

**LIGHTING**  
& *Standheizung*  
**INSTALLATION**  
**INSTRUCTIONS**  
**FOR SERIES**  
**7900-II / 8012-II**  
**8500-III-IV**  
**8900-III-DC**  
**8900-III-AC**

**MUST BE ATTACHED**  
**TO THE APPLIANCE**

**FOR YOUR SAFETY**  
**READ BEFORE OPERATING**

**WARNING: If you do not follow these instructions exactly, a fire or explosion may result causing property damage, personal injury or loss of life.**

- A. This appliance does not have a pilot. It is equipped with an ignition device which automatically lights the burner. Do not try to light the burner by hand.
- B. **BEFORE OPERATING** smell all around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.
- C. **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.
- D. Use only your hand to turn a gas control valve. Never use tools. If the valve will not turn by hand, don't try to repair it, call a qualified service technician. Force or attempted repair may result in fire or explosion.
- E. Do not use the appliance if any part has been 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 which has been under water.



## OPERATING INSTRUCTIONS

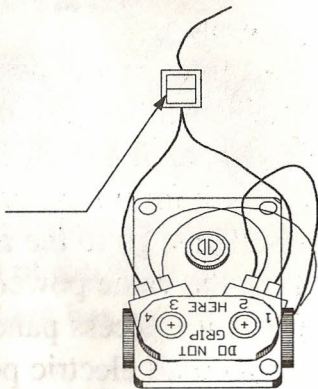
1. STOP! Read the safety information to the left on this label.
2. Set the thermostat to lowest setting.
3. Turn off all electric power to the appliance.
4. This appliance is equipped with an ignition device which automatically lights the burner. Do not try to light the burner by hand.
5. Open the control access panel.
6. Turn the circuit breaker or switch to OFF position.
7. Wait five (5) minutes to clear out any gas. Then smell for gas, including near the floor.
8. If you smell gas, STOP! Follow B in the safety information on this label. If you don't smell gas, go to the next step.
9. Turn the valve power switch ON.
10. Close the access panel.
11. Turn on all electric power to the appliance.
12. Set thermostat to desired setting.

13. If the appliance will not operate, follow the instructions "To Turn Off Gas To Appliance" and call your service technician or gas supplier.

## TO TURN OFF GAS TO APPLIANCE

1. Set the thermostat to lowest setting.
2. Turn off all electric power to the appliance if service is to be performed.
3. Open the access panel to turn off electrical switch.
4. Close the control access panel.

Power interrupt located within  
circuit breaker or on/off switch  
within valve power leg



# INSTALLATION INSTRUCTIONS FOR 7900 & 8012 FURNACES

These furnaces are for indoor installation and must be installed in accordance with the manufacturer's instructions and local codes or, in the absence of local codes, the Recreation Vehicles Standards ANSI A119.2 or CAN / CSA Z240 RV.

## VENT KIT SELECTION

To select the correct vent kit, measure from rear of furnace to outside outer wall, use this measurement and column "A" to determine vent kit.

"A" Min. / Max.	Vent kit Numbers	Extensions	Exhaust tube & Air box
0 To 3-1/2"	35955		36444/ 35941
3-1/2 To 7-1/2	35956		36446 / 35947
7-1/2 To 11-1/2	35957		36448/ 35951

Direct vent system appliance clearances from combustible construction.

Top 0" *	front = 0"	left side = 0" *
Right side = 0" *	back = 0"	bottom = 0" *

\* = from screw head spacers

## WIRE COLORS

Red _____	(+) 12 vdc and thermostat
Black _____	(-) 12 vdc
White _____	thermostat

## INSTALLATION INSTRUCTIONS 8500-III-IV MODELS ONLY

Direct vent system appliance. Clearances from combustible construction:

Top 1/2"	front 0"	left side 1/2"
Right side 1/2"	back 1"	bottom 3/16"
Vent tubes 0"		

Duct 1/4" for first 3 feet. Gas supply pressure for purposes of input adjustment min. 11" w.c. to max. 13" w.c. Thermal efficiency 76% (see rating plate for amperage). Manifold pressure 10.5" w.c. No air filter to be used. Unit must have 65 sq. in. return air opening. This furnace is designed for an air temperature rise of 100° -- 130° F. Maximum outlet air temperature; 200° F or less. Static pressure 0.10 inch w.c. Motor is permanently lubricated.

## ALL DC & AC 89-III MODEL UNITS

C.G.A. certified units are for use at elevations from 0-4500 feet. A.G.A. certified units are for use at elevations from 0-2000 feet and shall be de-rated 4% for each 1,000 feet above sea level. For installation in recreational vehicles. For alcove or closet installation. For installation on combustible flooring. This furnace must be installed so there are provisions for ventilating air. This furnace must be installed in accordance with manufacturer's instructions. Local codes or, in the absence of local codes, the National Fuel Gas Code, ANSI Z223.1 and the American National Standard for recreational vehicles ANSI A-119.2. This appliance must be installed in accordance

with local codes, if any; if not follow the current code Z240.6.1 and Z240.6.2. This appliance must be installed in accordance with the current standard code Z240.4 gas equipped recreational vehicles and mobile housing.

- These furnaces are supplied with either a 12 volt dc supply system for "dc" units or a 120 volt ac supply system for "ac" units. Do not connect 120 volts ac to a 12 volt dc furnace. Use a NEC Class (1) supply and thermostat with conductors that are suitable.
- Caution do not hi-pot (dielectric high voltage test) this unit after installation. To do so may cause component damage and voids warranty of furnace.
- Units are 100% fire tested.

## MODEL 85-III-IV WIRING INSTRUCTIONS

This connection is for low-voltage battery or direct current only. Do not connect to 120 or 240 volts ac. Use a NEC Class (1) supply and thermostat conductors. Use a thermostat suitable for 12 volt dc.

### MODEL 85/89 DC UNITS WIRE COLORS

Red: \_\_\_\_\_ (+) 12 vdc

Yellow: \_\_\_\_\_ (-) 12 vdc

Blue: \_\_\_\_\_ (+) thermostat

Blue: \_\_\_\_\_ thermostat

If any wire has to be replaced it must be replaced with type 105° C or equivalent.

## INSTALLATION INSTRUCTION

### 8900-III MODELS ONLY

Direct vent system appliance. Clearances from combustible construction:

Top 1/2"	front 0"	left side 1"
Right side 1"	back 1/2"	bottom 3/16"
Vent tubes 0"		

Duct 1/4" for first 3 feet. Gas supply pressure for purposes of input adjustment: min. 11" w.c., max. 13" w.c. Thermal efficiency 76% (see rating plate for amperage). Manifold pressure 10.5" w.c. This furnace not for use with filters. Unit must have 80 sq. in. return air opening. This furnace is designed for an air temperature rise of 100° – 130° F. Maximum outlet air temperature; 200° F or less. Static pressure 0.10 inch w.c. Motor is permanently lubricated.

### MODELS 89 AC UNITS WIRE COLORS

Black: \_\_\_\_\_ 120 volts ac

White: \_\_\_\_\_ 120 volts ac

Green: \_\_\_\_\_ Ground

(2) blue: \_\_\_\_\_ 24 volts ac thermostat

## GAS TYPE CONVERSION INSTRUCTIONS

### FOR MODELS AC-8900-III ONLY

Units having an "AC" in the model number come equipped with a convertible gas control. Each unit is supplied with an alternate main burner orifice. Natural gas orifices are marked with an "N" next



to the stamped orifice size on the orifice. The control regulator plug is used to change the gas pressure setting to 10.5" w.c. for propane; to 3.5" w.c. for natural gas.

## CONVERSION INSTRUCTIONS

1. Remove vent assembly from burner area.
2. Turn off gas.
3. Disconnect the gas line from the burner assembly.
4. Remove (4) screws from the burner box assembly.
5. Remove the wires from the burner assembly and remove the assembly.
6. Remove (2) screws holding the burner in place and remove orifice. Replace with correct orifice for type of gas to be used.
7. Change the regulator plug by unscrewing from the valve and turning plug to read the correct type of gas at the bottom of the plug. Insert plug back into valve and finger tighten.
8. Replace burner and all other parts in reverse order.
9. Place sticker on furnace in plain view to show that the unit has been converted to the new type of gas used. "For use with natural gas and propane, a conversion kit has been supplied by the manufacturer to be used to convert this furnace to the alternate fuel."

## ALL MODELS WARNINGS

- Improper installation, adjustment, alteration, service or maintenance can cause property damage, personal injury or loss of life. Refer to the user's information manual provided with this furnace. Installation and service must be performed by a qualified installer, service agency or the gas supplier.
- This compartment must be closed except when servicing.
- If not installed, operated and maintained in accordance with the manufacturer's instructions, this product could expose you to substances in fuel or from fuel combustion which can cause death or serious illness, which are known to the state of California to cause cancer, birth defects or other reproductive harm.
- Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.

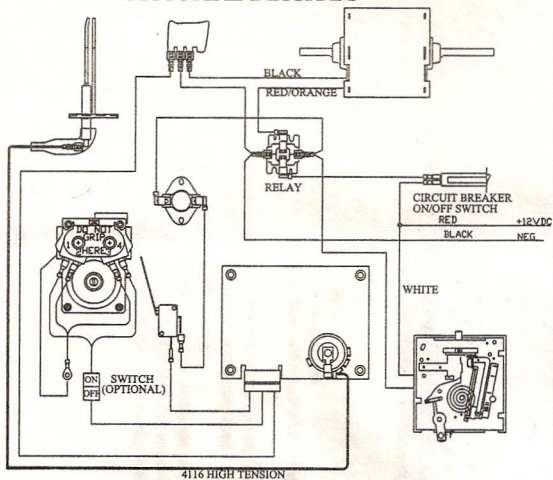
## CAUTION

- See installation and operation instructions accompanying appliance for complete instructions.
- This furnace is not for use with filters.
- Do not HI-POT the electrical system.
- Do not twist gas valve during piping. Check all gas system fittings before firing.
- This furnace must be installed so there are provisions for ventilating air supply.
- Units are approved for installation on combustible flooring.
- See instruction manual for installation of outer door assembly (85/89 SERIES).
- Installation of vent must be tight against door screen when door is in the closed position (85/89 SERIES).
- The gas slide plate must be installed before furnace is test fired. Check for complete seal (85/89 SERIES).

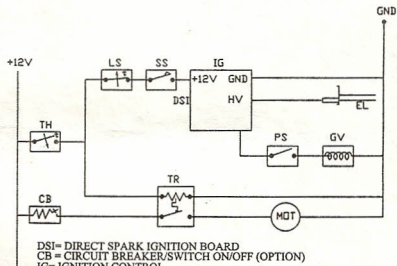


## 7900-II &amp; 8012-II DC WIRING

## PICTORIAL DIAGRAM



## LADDER DIAGRAM



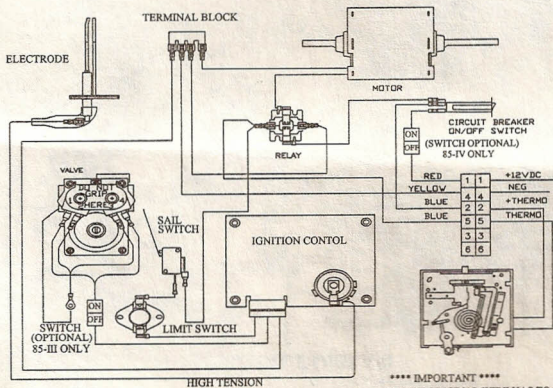
DSI = DIRECT SPARK IGNITION BOARD  
 CB = CIRCUIT BREAKER/SWITCH ON/OFF (OPTION)  
 IG = IGNITION CONTROL  
 GND = GROUND  
 GV = GAS VALVE  
 EL = ELECTRODE  
 MOT = BLOWER MOTOR  
 SS = SAIL SWITCH  
 TH = THERMSTAT  
 LS = LIMIT SWITCH  
 TR = THERMO RELAY  
 HV = HIGH VOLTAGE  
 PS = ON/OFF SWITCH (OPTIONAL)

## \*\*\*\* IMPORTANT \*\*\*\*

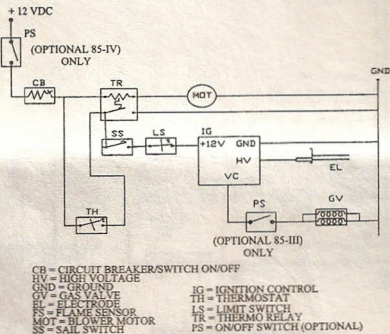
IF ANY ORIGINAL WIRE HAS TO BE REPLACED, IT MUST BE REPLACED WITH TYPE 105° C OR ITS EQUIVALENT.

## 8500-III, 8500-IV & 8900-III DC WIRING

### PICTORIAL DIAGRAM



### LADDER DIAGRAM



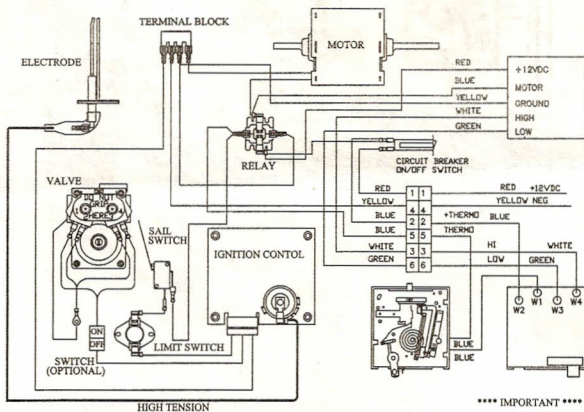
\*\*\*\* IMPORTANT \*\*\*\*

IF ANY ORIGINAL WIRE HAS TO BE REPLACED, IT MUST BE REPLACED WITH TYPE 105° C OR ITS EQUIVALENT.

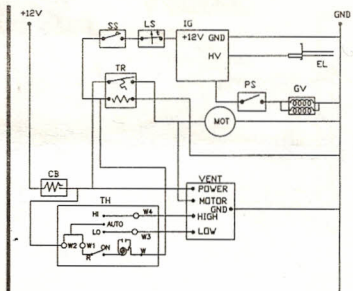
TERMINAL BLOCK ON 85 MODELS ONLY.

## 8500-III &amp; 8900-III VENTILATOR WIRING

PICTORIAL DIAGRAM



LADDER DIAGRAM



CB = CIRCUIT BREAKER/ SWITCH ON/OFF

HV = HIGH VOLTAGE

GND = GROUND

GV = GAS VALVE

EL = ELECTRODE

MOT = BLOWER MOTOR

SS = SAIL SWITCH

PS = ON/OFF SWITCH (OPTIONAL)

IG = IGNITION CONTROL

TH = THERMOSTAT

LS = LIMIT SWITCH

TR = THERMO RELAY

VENT = VENTILATOR CONTROL

\*\*\* IMPORTANT \*\*\*

IF ANY ORIGINAL WIRE HAS TO BE REPLACED, IT MUST BE REPLACED WITH TYPE 105° C OR ITS EQUIVALENT.

TERMINAL BLOCK IS ON 85 MODELS ONLY.

