

CAROPT WH10A

CAROPT WH10A Electric Water Heater Thermostat User Manual

Model: WH10A | Brand: CAROPT

1. INTRODUCTION

This manual provides essential information for the safe and effective installation, operation, and maintenance of your CAROPT WH10A Electric Water Heater Thermostat. The WH10A is designed specifically for use with the upper heating element of electric water heaters.

The CAROPT WH10A thermostat is engineered for enhanced temperature sensitivity and accuracy compared to conventional thermostats. Its patented design encapsulates the bimetal sensor, protecting it from temperature fluctuations of other components, ensuring reliable system control. This unit includes a high-limit reset button (L180) for safety, which automatically trips at 180°F.

2. IMPORTANT SAFETY INFORMATION

WARNING: Installation and servicing of this thermostat should only be performed by a qualified electrician or plumber. Failure to follow these instructions can result in electric shock, fire, property damage, or personal injury.

- Always disconnect power to the water heater at the circuit breaker before attempting any installation, maintenance, or troubleshooting.
- Ensure proper grounding of the water heater and all electrical components.
- Do not bypass or tamper with the high-limit safety features. The thermostat's limit control/safety override feature automatically trips at 180°F to prevent overheating.
- Verify that the replacement thermostat matches the specifications of the original unit.

3. SETUP AND INSTALLATION

This section outlines the general steps for replacing an electric water heater thermostat. Specific water heater models may vary, so always consult your water heater's manual for detailed instructions.

3.1 Tools Required

- Screwdriver (Phillips and/or flathead)
- Voltage tester
- Wire strippers (if needed)

- Replacement CAROPT WH10A Thermostat

3.2 Installation Steps

1. **Disconnect Power:** Turn off the power to the water heater at the main electrical panel or circuit breaker. Use a voltage tester to confirm that power is off at the water heater.
2. **Access Thermostat:** Remove the access panel(s) on the side of the water heater. You may need to remove insulation to expose the thermostat and heating element.
3. **Remove Old Thermostat:** Carefully disconnect the wires from the old thermostat. Note the wiring configuration or take a picture for reference. The CAROPT WH10A features "tear drop" holes on its wiring terminals, designed to make wire connection easier and more secure.
4. **Install New Thermostat:** Position the new CAROPT WH10A thermostat in the same location as the old one. Connect the wires to the appropriate terminals, ensuring a secure connection.
5. **Replace Insulation and Panel:** Once the thermostat is securely installed and wired, replace any insulation and reattach the access panel(s).
6. **Restore Power:** Turn the power back on at the circuit breaker.



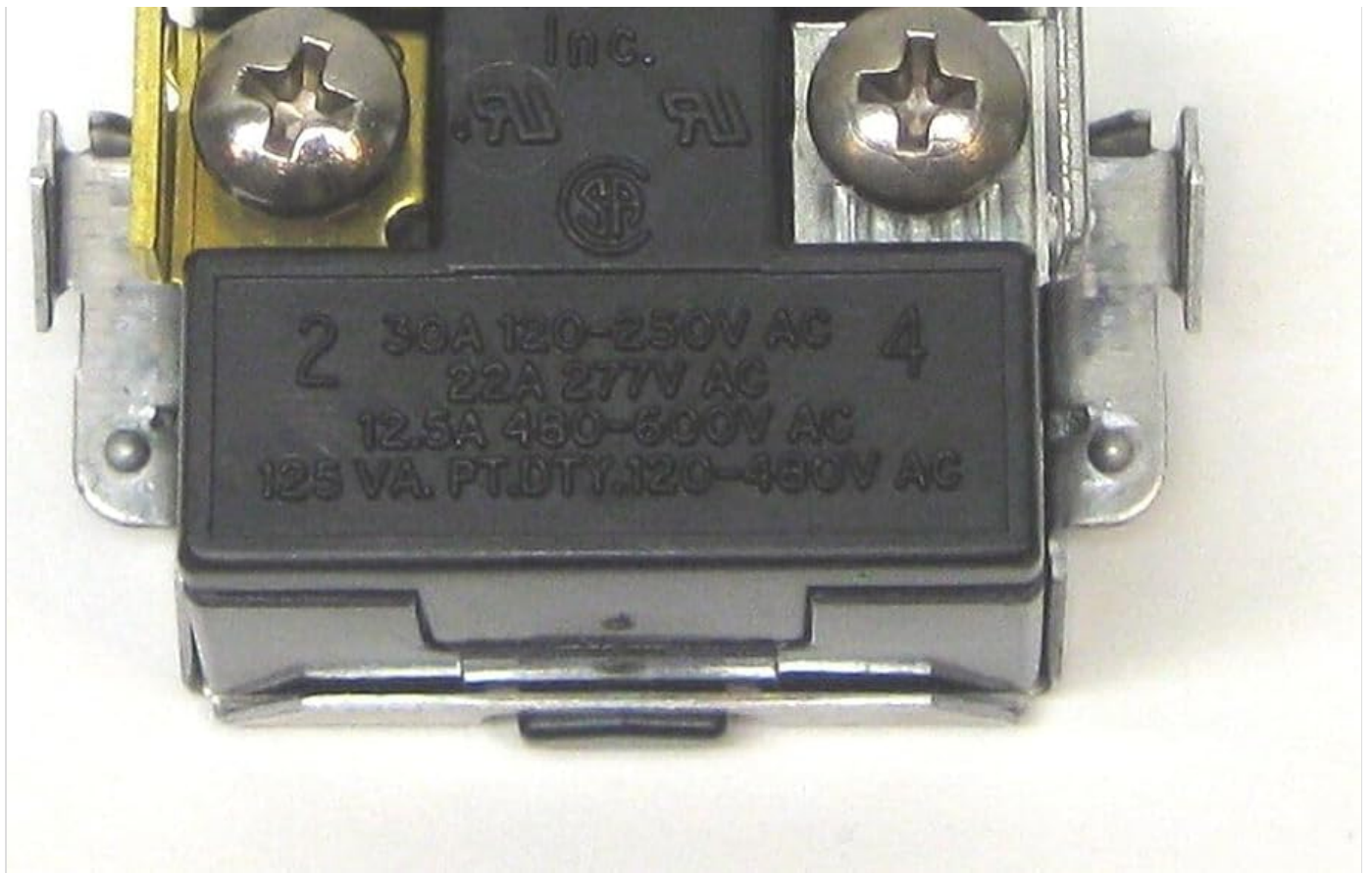


Figure 1: Front view of the CAROPT WH10A thermostat, showing the adjustable temperature dial, terminals, and model number. This image illustrates the primary controls and connection points.

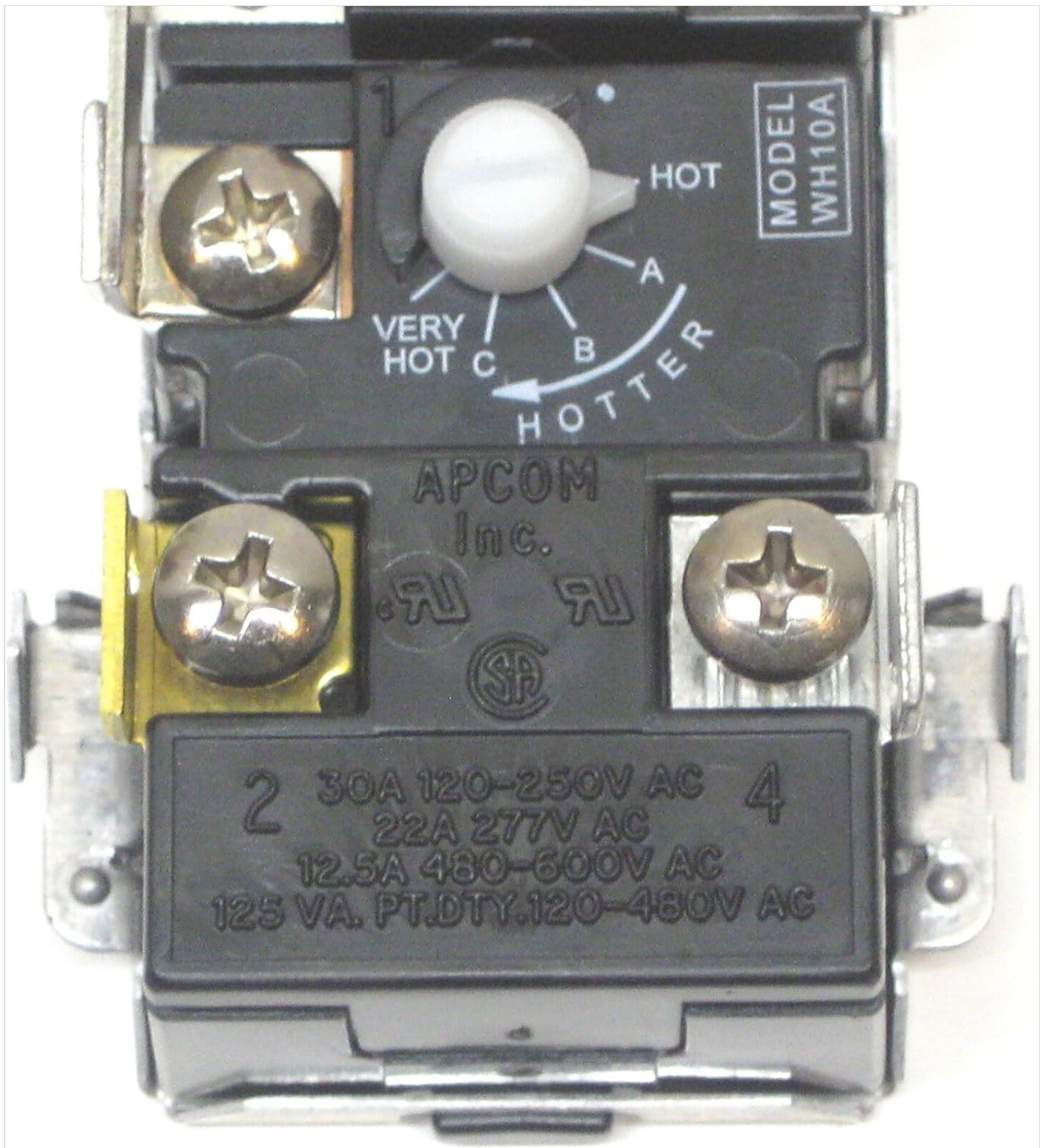


Figure 2: Top-down view of the CAROPT WH10A thermostat, featuring the red high-limit reset button and temperature dial. The red button is the manual reset for the high-limit safety feature.

4. OPERATING INSTRUCTIONS

4.1 Temperature Adjustment

The CAROPT WH10A thermostat allows for temperature adjustment within a range of 110°F to 170°F. Use the adjustable slotted knob on the front of the thermostat to set your desired water temperature. Turning the knob towards 'HOTTER' will increase the temperature, while turning it towards 'HOT' will decrease it.

CAUTION: Setting the water heater temperature too high can cause severe burns. It is recommended to set the temperature to 120°F for most household uses to balance comfort and safety.

4.2 High-Limit Reset

The thermostat is equipped with a high-limit reset button (L180) that automatically trips if the water temperature exceeds 180°F, preventing overheating. If your water heater stops heating, check if the high-limit button has tripped. To reset it:

1. **Disconnect Power:** Turn off the power to the water heater at the circuit breaker.
2. **Access Thermostat:** Remove the access panel to expose the thermostat.
3. **Press Reset Button:** Locate the red reset button (as shown in Figure 2) and firmly press it. You should hear a click.
4. **Inspect for Issues:** If the high-limit trips repeatedly, there may be an underlying issue with the heating element or another component. Consult a qualified professional.
5. **Restore Power:** Replace the access panel and restore power to the water heater.

5. MAINTENANCE

The CAROPT WH10A thermostat is designed for durability and reliability, requiring minimal maintenance. However, regular inspection of your water heater system is recommended.

- Periodically inspect the thermostat and wiring for any signs of damage, corrosion, or loose connections.
- Ensure the access panels are securely in place to protect the electrical components.
- If you notice any unusual operation, such as inconsistent water temperature or frequent high-limit trips, consult a qualified technician.

6. TROUBLESHOOTING

Problem	Possible Cause	Solution
No hot water or insufficient hot water.	Power supply off.	Check circuit breaker.
	High-limit tripped.	Reset high-limit button (see Section 4.2).
	Thermostat failure.	Test thermostat for continuity (professional recommended).
	Heating element failure.	Test heating element (professional recommended).
Water is too hot or too cold.	Temperature setting incorrect.	Adjust temperature knob (see Section 4.1).
	Thermostat malfunction.	Test and replace thermostat if faulty (professional recommended).
High-limit trips frequently.	Faulty heating element.	Inspect and replace heating element.
	Sediment buildup in tank.	Flush water heater tank.
	Thermostat malfunction.	Test and replace thermostat if faulty.

If troubleshooting steps do not resolve the issue, contact a qualified service technician.

7. SPECIFICATIONS

Brand	CAROPT
Model Number	WH10A (Part Number WH6-4)
Temperature Range	110°F - 170°F
High-Limit Reset	L180 (Trips at 180°F)

Controller Type	Mechanical knob
Special Feature	Safety Override Feature
Color	Black
Specific Uses	Residential and commercial water heating (Upper Element)
Connectivity Technology	Wired
Included Components	Water Heater Thermostat
Item Weight	1 pound
Product Dimensions	7 x 3.3 x 1.6 inches
UPC	764479352069

8. WARRANTY AND SUPPORT

For warranty information or technical support regarding your CAROPT WH10A Electric Water Heater Thermostat, please refer to the retailer's return policy or contact CAROPT customer service directly. Keep your purchase receipt for warranty claims. For further assistance, please visit the [CAROPT brand page on Amazon](#).