



**HOME OWNER / INSTALLER  
FOR YOUR SAFETY**

**THIS MANUAL MUST BE READ IN ITS  
ENTIRETY BEFORE OPERATING HEATER.**

**GAS INFRA-RED RADIANT HEATER  
Tropic Space Heater**

**REH-20DT**

**REH-30DT**

**Owner's Operation and Installation Manual**

THIS IS AN UNVENTED GAS-FIRED HEATER. IT USES AIR (OXYGEN) FROM THE ROOM IN WHICH IT IS INSTALLED. PROVISIONS FOR ADEQUATE COMBUSTION AND VENTILATION AIR MUST BE PROVIDED. REFER TO INSTALLATION INSTRUCTIONS ON PAGE 2.

**WARNING:** IF THE INFORMATION IN THIS MANUAL IS NOT FOLLOWED EXACTLY, A FIRE OR EXPLOSION MAY RESULT CAUSING PROPERTY DAMAGE, PERSONAL INJURY OR LOSS OF LIFE.

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

**WHAT TO DO IF YOU SMELL GAS**

- DO NOT TRY TO LIGHT ANY APPLIANCE.
- DO NOT TOUCH ANY ELECTRICAL SWITCH; DO NOT USE ANY PHONE IN YOUR BUILDING.
- IMMEDIATELY CALL YOUR GAS SUPPLIER FROM A NEIGHBOR'S PHONE. FOLLOW THE GAS SUPPLIER'S INSTRUCTIONS.
- IF YOU CANNOT REACH YOUR GAS SUPPLIER, CALL THE FIRE DEPARTMENT.

INSTALLATION AND SERVICE MUST BE PERFORMED BY A QUALIFIED INSTALLER, SERVICE AGENCY OR THE GAS SUPPLIER.

This appliance may be installed in an aftermarket, permanently located, manufactured (mobile) home, where not prohibited by local codes. This appliance is for use with the type of gas indicated on the rating plate. This appliance is not convertible for use with other gases.

INSTALLER: MUST LEAVE MANUAL WITH UNIT AFTER INSTALLATION.  
OWNER: RETAIN THIS MANUAL SAFELY, FOR FUTURE REFERENCE.

**Rinnai**

## WARNING

THIS APPLIANCE IS INTENDED FOR SUPPLEMENTAL HEATING.

IMPROPER INSTALLATION, ADJUSTMENT, ALTERATION, SERVICE OR MAINTENANCE CAN CAUSE PROPERTY DAMAGE, PERSONAL INJURY OR LOSS OF LIFE. REFER TO THE OWNER'S INFORMATION MANUAL PROVIDED WITH THIS APPLIANCE.

INSTALLATION AND SERVICE MUST BE PERFORMED BY A QUALIFIED INSTALLER, SERVICE AGENCY OR THE GAS SUPPLIER. FOR ASSISTANCE OR ADDITIONAL INFORMATION CONSULT A QUALIFIED INSTALLER, SERVICE AGENCY OR THE GAS SUPPLIER.

## GENERAL INFORMATION



THIS SERIES HEATER IS DESIGN CERTIFIED BY CSA INTERNATIONAL AS A VENT-FREE ROOM HEATER AND MUST BE INSTALLED ACCORDING TO THESE INSTRUCTIONS.

ANY ALTERATION OF THE ORIGINAL DESIGN INSTALLED OTHER THAN AS SHOWN IN THESE INSTRUCTIONS OR USED WITH A TYPE OF GAS NOT SHOWN ON THE RATING PLATE, IS THE RESPONSIBILITY OF THE PERSON AND COMPANY MAKING THE CHANGE.

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# SPECIFICATIONS

Model	Input Rating BTU/Hr	Weight in pounds	Dimensions in inches.
REH-20DT-N	20,000	28.0	Height: 19 11/16" 22 1/8" with Base (Option)
REH-20DT-P	19,500		Width: 22 7/16" Depth: 8 9/16" 9 1/2" with Fan (Option)
REH-30DT-N	30,000	31.5	Height: 19 11/16" 22 1/8" with Base (Option)
REH-30DT-P	29,000		Width: 26 5/16" Depth: 8 9/16" 9 1/2" with Fan (Option)

"-N" Models are for Natural Gas. (Inlet Pressure within 5.3" -10.5" WC) (REH-20DT Model)

"-N" Models are for Natural Gas. (Inlet Pressure within 6.0" -10.5" WC) (REH-30DT Model)

"-P" Models are for L.P.Gas. (Inlet Pressure within 11" -13" WC)

"-N" Models Manifold Pressure=4.7" WC (REH-20DT Model) 5.5" WC (REH-30DT Model)

"-P" Models Manifold Pressure=9.5" WC

Gas Connection Pipe size 3/8" N.P.T. All Models.

## USAGE AND INSTALLATION MUSTS

1. READ THESE RULES AND THE INSTRUCTIONS CAREFULLY. CHECK ALL LOCAL CODES. FAILURE TO FOLLOW THESE COULD CAUSE A MALFUNCTION OF THE HEATER RESULTING IN DEATH, SERIOUS BODILY INJURY AND/OR PROPERTY DAMAGE.
2. THIS HEATER IS DESIGNED FOR USE ONLY WITH ONE TYPE OF GAS, EITHER L.P.G. OR NATURAL. MAKE SURE THAT THE TYPE OF GAS TO BE SUPPLIED TO THIS UNIT MATCHES THAT SHOWN ON THE RATING PLATE ON THE HEATER.
3. **WARNING: ANY CHANGE TO THIS HEATER OR ITS CONTROLS CAN BE DANGEROUS.**
4. IF A GAS LEAK IS SUSPECTED, TURN HEATER OFF, TURN GAS SUPPLY VALVE OFF AT REGULATOR OR APPLIANCE CONNECTOR VALVE. OPEN WINDOWS TO VENTILATE AREA IMMEDIATELY AND CONTACT YOUR DEALER OR GAS COMPANY.
5. **WARNING: FAILURE TO KEEP THE PRIMARY AIR OPENING(S) OF THE BURNER CLEAN MAY RESULT IN SOOTING AND PROPERTY DAMAGE.**
6. **INSTALLATION AND REPAIR SHOULD BE DONE BY A QUALIFIED SERVICE PERSON. HEATER SHOULD BE INSPECTED BEFORE USE AND AT LEAST ANNUALLY BY A PROFESSIONAL SERVICE PERSON. MORE FREQUENT CLEANING MAY BE REQUIRED DUE TO EXCESSIVE LINT FROM CARPETING, BEDDING MATERIAL, ETC.. IT IS IMPERATIVE THAT CONTROL COMPARTMENT, BURNERS AND CIRCULATING AIR PASSAGEWAYS BE KEPT CLEAN.**
7. THIS HEATER MUST NOT BE INSTALLED IN BEDROOMS/SLEEPING QUARTERS, BATHROOMS OR RECREATIONAL VEHICLES.
8. KEEP AREA NEAR THE HEATER CLEAR AND FREE FROM COMBUSTIBLE MATERIALS, GASOLINE AND OTHER FLAMMABLE VAPORS AND LIQUIDS.
9. **DUE TO ITS HIGH TEMPERATURE, THE HEATER SHOULD BE LOCATED OUT OF TRAFFIC AND AWAY FROM FURNITURE AND DRAPERIES.**
10. **DO NOT PLACE CLOTHING OR FLAMMABLE MATERIAL ON OR NEAR THE HEATER.**
11. **ANY SAFETY SCREEN OR GUARD REMOVED FOR SERVICING MUST BE REPLACED PRIOR TO OPERATING THE HEATER.**
12. AN UNVENTED GAS HEATER WILL INCREASE THE AMOUNT OF HUMIDITY IN THE ROOM.
13. THIS HEATER IS INTENDED FOR SPACE HEATING PURPOSES ONLY. DO NOT USE FOR OTHER PURPOSES SUCH AS DRYING CLOTHES OR BAKING PAINTS.
14. DO NOT TOUCH THE DRESS GUARD OR FLUE OUTLET AREA WHILE THE HEATER IS IN USE. TO AVOID BURNS, DO NOT MOVE THE HEATER DURING USE, AND AVOID TOUCHING THE HEATER JUST AFTER TURNING OFF.

## INSTALLATION INSTRUCTIONS

### NOTICE BEFORE INSTALLATION

The heater must be installed by a qualified service person according to this installation instruction.

Check your local building codes for the proper method of installation. In the case of absence of local codes, this heater should be installed in accordance with the National Fuel Gas Code ANSI Z223.1 / NFPA54.

Available from the American National Standards Institute, Inc., 1430 Broadway, New York, N.Y. 10018, or from the National Fire Protection Association, Batterymarch Park, Quincy, MA 02269.

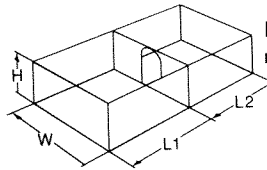
All correspondence should refer to Model No., Serial No., and type of gas.

The following formula can be used to determine the maximum heater rating per the definition of unconfined space:

$$\text{BTU/HR} = \frac{(L1+L2)Ft \times (W)Ft \times (H)Ft \times 1000}{50}$$

Consider two connecting rooms with an open area between, with the following dimensions:

$$\text{BTU/HR} = \frac{(15\frac{1}{2} + 12) \times (12) \times (8) \times 1000}{50} \\ = 52800 \text{ BTU/HR}$$



If there is a door between the two rooms that can be closed the calculation must be based only on the room with the heater.

$$\text{BTU/HR} = \frac{(15\frac{1}{2}) \times (12) \times (8) \times 1000}{50} \\ = 29760 \text{ BTU/HR}$$

**WARNING:** If the area in which the heater may be operated is smaller than that defined as an unconfined space or if the building is of unusually tight construction, provide adequate combustion and ventilation air by one of the methods described in the National Fuel Gas Code, ANSI Z223.1 / NFPA54, Section 5.3 or applicable local codes.

Unusually tight construction is defined as construction where:

- Walls and ceilings exposed to the outside atmosphere have a continuous water vapor retarder with a rating of 1 perm ( $6 \times 10^{-11}$  kg per pa-sec- $m^2$ ) or less with openings gasketed or sealed, and
- Weather stripping has been added on openable windows and doors, and
- Caulking or sealants are applied to areas such as joints around window and door frames, between sole plates and floors, between wall-ceiling joints, between wall panels, at penetrations for plumbing, electrical, and gas lines, and at other openings.

### LOCATION AND CLEARANCES

1. The following safety precautions should be kept in mind when determining the location of the heater.

- Do not install this heater in bedroom/sleeping quarters, or bathroom.
- Do not install in areas where curtains, drapes, clothing or other inflammable materials are within 12 inches of the sides or 36 inches of top of heater.
- Adequate clearances for accessibility for purposes of servicing and proper operation be provided.
- Adequate clearances around air openings be provided.

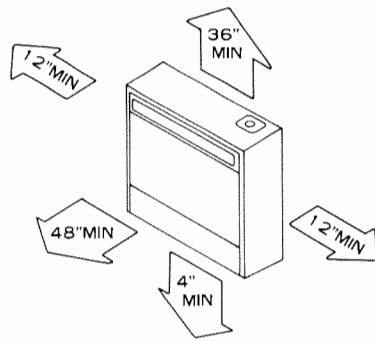
- CHILDREN AND ADULTS SHOULD BE ALERTED TO THE HAZARD OF HIGH SURFACE TEMPERATURES AND SHOULD STAY AWAY TO AVOID BURNS OR CLOTHING IGNITION.
- YOUNG CHILDREN SHOULD BE CAREFULLY SUPERVISED WHEN THEY ARE IN THE SAME ROOM WITH THE HEATER.
- LPG CONTAINERS MUST NOT BE INSTALLED INDOORS.
- DO NOT INSTALL IN A WINDY AREA. SUCH AS FACING A WINDOW OR A DOOR LEADING TO THE OUTSIDE.
- WARNING: ELECTRICAL GROUNDING INSTRUCTIONS OPTIONAL FAN (1) (REH19D-100) IF IT IS PROVIDED, IS EQUIPPED WITH A THREE-PRONG (GROUNDING) PLUG FOR YOUR PROTECTION AGAINST SHOCK HAZARD AND SHOULD BE PLUGGED DIRECTLY INTO A PROPERLY GROUNDED THREE-PRONG RECEPTACLE. (OPTIONAL FAN MODELS)
- WARNING: ELECTRICAL GROUNDING INSTRUCTIONS OPTIONAL FAN (2) (REH 10-50) IF IT IS PROVIDED, IS EQUIPPED WITH A POLARIZED PLUG FOR YOUR PROTECTION AGAINST SHOCK HAZARD. IT SHOULD BE PLUGGED DIRECTLY INTO A PROPERLY GROUNDED POLARIZED RECEPTACLE. (OPTIONAL FAN MODELS)
- THIS APPLIANCE MAY BE INSTALLED IN AN AFTERMARKET\* MANUFACTURED (MOBILE) HOME WHERE NOT PROHIBITED BY STATE OR LOCAL CODES. \*AFTERMARKET=COMPLETION OF SALE, NOT FOR PURPOSE OF RESALE FROM MANUFACTURER. THIS APPLIANCE IS ONLY FOR USE WITH THE TYPE OF GAS INDICATED ON THE RATING PLATE. THIS APPLIANCE IS NOT CONVERTIBLE FOR USE WITH OTHER GASES.
- THIS HEATER SHALL NOT BE INSTALLED IN A CONFINED SPACE OR UNUSUALLY TIGHT CONSTRUCTION UNLESS PROVISIONS ARE PROVIDED FOR ADEQUATE COMBUSTION AND VENTILATION AIR.
- THE NATIONAL FUEL GAS CODE ANSI Z223.1/ NFPA54 DEFINES A CONFINED SPACE AS A SPACE WHOSE VOLUME IS LESS THAN 50 CUBIC FEET PER 1,000 BTU PER HOUR (4.8 $m^3$  PER kW) OF THE AGGREGATE INPUT RATING OF ALL APPLIANCES INSTALLED IN THAT SPACE AND AN UNCONFINED SPACE AS A SPACE WHOSE VOLUME IS NOT LESS THAN 50 CUBIC FEET PER 1,000 BTU PER HOUR (4.8 $m^3$  PER kW) OF THE AGGREGATE INPUT RATING OF ALL APPLIANCES INSTALLED IN THAT SPACE. ROOMS COMMUNICATING DIRECTLY WITH THE SPACE IN WHICH THE APPLIANCES ARE INSTALLED, THROUGH OPENINGS NOT FURNISHED WITH DOORS, ARE CONSIDERED A PART OF THE UNCONFINED SPACE.
- DO NOT USE THIS ROOM HEATER IF ANY PART HAS BEEN UNDER WATER. IMMEDIATELY CALL A QUALIFIED SERVICE TECHNICIAN TO INSPECT THE ROOM HEATER AND TO REPLACE ANY PART OF THE CONTROL SYSTEM AND ANY GAS CONTROL WHICH HAS BEEN UNDER WATER.
- THIS APPLIANCE IS INTENDED FOR SUPPLEMENTAL HEATING.

- The heater is designed for wall mounting. The minimum clearances from the combustible materials are as follows.

36 inches from top  
12 inches from side  
48 inches from front  
0 inch from back  
4 inches from bottom  
to the top surface of  
any floor coverings.

(0 inch from optional  
Base bottom if it  
is provided)

Right and left sides are  
determined when facing unit front.



- The heater may be installed on combustible flooring if optional Base (Kit No.REH 19D-150B/SO-001-0714) is attached to the bottom of the heater. When the heater with optional Base fixed is installed directly on carpeting, tile or other combustible material other than wood flooring, the heater shall be installed on a metal or wood panel extending the full width and depth of the heater and the Base.

## INSTALLING THE HEATER TO WALL

- Apply the heater installation template on the wall surface where the heater will be. After checking the location, leveling, and running piping for the heater, mark the holes for drilling. (Template is included with this heater.)

Before drilling holes, check for clearances.

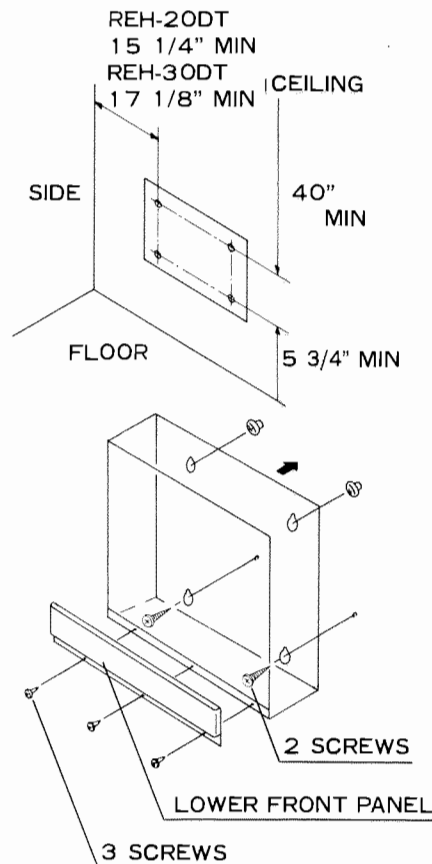
- Remove the template. Drill at the marked locations with 1/4" drill bit. Insert supplied anchors in holes and tap flush to wall. Tighten screws supplied in upper 2 screw holes to the end, then unfasten one half turn to allow hanging heater with its upper key holes at the back.

- Hang the heater on the screws in the wall by using its upper 2 key holes.

- Remove the lower front panel of the heater by removing three screws at the bottom and pulling the bottom of panel forward.

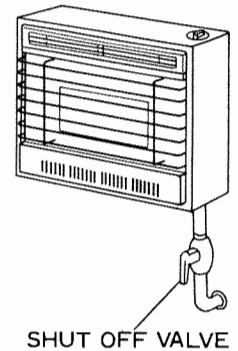
- Secure the heater by installing 2 screws supplied through the recessed holes located at the bottom back of heater.

- Replace the lower front panel with three screws.



## GAS CONNECTION

- The gas supply line shall be gas-tight, sized and so installed as to provide a supply of gas sufficient to meet the maximum demand of the heater without loss of pressure.
- A shut off valve (and appliance connector valve) should be installed in the upstream of the gas line to permit servicing.
- Flexible pipe and any appliance connector valve used for gas piping shall be types approved by nationally recognized agencies.
- Any compound used on the threaded joint of the gas piping shall be a type which resists the action of liquefied petroleum gas.
- Supplied gas pressure must be within the limits shown in the specifications.
- After completion of gas pipe connections, all joints including the heater must be checked for gas-tightness by means of leak detector solution, soap and water, or an equivalent nonflammable solution, as applicable.



**CAUTION:** Since some leak test solutions, including soap and water, may cause corrosion or stress cracking, the piping shall be rinsed with water after testing, unless it has been determined that the leak test solution is noncorrosive.

- The appliance and its appliance main gas valve must be disconnected from the gas supply piping system during any pressure testing of that system at test pressures in excess of 1/2 psi (3.5kPa),

The appliance must be isolated from the gas supply piping system by closing its equipment shut-off valve during any pressure testing of the gas supply piping system at test pressures equal to or less than 1/2 psi (3.5 kPa).

INSTALLATION OF OPTIONAL FAN OR BASE:REFER  
INSTRUCTIONS INCLUDED IN FAN OR BASE BOX.

## OPERATING INSTRUCTIONS

### FOR YOUR SAFETY READ BEFORE LIGHTING

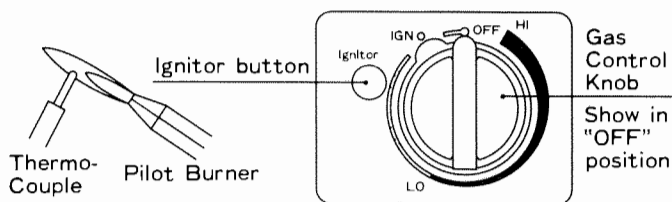
**WARNING:** If you do not follow these instructions exactly, a fire or explosion may result causing property damage, personal injury or loss of life.

- A. This appliance has a pilot which must be lighted by hand. When lighting the pilot, follow these instructions exactly.
- B. **BEFORE LIGHTING** 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.
- WHAT TO DO IF YOU SMELL GAS**
- Do not try to light any appliance.
  - Do not touch any electric switch; do not use any phone in your building.
  - Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
  - If you cannot reach your gas supplier, call the fire department.
- C. Use only your hand to push in or turn the gas control knob. Never use tools. If the knob will not push in or turn by hand, don't try to repair it, call a qualified service technician. Force or attempted repair may result in a fire or explosion.
- D. Do not use this 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.

### LIGHTING INSTRUCTIONS

- **STOP!** Read the safety information above on this Operating instructions.
- Turn Gas Control Knob clockwise ↻ to "OFF" position.
- Wait 5 minutes to clear out any gas. Then smell for gas, including near the floor. If you then smell gas, **STOP!** Follow "B" in the safety information above on this label. If you don't smell gas, go to next step.

To ignite ODS (Oxygen Depletion Sensor) pilot burner.



Observe pilot. The pilot is attached to the bottom main burner. Turn knob on gas control counterclockwise ↻ to "IGN". Press push gas control knob all the way down and hold. Repeatedly push ignitor button until pilot lights (or use a match to light pilot). Continue to hold the control knob in for about one (1) minute after the pilot is lit. Release knob and it will pop back up. Pilot should remain lit.

Turn gas control knob counterclockwise ↻. Set thermostat (gas control knob) to desired setting from "HI" to "LO".

If it goes out, repeat the lighting procedure.

- If knob does not pop up when released, stop immediately call your service technician or gas supplier.
- If the pilot will not stay lit after several tries, turn the gas control knob to "OFF" and call your service technician or gas supplier.

**ATTENTION!** Gas control has an INTERLOCK latching device.

When the pilot is initially lit and the safety magnet is energized (pilot stays "ON") the INTERLOCK latching device becomes operative. If the gas control is turned to the "OFF" position or gas flow to the appliance is shut off, the pilot cannot be relighted until the safety magnet is de-energized (approximately 60 seconds). There will be an audible "click" when the safety magnet in the gas control is de-energized. Pilot can now be relighted. If it does not remain lit, then repeat the lighting procedure.

### TO TURN OFF GAS TO APPLIANCE

Turn Gas Control Knob clockwise ↻ to "OFF" position, the main and pilot burner will shut off.

Due to high surface temperature, keep children, clothing and furniture away. Keep burner and control compartment clean. See installation and operating instructions accompanying heater.

**WARNING:** Improper installation, adjustment, alteration, service or maintenance can cause property damage, personal injury or loss of life. Refer to the owner's information manual provided with this appliance. Installation and service must be performed by a qualified installer, service agency or the gas supplier.

### CIRCULATING FAN

(Option: Kit No. REH19D-100/REH19D-200)

To operate air circulation fan, if it is provided, push Fan Switch to its "ON" ("AUTO" or "ON": REH19D-200) position. The switch is located on top of fan unit, on rear of heater.

(Option: Kit No. REH10-50)

Switch is located on power cord. Follow instructions packed with optional fan units.

**WHEN SERVICING UNIT, TURN OFF ELECTRICAL POWER IF AN OPTIONAL BLOWER IS USED.**

## MAINTENANCE / SERVICE MAINTENANCE SUGGESTIONS

This heater has been designed and constructed for a long performance life when installed and operated properly under normal conditions. Regular inspections, as outlined in this section, are strongly recommended as means of keeping your heater operating efficiently and safely throughout the season. Access to internal parts is from the front of the heater.

### 1. Cleaning

Heater must be cleaned annually.

Keep heater clear of dust and debris especially in and around the ODS pilot. Cleaning procedures of heater are as follows;

- 1) Turn heater off. Allow to cool for one hour.
- 2) Remove the Lower Front Panel of the heater by removing three screws at the bottom and pulling the bottom of panel forward.
- 3) Use pressurized air to remove dust from around ODS pilot and main burner.
- 4) Use soft dry cloth to wipe cabinet.

DO NOT TOUCH SURFACE OF MAIN BURNER. CERAMIC TILE IS FRAGILE.

DO NOT DAMAGE OR DISTORT ANY PARTS OF HEATER.

DO NOT USE WET CLOTH OR SPRAY CLEANERS ON BURNER OR ODS PILOT.

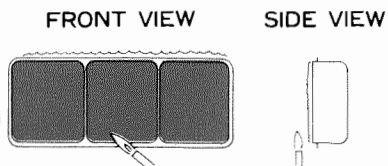
IT IS RECOMMENDED THAT YOU USE WORKING GLOVES DURING CLEANING TO AVOID INJURY BY SHARP METAL EDGES.

2. Visual check of main and pilot burner flames.

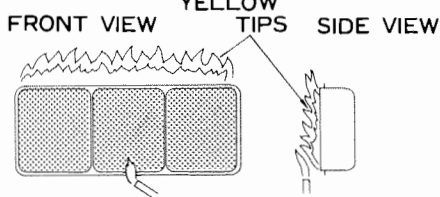
Flame pattern should be as shown in the following diagrams.

The burner must glow evenly over the entire surface when operating correctly. The pilot flame must burn with a clear blue stable flame.

SATISFACTORY



UNSATISFACTORY  
YELLOW TIPS



3. The Oxygen Depletion Sensor should be cleaned annually, or more often if located in a dusty location or carpeted area.

## TROUBLE SHOOTING

### STEP 1.

- 1) Be sure the heater is properly installed. See Section 2. INSTALLATION.
- 2) Make sure gas valve on L.P. Gas bottle or gas supply line is ON and gas pressure is available.
- 3) Verify the electrical circuit servicing the optional fan, if it is provided, is ON.
- 4) Be sure ODS and Burner are free of dust and dirt.

### STEP 2.

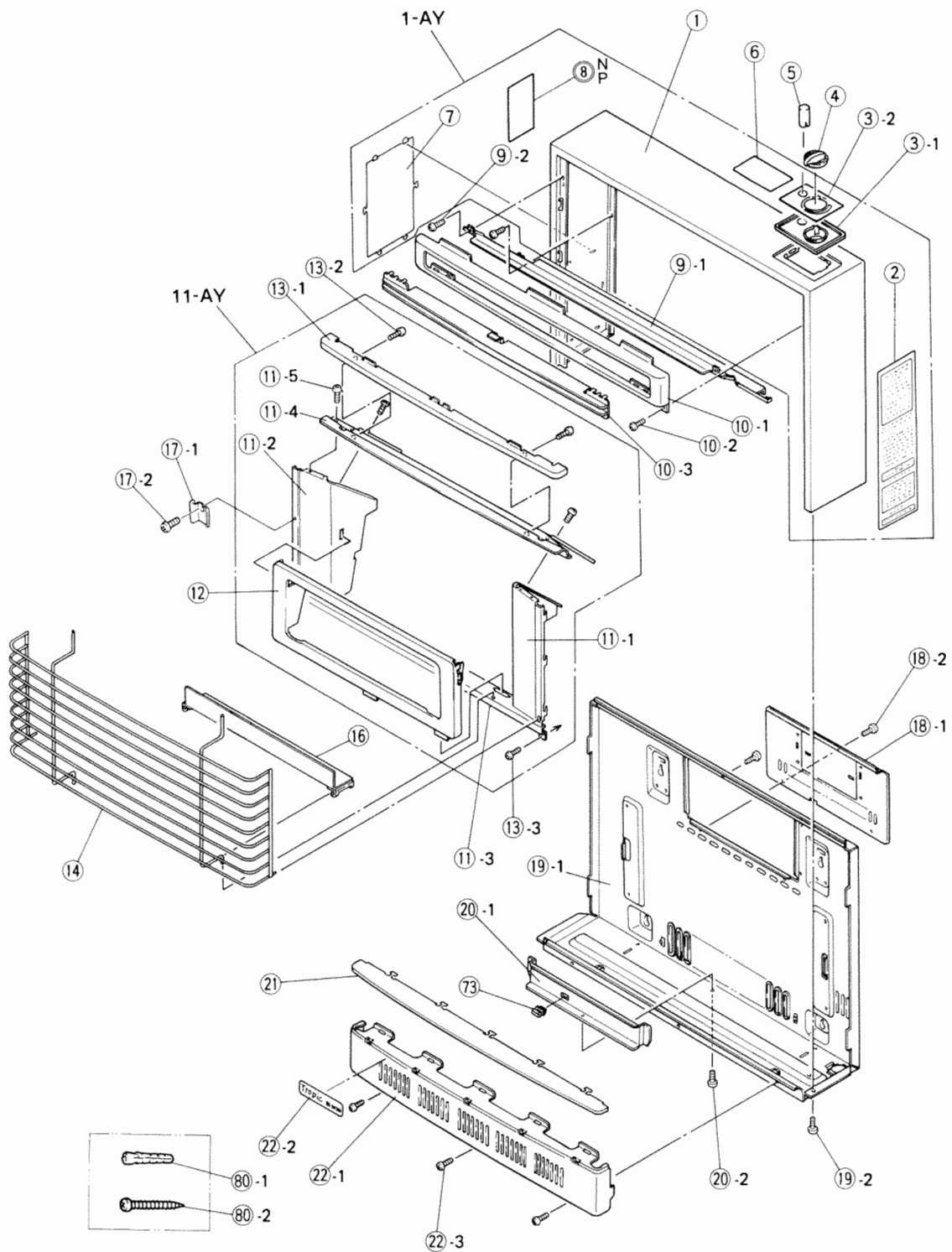
If the trouble remains after verifying step 1, please check the cause of trouble in the following trouble shooting chart and correct it by following the procedures indicated, or contact a reliable service company.

TROUBLE	CAUSE	PROCEDURE
Pilot or Heater will not ignite.	Gas supply valve is closed.	Open gas supply valve.
	Air inside gas supply line.	Repeat ignition procedure.
	Control knob released too soon.	Hold knob in pilot position for full 20 seconds.
	Faulty ignition device.	See Operating Instructions on Page 4. Contact your dealer or gas company.
Burner does not glow.	Orifice is blocked.	Clean dust and dirt from heater. Contact your dealer or gas company.
Whistling noise during ignition or operation.	Back firing.	Turn off heater immediately and re-ignite. If whistling noise persists, contact your dealer or gas company.
Smelly exhaust fumes during operation.	Incomplete combustion.	Be sure gas supply valve on regulator is open fully. If supply valve was opened properly, and smelly exhaust persists, turn off heater and gas supply tap, then contact your dealer or gas company.
Smell of raw unburned gas.	Gas leak.	Turn off heater and gas supply valve immediately, then contact your dealer or gas company. See front page of this manual.
Yellow flame at ODS pilot burner.	Blockage of the ODS pilot burner by dust.	Clean ODS pilot.
Heater automatically extinguished during use.	Lack of fresh air, and ODS device working.	Turn off gas valve knob and open door or windows to ventilate room.

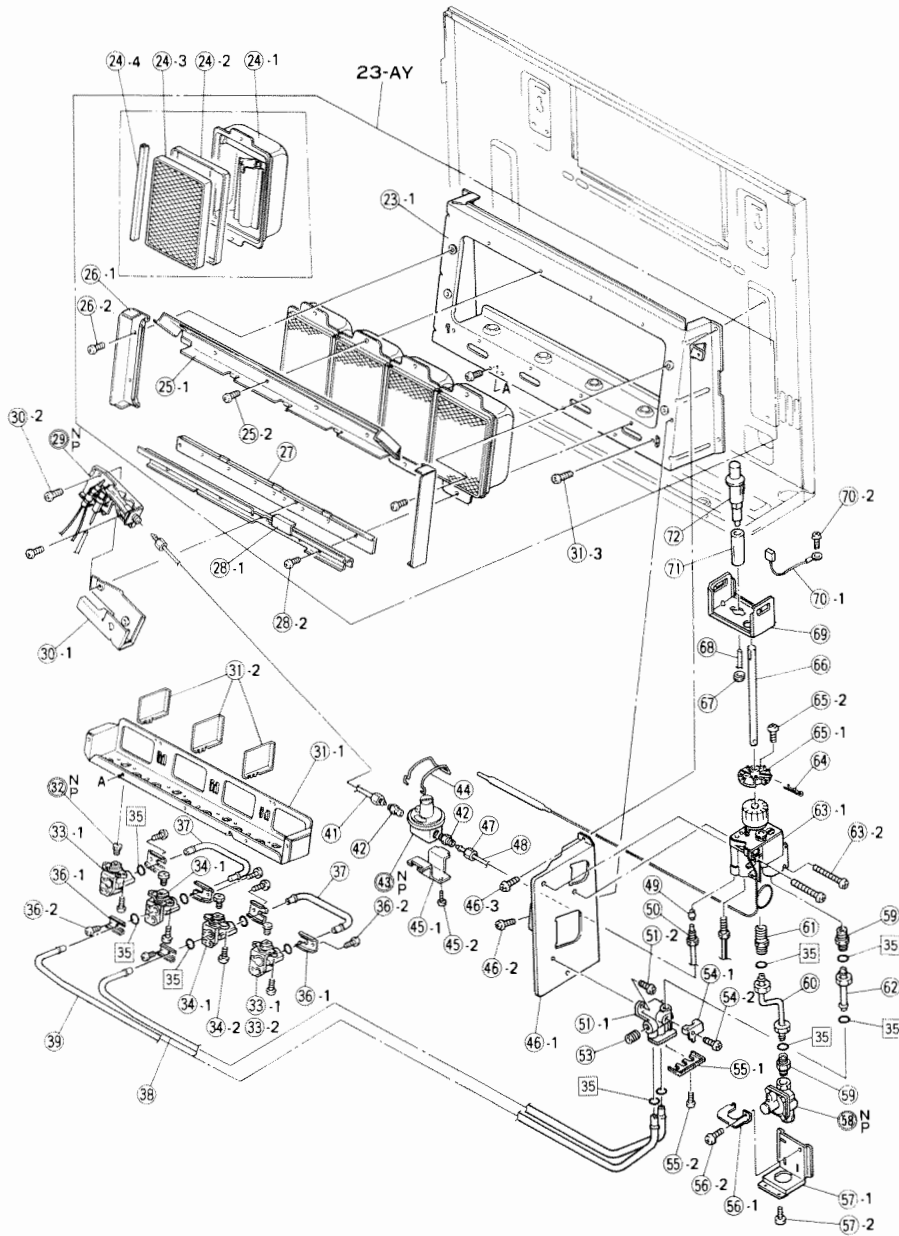
# SCHEMATIC DISASSEMBLY

Models: REH-20DT-N, REH-20DT-P, REH-30DT-N, REH-30DT-P

To determine any part number, please refer to the key number in the illustrated diagram.



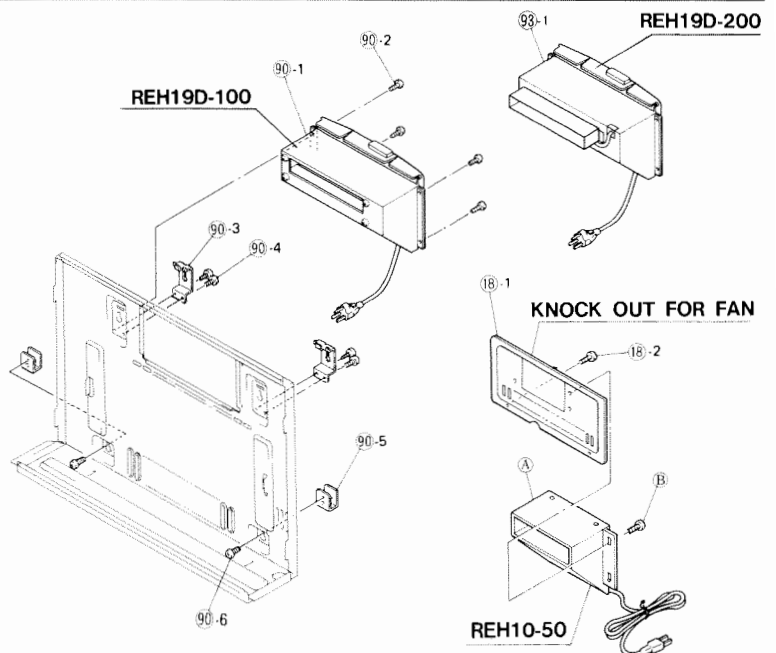
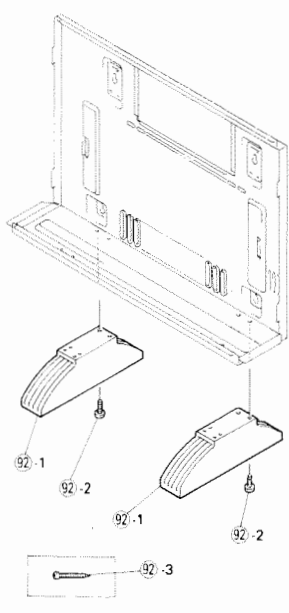
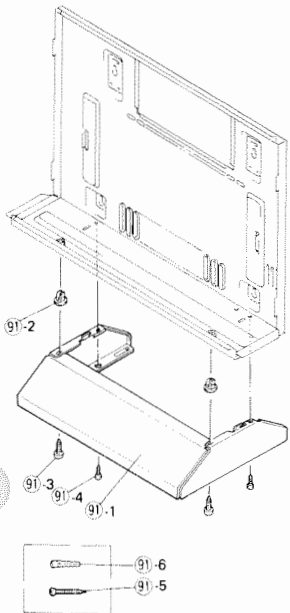




**BASE KIT REH19D-150B**

**BASE KIT SO-001-0714**

**FAN KITS REH19D-100/REH19D-200/REH10-50**



# PARTS LIST

To obtain or order parts, check with your nearest Rinnai dealer or distributor. If your dealer cannot supply you, contact Service Department of:  
 Rinnai America Corporation, 1662 Lukken Industrial Drive West, La Grange, Georgia 30240  
 Phone: 1-800-621-9419

## Models: REH-20DT-N, REH-20DT-P

ASSY No.	KEY No.	PART NAME	PART No.	QTY	
1-AY	1	CASING	REH19D-127-1	1	
	2	INSTRUCTION LABEL	REH15D-52	1	
	3-1	CONTROL BOX	REH300-301-2	1	
	3-2	CONTROL PANEL	REH19D-136	1	
	4	CONTROL KNOB ASS'Y	REH300-303-2	1	
	5	IGNITION BUTTON	REH15D-22	1	
	6	CAUTION LABEL	REH15D-60	1	
	7	CAUTION PLATE	REH19D-49-2	1	
8P		DATA PLATE	REH19D-140P	1	
	8N	DATA PLATE	REH19D-140N	1	
9	9-1	DIVIDE PANEL	REH19D-12	1	
	9-2	SCREW	ZEAB0408SB	4	
10	10-1	FRONT PANEL TOP	REH19D-13-2	1	
	10-2	SCREW	ZEAB0408SB	2	
	10-3	LOUVER	REH19D-14-2	1	
11-AY	11-1	REFLECTOR SIDE(R)	REH19D-18a	1	
	11-2	REFLECTOR SIDE(L)	REH19D-18b	1	
	11-3	REFLECTOR-BOTTOM	REH19D-19	1	
	11-4	REFLECTOR-TOP	REH19D-20	1	
	11-5	SCREW	ZEAA0408SC	14	
12		BURNER FRAME	REH19D-22-3	1	
	13-1	TRIM-TOP	REH19D-21-3	1	
	13-2	SCREW	ZEAB0408SB	2	
	13-3	SCREW	ZEAB0408SC	2	
14		GUARD	REH19D-46	1	
	16	SHIELD PANEL	REH19D-48a	1	
17-1		GUARD RETAINER PANEL	REH19D-66	1	
	17-2	SCREW	ZEAB0408SC	1	
18-1		BLIND PLATE	REH19D-24	1	
	18-2	SCREW	ZEAA0408SB	2	
19-1		REAR PANEL	REH19D-23	1	
	19-2	SCREW	ZEAB0408SB	2	
20-1		WIND PROTECTION PLATE-REAR	REH19D-25	1	
	20-2	SCREW	ZEAB0408SB	1	
	21	TRIM-TOP	REH19D-45	1	
22-1		FRONT PANEL	REH19D-42-2	1	
	22-2	NAME LABEL	REH19D-54-2	1	
	22-3	SCREW	ZEAB0408SC	3	
23-AY	23	BURNER-UNIT	REH19D-134	1	
	23-1	BRACKET-BURNER	REH19D-29	1	
	24-1	BURNER BODY	20SF-046	3	
	24-2	CERAMIC WOOL	CP-80037-31	3	
	24-3	CERAMIC TILE	LND-11810	3	
	24-4	BURNER DIVIDE PANEL	20SF-049	2	
	25-1	CERAMIC TILE RETAINER-TOP	REH19D-27	1	
	25-2	SCREW	ZEAB0408SZ	2	
	26-1	CERAMIC TILE RETAINER-SIDE	REH19D-53	2	
	26-2	SCREW	ZEAB0408SC	4	
	27	CERAMIC TILE RETAINER-BOTTOM	REH19D-28	1	
	28-1	DRAFT PREVENTION PLATE	REH19D-63	1	
	28-2	SCREW	ZEAB0408SZ	2	
	29-1		ODS PILOT FOR LPG	PC105-12P	1
		29N	ODS PILOT FOR NAT. GAS	PC105-12N	1
	30-1		PILOT BRACKET	REH6-46	1
30-2		SCREW	ZEAB0408SC	2	
31-1		AIR SUCTION	REH19D-30	1	
	31-2	DIVISION BOARD	REH19D-31	2	
	31-3	SCREW	ZEAB0408SC	6	
32-1		ORIFICE FOR LPG	BU101-307-077	3	
	32N	ORIFICE FOR NAT. GAS	BU101-307-121	3	
33-1		NOZZLE HOLDER D	REH210-70-4	1	
	33-2	NOZZLE HOLDER A	REH210-70-1	1	
34-1		NOZZLE HOLDER B	REH210-70-2	1	
	34-2	SCREW	ZEAB0410SZ	6	
35		O RING	M10B1-8	10	
	36-1	MAIN GAS TUBE RETAINER	REH210-79	4	
36-2		SCREW	ZHAA0408SZ	4	
	37	MAIN GAS TUBE C	REH19D-133	1	
38		MAIN GAS TUBE A	REH19D-131	1	
	39	MAIN GAS TUBE B	REH19D-132	1	
41		PILOT TUBE B	REH15D-41-3	1	
	42	BUSHING PILOT FEED PIPE	REH20-123	2	
43-1		PILOT REGULATOR ASS'Y	REH20-129-P	1	
	43N	PILOT REGULATOR ASS'Y	REH20-129-N	1	
	44	PILOT REGULATOR PIN	REH27D-32	1	
45-1		MOUNTING REGULATOR	REH27D-31	1	
	45-2	SCREW	ZEAB0408SZ	1	
46-1		CONTROL MOUNTING BRACKET	REH19D-128	1	
	46-2	SCREW	ZEAB0408SZ	4	
	46-3	SCREW	ZBA0406SB	4	
47		COMPRESSION NUT	RHF300-147	1	
	48	PILOT TUBE A	REH15D-40-2	1	
49		BALL SLEEVE	R2000-218	1	
	50	PIPE NUT	REH18-134	1	
51-1		MAIN GAS TUBE CONNECTOR	REH15D-15B	1	
	51-2	SCREW	ZEAB0410SZ	2	
53		BLIND SCREW	AU39-965	1	
	54-1	OUTLET TUBE RETAINER	CP-30488	1	
54-2		SCREW	ZHAA0408SZ	1	
	55-1	MAIN GAS TUBE BRACKET	REH15D-16	1	
55-2		SCREW	ZHAA0408SZ	1	
	56-1	GAS INLET RETAINER SUPPORT	REH19D-138	1	
56-2		SCREW	ZEAB0408SZ	1	
	57-1	GAS INLET RETAINER	REH19D-125	1	
57-2		SCREW	ZEAB0408SC	2	

## Models: REH-30DT-N, REH-30DT-P

ASSY No.	KEY No.	PART NAME	PART No.	QTY	
1-AY	1	CASING	REH27D-80-1	1	
	2	INSTRUCTION LABEL	REH15D-52	1	
	3-1	CONTROL BOX	REH300-301-2	1	
	3-2	CONTROL PANEL	REH19D-136	1	
	4	CONTROL KNOB ASS'Y	REH300-303-2	1	
	5	IGNITION BUTTON	REH15D-22	1	
	6	CAUTION LABEL	REH15D-60	1	
	7	CAUTION PLATE	REH19D-49-2	1	
8P		DATA PLATE	REH27D-85P	1	
	8N	DATA PLATE	REH27D-85N	1	
9-1		DIVIDE PANEL	REH27D-12	1	
	9-2	SCREW	ZEAB0408SB	4	
10-1		FRONT PANEL TOP	REH27D-13-2	1	
	10-2	SCREW	ZEAB0408SB	2	
	10-3	LOUVER	REH27D-14-2	1	
11-1		REFLECTOR-SIDE(R)	REH19D-18a	1	
	11-2	REFLECTOR-SIDE(L)	REH19D-18b	1	
	11-3	REFLECTOR-BOTTOM	REH27D-19	1	
	11-4	REFLECTOR-TOP	REH27D-20	1	
	11-5	SCREW	ZEAA0408SC	14	
12		BURNER FRAME	REH27D-22-3	1	
	13-1	TRIM-TOP	REH27D-21-3	1	
	13-2	SCREW	ZEAB0408SB	2	
	13-3	SCREW	ZEAB0408SC	2	
14		GUARD	REH27D-46	1	
	16	SHIELD PANEL	REH19D-48b	1	
17-1		GUARD RETAINER PANEL	REH19D-66	1	
	17-2	SCREW	ZEAB0408SC	1	
18-1		BLIND PLATE	REH19D-24	1	
	18-2	SCREW	ZEAA0408SB	2	
19-1		REAR PANEL	REH27D-23	1	
	19-2	SCREW	ZEAB0408SB	2	
20-1		WIND PROTECTION PLATE-REAR	REH19D-25	1	
	20-2	SCREW	ZEAB0408SB	1	
	21	TRIM-TOP	REH27D-45	1	
22-1		FRONT PANEL	REH27D-42-2	1	
	22-2	NAME LABEL	REH19D-54-2	1	
	22-3	SCREW	ZEAB0408SC	3	
23-AY	23	BURNER-UNIT	REH27D-83	1	
	23-1	BRACKET-BURNER	REH27D-29	1	
	24-1	BURNER BODY	20SF-046	4	
	24-2	CERAMIC WOOL	CP-80037-31	4	
	24-3	CERAMIC TILE	LND-14	4	
	24-4	BURNER DIVIDE PANEL	20SF-049	3	
	25-1	CERAMIC TILE RETAINER-TOP	REH27D-27	1	
	25-2	SCREW	ZEAB0408SC	4	
	26-1	CERAMIC TILE RETAINER-SIDE	REH19D-53	3	
	26-2	SCREW	ZEAB0408SC	4	
	27	CERAMIC TILE RETAINER-BOTTOM	REH27D-28	1	
	28-1	DRAFT PREVENTION PLATE	REH27D-63	1	
	28-2	SCREW	ZEAB0408SC	3	
	29-1		ODS PILOT FOR LPG	PC105-12P	1
		29N	ODS PILOT FOR NAT. GAS	PC105-12N	1
	30-1		PILOT BRACKET	REH6-46	1
30-1P		PILOT BRACKET	CP-50725	1	
30-2		SCREW	ZEAB0408SC	2	
	31-1	AIR SUCTION	REH27D-30	1	
	31-2	DIVISION BOARD	REH19D-31	3	
31-3		SCREW	ZEAB0408SC	7	
	32-1	ORIFICE FOR LPG	BU101-307-080	4	
32-2		ORIFICE FOR NAT. GAS	BU101-307-121	4	
	33-1	NOZZLE HOLDER D	REH210-70-4	2	
34-1		NOZZLE HOLDER B	REH210-70-2	2	
	34-2	SCREW	ZEAB0410SZ	8	
35		O RING	M10B1-8	12	
	36-1	MAIN GAS TUBE RETAINER	REH210-79	6	
36-2		SCREW	ZHAA0408SZ	6	
	37	MAIN GAS TUBE C	REH19D-133	2	
38		MAIN GAS TUBE A	REH27D-81	1	
	39	MAIN GAS TUBE B	REH27D-82	1	
41		PILOT TUBE B	REH15D-41-3	1	
	42	BUSHING PILOT FEED PIPE	REH20-123	2	
43-1		PILOT REGULATOR ASS'Y	REH20-129-P	1	
	43N	PILOT REGULATOR ASS'Y	REH20-129-N	1	
	44	PILOT REGULATOR PIN	REH27D-32	1	
45-1		MOUNTING REGULATOR	REH27D-31	1	
	45-2	SCREW	ZEAB0408SZ	1	
46-1		CONTROL MOUNTING BRACKET	REH19D-128	1	
	46-2	SCREW	ZEAB0408SZ	4	
	46-3	SCREW	ZBA0406SB	4	
47		COMPRESSION NUT	RHF300-147	1	
	48	PILOT TUBE A	REH15D-40-2	1	
49		BALL SLEEVE	R2000-218	1	
	50	PIPE NUT	REH18-134	1	
51-1		MAIN GAS TUBE CONNECTOR	REH15D-15B	1	
	51-2	SCREW	ZEAB0410SZ	2	
53		BLIND SCREW	AU39-965	1	
	54-1	OUTLET TUBE RETAINER	CP-30488	1	
54-2		SCREW	ZHAA0408SZ	1	
	55-1	MAIN GAS TUBE BRACKET	REH15D-16	1	
55-2		SCREW	ZHAA0408SZ	1	
	56-1	GAS INLET RETAINER SUPPORT	REH19D-138	1	
56-2		SCREW	ZEAB0408SZ	1	
	57-1	GAS INLET RETAINER	REH19D-125	1	
57-2		SCREW	ZEAB0408SC	2	

ASSY No.	KEY No.	PART NAME	PART No.	QTY
58	58P	GAS INLET REGULATOR	REH18-152-P	1
	58N	GAS INLET REGULATOR	REH18-152-N	1
	59	NIPPLE A	REH18-139-1	1
	60	GAS INLET TUBE	REH19D-130	1
	61	NIPPLE C	REH18-139-3	1
	62	OUTLET TUBE A	REH15D-30	1
63	63-1	SIT CONTROL ASS'Y	REH18-151	1
	63-2	SCREW	ZAA0555SZ	2
64	64	SNAP PIN	ZTC1.2SZ	1
	65-1	CONTROL ADAPTER	REH300-227	1
65	65-2	SCREW	ZEAA0310SZ	2
	66	CONTROL SHAFT	REH15D-23-2	1
67	HIGH TENSION CORD	8581-82	1	
68	PIEZO WIRE ASS'Y	REH18-131-2	1	
69	IGNITER RETAINER	REH19D-126	1	
70	70-1	EARTH CORD	REH18-132	1
	70-2	SCREW	ZEAB0408SZ	1
71	SILICON TUBE	REH18-173	1	
72	IGNITER	REH18-155	1	
73	ROD HOLDER	CP-90347-9	1	
80	80-1	SCREW	CP-30413	4
	80-2	CAULKING PLUG	CP-30414	4

### BASE KIT REH19D-150B (OPTION)

ASSY No.	KEY No.	PART NAME	PART No.	QTY
91-AY		BASE KIT	REH19D-150B	1
	91-1	BASE ASS'Y	REH19D-155-2	(1)
	91-2	PLASTIC GROMMET	CP-30415	(2)
	91-3	SCREW	ZEAD0510SC	(2)
	91-4	SCREW	ZEAB0408SB	(2)
	91-5	SCREW	CP-30413	(2)
	91-6	ANCHOR	CP-30414	(2)

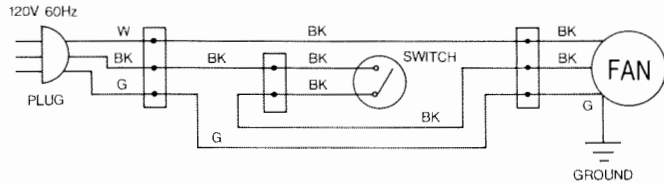
### FAN KIT REH19D-100 (OPTION)

ASSY No.	KEY No.	PART NAME	PART No.	QTY
90-AY		FAN KIT	REH19D-100	1
	90-1	FAN UNIT	REH19D-101	(1)
	90-2	SCREW	ZEAC0408SC	(4)
	90-3	WALL MOUNTING BRACKET-UPPER	REH18-66	(2)
	90-4	SCREW	ZEAC0408SC	(4)
	90-5	WALL MOUNTING BRACKET-LOWER	REH18-67	(2)
	90-6	SCREW	ZEAC0408SC	(2)

"Caution: Label all wires prior to disconnection when servicing controls. Wiring errors can cause improper and dangerous operation."  
 "Verify proper operation after servicing."

## WIRING DIAGRAM

(for Optional Fan Kit No. REH19D-100)



If any of the original wire as supplied with the appliance must be replaced, it must be replaced with wire of at least a 194°F temperature rating and No. 18AWG wire or its equivalent.

ASSY No.	KEY No.	PART NAME	PART No.	QTY
58	58P	GAS INLET REGULATOR	REH18-152-P	1
	58N	GAS INLET REGULATOR	REH18-152-N	1
	59	NIPPLE A	REH18-139-1	1
	60	GAS INLET TUBE	REH19D-130	1
	61	NIPPLE C	REH18-139-3	1
	62	OUTLET TUBE A	REH15D-30	1
63	63-1	SIT CONTROL ASS'Y	REH18-151	1
	63-2	SCREW	ZAA0555SZ	2
64	64	SNAP PIN	ZTC1.2SZ	1
	65-1	CONTROL ADAPTER	REH300-227	1
65	65-2	SCREW	ZEAA0310SZ	2
	66	CONTROL SHAFT	REH15D-23-2	1
67	HIGH TENSION CORD	8581-82	1	
68	PIEZO WIRE ASS'Y	REH18-131-2	1	
69	IGNITER RETAINER	REH19D-126	1	
70	70-1	EARTH CORD	REH18-132	1
	70-2	SCREW	ZEAB0408SZ	1
71	SILICON TUBE	REH18-173	1	
72	IGNITER	REH18-155	1	
73	ROD HOLDER	CP-90347-9	1	
80	80-1	SCREW	CP-30413	4
	80-2	CAULKING PLUG	CP-30414	4

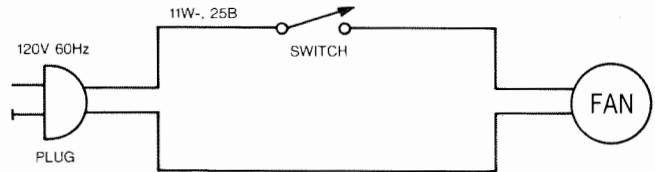
### BASE KIT SO-001-0714

ASSY No.	KEY No.	PART NAME	PART No.	QTY
92-AY		BASE KIT		
	92-1	BASE	SO-001-0461	2
	92-2	SCREW	ZEAB0408SZ	8
	92-3	SCREW	ZEAB3.532SZ	2

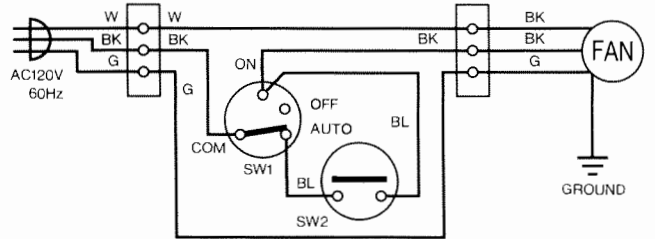
### FAN KIT REH19D-200 (OPTION)

ASSY No.	KEY No.	PART NAME	PART No.	QTY
93-AY		FAN KIT	REH19D-200	1
	93-1	FAN UNIT	REH19D-199	(1)
	90-2	SCREW	ZEAC0408SC	(4)
	90-3	WALL MOUNTING BRACKET-UPPER	REH18-66	(2)
	90-4	SCREW	ZEAC0408SC	(4)
	90-5	WALL MOUNTING BRACKET-LOWER	REH18-67	(2)
	90-6	SCREW	ZEAC0408SC	(2)

(for Optional Fan Kit No. REH10-50)



(for Optional Fan Kit No. REH19D-200)



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## LIMITED WARRANTY RINNAI SPACE HEATERS

Rinnai America Corporation warrants the products described in this warranty, including any parts and components thereof, to be free from any defects in materials and workmanship for the period specified below, subject to the terms specified in this warranty. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state. This warranty extends to the original purchaser.

MODEL	PERIOD OF COVERAGE	TYPE OF FAILURE COVERED
GLO-RAY REH-15DF, REH-15DFT GLO-RAY REH-23DF, REH-23DFT	FIVE YEARS FROM DATE OF PURCHASE	DEFECTIVE MATERIALS AND WORKMANSHIP
TROPIC REH-20D, REH-20DT TROPIC REH-30D, REH-30DT	FOUR YEARS FROM DATE OF PURCHASE	DEFECTIVE MATERIALS AND WORKMANSHIP
BANTAM REH-18, REH-18T BANTAM REH-25, REH-25T	THREE YEARS FROM DATE OF PURCHASE	DEFECTIVE MATERIALS AND WORKMANSHIP
EQUATOR REH-6, REH-6T EQUATOR REH-10, REH-10T	THREE YEARS FROM DATE OF PURCHASE	DEFECTIVE MATERIALS AND WORKMANSHIP

In the event of a malfunction, operational difficulty or failure of the product, or any parts or components, during the warranty term, resulting from defects in materials or workmanship, Rinnai will remedy the malfunction, operational difficulty, or failure without charge to the owner. The remedy will consist of repair or replacement of the product (including payment of reasonable shipping costs), at the option of Rinnai. You may obtain the benefits of warranty coverage by returning the product to a qualified Rinnai servicing agent which has been qualified by Rinnai or its authorized distributor. Any such warranty replacement or repair shall be subject to the terms and conditions of this warranty for the remainder of the original period of coverage. In order to obtain the name and location of the qualified Rinnai servicing agent closest to you, please write Rinnai at the address shown on the back side of the warranty card, or call Rinnai at 1-800-621-9419.

This warranty does not cover any failures, operational difficulty, or malfunction due to accident, abuse, misuse, alteration, Acts of God, misapplications, improper installation or improper maintenance or service, or from any other cause other than defects in materials and workmanship.

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EXTENDED WARRANTY AVAILABLE SEE WARRANTY

### Rinnai SPACE HEATER WARRANTY REGISTRATION CARD

Owner's Name \_\_\_\_\_  
 Installation Address \_\_\_\_\_  
 City, State, Zip \_\_\_\_\_  
 Dealer's Name \_\_\_\_\_  
 Address \_\_\_\_\_  
 City, State, Zip \_\_\_\_\_  
 Type of Dealer \_\_\_\_\_  
 Model \_\_\_\_\_ Type of Gas \_\_\_\_\_  
 Serial No. \_\_\_\_\_  
 Date Purchased \_\_\_\_\_

## Rinnai

AMERICA CORPORATION  
 103 International Drive,  
 Peachtree City, Georgia 30269  
 Phone: 1-800-621-9419  
 Fax: 1-888-474-6624

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