HAKKO

# HAKKO FX-300 SOLDERING POT

SOLDERING POT

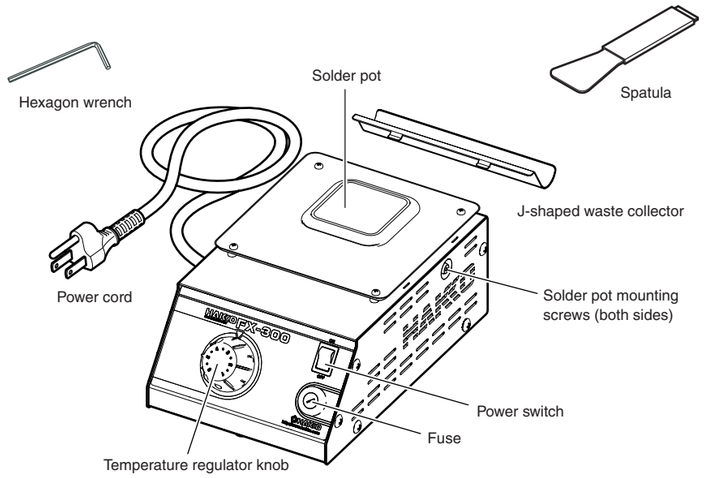
# Instruction Manual

Thank your for purchasing the HAKKO FX-300 soldering pot.
Please read this manual before operating the HAKKO FX-300.
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-300 | 1 | Hexagon wrench | 1 |
| Spatula | 1 | Instruction manual | 1 |
| J-shaped waste collector | 1 | | |




## 2. SPECIFICATIONS

| | 50 × 50 Square | 75 × 75 Square |
|---|---|---|
| Power consumption | 100V - 195W, 110V - 220W, 120V - 200W, 220V - 190W, 230V - 205W, 240V - 215W | |
| Temperature range | 200 - 450°C (400 - 840°F) | 200 - 380°C (400 - 720°F) |
| Solder pot dimensions | 50 (W) × 50 (D) × 43.5 (H) mm (2.0 × 2.0 × 1.7 in.) | 75 (W) × 75 (D) × 52.5 (H) mm (3.0 × 3.0 × 2.1 in.) |
| Molten solder capacity | 0.85 kg (1.87 lb.) | 1.2 kg (2.64 lb.) |
| Weight (w/o solder and cord) | 1.7 kg (3.74 lb.) | |
| Outer dimensions | 143 (W) × 100 (H) × 220 (D) mm (5.6 × 4.0 × 8.7 in.) | |

* Only a 50 × 50 square solder pot is included in this product.
* The 75 × 75 square solder pot is an optional part.
* This product meets China RoHS requirements.
* Specifications and design are subject to change without notice.

### 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) |
| 插頭 | × | ○ | ○ | ○ | ○ | ○ |

○： 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。
×： 表示該有毒有害物質至少在該部件的某一均質材料中的含量超出SJ/T 11363-2006 標準規定的限量要求。

注有「附帶BS插頭」之時，表示「插頭」為含有有害物質的部件。

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## 3. SAFETY INSTRUCTIONS

### ⚠ WARNING

**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:**

⚠ **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. Two examples are given below.

### ⚠ WARNING

**When the power is ON, the temperature of the melted solder in the solder pot is approximately 450°C/842°F. Before changing the solder pot, be sure to unplug the power cord and let the solder and the unit cool to room temperature.**

**Observe the following precautions to ensure safety.**

### ⚠ CAUTION

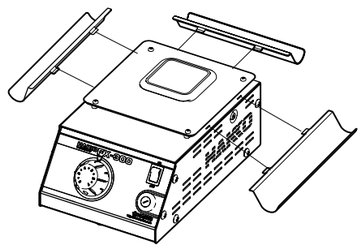
The molten solder in the solder pot is dangerous since it reaches about 450°C/842°F. The pot cover also becomes a high temperature when the power is ON. Wrong handling may cause burns or fire. Be sure to observe the following precautions.

- Use this product on highly stable metal workbench. Never use it near paper or other flammable materials.
- Inform others in the area that the product is hot and should not be touched.
- Never put water in the solder pot as this will cause solder to spatter out of the solder pot.
- Turn the power off when not in use, or left unattended.
- Before changing parts or storing the unit, be sure to turn the power off and allow the unit to cool to room temperature.

**Observe the following precautions to prevent accidents or damage to the unit.**

- Do not use the HAKKO FX-300 for applications other than soldering.
- Do not modify the HAKKO FX-300.
- Use only genuine HAKKO replacement parts.
- Do not allow the HAKKO FX-300 to become wet, or use it with wet hands.
- Be sure the work area is well ventilated. Soldering produces smoke.
- Do not do anything else that might be dangerous.

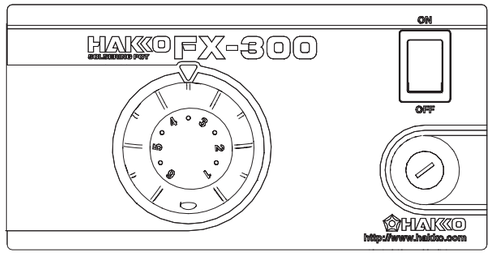
## 4. INITIAL SETUP



1. Install the J-shaped waste collector to the unit. (Three-way installation is possible to meet your operating needs.)
2. Cut the solder sticks into small pieces and put them in the solder pot.
3. Plug the power cord into a grounded wall socket.

**⚠ CAUTION**
Make sure the power switch is off before plugging in the power plug.

## 5. OPERATION




**Temperature regulator knob**

The set temperature can be changed with the temperature regulator knob.
Turning the knob clockwise increases the set temperature and turning the knob counterclockwise decreases the set temperature.

1. Turn the power switch ON.
2. The temperature control is started, causing the temperature to increase.

| Knob | Temperature (50 × 50 Square) | Temperature (75 × 75 Square) |
|---|---|---|
| 1-3 | Approximately 200°C (400°F) | Approximately 200°C (400°F) |
| 3-4 | Approximately 300°C (570°F) | Approximately 300°C (570°F) |
| 4-5 | Approximately 400°C (750°F) | Approximately 350°C (660°F) |
| 5-6 | Approximately 450°C (840°F) | Approximately 380°C (720°F) |

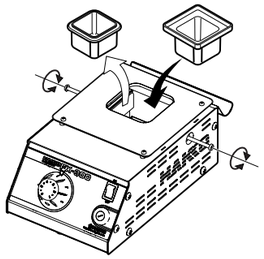
**NOTE:**
Temperature depends on a soldering pot. Please use the table above as a guide.
Measure an exact temperature by the FG-100 or the FG-101 with an applicable temperature probe if necessary.

# 6. MAINTENANCE

**⚠ WARNING**

**Unless otherwise directed, carry out these procedures after turning the power switch OFF, unplugging the power plug and waiting for both the unit and the solder to sufficiently cool down.**

### ● Changing the solder pot



**⚠ WARNING**

When the power is ON, the temperature of the melted solder in the solder pot is approximately 450°C/842°F. Before changing the solder pot, be sure to unplug the power cord and let the solder and the unit cool to room temperature.

1. Using the hexagon wrench (provided with the HAKKO FX-300) to loosen the screws on both sides of the unit.

**NOTE:**
Screws do not have to be removed.

2. Pull out the solder pot.

3. Insert a new solder pot and then tighten the screws on both sides.

**⚠ CAUTION**

Check that the solder pot has been locked now. Otherwise, the temperature may not increase properly.

### ● Replacing the heating element

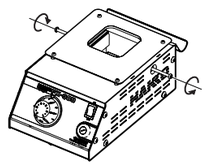


Fig. 1

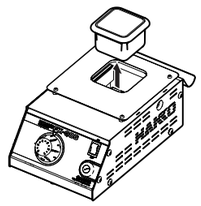


Fig. 2

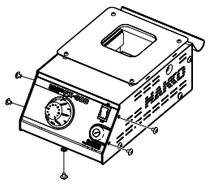


Fig. 3

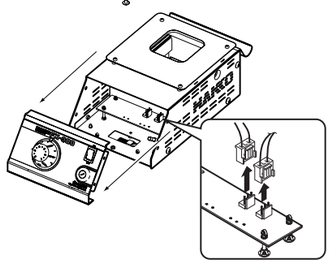


Fig. 4

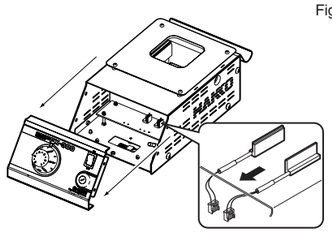


Fig. 5

1. Loosen the screws on both sides of the unit. (Fig. 1)

**NOTE:**
Screws do not have to be removed.

2. Pull out the solder pot. (Fig. 2)

3. Remove the setscrews (5 pieces) on the unit. (Fig. 3)

4. Slide the front panel frontward, disconnect the two connectors (Fig. 4) from the connector circuit board, and then pull out the units of the heating elements (Fig. 5).

5. Insert the right and left heating elements in the reverse procedure to removing the heating elements.

**⚠ CAUTION**

The heating element is a discrete type.

### ● Daily Check

Solder gradually corrodes and makes holes through the stainless solder pot, which can lead to solder leakage from the holes.

Daily check and replacement (if necessary) of the solder pot is recommended to ensure comfortable and safe execution of work.

**⚠ CAUTION**

Make sure that the solder pot has sufficiently cooled down before performing the daily check.

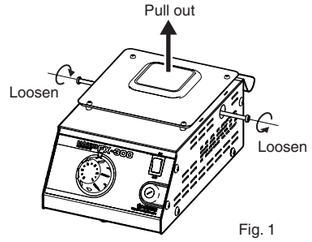



Fig. 1

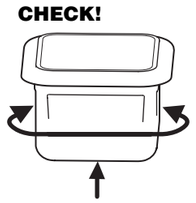



Fig. 2

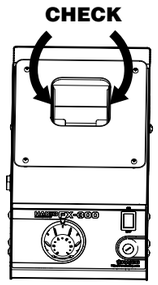



Fig. 3

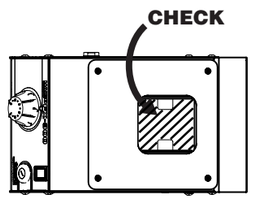



Fig. 4

**How to check**

1. Loosen two mounting screws on both sides of the unit to pull out the solder pot. (Fig. 1)

2. Check for holes or leaks by visually inspecting the surface of the solder pot. (Fig.2)

**NOTE:**
Visually inspect sides and bottom of the solder pot. The life of the solder pot can be increased if the pot is reinstalled with its orientation being changed by 90 degrees.

3. Check the following areas for solder sticking.
   - Overflow tray
   - Around the heater of the unit, insides of the heat insulator (Fig.3 and Fig.4)

# 7. TROUBLE SHOOTING GUIDE

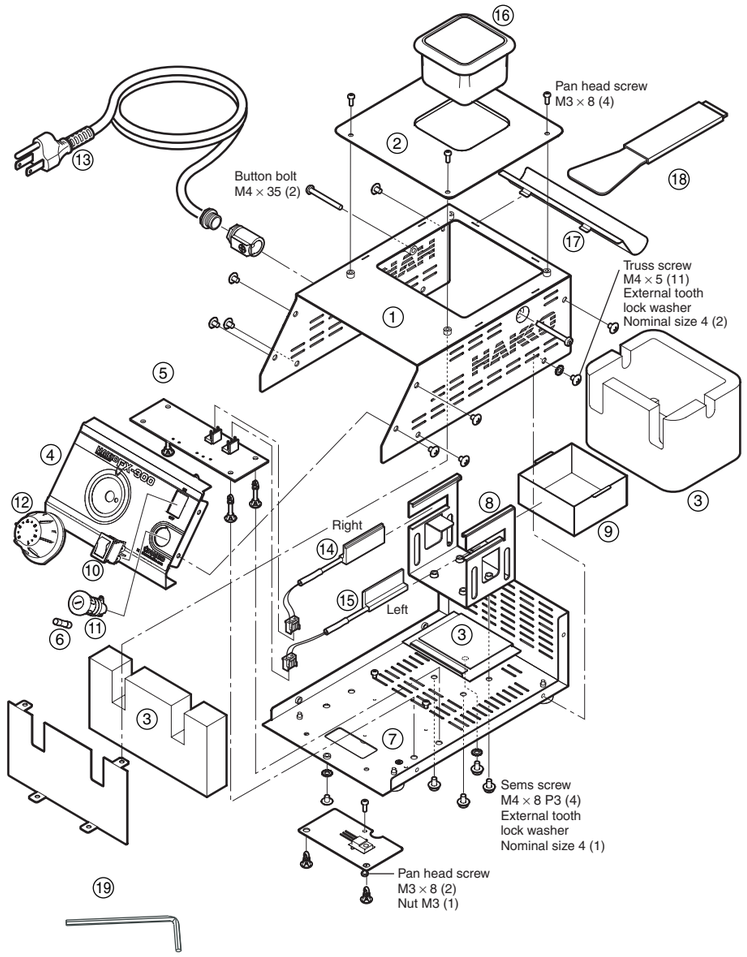
**⚠ WARNING**

**Before checking the inside of the FX-300 or replacing parts, be sure to disconnect the power plug.**

**● The unit does not operate when the power switch is turned on.**

**CHECK** : Is the power cord and/or the connection plug disconnected?
**ACTION** : Connect it.
**CHECK** : Is the fuse blown?
**ACTION** : Investigate why the fuse blew and then replace the fuse. If the cause can not be determined, replace the fuse. If the fuse blows again, send the unit in for repair.

# 8. PARTS LIST




**● FX-300 Soldering pot**

| Item No. | Part No. | Part Name | Specifications |
|---|---|---|---|
| ① | B3382 | Cover | |
| ② | B2918 | Overflow tray | |
| ③ | B2916 | Heat insulator | |
| ④ | B3383 | Front panel | With membrane sheet |
| ⑤ | B3385 | P.W.B. | 100 - 110V |
| | B3386 | P.W.B. | 120V |
| | B3387 | P.W.B. | 220 - 240V |
| ⑥ | B2705 | Midget fuse/125V-5A | 100 - 110V |
| | B2468 | Fuse/125V-5A | 120V |
| | B2922 | Fuse/250V-5A | 220 - 240V |
| | B3045 | Fuse/250V-5A CE | 230V CE, KTL |
| ⑦ | B3384 | Chassis | With rubber feet |
| ⑧ | B2927 | Solder pot support | |
| ⑨ | B2928 | Solder pot tray | |
| ⑩ | B1487 | Power switch | 100 - 120V |
| | B2604 | Power switch | 220 - 240V |
| ⑪ | B1134 | Fuse holder | |
| ⑫ | B3348 | Knob | |
| ⑬ | B1238 | Power cord, 2 wired cord & flat 2 pin plug | |
| | B1795 | Power cord, 3 wired cord & American plug | |
| | B1796 | Power cord, 3 wired cord but no plug | |
| | B2913 | Power cord, 3 wired cord & BS plug | |
| | B2914 | Power cord, 3 wired cord & Chinese plug | |
| | B1797 | Power cord, 3 wired cord & European plug | KTL, CE |
| | B1798 | Power cord, 3 wired cord & Australian plug | |
| | B3046 | Power cord, 3 wired cord & BS plug CE | |

**● Replacement parts**

| Item No. | Part No. | Part Name | Specifications |
|---|---|---|---|
| ⑭ | A1551 | Heating element/Right | 100 - 110V |
| | A1553 | Heating element/Right | 120V |
| | A1549 | Heating element/Right | 220 - 240V |
| ⑮ | A1552 | Heating element/Left | 100 - 110V |
| | A1554 | Heating element/Left | 120V |
| | A1555 | Heating element/Left | 220 - 240V |
| ⑯ | A1517 | Solder pot | 50 × 50 × 43.5(mm) /2.0 × 2.0 × 1.7(in.) |
| ⑰ | B2919 | J-shaped waste collector | |
| ⑱ | B2932 | Spatula | |
| ⑲ | B1417 | Hexagon wrench | |

**● Optional parts**

| Part No. | Part Name | Specifications |
|---|---|---|
| A1539 | Solder pot | Special coating 50 × 50 × 43.5(mm) /2.0 × 2.0 × 1.7(in.) |
| A1540 | Solder pot | Special coating 75 × 75 × 52.5(mm) /3.0 × 3.0 × 2.1(in.) |
| A1518 | Solder pot | 75 × 75 × 52.5(mm) /3.0 × 3.0 × 2.1(in.) |