Solder Pot Installation, Operation, and Maintenance





Figure 1. APR 670030 Solder Pot

Description

The APR 670030 Solder Pot tins, pre-tins, and solders items such as stranded wire, electrical components, and circuit boards. It has a 500° F to 975° F temperature range with ±11° F control through the use of a thermal switch with automatic correction for voltage fluctuations. Its crucible has a 2 pound capacity and measures 2.5 inches in diameter and 1.5 inches in depth. The ceramic coating extends the crucible's lifespan and prevents corrosion in high temperature applications. The Solder Pot features adjustable leveling feet, and it includes a de-dross tool and dross tray for quick cleaning and a label for lead-free solder designation.

Packaging

- 1 Solder Pot with North American Power Cord
- 1 Dross Tray
- 1 Solder Dross Removal Tool
- 1 Lead-free Label



Figure 2. APR Solder Pot packaging contents

Installation

- Place the Solder Pot onto a flat worksurface. Adjust its feet using a 1/8" hex key so it sits level. The Solder Pot may also be anchored to the worksurface by removing its leveling feet and replacing them with 1/4"-20 thread screws.
 - Place insulation or a sand tray underneath the Solder Pot if the worksurface is heat sensitive.
- 2. Place the dross tray around the Solder Pot's collar.
- Use adequate ventilation or fume extraction such as the <u>Purex FumeCube</u> over the Solder Pot.
- Connect the power cord into an appropriate AC outlet.
- 5. DO NOT operate the Solder Pot without solder in the crucible. Always keep the crucible full.
- 6. Apply the included green label onto the Solder Pot to designate it for lead-free solder use if applicable.

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Figure 3. Applying the lead-free label onto the Solder Pot

Operation

Initial Power-up

- Turn the control knob to the HIGH HEAT-UP setting. Melt solder into the crucible until full. DO NOT use flux core solder.
- Turn the control knob to the NORMAL OPERATING RANGE setting once the solder has completely melted.

General Operating Instructions

CAUTION: Outgassing or solder splash may occur when remelting a full Solder Pot. APR recommends that a suitable cover be placed over the crucible during solder re-melt.

The Solder Pot has a four-position control knob: OFF, LOW, NORMAL OPERATING RANGE, and HIGH HEAT-UP. The HIGH HEAT-UP setting will continuously energize the heating element. Use this position when first warming the Solder Pot. Reduce the temperature by turning the control knob to the NORMAL OPERATING RANGE setting after 15 to 20 minutes. The temperature will decrease as the control knob is turned clockwise from the HIGH HEAT-UP position. Temperatures are infinitely adjustable over this range.

The Solder Pot does not produce sufficient heat to keep solder molten when the control knob is positioned to the LOW setting. The control knob must remain in the NORMAL OPERATING RANGE setting. Adjust the control knob counterclockwise to increase the temperature if the molten solder's temperature is reduced due to heavy usage.

If a precise solder temperature is required, use the procedure below to determine the corresponding control knob setting.

- Set the control knob to the center of the NORMAL OPERATING RANGE setting, and allow the solder's temperature to stabilize.
- Measure the molten solder's temperature using a pyrometer or temperature recording device.
- Adjust the control knob until the desired temperature is achieved. Mark the control knob's position for future reference.

For future use, position the control knob to the HIGH HEAT-UP setting until the desired temperature is approached, and then turn the control knob to the previously marked position for the temperature requirement.



Figure 4. Using the Solder Pot to tin stranded wire

Maintenance

Use the included solder dross removal tool to clean the molten solder as needed. Butt the tool's curved spatula to the inside edge of the crucible to collect the solder dross. The liquid solder will drain through the tool's serrated edge. All dross can be placed onto the dross tray and later discarded.



Figure 5. Using the solder dross removal tool

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Figure 6. Placing solder dross onto the solder dross tray

CAUTION: The dross tray gets hot when the Solder Pot is powered. Turn off the Solder Pot and allow the dross tray to cool before handling.

Replace the solder inside the crucible once it becomes contaminated.

For maximum heater life, operate the Solder Pot in the lowest temperature setting that will accommodate the work. Leaving the heating element in the HIGH HEAT-UP position will substantially decrease its life. Turn off the Solder Pot when not in use to extend its lifespan.

Replacement Parts

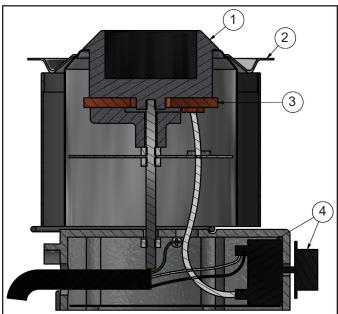


Figure 7. Cross-sectional view of the Solder Pot

Ref.	Description	Item No.
-	Solder Dross Removal Tool	<u>670032</u>
1	Ceramic Coated Crucible	<u>670033</u>
2	Dross Tray	<u>670034</u>
3	Heating Element, 120 VAC	<u>670035</u>
4	Thermal Switch with Knob, 120 VAC	<u>670036</u>

Specifications

Input Voltage and Frequency	Power Input: 100-120 VAC, 50/60 Hz
	Cable Length: 5.5 ft. (1.7 m)
Wattage	350 W
Current Draw	2.4 A @ 100 VAC 2.8 A @ 115 VAC 3.0 A @ 125 VAC
Temperature Range	500° to 975° F (260° to 524° C)
Temperature Variation	±11° F (±6° C)
Solder Capacity	2 lbs. (907 g)
Crucible Depth	1.5" (38 mm)
Crucible Depth Crucible Diameter	1.5" (38 mm) 2.5" (64 mm)
·	,
Crucible Diameter	2.5" (64 mm) 4.8" x 4.8" x 7.6"
Crucible Diameter Dimensions	2.5" (64 mm) 4.8" x 4.8" x 7.6" (122 mm x 122 mm x 193 mm)

Limited Warranty, Warranty Exclusions, Limit of Liability and RMA Request Instructions

See the APR Warranty -

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