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SUBURBAN TANK WATER HEATERS OPERATION & MAINTENANCE GUIDE

Part Number 206244
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Caution Notes

As you read this information, take particular note of the NOTICE, CAUTION, WARNING, and DANGER symbols when they appear. This information is important for safe and efficient use of the Suburban water heater.

NOTICE

NOTICE signals a situation where potential damage to the Suburban water heater could occur.

 **CAUTION**

CAUTION signals a situation where potential harm or risk of minor or moderate injury could occur if you do not follow instructions.

 **WARNING**

WARNING signals a hazardous situation where potential harm, risk of serious injury, or death could result if instructions are not followed.

 **DANGER**

DANGER signals a situation where immediate risk of serious injury or death will result if instructions are not followed.

NOTE: This manual will also use notes sections similar to this one to draw attention to features and practices which must be observed.

Read all instructions before using the Suburban Water Heater. Suburban is not liable for damage resulting from failing to follow instructions contained in this, and any other Suburban documentation relevant to this appliance.



- Read this user manual before using the Suburban System to reduce the risk of injury to persons or damage to the equipment.
- The product identity label contains specifications of the unit, to what standard it has been tested, and important safety notices.
- For your safety, ALL repairs and/or maintenance of unit should be performed by your dealer or a qualified service technician.



SAFETY INFORMATION

- (If Equipped) Have your dealer show you where the main gas shut-off valve is located and how to shut it off in an emergency.
- When using electrical appliances, safety precautions should always be followed. Only operate this appliance for its intended purpose.
- Failure to follow all instructions and safety warnings exactly as described herein could result in serious injury, death, or property damage.
- If the user of this appliance fails to maintain it in the condition in which it was shipped from the factory, or if the appliance is not used solely for its intended purpose, or if appliance is not maintained properly, then the risk of a fire and/or the production of carbon monoxide increases which can cause personal injury, property damage, or death.



ELECTRIC SHOCK

Before cleaning, make sure the power has been turned off at the circuit breaker panel and the appliance is cool.



FIRE OR EXPLOSION HAZARD

Failure to follow safety warnings exactly could result in property damage, serious personal injury, or death.

WHAT TO DO IF YOU SMELL GAS

- Evacuate all persons from the vehicle.
- Shut off the gas supply at the gas container or source.
- Do not touch any electrical switch or use any phone or radio in the vehicle.
- Do not start the vehicle's engine or electric generator.
- Contact the nearest gas supplier or qualified service technician for repairs.
- If you cannot reach a gas supplier or qualified service technician, contact the nearest fire department.
- Do not turn on the gas supply until the gas leak(s) has been repaired.



INJURY/BURNS

The surfaces of this appliance become hot during use, above 90°C (194°F). To prevent burns, ensure that the hot surfaces never contact bare skin.

NOTE: Contact your Authorized Service Center or Suburban RV if you have any questions **before** starting any operation, service, or maintenance.

Service and maintenance must be performed by a qualified installer, service agency, or gas supplier.

Suburban Tank Water Heaters

Direct-Fit Replacement Tank Water Heaters



Advantage Water Heaters with Porcelain Lined Steel Tank



Suburban Tank Water Heater Controls

Tank Water Heater Control for Model D & DE



Tank Water Heater Control for Model DEL



Operating Instructions

To Turn ON Gas Operation:

1. Turn “ON” gas supply.
2. Turn on electrical power to the appliance.
3. Locate the switch plate that operates the water heater which is somewhere inside the RV.
4. Once the switch is located and depending on which switch plate; Press the rocker switch marked “GAS”, or the plain rocker switch, or your switch so that it is in the “ON” position. If the burner does not light, the system will automatically attempt ignition two more times before going into lock-out.

NOTE: Each ignition cycle will have a 15 second purge before spark cycle, the red “RESET” light on the switch plate will be illuminated during the 15 second purge and turn off during the spark cycle. If the red “RESET” light remains illuminated after the 15 second purge AND the system has attempted ignition three times; the system is in lockout.

5. If lockout occurs before main burner lights, the red “RESET” light on the switch plate remains illuminated to indicate ignition did not occur. To reset the system and attempt ignition again, press the rocker switch marked “GAS”, or the plain rocker switch, or your switch so that it is in the “OFF” position and wait five seconds before returning the switch to the “ON” position. The first start-up of the water heater may require several ignition cycles before all the air is purged from the gas lines.
6. If burner fails to light, call a Suburban authorized service center or a local RV service agency.

To Turn OFF Gas Operation:

Locate the switch plate that operates the water heater which is somewhere inside the RV. Your switch may have a different appearance. Once the switch is located and depending on the switch plate; Press the rocker switch marked “GAS”, or the plain rocker switch, or your switch so that it is in the “OFF” position.

1. Turn off electrical power to the appliance.
2. Turn off gas supply.
3. If vehicle is to be stored or heater is going to be turned off while subject to freezing temperature, drain water heater. (See “Draining and Storage Instructions”)

Operating Instructions

To Turn ON Electric Element (DE Models):

To energize the electric heating element, turn the switch to "ON". The switch is located behind the water heater door in the lower left corner of the control housing.

To Turn OFF Electric Element (DE Models):

To turn off the electric heating element, turn the switch to "OFF". The switch is located behind the water heater door in the lower left corner of the control housing.

1. Turn off electrical power to the appliance
2. If vehicle is to be stored or heater is going to be turned off while subject to freezing temperature, drain water heater. (See "Draining and Storage Instructions")



Secondary 110V Switch

To Turn ON Electric Element (DEL Models):

To energize the electric heating element, locate the switch plate that operates the water heater which is somewhere inside the RV. Your switch may have a different appearance. Once the switch is located and depending on the switch plate; Press the rocker switch marked "ELECTRIC", or the plain rocker switch, or your switch so that it is in the "ON" position.

Tank Water Heater Control for Model DEL



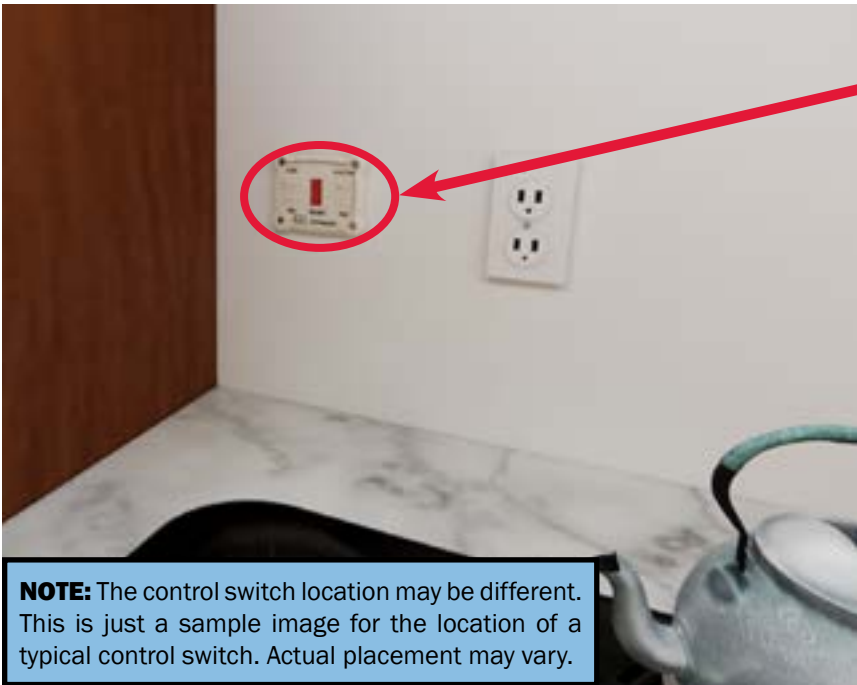
To Turn OFF Electric Element (DEL Models):

To turn off the electric heating element, locate the switch plate that operates the water heater which is somewhere inside the RV. Press the rocker switch marked "ELECTRIC", or the plain rocker switch, or your switch so that it is in the "OFF" position.

1. Turn off electrical power to the appliance
2. If vehicle is to be stored or heater is going to be turned off while subject to freezing temperature, drain water heater. (See "Draining and Storage Instructions")

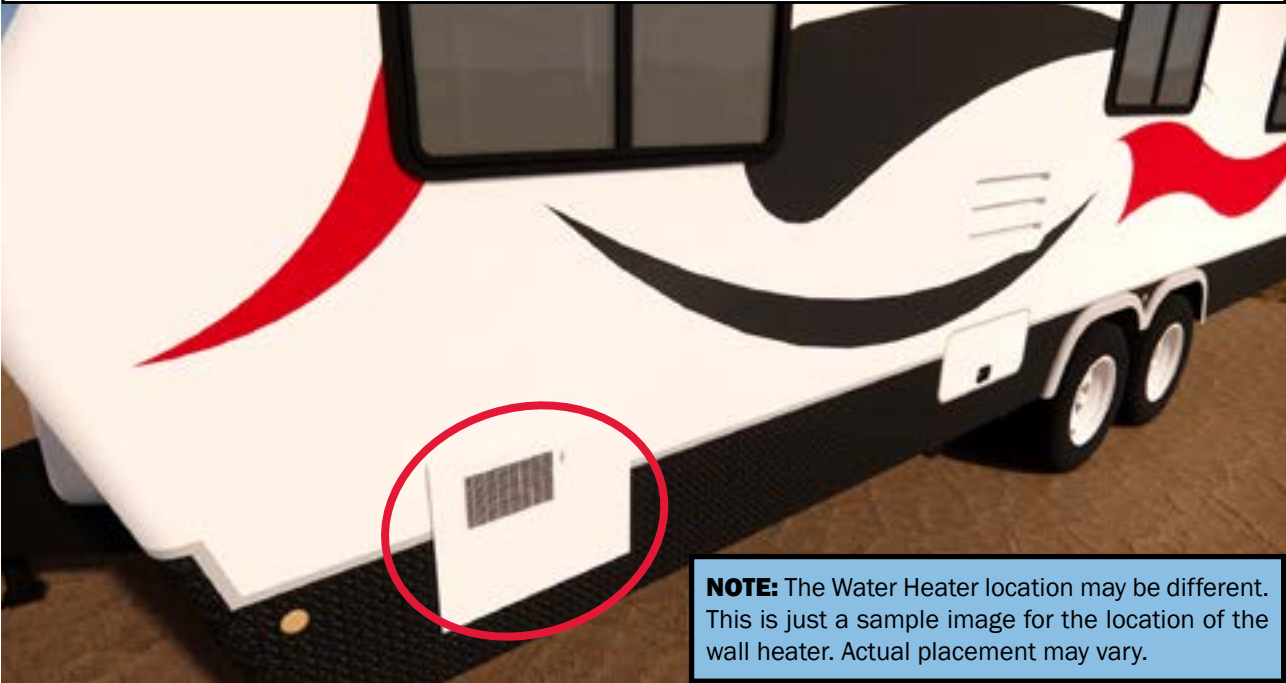
NOTE: Some DEL models are equipped with a ON/OFF switch like the DE model which is located behind the water heater door in the lower left corner of the control housing, this switch will also need to be in the "OFF" position.

Tank Water Heater Controls



NOTE: The control switch location may be different. This is just a sample image for the location of a typical control switch. Actual placement may vary.

Water Heater Location In Trailer Bay



NOTE: The Water Heater location may be different. This is just a sample image for the location of the wall heater. Actual placement may vary.

Maintenance and Cleaning

Maintenance & Cleaning

- Periodically inspect unit for soot. If soot is present anywhere on water heater, immediately shut unit down and contact your dealer or a qualified service person. Soot is a sign of incomplete combustion and must be corrected before operating water heater.
- Check the screen in the door to see that no foreign material has accumulated to prevent flow of combustion and ventilating air.

Draining & Storage

If RV is to be stored during winter months, the water heater must be drained to prevent damage from freezing.

1. Turn off electrical power to water heater either at the switch from the electrical element or a breaker.
2. Shut off gas supply to water heater.
3. Turn off pressure pump on water system.
4. Open both hot and cold-water faucets
5. Remove anode rod from tank. The anode rod is accessible at the front of the water heater (using 1-1/16 socket).
6. Follow RV manufacturer's instructions for draining entire water system.

NOTE: Be certain to refill water heater with water and remove all air from tank and lines before re-lighting or before turning on electrical power.

WARNING

It is imperative that the water heater tank be filled with water before operating the water heater. Operation of the water heater without water in the tank may result in damage to the tank and/or controls. This type of damage is not covered by the limited warranty.

Winterizing

If your water heater plumbing system is equipped with a bypass kit, use it to close off the water heater, drain the water heater completely and leave the water heater closed off (out of the system) in the bypass position particularly if you are introducing antifreeze into the plumbing system. Antifreeze can be very corrosive to the anode rod creating premature failure and heavy sediment in the tank. If the plumbing system is not equipped with a bypass kit, and you intend to winterize by adding antifreeze to the system, remove the anode rod (storing it for the winter) and replace it with a 3/4" drain plug.

WARNING

FREEZE WARNING
Drain or fill with RV approved antifreeze if subject to freezing temperatures when storing for winter.

Flushing the Water Heater (Sediment Removal)

Visit the link below for detailed information on how to flush the Water Heater.

<https://www.youtube.com/watch?v=RAhOgCTnNcA>

Maintenance and Cleaning

Anode Protection

The tank in this water heater is protected by a magnesium or aluminum anode to prolong the life of the tank by absorbing the corrosive action of hot water. Under normal use, the anode rod will deteriorate and because of this, we recommend it be replaced yearly.

NOTE: Water with high levels of iron and/or sulfate will increase the rate of deterioration; therefore, more frequent replacement may be required. If anode rod is mostly eaten away, replace it with a new one. To prevent a water leak when replacing the anode rod, a pipe thread sealant approved for potable water (such as Teflon Tape) must be applied to the threads of the anode rod. Proper application of a thread sealant will not interfere with the anode's tank protection. Operating the water heater without proper anode protection will decrease tank life and will void your warranty on the tank.

NOTE: Tank is drained by removing anode rod (using 1-1/16 socket), see the "Draining and Storage Instructions" section of this manual. To extend anode life, drain water from tank whenever RV is not being used. Avoid any extended time of non-use with water in tank. Also, refer to section on Winterizing.

WARNING

Do not replace the anode rod with any non-Suburban accessory part, such as an "add-on" electric heating element. Items such as these are not approved to be installed in Suburban products. They could create an unsafe condition and will also void all warranties.



Operating the Water Heater without the Anode voids Suburban's Limited Warranty

Odor From Hot Water System

Odor from the hot water system is not a service problem and many water supplies contain enough sulfur to produce an odor. The odor is like rotten eggs and is often referred to as "sulfur water". It is not harmful - only unpleasant to smell. Sulfur water can be caused by a chemical action or by bacteria. The solution to eliminate is chlorination of the water system. Add about six (6) ounces of chlorinated common household liquid bleach to each 10 gallons in the water tank. Then run the chlorinated water throughout the system, opening each faucet one at a time until you smell the chlorine. Let the RV sit for a few days and the chlorine should take care of the problem. Then you will need to take care of the chlorine. Remove the chlorine by flushing the system with fresh water. This may take several attempts. You may consider adding a filtering system that removes chlorine and prevents sulfur water. If the sulfur or rotten egg smell continues, flush the system once again as described above and replace anode rod as necessary.

Anode Protection - Water Heater

Each Suburban water heater is equipped with a replaceable anode rod. The sacrificial anode equalizes aggressive water action providing cathodic protection for the tank. The anode rod is a very important factor in tank life and should only be removed for inspection or draining. Replacement of the anode rod is recommended when consumption or weight loss is greater than 75%. With regular inspection and replacement of the anode, tank life can be greatly extended. Frequency of anode replacement will vary depending on the water conditions and usage. Sediment on the bottom of the tank forms a layer of insulation between the gas burner and the water. The sediment slows heat transfer and overheats the tank bottom. Overheating weakens the steel and damages the glass lining, shortening the tank life. In addition, it lowers the energy efficiency of the tank.

TWO YEAR LIMITED WARRANTY SUBURBAN RECREATIONAL VEHICLE WATER HEATER

TWO YEAR LIMITED WARRANTY

This Suburban product is warranted to the original purchaser to be free from defects in material and workmanship under normal use and maintenance for a period of two years from date of purchase whether or not actual use begins on that date. It is the responsibility of the consumer/owner to establish the warranty period. Suburban does not use warranty registration cards for its standard warranty. You are required to furnish proof of purchase date through a Bill of Sale or other payment records.

Suburban will replace any parts that are found defective within the first two years and will pay a warranty service allowance directly to the recommended Suburban Service Center at rates mutually agreed upon between Suburban and its recommended service centers. Replacement parts will be shipped FOB the shipping point within the Continental United States, Alaska and Canada to the recommended service center performing such repairs. All freight, shipping and delivery costs shall be the responsibility of the owner. The exchanged part or unit will be warranted for only the unexpired portion of the original warranty. Before having warranty repairs made, confirm that the service agency is a recommended service center for Suburban. DO NOT PAY THE SERVICE AGENCY FOR WARRANTY REPAIRS; SUCH PAYMENTS WILL NOT BE REIMBURSED.

Suburban reserves the right to examine the alleged defect in the water heater or component parts, and it is the owner's obligation to return the water heater and/or component parts to Suburban or its representative. When returning a water heater, it must include all component parts and the serial number plate. Returned component parts must be individually tagged and identified with the water heater's model number, serial number and date of installation.

For warranty service, the owner/user should contact the nearest recommended Suburban Service Center, advising them of the model and serial numbers (located on the water heater) and the nature of the defect. Transportation of the RV to and from the Service Center and/or travel expenses of the Service Center to your location is the responsibility of the owner/user. A current listing of recommended service center may be obtained from Suburban's website: www.Airxcel.com. If you cannot locate a recommended service center locally, the service agency chosen to perform warranty repairs must contact our Service Department at 423-775-2131 for authorization before making repairs. Unauthorized repairs made will not be paid by Suburban.

THREE YEAR LIMITED WARRANTY ON TANK

The inner tank is further warranted to be free from defects in material and workmanship during the third year after the date of original purchase. A replacement water heater will be provided under the same conditions as stated in the two year warranty EXCEPT no labor reimbursement will be provided.

LIMITATION OF WARRANTIES

ALL IMPLIED WARRANTIES (INCLUDING IMPLIED WARRANTIES OF MERCHANTABILITY) ARE HEREBY LIMITED IN DURATION TO THE PERIOD FOR WHICH EACH LIMITED WARRANTY IS GIVEN. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS SO THE ABOVE LIMITATIONS MAY NOT APPLY TO YOU. THE EXPRESSED WARRANTIES MADE IN THIS WARRANTY ARE EXCLUSIVE AND MAY NOT BE ALTERED, ENLARGED, OR CHANGED BY ANY DISTRIBUTOR, DEALER OR OTHER PERSON WHOMSOEVER.

SUBURBAN WILL NOT BE RESPONSIBLE FOR:

1. Normal maintenance as outlined in the installation, operating and service instructions owner's manual including cleaning of component parts and cleaning or replacement of the burner orifice. Any water damage arising, directly or indirectly, from any defect in the water heater or component parts or from its use.
2. Initial checkouts and subsequent checkouts which indicate the water heater is operating properly, or diagnosis without repair.
3. Damage or repairs required as a consequence of faulty or incorrect installation or application not in conformance with Suburban instructions.
4. Failure to start and/or operate due to loose or disconnected wires; water or dirt in controls, fuel lines and gas tanks; improper gas pressure; low voltage.
5. Cleaning or adjustment of components; electrode, burner tube, pilot and thermocouple.
6. Costs incurred in gaining access to the water heater.
7. Parts or accessories not supplied by Suburban.
8. Freight charges incurred from parts replacements.
9. Damage or repairs needed as a consequence of any misapplication, abuse, unreasonable use, unauthorized alteration, improper service, improper operation or failure to provide reasonable and necessary maintenance.
10. Suburban products whose serial number has been altered, defaced or removed.
11. Suburban products installed or warranty claims originating outside the Continental U.S.A., Alaska, Hawaii and Canada.
12. Damage as a result of floods, winds, lightning, accidents, corrosive atmosphere or other conditions beyond the control of Suburban.
13. ANY SPECIAL, INDIRECT OR CONSEQUENTIAL PROPERTY, ECONOMIC OR COMMERCIAL DAMAGE OF ANY NATURE WHATSOEVER

Some states do not allow the exclusion of incidental or consequential damages, so the above limitation may not apply to you.

NO REPRESENTATIVE, DEALER, RECOMMENDED SERVICE CENTERS OR OTHER PERSON IS AUTHORIZED TO ASSUME FOR SUBURBAN MANUFACTURING COMPANY ANY ADDITIONAL, DIFFERENT OR OTHER LIABILITY IN CONNECTION WITH THE SALE OF THIS SUBURBAN PRODUCT.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

IF YOU HAVE A PRODUCT PROBLEM

FIRST: If your RV has its original water heater and is still under the RV manufacturer's warranty, follow the steps suggested by your dealer or manufacturer of the RV.

SECOND: Contact a conveniently located recommended Suburban Service Center. Describe to them the nature of your problem, make an appointment, if necessary, and provide for delivery of your RV to the selected service center.

THIRD: For the location of the nearest Service Center contact:

Suburban, An Airxcel Brand
Customer Service Department
676 Broadway Street
Dayton, TN 37321
(423) 775-2131 Ext. 7101
www.Airxcel.com/Suburban



An AIRXCEL Brand

FOR FUTURE REFERENCE, YOU SHOULD RECORD THE FOLLOWING INFORMATION:	
MODEL NUMBER:	_____
SERIAL NUMBER:	_____
STOCK NUMBER:	_____
DATE OF PURCHASE:	_____



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