

Suburban SF-30

Suburban SF-30 Dynatrail Furnace Instruction Manual

Model: SF-30

1. INTRODUCTION

This manual provides essential information for the proper installation, operation, and maintenance of your Suburban SF-30 Dynatrail furnace. Please read this manual thoroughly before attempting to install or operate the unit. Retain this manual for future reference.

2. SAFETY INFORMATION

Important Safety Instructions:

- Always ensure proper ventilation when operating the furnace.
- Do not store flammable materials near the furnace.
- Ensure all gas connections are secure and leak-free.
- Only qualified personnel should perform installation and major servicing.
- Disconnect power before performing any maintenance or service.
- Keep children and pets away from the furnace during operation.

3. PRODUCT OVERVIEW

The Suburban SF-30 Dynatrail furnace is a compact 12-volt DC heating unit designed for recreational vehicles. It offers a heating capacity of 30,000 BTU/h, providing efficient warmth. Its versatile design allows for installation and servicing from either the exterior or interior of the coach, depending on the specific RV design. An optional exterior door with a rear gas connection is available for convenient service access without entering the coach.

Key Features:

- Constructed from durable and high-quality materials for longevity.
- Versatile installation options for various RV configurations.
- Designed for quick and straightforward installation.



Figure 1: The Suburban SF-30 Dynatrail furnace unit. This image displays the compact, rectangular metal housing of the furnace, featuring a grated vent on one side and two circular openings on the front panel, likely for air intake or exhaust connections. The top surface also has a grated section for airflow.

4. SETUP AND INSTALLATION

Proper installation is crucial for the safe and efficient operation of your SF-30 furnace. It is highly recommended that installation be performed by a certified RV technician or a qualified professional.

General Installation Guidelines:

1. **Location:** Select a suitable location within the RV that allows for proper airflow and access for servicing. Consider both interior and exterior access points.
2. **Mounting:** Securely mount the furnace according to manufacturer specifications, ensuring it is level and stable.
3. **Ducting:** Connect all necessary air ducts for supply and return air. Ensure ducts are properly sealed to prevent air leaks.
4. **Gas Connection:** Connect the propane gas line to the furnace. Use appropriate fittings and ensure all connections are leak-tested using a non-corrosive leak detection solution.
5. **Electrical Wiring:** Connect the 12-volt DC power supply and thermostat wiring according to the wiring diagram provided with the unit. Ensure correct polarity and secure connections.
6. **Ventilation:** Verify that the exhaust and intake vents are clear and unobstructed to ensure proper combustion and prevent carbon monoxide buildup.

Refer to the detailed installation instructions provided with your specific unit for precise steps and diagrams. Adherence to all local and national codes is mandatory.

5. OPERATING INSTRUCTIONS

Once the furnace is properly installed and all connections are verified, follow these steps to operate your Suburban SF-30 Dynatrail furnace:

1. **Power On:** Ensure the 12-volt DC power supply to the furnace is turned on.
2. **Gas Supply:** Open the main propane gas supply valve to your RV.
3. **Thermostat Setting:** Set your RV's thermostat to the desired temperature. Ensure the thermostat is set to 'HEAT' mode.
4. **Ignition Cycle:** The furnace will typically initiate an ignition cycle. You should hear the blower fan start, followed by the igniter attempting to light the burner. This process may take a few moments.

5. **Heat Output:** Once ignited, the furnace will begin to produce warm air. The blower will continue to run until the thermostat's set temperature is reached.
6. **Shut Down:** To turn off the furnace, lower the thermostat setting below the ambient temperature or switch the thermostat to 'OFF' mode. For extended storage, turn off the main propane supply and the 12-volt power to the furnace.

If the furnace fails to ignite after several attempts, refer to the Troubleshooting section.

6. MAINTENANCE

Regular maintenance ensures the longevity and efficient operation of your SF-30 furnace.

- **Annual Inspection:** Have the furnace inspected annually by a qualified technician. This includes checking the heat exchanger, burner, ignition system, and gas connections.
- **Clean Air Intake/Exhaust:** Periodically check and clean the exterior air intake and exhaust vents to ensure they are free from obstructions (e.g., leaves, debris, insect nests).
- **Blower Motor:** Listen for unusual noises from the blower motor. If present, consult a technician.
- **Ductwork:** Inspect all ductwork for leaks or damage. Repair as necessary to maintain heating efficiency.
- **Propane System:** Regularly check the RV's propane system for leaks and ensure the pressure is within the recommended range.

7. TROUBLESHOOTING

This section addresses common issues you might encounter with your SF-30 furnace.

Problem	Possible Cause	Solution
Furnace does not ignite	No propane supply, low battery voltage, faulty igniter, obstructed gas line.	Check propane tank level and valve. Ensure 12V power is sufficient. Inspect igniter and gas line for blockages. Consult technician if issue persists.
Blower runs but no heat	Ignition failure, gas valve issue, sail switch problem.	Verify gas supply. Check for error codes on thermostat. Professional inspection recommended.
Insufficient heat output	Blocked air ducts, dirty filter (if applicable), low gas pressure.	Inspect and clear all air ducts. Check gas pressure. Ensure thermostat setting is appropriate.
Unusual noises during operation	Loose components, failing blower motor, debris in fan.	Turn off furnace immediately. Have a qualified technician inspect the unit.

For problems not listed or if solutions do not resolve the issue, contact a qualified service technician.

8. SPECIFICATIONS

Specification	Value
Model	SF-30

Specification	Value
Manufacturer	Suburban
Item Weight	32 pounds
Package Dimensions	22.5 x 21 x 9.4 inches
Voltage	12 Volts DC
OEM Part Number	SF 30
Date First Available	June 15, 2004

9. WARRANTY AND SUPPORT

For warranty information, please refer to the documentation included with your purchase or contact Suburban directly. For technical support, service, or to locate authorized service centers, please visit the official Suburban website or contact their customer service department.

Manufacturer: Suburban

Model: SF-30

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ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page’s manual context to help answer it.

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Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question