



# **HAKKO 926**

**SOLDERING STATION**

**INSTRUCTION MANUAL**

**使用說明**

## **NOTICE**

Please read this instruction manual thoroughly before operating the HAKKO 926

使用白光 926 之前，請仔細閱讀使用說明。

# SPECIFICATION 規格

## ● STATION 機身

Power Consumption 電耗	60W 60瓦
Output Voltage 輸出電壓	AC24V 交流電24伏
Temperature 溫度	200~480°C/392~896°F 攝氏200度-480度 / 華氏392度-896度
Temperature Control 溫控	Control accuracy of setting at idling temperature. ±0.5°C (±0.9°F) 非工作狀態定值溫度精確度 攝氏±0.5度 (華氏±0.9度)
Outer Dimensions 外形尺寸	125(W) x 120(H) x 200 (D) mm ] 4.9(W) x 4.7(H) x 8.1(D) in ] (without Cord & Holder Part) 寬125×高120×長200毫米 (不包括烙鐵架、電線) 寬4.9×高4.7×長8.1英寸
Weight 重量	Approx 1.5 kg (3.3 lb) (without Cord & Holder Part) 約1.5公斤 (3.3磅) (不包括烙鐵架、電線)

## ● IRON 電烙鐵

	HAKKO 900M-type HAKKO 900M-型	HAKKO 900 L-type HAKKO 900L-型
Part No. 部件編號	900M 900M	900M-ESD 900M-ESD
Power Consumption 電耗	AC24V 50W 交流電24伏50瓦	
Insulation Resistance 絕緣電阻	Over 300M ohm at 400°C/752°F by DC500V insulation tester. [50M ohm at 480°C (896°F)] 攝氏400度 / 華氏752度直流電500伏電阻大于300M Ω 測試電阻 [50M Ω 攝氏480度 (華氏896度)]	
Leak Voltage 漏電壓	under 0.6mV (between Tip and Ground) 小于0.6毫伏 (烙鐵頭與地電壓差)	
Heating Element 發熱材料	Ceramic Heater 陶瓷發熱器	
Cord Asse'y 裝配電線	5 wire burn-proof silicone cord, 1.2m (4ft.)with Connecting Plug 5芯防火矽質電線, 1.2米 (4英寸) 包括連接插頭	
Connecting Plug 連接插頭	5 pin inter-lock system 5芯內鎖插頭	
Length (w/o cord) 長度 (不包括電線)	190mm (7.4 in) 190毫米 (7.4英寸)	210mm (8.2 in) 210毫米 (8.2英寸)
Weight 重量	45g (0.10 lb) 45克 (0.10磅)	55g (0.12 lb) 55克 (0.12磅)

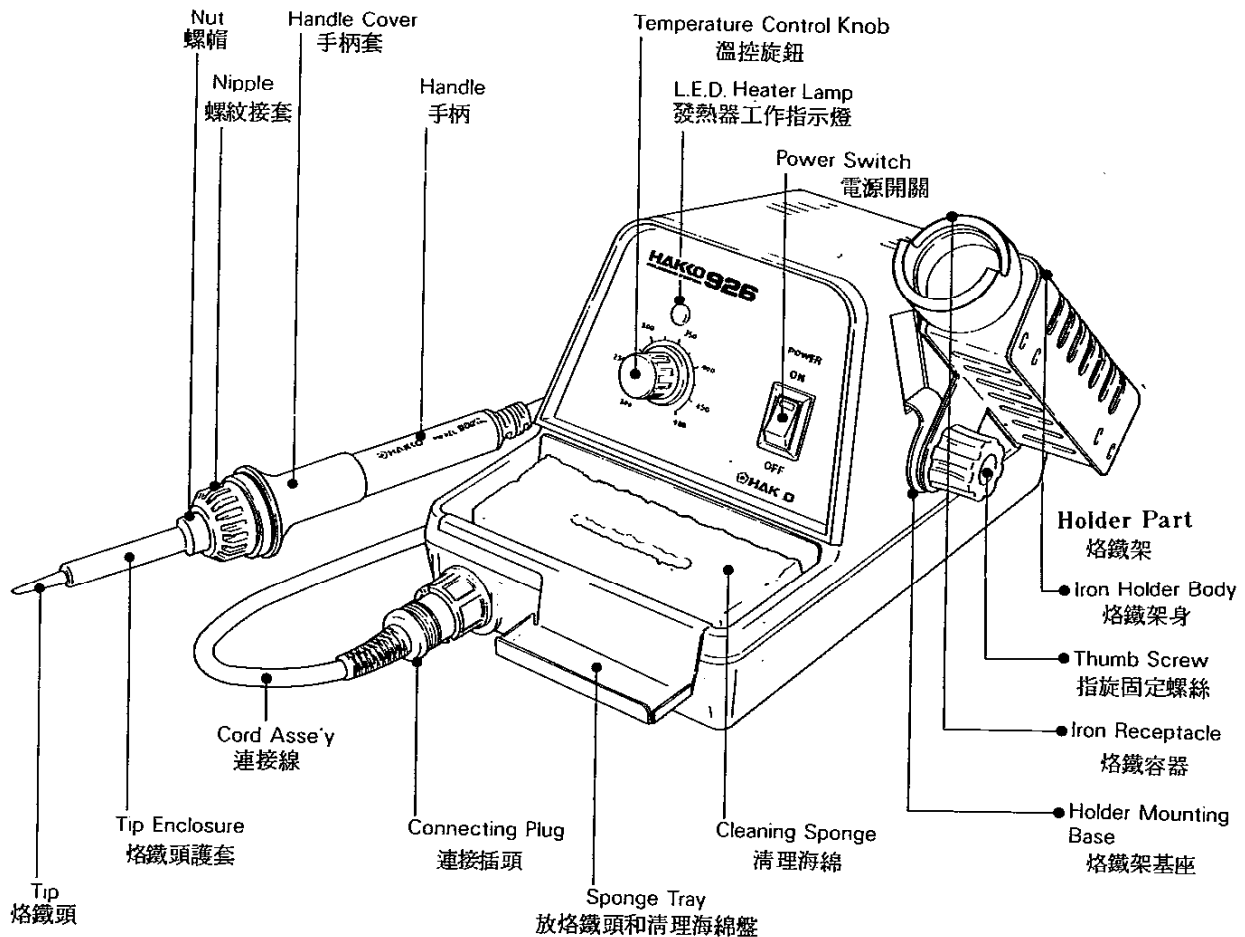
\* The specifications written here may be subject to change without notice.  
表列規格可能變更, 以修訂後內容為準。恕不另行奉告。

# ACCESSORIES

# 附件

- **Holder Part** (consists of: Iron receptacle, Iron Holder Body, Holder Mounting Base, Thumb Screw)
- **Cleaning Sponge**
- **Tip & Sponge Tray**
- **烙鐵架部份** (由烙鐵容器, 烙鐵架身, 烙鐵架基座, 指旋固定螺絲組成)
- **清理海綿**
- **放烙鐵頭和清理海綿盤**

## ■ PART NAME ■ 部件名稱



# PRECAUTIONS 注意事項

- |   |   |
|---|---|
| <p>1) Ceramic Heating Element cannot stand excessive force. Never strike Soldering Iron against work-bench or solid surface.</p> <p>2) Make sure the Nut securing the Tip Enclosure is properly tightened.</p> <p>3) Use exclusive Tips for 900 only.</p> <p>4) Operate in lower tip temperature. Exceptionally high thermal recovery allows a lower temperature setting thereby protecting sensitive components and extending tip life.</p> <p>5) Power off when replace the tip. Or Heating Element or Tip may be damaged.</p> <p>6) Never file the specially plated tip.</p> | <p>1) 陶瓷發熱材料不能承受重壓，切忌將烙鐵猛擊工作台或其他硬物。</p> <p>2) 確保旋緊烙鐵頭緊固螺帽。</p> <p>3) 只可選用白光900烙鐵頭。</p> <p>4) 爲了保護敏感零部件和延長烙鐵壽命，應在較低烙鐵溫度下操作。由於回熱特快，所以能夠在較低溫度下焊接。</p> <p>5) 換烙鐵頭時應關掉電源開關，不然會損壞烙鐵和發熱器部件。</p> <p>6) 切勿銼削烙鐵頭表面鍍層。</p> |
|---|---|

## REPLACEMENT PARTS

No.	Name/Specifications
A1321	Heating Element for 900M/L Ceramic 24V 50W
B1784	Nut for 900M
B1786	Tip Enclosure for 900M
B1920	Nipple for 900M
B1921	Nipple for 900M (ESD Type)
900M-036	Grounding Spring for 900M
B1794	Nut for 900L
B1787	Tip Enclosure for 900L
B1918	Nipple for 900L
B1919	Nipple for 900L (ESD Type)
B1184	Grounding Spring for 900L
900-039	Cord Asse'y for 900M and 900L
900-039S	Cord Asse'y for 900M and 900L (ESD Type)
926-029	Cleaning Sponge
926-022	Holder Part
609-041	Iron Receptacle

## 替換部件

編號	名稱規格
A1321	900M/L機用陶瓷發熱器，24伏50瓦
B1784	螺帽900M機用
B1786	烙鐵頭護套900M機用
B1920	螺紋接套900M機用
B1921	螺紋接套900機用(ESD型)
900M-036	接地彈簧900M機用
B1794	螺帽900L機用
B1787	烙鐵頭護套900L機用
B1918	螺紋接套900L機用
B1919	螺紋接套900M機用(ESD型)
B1184	接地彈簧900L機用
900-039	連接電線900M、900L機通用
900-039S	連接電線900M、900L機通用(ESD型)
926-029	清理海綿
926-022	烙鐵架
609-041	烙鐵容器

# OPERATING INSTRUCTION

# 使用說明

## ● Set Up the Holder Part

1) Attach the Holder Part to Station with Thumb Screw.

2) Holder Mounting Base is located on right side of Station. Re-position to left side if necessary refer to the drawing.

3) Angle of the Holder Part may be adjusted by loosening Thumb Screw.

## ● Connection

Insert 5 - pin Connecting Plug into the Receptacle on the Station, and lock it by turning the outside ring of plug clockwise.

Warning: Connect or disconnect Cord Ass'y after power off. Or Control PWB inside of the Station may be damaged.

Then, plug into properly grounded A.C. Outlet.

## ● Cleaning Sponge

Dampen Cleaning Sponge with water. Special coted Tip may be damaged if cleaned in dry condition.

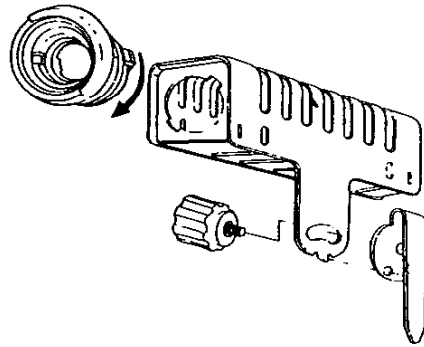
● Set the Temperature Control Knob to your desired temperature and turn on the Power Switch. L.E.D. Heater Lamp comes on and off when Tip temperature reaches to the figure you set. Now you can start the soldering work.

## ● 裝配烙鐵架

1) 用指旋固定螺絲將烙鐵架固定在焊機上。

2) 烙鐵架的基座設於機身的右傾，可重新放置於機身的左側，如有必要請參照圖。

3) 放鬆指旋式固定螺絲，可調節烙鐵架的角度。



## ● 連接

將 5 芯連接插頭，插入機身上的連接座，按順時鐘方向旋轉插頭外圈將插頭鎖緊。

警告：連接式拆卸應在電源關閉後進行，否則會損壞機身內之控制電路板。然後正確地接上接地交流電源插座。

## ● 清理海綿

將海綿浸入水中吸潮。在乾燥條件下清理可能會損壞烙鐵頭的特殊表面鍍層。

● 旋轉溫控開關旋鈕，至你所需要的溫度指示處，打開電源開關，當烙鐵頭達到你指定的溫度，發熱器工作指示燈就閃爍發亮。此時便可以進行焊接工作。

# REPLACEMENT TIP

# 替換烙鐵頭

## ● CAUTION

- 1) Use exclusive tips for HAKKO 900 only.
  - 2) The set temperature should be adjusted according to the tip configuration. If required, adjust the temperature with "CAL" potentiometer on bottom of station when changing tip configurations. The temperature is increased by turning "CAL" Clockwise.
  - 3) When using the Soldering Iron continuously loosen Tip and remove oxide once a week. This helps prevent seizure and reduction of Tip temperature.
  - 4) Tin the tip daily as follows;
    - Clean the Tip.
    - Set the temperature at 200°C (392°F).
    - Melt the solder gradually at the tip.
  - 5) For heavy duty soldering, HAKKO recommends The 900L Iron with heavier tips.
- The tip temperature may vary depending on the figure. Refer to the right chart for the quick and temporary adjustment.

※ Temp, comparison with the standard tip.  
(At 480°C, 896°F)  
※溫度、與標準烙鐵頭的比較  
(攝氏 480 度、華氏 896 度)

900M-T-1.6D		0	(480°C, 896°F)
900M-T-2.4D		0	(480°C, 896°F)
900M-T-3.2D		0	(480°C, 896°F)
900M-T-B		0	(480°C, 896°F)
900M-T-LB		-10°C, -18°F	(470°C, 878°F)
900M-T-1C		0	(480°C, 896°F)
※ 900M-T-1CF		0	(480°C, 896°F)
900M-T-2C		0	(480°C, 896°F)
※ 900M-T-2CF		0	(480°C, 896°F)
900M-T-3C		0	(480°C, 896°F)
※ 900M-T-3CF		0	(480°C, 896°F)
900M-T-4C		0	(480°C, 896°F)
※ 900M-T-4CF		0	(480°C, 896°F)
900M-T-K		+30°C, +54°F	(510°C, 590°F)
900M-T-I		-10°C, -18°F	(470°C, 878°F)
900M-T-H		-20°C, -36°F	(460°C, 860°F)
900M-T-1.8H		-10°C, -18°F	(470°C, 878°F)
900M-T-R		0	(480°C, 896°F)
900M-T-RT		0	(480°C, 896°F)
<b>900L</b>			
900L-T-B		0	(480°C, 896°F)
900L-T-2B		0	(480°C, 896°F)
900L-T-2.4D		0	(480°C, 896°F)
900L-T-3.2D		0	(480°C, 896°F)
900L-T-2C		-20°C, -36°F	(460°C, 860°F)
※ 900L-T-2CF		-20°C, -36°F	(460°C, 860°F)
900L-T-3C		0	(480°C, 896°F)
※ 900L-T-3CF		0	(480°C, 896°F)
900L-T-4C		0	(480°C, 896°F)
※ 900L-T-4CF		0	(480°C, 896°F)
900L-T-5C		0	(480°C, 896°F)
※ 900L-T-5CF		0	(480°C, 896°F)
900L-T-I		-20°C, -36°F	(460°C, 860°F)
900L-T-K		+20°C, +36°F	(500°C, 932°F)
*900L Tip Out Diam Ø8.5 900L 烙鐵頭外徑 8.5 毫米 (Φ 8.5) ★ These tips are tinned flat only. 這些烙鐵頭只可塗錫			

## ● 注意事項

- 1) 必須選用白光 900 烙鐵頭。
  - 2) 焊機的工作溫度應根據烙鐵頭構造進行相應調整。如需調整，請在調換烙鐵頭時，可調整焊機底“CAL”電位器來調焊機溫度。溫度隨順時鐘方向增高。
  - 3) 當不斷使用烙鐵時，應每週清理烙鐵頭之氧化物及將烙鐵頭放鬆。這樣有利防止烙鐵頭咬死和降低烙鐵頭溫度。
  - 4) 烙鐵頭每天按下示步驟上錫：
    - 清理烙鐵頭。
    - 將溫度調至攝氏 200 度 (華氏 392 度)。
    - 讓焊錫在烙鐵頭上慢慢熔化。
  - 5) 焊接量大的工作，請選用白光 900L 烙鐵，該烙鐵頭比較大。
- 由于烙鐵頭構造各異，溫度也可能不一，請參閱左圖作快速臨時調整。

# TROUBLE SHOOTING GUIDE 排除故障指南

**PROBLEM : TURN THE POWER SWITCH ON, BUT TIP DOES NOT HEAT UP OR OVER HEATING.**  
**故障 :** 打開電源開關後，烙鐵頭不升溫或溫度過高。

Condition 狀況	CheckPoint 查找毛病
o The power lamp doesn't light up. 電源指示燈不亮。	1. Is the fuse blown? 保險絲是否燒斷？
o The fuse is blown. 保險絲燒斷。	1. Is the inside of the iron short-circuited? 是否電烙鐵內發生短路？ 2. Is the grounding spring touching the Heating Element? 是否接地彈簧碰到發熱材料？ 3. Is the Heating Element Lead twisted and short-circuited? 是否發熱材料引線纏在一起和發生短路？
o The power lamp lights up but the LED Heater Lamp doesn't blink. 電源指示燈亮，但發熱器工作指示燈不閃爍發亮。	1. Is the Connecting Plug connected correctly? 連接插頭是否連接妥當？ 2. Is the Heating Element Lead broken? 是否發熱材料引線折斷？
o The Power Lamp and The LED Heater Lamp lights up. 電源指示燈和發熱器工作指示燈都亮。	1. Is the Heating Element broken? 是否發熱材料損壞？ 2. Is the Cord Asse'y broken? 是否連接線損壞？

**PROBLEM : THE TIP HEATS UP INTERMITTENTLY.**  
**故障 :** 電烙鐵頭間歇性發熱。  
**CheckPoint :** Is the Cord Asse'y almost broken?  
**查找毛病 :** 連接線是否將要斷裂？

**PROBLEM : THE TIP DOESN'T WET.**  
**故障 :** 烙鐵頭不上焊錫。  
**CheckPoints :** 1. Is the Tip temperature too high?  
**查找毛病 :** 烙鐵頭溫度是否過高？  
 2. Is the Tip cleaned?  
 烙鐵頭是否清理過？

**PROBLEM : THE TIP DOESN'T HAVE DESIRED TEMPERATURE.**  
**故障 :** 烙鐵頭達不到要求溫度。  
**CheckPoint :** Is the iron calibrated correctly?  
**查找毛病 :** 烙鐵溫度是否已經校準？

**PROBLEM : THE TIP CANNOT BE PULLED OFF.**  
**故障 :** 烙鐵頭取不下來。  
**CheckPoints :** 1. Is the Tip seised?  
**查找毛病 :** 烙鐵頭是否被咬死？  
 2. Is the Tip expanded by deterioration.  
 烙鐵頭是否在變形脹大？

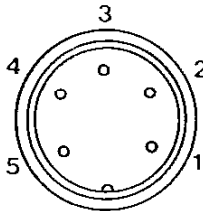
**NOTE: WHEN REPAIRS ARE NEEDED, PLEASE SEND BOTH THE SOLDERING IRON AND THE STATION TO YOUR SALES AGENT**  
 註：需要修理時，請將電烙鐵和焊機身一起送交你的經銷商。

# TROUBLE SHOOTING 排除故障指南

## ■ HOW TO CHECK THE BREAKAGE OF HEATING ELEMENT AND CORD ASSE'Y.

Disconnect the Connecting Plug and measure the resistance value between pins of Connecting Plug as follows:

a	Between pin 4 & pin 5 (Heating Element)	2.5~3.5 ohm (Normal)
b	Between pin 1 & pin 2 (Sensor)	43~58 ohm (Normal)
c	Between pin 3 & Tip (Grounding)	Under 10 ohm



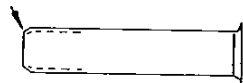
## ■ 如何檢查發熱材料和連接線是否損壞？

將連接插頭拔出，然後測量連接插頭各腳間的電阻值如下：

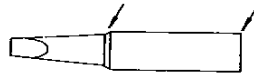
a	第4腳和第5腳間 (發熱材料)	2.5~3.5 歐姆 Ω (正常值)
b	第1腳和第2腳間 (傳感器)	43~58 歐姆 Ω (正常值)
c	第3腳和烙鐵頭 (接地)	小于10 歐姆 Ω (正常值)

- (1) If the value of "a" & "b" is different from above value, replace the Heating Element (Sensor) or Cord Ass'e'y.
- (2) If the value of "c" - between pin 3 and tip (Grounding) is over above value, remove the oxidization film by rubbing lightly points shown as under with sand-paper or steel wool.

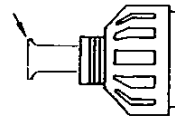
- (1) 如果 a 和 b 值超過上表值，應更換發熱材料 (傳感器) 或連接線。
- (2) 如果 c 值—第3腳和接地間超過上表值，用砂紙或鐵砂紙輕擦除去氧化膜。



Tip Enclosure  
烙鐵頭護套



Tip  
烙鐵頭



Nipple  
螺紋接套

- If the problem remains unsolved after check in the Soldering Iron, the Station may have a problem. Please contact your nearest HAKKO representative.

- 如果檢查電烙頭後故障仍未除去，焊機本身有可能出了毛病。請與最鄰近的白光代表 (代理商) 聯系。

## ■ IF THE TIP DOESN'T WET.

- Tip temperature is higher than desired. Recalibrate by adjusting "CAL" on the bottom of the Station.
- Tip is oxidized or dirty,
  1. Clean up with Cleaning Sponge.
  2. Set the Tip temperature at 250°C (482°F), and clean oxidized or dirty Tip with steel wool.
    - ※ Never file or rub excessively specially plated tip.
  3. Melt the solder gradually at the tip.

## ■ 如果烙鐵頭不上焊錫

- 烙鐵頭溫度 高過需要溫度。用調節機身底部 "CAL" 電位器的方法調整溫度。
- 烙鐵頭被氧化或太髒。
  1. 用清理海線清理烙鐵頭。
  2. 將烙鐵頭溫度調到攝氏 250 度 (華氏 482 度) 用鐵砂紙清理氧化層或雜質。
    - ※ 切勿用銼削或大力擦特殊塗層烙鐵頭。
  3. 在烙鐵頭上慢慢熔化焊錫。



# RECALIBRATING OF IRON TEMPERATURE 烙鐵溫度的調節

After replacing the Heating Element or replacing the tip, recalibrate the temperature of the Soldering Iron.

替換發熱材料或烙鐵頭後，按下列步驟調節烙鐵溫度。

- 1) Connect the Plug of Soldering Iron to the Station and lock it.
  - 2) Set Temperature Control Dial at 400°C (752°F).
  - 3) Turn the Power Switch on and wait till the L.E.D. Heater Lamp comes on and off.
  - 4) Adjust the temperature of Tip at 400°C (752°F) by "CAL" on the bottom of the Station using thermometer.
- 1) 將烙鐵連接插頭插入機身鎖緊。
  - 2) 將溫控刻度定為攝氏 400 度 (華氏 752 度)。
  - 3) 打開電源開關稍等至發熱器工作指示燈亮。
  - 4) 調整機身底部 "CAL" 電位器直至溫度計顯示烙鐵頭溫度為攝氏 400 度 (華氏 750 度) 為止。

## CONDITIONS OF MEASUREMENT 測量條件

### ● Tip Temperature

The tip temperature was measured using HAKKO 191 thermometer.

### ● 烙鐵頭溫度測量

用白光 191 溫度計測驗烙鐵頭溫度。

### ● Insulation Resistance

The insulation resistance was measured between the tip and the lead of the Heating Element using a 500V DC insulation resistance meter.

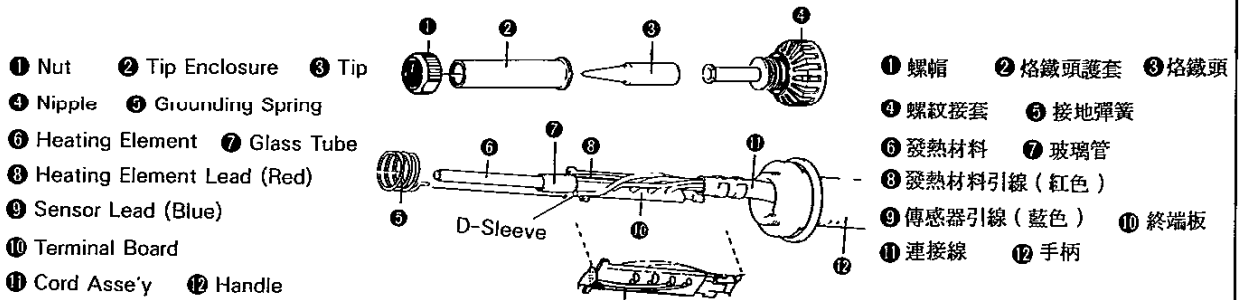
### ● 絕緣體電阻測量

用直流電 500 伏電阻表測量烙鐵頭與發熱材料間的電阻。

**Caution:** The insulation resistance cannot be measured between the tip and the power plug as the transformer between the secondary part (Heating Element) and the primary part acts as an insulator.

**注意：**烙鐵頭和電源插頭間的電阻不可以測量。因為第 2 部份 (發熱材料) 與第 1 部份間的變壓器起一個絕緣體作用。

# REPLACING HEATING ELEMENT 替換發熱材料



- 1 Nut
- 2 Tip Enclosure
- 3 Tip
- 4 Nipple
- 5 Grounding Spring
- 6 Heating Element
- 7 Glass Tube
- 8 Heating Element Lead (Red)
- 9 Sensor Lead (Blue)
- 10 Terminal Board
- 11 Cord Ass'y
- 12 Handle

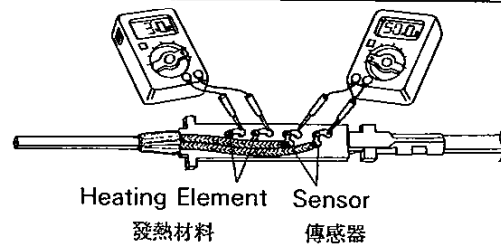
- 1 螺帽
- 2 烙鐵頭護套
- 3 烙鐵頭
- 4 螺紋接套
- 5 接地彈簧
- 6 發熱材料
- 7 玻璃管
- 8 發熱材料引線 (紅色)
- 9 傳感器引線 (藍色)
- 10 終端板
- 11 連接線
- 12 手柄

- 1) Turn the Nut 1 counterclockwise and remove the Tip Enclosure 2, the Tip 3.
- 2) Turn the Nipple 4 counterclockwise and remove it from Iron.
- 3) Pull both the Heating Element 6 and the Cord Ass'y 11 out of the Handle 12 (toward the tip of the Iron).
- 4) Pull the Grounding Spring 5 out of the D-Sleeve.
- 5) Measure the resistance value at the Sensor and Heating Element of the Terminal.

- 1) 反時鐘方向旋下螺帽1除去烙鐵頭護套2，烙鐵頭3。
- 2) 反時鐘方向將螺紋接套4從烙鐵上旋下。
- 3) 將發熱材料6連接線11從手柄12中拉出 (向烙鐵頭方向)。
- 4) 將接地彈簧5從D形套筒上拉出。
- 5) 測量終端板上傳感器和發熱材料的電阻值。

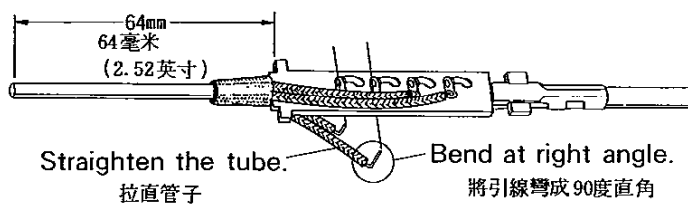
Resistance Value of Heating Element 發熱材料的電阻值	2.5~3.5Ω
Resistance Value of Sensor 傳感器電阻值	43~58Ω

Measure in normal condition  
在一般條件下測量



- If the resistance value is not normal, replace the Heating Element.
  - If the resistance value is normal, the Cord Ass'y may be broken.
- 6) Desolder the Heating Element Leads.
    - In the above Item 5 & 6, be careful not to damage the leads with soldering iron.

- 如果電阻值不正常，替換發熱材料。
  - 如果電阻值正常，連接線可能損壞。
- 6) 熔化發熱材料引線。
    - 在上述步驟5和6中注意別讓烙鐵損壞引線。



Straighten the tube.  
拉直管子

Bend at right angle.  
將引線彎成90度直角

- 7) Solder the new Heating Element. Solder two Sensor Leads (blue) and Heating Element Leads (red) on the Terminal Board 10 as above drawing.
  - There is no polarity between leads of the same color.
- 8) Insert the Grounding Spring into the Heating Element. And connect the Grounding Spring and D-sleeve on the side of the Heating Element Leads.
- 9) Pull the Power Cord and fix the Heating Element in the Handle to prevent rolling.
- 10) Turn the Nipple and secure the Handle.
- 11) Replace the Nipple 4, the Tip 3, the Tip Enclosure 2 and secure the Nut 1.

- 7) 焊上新的發熱材料。將兩條傳感器引線 (藍色) 和發熱材料引線 (紅色) 焊在終端板10上如上圖示。
  - 同色引線不分極性。
- 8) 將接地彈簧插入發熱材料，在發熱材料邊上將接地彈簧與D形套筒連接起來。
- 9) 拉電源線將發熱材料固定在手柄裏以防止扭轉。
- 10) 旋轉螺紋連接套定死手柄。
- 11) 裝回螺紋連接套4，烙鐵頭3，烙鐵護套2上緊螺帽1。

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