

# PREHEAT PLATE

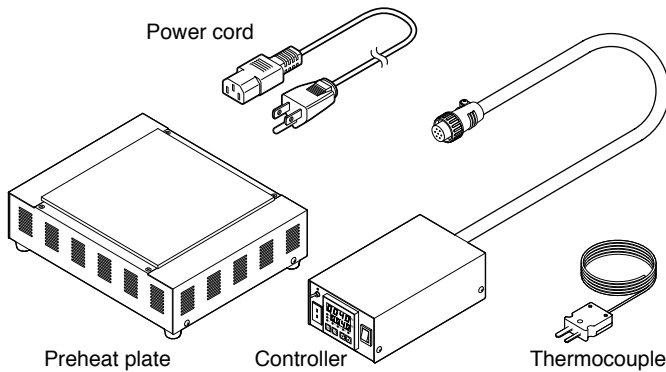
## FR-860

### Instruction Manual

Thank you for purchasing the HAKKO FR-860 preheat plate.  
Please read this manual before operating the Preheat plate.  
Keep this manual readily accessible for reference.

#### PACKING LIST AND PART NAMES

Controller .....	1	Thermocouple .....	1
Preheat plate (L) .....	1	Instruction manual .....	1
Power cord .....	1		



#### WARNINGS AND CAUTIONS

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

- ⚠ WARNING :** Failure to comply with a WARNING may result in serious injury or death.
- ⚠ CAUTION :** Failure to comply with a CAUTION may result in injury to the operator, or damage to the items involved.

#### ⚠ CAUTION

When power is ON, the plate surface may be as hot as 500°F. To avoid injury or damage to personnel and items in the work area, observe the following :

- Do not touch the plate or place metal parts near the plate.
- Do not allow the plate 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.
- This product 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 product by a person responsible for their safety.
- Children should be supervised to ensure that they do not play with the product.
- Do not use the product for applications other than Preheat plate.
- Do not allow the product to become wet, or use it with wet hands.
- Remove power and controller cords by holding the plug - not the cord.
- While using the product, don't do anything which may cause bodily harm or physical damage.

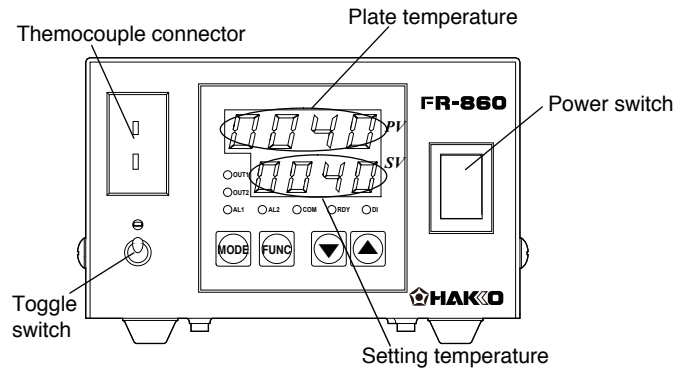
#### SPECIFICATIONS

Output	AC120V 60Hz
Power Consumption	600W (Large plate)
Temperature Range	0-500°F
Temperature Stability	±10°F
Dimensions (Large plate)	250(W)×79(H)×204(D)mm (9.8×3.1×8.0 in)
(Controller)	100(W)×66(H)×169(D)mm (3.9×2.6×6.7 in)
Size of plate	178×178mm (Large plate) (7.0×7.0 in)
Weight (Without cord)	2.5kg (Large plate) (5.5 lbs.)
	1.0kg (Controller) (2.2 lbs.)

#### OPERATION

##### Controller

To use the controller to configure the preheat plate for use as follow.



1. Turn the power switch ON.
2. Setting temperature is displayed as Set Variable (SV).  
Plate temperature is displayed as Process Variable (PV).  
The plate temperature rises to the setting temperature.
3. When changing the setting temperature, press the "▼" button or "▲" button to set the temperature.
4. Turn the power switch OFF after using.

##### \*Toggle Switch

The controller has toggle switch to select between plate temperature control or T/C temperature control.

##### For T/C temperature control:

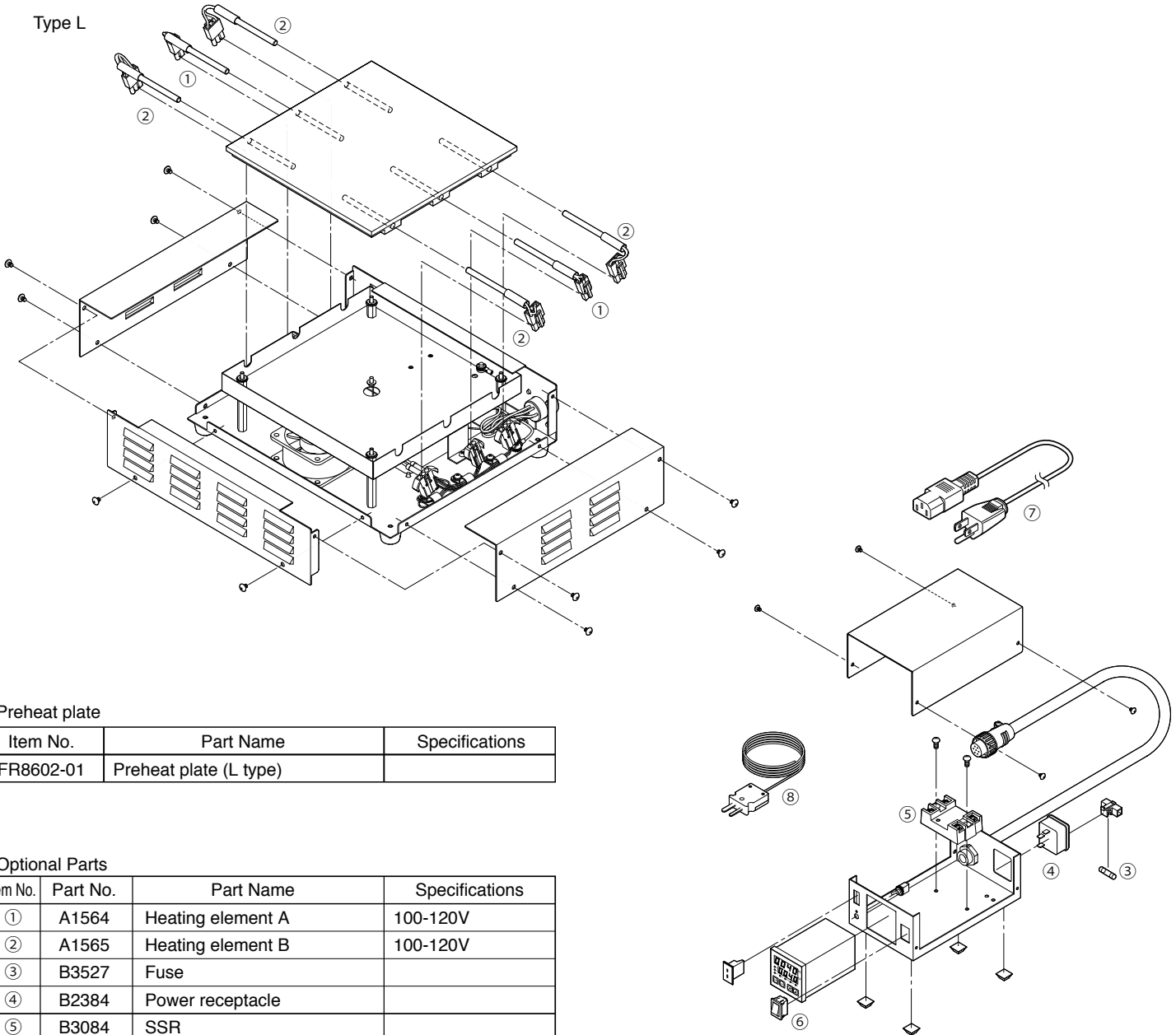
1. Insert thermocouple into thermocouple connector. Place the thermocouple end on a desired temperature measuring point or the item to be heated by the plate.
2. Switch toggle switch to T/C mode.
3. Temperature reading of the thermocouple is displayed as Process Variable. Change the setting temperature as needed.

#### ⚠ CAUTION

When the thermocouple is attached, the temperature of the plate will rise until the T/C reaches to the setting temperature. Ensure the T/C is properly attached and not left in open air or damage may result.

# PARTS LIST

Type L



●Preheat plate

Item No.	Part Name	Specifications
FR8602-01	Preheat plate (L type)	

●Optional Parts

Item No.	Part No.	Part Name	Specifications
①	A1564	Heating element A	100-120V
②	A1565	Heating element B	100-120V
③	B3527	Fuse	
④	B2384	Power receptacle	
⑤	B3084	SSR	
⑥	B2852	Switch	
⑦	B2419	Power cord	
⑧	B3516	Thermocouple	



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中國RoHS: 產品中有毒有害物質或元素的名稱及含量

部件名稱	有毒有害物質或元素					
	鉛(Pb)	汞(Hg)	鎘(Cd)	六價鉻 (Cr(VI))	多溴聯苯 (PBB)	多溴二苯醚 (PBDE)
電器部件	×	○	○	○	○	○

○ : 表示該有毒有害物質在該部件所有均質材料中的含量均在SJ/T 11363-2006標準規定的限量要求以下。  
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