

## LTD 91226

# LTD Atwood 91226 RV Water Heater Control Circuit Board User Manual

## 1. INTRODUCTION

This manual provides essential information for the proper installation, function, and maintenance of the LTD Atwood 91226 RV Water Heater Control Circuit Board. Please read this manual thoroughly before attempting any installation or service to ensure safe and efficient operation of your RV water heater system.

The Atwood 91226 circuit board is designed to control the ignition and operational sequences of compatible RV water heaters, ensuring reliable hot water supply in your recreational vehicle.

## 2. SAFETY INFORMATION

**WARNING:** Improper installation, adjustment, alteration, service, or maintenance can cause property damage, injury, or death. Read the installation, operating, and maintenance instructions thoroughly before installing or servicing this equipment.

- Always disconnect all power sources (12V DC and 120V AC, if applicable) to the RV water heater before attempting any installation, maintenance, or troubleshooting.
- Installation and service should only be performed by a qualified service technician.
- Ensure proper grounding of the water heater system.
- Verify all wiring connections are secure and correct according to the water heater manufacturer's specifications.
- Do not operate the water heater if any part has been submerged in water. Contact a qualified service technician to inspect and replace any part of the control system that has been submerged.

## 3. PRODUCT OVERVIEW

The LTD Atwood 91226 is a replacement control circuit board for specific Atwood RV water heater models. It serves as the central control unit, managing the ignition sequence, flame sensing, and overall operation of the water heater's heating elements (gas and/or electric, depending on the water heater model).



**Figure 1:** Atwood 91226 RV Water Heater Control Circuit Board. This image displays the Atwood 91226 RV Water Heater Control Circuit Board. The board is housed in a black plastic casing, showing various electronic components such as capacitors, resistors, and relays. A separate green circuit board with connection pins and two mounting screws are also visible, indicating parts for installation.

Key components on the board include relays, capacitors, and a micro-controller, all designed to withstand the typical operating conditions of an RV environment. The board ensures the safe and efficient operation of the water heater by monitoring various sensors and controlling the gas valve and igniter.

## 4. INSTALLATION INSTRUCTIONS

This section provides general guidelines for replacing the Atwood 91226 circuit board. Always refer to your specific RV water heater's service manual for detailed, model-specific instructions. If you are not comfortable performing this procedure, seek assistance from a qualified RV technician.

1. **Disconnect Power:** Turn off all power to the RV water heater. This includes turning off the 12V DC battery disconnect and the 120V AC breaker for the water heater. Verify power is off using a multimeter.
2. **Access the Control Board:** Locate the existing control board on your RV water heater. This is typically found behind an access panel on the exterior of the RV.
3. **Document Connections:** Before disconnecting any wires, take clear photographs or make a detailed diagram of all wire connections to the existing board. Note the color and position of each wire.
4. **Disconnect Wires:** Carefully disconnect all wires and connectors from the old circuit board.
5. **Remove Old Board:** Unscrew or unclip the old circuit board from its mounting location.
6. **Install New Board:** Mount the new LTD Atwood 91226 circuit board in the same location as the old one, securing it with the provided screws or clips.

7. **Reconnect Wires:** Using your photographs or diagram, carefully reconnect all wires and connectors to the new board. Ensure all connections are firm and correctly seated.
8. **Verify Installation:** Double-check all connections for accuracy and security. Ensure no wires are pinched or exposed.
9. **Restore Power:** Once installation is complete and verified, restore 12V DC and 120V AC power to the water heater.
10. **Test Operation:** Initiate the water heater's operation according to your RV's instructions and observe for proper ignition and heating.

## 5. OPERATIONAL FUNCTION

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The Atwood 91226 circuit board manages the following key functions for your RV water heater:

- **Ignition Sequence:** When the water heater is called to heat, the board initiates the gas ignition sequence, sending power to the igniter and opening the gas valve.
- **Flame Sensing:** The board monitors the flame presence via a flame sensor. If a flame is not detected after several ignition attempts, the board will enter a lockout mode for safety.
- **Temperature Control:** Working in conjunction with the thermostat, the board ensures the water reaches and maintains the set temperature.
- **Safety Shut-off:** In case of overheating or other fault conditions, the board will safely shut down the water heater to prevent damage or hazards.

The board's operation is largely automatic once the water heater is turned on. Users typically interact with the water heater through the RV's internal control panel, which sends signals to the circuit board.

## 6. MAINTENANCE

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The Atwood 91226 circuit board itself requires minimal maintenance. However, regular inspection of the water heater system can help prolong its life and ensure reliable operation:

- **Visual Inspection:** Periodically inspect the circuit board and its connections for any signs of corrosion, loose wires, or physical damage.
- **Keep Dry:** Ensure the area around the circuit board remains dry and free from moisture, which can cause electrical shorts and damage.
- **Clean Connections:** If necessary, carefully clean any dusty or corroded electrical connections with an appropriate electronic contact cleaner (with power disconnected).
- **System Checks:** Follow the maintenance schedule for your specific RV water heater model, which may include anode rod inspection, tank flushing, and burner assembly cleaning.

## 7. TROUBLESHOOTING

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If your RV water heater is not functioning correctly, the control board may be a factor. Here are some common issues and potential troubleshooting steps. Always ensure power is disconnected before inspecting components.

### Common Symptoms of a Faulty Control Board:

- **No Ignition:** The water heater attempts to ignite but fails, or there is no ignition attempt at all.
- **Intermittent Operation:** The water heater ignites and heats, but then shuts off prematurely or

operates inconsistently.

- **Lockout Mode:** The water heater goes into lockout mode frequently, indicated by a fault light.
- **No Hot Water:** Despite the water heater being turned on, no hot water is produced.

## Troubleshooting Steps:

1. **Check Power Supply:** Ensure the RV's 12V DC and 120V AC (if applicable) power sources are active and reaching the water heater. Check fuses and circuit breakers.
2. **Verify Connections:** With power disconnected, inspect all wire connections to the control board, igniter, and gas valve for looseness, corrosion, or damage.
3. **Inspect Igniter/Burner Assembly:** Ensure the igniter is clean and properly gapped. Check the burner tube for obstructions (e.g., spider webs). A dirty igniter or burner can prevent proper ignition, leading the board to lockout.
4. **Test Thermostat/ECO:** The thermostat and ECO (Emergency Cut-Off) switches provide temperature feedback to the board. If these are faulty, the board may not initiate heating. Testing these components requires a multimeter and knowledge of their specifications.
5. **Reset System:** Sometimes, simply turning off and then restoring power to the water heater can reset the control board and clear minor faults.
6. **Professional Diagnosis:** If basic troubleshooting does not resolve the issue, it is recommended to consult a qualified RV technician for a thorough diagnosis. They can test the board's output and other components to pinpoint the exact cause.

## 8. SPECIFICATIONS

Feature	Specification
Model Number	91226
Brand	LTD (Atwood compatible)
Item Weight	11.3 ounces
Package Dimensions	6.65 x 4.37 x 3.31 inches
Power Source	12V DC (for control), compatible with electric/propane water heaters
ASIN	B07Q4FW321
Date First Available	February 21, 2019

*Note: Specifications are subject to change without notice. Always refer to the product packaging or manufacturer's official documentation for the most current information.*

## 9. WARRANTY AND SUPPORT

For specific warranty information regarding the LTD Atwood 91226 RV Water Heater Control Circuit Board, please refer to the documentation included with your purchase or contact the seller directly. Warranty terms typically cover manufacturing defects for a specified period from the date of purchase.

For technical support or assistance with installation and troubleshooting beyond the scope of this manual, it is recommended to contact a certified RV service technician or the product manufacturer's customer service.

department.