

Suburban SW10DEL

Suburban Advantage RV Tank Water Heater SW10DEL (Model 5244A) - 10 Gallon Instruction Manual

INTRODUCTION

This manual provides detailed instructions for the installation, operation, and maintenance of your Suburban Advantage RV Tank Water Heater, model SW10DEL (5244A). This 10-gallon unit features a porcelain-lined steel tank, Direct Spark Ignition (DSI), an Incoloy electric element, and a 12VDC relay, designed to provide reliable hot water for your recreational vehicle.

Key features of this water heater include:

- **Durable Construction:** Engineered with a porcelain-lined steel tank for extended lifespan, similar to residential water heaters.
- **Advanced Corrosion Protection:** Equipped with a replaceable anode rod that protects against tank corrosion and also functions as a drain for simplified maintenance.
- **Flexible Power Options:** Features an Incoloy electric element (1440 watts) for heating water using campsite or generator power, alongside gas operation.
- **Efficient Heat Transfer:** Suburban's exclusive flue tube design optimizes heat transfer for efficient water heating and faster recovery rates.
- **High Recovery Rate:** Offers a recovery rate of 10.1 gallons per hour on gas and 6.1 gallons per hour on electric.

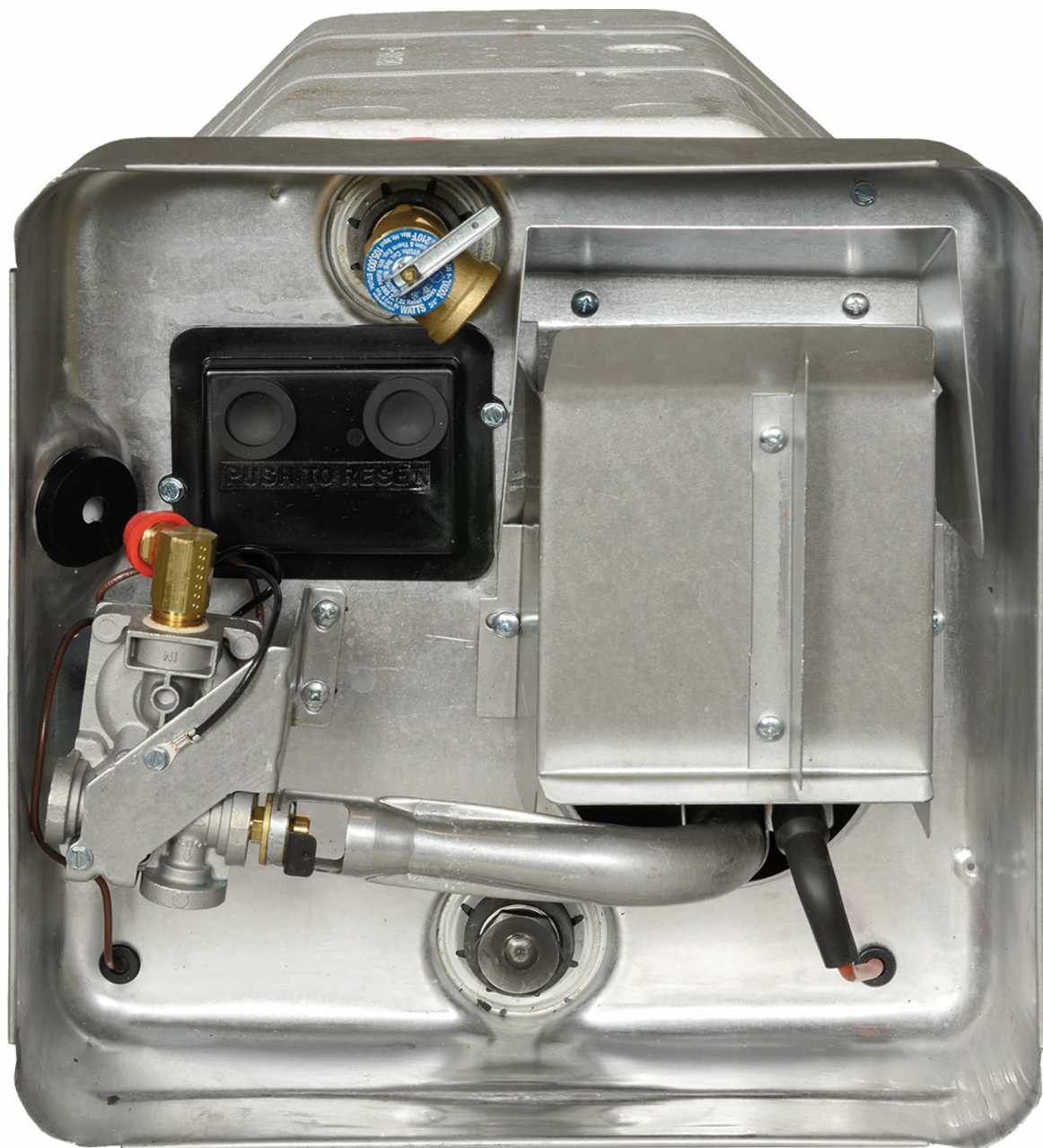
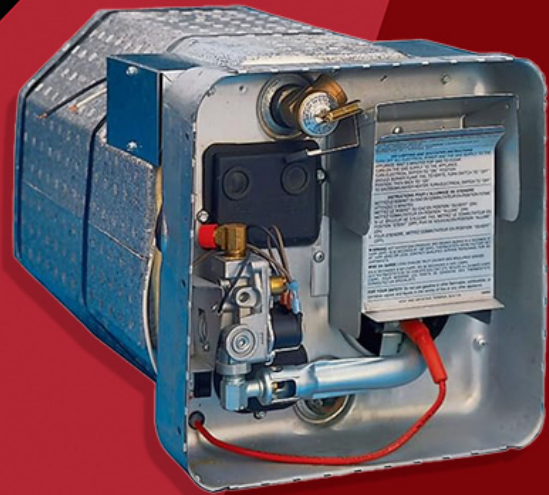


Figure 1: Suburban Advantage RV Tank Water Heater SW10DEL (Model 5244A).



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DIRECT SPARK IGNITION WATER HEATER

Figure 2: Internal view of the Suburban Direct Spark Ignition (DSI) water heater, highlighting key components.

SETUP AND INSTALLATION

Proper installation is crucial for safe and efficient operation. It is recommended that installation be performed by a qualified RV technician.

Pre-Installation Checks

- Verify that the water heater model matches your RV's requirements.
- Ensure adequate clearance for ventilation and maintenance access.
- Inspect the unit for any shipping damage.

Water Connections

1. Connect the cold water inlet and hot water outlet lines to the designated ports on the water heater. Use appropriate plumbing fittings and sealants to prevent leaks.
2. Ensure all connections are tight but do not overtighten.

Gas Connections

1. Connect the RV's LP gas supply line to the water heater's gas inlet.
2. Use gas-rated sealant on threaded connections.
3. After connection, perform a leak test using a non-corrosive leak detection solution.

Electrical Connections

1. Connect the 12VDC wiring for the Direct Spark Ignition system and the 12VDC relay according to the wiring diagram provided with the unit.
2. If utilizing the electric heating element, connect the 120VAC power supply to the designated terminals. Ensure

proper grounding.

3. All electrical work should comply with local codes and standards.

Filling the Water Heater Tank

1. Close the drain valve (anode rod).
2. Open all hot water faucets inside the RV.
3. Turn on the RV's main water supply.
4. Allow water to flow from the hot water faucets until all air is purged and a steady stream of water is present.
5. Close the hot water faucets. The tank is now full.

OPERATING INSTRUCTIONS

Ensure the water heater tank is full before operating on either gas or electric power.

Gas Operation (Direct Spark Ignition)

1. Ensure the LP gas supply is turned on at the tank.
2. Locate the interior wall switch for the gas water heater.
3. Flip the switch to the 'ON' position. The DSI system will attempt to ignite the burner.
4. If ignition is successful, the 'FAULT' light (if present) will turn off. If ignition fails after several attempts, the 'FAULT' light will illuminate. Turn the switch 'OFF' for 5 minutes, then try again.

Electric Operation

1. Ensure the RV is connected to a 120VAC power source (shore power or generator).
2. Locate the exterior switch for the electric heating element, typically behind the water heater access panel.
3. Flip the exterior switch to the 'ON' position.
4. Some models may also have an interior switch for electric operation. Ensure both are 'ON' if applicable.

Simultaneous Operation

For faster recovery or higher hot water demand, both the gas and electric heating elements can be operated simultaneously.

Safety Precautions

- Never operate the water heater with an empty tank.
- Do not store flammable materials near the water heater.
- Ensure proper ventilation for gas operation.

Your browser does not support the video tag.

Video 1: An overview of Suburban RV Products, including water heaters. This video provides a brief introduction to the brand's offerings.

MAINTENANCE

Regular maintenance ensures optimal performance and extends the life of your water heater.

Anode Rod Inspection and Replacement

The anode rod protects the tank from corrosion. It should be inspected annually and replaced when 75% consumed.

1. Turn off all power to the water heater (gas and electric).
2. Turn off the RV's main water supply.
3. Open a hot water faucet inside the RV to relieve pressure.
4. Carefully remove the anode rod (which also serves as the drain plug) using a 1 1/16-inch socket. Be prepared for water to drain.
5. Inspect the rod. If it is heavily pitted or less than 1/4 inch in diameter at any point, replace it with a new Suburban anode rod.
6. Flush the tank with fresh water to remove sediment.
7. Install the new anode rod (or the old one if still good) with plumber's tape on the threads.



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Water Heaters

- **Durable porcelain lined steel tank** – built just like longer lasting residential tank water heaters
- **Sacrificial, replaceable anode rod** protects against tank corrosion and doubles as a drain
- **Use gas and electric element simultaneously**



Figure 3: View of the anode rod and electric heating element, accessible for inspection and replacement.

Draining the Tank

Drain the tank whenever the RV will be stored or if there is a risk of freezing temperatures.

1. Follow steps 1-3 from anode rod removal.

2. Remove the anode rod to allow the tank to drain completely.
3. Open the pressure relief valve to assist draining.
4. Once drained, replace the anode rod (or drain plug) and close the pressure relief valve.

Winterization

To prevent damage from freezing, the water heater must be properly winterized.

1. Drain the water heater tank completely as described above.
2. Bypass the water heater using the bypass valves (if installed) to prevent antifreeze from entering the tank.
3. Pump RV-approved non-toxic antifreeze into the RV's plumbing system.
4. Do not put automotive antifreeze into the fresh water system.



TRAVEL IN COMFORT

Figure 4: Internal view of the water heater, showing wiring and gas components. This area should be inspected by a qualified technician.

TROUBLESHOOTING

This section addresses common issues. For complex problems, consult a qualified technician.

Problem	Possible Cause	Solution
No hot water (Gas)	No LP gas, faulty DSI, thermostat issue, air in gas line.	Check LP gas supply. Turn gas switch OFF for 5 minutes, then ON. Purge air from gas lines by operating other gas appliances. Consult technician if DSI fault persists.
No hot water (Electric)	No 120VAC power, electric element switch off, tripped breaker, faulty element.	Check shore power/generator. Ensure exterior and interior electric switches are ON. Reset circuit breaker. Consult technician for element replacement.
Water leaks	Loose connections, faulty pressure relief valve, cracked tank.	Tighten connections. Inspect pressure relief valve. A cracked tank requires replacement.
Low hot water temperature	Thermostat setting, excessive hot water use, sediment buildup.	Ensure thermostat is set correctly. Allow recovery time. Drain and flush tank to remove sediment.

SPECIFICATIONS

Specification	Value
Model Number	5244A (SW10DEL)
Capacity	10 Gallons
Product Dimensions (W x H)	16.22" x 20.5"
Cutout Dimensions	16.38" x 16.38" x 20.50"
Gas Input (BTU/h)	12,000
Electric Element Input	1,440 Watts
Recovery Rate (Gas Only)	10.1 Gallons/Hour
Recovery Rate (Electric Only)	6.1 Gallons/Hour
Power Source	LP Gas, Corded Electric (120VAC)
Ignition Type	Direct Spark Ignition (DSI)
Tank Material	Porcelain-Lined Steel
Weight	46 Pounds

WARRANTY INFORMATION

The Suburban Advantage RV Tank Water Heater SW10DEL (Model 5244A) is backed by the following warranties:

- **2-Year Limited Warranty:** Covers general components and manufacturing defects.
- **3-Year Tank Limited Warranty:** Specifically covers the porcelain-lined steel tank against defects.

For full warranty terms and conditions, please refer to the documentation included with your product or contact Suburban customer support.

SUPPORT

If you encounter issues not covered in the troubleshooting section or require professional assistance, please contact Suburban customer support or a certified RV service technician. Always provide your model number (SW10DEL or 5244A) and serial number when seeking support.

For additional resources and product information, visit the official Suburban website.

ASK A QUESTION ABOUT THIS MANUAL

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