



An AIRXCEL Brand

*...feels like home!*

# **ALL SUBURBAN GAS FURNACES OPERATION GUIDE**

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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 gas furnace.

## NOTICE

**NOTICE** signals a situation where potential damage to the Suburban gas furnace 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 Gas Furnace. Suburban is not liable for damage resulting from failing to follow instructions contained in this, and any other Suburban documentation relevant to this appliance.

## CAUTION

- 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.

## WARNING

- Be sure the furnace and all ignition systems are “OFF” during any type of refueling and while vehicle is in motion or being towed.
- Should overheating occur, or the gas supply fails to shut off, shut off the manual gas valve to the appliance (if equipped) before shutting off the electrical supply.
- Do NOT install screens over the vent for any reason. Screens will become restricted and cause unsafe furnace operation. Accessories are being marketed for RV products which we do not recommend. For your safety, only factory authorized parts are to be used on your furnace.
- If the furnace is to be left unattended for a period of time, turn the thermostat to the “OFF” position and turn manual valve (if equipped) or the valve at the exterior propane tank to the “OFF” position.
- 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.



## WARNING

### 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 engine or electric generator (if equipped).
- Contact the nearest gas supplier or qualified service technician for repairs.
- If you cannot contact the nearest gas supplier or qualified service technician, contact the nearest fire department.
- Do not turn on the gas supply until the gas leak or leaks (if relevant) have been repaired.

**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.



## WARNING

**In any installation in which the vent of this appliance can be covered due to the construction of the RV or some special feature of the RV (such as slide-out, pop-up, etc), always ensure that the appliance cannot be operated by setting the thermostat to the “OFF” position and shutting off all electrical and gas supply to the appliance.**

**NEVER OPERATE FURNACE WITH VENT COVERED.**

## Operating Instructions

### To Turn Furnace **ON**:

1. For the furnace to properly turn on, the propane gas valve must be fully open. Never attempt to operate the furnace with any of the gas valves partially open. Locate the manual shut off valve - this can be found on the furnace either inside or outside of the coach depending on if it is a front or rear gas hook-up (if equipped), or at the main vehicle propane tanks. See the images on the following page for reference.

**NOTE:** This furnace is equipped with a valve shut-off switch. With the switch in the "OFF" position, the gas will not flow to burner, nor will the furnace operate.

**NOTE:** The shut off valve will resist turning when it is in the full ON or OFF position. Do not force the valve past this point or force it open or closed.

2. Locate the interior thermostat on the interior of the RV (see image below). Set this to the desired interior temperature.

**NOTE:** The furnace motor will not start instantly. Allow approximately 30 seconds for motor operation.

3. You will hear the furnace blower turn on. After about 30 seconds, the main burner will automatically ignite. **DO NOT** attempt to light the burner by hand.

4. If the burner does not light or no heat is coming from the heater vent(s), repeat Steps 1 -3.

5. If after three (3) attempts with no ignition, turn off the furnace as described in the following section. Contact your dealer or local recreational vehicle service agency for service. Do not continue to cycle furnace through the thermostat in an attempt to start the furnace.

**NOTE:** If the furnace should lock out (fail to ignite after multiple attempts), the blower will continue to run for 5 minutes and then shut off. The system must be reset by resetting the interior thermostat.

### To Turn Furnace **OFF**:



1. Set the thermostat to lowest setting, then move lever to "OFF" position.
2. Turn manual valve located either on the inside of the coach or outside of the coach (if equipped) or the valve at the exterior propane tank to the "OFF" position. **DO NOT FORCE.**

**NOTE:** The shut off valve will resist turning when it is in the full OFF position. Do not force the valve past this point or force it open or closed.

3. Turn off all electric power to the appliance if service is to be performed. This can be done by turning the interior thermostat to OFF, and disconnecting from shore power if hooked up.

**WARNING**

**Be sure the furnace and all ignition systems are "OFF" during any type of refueling (propane tanks or RV fuel tank if equipped), and while the vehicle is in motion or being towed.**

Thermostat Lever	Suburban Thermostat
	<p style="font-size: 0.8em; margin: 0;">Generally installed on an interior wall</p> 
<p><b>NOTE:</b> The thermostat may appear different, as different types are available. This is just a sample image for the location of the thermostat and thermostat lever. Actual placement may vary.</p>	

**NOTE:** Depending on the RV, the manual shut-off valve is generally located at the main propane tank in the RV bay or at the front of the trailer.



### RV Propane Tanks Manual Shut-off Valve

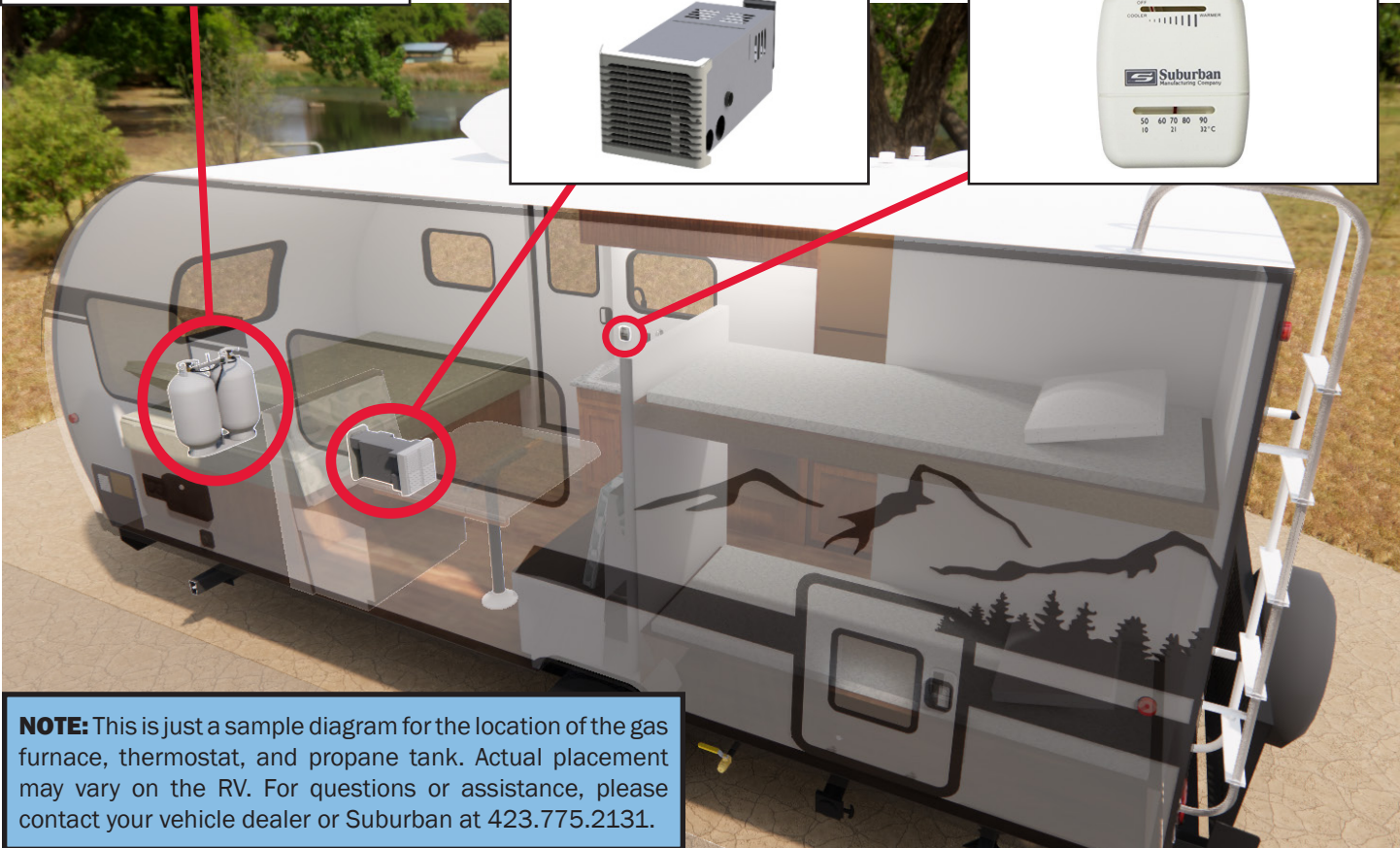


**RV Propane Tanks**  
Manual shut off valve is located on the tank as shown above

**Suburban Gas Furnace**  
Generally installed in an interior cabinet or storage bay



**Suburban Thermostat**  
Generally installed on an interior wall

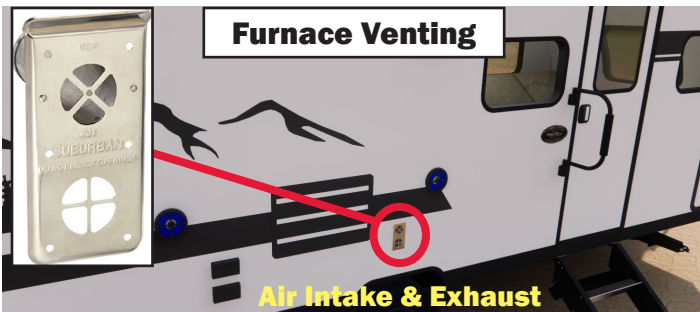


**NOTE:** This is just a sample diagram for the location of the gas furnace, thermostat, and propane tank. Actual placement may vary on the RV. For questions or assistance, please contact your vehicle dealer or Suburban at 423.775.2131.



## Maintenance and Cleaning

1. For the furnace to work efficiently and safely, the furnace venting for air flow must be free of any obstructions. Inspect furnace venting (see image below for location). Venting must be free of obstructions, void of soot, and properly routed to the exterior of the RV.



2. Periodically inspect the vent for obstructions or presence of soot. Soot is formed whenever combustion is incomplete. This is your visual warning that the furnace is operating in an unsafe manner. If soot is present, immediately shut the furnace down and contact your dealer or a qualified service person.
3. Inspect return air inlet openings to the furnace. Remove any restrictions to assure adequate air flow.
4. Keep furnace and surrounding areas clean. More frequent cleaning may be required due to excessive lint from carpeting, bedding material, etc. It is imperative that control compartments, burners, and circulating air passageways of the appliance be kept clean.
5. The motor is permanently lubricated and requires no oiling.
6. Keep the furnace area clear of any combustible materials, gasoline, or other flammable vapor and liquids. The furnace produces very hot temperatures that can ignite surrounding flammable materials. The furnace should be turned off when loading or unloading flammable materials.

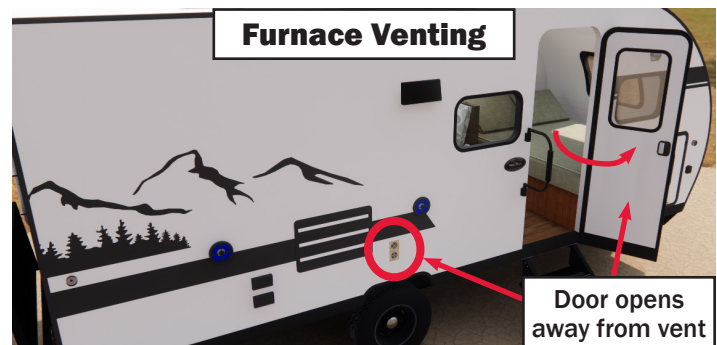


### WARNING

In any installation in which the vent of this appliance can be covered due to the construction of the RV or some special feature of the RV such as slide-out, pop-up, etc., always ensure that the appliance cannot be operated by setting the thermostat to the positive "OFF" position and shutting off all electrical and gas supply to the appliance.

**NEVER OPERATE FURNACE WITH VENT COVERED.**

7. Before operating the furnace, check the location of the furnace vent to make sure it will not be blocked by the opening of any door on the RV. If it can be blocked, do not operate the furnace with the door open.



8. Do not restrict the flow of combustion air or the warm air circulation to the furnace by covering the exterior vent.
9. Immediately shut furnace down and call a dealer or qualified service technician if furnace cycles erratically or delays on ignition.



### WARNING

**NEVER OPERATE FURNACE IF YOU SMELL PROPANE GAS.**  
If you smell propane gas, do not proceed with turning the furnace on. **IMMEDIATELY** turn off the gas supply at the source (propane tanks), extinguish any flames, and contact a dealer or qualified service person.



**TWO YEAR LIMITED WARRANTY  
SUBURBAN RECREATIONAL VEHICLE FURNACE**

**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 cost 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 furnace or component parts, and it is the owner's obligation to return the furnace and/or component parts to Suburban or its representative. When returning a furnace, it must include all component parts and the serial number plate. Returned component parts must be individually tagged and identified with the furnace'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 furnace) 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 centers may be obtained from Suburban's website, [www.AIRXCEL.com](http://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 HEAT EXCHANGER**

The furnace heat exchanger is further warranted to be free from defects in material and workmanship during the third through fifth year after the date of original purchase. A replacement heat exchanger 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; such as, orifices and burners.
2. Initial checkouts and subsequent checkouts which indicate the furnace 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; restriction or alteration of return air circulation; low voltage.
5. Routine adjustments that may be required to the thermostat, electrode and burner.
6. Costs incurred in gaining access to the furnace.
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 CENTER 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 furnace 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, refer to the listing provided or contact:

AIRXCEL, INC. - SUBURBAN DIVISION  
Customer Service Department  
676 Broadway Street  
Dayton, Tennessee 37321  
(423) 775-2131, Ext. 7101  
[www.Airxcel.com](http://www.Airxcel.com)

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



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676 Broadway Street | Dayton, TN 37321  
423.775.2131 | [www.airxcel.com/suburban](http://www.airxcel.com/suburban)