

## Suburban SF Series

Note that these instructions are somewhat generic- they should apply to most SF series furnaces, but some items may be different.

### INSTALLATION AND REMOVAL OF UNIT

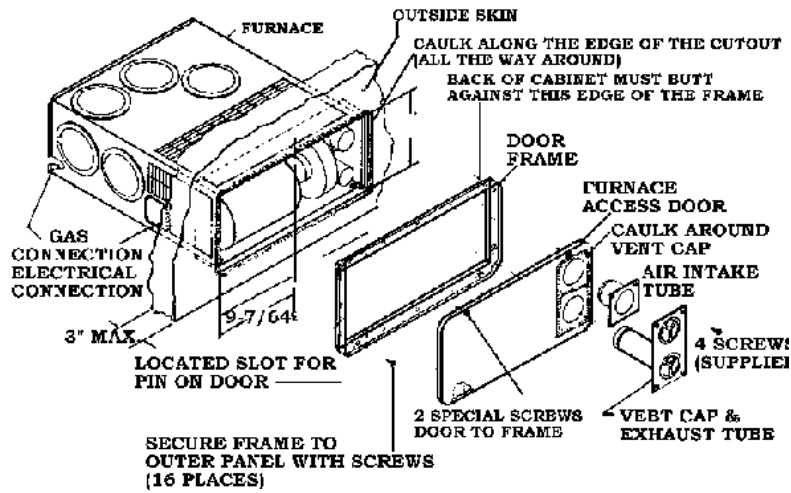
#### TO REMOVE

1. Disconnect power supply at furnace.
2. Remove vent cap assembly.
3. Disconnect gas connections.
4. Remove cabinet front (2 screws).
5. Remove tie-down screw from center of unit and remove furnace from cabinet.

#### TO INSTALL

1. Slide unit into cabinet. NOTE: Care must be taken in routing wiring to back of cabinet and outside of cabinet.
2. Reinstall tie-down screw.
3. Reinstall cabinet front.
4. Connect gas line.
5. Check gas connections for leaks using a soap and water solution. Correct any gas leaks immediately.
6. Reinstall vent cap assembly

7. Reconnect power supply.



## ELECTRODE ADJUSTMENT

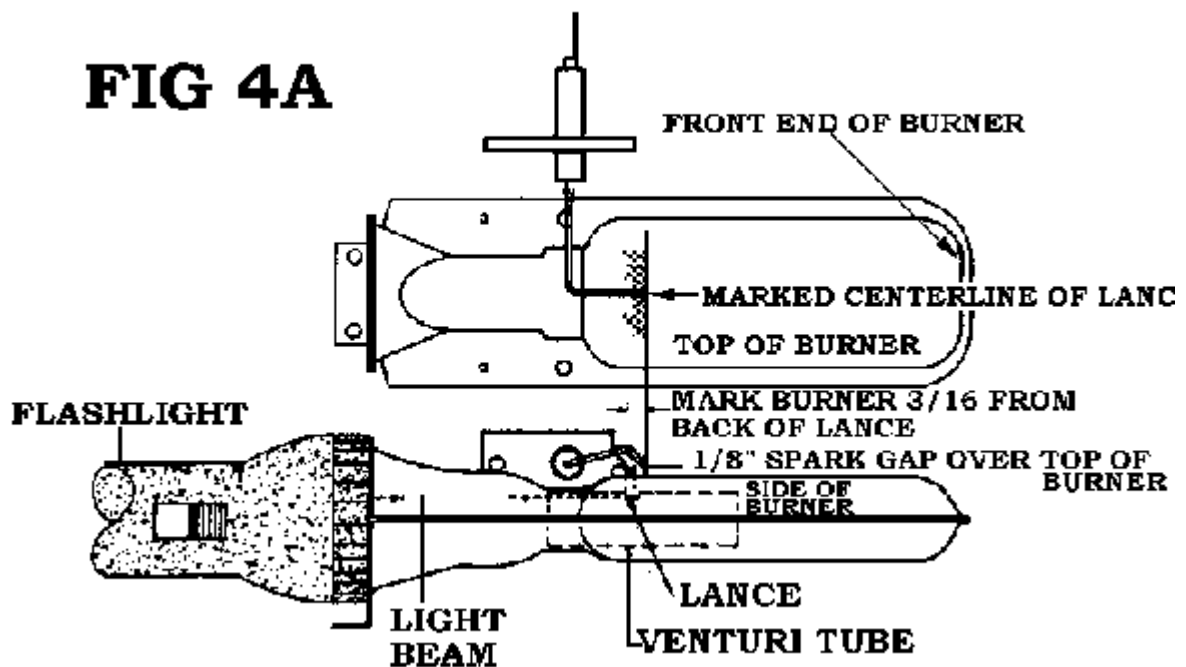
For consistent ignition of the burner, it is important that the electrode be positioned properly over the top of the burner. The electrode was set at the factory for proper ignition and should not need further adjustments however, if you should experience inconsistent ignition, reposition electrode as follows:

Equipment needed: flashlight, black felt-tip pen, needle-nose pliers, measuring tape

NOTE: Furnace must be removed. (See instructions for removing unit.)

1. Remove burner from combustion chamber by removing six (6) screws which attach the burner to the chamber and air baffles (plates).
2. Locate the lance in relation to the burner ports for electrode positioning by:

- a. Shine a flashlight into the burner venturi as illustrated. (Be sure flashlight lens is against the end of the burner.)
  - b. Light will reflect off the lance in the venturi of the burner and shine through a portion of the two (2) rolls of burner ports in the top of the burner.
  - c. Using a black felt-tip pen, mark a line along top of burner  $3/16$ " in back of the lance and parallel with lance. Make an additional mark indicating the center line of the lance. (See illustration.) Both marks will be used later as reference marks; therefore, keep lines thin.
3. Reassemble the burner.
  4. Adjust electrode so the electrode probe is positioned along the marked center line of the burner lance and the tip of the electrode terminates  $3/16$ " from the back of the lance. (At the line marked in Step 2-c.) (See Figure 1.)
  5. **IMPORTANT:** Be sure electrode probe maintains  $1/8$ " spark gap over the burner as illustrated.
  6. Reinstall the furnace into the cabinet following the instructions in the manual.

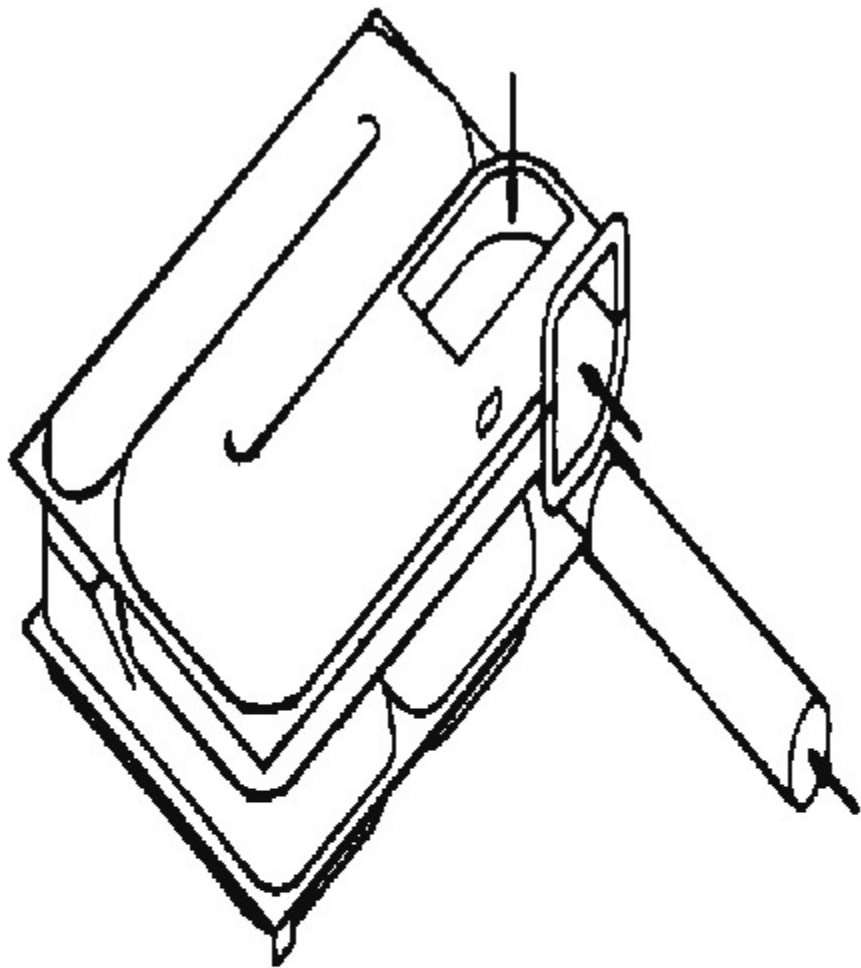


## PREVENTIVE MAINTENANCE

Your furnace should be inspected before use at least annually by a qualified service agency. Particular attention should be given to the following items.

1. Inspect furnace installation and vent termination to be sure furnace is properly secured in place (see Installation Instructions), that vent terminates to the atmosphere, and that vent tubes overlap properly (see Installing Vent Assembly.)
2. Inspect combustion chamber for restrictions in exhaust or intake. It is imperative that the flow of intake combustion air and the flow of exhaust gases being expelled to the outside atmosphere not be obstructed. Any soot or loose debris should be blown out using compressed air. (See Figure 1.)
3. Inspect all gaskets. If any gaskets show signs of leakage or deterioration, replace them. Safe operation of the furnace depends on all gaskets being tight.
4. Inspect return air inlet openings to the furnace. Remove any restrictions to assure adequate air flow.
5. 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 furnace down and contact your dealer or a qualified service person.
6. Keep furnace 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.

7. The motor is permanently lubricated and requires no oiling.



**TO CLEAN THE CHAMBER, THE FURNACE MUST BE REMOVED FROM THE CABINET AND THE MANIFOLD BLOWER ASSEMBLY, AND THE CONTROLS REMOVED LEAVING THE CHAMBER ONLY. AS SHOWN. USING COMPRESSED AIR, BLOW THROUGH THE CHAMBER, AS SHOWN BY ARROWS TO REMOVE SOOT OR LOOSE DEBRIS.**

You, as the owner/user, should inspect the furnace monthly during the heating season for presence of soot on vent. Operating the furnace under this condition could lead to serious property damage, personal injury or loss of life. If soot is observed on the vent, immediately shut the furnace down and contact a qualified service agency.

Listed below are several safety related items that you should follow to assure continued safe operation of the furnace.

1. Inspect furnace venting. Venting must be free of obstructions, void of soot, and properly terminated to the atmosphere. (See Installing Vent Assembly.)

**WARNING !** 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.

2. Keep the furnace area clear of any combustible materials, gasoline or other flammable vapor and liquids.
3. Before operating furnace, check the location of the furnace vent to make sure it will not be blocked by the opening of any door on the trailer. If it can be blocked, do not operate the furnace with the door open.
4. Do not restrict the flow of combustion air or the warm air circulation to the furnace. To do so could cause personal injury and or death.
5. Never operate the furnace if you smell gas. See warning on front cover of this manual.
6. Immediately shut furnace down and call a service agency if furnace cycles erratically or delays on ignition.

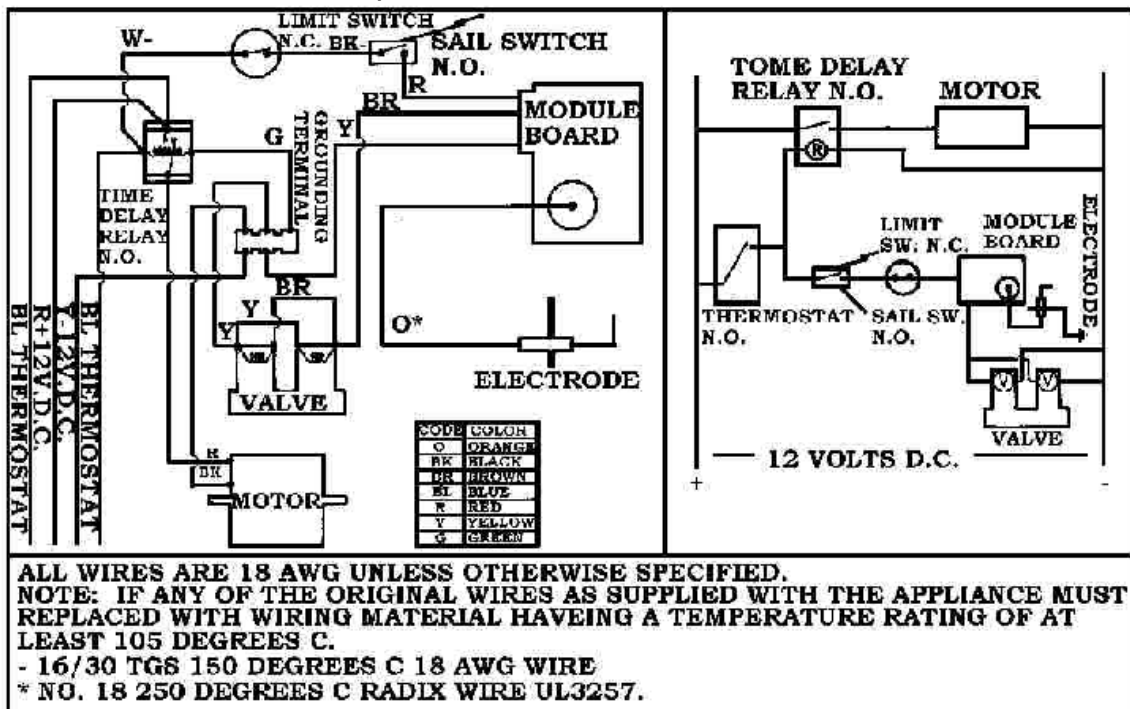
WARNING ! Should overheating occur, or the gas supply fail to shut off, shut off the manual gas valve to the appliance before shutting off the electrical supply.

7. Never attempt to repair damaged parts. Always have them replaced by a qualified service agency.
8. Never attempt to repair the furnace yourself. Seek the help of a qualified service person.
9. Never restrict the ducting installed by your trailer manufacturer. To do so could cause improper furnace operation.
10. Do not install air boosters in the duct system. Such devices will cause the furnace to cycle on limit and to have erratic sail switch operation.
11. Clothing or other flammable material should not be placed on or near the appliance.
12. Always follow the Operating Instructions. Do not deviate from the step-by step procedures.
13. Do not use this appliance if any part has been submerged under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control that has been submerged under water.

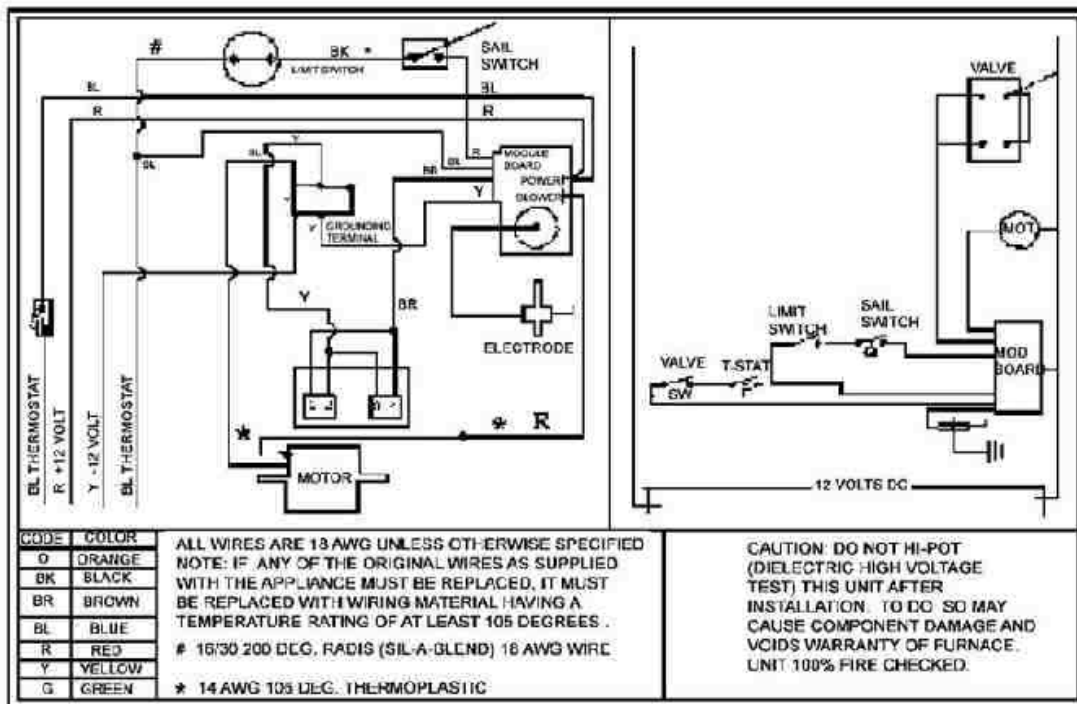


# Wiring Diagrams

Models prior to 2001- s/n 012003642



Models after 2001



## **SAFETY**

FOR YOUR SAFETY

WHAT TO DO IF YOU SMELL GAS:

1. Do not try to light any appliance.
2. Do not touch any electrical switch; do not use any phone in your building.
3. Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
4. If you cannot reach your gas supplier, call the fire department.

FOR YOUR SAFETY

DO NOT STORE OR USE GASOLINE OR OTHER FLAMMABLE VAPORS AND LIQUIDS IN THE VICINITY OF THIS OR ANY OTHER APPLIANCE.

**WARNING!**

Improper installation, adjustment, alteration, service or maintenance can cause property damage, personal injury or loss of life. Refer to the installation instructions and/or owners manual provided with this appliance. Installation and service must be performed by a qualified installer, service agency or the gas supplier.