

## HAKKO FX-600

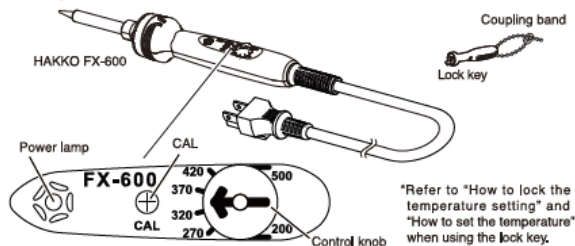
### Instruction Manual

Thank you for purchasing the HAKKO FX-600 soldering iron.  
This product is a soldering iron with temperature control.  
Please read this manual before operating the HAKKO FX-600.  
Keep this manual readily accessible for reference.

### 1. PACKING LIST AND PART NAMES

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

HAKKO FX-600 soldering iron	1	Coupling band	1
Lock key	1	Instruction manual	1



### 2. SPECIFICATIONS

Power Consumption	100V-60W 110V-59W 120V-74W	Tip to Ground Potential	< 2 mV
	220V-43W 230V-47W 240V-51W	Heating Element	Ceramic
Temperature Range	200 - 500°C (390 - 930 °F)	Total Length (w/o cord)	233 mm (9.2 in.) with B tip
Temperature Stability	±1°C (±2°F) at idle temperature	Weight (w/o cord)	61 g (0.14 lb.) with B tip
Tip to Ground Resistance	< 2 Ω		

\* Specifications and design are subject to change without notice.

### 3. WARNINGS, CAUTIONS, NOTES AND EXAMPLES

#### ⚠ WARNING

When power is ON, tip temperatures will be between 200°C and 500°C. (390°F to 930°F.) To avoid injury or damage to personnel and items in the work area, observe the following:

- 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.
- Turn the power off when changing parts or storing the HAKKO FX-600.
- This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.
- Children should be supervised to ensure that they do not play with the appliance.
- 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.

● To prevent accidents or damage to the HAKKO FX-600, be sure to observe the following:

#### ⚠ CAUTION

- Do not strike the iron against hard objects to remove excess solder. This will damage the iron.
- Do not modify the HAKKO FX-600.
- Use only genuine Hakko replacement parts.
- Do not allow the HAKKO FX-600 to become wet, or use it with wet hands.
- Remove power and iron cords by holding the plug – not the wires.
- Be sure the work area is well ventilated. Soldering produces smoke.
- While using HAKKO FX-600, don't do anything which may cause bodily harm or physical damage.
- The unit is for a counter or workbench use only.

### 4. OPERATION

#### ● Procedure

1. Turn the control knob to set the temperature.
2. Plug the power cord into a ground wall socket.
3. Tip will be heated to the selected temperature setting.
4. Power lamp will start to flash once the tip has reached the selected temperature setting.

#### \* Temperature Calibration

If higher accuracy of the tip temperature is required, perform a temperature calibration. When the power lamp begins flashing, the tip temperature is stabilized. Turn the CAL knob as needed while measuring the tip temperature with a tip thermometer. Clockwise adjustment increases temperature. Counterclockwise decreases temperature.

When changing the temperature setting or replacing the tip and heating element, perform a temperature calibration. In default setting, temperature setting is 370°C and temperature accuracy is ±10.

### 4. OPERATION

#### 5. Soldering

- Press the tip lightly against the part to be soldered and heat the part.
- Melt the solder by touching it against the part.
- When melted solder has spread over the part, remove the tip from the part and allow the solder to harden.

**NOTE :** If the surface is contaminated with oils, oxidation, or other coatings, it may be impossible to solder. Recommend using solder with flux.

#### ● How to set the temperature

##### Set the temperature by control knob

Hold the handle firmly and turn the control knob. Set the arrow to the desired temperature indication. When turning the control knob, it is easy to always set the same position because there is click at each temperature indication.

\* Temperature is also controlled in positions between clicks.



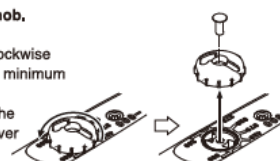
#### ● How to lock the temperature setting

When turning the control knob with the control knob attached, the temperature setting can be changed. To lock the temperature setting, remove the control knob. Doing so will require the use of the lock key to make temperature changes.

##### Attaching / Removing the control knob.

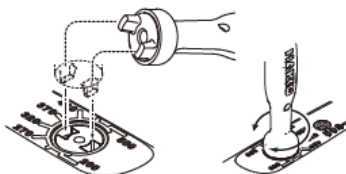
##### Removing the control knob.

1. Turn the control knob in a counterclockwise direction and set the temperature to minimum value (200°C).
2. Remove the screw in the center of the control knob with a phillips screwdriver to remove the control knob.



##### Set the temperature by lock key.

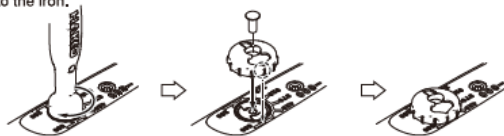
Hold the handle firmly and insert the lock key to match the grooves of the setting dial. Push down on the lock key and turn to adjust.



**⚠ Caution**  
If turning the control knob without pushing it fully, the lock key may be broken.

##### Attaching the control knob

1. Turn the control knob in a clockwise direction and set the temperature to maximum value (500°C) with the lock key.
2. Attach the control knob to the iron and match the arrow of the knob with the maximum value (500°C).
3. Using a phillips screwdriver, secure the small screw in the center of the knob to the iron.



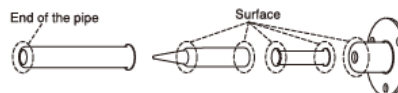
### 5. MAINTENANCE

#### ⚠ WARNING

Performing proper and periodic maintenance extends the product life. Efficient soldering depends upon the temperature, the quality and quantity of the solder and flux. Apply the following maintenance procedure as dictated by the conditions of usage. Unless otherwise specified, always perform maintenance procedures when the power has been turned off, the power plug removed from the outlet, and the unit has cooled sufficiently to prevent possible burns.

#### ● Cleaning the grounding line.

Due to oxidation, rub lightly on the following points with sand-paper and remove the oxide coating if tip to ground resistance and tip to ground potential are not normal. Clean the grounding line regularly.



### 6. TROUBLE SHOOTING GUIDE

Symptoms	Cause	Treatment
The tip temperature is too low.	The power cord is disconnected. Heater is broken.	Connect it. Replace the heater with a new one.
The tip heats up intermittently.	The cord assembly is broken. Defective soldering when replacing the heater.	Replace the cord assembly. Solder it again.
The tip temperature is not reached to the setting temperature.	Temperature is not corrected. The tip becomes deteriorated.	Temperature calibration Correct the temperature after replacing the tip.
Solder does not wet to the tip.	The setting temperature of the tip is too high. The tip is oxidized.	Decrease the setting temperature. Clean tip if possible or Replace the tip with a new one.
Value of the tip to ground potential and tip to ground resistance is too high.	Defective cleaning the grounding line. Enclosure nut is not tightened firmly.	Clean the grounding line. Tighten the enclosure nut again.