# **1. PACKING LIST AND PART NAMES**

Please make sure that all items listed below are included in the package.

HAKKO FX-601 soldering iron1	Beaded cable tie1
	Instruction manual1

	LED lamp	CAL -601 410 540 360 CAL 360 240
HAKKO FX-601		Temperature knob Beaded cable tie

\*Refer to "5. TEMPERATURE SETTING" when using the lock key

# 2. SPECIFICATIONS

Power Consumption	ower Consumption 100V-47W/110V-56W/ 120V-67W/220V-42W/	Tip to Ground Resistance	< 2 Ω
230V-46W/240V-50W	Tip to Ground Potential	< 2 mV	
Temperature Range	240 - 540°C	Heating Element	Ceramic
Temperature Stability ±1 °C at idle temperature	Total Length (w/o cord)	237 mm with T19-D65 tip	
	Weight (w/o cord)	68 g with T19-D65 tip	

Specifications and appearance are subject to change without notice.

## 3. WARNINGS, CAUTIONS, NOTES AND EXAMPLES

## A WARNING

When power is ON, tip temperatures will be between 240°C and 540°C. (460°F to 1000°F) To avoid injury or damage to personnel and items in the work area, observe the following:

• This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in safe way and understand the hazards involved. Children shall not play with the appliance.

Cleaning and user maintenance shall not be made by children without supervision.

- •Place the handpiece on the iron holder when it is not in use.
- If the power cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified person in order to avoid personal injury or damage to the unit.

• Do not touch the tip or the metal parts near the tip.

• Do not allow the tip to come close to, or touch, flammable materials.

Inform others in the area that the unit is hot and should not be touched.

• Turn the power off when not in use, or left unattended.

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Turn the power off when changing parts or storing the HAKKO FX-601.

• To prevent accidents or damage to the HAKKO FX-601, be sure to observe the following:

# A CAUTION

- Do not use the unit for applications other than those specifically described in the instruction manual.
- Do not strike the iron against hard objects to remove excess solder. This will damage the iron.
- Do not modify the HAKKO FX-601.
- Use only genuine Hakko replacement parts.
- Do not allow the HAKKO FX-601 to become wet, or use it with wet hands.
- Hold the power plug when plugging it in and unplugging it.
- Be sure the work area is well ventilated. Soldering produces smoke.
- The unit is for a counter or workbench use only.
- Do not perform any other actions that may be considered dangerous.

## 4. OPERATION

#### Procedure

- 1) Turn the temperature knob to set the temperature.
- 2) When the power plug is plugged in, the LED lamp will light.
  - \* While the LED lamp is lit (temperature is increasing), it is recommended to use an iron holder.
- When the iron temperature reaches the set temperature, the LED lamp will change from lit to blinking.

## 5. TEMPERATURE SETTING

### How to use the temperature knob

Hold the grip firmly and align **the arrow mark** of the temperature knob with the desired temperature setting.

Since you can feel a click at each temperature, it is easy to set the temperature.

\* Temperature is also controlled in positions between clicks.



### How to use the lock key

This product is shipped with the temperature knob attached.

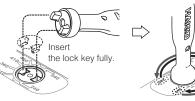
After the temperature knob is removed, the set temperature cannot be easily changed unless the lock key is used.

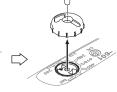
#### Removing the temperature knob.

- Turn the temperature knob in a counterclockwise direction and set the temperature to minimum value (240°C).
- Remove the screw in the center of the temperature knob with a crosspoint screwdriver to remove the temperature knob.

#### Set the temperature by lock key

- Hold the grip firmly and insert the lock key into the keyhole.
- Turn the key while pressing it in firmly.



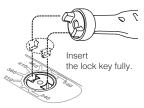


#### Attaching the temperature knob

- 1) Hold the grip firmly and insert the lock key into the keyhole.
- Turn the temperature knob in a clockwise direction and set the temperature to maximum value (540°C) with the lock key.

▲ Caution If turning the temperature knob without pressing it fully, the lock key may be

- Attach the temperature knob to the iron and match the arrow of the knob with the maximum value (540°C).
- Using a crosspoint screwdriver, secure the small screw in the center of the knob to the iron.



# 6. MAINTENANCE

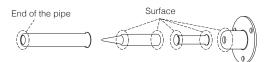
### WARNING

Since this product becomes very hot, use extra caution during use. Except the case especially indicated, always turn the power switch OFF and disconnect the power plug before performing any maintenance procedure.

### Cleaning the grounding line.

When the tip to ground resistance and tip to ground potential is out of normal value due to degradation by use, remove the oxides from the sections indicated in the figure below using sandpaper.

Clean the grounding line periodically.



### Temperature Calibration

To adjust the tip temperature to the set temperature at higher accuracy, calibrate the temperature. When changing the set temperature or replacing tips and heating elements, be sure to calibrate the temperature. The temperature is initially set to  $410^{\circ}C \pm 10^{\circ}C$ .

Adjust to the desired temperature setting by measuring the tip temperature using a tip thermometer (optional accessory) and turning the CAL knob with a crosspoint screwdriver.

## 7. TROUBLE SHOOTING GUIDE

broken.

Symptoms	Cause	Treatment	
Iron does not heat up.	Iron is not properly connected to power source.	Connect properly.	
	Heating element failure	Replace heating element.	
Iron is sometimes hot and sometimes cold.	Short in cord	Replace cord.	
	Heating element is NOT properly soldered.	Solder heating element once again.	
Iron does not reach setting temperature.	Improper CAL adjustment	Recalibrate temperature.	
	Tip is worn.	Replace tip and then recalibrate temperature.	
Solder does not wet to the tip.	Tip setting temperature is too high.	Reduce setting temperature.	
	Tip is worn.	Replace tip.	
Value of the tip to ground potential and tip to ground resistance is too high.	Grounding line has not been cleaned properly.	Clean grounding line.	
	Nut is not fastened tightly enough.	Refasten.	