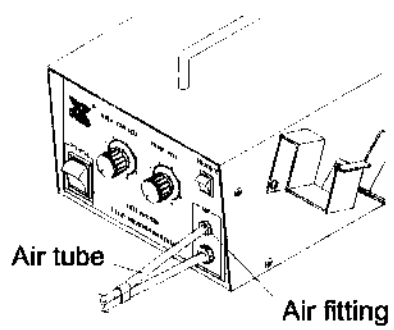
1. Flip the "Power switch " (1) & "Heater switch" (2) to the "OFF" position.

Fig. 1



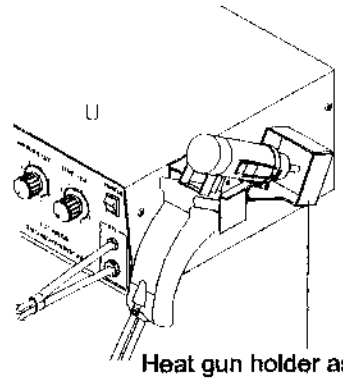
2. Connect the "air tube" to "air fitting" on station housing.

Fig. 2



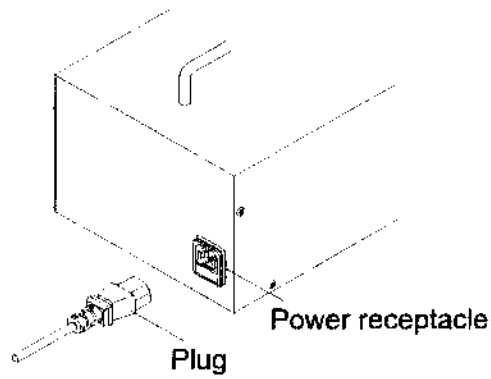
3. Screw the holder on the right side of the station and put the heat gun on it.

Fig. 3



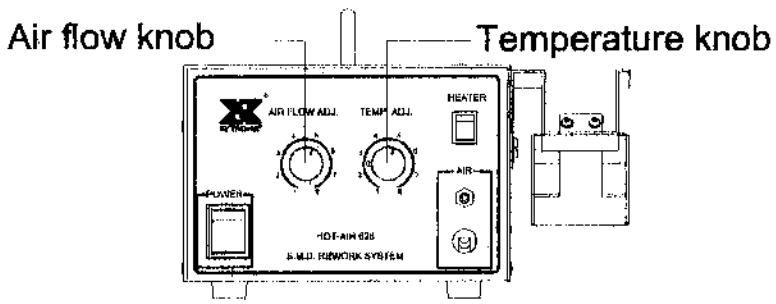
4. Insert the female plug in to the AC power receptacle on the back of the unit.

Fig. 4



5. Preset the airflow and temperature knobs to desired position according to the needs of the SMD component per cross reference table.

Fig. 5



6. Plug in the AC power cord and flip the mains illuminated switch to the 'ON" position, the built in pump will then activate creating a low humming noise.

⚠ CAUTION : The unit may have malfunctioned if the pump is quiet and there is no air flow.

7. Turn the heater switch on. The heater will activate, raising the operating temperature to the preset level. Adjust the temperature to the desired level and begin using the device.

⚠ CAUTION : To avoid burning your skin, do not touch the heater during heat up!

CAUTION : Operating the unit for more than a few minutes without airflow may cause the heater to overheat and burn out.

8. Let the heater idle about 5 minutes after reaching the preset temperature before using.

⚠ CAUTION : The heat gun must be returned to its holder after each use to minimize the danger of burns.

9. To use, place the nozzle directly over the component to be reworked without actually touching the device. IC popper or a tweezers can be used to carefully pick up the component after the solder has flowed.

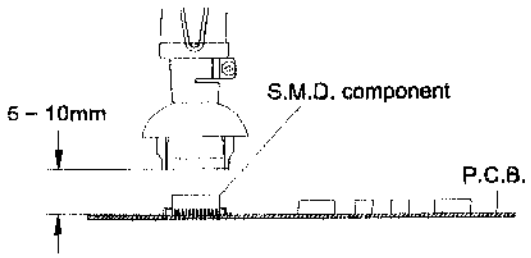


Fig. 6

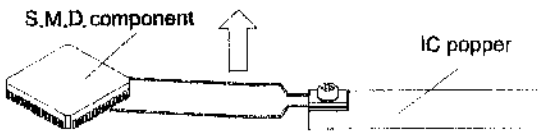


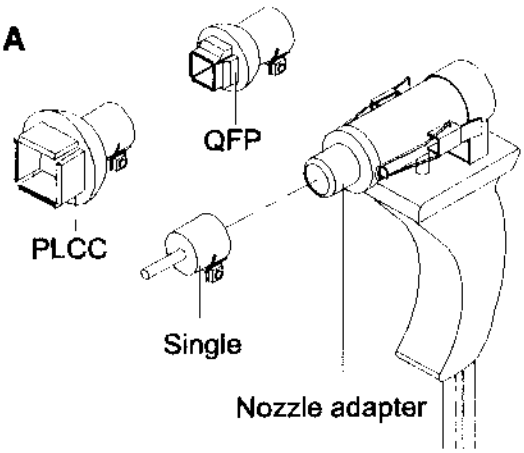
Fig. 7

10. After use, flip the heater switch "OFF" and turn the airflow knob to maximum(Scale 8) to allow the unit cooling faster. Turn off the main switch after approximately 10 minutes. Following these simple steps will both quickly remove a high temperature hazard from the work area and extend the life of your heating element.

Optional Nozzles

Focus hoods VS. Heat gun : Table A

Fig.8



⚠ WARNING: The focus hood and heater assembly can reach very high temperature. Do not touch! Let the heating element to completely cool prior to changing focus hood or heater.

Focus Hoods (A) :

Part No.	Application	HAKKO Equivalent	HOZAN Equivalent
28-010337	Adapter A850	✓	×
68-250025-07	Single φ2.5mm	A1124	SP-1
68-250044-07	Single φ4.4mm	A1130	SP-1L
68-115140-01	PLCC 11.5*14(32Pins)	A1141B	PLCC32
68-175175-01	PLCC 17.5*17.5(44Pins)	A1135B	PLCC44
68-200200-01	PLCC 20*20(52Pins)	A1136B	PLCC52
68-250250-01	PLCC 25*25(68Pins)	A1137B	PLCC68
68-300300-01	PLCC 30*30(84Pins)	A1138B	PLCC84
68-100100-02	QFP 10*10	A1125B	QFP1010
68-140140-02	QFP 14*14	A1126B	QFP1414
68-140200-02	QFP 14*20	A1128B	QFP1420
68-175175-02	QFP 17.5*17.5	A1127B	QFP1717
68-200200-02	QFP 20*20	A1261B	
68-240240-02	BQFP 24*24	A1182B	
68-280280-02	QFP 28*28	A1129B	QFP2828
68-280400-02	QFP 28*40	A1263B	
68-320320-02	QFP 32*32	A1265B	
68-400400-02	QFP 40*40	A1264B	
68-076127-03	SOP 7.6*12.7	A1258B	SOP1308
68-086180-03	SOP 8.6*18	A1260B	SOP1808
68-130280-03	SOP 13*28	A1259B	

Fig.9

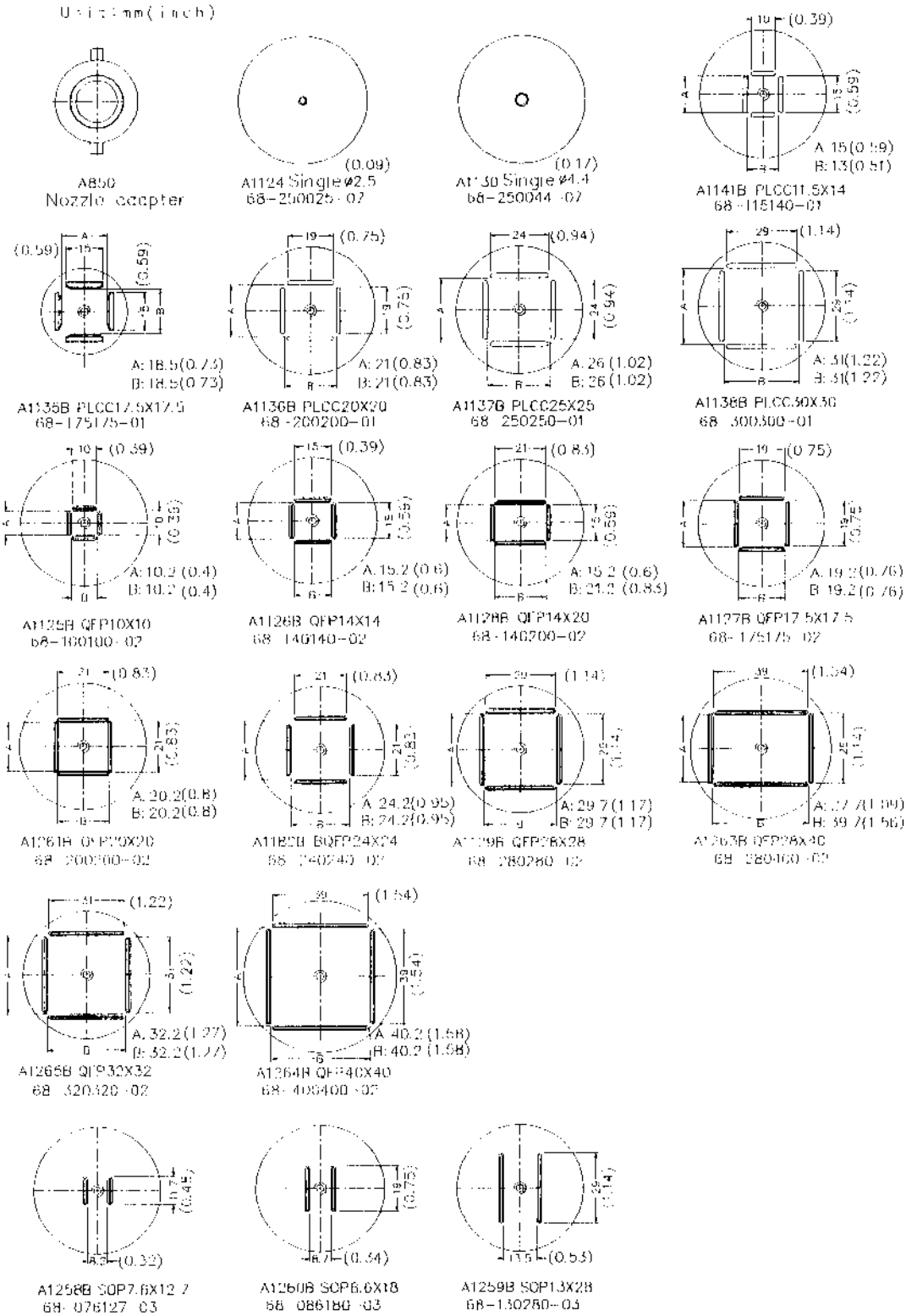
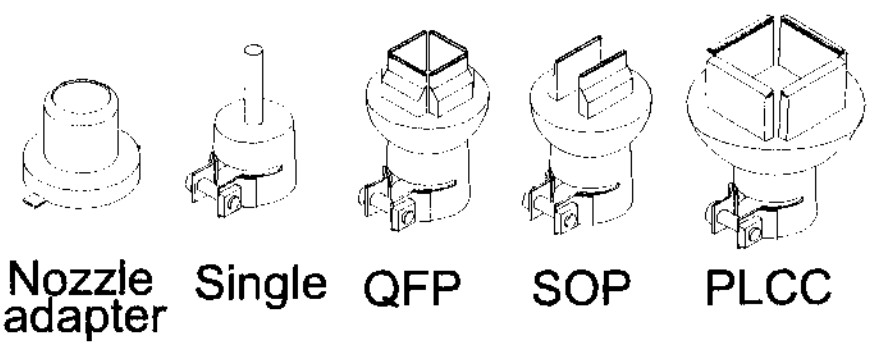

Unit:mm(inch)
A850
Nozzle adapter
A1124 Single ø2.5
68-250025-07
A1130 Single ø4.4
68-250044-07
A1141B PLCC11.5X14
68-115140-01
A1135B PLCC17.5X17.5
68-175175-01
A1136B PLCC20X20
68-200200-01
A1137B PLCC25X25
68-250250-01
A1138B PLCC30X30
68-300300-01
A1125B QFP10X10
68-100100-02
A1126B QFP14X14
68-140140-02
A1128B QFP14X20
68-140200-02
A1127B QFP17.5X17.5
68-175175-02
A1261B QFP20X20
68-200200-02
A1185B BQFP24X24
68-240240-02
A1129B QFP28X28
68-280280-02
A1263B QFP28X40
68-280400-02
A1265B QFP32X32
68-320320-02
A1264B QFP40X40
68-400400-02
A1258B SOP7.6X12.7
68-076127-03
A1260B SOP6.6X18
68-066180-03
A1259B SOP13X28
68-130280-03

Fig.10


Nozzle adapter
Single
QFP
SOP
PLCC

How to replace the heating element

⚠ WARNING: (1) Turn OFF the power switch and make sure the heater is in cool condition before replacing parts.

(2) Take off the focus hood and nozzle adapter before activating this job.

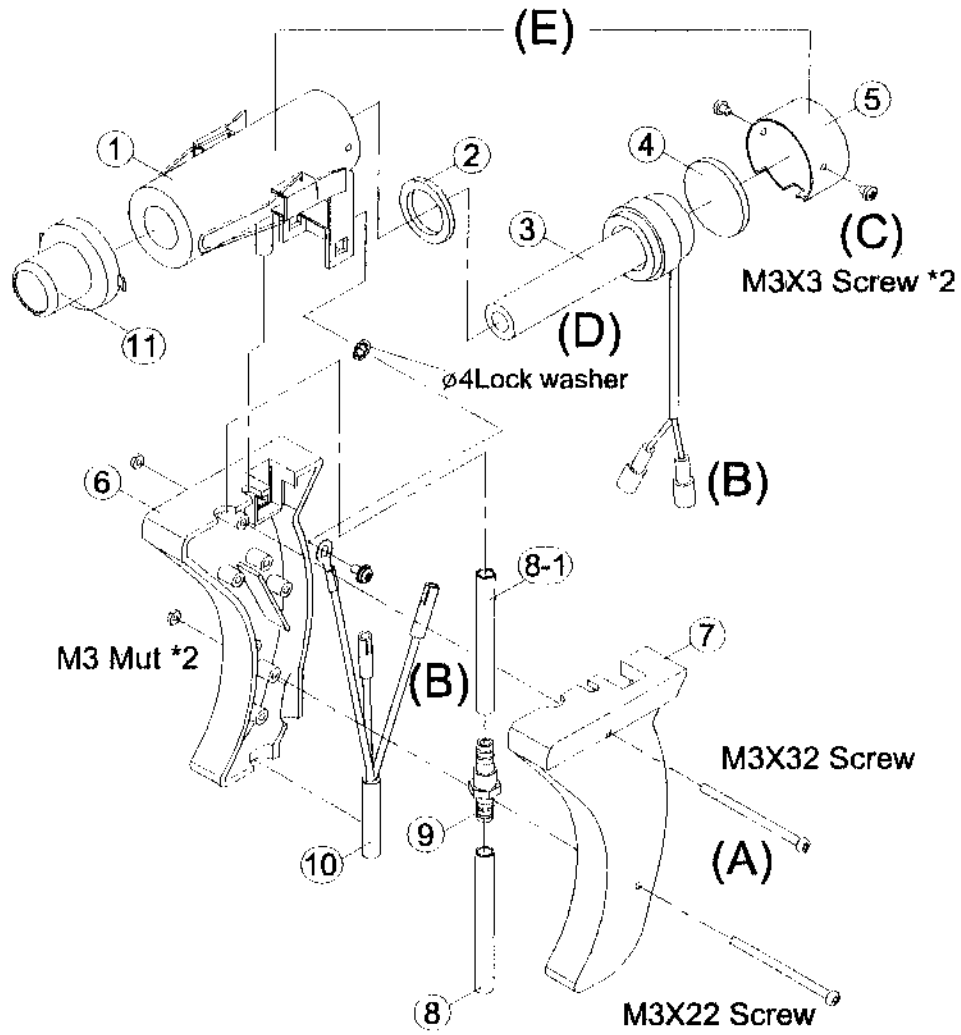


Fig. 11

(A) Remove M3x22, M3x32 machine screws which secured to the handle and carefully take apart from the handle ⑥ & ⑦.

(B) Disconnect the terminals of two heater lead wires ③ from the brown and blue lead wires of power cord ⑩.

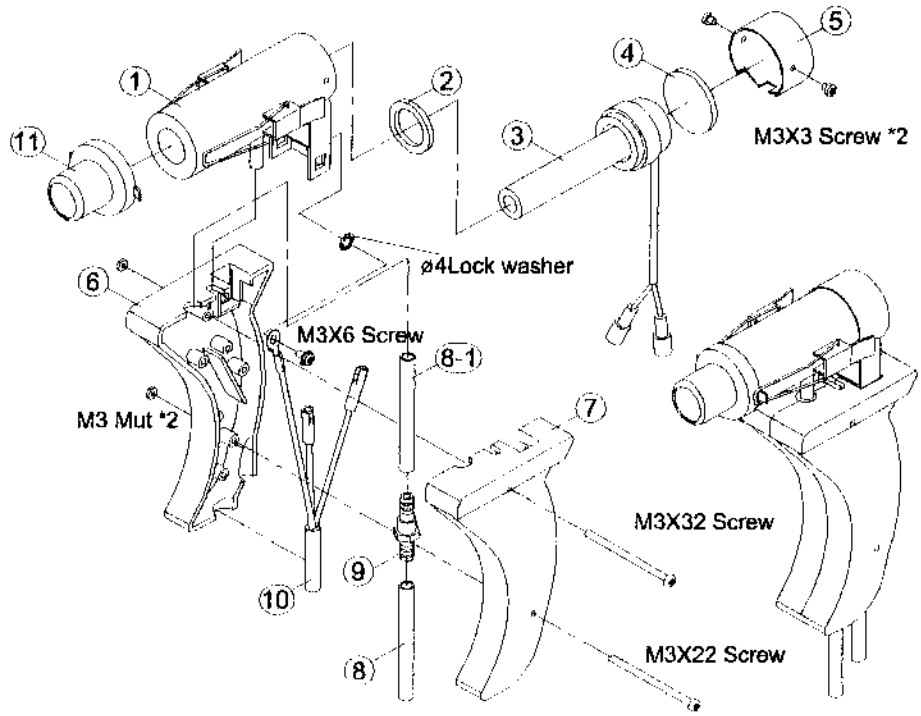
(C) Remove 2pcs of M3x3 screws from the heater cap, then ⑤④③②① can be separated.

(D) Remove the heater assembly ③ and replace with a new one.

(E) Re-assemble the handle in reverse order being sure to securely reconnect to the grounding terminal.

Assembly of Heat Gun

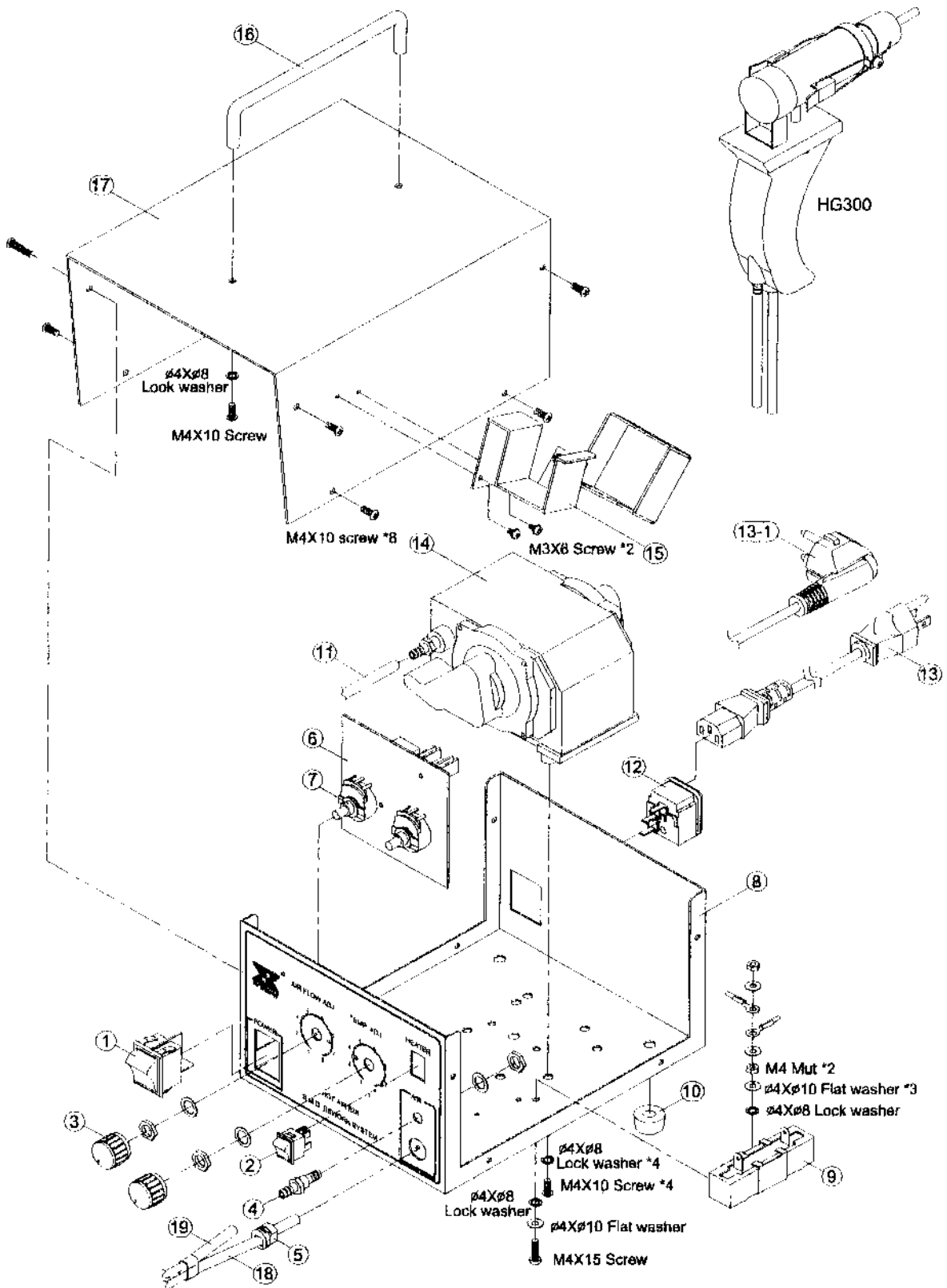
HG300 EXPLODED DRAWING



HEAT GUN HG300 SPARE PARTS LIST

Item	Part No.	Description
1	28A020222-02	Heater tube assembly
2	76-4425003	Asbestos ring
3	79A120240P11	Heating element assembly for 110V-120V
3-1	79A230240P11	Heating element assembly for 220V-240V
4	76-4430003	Asbestos washer
5	28-020191-02	Heater cap
6	27-020015-01	Heater gun handle (left side)
7	27-020016-01	Heater gun handle (right side)
8, -1	37-031070	Silicone rubber tube φ 7x850mm & φ 7x110mm
9	42-030099-01	Inlet air fitting
10	34-510110	Heat gun power cord w/Terminal, silicone type
11	28-020337	Adapter #A850

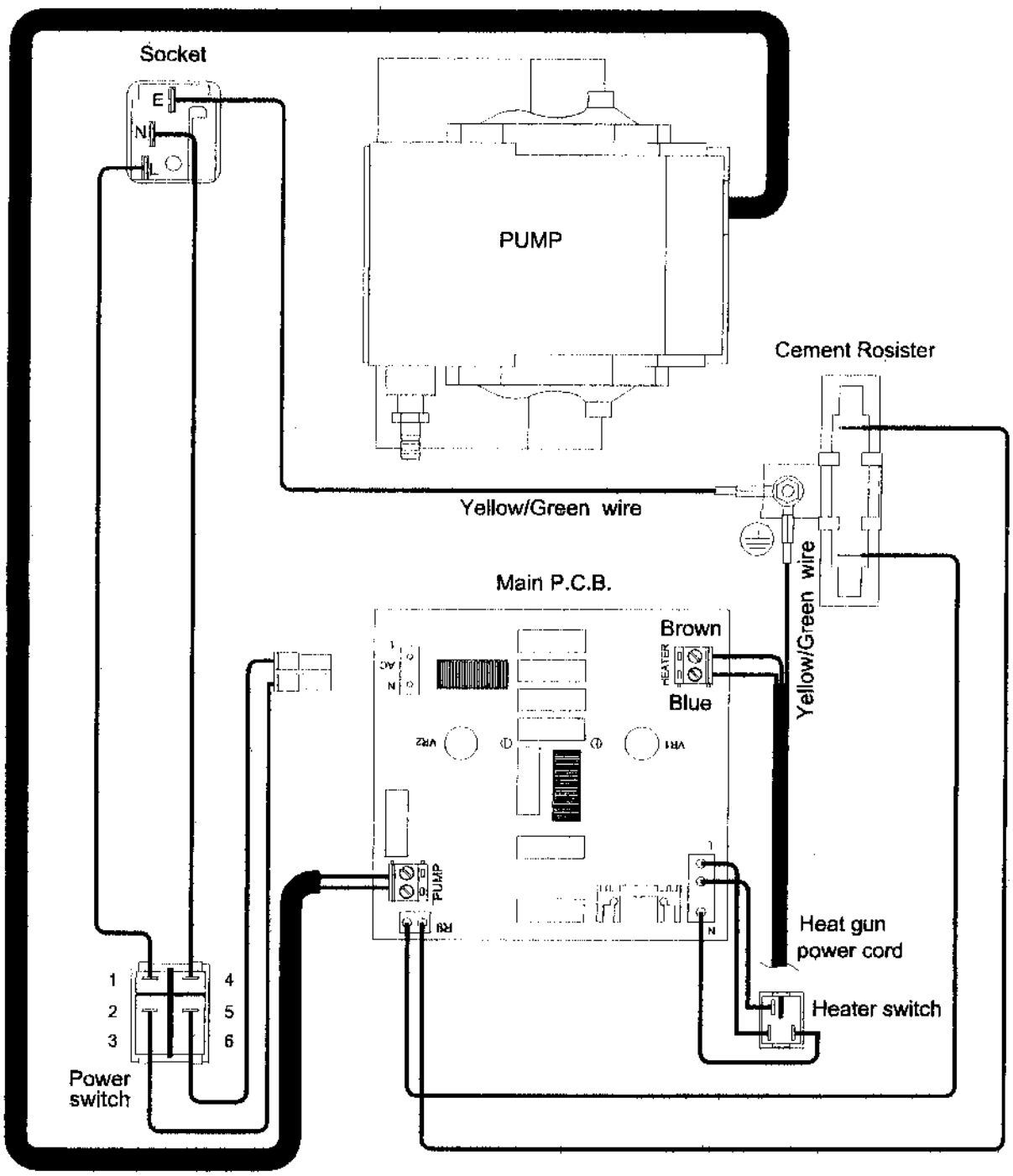
626 EXPLODED DRAWING



626 SPARE PARTS LIST

Item	Part No.	Description
1	53-042241-300	DPST illuminated rocker switch, 4Pin
2	53-041192-240A	DPST illuminated rocker switch, 3Pin
3	42-010100-02	Knob
4	42-030098-01	Outlet air fitting
5	26-0116121	Strain relief bushing
6	B626CUM	Main P.C.B. assembly for 120V
6-1	B626CVM	Main P.C.B. assembly for 230V
7	13-325524-1511	Variable resistor 250K, shaft 15mm long
8	28-010210-05	Base housing
9	15-320395-56	Cement resistor 2K／30W for 120V
9-1	15-350395-56	Cement resistor 5K／30W for 220V-240V
10	52-020034-01	Rubber foot
11	37-031070-0250	Silicone tube $\phi 7 \times \phi 5 \times 250$mm
12	58-3030221	Power inlet with fuse holder
13	33-120318-181	UL AC Power cord w/plug, SVT type
13-1	33-330519-181	VDE AC Power cord w/plug, H05VV-F type
14	73-311107	Air pump, 115V
14-1	73-311407	Air pump, 230V
15	28A010228	Heat gun holder assembly
16	28-050220-05	Hand carry bar
17	28-010211-05	Top housing
18	34-510110	Heat gun power cord w/Terminal, silicone type
19	37-031070-0850	Silicone rubber tube $\phi 7 \times \phi 5 \times 850$mm

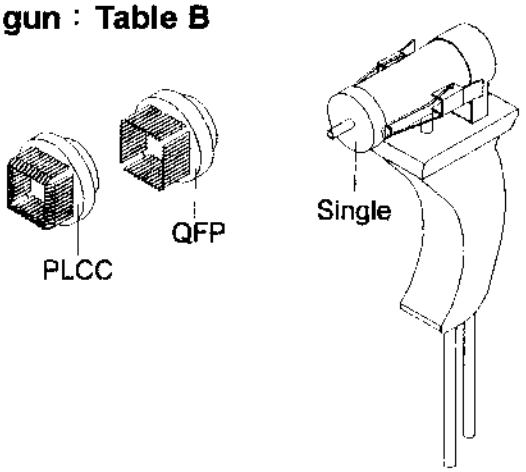
626 WIRING DIAGRAM



Appendix

Optional Nozzles

Focus hoods VS. Heat gun : Table B

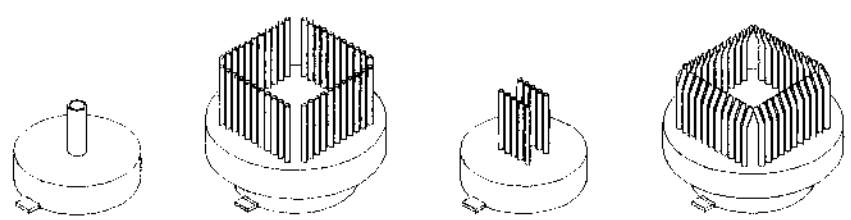


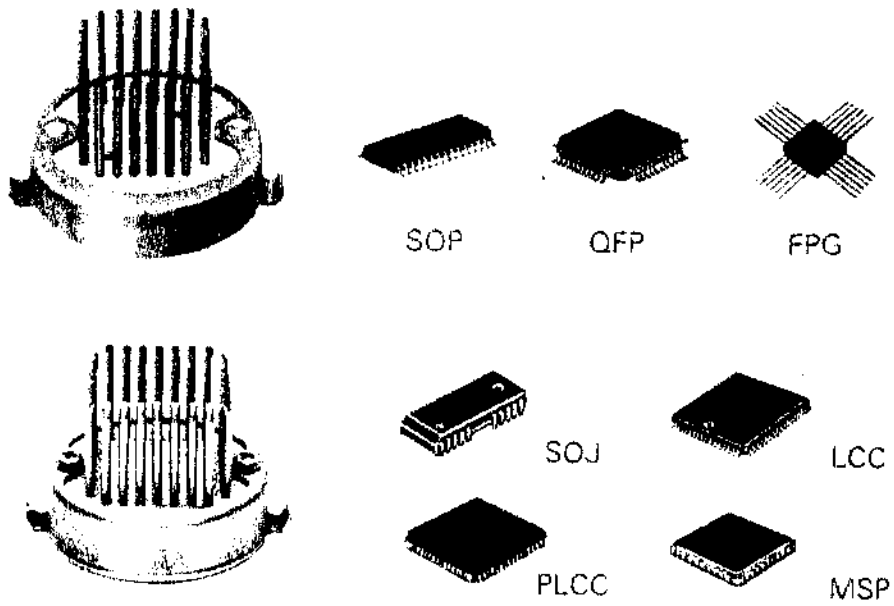
⚠ WARNING: The focus hood and heater assembly can reach very high temperature. Do not touch! Let the heating element to completely cool prior to changing focus hood or heater.

Focus Hoods (B) :

Part No.	Application	Part No.	Application
SP-1L	φ 5*1 Single	SOJ40	For SRAM (SOJ)
SP-1	φ 1*1 Single	SOP0804	SOP 8*4
SP-2	φ 1*2 4mm	SOP1004	SOP 10*4
SP-5	φ 1*5 11mm	SOP1306	SOP 13*6
SP-7	φ 1*7 16mm	SOP1308	SOP 13*8
QFP1010	QFP 10*10	SOP1808	SOP 18*8
QFP1414	QFP 14*14	PLCC20	PLCC 20PINS
QFP1420	QFP 14*20	PLCC28	PLCC 28PINS
QFP1515	QFP 15*15	PLCC32	PLCC 32PINS
QFP1717	QFP 17*17	PLCC44	PLCC 44PINS
QFP2626	QFP 26*26	PLCC52	PLCC 52PINS
QFP2828	QFP 28*28	PLCC68	PLCC 68PINS
QFP3131	QFP 31*31	PLCC84	PLCC 84PINS
SOJ256K	For DRAM 256K	PLCC100	PLCC 100PINS
SOJ1M	For DRAM 1M		

Fig.13





AIRFLOW VS. TEMPERATURE CROSS TABLE FOR SP-1L

F - AIRFLOW SCALE T – TEMPERATURE SCALE (°F)

F \ T	2	3	4	5	6	7	8
1	320℃(608)	380℃(716)	450℃(842)				
2	310℃(590)	360℃(680)	425℃(797)				
3	300℃(572)	340℃(644)	410℃(770)	450℃(842)			
4	270℃(518)	320℃(608)	360℃(680)	430℃(806)			
5	250℃(482)	290℃(554)	340℃(644)	410℃(770)	450℃(842)		
6	230℃(446)	260℃(500)	330℃(626)	350℃(662)	430℃(806)	450℃(842)	
7	200℃(392)	240℃(464)	300℃(572)	330℃(626)	400℃(752)	430℃(806)	450℃(842)
8	190℃(374)	230℃(446)	290℃(554)	330℃(626)	370℃(698)	410℃(770)	430℃(806)

Remark:

1. Focus hood SP-1L; Distance 3-5mm from the component, see Fig. 8 as standard.
1. If used together with 628 Pre-Heat system, more efficient and quality rework of both SMD and/or BGA components will result.

Fig.14