

HAKKO 850B

SMD REWORK STATION

SMD Rework Station

Instruction Manual

English

中文

●

Thank you for purchasing the HAKKO 850B SMD Rework Station.
The HAKKO 850B is designed to solder and desolder surface mounted devices with hot air.

Please read this manual before operating the HAKKO 850B.
Keep this manual readily accessible for reference.

●

TABLE OF CONTENTS

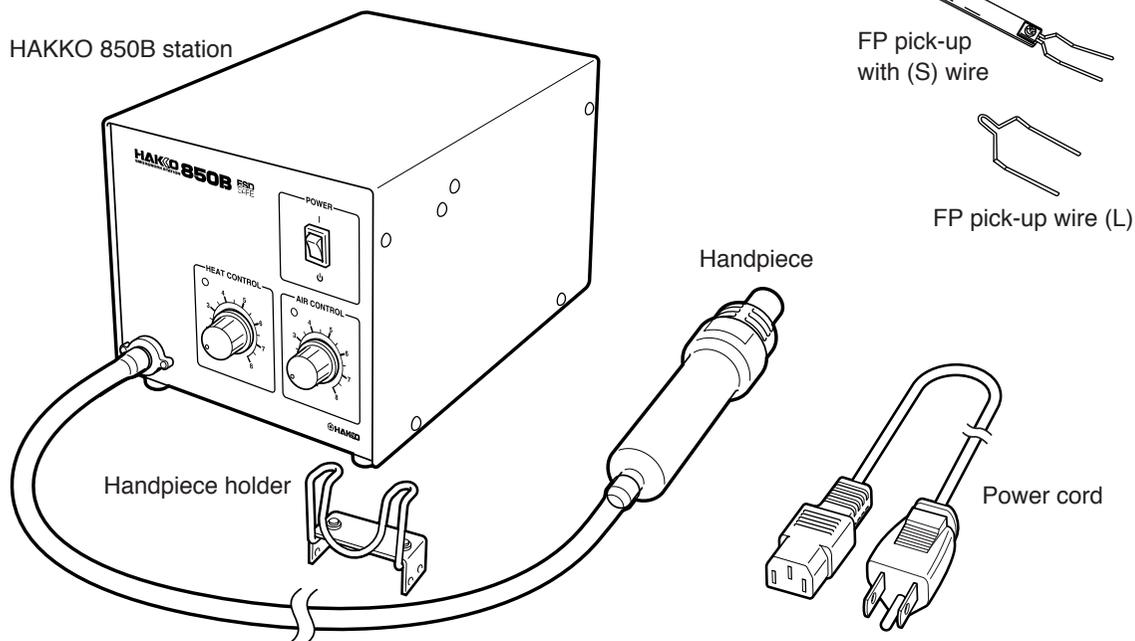
1. PACKING LIST	1
2. SPECIFICATIONS	1
3. SAFETY INSTRUCTIONS	2
4. PART NAMES	3
5. PREPARATION: ASSEMBLY AND ELECTRICAL CONNECTION	4
6. OPERATION	5
7. MAINTENANCE / INSPECTION	7
8. TEMPERATURE DISTRIBUTION CHART	8
9. OPTIONAL NOZZLES	11
10. PARTS LIST / HANDPIECE	12
/ STATION	13
11. WIRING DIAGRAM	15

1. PACKING LIST

Check the contents of the HAKKO 850B package and confirm that all the items listed below are included:

HAKKO 850B station.....	1
Power cord	1
Handpiece holder	1
FP pick-up	1
FP pick-up wire.....	1
Instruction manual	1

* This product does not include a nozzle. A large selection of nozzles is available for the HAKKO 850B. Select the nozzle or nozzles suitable for the work to be performed.



2. SPECIFICATIONS

Name	HAKKO 850B
Power consumption	100V - 280W 110V - 270W 120V - 300W 220V - 300W 230V - 310W 240V - 310W

● Station

Power Consumption	30 W (Stand-by power consumption 100 - 120V 2W, 220 - 240V 4W)
Pump	Diaphragm pump
Capacity	23 ℓ/min (max)
Control temperature	100 - 420°C (212 - 788°F) (Use A1126B)
External dimensions	160 (W) × 145 (H) × 225 (D) mm. (6.3 × 5.7 × 8.9 in.)
Weight	4 kg. (8.82 lb.)

● Handpiece

Power consumption	100V - 250W 110V - 240W 120V - 270W 220V - 270W 230V - 280W 240V - 280W
Total length (w/o cord)	196 (L) mm / 7.72 (L) in.
Weight (w/o cord)	120 g / 0.26 lb.

* This product is protected against electrostatic discharge.

* Specifications and design are subject to change without notice.

3. SAFETY INSTRUCTIONS

WARNING

Warnings and cautions are placed at critical points in this manual to direct the operator's attention to significant items. They are defined as follows:

 **WARNING:** Failure to comply with a WARNING may result in serious injury or death.

 **CAUTION:** Failure to comply with a CAUTION may result in injury to the operator, or damage to the items involved. Two examples are given below.

- Be sure to comply with following WARNINGS and CAUTIONS for your safety.

WARNING

- Be sure not to operate the unit with any combination of temperature and air flow settings that makes the thermal protector trip (the heater lamp turns off during use). This could damage the unit.
- After use, do not disconnect the plug during the automatic cool-down process.

CAUTION

When the power is ON, the temperature of the hot air and the nozzle ranges from 100 to 450°C. (212 to 842°F.). To avoid injury to personnel or damage to items in the work area, observe the following:

- Do not direct the hot air toward personnel or touch the metal parts near the nozzle.
- Do not use the product near combustible gases or flammable materials.
- Advise those in the work area that the unit can reach very high temperatures and should be considered potentially dangerous.
- Turn the power OFF when no longer using the HAKKO 850B or when leaving it unattended.
- Before replacing parts or storing the unit, allow the unit to cool and then turn the power OFF.

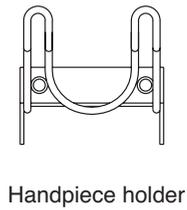
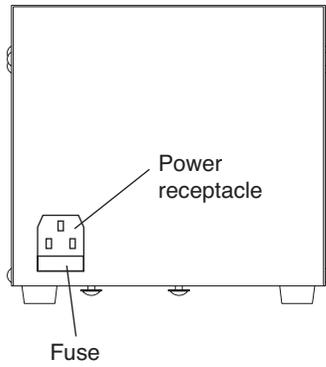
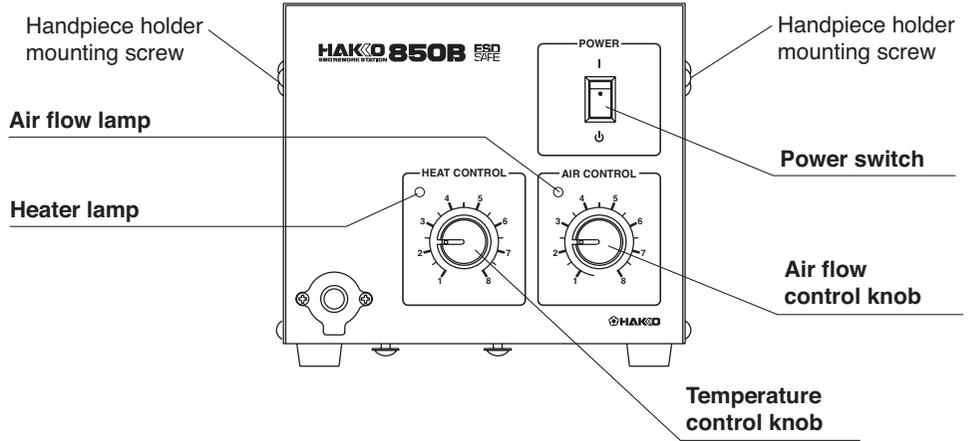
- **To prevent accidents and failures, be sure to take the following precautions:**

- Do not strike the handpiece against hard surfaces or otherwise subject it to physical shock. This will damage the quartz glass shield around the heating element, and could damage the heater as well.
- Be sure the unit is grounded. Always connect power to a grounded receptacle.
- Do not disassemble the pump.
- Do not modify the unit.
- Use only genuine HAKKO replacement parts.
- Do not wet the unit or use the unit with wet hands.
- Remove power cord by holding the plug - not the wires.
- Make sure the work area is well ventilated.
- The HAKKO 850B is not intended for use by children or infirm persons without supervision.
- Children should be supervised to ensure that they do not play with the HAKKO 850B.

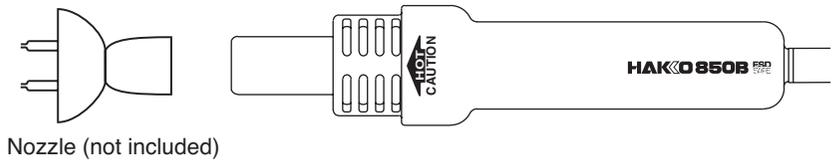
4. PART NAMES

English
中文

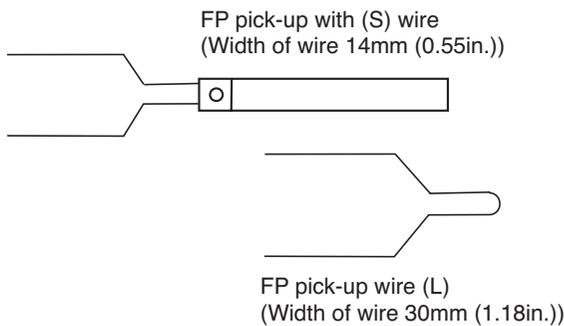
Station



Handpiece



Accessories



5. PREPARATION: ASSEMBLY AND ELECTRICAL CONNECTION

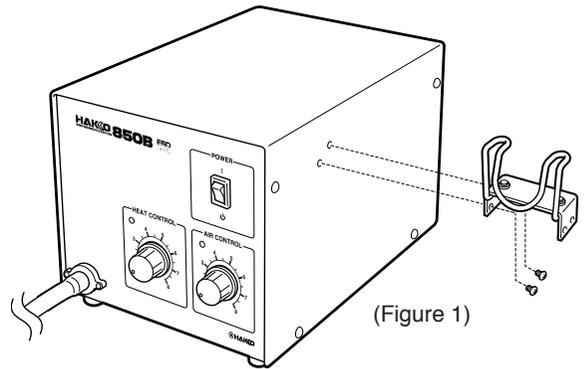
Preparation: Assembly and Electrical Connection

A. Station assembly

● Attach the handpiece holder.

Remove the handpiece holder mounting screw from the side of the station. Attach the handpiece holder to the station. (Figure 1)

(The handpiece holder can be installed on either the left or right side.)

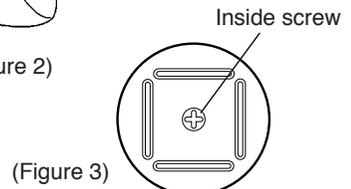
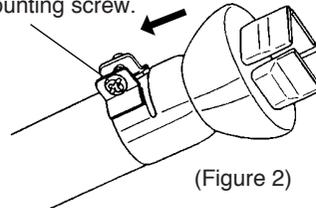


B. Handpiece assembly

● Attach the nozzle.

Loosen the nozzle mounting screw. Attach the nozzle as shown in the drawing. (Figure 2)

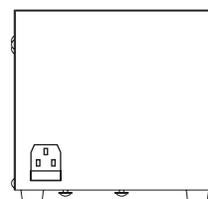
Tighten the nozzle mounting screw.



C. Electrical connection and power ON

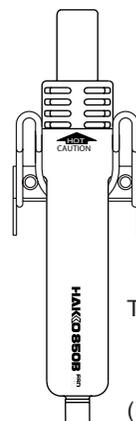
1. Connect the power cord to the power receptacle on the back panel of the station. (Figure 4)
2. Place the handpiece on the holder. (Figure 5)
3. Plug the power cord into a grounded wall socket. After connection, the automatic blowing function will start sending air through the pipe, but the heating element remains cool.
4. Turn the power switch ON.

NOTE: 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 heating element will begin to warm up.



When installing an optional nozzle to the HAKKO 850B, do not remove this inside screw.

(Figure 4)



Top View

(Figure 5)

⚠ CAUTION

This product is protected against electrostatic discharge. Be sure to use a grounded wall socket.

⚠ CAUTION

When not in use, place the handpiece on the holder.

6. OPERATION

● QFP Desoldering

1. Adjust the air flow and temperature control knobs.

Refer to the temperature distribution chart (page 8) to adjust the air flow and temperature control knobs. Wait for the temperature to stabilize for a short period of time.

⚠ WARNING

If the thermal protector is tripped (the heater lamp turns off during use), reduce the temperature setting or increase the air flow. Be sure not to operate the unit with temperature and air flow settings that makes the thermal protector trip. This could damage the unit.

2. Place the FP pick-up under the IC lead.

Slip the FP pick-up wire under the IC lead. (Refer to the photo shown.)

If the width of the IC does not match the size of the FP pick-up, adjust the width of the pick-up by squeezing the wire. In case of PLCC or small components such as chip resistors, desolder by using tweezers, etc.

3. Heating

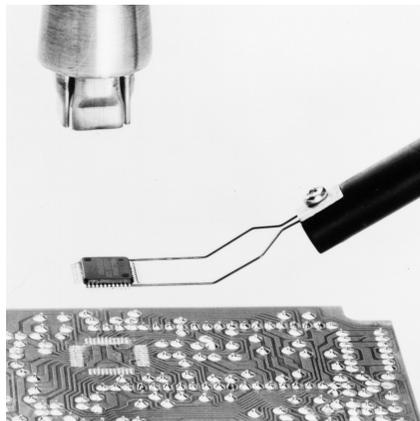
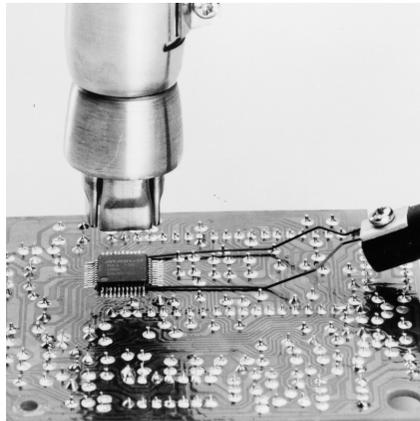
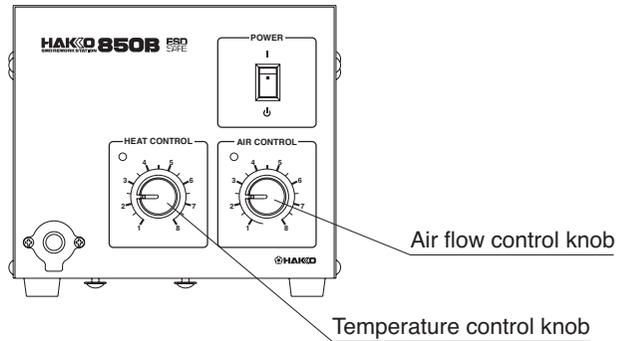
Hold the handpiece so that the nozzle is located directly over, but not touching the IC, and allow the hot air to melt the solder. Be careful not to touch the leads of the IC with the nozzle.

4. Remove the IC.

Once the solder has melted, remove the IC by lifting the FP pick-up.

5. Remove any remaining solder.

After removing the IC, remove remaining solder with a soldering iron and wick or desoldering tool.



● QFP Soldering

1. Apply the solder paste.

Apply the proper quality of solder paste and install the SMD on the PWB.

2. Preheat the SMD.

Refer to the photo to preheat SMD.

3. Soldering

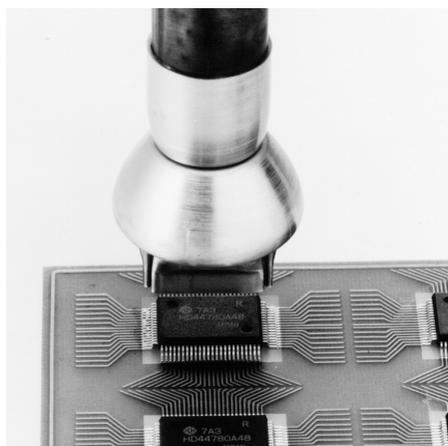
Heat the lead frame evenly.

4. Cleaning

When soldering is completed, clean the residual flux from the board with an appropriate cleaner.

NOTE:

Soldering with hot air has many advantages, such as the inherent ability to pre-heat the component being replaced. As with any soldering process, however, there is always the possibility of forming solder balls, bridges between leads, and inadequate solder joints. Always inspect the finished solder joints for structural and electrical integrity.



● 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 the handpiece. Do not disconnect the plug during this cooling process.

⚠ CAUTION

During the cooling process, the amount of air is controlled by the setting of the air flow adjustment knob. HAKKO recommends setting the knob at 8 when cooling for greatest efficiency.

7. MAINTENANCE / INSPECTION

● Broken heating element

A. Open the handpiece

1. Remove the three screws holding the handpiece together. (Figure 1)
2. Move the tube away from the handpiece, as shown.
3. Open the handpiece. Disconnect the grounding wire sleeve (1) and pipe from the protruding portion of the handle. Remove the pipe.

⚠ CAUTION

Quartz glass and heat insulation are inside the pipe. Be careful not to drop or lose these items.

4. Disconnect the connector (2) and remove the heating element.

B. Measure the resistance value

Connect an ohmmeter across the connector terminals (a). The correct values are approximately:

26-40 Ω (100-120V), 70-100 Ω (220-240V).

If the resistance value is incorrect, replace the part.

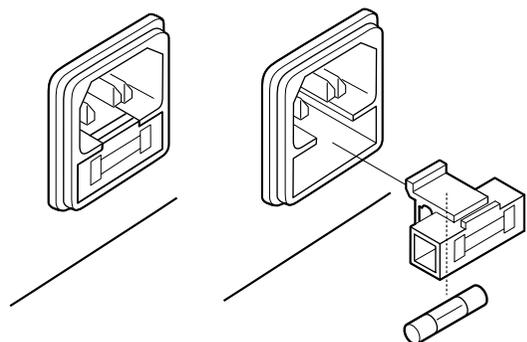
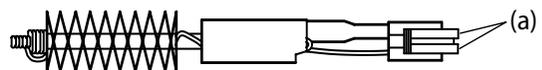
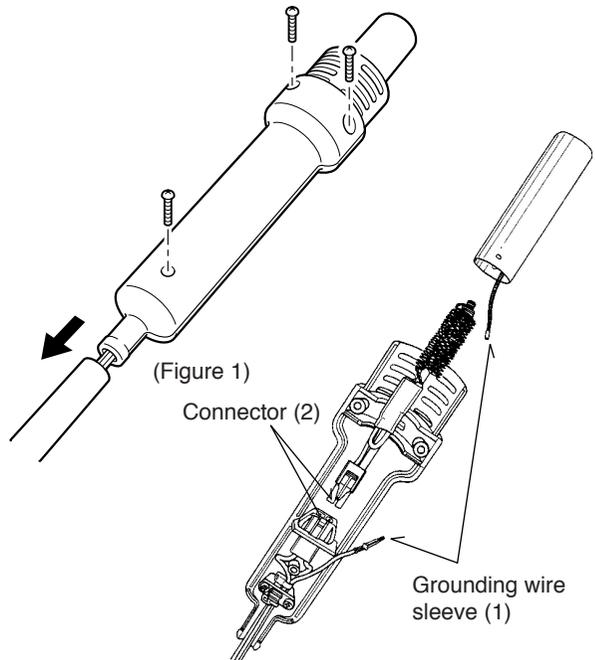
(Refer to the instructions included with the replacement part.)

⚠ CAUTION

Handle the heating element with care. Never rub the heating element wire!
Insert the handle's projection into the hole in the pipe.

● Replacing the fuse

1. Unplug the power cord from the power receptacle.
2. Remove the fuse holder.
3. Replace the fuse.
5A (100-120V), 3.15A (220-240V)
4. Put the fuse holder back in place.



8. TEMPERATURE DISTRIBUTION CHART

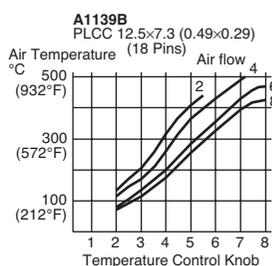
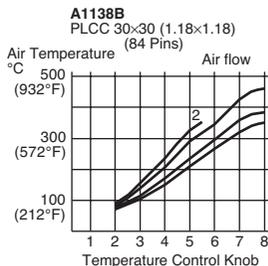
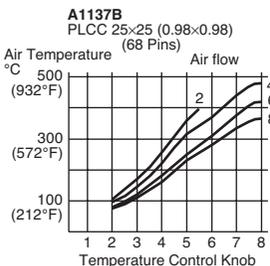
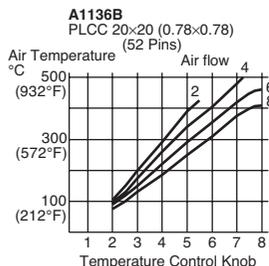
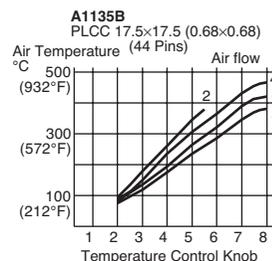
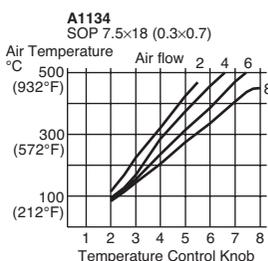
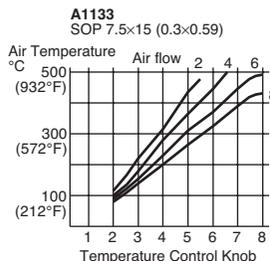
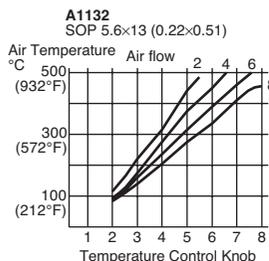
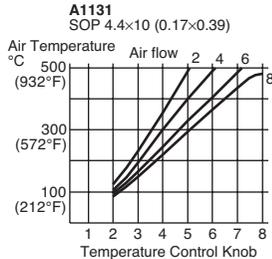
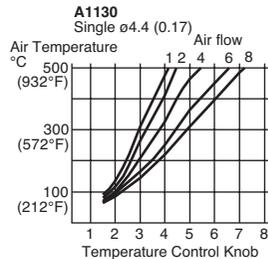
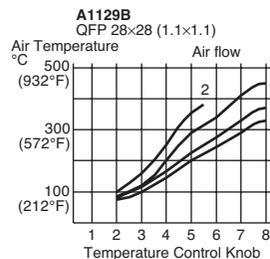
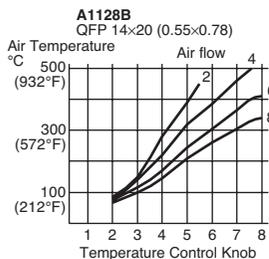
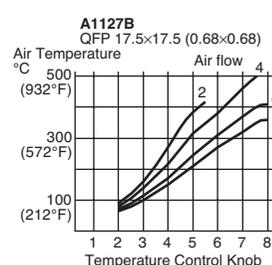
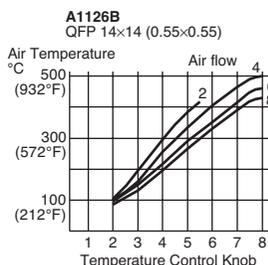
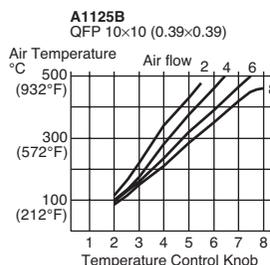
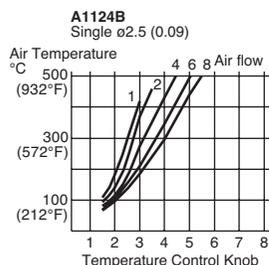
⚠ CAUTION These charts are for reference. If the thermal protector trips, reduce the temperature setting or increase the air flow.

NOTE: Air-flow and temperature adjustment of the HAKKO 850B

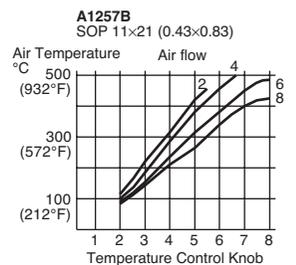
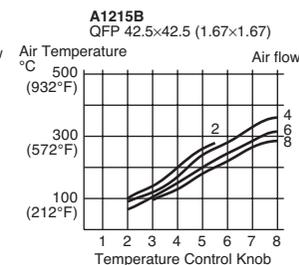
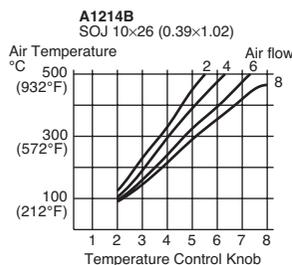
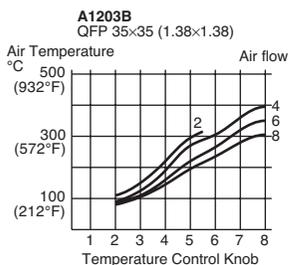
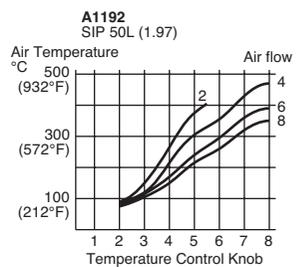
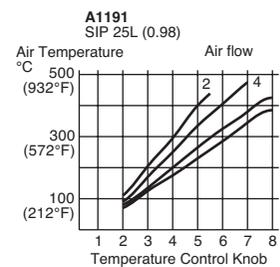
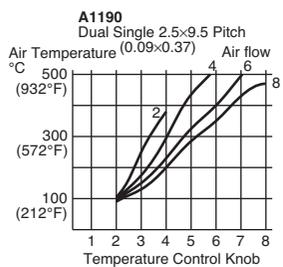
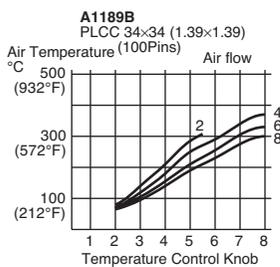
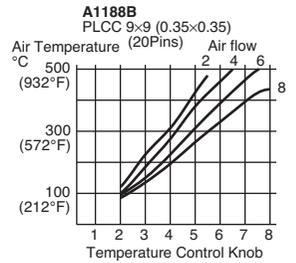
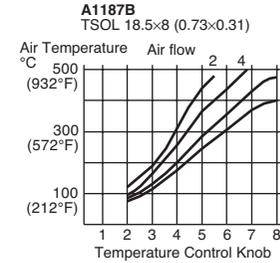
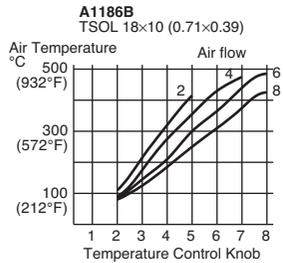
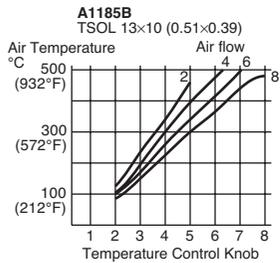
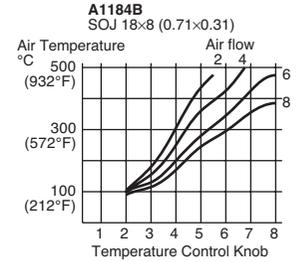
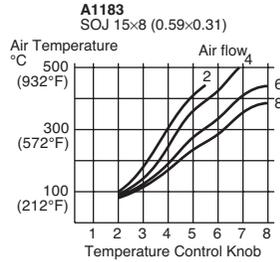
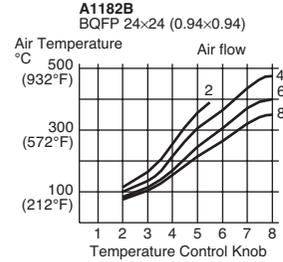
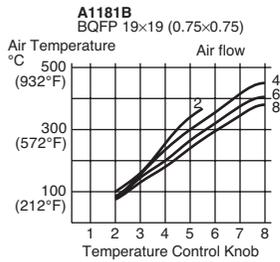
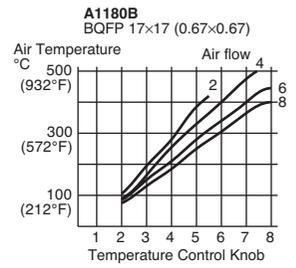
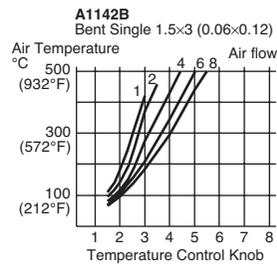
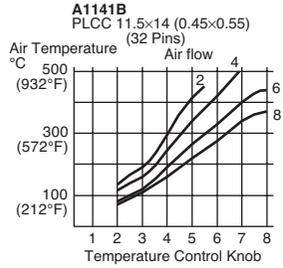
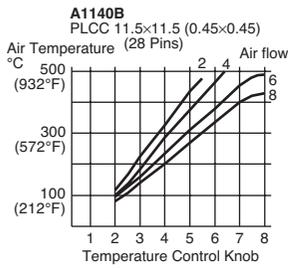
The temperature distribution chart relating air-flow and temperature settings for different nozzle types provided with the HAKKO 850 are not to be used with the 850B. The 850B uses a different pump and control system and the flow-rates and temperature do not correspond.

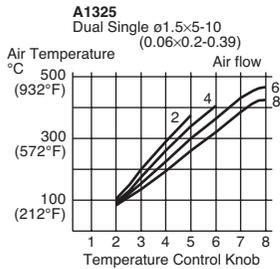
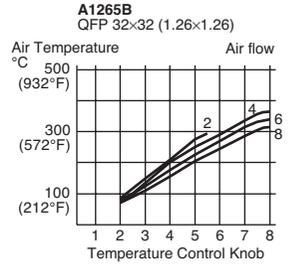
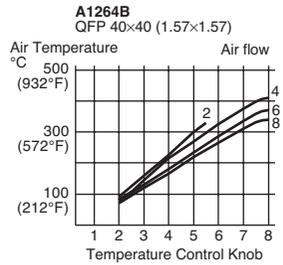
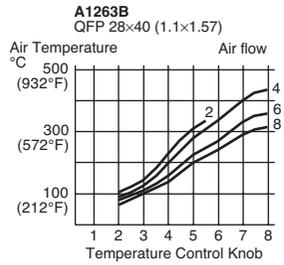
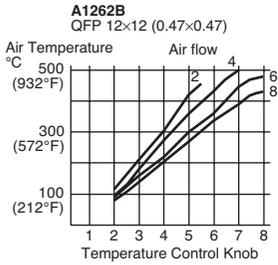
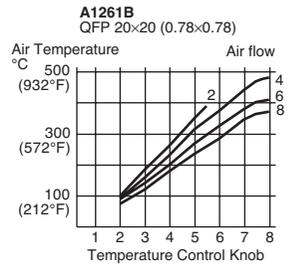
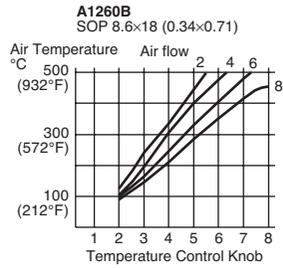
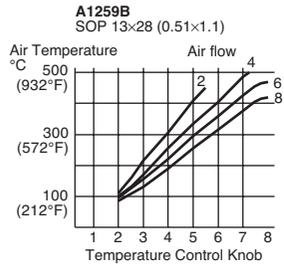
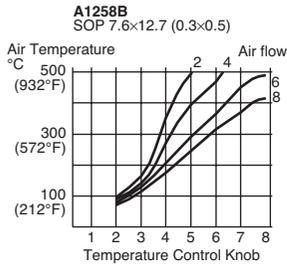
Please refer to the temperature distribution chart in the 850B instruction manual before use.

Test criteria: Measured at a point 3mm (0.12 in.) from the nozzle by recorder.



8. TEMPERATURE DISTRIBUTION CHART

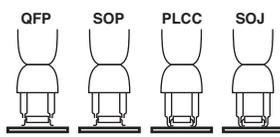
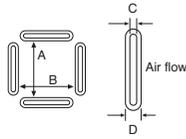




9. OPTIONAL NOZZLES

NOTE:

The size in Name/ Specification indicates the size of IC package.



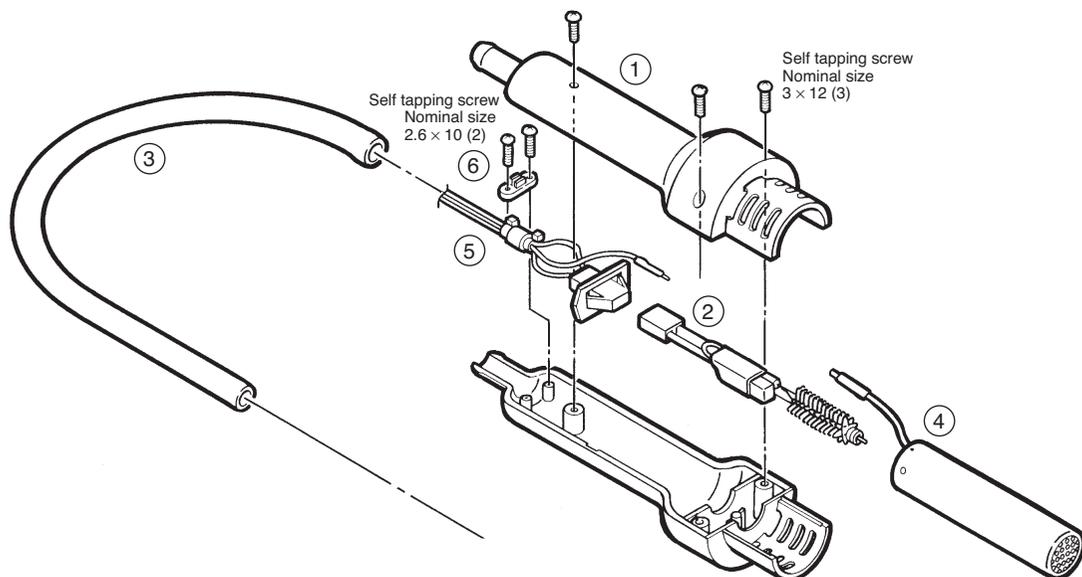
No.	C 0.8 (0.03) D 1.8 (0.07)	C 1.0 (0.04) D 2.0 (0.08)	C 0.8 (0.03) D 2.0 (0.08)
	A1125B~A1129B A1131~A1141B A1180B~A1189B A1203B~A1265B	A1191	A1192

A1124B Single $\phi 2.5$ (0.09) $\phi 2.5$ (I.D.) (0.09)	A1125B QFP 10 × 10 (0.39 × 0.39) A:10.2 (0.4) B:10.2 (0.4)	A1126B QFP 14 × 14 (0.55 × 0.55) A:15.2 (0.6) B:15.2 (0.6)	A1127B QFP 17.5 × 17.5 (0.68 × 0.68) A:19.2 (0.76) B:19.2 (0.76)	A1128B QFP 14 × 20 (0.55 × 0.78) A:15.2 (0.6) B:21.2 (0.83)	A1129B QFP 28 × 28 (1.1 × 1.1) A:29.7 (1.17) B:29.7 (1.17)
A1130 Single $\phi 4.4$ (0.17) $\phi 4.4$ (I.D.) (0.17)	A1131 SOP 4.4 × 10 (0.17 × 0.39) 4.8 (0.19)	A1132 SOP 5.6 × 13 (0.22 × 0.51) 5.7 (0.22)	A1133 SOP 7.5 × 15 (0.3 × 0.59) 7.2 (0.28)	A1134 SOP 7.5 × 18 (0.3 × 0.7) 7.2 (0.28)	A1135B PLCC 17.5 × 17.5 (0.68 × 0.68) (44 Pins) A:18.5 (0.73) B:18.5 (0.73)
A1136B PLCC 20 × 20 (0.78 × 0.78) (52 Pins) A:21 (0.83) B:21 (0.83)	A1137B PLCC 25 × 25 (0.98 × 0.98) (68 Pins) A:26 (1.02) B:26 (1.02)	A1138B PLCC 30 × 30 (1.18 × 1.18) (84 Pins) A:31 (1.22) B:31 (1.22)	A1139B PLCC 12.5 × 7.3 (0.49 × 0.29) (18 Pins) A: 9 (0.35) B:14 (0.55)	A1140B PLCC 11.5 × 11.5 (0.45 × 0.45) (28 Pins) A:13 (0.51) B:13 (0.51)	A1141B PLCC 11.5 × 14 (0.45 × 0.55) (32 Pins) A:15 (0.59) B:13 (0.51)
A1142B Bent Single 1.5 × 3 (0.06 × 0.12) 45° 1.5 (I.D.) 0.12 (I.D.)	A1180B BQFP 17 × 17 (0.67 × 0.67) A:18.2 (0.72) B:18.2 (0.72)	A1181B BQFP 19 × 19 (0.75 × 0.75) A:19.2 (0.76) B:19.2 (0.76)	A1182B BQFP 24 × 24 (0.94 × 0.94) A:24.2 (0.95) B:24.2 (0.95)	A1183 SOJ 15 × 8 (0.59 × 0.31) 8 (0.31)	A1184B SOJ 18 × 8 (0.71 × 0.31) 10 (0.39)
A1185B TSOL 13 × 10 (0.51 × 0.39) 11.9 (0.47)	A1186B TSOL 18 × 10 (0.71 × 0.39) 18.2 (0.72)	A1187B TSOL 18.5 × 8 (0.73 × 0.31) 18.5 (0.73)	A1188B PLCC 9 × 9 (0.35 × 0.35) (20 Pins) A:11 (0.43) B:11 (0.43)	A1189B PLCC 34 × 34 (1.34 × 1.34) (100 Pins) A:36.5 (1.44) B:36.5 (1.44)	A1190 Dual Single 2.5 × 9.5 Pitch (0.09 × 0.37) $\phi 2.5$ (I.D.) (0.09)
A1191 SIP 25L (0.98) 26 (1.02)	A1192 SIP 50L (1.97) 52.5 (2.07)	A1203B QFP 35 × 35 (1.38 × 1.38) A:35.2 (1.39) B:35.2 (1.39)	A1214B SOJ 10 × 26 (0.39 × 1.02) 12 (0.47)	A1215B QFP 42.5 × 42.5 (1.67 × 1.67) A:42.5 (1.67) B:42.5 (1.67)	A1257B SOP 11 × 21 (0.43 × 0.83) 11.7 (0.46)
A1258B SOP 7.6 × 12.7 (0.3 × 0.5) 8.2 (0.32)	A1259B SOP 13 × 28 (0.51 × 1.1) 13.5 (0.53)	A1260B SOP 8.6 × 18 (0.34 × 0.71) 8.7 (0.34)	A1261B QFP 20 × 20 (0.78 × 0.78) A:20.2 (0.8) B:20.2 (0.8)	A1262B QFP 12 × 12 (0.47 × 0.47) A:12.2 (0.48) B:12.2 (0.48)	A1263B QFP 28 × 40 (1.1 × 1.57) A:27.7 (1.09) B:39.7 (1.56)
A1264B QFP 40 × 40 (1.57 × 1.57) A:40.2 (1.58) B:40.2 (1.58)	A1265B QFP 32 × 32 (1.26 × 1.26) A:32.2 (1.27) B:32.2 (1.27)	A1325 Dual Single $\phi 1.5 \times 5-10$ (0.06 × 0.2-0.39) Adjustable Pitch The pitch between the two nozzles is adjustable. 5 (0.2) 10 (0.39) $\phi 1.5$ (I.D.) (0.06)			

10. PARTS LIST / HANDPIECE

NOTE:

Spare or repair parts do not include mounting screws, if they are not listed on the specifications. Screws must be ordered separately.



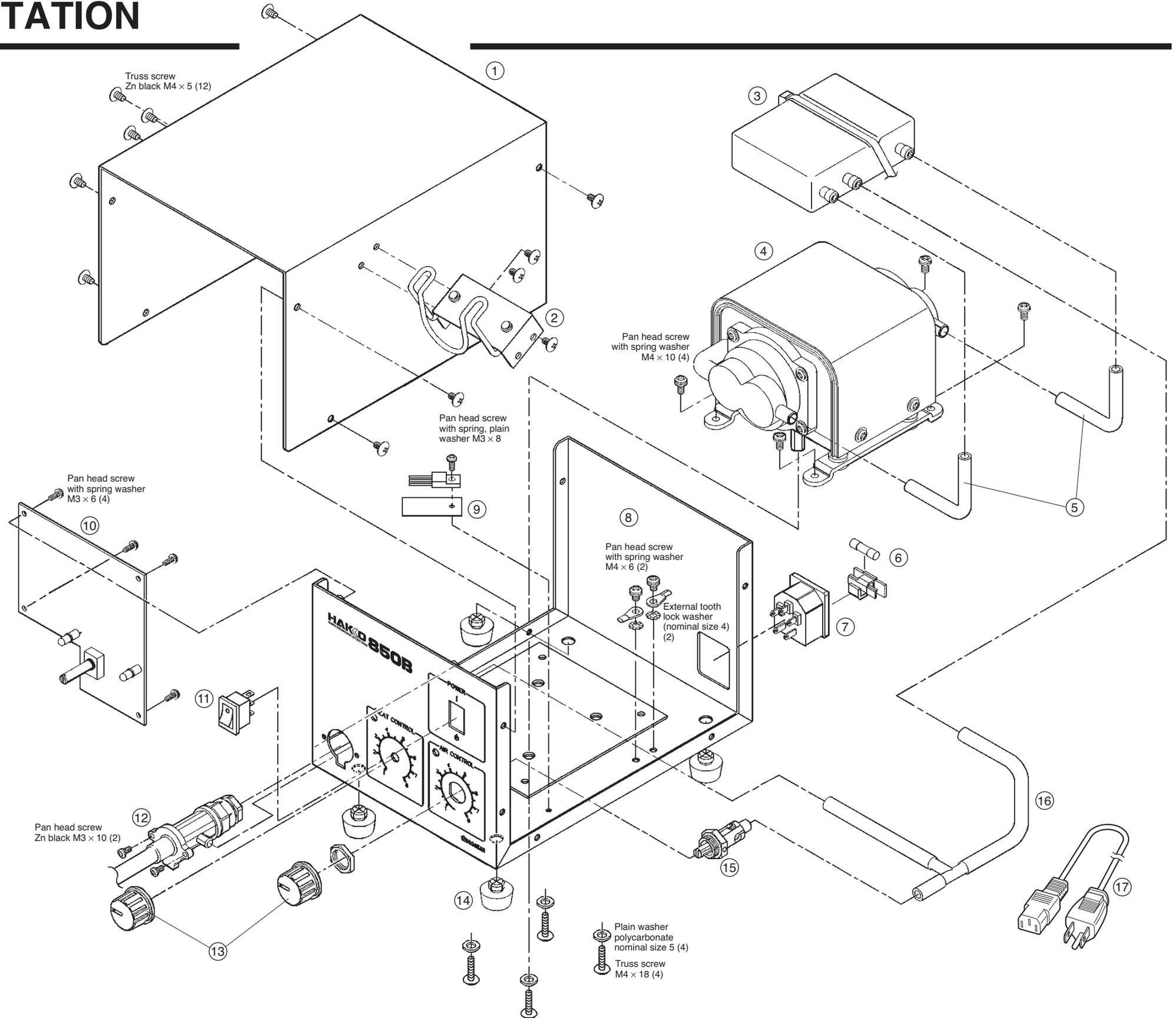
Item No.	Part No.	Part Name	Specifications
①	B2544	Handle	With screws
②	A1143	Heating element	100V
	A1144	Heating element	110V
	A1145	Heating element	120V
	A1146	Heating element	220-240V
③	B1188	Silicone hose	
④	B1441	Pipe assembly	
⑤	B2556	Cord assembly	
⑥	B1354	Cord stopper	With screws

10. PARTS LIST / STATION

English
中文

NOTE:
Spare or repair parts do not include mounting screws, if they are not listed on the specifications. Screws must be ordered separately.

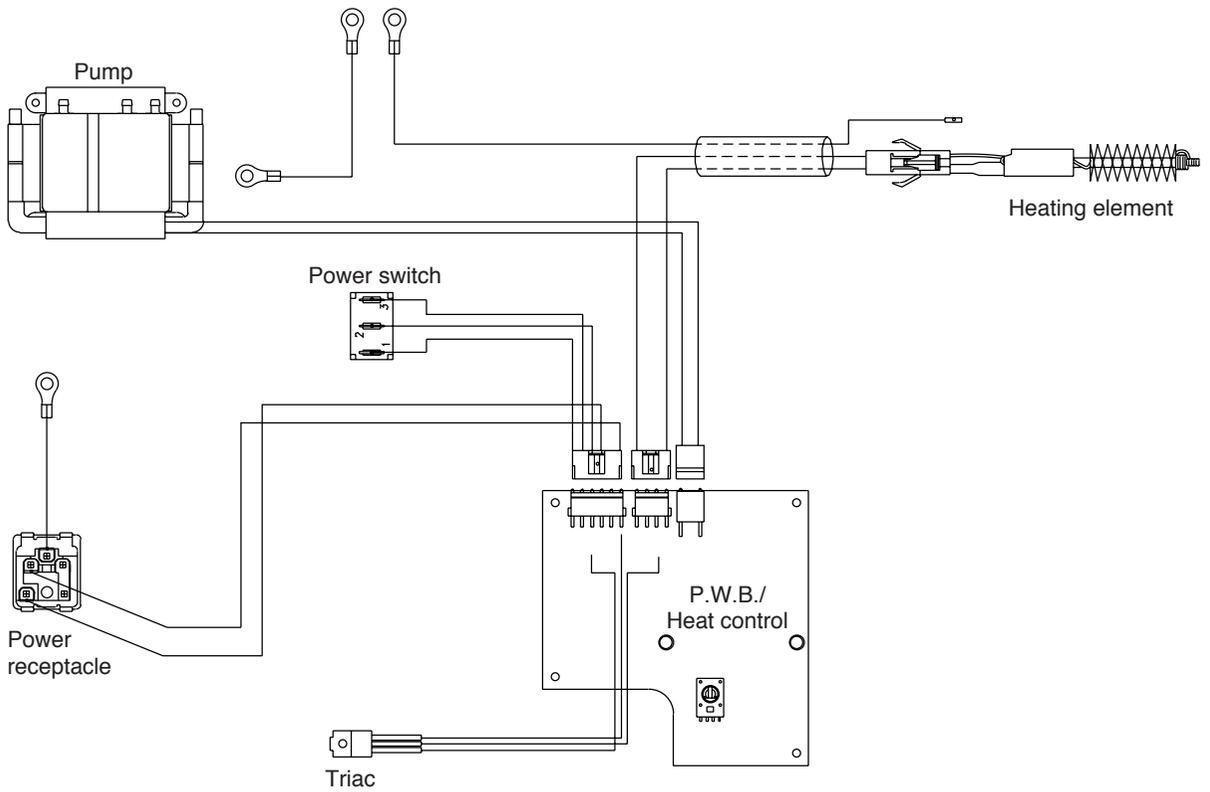
Item No.	Part No.	Part Name	Specifications
①	B2539	Cover	
②	B2477	Handpiece holder assembly	
③	B2472	Sound-proof tank	
④	B2471	Air pump	100V, with high nut, nylon tape, double-side tape
	B2480	Air pump	110-120V, with high nut, nylon band, double-side tape
	B2481	Air pump	220-240V, with high nut, nylon band, double-side tape
⑤	B2473	Silicone tube	8 × 5 × 130ℓ (mm.) 0.3 × 0.2 × 5.1ℓ (in.)
⑥	B2468	Fuse	125V-5A
	B1258	Fuse	250V-3.15A
⑦	B2384	Power receptacle	
⑧	B2540	Chassis	
⑨	B2463	Radiation sheet	
⑩	B2542	P.W.B.	100V, with potentiometer, triac
	B2545	P.W.B.	110-120V, with potentiometer, triac
	B2546	P.W.B.	220-230V, with potentiometer, triac
	B2547	P.W.B.	240V, with potentiometer, triac
⑪	B2541	Switch	
⑫	B2537	Air nozzle	With cord stopper
⑬	B1028	Knob	With screw
⑭	B1204	Rubber foot	Set of 4
⑮	-	Exhaust nozzle	If you need exhaust nozzle, contact your HAKKO representative.
⑯	B2543	Tube connector	With silicone tube
⑰	B2419	Power cord, 3 core & American plug	
	B2421	Power cord, 3 core, no plug	
	B2422	Power cord, 3 core, BS plug	India
	B2423	Power cord, 3 core European plug	Korea
	B2424	Power cord, 3 core European plug	Eur.
	B2425	Power cord, 3 core, BS plug	U.K.
	B2426	Power cord, 3 core, Australian plug	
	B2436	Power cord, 3 core, Chinese plug	



English
中文

11. WIRING DIAGRAM

English
中文



HAKKO 850B

SMD REWORK STATION

扁平集成電路拔放臺

使用說明書

日本白光牌



承蒙惠顧，謹致謝忱。

本產品用熱風焊接及除錫之扁平集成電路拔放臺。

請詳閱本使用說明書，正確使用。閱後請妥為收存，以備日後查閱。



目錄

1. 包裝清單.....	17
2. 規格.....	17
3. 安全及使用上之注意事項.....	18
4. 各部名稱.....	19
5. 準備-組裝與連接.....	20
6. 使用方法.....	21
7. 保養/檢查方法.....	23
8. 溫度分布圖表.....	24
9. 選購品/噴氣嘴.....	27
10. 部件清單/焊鐵部.....	28
/機身.....	29
11. 電路圖.....	31

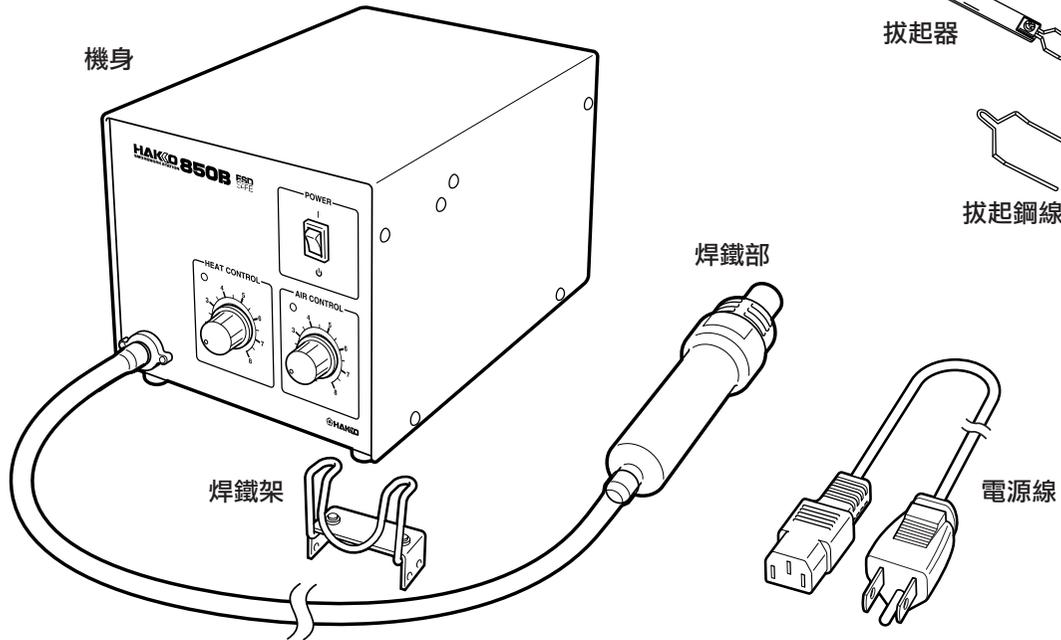
1. 包裝清單

請先確認包裝的內容。

HAKKO 850B機身	1
電源線.....	1
焊鐵架.....	1
拔起器.....	1
鋼線(大,小).....	各1
使用說明書.....	1

※本商品不包含噴氣嘴。
請另購配合IC之噴氣嘴。

English
中文



2. 規格

名稱	HAKKO 850B
功率消耗	100V-280W 110V-270W 120V-300W 220V-300W 230V-310W 240V-310W

●機身

功率消耗	30W (待機功率消耗100-120V 2W, 220-240V 4W)
泵	膜片式
風量	23ℓ/min. (Max)
控制溫度	100-420℃ 使用A1226B時
外形尺寸	160 (W)×145 (H)×225 (D) mm
重量	4 kg

●焊鐵部

功率消耗	100V-250W 110V-240W 120V-270W 220V-270W 230V-280W 240V-280W
全長(不含電線)	196 (L) mm
重量(不含電線)	120 g

※本商品有防靜電處理。
※規格及外觀有可能改良變更，恕不先行通知。

3. 安全及使用上的注意事項

警告

本說明書如下所述將注意事項區分為「警告」「注意」來表示。
請充分理解其含意後再閱讀本文。

 **警告：**濫用可能導致使用者死亡或負重傷。

 **注意：**濫用可能導致使用者受傷或對涉及物體造成實質破壞。

- 為了安全，請務必遵守以下之警告・注意事項。

警告

請勿設定熱度保護器動作（使用時發熱元件指示燈滅）的風量・溫度。
可能發熱元件部分不能操作。使用後，務必進行自動冷卻，此冷卻時內勿拔掉插頭。

注意

當電源接通時，熱風及噴氣嘴附近之溫度高達到攝氏100~450°C的高溫。
鑑於濫用可能發生燙傷、火災，請務必嚴格遵守以下注意事項。

- 切勿碰觸熱風或噴氣嘴周圍的金屬部分。
- 切勿在引火性之氣體或材料、易燃物附近使用。
- 噴氣嘴不要朝向人或臉面。
- 通知周圍的人「高溫危險」。
- 使用暫停、結束時，或要離開現場時關閉電源。
- 更換部件或收拾本體時，應關掉電源並待冷卻至室溫。

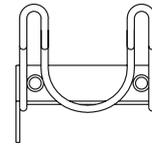
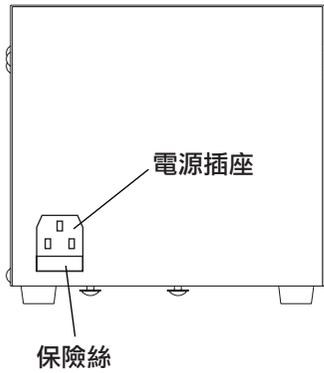
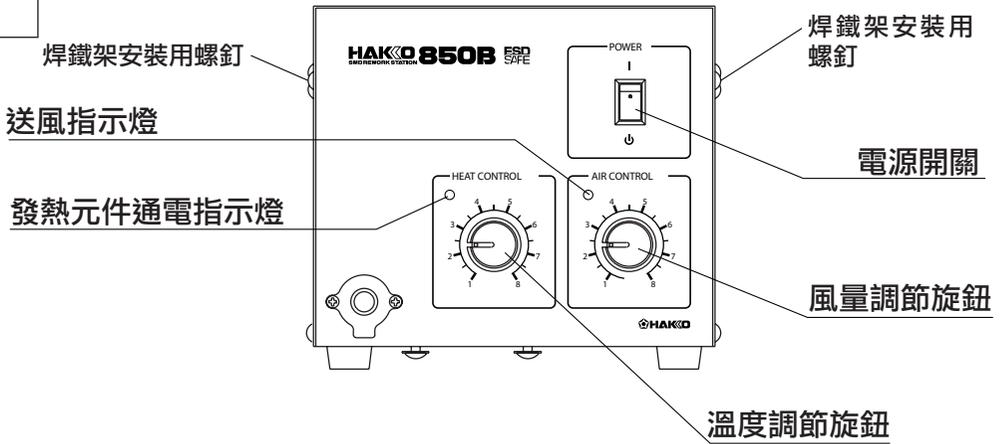
- 請務必遵守以下之注意事項，否則可能發生個人受傷或機器受損。

- 切勿以焊鐵部敲打作業臺而給予強大衝擊。
- 務必接地之後再使用。
- 切勿拆卸泵或真空泵。
- 切勿改裝本產品。
- 更換部件時，應採用HAKKO原件。
- 切勿弄濕本體，或手濕時也不能使用。
- 拔出或插入電源時，抓住插頭進行。
- 作業時，請做好通風。
- 使用本體時，不可作任何可能傷害身體或損害物體的妄動。

4. 各部名稱

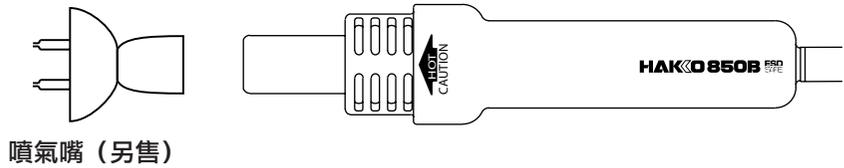
English
中文

機身

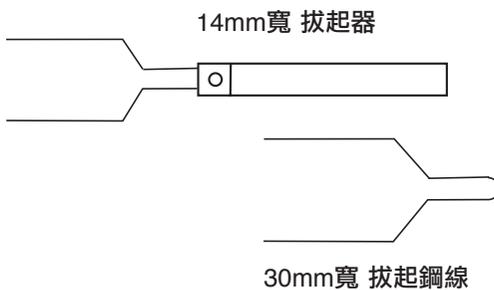


焊鐵架

焊鐵部



附屬品



5. 準備-組裝與連接

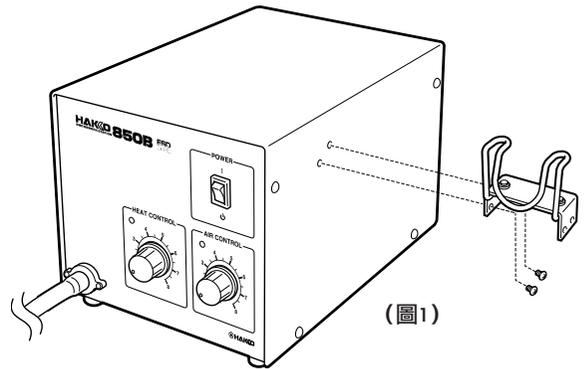
準備-組裝與連接

A. 組裝機身

● 安裝焊鐵架

取下機身旁的焊鐵架安裝用螺釘。將焊鐵架裝到機身（圖1）

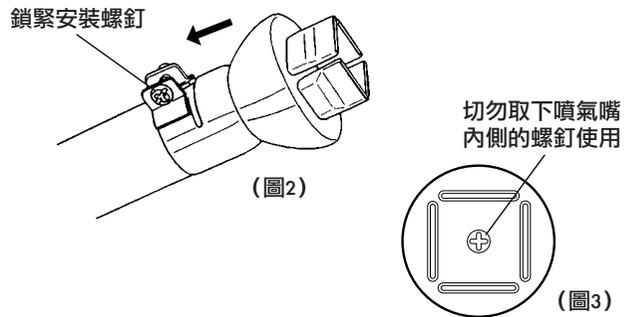
（左右哪一側都可安裝。）



(圖1)

B. 組裝焊鐵部

● 鬆開噴氣嘴的安裝用螺釘，安裝噴氣嘴。鎖緊噴氣嘴的安裝用螺釘。（圖2）

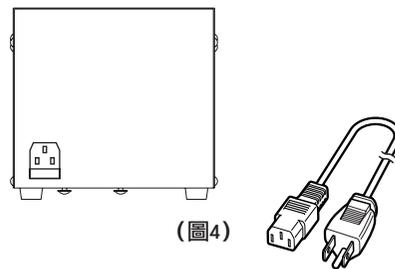


(圖2)

(圖3)

C. 連接電源線、接通電源

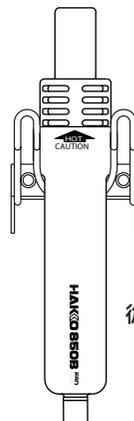
1. 將電源線連接到機身後面的電源插座。（圖4）
2. 將焊鐵部放在焊鐵架上。（圖5）
3. 將電源插頭插入插座。
自動送風功能會開始送風。然而，發熱元件為OFF。
4. 打開電源開關。



(圖4)

⚠ 注意

本產品有防靜電處理，請務必接地。



從上面看到的圖

⚠ 注意

不使用時，請將焊鐵部放在焊鐵架上。

(圖5)

注記：

自動送風功能運作時任何時間內，皆可打開電源開關。一旦開關打開發熱元件開始加熱。

6. 使用方法

● 取下 (QFP)

1. 調節空氣量及溫度控制旋鈕。

溫度，風量與噴氣嘴之關係為請參閱溫度分布圖表。調節後，待溫度安定。

⚠警告

如果溫度保護器動作時，請降低溫度設定或增加空氣流量。切勿設定將溫度保護器會動作（使用時發熱元件指示燈滅）的風量・溫度。可能發熱功能部分不能操作。

2. 安裝拔起器

將拔起器套入部件塊底下（參閱圖I）。如果部件寬度不配合起拔鋼線尺寸，可擠壓鋼線寬度以適應之。PLCC，集成電路電阻等部件時，請用小鑷子，拆下部件。

3. 加熱

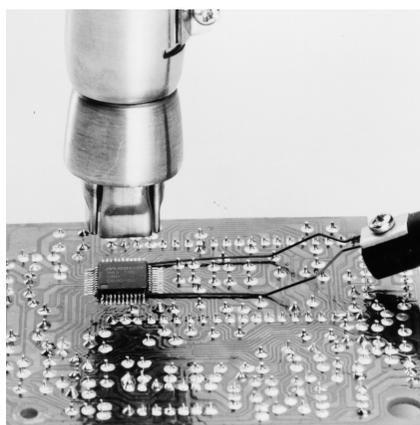
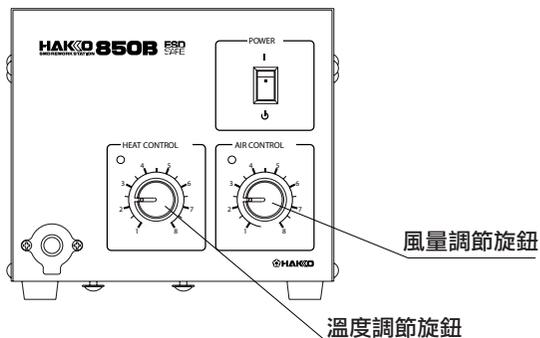
持著焊鐵在部件正上面，使噴氣嘴對準所要熔化焊錫部份，讓噴出熱風熔化焊錫。噴氣嘴不可觸及部件引線。

4. 拆下部件

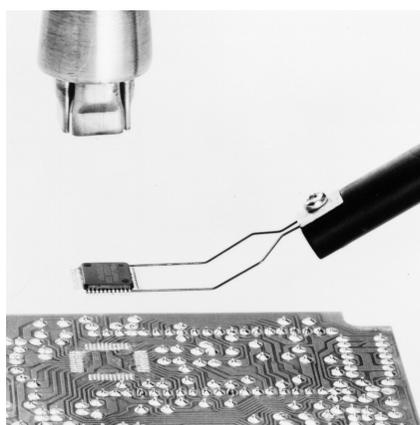
焊錫熔化時，提起起拔器，移開部件。

5. 清除焊錫

移開部件後，使用吸錫線或除錫工具，清除殘餘焊錫。



(圖I)



(圖II)

●安裝 (QFP)

1. 塗抹適量錫膏

塗抹適量錫膏，將部件放在電路板上。

2. 預備加熱

參閱圖（圖III），預熱部件。

3. 焊接

向引線框平均噴出熱風。（圖IV）

4. 清理

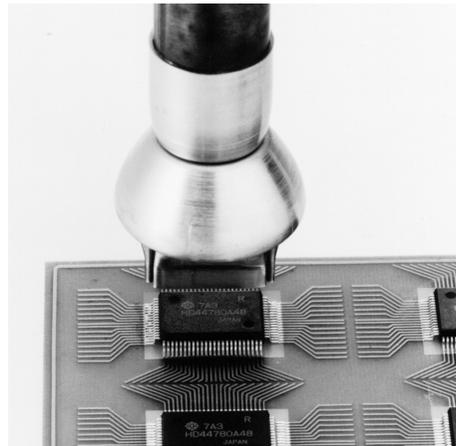
焊接完畢，清除助焊劑殘餘。

注記：

使用熱風的焊接有許多優點，但亦可能引起產生錫球或焊橋等的焊接不良。因此，作業時我方建議充分考慮各種條件。



(圖III)



(圖IV)

●電源開關

關掉電源後，自動送風功能開始操作，通過管件輸送涼氣90秒，使發熱元件和手柄降溫。因此，在冷卻時段，不可拔去電源插頭。

⚠注意

自動送風功能的風量被風量調節旋鈕控制。為了效率冷卻，我方建議將旋鈕設定為8。

7. 保養/檢查方法

● 檢查發熱元件方法

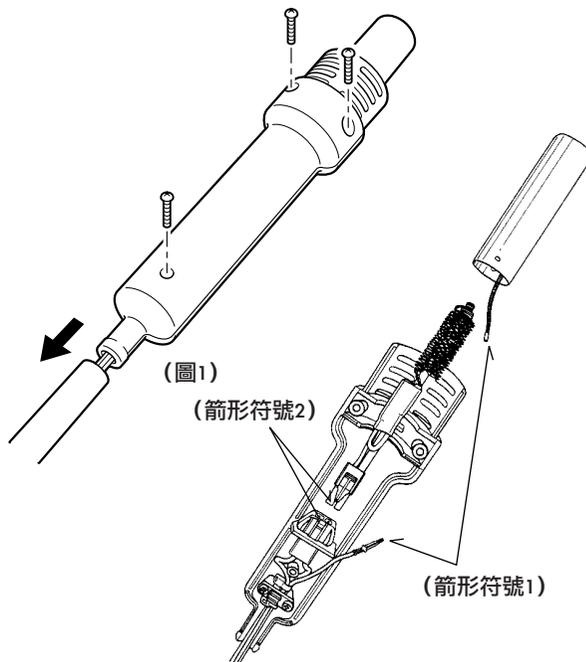
A. 打開焊鐵部

1. 取下固定焊鐵部之3支螺釘。
2. 將保護管退到下面。
3. 打開焊鐵部，拆開接地電線。護套（箭形符號1）。取下發熱元件套管。

⚠注意

發熱元件套管內部裝有石英玻璃及斷材料。請勿掉下或遺失。

4. 拆下終端（箭形符號2）拔出發熱元件

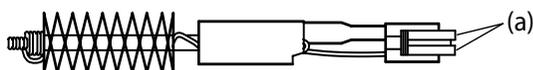


B. 測量電阻值

測量發熱元件之電阻值（a）。正常值為26-40歐姆（100-120V），70-100歐姆（220-240V）（常溫時）。電阻值異常時請更換之。（更換方法請參照更換部件附屬之說明書。）

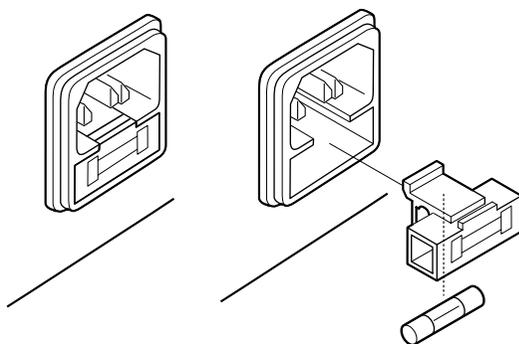
⚠注意

小心觸發熱元件。切勿摩擦發熱元件線。



● 保險絲更換方法

1. 將電源線自電源插座拔出。
2. 將保險絲座拔出。
3. 更換新的保險絲。
5A (100-120V) 3.15A (220-240V)
4. 組裝成原樣。



8. 溫度分布圖表

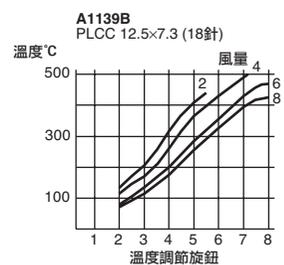
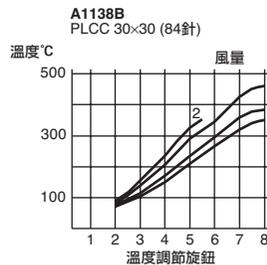
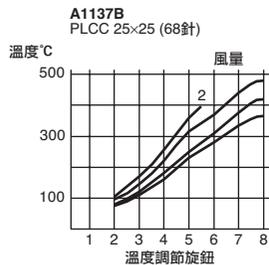
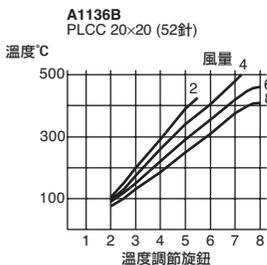
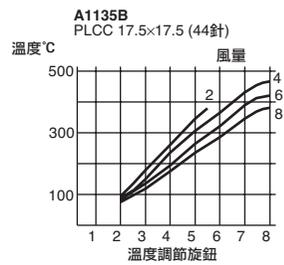
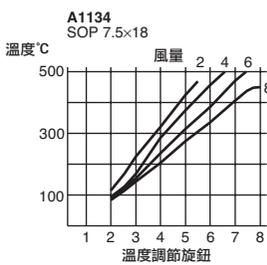
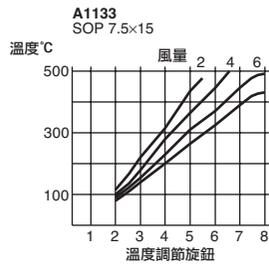
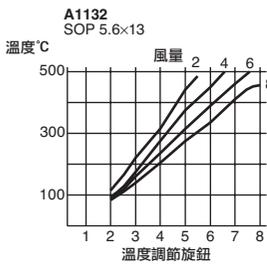
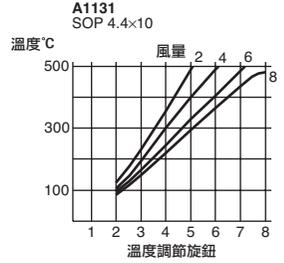
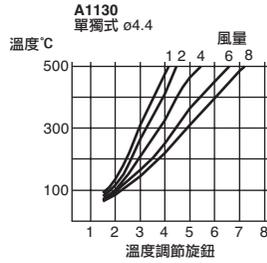
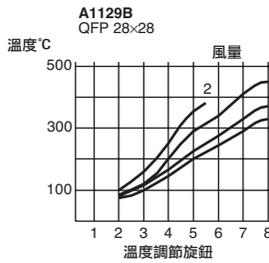
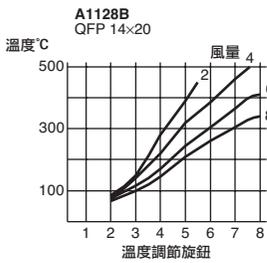
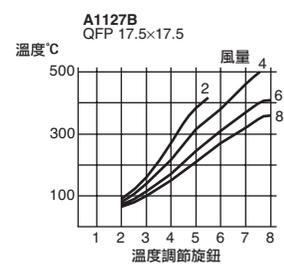
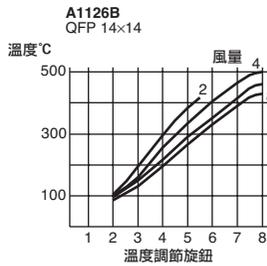
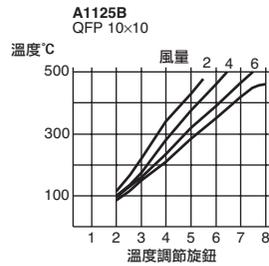
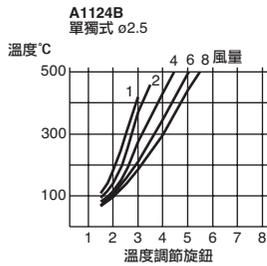
⚠注意 溫度分布圖表只是參考用之。如果熱度保護器動作時請降低所設定溫度或增加風量。

注記：關於HAKKO 850B之溫度調節與風量調節

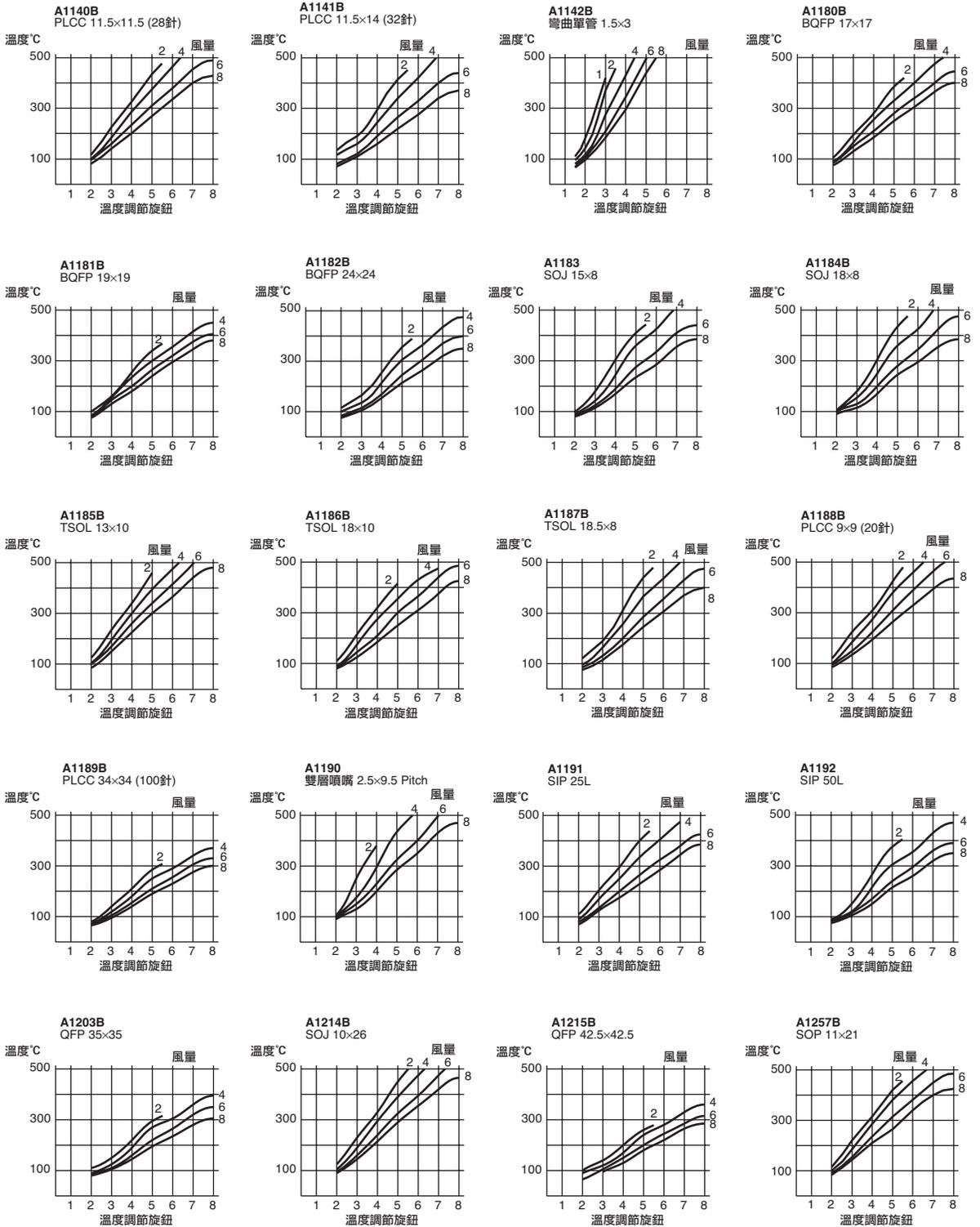
請勿將HAKKO 850之風量與溫度設定的溫度分布表，引用到HAKKO 850B。HAKKO 850B之泵與控制機構和HAKKO 850不同。因此，其設定風量，設定溫度並不一致。

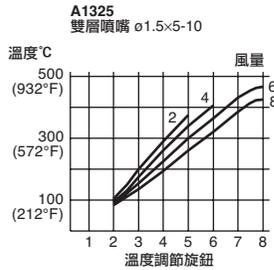
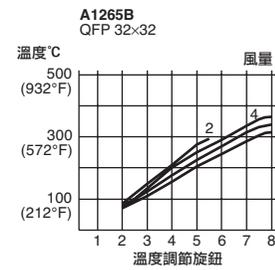
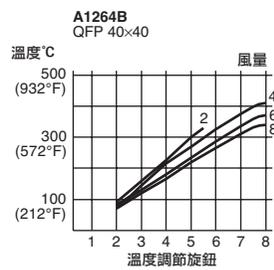
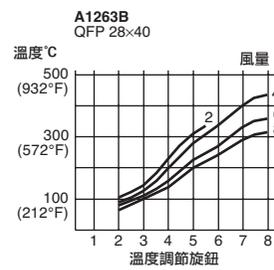
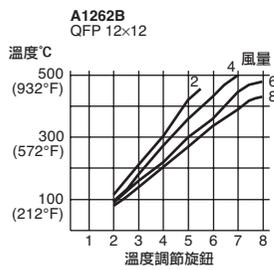
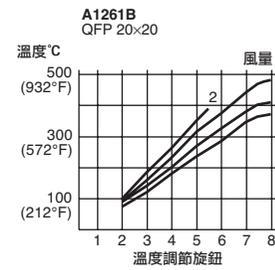
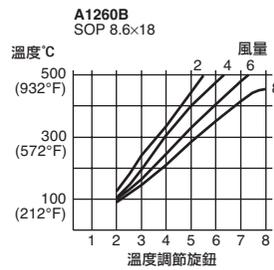
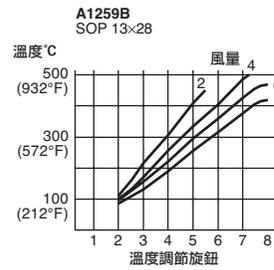
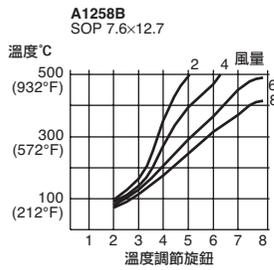
當使用HAKKO 850B時，請參考HAKKO 850B之使用說明書所記載的溫度分布表而設定。

測量條件：距離噴氣嘴3毫米處測量。



8. 溫度分布圖表

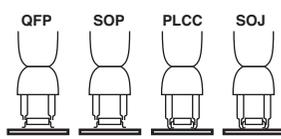
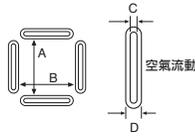




9. 選購品/噴氣嘴

注記：

噴氣嘴的規格及尺寸表示扁平IC的尺寸。



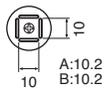
No.	C 0.8 D 1.8	C 1.0 D 2.0	C 0.8 D 2.0
	A1125B~A1129B A1131~A1141B A1180B~A1189B A1203B~A1265B	A1191	A1192

單位：mm

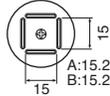
A1124B 單獨式 $\phi 2.5$



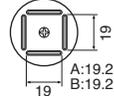
A1125B QFP 10 x 10



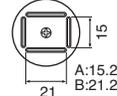
A1126B QFP 14 x 14



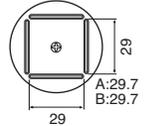
A1127B QFP 17.5 x 17.5



A1128B QFP 14 x 20



A1129B QFP 28 x 28



A1130 單獨式 $\phi 4.4$



A1131 SOP 4.4 x 10



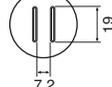
A1132 SOP 5.6 x 13



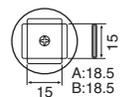
A1133 SOP 7.5 x 15



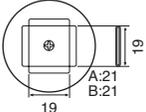
A1134 SOP 7.5 x 18



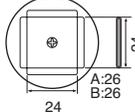
A1135B PLCC 17.5 x 17.5 (44針)



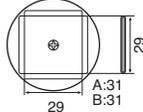
A1136B PLCC 20 x 20 (52針)



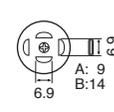
A1137B PLCC 25 x 25 (68針)



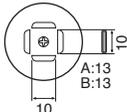
A1138B PLCC 30 x 30 (84針)



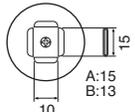
A1139B PLCC 12.5 x 7.3 (18針)



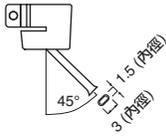
A1140B PLCC 11.5 x 11.5 (28針)



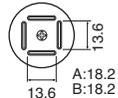
A1141B PLCC 11.5 x 14 (32針)



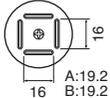
A1142B 彎曲單管 1.5 x 3



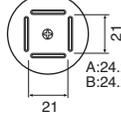
A1180B BQFP 17 x 17



A1181B BQFP 19 x 19



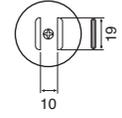
A1182B BQFP 24 x 24



A1183 SOJ 15 x 8



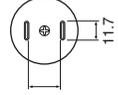
A1184B SOJ 18 x 8



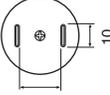
A1185B TSOL 13 x 10



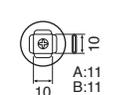
A1186B TSOL 18 x 10



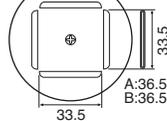
A1187B TSOL 18.5 x 8



A1188B PLCC 9 x 9 (20針)



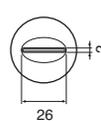
A1189B PLCC 34 x 34 (100針)



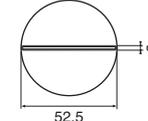
A1190 雙層噴嘴 2.5 x 9.5 Pitch



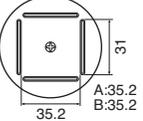
A1191 SIP 25L



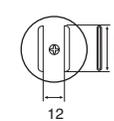
A1192 SIP 50L



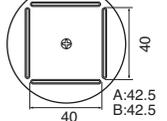
A1203B QFP 35 x 35



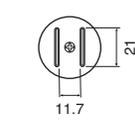
A1214B SOJ 10 x 26



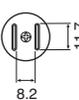
A1215B QFP 42.5 x 42.5



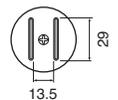
A1257B SOP 11 x 21



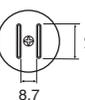
A1258B SOP 7.6 x 12.7



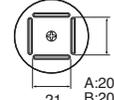
A1259B SOP 13 x 28



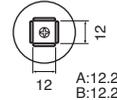
A1260B SOP 8.6 x 18



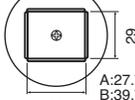
A1261B QFP 20 x 20



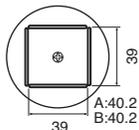
A1262B QFP 12 x 12



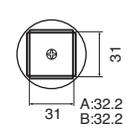
A1263B QFP 28 x 40



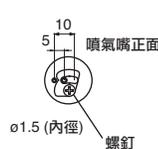
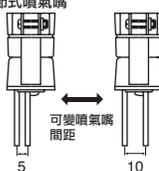
A1264B QFP 40 x 40



A1265B QFP 32 x 32



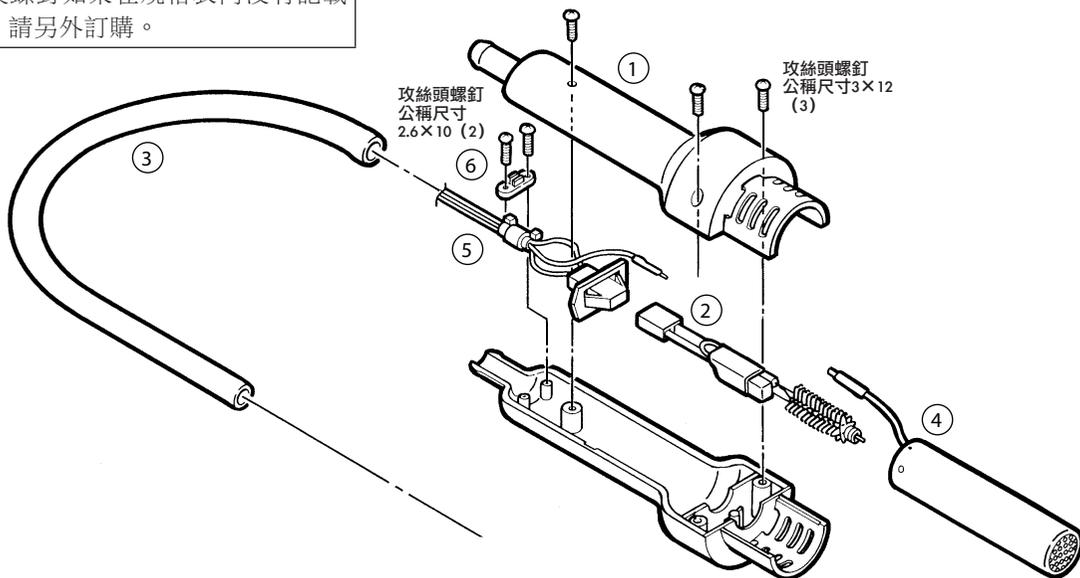
A1325 雙層噴嘴 0.15 x 5-10 調節式噴氣嘴



10. 部件清單 (焊鐵部)

注記：

安裝螺釘如果在規格表內沒有記載時，請另外訂購。

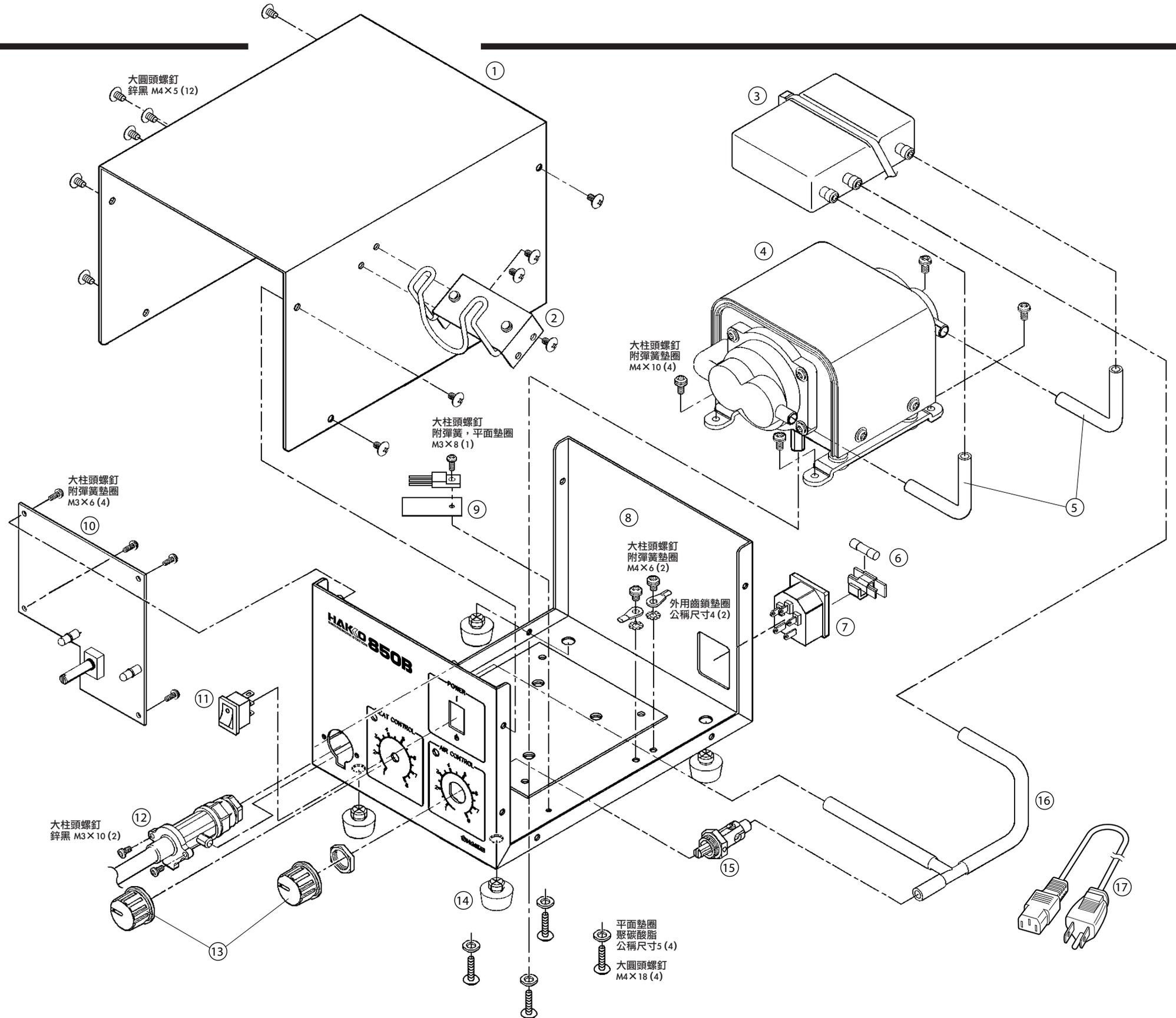


圖號	編號號碼	部件名稱	規格
①	B2544	手柄	附螺釘
②	A1143	發熱元件	100V
	A1144	發熱元件	110V
	A1145	發熱元件	120V
	A1146	發熱元件	220-240V
③	B1188	硅軟管	
④	B1441	發熱元件套管	
⑤	B2556	電線組件	
⑥	B1354	電線塞/手柄	附螺釘

10. 部件清單 (機身)

注記：
安裝螺釘如果在規格表內沒有記載時，請另外訂購。

圖號	編號號碼	部件名稱	規格
①	B2539	外蓋	
②	B2477	焊鐵架	組品
③	B2472	消音箱	附尼龍扣帶, 兩面膠帶
④	B2471	空氣泵	100V附高螺母, 尼龍扣帶, 兩面膠帶
	B2480	空氣泵	110-120V附高螺母, 尼龍扣帶, 兩面膠帶
	B2481	空氣泵	220-240V附高螺母, 尼龍扣帶, 兩面膠帶
⑤	B2473	硅軟管	φ8×φ5×130Lmm
⑥	B2468	保險絲	125V-5A
	B1258	保險絲	250V-3.15A
⑦	B2384	電源插座	
⑧	B2540	底盤	
⑨	B2463	散熱片	
⑩	B2542	印刷電路板	100-120V附可控硅, 電位計
	B2545	印刷電路板	110-120V附可控硅, 電位計
	B2546	印刷電路板	220-230V附可控硅, 電位計
	B2547	印刷電路板	240V附可控硅, 電位計
⑪	B2541	電源開關	
⑫	B2537	噴氣器	附電源線塞
⑬	B1028	旋鈕	附螺釘
⑭	B1024	橡膠塞	附4個
⑮	-	排出噴嘴	有需要者請詢問代理店或銷售店。
⑯	B2543	T字形接合器	附硅軟管
⑰	B2419	電源線 三芯美式插頭	
	B2421	電源線 三芯沒有插頭	
	B2422	電源線 三芯英國標準插頭	印度
	B2423	電源線 橡膠三芯歐式插頭	韓國
	B2424	電源線 三芯歐式插頭	歐洲
	B2425	電源線 三芯英國標準插頭	英國
	B2426	電源線 三芯澳大利亞插頭	
	B2436	電源線 三芯中式插頭	

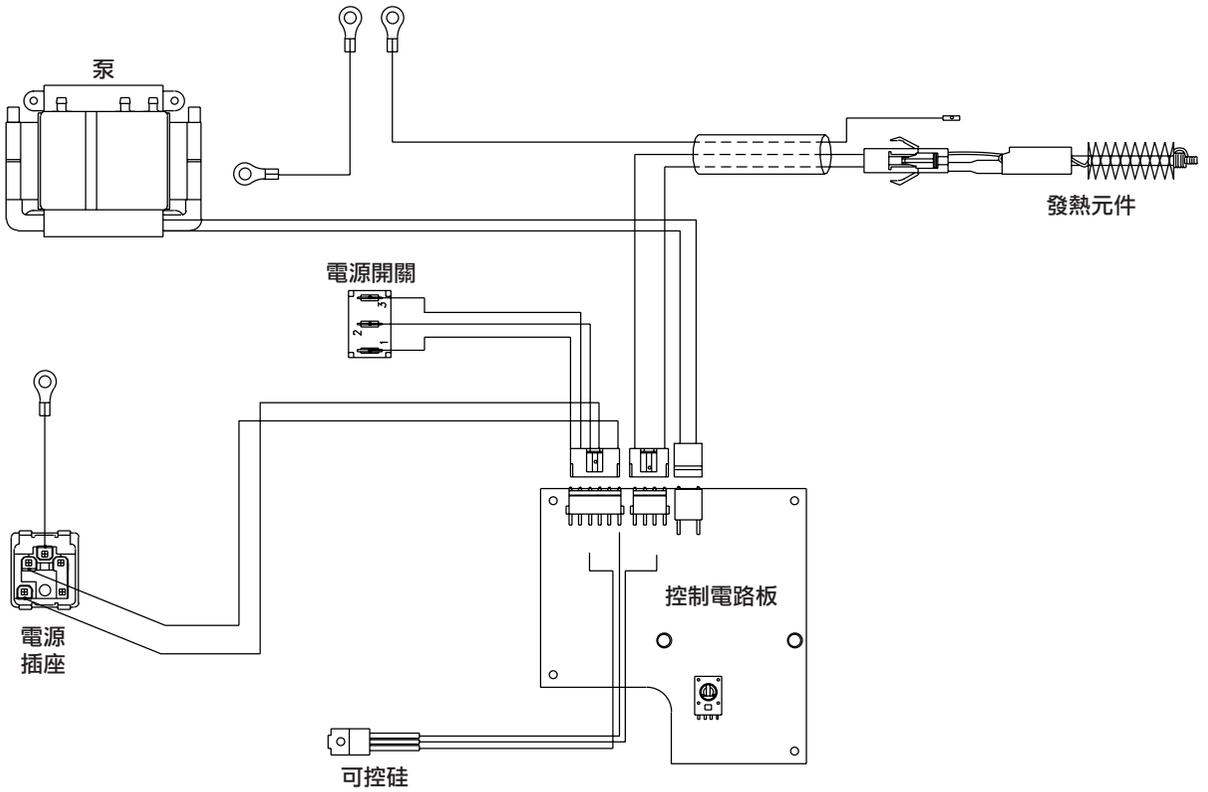


English
中文

English
中文

11. 電路圖

English
中文



HAKKO CORPORATION

HEAD OFFICE

TEL: +81-6-6561-3225 FAX: +81-6-6561-8466
<http://www.hakko.com> E-mail: sales@hakko.com

OVERSEAS AFFILIATES

U.S.A.: AMERICAN HAKKO PRODUCTS, INC.

TEL: (661) 294-0090 FAX: (661) 294-0096
 Toll Free (800)88-HAKKO

<http://www.hakko.us>

HONG KONG: HAKKO DEVELOPMENT CO., LTD.

TEL: 2811-5588 FAX: 2590-0217

<http://www.hakko.com.hk>

E-mail: info@hakko.com.hk

SINGAPORE: HAKKO PRODUCTS PTE., LTD.

TEL: 6748-2277 FAX: 6744-0033

<http://www.hakko.com.sg>

E-mail: sales@hakko.com.sg

Please access to the following address for the other Sales affiliates.

<http://www.hakko.com/address>