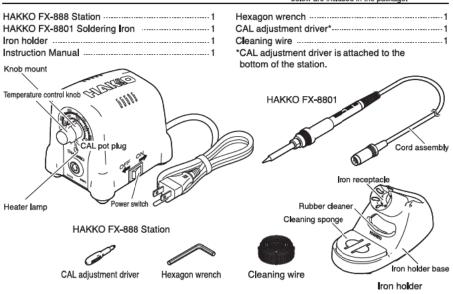
# HAKOFX-888 Instruction Manual

# Thank you for purchasing the HAKKO FX-888 Soldering Station.

Please read this manual before operating the HAKKO FX-888. Keep this manual readily accessible for reference.

1. PACKING LIST AND PART NAMES Please check to make sure that all items listed below are included in the package.



\*HAKKO FX-8802 / FX-8803 / FX-8804 (not included) can be connected to HAKKO FX-888 station.

\*When using above FX-8802/FX-8803/FX-8804, please use it with the dedicated iron holder.

# 2. SPECIFICATIONS

Power consumption	70W	
● Station		
Output	AC26V	
Temperature Range	200~480°C	
Temperature Stability	±1°C at idle temperature	
Dimensions (W x H x D)	100(W) x 120(H) x 130(D)mm	
Weight(w/o cord)	1,3kg	

- The temperature was measured using the FG-100 then
- This product is protected against electrostatic discharge. Specifications and design are subject to change without notice.

# ● HAKKO FX-8801 Soldering iron

<b>-</b>			
Power Consumption	AC26V 65W		
Tip to Ground Resistance	< 2 Ω		
Tip to Ground Potential	< 2 mV		
Heating Element	Ceramic heater		
Cord	1.2 m		
Total Length (w/o cord)	217 mm with B tip		
Weight (w/o cord)	46 g with B tip		

※ 各言語(日本語、英語、中国語、フランス語、ドイツ語、韓国語)の取扱説明書は以下のURL、HAKKO Document Portalからダウンロードしてご覧いただけます。(商品によっては設定の無い言語がありますが、ご了承ください)
 \* 各國語言(日語,英語,中文,法語,德語,韓語的使用説明書可以強題以下開始的HAKKO Document Portal 下載参開。

(有一部分的產品沒有設定外語對應,請見諒)

Instruction manual for the language, Japanese, English, Chinese, French, German and Korean can be downloaded from the following URL, HAKKO Document Portal.
 (Please note that some language may not be available depending on the product.)

# https://doc.hakko.com

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中國RoHS: 產品中有壽有害物質或元素的名稱及含量

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六價略 (Cr(VII)

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# 3. WARNINGS, CAUTIONS, NOTES AND EXAMPLES

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

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

ACAUTION: Failure to comply with a CAUTION may result in injury to the operator, or damage to the items involved.

# 

When power is ON, tip temperatures will be between 200 and 480°C. (400 to 880°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-888.
- 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.
- The unit is for a counter or workbench use only.

#### To prevent accidents or damage to the HAKKO FX-888, be sure to observe the following:

- Do not use the HAKKO FX-888 for applications other than soldering.
- Do not strike the iron against hard objects to remove excess solder. This will damage the iron.
- Do not modify the HAKKO FX-888.
- Use only genuine Hakko replacement parts.
- Do not allow the HAKKO FX-888 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 the HAKKO FX-888, don't do anything which may cause bodily harm or physical damage.

# 4. OPERATION

### A. Iron Holder

- The sponge is compressed. It will swell when moistened with water. Before using the unit, dampen the sponge with the water
- 1. Fit the small sponge pieces into the holes of the iron holder base.
- 2. Add an appropriate amount of water into the iron holder base. The small sponge will absorb water to keep the wet state at all times
- 3. Dampen the large sponge and place it on the iron holder
- \* When Using a Cleaning Wire

See "3. Using a Cleaning Wire" in section "5. MAINTENANCE."

### B. Connections

# CAUTION

Be sure to turn off the power before connecting or disconnecting the cord assembly for the iron to and from the receptacle to avoid damaging the circuit board.

1. Connect the cord assembly to the receptacle

### **∴** CAUTION

Do not use an iron other than the HAKKO FX-8801.

- 2. Place the iron into the iron holder.
- 3. Plug the power cord into the power supply.

# CAUTION

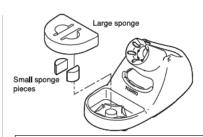
This unit is protected against electrostatic discharge and must be grounded for full efficiency.

- C. Setting the temperature
- 1. Set the temperature control knob to the desired temperature.
- 2. Lock the knob.

The HAKKO FX-888 station is equipped with a temperature control knob lock. (See the drawing on the

After setting the desired temperature, tighten the hexagon socket head cap screw on the underside of the knob mount using the supplied hexagon wrench. Turn the nut clockwise to tighten the knob lock.

- Don't overtighten the hexagon socket head cap
- Don't attempt to turn the knob when the knob lock is or

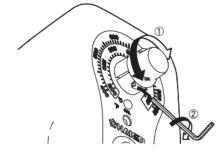


# **⚠** CAUTION

Be sure the sponge is moistened with water before use to avoid damaging the tip.

# Push on the plug until it stops, making sure it is securely connected To disconnect, hold the plug





# 4. OPERATION

#### D. Turn on the Power Switch

The heater lamp is on as the tip comes up to the set temperature. The heater lamp blinks on and off when the set temperature is reached. The unit is now ready to perform solding work.

#### **CAUTION**

- · The iron must be placed in the iron holder when not in use.
- · Turn the power off when not using the station for a ong time.

#### E. After Use

When done, wipe the tip clean and coat the tip with fresh

# 5. MAINTENANCE

Performing proper and periodic maintenance extends the products life and contributes to use it always in a good condition. Efficient soldering depends upon the temperature, the quality and quantity of the solder and flux, Apply the following service procedure as dictated by the conditions of the usage

# **MARNING**

Since the soldering iron can reach a very high temperature, please work carefully. Except the case especially indicated, always turn the power switch OFF and disconnect the power plug before performing any maintenance procedure.

#### Tip Maintenance

Cleaning the tip using the iron holder

1. Using the cleaning sponge

2. Using the rubber dea

3. Using a cleaning wire

heating element or tip.

plate as shown on the right.

- 1. Set the temperature to 250°C (482°F).
- 2. When the temperature stabilizes, clean the tip with the cleaning sponge and check the condition of the tip.
- 3. If the solder plated part of the tip is covered with black oxide, apply fresh solder, containing flux, and clean the tip again. Repeat until all the oxide is removed, then coat the tip with fresh
- 4. If the tip is deformed or heavily eroded, replace it with a new one.

# CAUTION

Do not file the tip in an attempt to remove the black oxide.

Use the cleaning sponge that comes with the product to clean the tip. It offers wide-ranging uses, from simple removal of excess solder to complete elimination of matter occurring as a result of oxidization.

Alternatively, you can use the rubber cleaner to clean the tip as shown on the left. It is convenient way of removing excess solder.





2 Keep pressing the slide lock button and remove the bottom plate.

Material that is not removed easily with the cleaning sponge or rubber cleaner can likely be removed using the cleaning wire.

If solder debris builds up in the bottom plate, remove the bottom plate in the same way.

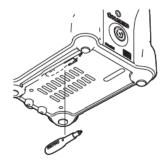
 Calibration of the Tip Temperature The tip temperature should be recalibrated

If a cleaning wire is used, place it in the bottom

1. Connect the cord assembly to the receptacle on the station. 2. Set the temperature control knob to 350°C (662°F). after changing the iron, or replacing the 3. Turn the power switch to "ON" and wait until the temperature

stabilizes. Remove the CAL pot plug. 4. When the iron tip temperature stabilizes, measure the tip temperature using an tip thermometer. As necessary, fit the included CAL adjustment driver in the hole in the station indicated

by the CAL marking, and make adjustments so that the tip





temperature is 350°C (662°F).



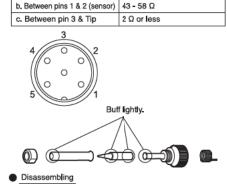


# 5. MAINTENANCE

Disconnect the plug of the cord assembly and measure the resistance value between the ping of the connecting plug as follows.

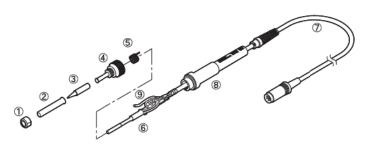
If the values of "a" and "b" are outside the value in the table, replace the heating element (sensor) and/or cord assembly.

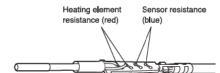
If the value of "c" is over the value in the table, remove the oxidization film by lightly rubbing with sand-paper or steel wool the points shown in the drawing on the



a. Between pins 4 & 5 (Heating Ellement) 2.5 - 3.5 Ω (at time of room temperature)

1. Broken Heating Element/Sensor





There are two methods of testing the cord assembly.

- 1. Turn the nut ① counterclockwise and remove the tip enclosure 2 and the tip 3.
- 2. Turn the nipple 4 counterclockwise and remove it from the
- 3. Pull both the heating element  $\ensuremath{\widehat{\textbf{6}}}$  and the cord assembly  $\ensuremath{\widehat{\textbf{7}}}$
- out of the handle ®. (Toward the tip of the iron). 4. Pull the grounding spring (5) out of the sleeve of the terminal
- \* Measure when the heating element is at room temperature.
- 1. Heating element resistance (red) 2.5 3.5  $\Omega$
- Sensor resistance (blue) 43-58 Ω
- If the resistance value is not normal, replace the heating element. (Refer to the instructions included with the

### After replacement

- ① Measure the resistance between pins 4 and 1, 4 and 2, 5 and 1, and 5 and 2. If it is not  $\infty$ , the heating element and sensor are touching. This will damage the circuit board.
- 2 Measure the resistance "a," "b," and "c" to confirm that the leads are not twisted and that the grounding spring is
- 1. Turn the unit ON and set the temperature control knob to 480°C (880°F). Then bend the iron cord at various locations along its length, including in the strain relief area. If the LED heater lamp flashes, then the cord needs to be replaced.

# ♠ CAUTION

The power lamp starts to flash when the temperature reaches 480°C (880°F) regardless of the condition of



2. Check the resistance between the plug pin and the terminal ead.

Pin 1: Red Pin 2: Blue pin 3: Green Resistance: 0 Ω.

If it is higher than 0  $\Omega$  or is  $\infty,$  the cord should be replaced.

2, Broken Cord Assembly

This product includes such features as electrically conductive plastic parts and grounding of the handpiece and station as measures to protect the device to be soldered from the effects of static electricity. Be sure to observe the following instructions:

- 1. The handle and other plastic parts are not insulators, they are conductors. When making repairs or replacing parts, take sufficient care not to expose live electrical parts or damage insulation materials.
- 2. Be sure to ground the unit during use.

# 6. TROUBLE SHOOTING GUIDE

#### **⚠** WARNING

 Before checking the inside of the FX-888 or replacing parts, be sure to disconnect the power plug. 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.

Nothing happens when the power switch

CHECK: Is the power cord and/or connecting plug disconnected?

CHECK: Is the fuse blown?

ACTION: Determine why the fuse blew and eliminate the cause, then replace the fuse.

a. Is the inside of the iron short-circuited?

b. Is the grounding spring touching the heating element?
c. Is the heating element lead twisted and short-circuited?

Try replacing the fuse even if the cause cannot be identified. If it still blows, return the product for repair.

 The heater lamp lights up but the tip does not heat up.

CHECK: Is the cord assembly broken? Is the heating element/sensor broken?

ACTION: Refer to "Broken Cord Assembly" and "Broken Heating Element/Sensor."

The tip heats up intermittently.

CHECK: Is the cord assembly broken? ACTION: Refer to "Broken Cord Assembly."

Solder does not wet to the tip.

The tip temperature is too low.

The tip can not be pulled off.

The tip doesn't hold the desired

CHECK: Is the tip temperature too high? ACTION: Set an appropriate temperature.

CHECK: Is the tip coated with black oxide?

Remove the black oxide. (Refer to "Tip Maintenance.")

CHECK: Is the tip coated with black oxide? Remove the black oxide. (Refer to "Tip Maintenance.")

Is the iron temperature calibrated correctly?

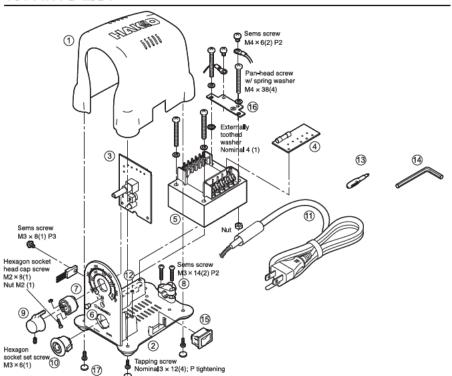
CHECK: Is the tip seized? Is the tip swollen because of deterioration?

ACTION: Replace the tip and the heating element.

CHECK: Is the iron temperature calibrated correctly? ACTION: Recalibrate.

# 7. PARTS LIST

temperature,

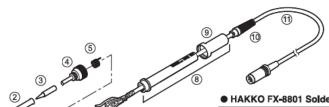


#### HAKKO FX-888 Station

• IIAIRI TA GOO GRARIOII			
Item No.	Part No.	Part Name	Specifications
	B3450	Upper case / BY	
•	B3451	Upper case / BK	
1	B3452	Upper case / SV	
	B3453	Upper case / RD	
<u></u>	B3454	Chassis / Yellow	For BY
2	B3455	Chassis / Gray	For BK, SV, RD
3	B3456	P.W.B	For temperature control
	B3721	P.W.B / 100V	With fuse and rubber feet
4	B3722	P.W.B / 110 - 120V	With fuse and rubber feet
4)	B3680	P.W.B / 220V	With fuse and rubber feet
	B3723	P.W.B / 230V	With fuse and rubber feet
	B3724	P.W.B / 240V	With fuse and rubber feet
(5)	B3458	Transformer	100-110V
	B3562	Transformer	120V
	B3491	Transformer	220-240V
6	B3459	CAL pot plug	
7	B3460	Knob mount	

Item No.	Part No.	Part Name	Specifications
8	B3461	Cord stopper	
9	B3462	Knob	With hexagon socket set scre
10	B3463	Receptacle	
	B3492	Power cord, 3 wired cord & American plug	With tube, USA
	B3493	Power cord,3 wired cord but no plug	With tube
	B3494	Power cord, 3 wired cord &BS plug	With tube
	B3495	Power cord, 3 wired cord & European plug	With tube, CE
11)	B3496	Power cord, 3 wired cord & BS plug	With tube, CE
	B3497	Power cord, 3 wired cord & Australian plug	With tube
	B3498	Power cord, 3 wired cord & Chinese plug	With tube
	B3499	Power cord, 3 wired cord & SI plug	With tube
	B3500	Power cord, 3 wired cord & American plug	With tube
12	12 B3465 Driver suppo		
13	B3466	CAL adjustment driver	
14)	B2017	Hexagon wrench	
13	B2852	Switch	
16	B2227	Grounding plate	
17	B2405	Rubber feet	

# 7. PARTS LIST



HAKKO FX-8801 Soldering Iron

Item No.	Part No.	Part Name	Specifications
①~①	FX8801-01	HAKKO FX-8801	

Coldering Iron Dorte

Soldering Iron Parts			
Item No.	Part No.	Part Name	Specifications
1	B1785	Nut	
2	B3469	Tip enclosure	
3		Tip	See "8. TIP STYLES"
4	B2022	Nipple	
(5)	B2032	Grounding spring	
6	A1560	Heating element	26V-65W
7	B2028	Terminal board	With cord stopper
8	B3470	Handle	With handle cover
9	B3471	Handle cover	
10	B3467	Cord bushing	
11)	B3468	Cord assembly	

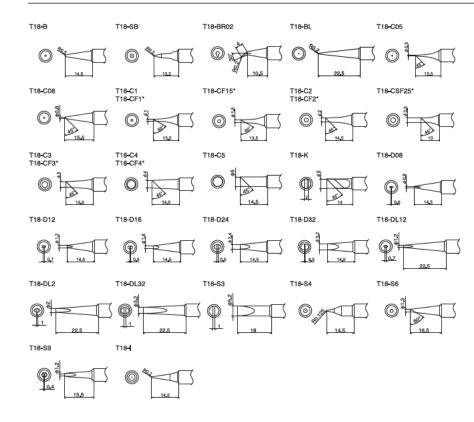
HAKKO FH-800 Iron Holder

Item No.	Part No.	Part Name	Specifications
1-5	FH800-01BY	HAKKO FH-800	Blue-Yellow
1)~(5)	FH800-01SV	HAKKO FH-800	Silver

#### Iron Holder Parts

Item No.	Part No.	Part Name	Specifications
1	A1559	Cleaning sponge	
2	B3472	Iron holder base	Blue-Yellow with rubber feet
(Z)	B3473	Iron holder base	Silver with rubber feet
3	B3474	Rubber cleaner	
4	B3475	Bottom plate	With rubber feet
(5)	B3476	Slide lock	
6	A1561	Cleaning wire	

# 8. TIP STYLES



\* Tinned on the soldering surface only.

\*\*Use only genuine Hakko soldering iron tips. Replacement tips for the HAKKO FX-888 are designated the T18 series.