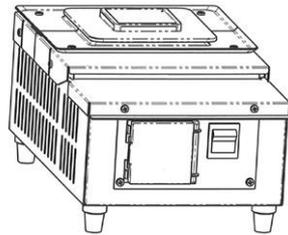




**LEAD-FREE APPLICABLE SOLDER POT**  
**POT-50C**

**OPERATION MANUAL**



**WARNING**

Before using the solder pot, read the Operation Manual. Failure to follow the safety precautions and instructions in this manual could result in serious injury and property damage.

Thank you for buying a **goot** solder pot. Accurate PID temperature control, long life ceramic heater and solder bath material are perfect for lead-free soldering.

**KEEP THIS MANUAL FOR FUTURE REFERENCE**

The safety signal words [**WARNING**] and [**CAUTION**] are defined below.



**WARNING**

Failure to obey a safety warning could result in serious injury or death to yourself or to others. Always follow the safety precautions to reduce the risk of electric shock, fire or personal injury.



**CAUTION**

Failure to obey a safety caution may result in a minor or moderate injury to yourself or to others. Always follow the safety precautions to reduce the risk of electric shock, fire or personal injury.

**1. Table of Contents / Specifications**

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Specifications	
Model	POT-50C
Voltage	110-120V , 220 - 240V AC 50/60 Hz
Power Consumption	470-610W , 370 - 430W
Maximum Current	25A , 11A (at solder temperature 25°C / 77°F)
Solder Bath Temperature	Room temp.--- 500°C / 932°F
Unit Dimensions	174(W) x 285(D) x 142(H) (6.9 X 11.2 x 5.6 inch)
Solder Bath Dimensions	50(W) x 50(D) x 50(H) (2 x 2 x 2 inch)
Weight	Approx.4Kg (75 lb)
Max. Solder Volume	Approx. 850g (1.9 lb)                      Approx. 1900g (4.2 lb)
Solder Bath Material	Cast Iron
Power Cord Length	1.5m (4.9 ft.) (3 core cord) ground plug

## 2. Introduction

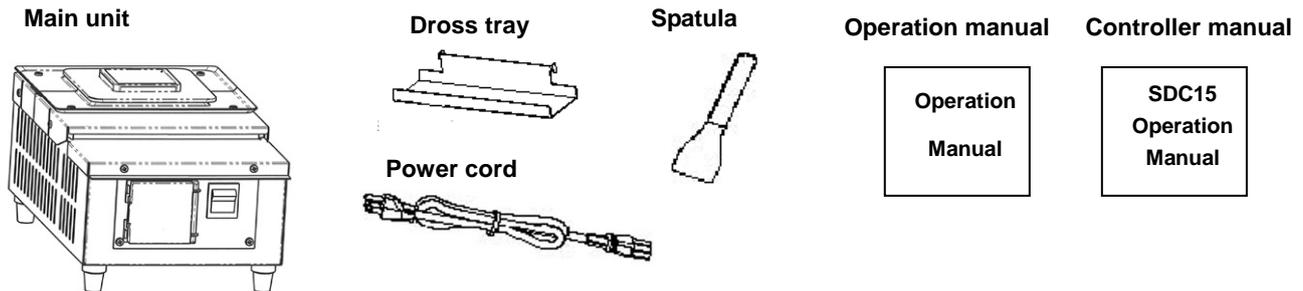
### 2.1 Features

- Perfect for insulation-removal and preparative soldering of transformer leads and other leads (POT-50C)
- Accurate PID temperature control. User defined bath temperature regulation by switching to sensor feedback ON/OFF control.
- Dual digital display shows the set temperature and measured temperature at the same time.
- Fitted with extra long life ceramic heater.

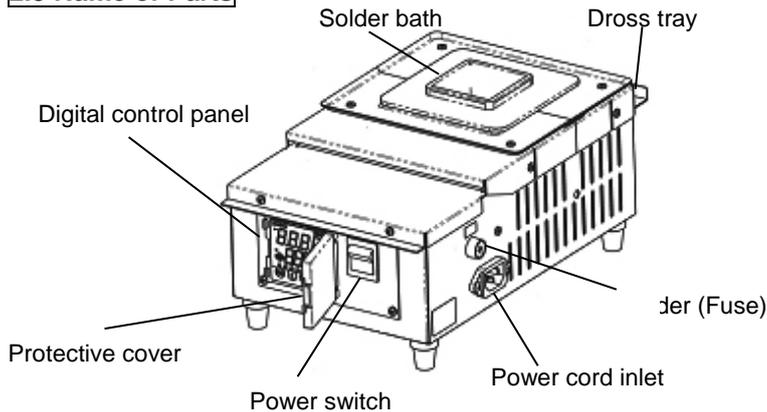
### 2.2 Unpacking

Please make sure that all the items listed below are included, and the unit functions properly. Please store the packaging for future shipment or repair.

Packaged items:



### 2.3 Name of Parts



## 3. Rules for Safe Operation

- 1. DO NOT USE IN DANGEROUS ENVIRONMENTS.**  
Do not use the solder pot in damp or wet locations or expose it to external environmental conditions, particularly rain. Never use it in an explosive atmosphere. The heat from the heater can ignite fumes. Be sure that the work area is well ventilated.
- 2. KEEP CHILDREN AND BYSTANDERS AWAY FROM THE SOLDER POT.**  
Do not let bystanders touch the solder pot. All bystanders should be kept a safe distance from the work area.
- 3. USE FOR THE RIGHT JOB.**  
Do not use the solder pot for any purpose other than solder dipping work. For example: The solder pot should never be used to warm water or other liquids.
- 4. WEAR PROPER APPAREL AND SAFETY GLASSES, MASK AND GLOVES.**  
Do not wear loose clothing (such as a necktie). Tie up long hair. Clothing or hair can burn on contact with the molten solder or surrounding heated parts.
- 5. CONNECT TO THE SPECIFIED AC POWER SUPPLY.**  
The power voltage for this solder pot is indicated on the unit. Never plug the solder pot into any other voltage.

**6. DO NOT ABUSE THE POWER CORD AND INSPECT IT PERIODICALLY.**

Never yank the power cord to disconnect it from the receptacle. Keep the power cord away from heat, oil and sharp edges. If it is damaged, replace it.

**7. FOR FACTORY USE ONLY**

This unit has noise proof circuit for factory use. If used in a home environment it may affect surrounding electrical appliances.



**WARNING**

Please observe the following in order to prevent solder splashing.

The splashed solder may badly burn you. Please be careful.

• **Do not let the spatula get wet.**

Steam is generated when a wet spatula contacts the molten solder. This may cause solder to splash.

• **Please use only the bundled spatula when you would like to remove oxide.**

Anything used in place of the spatula (Spoon, etc.) may cause solder to splash.

The spatula has unique features which cannot be substituted.

• **Spatula surface must be clear and smooth.**

Anything adhering to the spatula may cause solder to splash.

• **If spatula has rust, please replace it with a new one.**

**4. Operation Instructions**



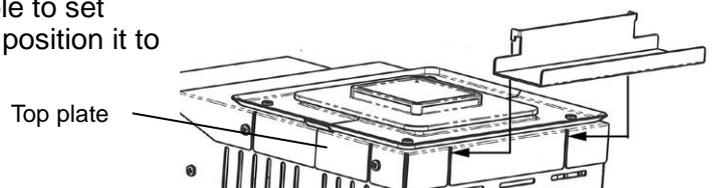
**WARNING**

To prevent fire, burns, and possible serious injury or damage:

- Keep the solder pot away from flammable substances and materials in the work area.
- Be sure to position the solder pot on a firm metal bench. The solder pot is heavy when filled with solder and the solder bath and surrounding area becomes very hot.
- Unplug the solder pot power cord immediately if there is burnt smell or unusual heating occurs. Do not use the solder pot again, and return it to the distributor you purchased it from.
- Do not leave the solder pot unattended when it is hot as the pot and surrounding area becomes very hot.
- Do not touch any part of the unit other than the power switch or the control panel when it is switched ON.

**4.1 Set up**

1. Hook the dross tray to the top-plate. It is possible to set the dross tray on 3 sides of the unit so you can position it to suit your needs.



2. Make sure the Power Switch is in the OFF position before inserting the power cord into the power cord inlet and plugging the other end into a power outlet.

3. Place the required amount of solder into the solder bath and turn the unit ON. Ideal solder level is 5mm below the rim of the bath.
4. Following the Control Panel setting procedure, input the temperature settings. This unit is set to 270 °C (518°F) prior to shipment.
5. When the settings are completed the Output Lamp (ot1) will light and temperature control begins. The solder will melt in 7~8 minutes so put the solder into the pot little by little until it reaches the right level. When the measured temperature (PV) and the set temperature (SP) are the same, the Output Lamp (ot1) will flash and the temperature will be stable. The solder will be melted and work can begin approximately 20 minutes after starting the temperature control. Before dipping, remove the oxidized solder dross with the spatula and make sure the solder surface is clean.
6. Turn the unit OFF when not in use or when you are away from it.

#### 4.2 Name of Parts and Control Panel Functions

The solder pot controller is a general-purpose model. The operator only sets temperature. If you want to change the set up and parameter settings please refer the SDC15 operation manual included with this solder pot. You can change the temperature display from Celsius to Fahrenheit.

	<p>① <b>Para key</b> (No need to use) Changes the displayed item. → Refer to the 'SDC15 operation manual'.</p> <p>② <b>&lt; key</b> Changes the set value by moving the cursor to the digit to be changed.</p> <p>③ <b>v key</b> Decreases the value when changing the set value.</p> <p>④ <b>^ key</b> Increases the value when changing the set value.</p>
<p>⑤ <b>Upper display (PV value)</b> Displays the measured value (PV). If the sensor is open, the alarm code [AL03] will be displayed. Return the solder pot to the distributor for repair.</p> <p>⑥ <b>Auto-tuning (AT) / Self-tuning (ST) display lamp</b> → Refer to the 'SDC15 operation manual'.</p> <p>⑦ <b>Lower display (SP value)</b> Displays the Set Value (SP). Shows the displayed value and measured value when changing the settings.</p> <p>⑧ <b>Mode key</b> (No need to use) By pressing this key for over 1 second it is possible to switch the modes. → Refer to the 'SDC15 operation manual'.</p> <p>⑨ <b>Mode display lamp</b> ot1 : Lights up while the heater is ON. rdy, man, ev1, ev2, ev3, ot2 : No light up → Refer to the 'SDC15 operation manual'.</p>	

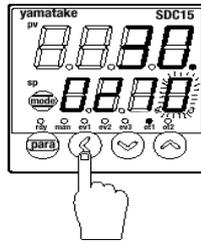
Note : Do not use sharp objects, such as mechanical pencils, to press the keys on the control pad. This may damage the pad.

#### 4.3 How to set

Example procedure to enter 400 °C /752°F as the set value (SP) (PV value at 30 °C/ 86°F)

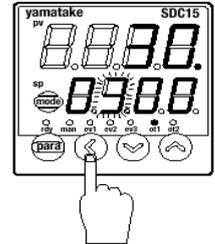
### 1. Enter the setting mode

Press the < key to enter the SP setting mode.  
The lowest digit in the SV display flashes.



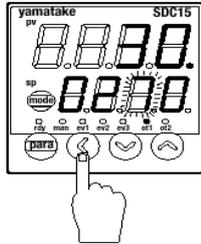
### 4. Setting the 100 digit.

Move the flashing digit to the 100 digit by pressing < key.



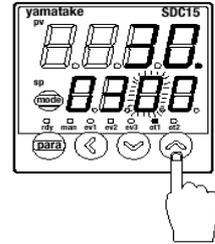
### 2. Setting the 10 digit

Press the < key until the 10 digit flashes.  
The selected digit flashes in the order shown in the illustration below.



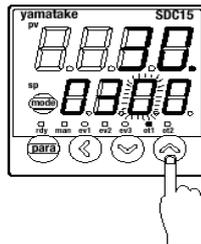
### 5. Increase /decrease of the value

The ^ key is used to increase and the v key is used to decrease the value.



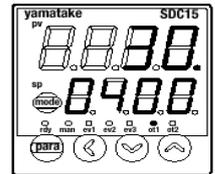
### 3. Increase /decrease of the value

The ^ key is used to increase and the v key is used to decrease the value.



### 6. Registering the set value

After finishing the settings please wait for 2 seconds without pressing any buttons. When the display stops flashing the set value is confirmed and the operation display is shown.



Note 1: When nothing is input for over 2 seconds during the setting, the flashing value will be confirmed automatically and operation display will be shown.

Note 2: It is not possible to set the values to more than the maximum temperature of 530 °C /986 °F.

Note 3: After setting is completed, close the protective cover. This will help minimize damage and keep the control panel clean.

Note 4: The unit operates at the old temperature while setting the new temperature.

## 5. Maintenance



### WARNING

To prevent fire, burns, and possible serious injury, wear glasses, gloves and a mask before doing maintenance.

- Keep the level of molten solder approximately 5mm below the rim of the solder bath.
- When using the solder pot for long periods, oxidized dross may collect around the walls of the solder bath. This can cause poor heat transmission from the heater, overheating and insufficient heating of the solder. Scrape the walls of the solder bath periodically with the spatula included with the unit to remove oxidized dross.

## 6. Troubleshooting

Trouble: The solder does not melt.

a) The temperature setting display does not flash

Cause	Countermeasure
The Power Cord is unplugged at either end.	Plug it in.
The Power Switch is in the OFF position.	Set the power switch to the ON position
The Power Cord is damaged.	Replace the power cord.
The Fuse is blown.	Replace the fuse.

b) The temperature setting display flashes

Cause	Countermeasure
The set temperature is lower than the temperature at which the solder melts.	Set the temperature to higher than that the solder melting temperature.
The heater is damaged.	Replace the heater.
The alarm code display is shown.	Check the alarm code table in the SDC15 operation manual.

Return your **goot** distributor for service if you cannot solve the trouble above.

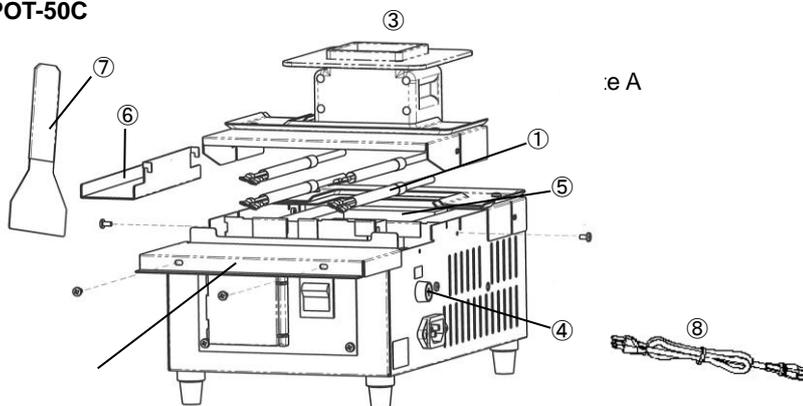
## 7. Replacement Parts

### 7.1 Replacement Parts

No.	Item	No.	Item
1	Heater (110 - 130V) Heater (220 - 240V)	5	Heat Resistant Board Set B-50 for POT-50C
2	Heater Block *Not required for POT-50C	6	Dross Tray
3	Cast Iron Bath for POT-50C *Built-in heater block	7	Spatula
4	Fuse 15A 250V for 110-130V model Fuse 10A 250V for 220-240V model	8	Power Cord

### 7.2 Replacement Procedures

POT-50C



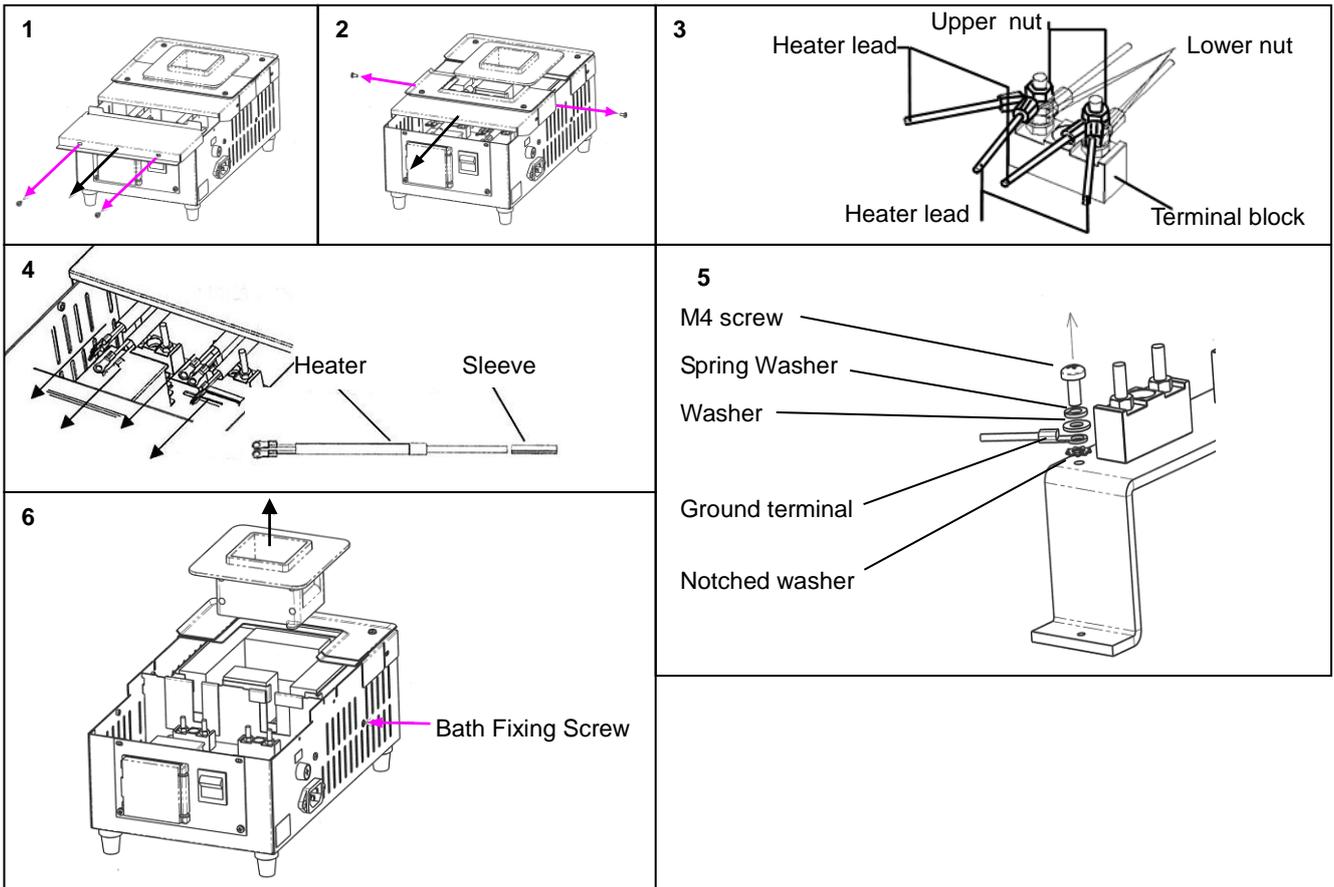
#### WARNING



Turn the unit OFF and unplug the power outlet before changing the solder bath, heater or heat resistant board. Do not start removing the solder bath or the parts before the unit has completely cooled down.

Replacing the bath and heater.(POT-50C)

1. Loosen the two screws in Top plate B and remove the Top plate B.
2. Loosen the two screws in Top plate A and remove the Top plate A.
3. Remove the nuts from the Terminal block. Take care not to loosen the Lower nuts underneath when doing this.
4. Remove the heater from the heater-opening. Be sure that the sleeve does not stick on the heater.  
Note: The sleeve may come out with the heater when removing. Reinsert the sleeve in heater-opening.
5. Remove the M4 screw of the terminal block and remove the ground terminal for the solder pot.
6. Loosen the Bath Fixing Screw on the right side of the unit. Lift the bath directly upwards to remove from the main body.
7. Put the new heater and/or bath in place and reverse the steps above to reassemble.
8. Tighten the Bath Fixing Screw so that the bath does not move.



For service, accessories and etc, Contact your nearest distributor or following:

SOLDERING IRONS, EQUIPMENT & ACCESSORIES  
**TAIYO ELECTRIC IND.CO.,LTD** [www.goot.co.jp](http://www.goot.co.jp)  
TEL:81-84-951-1512 FAX:81-84-951-9531

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