

Reliance 9000507-045

Reliance 9000507-045 Lower Electric Thermostat Instruction Manual

Model: 9000507-045

1. INTRODUCTION

This manual provides essential information for the safe and effective use of your Reliance 9000507-045 Lower Electric Thermostat. This thermostat is designed for use with 2-element electric water heaters, specifically controlling the lower heating element.



Image: The Reliance 9000507-045 Lower Electric Thermostat. This component regulates the temperature of the water in the lower section of a 2-element electric water heater.

The lower thermostat plays a critical role in maintaining the water temperature, especially during periods of high hot water demand. Proper installation and operation are crucial for the efficiency and longevity of your water heater system.

2. SAFETY INFORMATION

WARNING: This product can expose you to chemicals which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, go to www.P65Warnings.ca.gov.

- Always disconnect power to the water heater at the circuit breaker before attempting any installation, maintenance, or troubleshooting.
- Only qualified personnel should perform electrical work. If you are unsure about any step, consult a licensed electrician or plumber.
- Wear appropriate personal protective equipment (PPE), such as safety glasses and gloves, during installation or service.
- Ensure all wiring connections are secure and comply with local electrical codes.

- Do not bypass or tamper with any safety devices.

3. PRODUCT OVERVIEW

The Reliance 9000507-045 is a replacement lower electric thermostat designed for compatibility with various 2-element electric water heaters. It is a critical component for regulating water temperature.

Included Components:

- Reliance 9000507-045 Lower Electric Thermostat (1 unit)

4. SETUP AND INSTALLATION

This thermostat is designed for straightforward replacement in compatible electric water heaters. It is crucial to follow safety procedures and consult your water heater's specific manual for detailed instructions.

General Installation Steps:

1. **Disconnect Power:** Turn off the power to the water heater at the main electrical panel or circuit breaker. Verify power is off using a voltage tester.
2. **Access Thermostat:** Remove the access panel(s) on your water heater to expose the lower thermostat and heating element.
3. **Remove Old Thermostat:** Carefully disconnect the wires from the old thermostat, noting their positions for correct reinstallation. Remove the old thermostat from its mounting clips.
4. **Install New Thermostat:** Insert the new Reliance 9000507-045 thermostat into the mounting clips. Ensure it is seated correctly against the tank.
5. **Reconnect Wiring:** Reconnect the electrical wires to the new thermostat exactly as they were connected to the old one. Ensure all connections are tight and secure.
6. **Replace Access Panel:** Securely reattach the access panel(s) and any insulation.
7. **Restore Power:** Turn the power back on at the circuit breaker.
8. **Test Operation:** Monitor the water heater's operation to ensure proper heating.

For specific wiring diagrams and safety precautions, always refer to the instruction manual provided with your electric water heater.

5. OPERATING INSTRUCTIONS

The Reliance 9000507-045 is a manual temperature control thermostat. Once installed, its primary function is to regulate the temperature of the water in the lower portion of your electric water heater.

Temperature Adjustment:

Temperature adjustments are typically made via a mechanical knob or dial on the thermostat itself. The exact method and temperature range will depend on your specific water heater model and the thermostat's design. Generally, rotating the dial will increase or decrease the set temperature.

- **Standard Setting:** A common recommended temperature setting for residential water heaters is 120°F (49°C) to balance comfort and energy efficiency while minimizing the risk of scalding.
- **Safety First:** Be cautious when adjusting temperatures, especially upwards, to prevent scalding.
- **Consult Water Heater Manual:** Always refer to your water heater's manual for recommended temperature settings and adjustment procedures.

6. MAINTENANCE

The Reliance 9000507-045 thermostat is designed for reliable operation and typically requires minimal maintenance. However, periodic inspection of your water heater system is recommended.

- **Visual Inspection:** Annually inspect the thermostat and wiring for any signs of damage, corrosion, or loose connections. Ensure the protective cover is securely in place.
- **Dust and Debris:** Keep the area around the water heater and its components free from dust and debris to ensure proper heat dissipation and prevent fire hazards.
- **Professional Check:** Consider having your water heater system professionally inspected every few years to ensure all components, including thermostats and heating elements, are functioning optimally.

7. TROUBLESHOOTING

If your electric water heater is not functioning correctly, the thermostat may be a contributing factor. Here are some common issues and potential troubleshooting steps:

Common Issues:

- **No Hot Water:** This could indicate a tripped circuit breaker, a faulty heating element, or a failed thermostat (either upper or lower).
- **Insufficient Hot Water:** If hot water runs out quickly, the lower thermostat or element might be failing, as the lower element does most of the recovery work.
- **Water Too Hot / Frequent Tripping:** If the water is excessively hot or the water heater's internal breaker trips frequently, it often points to a malfunctioning thermostat that is not accurately regulating temperature.

Troubleshooting Steps:

1. **Check Circuit Breaker:** Ensure the circuit breaker for the water heater has not tripped.
2. **Reset Thermostat:** Some thermostats have a reset button (often found on the upper thermostat). Disconnect power, press the reset button, and restore power.
3. **Test Elements and Thermostats:** Advanced troubleshooting may involve testing the continuity of heating elements and the functionality of both upper and lower thermostats with a multimeter. This should only be performed by a qualified technician.
4. **Professional Assistance:** If basic troubleshooting does not resolve the issue, it is recommended to contact a licensed plumber or appliance repair technician.

8. SPECIFICATIONS

Brand	Reliance
Model Number	9000507-045
Specific Uses For Product	Electric Water Heater
Temperature Control Type	Manual
Voltage	230 Volts
Item Weight	2.4 ounces

Material Type	Plastic
Specification Met	ETL, UL
UPC	074994331334, 020363105471

9. WARRANTY

This product comes with a manufacturer's warranty. For detailed information regarding the warranty period, coverage, and claims process, please refer to the documentation included with your purchase or contact Reliance customer support directly.

10. SUPPORT

For technical assistance, replacement parts, or further inquiries regarding your Reliance 9000507-045 Lower Electric Thermostat, please contact Reliance customer support. Contact information can typically be found on the product packaging or the official Reliance website.