



# INSTALLATION MANUAL FOR MODELS NT-12S • NT-16S • NT20S



The design of these furnaces has been certified for installation in recreational vehicles only. In order for these furnaces to operate in conformity with generally accepted safety regulations, the installation instructions outlined in this book **must be followed.** Failure to comply with the installation instructions will void any responsibility of Suburban Manufacturing Company. Your furnace was inspected before it left the factory. If any parts are found to be damaged do not install the furnace. Any damages should be reported to the transportation company immediately and the appropriate claims filed.

## 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.

## INSTALLATION INSTRUCTIONS

WARNING! Installation of this appliance must be made in accordance with the written instructions provided in this manual. No agent, representative or employee of Suburban or other person has the authority to change, modify or waive any provision of the instructions contained in this manual.

CAUTION: If possible, do not install the furnace to where the vent can be covered or obstructed when any door on the trailer is opened. If this is not possible, then the travel of the door must be restricted in order to provide a 6" minimum clearance between the furnace vent and any door whenever the door is open.

NOTE: The exhaust temperature of this furnace could discolor or warp some materials. You should verify that the material used on the coach door, panel, or cover will not discolor or warp from the exhaust temperature whenever any door, panel, or cover is in the open position.

CAUTION: Due to the differences in vinyl siding, this appliance should not be installed on vinyl siding without first consulting with the manufacturer of the siding or cutting the siding away from the area around the appliance vent.

CAUTION: 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 insure 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.

These furnaces must be installed and vented as described in this manual so that the negative pressure created by the air circulating (return air) fan cannot affect the combustion air intake or venting of any other appliance. It is imperative that the products of combustion be properly vented to the atmosphere and that all combustion air supplied to burner be drawn from the outside atmosphere. (See "Installing Vent Assembly".)

IMPORTANT: If this furnace is to be connected to a common duct system also serving a cooling unit, a manual or automatic damper is required to prevent any cold conditioned air from circulating back into the furnace. Cold air passing over the furnace combustion chamber during the operation of the cooling unit can result in the formation of condensation inside the furnace combustion chamber. This condensation may promote corrosion and premature failure of the combustion chamber.

NOTE: These furnaces shall be installed so the electrical components are protected from water.

These furnaces will accommodate an installation depth from 23 3/8" minimum (with standard vent tubes), to 30 1/8" maximum (with optional intake extension tubes). (See Figure 1.)

Please adhere strictly to the installation instructions to insure proper installation and safe operation, as well as adequate clearances for accessibility.

These furnaces are certified for use with propane/LP gas only. Gas supply pressure for purposes of input adjustment:

#### Return air

Return air must be from the living area of the coach.

NOTE: RV's that have a wall of separation to a cargo area (Toy Box) to transport internal combustion engine vehicles must not have return air opening from this area.

An opening must be provided in the interior cabinetry of the coach directly in front of the furnace. The opening must allow for free, unobstructed removal of the furnace. This opening may be used as a means of providing circulating return air to the furnace. Other openings may be used as well. The minimum return air to the furnace must total 55 square inches free area. It is important that sufficient return air be provided to insure normal heating and operation of the furnace. Also, adequate clearances must be maintained around the furnace cabinet so that the unit will be accessible for servicing. Failure to provide minimum return air as well as an adequate opening for furnace removal voids the warranty.

In the USA, the installation must conform with local building codes. In the absence of local building codes, refer to the latest edition of:

1-Standard for Recreational Vehicles ANSI A-119.2/NFPA 501C.

2-National Fuel Code ANSI Z223.1.

The furnace must be electrically grounded in accordance with the latest edition of the National Electrical Code ANSI/NFPA No. 70. The installation of the furnace shall be in accordance with any applicable local codes and regulations.

In Canada, the furnace must be installed in accordance with:

1-Standard CAN/CSA-Z240.6.2-M86 Electrical Requirements for Recreational Vehicles.

3-Standard CAN/CSA-Z240.4.2-M86 Installation Requirements for Propane Appliances and Equipment in Recreational Vehicles.

4-CAN/CGA-B149 Installation Codes

## 5-Any applicable local codes and regulations.

TO INSTALL THE FURNACE

1. Locate the furnace near lengthwise center of the coach. Do not install the furnace with the vent facing toward the forward end of the coach.

2. Select a location for installation out of the way of wires, pipes, etc. that might interfere with installation. Adhere to the following minimum clearances from the furnace cabinet to combustible construction.

NT-12 •	NT-16	NT-20S			
Front 3/8"	Floor 0"	Front 1"	Floor 0"		
Sides 1"	Top 1"	Sides 1"	Top 1"		
Back 0"		Back 0"			

NOTE: Side and top clearances may be 0" for through the wall installations up to a maximum of 2 1/2" wall thickness (See Figure 3.)

3. When an appliance is installed directly on carpeting, tile or other combustible material other than wood flooring, the appliance shall be installed on a metal or wood panel extending the full width and depth of the appliance. If preferred, the carpeting, tile or combustible materials, other than wood may be cut away the full length and depth of the appliance plus the appliance minimum clearances to combustibles.

4. Determine "X" dimension as shown in Figure 1 or 2 depending on model.

5. Determine "Y" dimension as shown in Figure 1 or 2.

6. If X-Y is less than 22 3/4" for Models NT-12 or NT-16, or 23 3/8" for Model NT-20, then an opening 9 5/8" x 9 3/8" must be cut through the inner wall only. DO NOT CUT THROUGH COACH SKIN. (See Figure 3.) Next, locate the center line of the exhaust and intake tube. Cut two (2) 2 1/4" diameter holes through outer skin as shown in Figure 5.

NOTE: Whenever the furnace cabinet is installed through the outside wall, the return air louvers on the furnace cabinet must not be blocked. The maximum projection of the furnace cabinet into the wall is 2 1/2". (See Figure 3.)

NOTE: Furnace cabinet approved for 0" clearance to combustible materials rear 2 1/2" of furnace cabinet.

7. If X-Y is 23 3/4" or greater for Model NT-12 or NT-16, or 23 3/8" or greater for Model NT-20, two methods may be used to install the furnace. They are:

a. Cut a 4" x 7 1/2" opening through combustible wall as shown in Figure 4. DO NOT CUT THROUGH TRAILER SKIN. Next, locate the center line of the exhaust and intake tube. Cut two (2) 2 1/4" diameter holes through trailer skin. (See Figure 5.)

b. If you do not wish to cut the 4" x 7 1/2" opening, locate the center line of the

exhaust and intake tube as shown in Figure 5. Next, cut two (2) 2 3/4" diameter holes through trailer skin and also the combustible wall of the trailer as illustrated in Figure 7. Care must be taken when locating the center line of the exhaust and intake tube as well as when cutting the holes in order to assure a 3/8" clearance around the exhaust and intake tubes to combustible materials.

8. Refer to the chart in Figure 1 or 2 (depending on the furnace model) and select the range for which the "X" dimension falls. The intake tube length directly to the left of the selected range is the length required. NOTE: The 7 3/4" length exhaust tube assembly will accommodate all approved installation depths - only the intake tube must be ordered when needed. Under no circumstances should the standard 3" intake tube be used when "X" dimension is greater than 25" for Model NT-12 or NT-16, or greater than 25 5/8" for Model NT-20.

9. Secure furnace to the floor using the two holes provided in the front area of the furnace cabinet. (See Figure 3 or 4.)

#### CONNECTING GAS SUPPLY

Connect the gas fitting (3/8" NPT to 3/8" Flare) to the furnace at the manifold provided on the right side of the furnace (Figure 3 or 4). It will be necessary to hold the flare fitting on the furnace manifold when connecting or loosening gas line.

NOTE: Be sure all male joints have been treated with a sealing compound resistant to the action of liquefied petroleum (LP) gas.

NOTE: The appliance must be disconnected from the gas supply piping system during any pressure testing of that system at test pressure in excess of 1/2 PSIG.

The appliance must be isolated from the gas supply piping during any pressure testing of the gas supply piping system at test pressure equal to, or less than 1/2 PSIG.

In order to maintain a check on gas supply pressure to the furnace, Suburban advises the installer to provide a 1/8" NPT plug tap for test gauge connection immediately upstream of the gas supply connection to the furnace.

After the furnace has been connected to the gas supply, all joints must be checked for leaks.

WARNING! Never check for leaks with an open flame. Turn on the gas and apply soapy water to all joints to see if bubbles are formed.

#### CONNECTING ELECTRICAL SUPPLY

CAUTION! This furnace is designed for negative ground 12 volt DC system only. Do not attempt to alter the furnace for a positive ground system or connect the furnace directly to 115 volts AC. Damage to furnace component parts will occur.

Be sure all wiring to the furnace is of heavy enough gauge to keep the voltage drop through it to a minimum and to provide enough power for start-up surge. No. 12 gauge wire is recommended.

If any of the original wire that is supplied with the appliance must be replace, it must be replaced with Type 105°C or its equivalent.

Connect the power supply to the red and yellow wires in the right side of the furnace. The wires are color coded, red for positive (+) and yellow for negative (-). This polarity must be observed so the furnace motor will run with the proper direction of rotation to insure correct air delivery. (See wiring diagram.)

If the furnace power supply is to be from a convertor, we recommend that the convertor system used to power the furnace be wired in parallel with the battery. This will serve two purposes:

1. Provide a constant voltage supply to the furnace.

2. Filter any A.C. spikes or volt surges.

NOTE: Furnace Models NT-12S, NT-16S and NT-20S are equipped with an electric ignitor device that has an energy consumption of .1 amp at 12 volts DC.

#### CONNECTING DUCTS TO FURNACE

The following duct requirements must be followed in order to assure proper operation of the furnace.

A. Maintain a minimum of 25 square inches unrestricted duct area throughout entire duct system including through register. (Minimum 2 ducts 4" diameter.) NOTE: Ducts terminating in a dead air space (like holding tank compartments or cargo areas (Toy Boxes) with no means for return air recirculation should not be counted in the required duct area. Also, ducts 2" in diameter or smaller should not be counted in the required duct area.

**B.** Make the duct connections at the furnace cabinet tight. Loose connections will result in overheating of the furnace component parts and a reduction in the heated air flow through the duct system.

**C.** Avoid making sharp turns in the duct system. Sharp turns will increase the static pressure in the plenum area and could cause the furnace to cycle.

**D.** Avoid making a lot of turns in the duct system. The straighter the duct system the better the performance of the furnace.

E. Maintain a minimum of 1" clearance where ducts pass through any combustible construction; such as, coach cabinetry. (See Figure 4A). NOTE: UL listed duct materials can be 0" clearance.

**F.** 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.

NOTE: After installation of the furnace and duct system is completed, adjustments must be made to obtain a temperature rise within the range specified on the Rating Plate.

The efficiency rating of the furnace is a product thermal efficiency rating determined under continuous operating conditions independent of any installed system.

#### CONNECTING THERMOSTAT

Locate the room thermostat approximately 4 1/2 feet above the floor on an inside bulkhead where it is not affected by heat from any source except room air. Connect thermostat wires to the blue wires leaving power supply plug on right side of furnace. (See wiring diagram.) If your furnace is equipped with a thermostat that has an adjustable anticipator, the anticipator should be set at .7 amps. If you desire longer heating cycles, adjust the anticipator to a higher setting. If you desire shorter heating cycles, adjust the anticipator to a lower setting. Adjustments to the anticipator setting should be made in .5 amp increments.

#### INSTALLING VENT

The vent outlet must be installed so it is in the same atmospheric pressure zone as the combustion air intake. The exhaust and intake tubes must be installed from the outside, pass through the RV skin and slide onto the furnace exhaust and intake.

WARNING! Do not alter the vent assembly supplied with this furnace. Any modifications will result in improper installation which could cause unsafe furnace operation.

CAUTION! Combustion air must not be drawn from the living area. All air for combustion must be drawn from the outside atmosphere. All exhaust gases must be vented to the outside atmosphere - never inside the RV. Therefore, it is essential to insure that the vent cap and tube assemblies are properly installed.

Suburban recommends all vents be installed using the rain shield supplied. (See Figure 7)

1. Apply caulking to RV skin behind vent cap as shown in Figure 7. Apply caulking generously around perimeter of vent cap and across center as shown.

2. Insert intake tube through RV skin and slide it onto the furnace intake (See Figure 1.) Minimum tube overlap of  $1/2^{\prime\prime}$  is required.

3. Insert vent cap exhaust tube through RV skin and slide it onto the furnace exhaust (See Figure 1.) Minimum tube overlap of 1 1/4" is required.

4. Attach vent cap assembly to outer skin of RV with the six (6) screws provided. Do not install vent assembly upside down. The words "Suburban" and "Dayton, Tenn." must be right side up.

#### PREVENTIVE MAINTENANCE

WARNING! 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 in accordance with the instructions in this manual, then the risk of a fire and/or the production of carbon monoxide exists which can cause personal injury, property damage or loss of life.

CAUTION: Label all wires before disconnecting for servicing. Proper polarity must be observed so the furnace motor will run with the proper direction of rotation to insure correct air delivery (See Wiring Diagram.)

CAUTION: Label all wires prior to disconnection when servicing controls. Wiring errors can cause improper and dangerous furnace operation.

#### Always verify proper operation of furnace after servicing.

Your furnace should be inspected by a qualified service agency yearly before turning the furnace on. Particular attention should be given to the following items.

 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.)
 Inspect chamber and venting to assure that these components are physically sound, without holes or excessive corrosion and that the installation and/or reinstallation is in accordance with Suburban's Installation Instructions. (Reference installation manual supplied with furnace.)

WARNING! It is imperative that the products of combustion be properly vented to atmosphere and that all combustion air supplied to burner be drawn from outside atmosphere.

3. Check the base on which furnace is mounted. Be sure it is physically sound, void of any sagging, deterioration, etc.

4. Inspect furnace, the venting, ducting and the gas piping to furnace for obvious signs of deterioration. Correct any defects at once.

5. 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 10.)

6. Inspect all gaskets. If any gaskets show signs of leakage of deterioration,

replace them. Safe operation of the furnace depends on all gaskets being tight. 7. Inspect return air inlet openings to the furnace. Remove any restrictions to assure adequate air flow.

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 furnace down and contact a qualified service agency.

Listed below are several safety related items that you should follow during the heating season 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. 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.

3. Periodically observe the main burner flame to assure it is burning with a hard blue flame with well defined burner ports (See Figure 12). If flame appears yellow or burner has a lazy flame, shut furnace down. It is possible that burner needs cleaning or replaced. To inspect the main burner, remove the four (4) screws (A, B, C and D) securing the burner access door to the combustion chamber (See Figure 11). If excessive rust and corrosion are present on burner surface, the burner must be thoroughly cleaned or replaced. The burner may be cleaned using a steel wire brush and blown clean using high compression air. Contact a qualified service person for assistance.

NOTE: To observe flame, cabinet front must be removed. Operation of burner can then be observed through the viewing window on front of chamber (See Figure 11).

4. 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.

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.

7. 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.

**8.** 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.

9. Never operate the furnace if you smell gas. Do not assume that the smell of gas in your RV is normal. Any time you detect the odor of gas, it is to beconsidered life threatening and corrected immediately. Extinguish any open flames including cigarettes and evacuate all persons from the vehicle. Shut off gas supply at LP gas bottle. (See safety notice on front cover of this manual.)

**10.** 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.

**11.** Never attempt to repair damaged parts. Always have them replaced by a qualified service agency.

12. Never attempt to repair the furnace yourself. Seek the help of a qualified service person.

**13.** Never restrict the ducting installed by your trailer manufacturer. To do so could cause improper furnace operation.

**14.** 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.

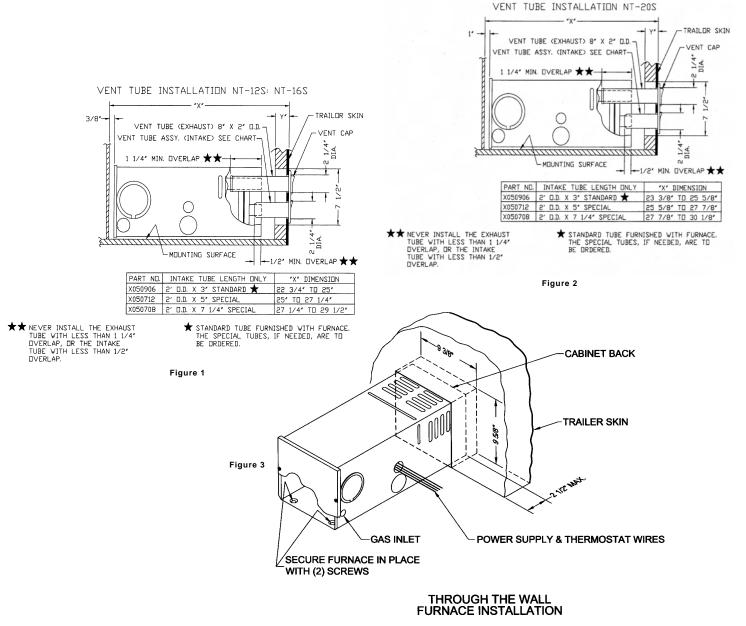
 ${\bf 15.}$  Clothing or other flammable material should not be placed on or near the appliance.

16. Always follow the Operating Instructions. Do not deviate from the step-by-step procedures.

17. 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.

18. When considering add-on rooms, porch or patio, attention must be given to the venting of your furnace. For your safety, do not terminate furnace vent inside add-on rooms, screen porch or onto patios. Doing so will result in products of combustion being vented into the room or occupied areas.

19. 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 insure 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.



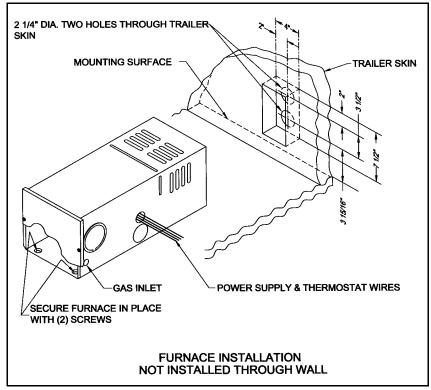


Figure 4

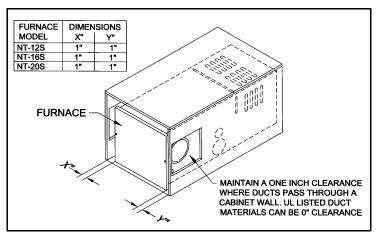


Figure 4A

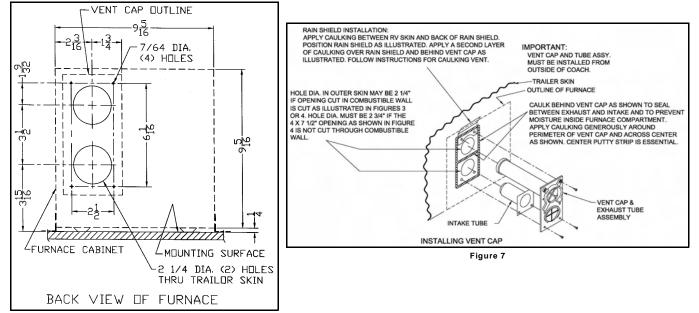


Figure 5

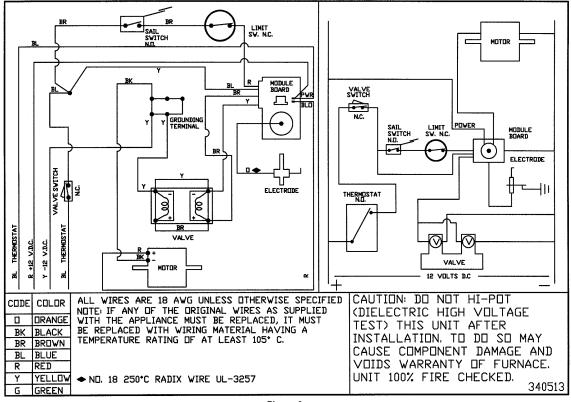
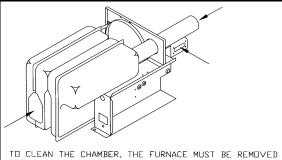
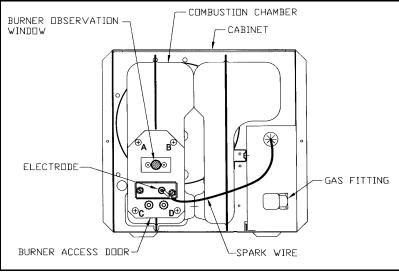


Figure 8



TO CLEAN THE CHAMBER, THE FURNACE MUST BE REMOVED FROM THE CABINET AND THE MANIFOLD BLOWER ASSEMBLY AND CONTROLS REMOVED LEAVING THE CHAMBER  $\underline{\text{DNLY}}$ , AS SHOWN. USING COMPRESSED AIR BLOW THROUGH THE CHAMBER AS SHOWN BY ARROWS, TO REMOVE SOOT OR LOOSE DEBRIS.

Figure 10



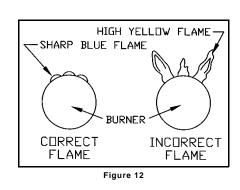


Figure 11

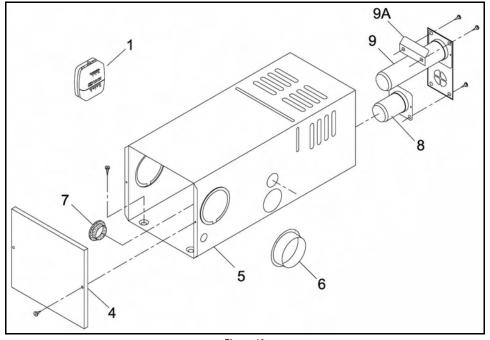


Figure 13

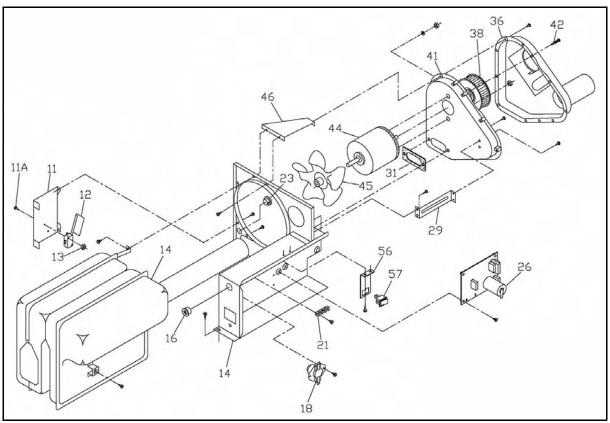


Figure 14

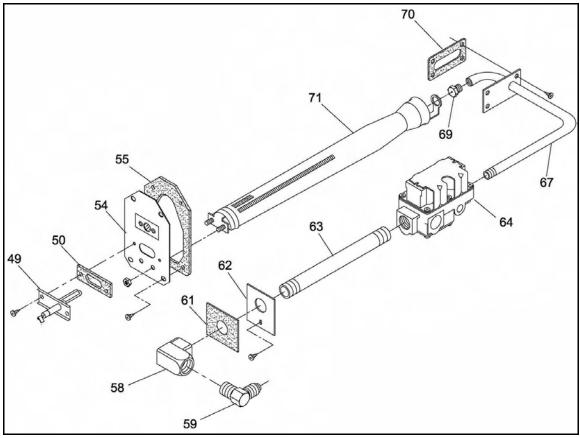


Figure 15

## **REPLACEMENT PARTS LIST** NT-12S • NT-16S • NT20S

# Only factory authorized parts are to be used. Do not attempt to repair defective parts.

W hen ordering repair parts from your dealer, a Suburban Service Center, or distributor, always give the following information.

- Part Number (Not Item No.)
  Part Description
  Model No., Serial No. and Date Code of Furnace
  Number of Parts Required

ltem		Part Number Item			Pa	Part Number			
No.	NT-12S	NT-16S	NT-20S	Description	No.	NT-12S	NT-16S	NT-20S	Description
1	161154	161154	161154	Thermostat (Suburban supplied thermostat not	36	390876	390876	390876	Housing, Combustion Air (Rear)
				applicable to some models)	38	350082	350082	350082	Wheel, Combustion Air
4	101886	101886	101884	Front, Cabinet	41	390874	390874	390874	Housing, Combustion Air (Front)
5	101885	101885	101885	Cabinet	42	121928	121928	121928	Screw 6-19 X 1/2 PH. P.H. (10 Required)
6	050715	050715	050715	Duct Collar (2 Required)	44	520949	520950	520950	Motor
7	070569	070569	070569	Bushing, Snap	45	350083	350083	350083	Impeller, Room Air
8	050906	050906	050906	Tube Assembly, Intake 3"	46	063447	063447	063447	Bracket, Combustion Air Housing Mounting
	050712	050712	050712	Tube Assembly, Intake 5"	49	231931	231931	231931	Electrode
	050708	050708	050708	Tube Assembly, Intake 7 1/4"	50	070163	070163	070163	Gasket, Electrode
9	260541	260541	260541	Vent Cap and Exhaust Tube Assembly	54	030621	030621	030621	Door, Burner Access
9A	280552	280552	280552	Rain Shield	55	070398	070398	070398	Gasket, Burner Access Door
11	062476	062476	062476	Bracket, Microswitch Mounting	56	063262	063262	063262	Bracket, Switch Mounting
11A	121247	121247	121247	Screw, #2-56 x 5/8 (2 Required)	57	232351	232351	232351	Switch, ON/OFF
12	230933	230933	230933	Microswitch Assembly	58	171428	171428	171428	Elbow, 90°
13	121951	121951	121951	Nut, #2-56 (2 Required)	59	170374	170374	170374	Gas Fitting
14	021186BK	021186BK	021186BK	Combustion Chamber	61	071034	071034	071034	Gasket, Pipe Inlet
16	070362	070362	070362	Bushing, Snap	62	062143	062143	062143	Plate, Gas Inlet Cover
18	230621	230621	230621	Limit Switch	63	171669	171669	171669	Pipe, Gas Inlet
21	230714	230714	230714	Splicer	64	161123	161123	161123	Valve
23	070270	070270	070270	Bushing, Snap	67	170746	170746	170746	Manifold Assembly
26	520820	520820	520820	Module Board	69	180225	180224	180231	Orifice, Main Burner
29	062392	062392	062392	Bracket, Combustion Air Housing Stiffener	70	070449	070449	070449	Gasket, Manifold
31	070450	070450	070450	Gasket, Burner Tunnel	71	010614	010614	010614	Burner Assembly

# 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.

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.rvcomfort.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 described in your RV owner's manual. **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 the furnace to the selected service center.

## THIRD:

For the location of the nearest service center, refer to the listing provided or contact:

Suburban Manufacturing Company Customer Service Department 676 Broadway Street Dayton, Tennessee 37321 (423) 775-2131, Ext. 1 www.rvcomfort.com

For future reference, you should record the following information
MODEL NUMBER
SERIAL NUMBER
STOCK NUMBER
DATE OF PURCHASE