Baskiville
ELECTRONIC INDUSTRY SPECIALISTS

Supplier of Hakko products in New Zealand

No.A1322

HAKKO 900
SOLDERING IRON
No.A1322 (for 900S)

Replacing the Heating Element

● **Part Name**

Nut   Tip   Heating Element   Terminal Board   Screw   Handle Cover

Heating Element Holder   Handle
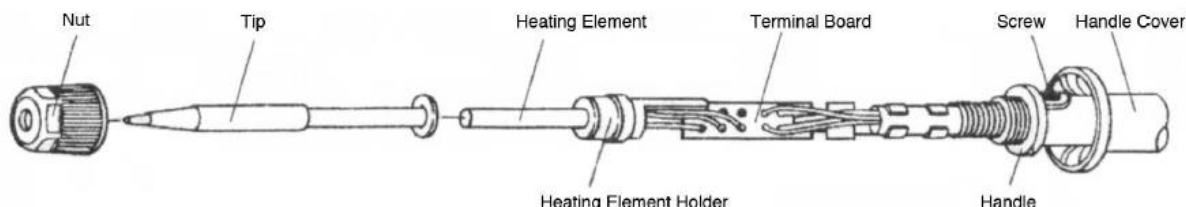
❶ Measure the resistance values at the Heating Element

1. Slide the handle cover and remove the screw.
2. Remove the nut and tip.
3. Pull the terminal board toward the tip with holding the heating element holder.
4. Measure the resistance values at the sensor and heating element of the terminal board in normal condition.

Resistance Value of sensor
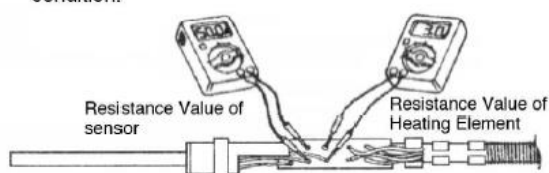
Resistance Value of Heating Element

Resistance value of heaing element (red): 2.5 - 3.5Ω
Resistance value of sensor (blue): 43 - 58Ω
If the value you get is outside this range, replace the heating element.
If the resistance value is normal, the cord assembly may be broken.

❷ Replace the Heating Element

1. Desolder the heating element leads, sensor leads and ground lead.
2. Remove the old heating element and replace it with a new one.
   • There is no polarity between leads of the same colors.
   • Bend the leads at right angle to prevent short-circuit.

Sensor Leads (transparent)   Heating element Leads (red)

Heating Element Holder   Ground Lead (green)
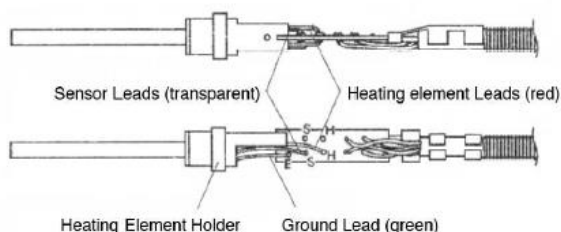
H:Heating element Leads (red)
S:Sensor Leads (transparent)
E:Ground Lead (green)

3. Solder the new heating element lead to the terminal board, then cut the extra lead.

❸ Reassemble in reverse order

After replacing the heating element,
1. Measure the resistance value between pins 4 & 1 and 4 & 2, and pins 5 & 1 and 5 & 2. If it is not infinite, the heating element and sensor are touching.
2. Measure the resistance value 'a', 'b', and 'c' to confirm that the leads are not twisted and that the grounding spring is properly connected.

a	Between pins 4 & 5 (Heating Element)	2.5 - 3.5Ω (Normal)
b	Between pins 1 & 2 (Sensor)	43 - 58Ω (Normal)
c	Between pin 3 & Tip	Under 2Ω
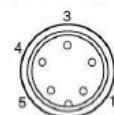
❹ Recalibrate the temperature

To ensure accurate soldering temperatures, always calibrate the temperature after replacing the heating element.

■**HAKKO 928・936**
1. Set the temperature control knob to 400°C (750°F).
2. Turn the power switch on and wait until the L.E.D. heater lamp comes on and off.
3. Using a straight-edge (–) or small cross point screwdriver, adjust the temperature calibrator (marked "CAL") so that the tip temperature is 400°C (750°F).

■**HAKKO 927・937**
1. Turn the power switch on and insert the card. Set the temperature to 400°C (750°F).
2. Wait until the digital display indicates 400 (a tip temperature of 400°C (750°F)).
3. Using a straight-edge (–) or small cross point screwdriver, adjust the temperature calibrator (marked "CAL") so that the tip temperature is 400°C (750°F).

* Turn the temperature calibrator clockwise to increase the temperature and counterclockwise to reduce the temperature.
* Using the supplied hex wrench, remove the screw (M4x5mm) labeled "CAL" on the bottom of the station, and then turn the power on (HAKKO 927).
* Remove the CAL pot plug before calibrating HAKKO 936/937.
* We recommend the HAKKO FG-100/101 thermometer for measuring the tip temperature.

NOTE   **When repairs are needed, please send both the soldering iron and the station to your sales agent.**

* Specifications subject to change without notice.
* This product is protected against electrostatic discharge.