



# Instruction Sheet

## SmartPlug Instant Hot Water Control®

U.S. Patent # 8,594,853 and # 9,207,682.

102-505

SUPERSEDES: May 20, 2022

EFFECTIVE: August 10, 2022

Plant ID# 001-4240

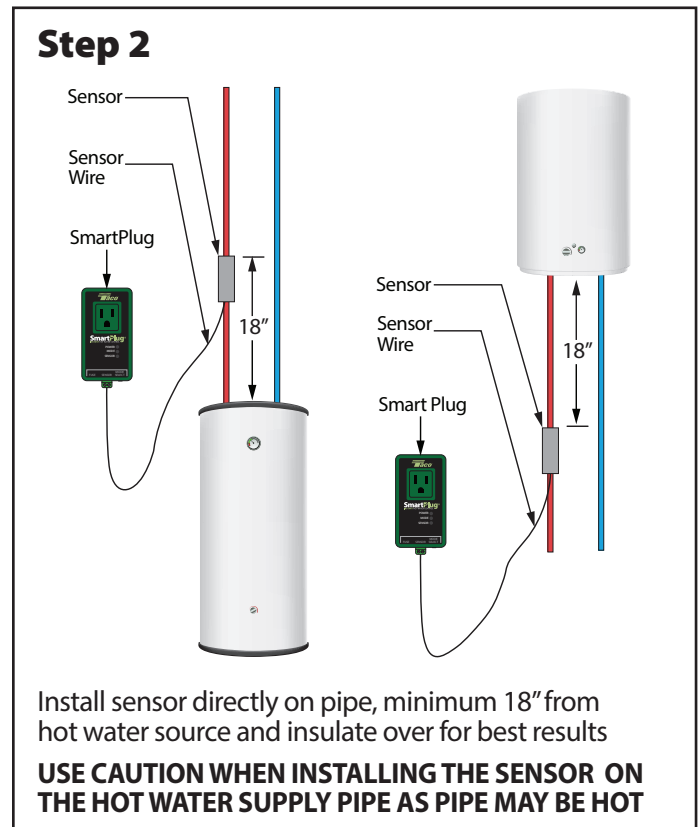
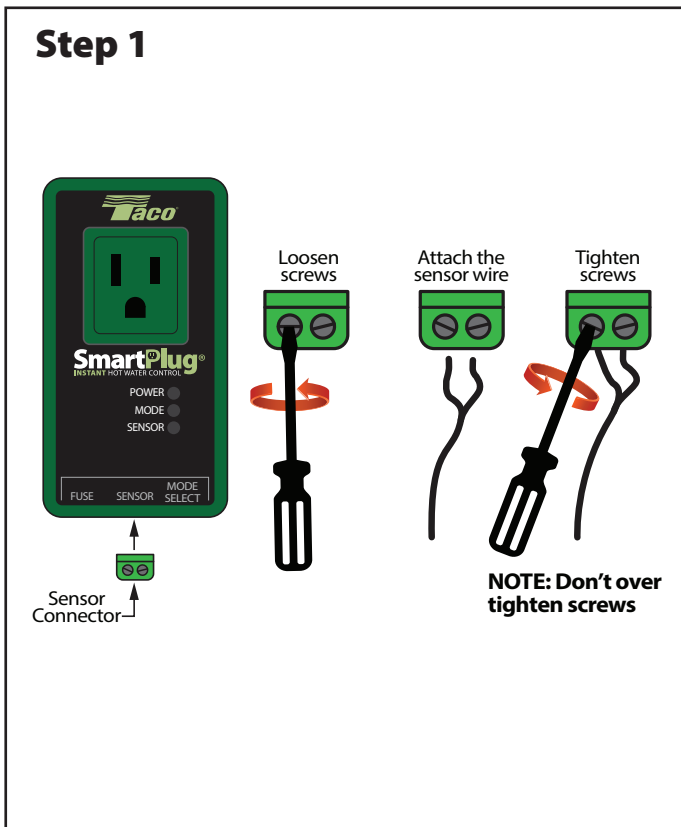
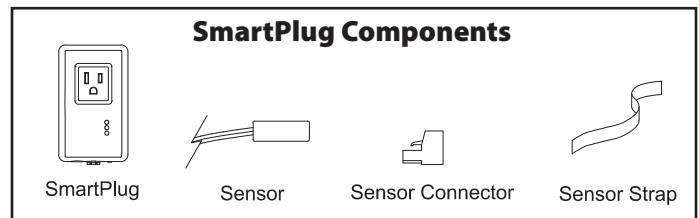
### Model#: SP115-1

#### Application:

The Taco SmartPlug Instant Hot Water Control® upgrades any corded DHW circulator with intelligence and logic, always providing hot water when needed maximizing energy savings and hot water comfort.

#### SmartPlug installation:

The SmartPlug is designed for use with standard domestic hot water circulators that have a 120V UL approved line cord. SmartPlug is safe to use on a pump with 50/60HZ and limited to 6FLA, 36LRA.

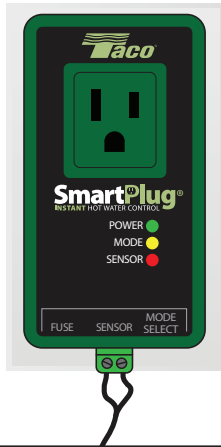
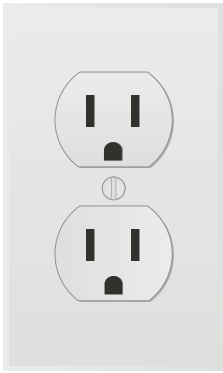


**WARNING: For indoor use only.**

**WARNING: All local plumbing and electrical codes should be followed when installing this product.**

**WARNING: Risk of electrical shock. This product is supplied with a grounding conductor and grounding-type attachment plug. To reduce the risk of shock, be certain that it is connected only to a properly grounded grounding-type receptacle.**

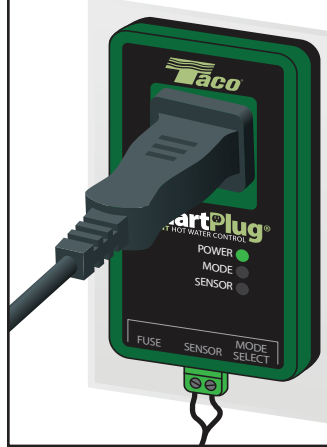
### Step 3



Plug in the SmartPlug

LEDs will illuminate and a 10 second diagnostic check will begin

### Step 4



Plug in the circulator cord

The green power LED will illuminate

**NOTE:**  
The circulator must be a properly grounded 120V pump

### Step 5

If circulator is equipped with a timer, turn the timer switch to full ON position. SmartPlug will turn the circulator on after a 10 minute delay.



Power on circulator, if applicable



### Step 6

#### Setting the SmartPlug Mode:

- **Smart Mode:** Learns your hot water usage and adapts to your routines
- **Pulse Mode:** Continuously operates 5 minutes on, 10 minutes off
- **Vacation Mode:** After 36 hours of no hot water usage, will remain off until hot water usage is detected
- **Exercise function:** While in vacation mode the SmartPlug will cycle the circulator for 10 seconds every 7 days to prevent any corrosion or scale build up

“Smart” or “Pulse” mode can be selected by pressing the mode select button located on the lower right side of the control box

To set the mode, make sure the SmartPlug is plugged into a properly grounded 120V outlet

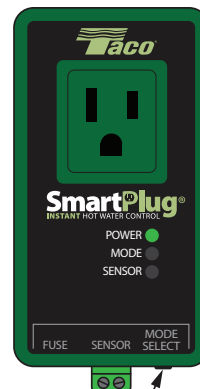
A yellow LED labeled “MODE” on the face of the SmartPlug identifies the mode selected

The SmartPlug is also provided with a red “SENSOR” LED. If the sensor is properly installed the SENSOR LED will not illuminate. If the red LED is flashing, refer to the troubleshooting section on page 3

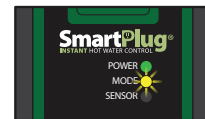
To ensure the SmartPlug is providing hot water properly, open a hot water tap at the fixture furthest away from the hot water tank

Set up complete, you are ready to enjoy hot water comfort

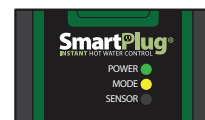
Press and release the mode select button to switch between modes



Mode Select



**Blinking Yellow LED = Pulse Mode**



**Solid Yellow LED = Smart Mode**



**Flashing Red LED = Check Sensor**  
(Refer to the troubleshooting section)

Check for hot water

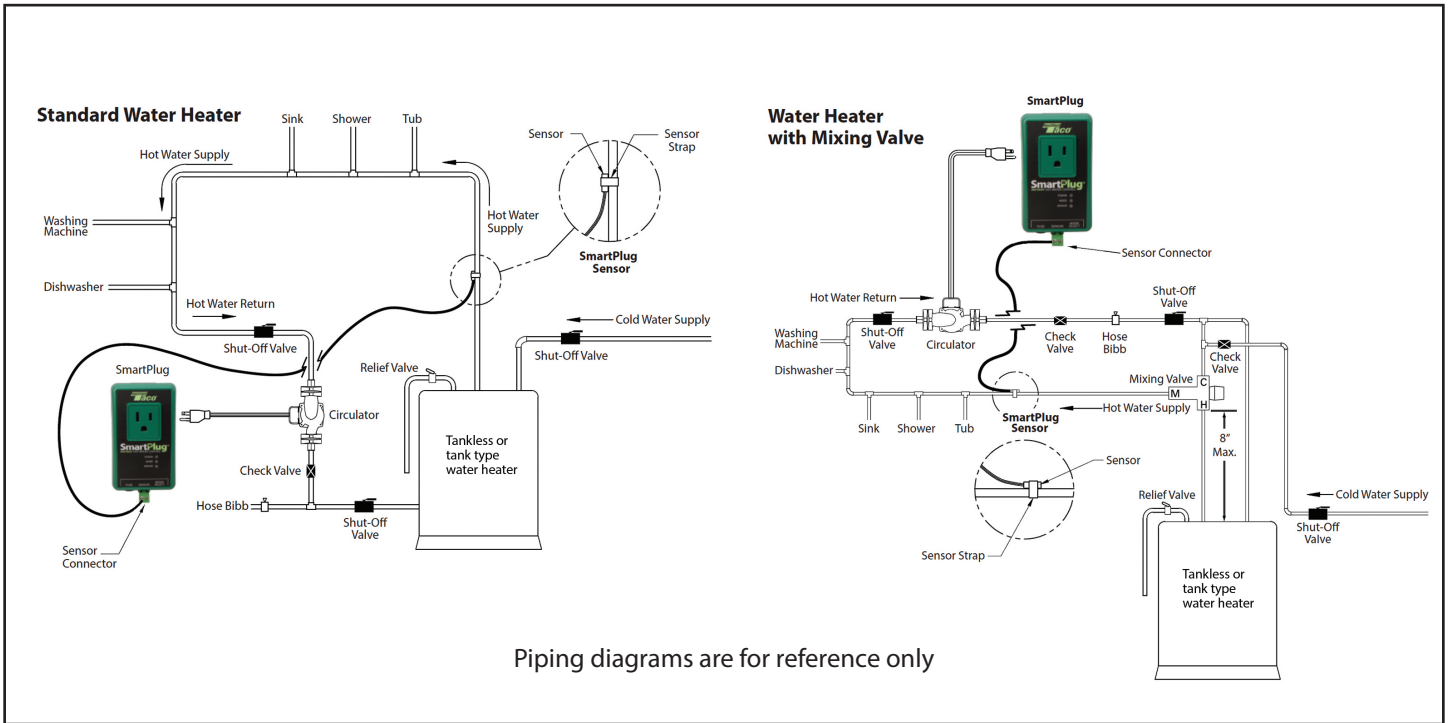


**NOTE: Use CAUTION as the water may be extremely hot.**

## TROUBLE SHOOTING

Symptom	Possible Cause	Service Tip
<b>No Hot Water</b>	Pump installed incorrectly	Check to see if the flow arrow on the pump casing is pointing in the right direction.
	Pump not running	-Check the circuit breaker. -Check power supply outlet. -Ensure pump is firmly plugged into SmartPlug and SmartPlug is properly plugged into electrical outlet.
	SmartPlug SENSOR error	-Red SENSOR LED blinking once every 5 seconds = sensor shorted. Use sensor replacement kit 194-3726. -Red SENSOR LED blinking twice every 5 seconds = bad sensor connection.
	SmartPlug is in Vacation mode	-Check to ensure the SmartPlug SENSOR lead is installed correctly on the hot water supply pipe. The sensor lead must be in direct contact with hot water supply pipe. -Sensor may be installed too close to the hot water tank and it may need to be moved at least 18" from the hot water tank.
	Blown fuse in SmartPlug	-Red SENSOR LED blinking 3 times every 5 seconds - Unplug SmartPlug and replace 6A, 125V fuse. Use fuse replacement kit 003-014RP.

## PIPING DIAGRAMS FOR TANKLESS OR TANK TYPE WATER HEATER



**FCC STATEMENT:** This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.



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