

**HOME OWNER / INSTALLER
FOR YOUR SAFETY**
THIS MANUAL MUST BE READ IN ITS
ENTIRETY BEFORE OPERATING HEATER



**FS35ETRBN/US FS35ETRSN/US
FS35ETRBL/US FS35ETRSL/US
Gas Radiant Space Heater
Owners Operation and Installation Manual**

WARNING: If the information in these instructions are 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 heater has been designed to code ANSI Z 21.88a-2000 effective 7-1-2002

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.

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

Rinnai

LIMITED WARRANTY

RINNAI FIREPLACE HEATER

WHAT IS COVERED?

This Warranty covers any defects in materials or workmanship, subject to the terms stated below. This Warranty extends to the original purchaser and subsequent transferees, but only while the product remains at the site of the original installation. This Warranty only extends through the first installation of the product and terminates if the product is moved or reinstalled at a new location.

HOW LONG DOES COVERAGE LAST?

Item	Period of Coverage
<i>All Parts and Components</i>	<i>2 Years from Date of Purchase</i>

WHAT WILL RINNAI DO?

Rinnai will repair or replace the product or any part or component that is defective in materials or workmanship, except as set forth as follows. Rinnai will pay reasonable shipping costs, provided you obtain prior authorization from an Authorized Rinnai Distributor. Rinnai will not pay labor charges associated with the repair or replacement of the product or any part or component. All repair parts must be genuine Rinnai parts. All repairs or replacements must be performed by an individual or servicing company that has been authorized by Rinnai or its distributor.

Replacement of the product or replacement of the heat exchanger may be authorized by Rinnai only. Rinnai does not authorize any person or company to assume for it any obligation or liability in connection with the replacement of a product or heat exchanger. If Rinnai determines that repair of a product is not possible, Rinnai will replace the product with a comparable product, at Rinnai's discretion.

HOW DO I GET SERVICE?

You must contact an Authorized Distributor or Installer for the repair of a defective product under this Warranty. Failure to contact an Authorized Distributor or Installer will void the Warranty. For the name of the Authorized Distributor or Installer nearest you, please contact your local HVAC dealer or gas service technician, visit the Rinnai website (www.rinnai.us), call Rinnai at 1-800-621-9419 or write to Rinnai, 103 International Drive, Peachtree City, Georgia 30269.

Proof of purchase is required. You can show proof of purchase with a dated sales receipt, or by completing and mailing the enclosed Warranty registration card within 30 days of purchasing the product. Please complete the enclosed Warranty registration card and mail it to Rinnai at the address shown on the card. Receipt of this card by Rinnai will constitute proof-of-purchase for this product. However, return of this Warranty registration card is not necessary in order to validate this Warranty.

WHAT IS NOT COVERED?

This Warranty does not cover any failures or operating difficulties due to accident, abuse, misuse, alteration, misapplication, force majeure, improper installation, improper maintenance or service, or for any other causes other than defects in materials or workmanship. This warranty does not apply to any product whose serial number or manufacture date has been defaced.

Rinnai is not liable for any special, incidental, indirect or consequential damages that may arise, including damage to person or property, loss of use, or inconvenience. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation may not apply to you.

LIMITATION ON IMPLIED WARRANTIES

Any implied warranties of merchantability and fitness arising under state law are limited in duration to the period of coverage provided by this limited Warranty, unless the period provided by state law is less. Some states do not allow limitations on how long an implied Warranty lasts, so the above limitation may not apply to you.

This Warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

WARNING

IMPROPER INSTALLATION, ADJUSTMENT, ALTERATION, SERVICE OR MAINTENANCE CAN CAUSE PROPERTY DAMAGE, PERSONAL INJURY OR LOSS OF LIFE.

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

This manual applies to the following models only:

FS35ETRBN/US

FS35ETRSN/US

FS35ETRBL/US

FS35ETRSL/US

Freestanding Fire ETR Electronic Timer Remote Table of Contents

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CONTACTS

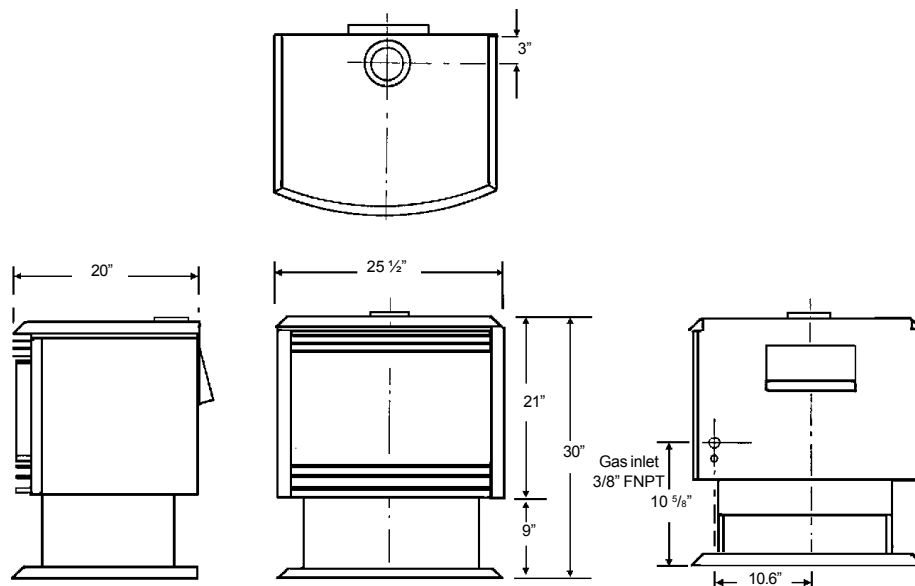
Rinnai

America Corporation	1-800-621-9419
103 International Drive	www.rinnai.us
Peachtree City	
Georgia 30269	

SPECIFICATIONS

Model:	FS35ETRBN/US, FS35ETRSN/US (NG) United States FS35ETRBL/US, FS35ETRSL/US (Propane) United States
Description:	Freestanding radiant/convector, glass-fronted, ceramic log space heater with forced convection and natural draft flue system
Output:	24,000 Btu/hr Natural Gas 22,000 Btu/hr Propane
Gas Control:	Electronic control valve
Burners:	Ember bed, flame and heat burner
Warm Air Discharge:	Top front louvres
Flue:	Natural draft. Approved 4" B vent system
Ignition:	Electronic spark
Power Supply:	115v. 60Hz
Rating Plate Location:	Bottom right hand side of pillar
Weight:	141 lb

DIMENSIONS



IMPORTANT POINTS / USAGE AND INSTALLATION MUSTS

Unpack the heater and check for damage (DO NOT INSTALL DAMAGED HEATER). If the heater is damaged, contact your supplier for advice. Before installing the heater, check the label for the correct gas type (see rating plate, bottom right hand side of pillar). Refer to local gas authority for confirmation of the gas type if you are in doubt.

Included in the carton

Customer operation information

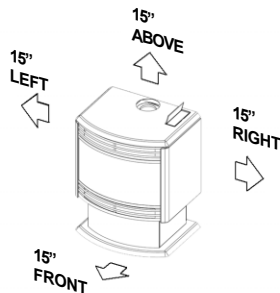
IMPORTANT Before using this product, please read this manual carefully to make sure of proper use of the product:

- 1 The installation must conform with local codes, or in the absence of local codes, the National Fuel Gas Code, ANSI Z223.1, or the Canadian Installation Code, CAN/CGA -B149.
- 2 For information on gas type see the data plate on the appliance.
- 3 This heater must not be installed where curtains or other combustible materials could come into contact with it. In some cases curtains may need restraining.
- 4 This is a freestanding appliance designed for installation with a vertical flue only.
- 5 If you move, check the gas type in the area where you are moving to. The local gas authority will be able to advise on local regulations.
- 6 This heater discharges a large volume of warm air to provide even heat distribution. If the air in the room contains cooking vapor or cigarette smoke, and the heater is used on a carpet, the surface of the carpet may become discolored. In addition, some nylon carpets contain dyes which may be affected by the warm air flow. Some soft vinyl surfaces are also subject to distortion, or discoloration by warm air. To prevent discoloration of carpets, etc., a mat should be placed in front of the appliance, extending about 30" in front of it.
- 7 This heater may be installed directly onto carpet
- 8 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.
- 9 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.
- 10 **WARNING:** Any change to this heater or its controls can be dangerous.
- 11 If a gas leak is suspected, turn heater off, turn gas supply valve off at appliance connector valve. Open windows to ventilate area immediately and contact your dealer or gas company.
- 12 **DO NOT PLACE CLOTHING OR FLAMMABLE MATERIALS, GASOLINE AND OTHER FLAMMABLE VAPORS AND LIQUIDS, ON OR NEAR THE HEATER.**
- 13 Do not spray aerosols when the heater is in operation.
- 14 **YOUNG CHILDREN SHOULD BE CAREFULLY SUPERVISED WHEN THEY ARE IN THE SAME ROOM WITH THE HEATER.**
- 15 LPG containers must not be installed indoors.
- 16 Do not use this appliance 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.

- 17 Adequate clearances for accessibility for purposes of servicing and proper operation should be provided.
- 18 Adequate clearances around air openings into the combustion chamber should be provided.
- 19 Do not install in areas where curtains, drapes, clothing, or other moving flammables are within 15 inches of this unit.

Diagram shows minimum clearances from combustible materials



- 20 Periodic examination of the venting system is required.
- 21 The flow of combustion and ventilation air should not be obstructed.
- 22 A manufactured home (USA only) or mobile home OEM installation must conform with the Manufactured Home Construction and Safety Standard, *Title 24CFR, Part 3280*, or, when such a standard is not applicable, the Standard for *Manufactured Home Installations, ANSI/NCSBCS A225.1* or Standard for *Gas Equipped Recreational Vehicles and Mobile Housing, CSA Z240.4*.
- 23 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 (3.5 kPa).

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

- 24 The draft hood on the appliance should be installed in the same atmospheric pressure zone as the combustion air inlet to the appliance and shall be located so that the relief opening is accessible for checking vent operation.
- 25 The appliance, when installed, must be electrically grounded in accordance with local codes or, in the absence of local codes, with the *National Electrical Code, ANSI/NFPA 70*, or the *Canadian Electrical Code, CSA C22.1*
- 26 A gas appliance must not be connected to a chimney flue serving a solid fuel burning appliance.
- 27 Do not restrict the warm air discharge by placing articles in front of heater.
- 28 This appliance must not be used for any purpose other than heating.
- 29 Do not allow anyone to post articles through the louvers.
- 30 Do not allow anyone to sit or lean against the appliance.
- 31 DUE TO HIGH TEMPERATURES, THE APPLIANCE SHOULD BE LOCATED OUT OF TRAFFIC AND AWAY FROM FURNITURE AND DRAPERIES.
- 32 CHILDREN AND ADULTS SHOULD BE ALERTED TO THE HAZARDS OF HIGH SURFACE TEMPERATURES AND SHOULD STAY AWAY TO AVOID BURNS OR CLOTHING IGNITION.
- 33 CLOTHING OR OTHER FLAMMABLE MATERIAL SHOULD NOT BE PLACED ON OR NEAR THE APPLIANCE.
- 34 INSTALLATION AND REPAIR SHOULD BE DONE BY A QUALIFIED SERVICE PERSON. THE APPLIANCE 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, ET CETERA. IT IS IMPERATIVE THAT CONTROL

COMPARTMENTS, BURNERS AND CIRCULATING AIR PASSAGEWAYS OF THE APPLIANCE ARE KEPT CLEAN.

- 35 The glass window shall be replaced as one piece as supplied by the manufacturer. See log and glass installation on page 15.
- 36 Do not substitute glass, glowing embers or logs. Use only glass, glowing embers and logs supplied by manufacturer.
- 37 Caution: Do not operate unit with broken glass.

38 WARNING: DO NOT OPERATE APPLIANCE WITH THE FRONT REMOVED, CRACKED OR BROKEN. REPLACEMENT OF THE GLASS SHOULD BE DONE BY A LICENSED OR QUALIFIED SERVICE PERSON.

39 WARNING: Electrical grounding instructions. This appliance 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. Do not cut or remove the grounding prong from this plug.

TECHNICAL SPECIFICATIONS

		Natural Gas	Propane
Gas Input Rate:		Btu/hr	Btu/hr
	Pilot:	200	200
	Low:	11,000	9,000
	High:	32,000	29,000
Minimum permissible gas supply pressure for purpose of input adjustment		WC	WC
	Min:	7"	10"
	Max:	10.5"	13"
Gas Connection:	3/8" FNPT		
Flue Termination:	An approved 4" vent cap must be fitted to all installations		
Fan:	90 Watt 2 speed tangential		
Combustion System:	Multi port burner and ceramic logs		
Ignition System:	Continuous spark electronic ignition		
Operation:	Finger touch control buttons or remote control		
Temperature control:	Electronic thermostat High~Low / Off Flame picture select option Up / Down buttons		
Temperature range:	Low = 50°F, 60°F~80°F, High 97°F		
Safety Devices:	Flame failure- flame rod Over heat - thermistors, thermal fuse Power surge - 3 amp fuse Room overheat - Automatic cut off at 104°F after 10 minutes		
Fan delay	Micro computer timer		
Combustion Method:	Naturally aspirated burner		
Flue Type:	Approved 4" B vent system		
Heat transfer:	Direct radiation and forced convection		
Installation Type:	Free standing		
Flue Requirement:	Manufacturers minimum, 10 ft vertical. <i>Local codes may have a greater requirement and must be followed</i>		

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 is equipped with an ignition device which automatically ignites the pilot. Do not try to light the pilot 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.

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 suppliers instructions.

- If you cannot reach your gas supplier call the fire dept.

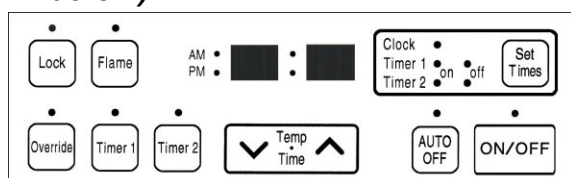
C. Use only your hand to push the gas control buttons. Never use tools. If the buttons will not activate by hand, don't try and repair it, call a qualified service technician. Force or attempted repair may result in a fire or an explosion.

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.

OPERATING INSTRUCTIONS

STOP Read the safety information above.

- **To turn the unit on (refer diagram below)**



Do not attempt to light the pilot by hand.

Wait for five minutes to clear out any gas. Then smell for gas, including near the floor. If you smell gas, STOP! Follow "B" in the safety information above. If you don't smell gas, go to the next step.

Press the On / Off button. This operates the ignition sequence.

If the appliance does not light it will automatically turn off.

To re-attempt ignition, press the On / Off button again.

- **To adjust the heat**

Press the "▲" and "▼" buttons to increase and decrease the room temperature setting.

- **To turn the unit off**

Press the On /Off button. The appliance will turn off.

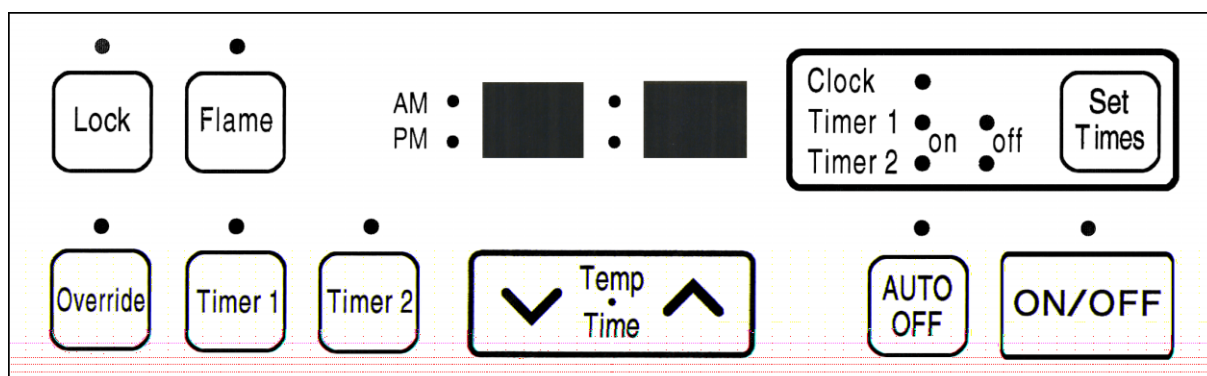
If the appliance will not operate; follow the instructions "to turn off the gas to appliance" and call your service technician or gas supplier.

TO TURN OFF GAS TO APPLIANCE

Turn off the appliance by operating the On/ Off button and turn off the power at the wall switch.

Disconnect the electric plug. This will isolate the gas supply and prevent the solenoid valve from opening.

CONTROL PANEL LAYOUT



For your convenience the controls on your new Flame Fire are situated under the cover on the top right-hand side of the fire and are accessed by simply lifting the lid. All necessary adjustments to the operation of your fire can be made with these controls.

OPERATION

• TURNING ON

Press the ON/OFF button to operate the unit. The ON indicator will glow green. The spark generator will be heard before the burner ignites and the ON indicator glows red, indicating that the burner is alight. Warm air can be felt coming from the louvres. The fan will come on automatically after 4 minutes.

If the unit does not ignite on initial use this may be due to air remaining in the gas supply line. The spark generator will only continue for 15 seconds. After this it will be necessary to press the ON/OFF button OFF, then ON again.

• TURNING OFF



Simply press the ON/OFF button to switch off the unit. The ON indicator will go out. The convection fan will continue to operate for several minutes after the burner has gone out in order to cool the appliance.

Do not turn off the heater by unplugging it from the wall. Do not unplug the heater while the convection

fan is running.

• ROOM TEMPERATURE ADJUSTMENT

The room temperature and preset temperatures are only displayed and adjustable while the heater is running.

Press the “” button to increase the temperature setting or “” button to decrease the temperature setting. The temperatures can be preset to:

- [L] low (50°F)
- [61°F] to [79°F] in 1°F steps
- [H] (97°F)

Once the pre-set temperature has been reached the burners will cycle between high and low (or high and pilot only depending on the auto off setting).

• LOCK

The LOCK function will help prevent accidental operation of the controls.

LOCK is activated by pressing the button and the LOCK indicator will glow. To

deactivate the LOCK press and hold the button for 3 seconds until the indicator goes off.

During normal operation the LOCK may be activated and all controls, other than the OFF switch, will be locked. Deactivating the LOCK releases the controls.

If the LOCK is activated while the unit is turned OFF, then all functions will be locked including the ON/OFF function. If the unit is turned OFF while the LOCK is activated, it cannot be turned ON again until the LOCK is deactivated.

- **FLAME**

To operate the FLAME function, press the FLAME button. This function will automatically override the thermostat and set the unit to a default Medium High heat setting for full visual flame effect.

- **AUTO OFF**

AUTO OFF is activated by pressing the button and the AUTO OFF indicator will glow when on.

When the AUTO OFF function is on and the room temperature reaches or exceeds the pre-set temperature then the burners will reduce to pilot only.

When the AUTO OFF is off then the burners will reduce to the front (ember) burner and pilots.

- **SETTING THE CLOCK**

When the appliance is first plugged in or after a power failure, the Digital Display will show **--:--**.

Press the SET TIMES button once, the Clock indicator will flash. Press and hold the "**▲**" or "**▼**" button, the minutes will begin to count up or down until they reach 00, the time will now change by one hour increments.

Release the button when the correct hour shows on the Digital Display. Confirm that

you have selected AM or PM as required, a small indicator on the left hand side of the Digital Display indicates the AM/PM setting.

Use the buttons again to set the minutes. Scroll up or down using the buttons until the correct time is reached.

Press the TIMER SET button five times to lock in the time. The CLOCK and TIMER indicators will go out. A small indicator on the digital display will flash to show that the clock is operating.

- **TIMERS / PREHEAT**

This heater has two programmable timers, these allow you to set a start and finish time. The temperature is preset each time the timers are activated.

There is also a preheat function that measures the temperature of the room and estimates the time it will take to bring the room up to the preset temperature by the programmed start time.

This means that the heater may start heating an hour or more before the programmed start time.

- **PROGRAMMING THE ON / OFF TIMERS**

Before programming the Timers you must ensure that the clock has been set to the correct time.

Press the SET TIMES button twice. The digital display will show AM 6:00 and the TIMER 1 - ON indicator will flash.

Set the desired start time the same way as for setting the clock. Be aware that the heater may start up much earlier than the programmed start time due to the preheat function, as explained earlier.

Press the SET TIMES button again, the TIMER 1 - OFF indicator will flash.

Set the desired stop time the same way as for setting the clock.

Press the SET TIMES button once to

proceed to TIMER 2 - which is programmed in the same way - or three times to return to the clock display. This must be done within 1 minute of setting the time to lock it into the memory.

The digital display will show the current time. A small indicator on the digital display will flash to show that the display has returned to the clock.

After setting timer 2 the SET TIMES button must be pressed once within one minute of programming to lock in the times and return to the clock display.

The timers operate over a 24 hour period, and will activate 7 days a week when set.

• OPERATING THE TIMERS

Before operating the timer(s), the clock time must be correct and a starting time and finishing time for the timer(s) must be programmed, see *page 10*. Both timers operate in the same way.

Ignite the heater and select the preset temperature as for normal operation.

Press the timer 1 and / or timer 2 button(s). The timer indicator(s) will glow and the unit will change to stand-by mode. The burners will extinguish and the ON indicator will change from red to green. The display will show the start time for the selected timer briefly before returning to the clock display.

When the heater is in stand-by mode, you can display and change the clock and the on and off times for both timers in the same way as described earlier.

The timers can be deactivated by either pressing the timer button(s) that you want to deactivate or by turning the heater off using the ON/OFF button.

NOTE: If there is a power failure, the system memory will retain the Timer programs, and the clock will stop at the time the power goes off. The clock will start

again when the power comes back on, but the time will be slow by the duration of the power failure. To set the clock to the correct time after the power has come back on, simply follow the instructions on page 10.

• OVERRIDE

This function is intended to be used to manually override the current operation of the heater. For example; If the heater is in stand-by mode (ie. between finishing time and starting time of a timer), and the OVERRIDE button is selected, then the heater will begin to operate and heat the room.



Press the OVERRIDE button to activate. The indicator light will flash when active.

To manually deactivate the OVERRIDE press the OVERRIDE button again. The OVERRIDE indicator will go out, and the heater will return to stand-by mode.

The heater will continue to operate on OVERRIDE until the OVERRIDE button is pressed again, or one of the timers takes over the operation of the heater. This means that the OVERRIDE mode will automatically turn off if a programmed starting time is reached. The heater will then return to operating at times programmed into the timer(s). Turning the heater off will also deactivate the OVERRIDE.

• REMOTE CONTROL

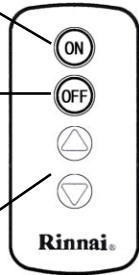
The remote control can only be used for manual operation of the heater. If the heater is in stand-by (timer) mode then only the OFF button will work. Pressing the OFF button when the heater is in stand-by mode will deactivate the timers and the heater can now be operated manually.

The ON and OFF buttons on the remote work in the same way as the ON / OFF button on the control panel as do the “” and “” buttons.

ON BUTTON
Operates the unit manually.

OFF BUTTON
Stops unit manually.

TEMPERATURE ADJUSTMENT
Increases or decreases the temperature setting.



NOTE: Some fluorescent lights may interfere with the transmission of remote control signals, in this case changing the position from which you are operating the remote control may help.

Avoid getting the remote control wet, or dropping it.

The remote control works within 15 feet and an angle of 40° to the receiver on the unit.

• TO REPLACE REMOTE CONTROL BATTERY

The battery is held in a clip that slides out the bottom of the remote control. The clip is removed by inserting a coin or similar into the recess in the back of the remote control and sliding downwards.

The battery must be of type CR 2032 and will only operate if installed the right way up, as shown below.

Remove the battery if the remote control is not going to be used for a long period. This will help avoid damage from leaking batteries.

— **REMOTE CONTROL BACK**

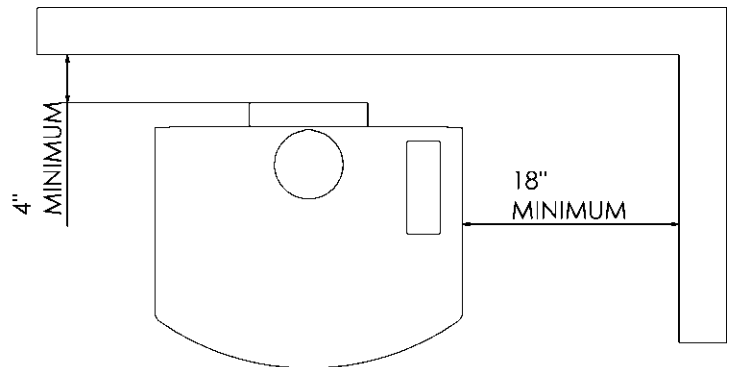
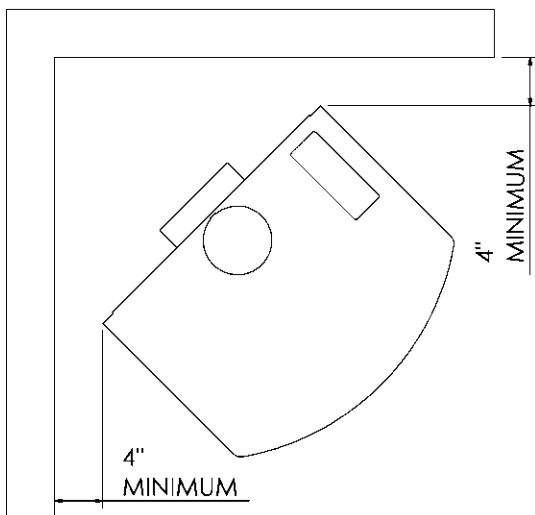
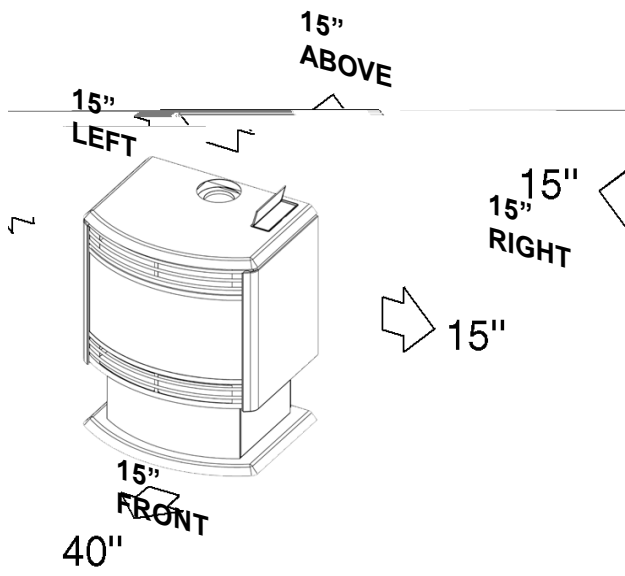
— **BATTERY**
Note the + side of the battery is facing the rear of the remote control

LOCATION

When positioning the heater, the main points governing the location are:

1. Flue connection and proper venting
2. Warm air distribution.
3. Adequate air supply.
4. The heater must not be installed where curtains or other combustible materials could come into contact with it. In some cases, curtains may need restraining.
5. The heater is not designed to be built into bookcases or shelves or any combustible opening.
6. Check that room ventilation complies with local regulations.
7. Installation location shall provide adequate combustion and ventilation air.
8. A gas appliance must not be connected to a chimney flue serving a separate solid-fuel burning appliance.

See below for minimum clearances required.



VENTING

Use only an approved B vent system

- Position the heater.
- Suspend a plumbline from the ceiling to the centre of the flue socket.
- Mark the centre of the flue in the ceiling.
- Make a small hole in the ceiling and double check that the flue system will be at least 1" clear of combustible materials.
- Cut the hole for the flue.
- Fit the ceiling plate, flue and decorative cover.

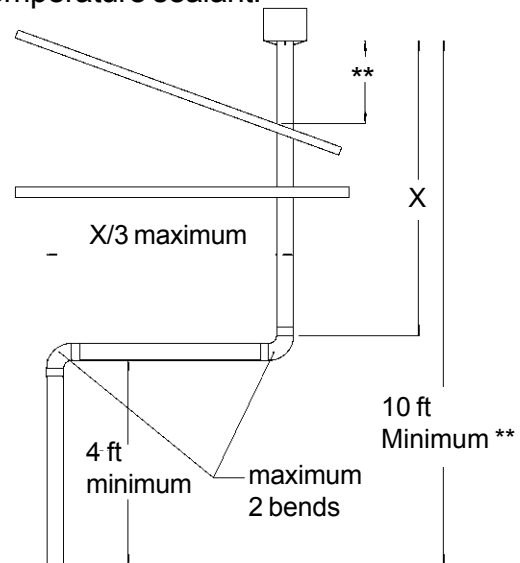
The decorative cover must be able to slide up to give access to the flue collar. The inner flue must be supported independently of the heater but allowing sufficient movement to allow connections to and disconnections from the flue collar.

It is recommended that the flue be installed vertically only. If installation prevents this then there must be at least 4 feet of vertical flue before any bends. The flue must not fall below

horizontal at any stage. There must not be more than 2 bends in any system. Any horizontal section of flue must be less than 1/3 the length of vertical flue which follows it.

See below diagram

An approved B vent system must be attached by mechanical means to the flue spigot and sealed using an approved high temperature sealant.



** Refer to local codes for other minimum requirements.

GAS CONNECTION

• RUN GAS SUPPLY

For pipe sizing, refer to your local gas installation codes.

• PURGE SUPPLY OF AIR AND DEBRIS

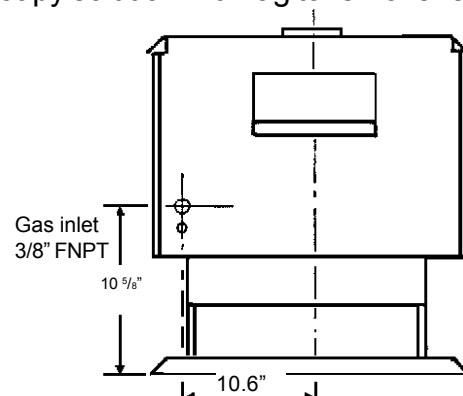
All foreign materials such as filings must be purged from the gas supply, as they may cause the gas valve to malfunction.

A means to measure the gas pressure immediately upstream of the supply connection to the appliance shall be provided by the installer.

Connect and tighten union.

On completion of work, check for gas leaks.

Use a soapy solution all gas connections. Leaks will be visible when the soapy solution forms bubbles. When finished wipe soapy solution with rag to remove residue.



LOG INSTALLATION

The logset is packed inside the unit and the packaging must be removed prior to installing the logset in its correct position.

- Open both side panels.
- Remove fasteners on both sides of the top glass retainer.
- Lift retainer away from unit.
- Loosen screws on bottom glass retainer.
- Carefully lift glass out of bottom channel.
- Carefully remove log packaging.

The logset has two holes underneath for location onto the pins inside the unit.

Place the logset into the unit ensuring that the locating pins enter the two locating holes on the bottom face of the logset.

Gently place loose ember bed material in front of the front log only. Do not pour as dust particles from the plastic bag may block the burner ports.

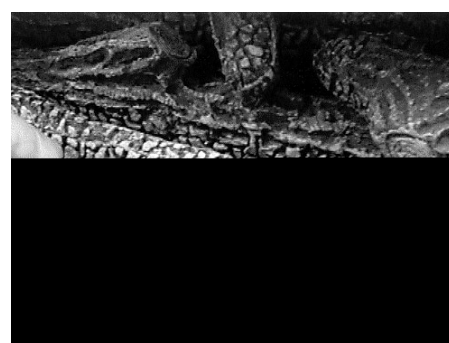
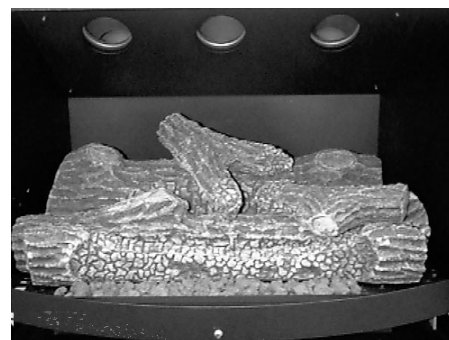
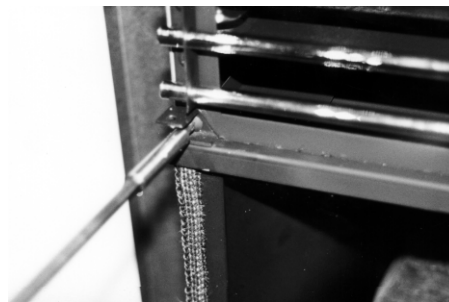
Level it with a pencil or screwdriver and remove excess material.

Note: The ember bed material must be placed after the logs are fitted. If the logs are to be removed for any reason, the ember bed material must be removed first and replaced after the logs are refitted. Any material that prevents the logs sitting flat on the burner top can upset the burning pattern and performance of the heater.

- Replace glass and top glass retainer, tighten bottom glass retainer screws.

Note: Fit glass so that the joint in the glass seal is at the bottom.

- Take care not to damage seals.
- Reinstall side panels.



WARNING: Failure to position the parts in accordance with these diagrams or failure to use only parts specifically approved with this appliance may result in property damage or personal injury.

Note: When first lighting the heater, the logs need to be burnt in, which may take approximately 2 hours. The flame color may change after the initial burning in period.

TESTING AND COMMISSIONING

• TESTING PROCEDURE

Turn gas supply on and plug the unit into the power supply. (Caution 115V)

• TO CHECK BURNER PRESSURE

- Refer to rating plate.
- Remove the wiring cover panel.
- Remove test point plug and attach manometer to test point.

The test point is on the bottom front face of the gas valve.

- Light heater, turn to High heat setting and check pressure.
- If adjustments are necessary, the regulator is situated on the front of the gas control.
- After checking pressure, turn the unit off, remove manometer and replace test point plug.
- Turn the heater on and off a few times to check ignition.
- When you are satisfied that the heater is working correctly, reassemble panels.
- All burner aeration is factory preset and cannot be adjusted.
- If you are unable to get the unit to operate correctly, refer to Troubleshooting on Page 20, before contacting your local service contact as listed on Page 3.
- It may take approximately 2 hours for the logs to achieve their full flame pattern and glow.

- **During the initial burning in period, some smoke and smell may be experienced. The heater should be run on the high position in a well ventilated room until these dissipate.**

It is the responsibility of the installer to check that under normal operating conditions of the appliance, all flue gases are exhausted to the outside atmosphere and that there is no spillage of combustion gases into the room.

COMMISSIONING

• INSTALLATION / COMMISSIONING CHECKLIST

Complete the installation checklist and the installer details on page 27 and make sure that this instruction book is left with the customer.

• INSTRUCT CUSTOMER ON USE OF UNIT

Explain to the customer about use and care of unit. Make sure the customer understands the instructions.

• EXPLAIN

Ignition (on / off), adjusting heat level, programming timers, flame setting, auto off, lock, override and the remote control.

NOTE:

THE MANUFACTURE RESERVES THE RIGHT TO CHANGE OR MODIFY SPECIFICATIONS WITHOUT NOTICE

MAINTENANCE INSTRUCTIONS

IMPORTANT MAINTENANCE INSTRUCTIONS

ANNUAL INSPECTION

The unit should be inspected at least once a year by a qualified service technician including inspection of the flue system.

The appliance area must be kept clear and free from combustible materials, gasoline and other flammable vapors and liquids.

• CLEANING INSTRUCTIONS.

Before cleaning, make sure the electrical power and gas are turned off and that the unit has cooled down.

WARNING: Do not clean the glass or unit when hot.

Do not remove any internal wiring covers.

Do not use abrasive cleaners.

Do not use solvent based cleaners.

• OUTER CASE

The outer case of the fire place should be cleaned with a soft, damp cloth.

Do not use aerosol polishes to clean the casing while the fire is in operation.

Do not damage or distort any part of the heater

Do not use wet cloth or spray cleaners on burners

• VENT MAINTENANCE

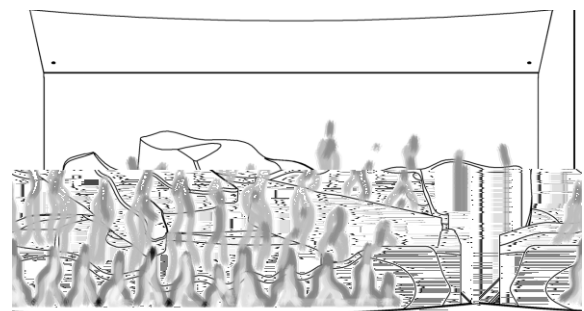
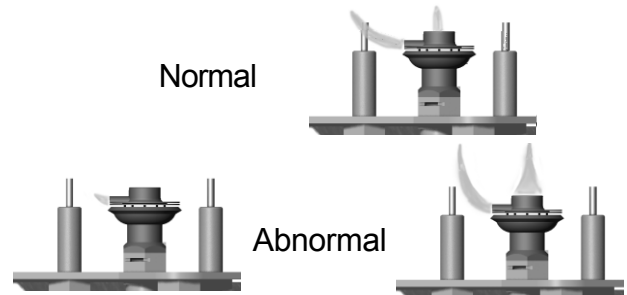
The flue should be inspected annually for blockages and signs of damage.

• VISUAL INSPECTION OF FLAME

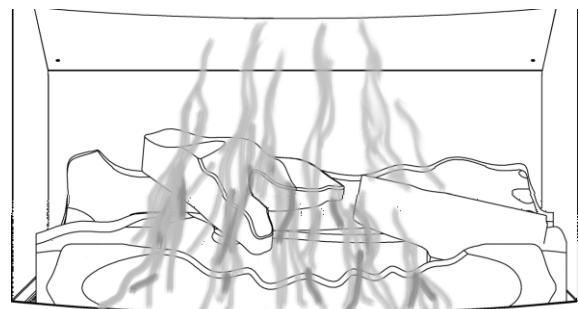
Check that the pilot and burner flames are operating normally.

If the flames appear either very short or very long and streaky or are producing smoke or soot deposits then there may be a problem with the heater or the gas supply.

A heater should not be used if you suspect there may be a problem, and a service agent must be called to investigate the cause of the problem.



Normal



Abnormal

The main burners are designed to produce some yellow flame but should not produce smoke or excessive soot.

NOTE: The flames may take up to 15 minutes to settle from ignition when the heater is cold.

• ELECTRIC MOTOR MAINTENANCE

Motors are permanently lubricated and needs no lubrication.

Keep fan and motor free of dust and dirt, clean annually.

The heater should be serviced annually only by an authorised person.

• **GLASS REPLACEMENT AND CLEANING.** (May be performed by the owner)

It is best to handle the glass with clean gloves to avoid smearing the glass with finger prints which might show after replacement.

Refer diagram opposite

Loosen the side panel retaining screws.(1)
Access can now be obtained to the two top glass retaining screws.(2)

Gently lift the retaining trim away from the glass.(3)

Carefully lift the glass out of the bottom retaining channel, taking care not to damage the fiber seal on the perimeter of the glass.(4)

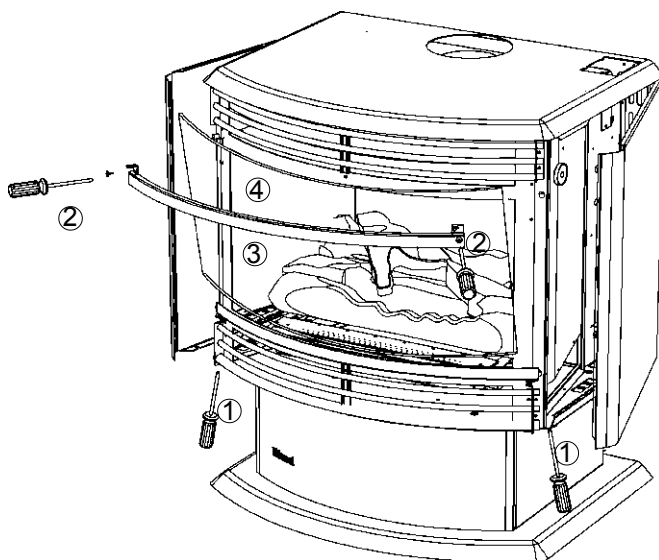
The glass may be cleaned with a damp sponge and soapy water. If the seal is damaged it should be replaced. Remove any soot deposit from the log set with a soft brush and a vacuum cleaner. Soot deposit may indicate that the flue is not drawing properly. Check the flue for correct operation.

It is best to handle the glass with clean gloves to avoid smearing the glass with finger prints which might show after replacement.

NOTE: When replacing the glass make sure that the joint of the fiber seal is at the bottom of the glass.

• **BURNERS**

Due to the design of the burners in this heater, they do not require cleaning by the owner. The burners should be cleaned once a year by a qualified service agent.



• **FAN REMOVAL** (Only to be carried out by qualified service technician)

Refer diagram below

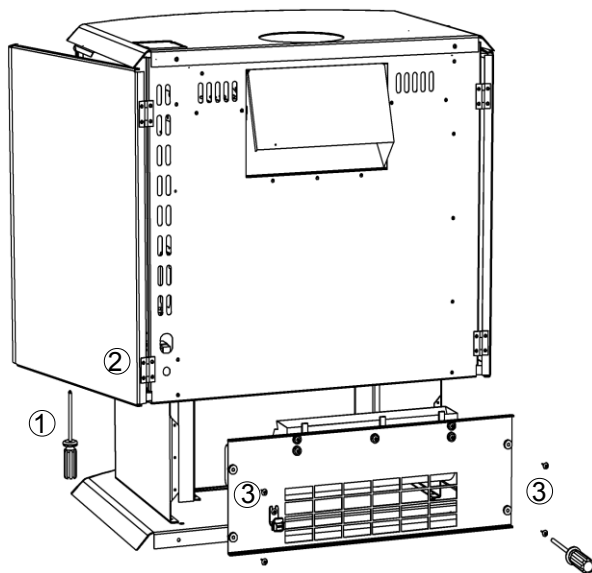
NOTE: The fan has a permanently lubricated bearing. DO NOT OIL.

Open the right-hand panel of the heater (1) and undo the cable connection between the fan assembly and wiring loom.(2)

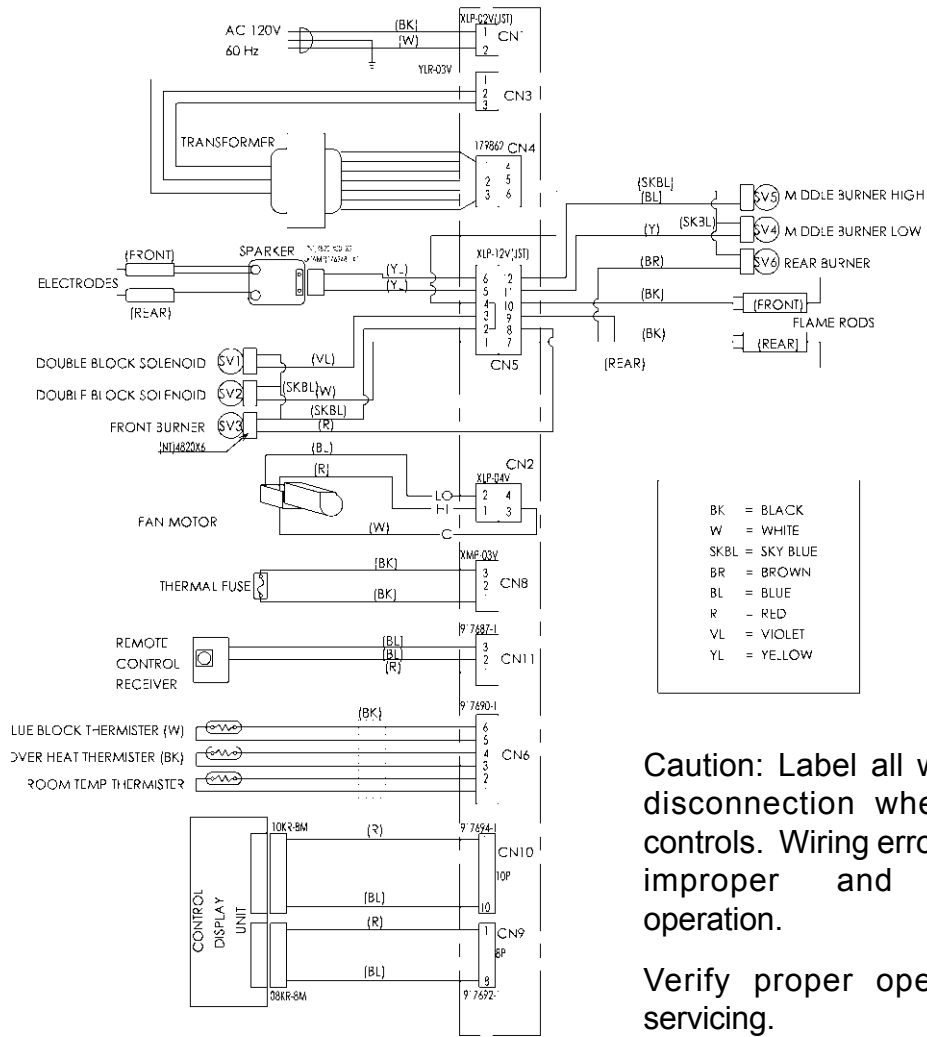
On the back of the heater loosen the 4 Phillips screws holding the fan bracket.(3)

The fan, complete with the fan support bracket, can now be removed for cleaning and replaced as is necessary.

Reassemble in reverse order.



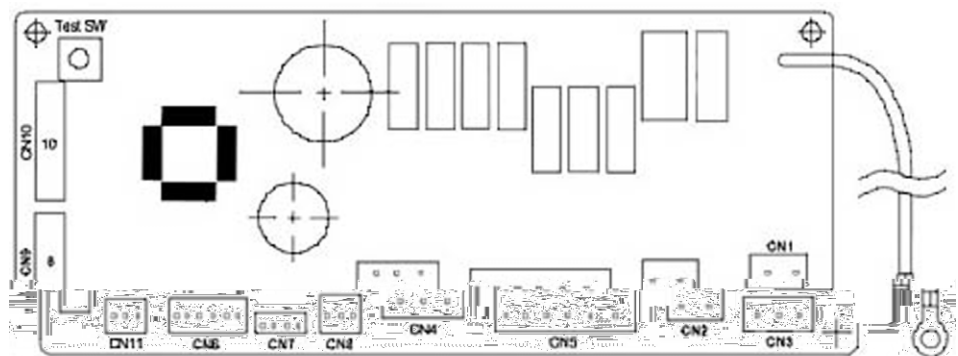
WIRING DIAGRAM



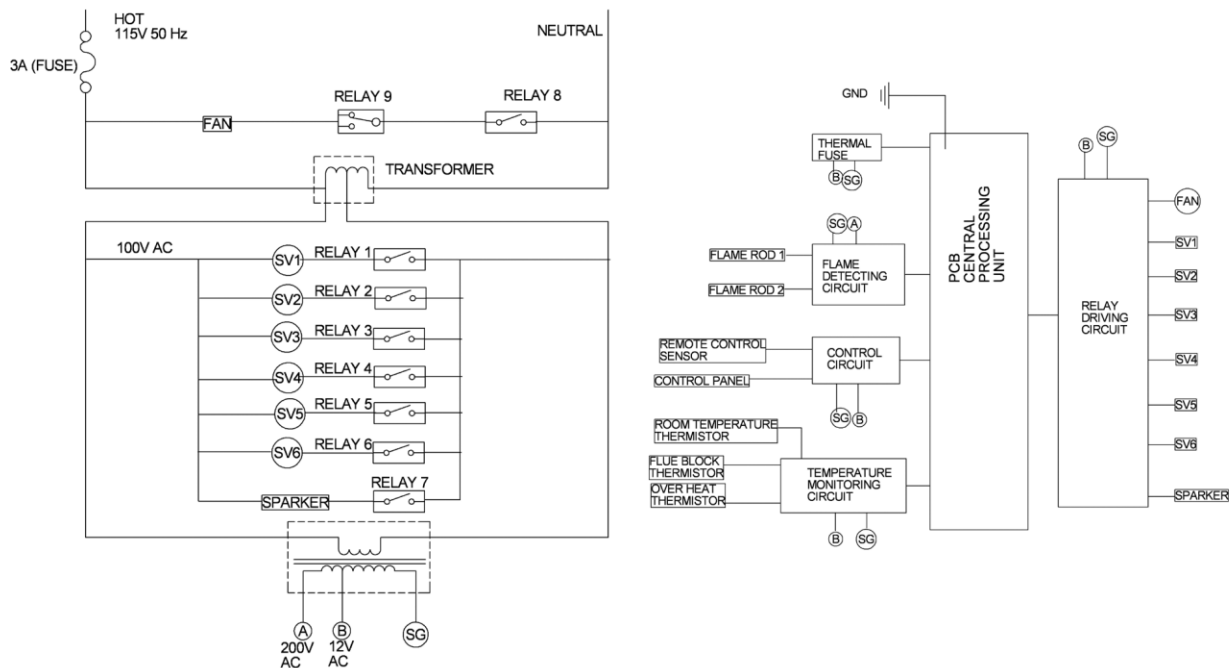
Caution: Label all wires prior to disconnection when servicing controls. Wiring errors can cause improper and dangerous operation.

Verify proper operation after servicing.

PCB LAYOUT



WIRING DIAGRAM-LADDER



TROUBLE SHOOTING

SYMPTOM	CAUSE	SOLUTION
Burner will not light	No power present	Ensure power cord is plugged in and turned on
	No gas present	Ensure gas supply is turned on
	power cut	Re-ignite after power is restored
	Air in gas pipe Ignition failure	Purge air (installer) Repeat lighting procedure.
Smell of gas	Leaking gas	Turn gas off at meter and call installer
Fan not working	Heater still warming up	The fan is programmed to start after the heater has been operating for 4 minutes.
Fan does not stop	Heater cooling down	The fan is programmed to continue running for 4 minutes after the burners have been extinguished
Small soot deposit	Normal operation	No action required
Soot deposit forming on glass or logs	Inadequate flue system Log misalignment Incorrect gas pressure	Call service department/agent
Condensation on glass	Normal operation	Allow fire to warm up
Streaky lines on glass	Normal operation	Remove and clean glass
Digital error message on control panel	Electronic fault detected	Refer <i>Error Messages page 21</i>

NOTE:

If you have any other faults or problems, please refer to your **Installer** or local qualified service agency

ERROR CODES

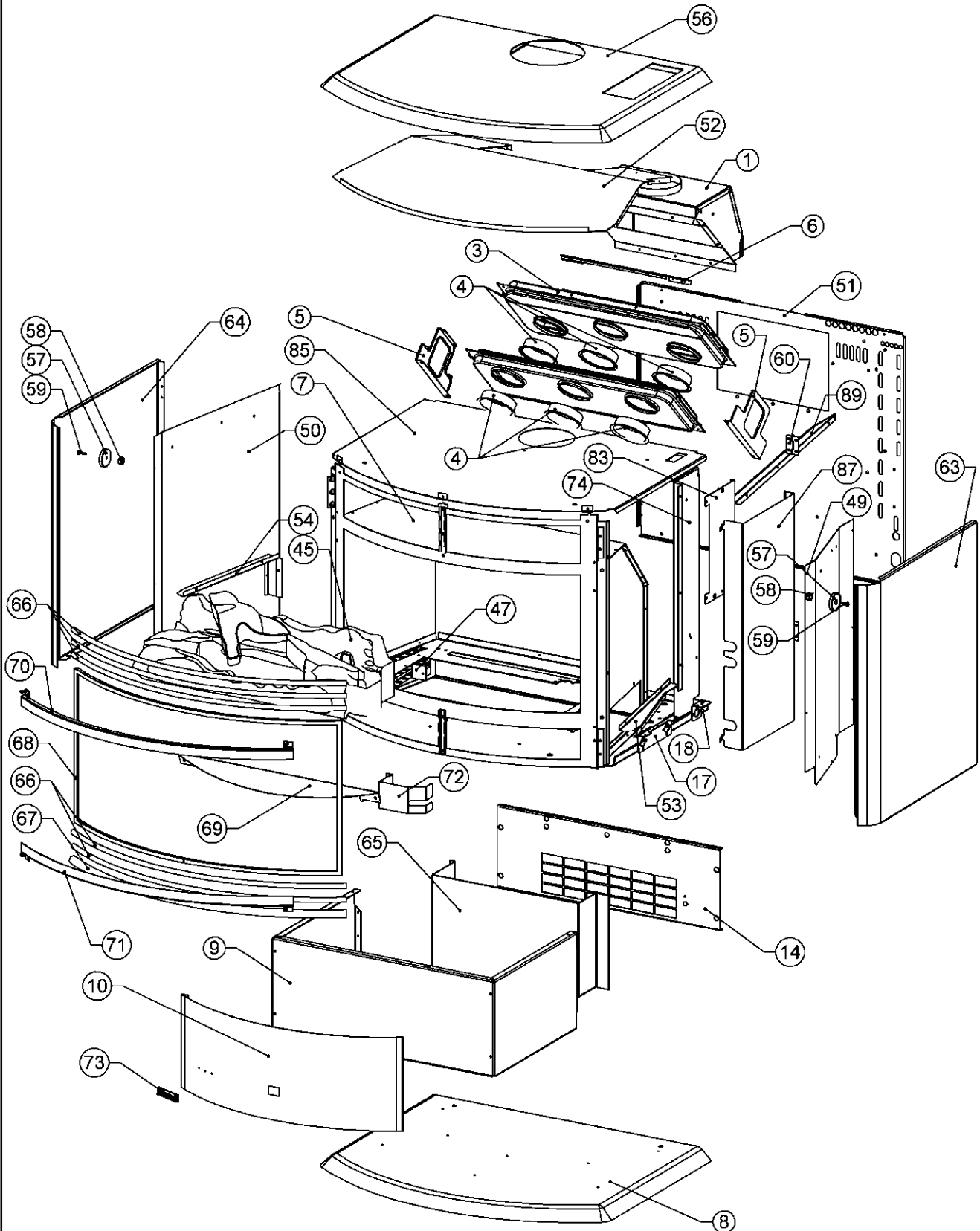
- ERROR CODE MESSAGE

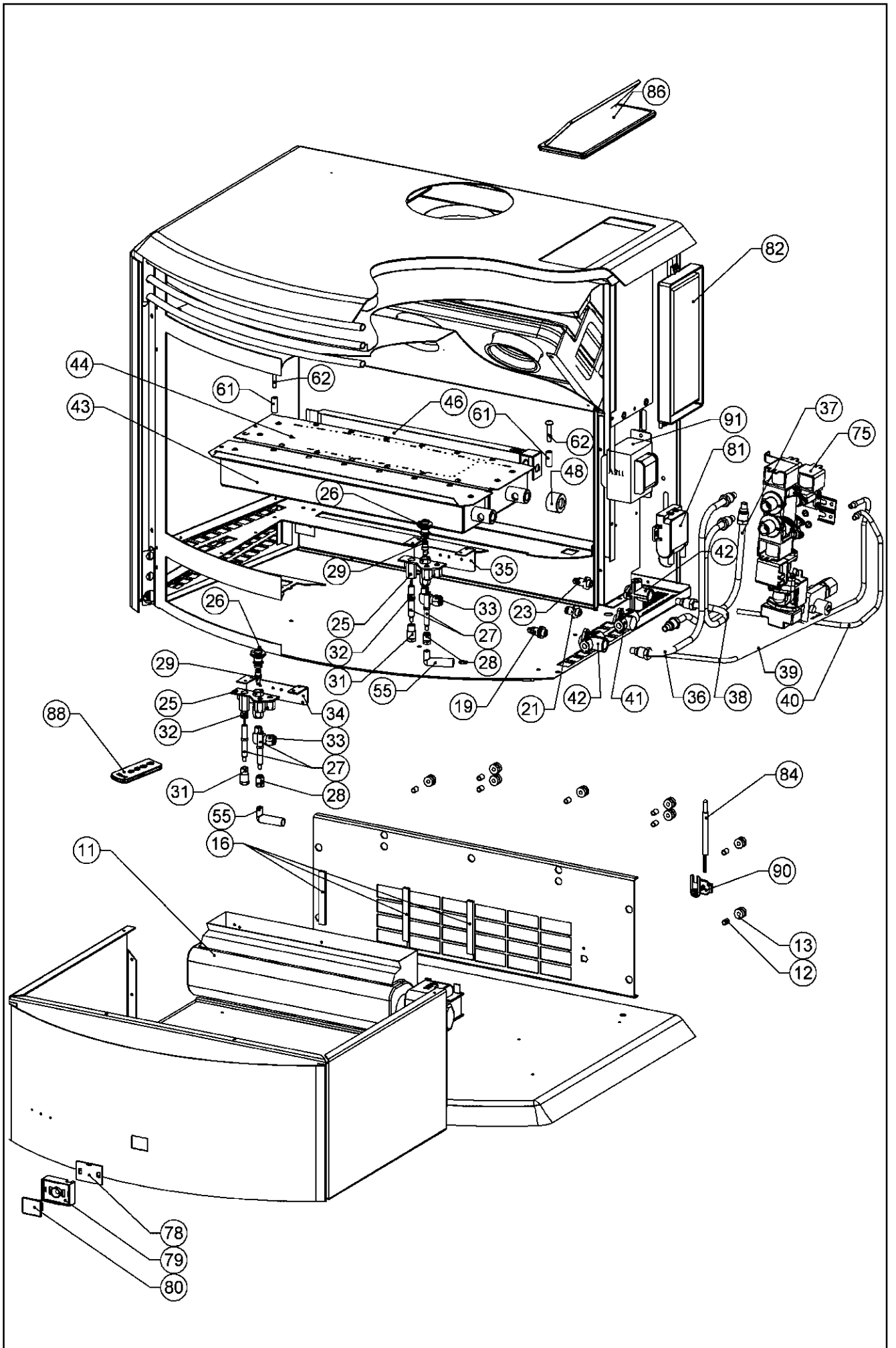
The Flame Fire ETR has the ability to check its own operation continuously. If a fault occurs, an Error Message will flash on the Digital Display of the control panel. This assists with diagnosing the fault, and may enable you to overcome a problem without a service call. Please quote the code displayed when enquiring about service.

Error code	Probable cause	Comments
<i>11</i>	Ignition failure	Check gas is turned on. Service call if repeated
<i>12</i>	Flame failure	Check gas is turned on. Service call if repeated
<i>14</i>	Overheat	Service call
<i>16</i>	Room overheat	Lower room temperature to less than 104°F
<i>31</i>	Room temperature sensor faulty	Service call
<i>32</i>		Service call
<i>33</i>	Overheat temperature sensor faulty	Service call
<i>70</i>	Faulty ON / OFF switch	Service call
<i>71</i>	Faulty solenoids	Service call
<i>72</i>	Faulty flame rod	Service call
<i>73</i>	Communication error	Service call
<i>99</i>	Flue block	Service call
<i>-- : --</i>	Power failure	Service call

In all cases, you may be able to clear the Error Message simply by turning the unit OFF, then ON again. If the Error Message still remains or returns on the next operation, please contact your nearest service contact and arrange for a service call.

EXPLODED DIAGRAMS





SPARE PARTS LIST

ITEM NO.	QTY.	PART NO.	DESCRIPTION	
1	1	7992-1	FLUE SPIGOT ASSY FS NAT USA	
2	1	7074	HEAT EXCHANGER FRONT ASSY 3+3H	
3	1	7075	HEAT EXCHANGER REAR ASSY 3H	
4	6	6624	BURNER EXCHANGER TRANSFER TUBE	
5	2	6625	BURNER HEAT EXCHANGER BRACKET	
6	1	7028-5	FLUE SPIGOT DRAUGHT DIVERTER	
7	1	7926	COMB CHAMB ASSY FS ETR USA PAI	
8	1	7022V	BASE PANEL FS VIPER	BLACK
	1	7022SP	BASE FS SP	SILVER
9	1	7020V	PILLAR FS VIPER	BLACK
	1	7020SP	PILLAR PAINTED SP	SILVER
10	1	7471V	PILLAR FRONT FS35ETR VIPER	BLACK
	1	7471SP	PILLAR FRONT FS35ETR SP	SILVER
11	1	7141	FAN QLN65/0030-3038LH MVL 110V	
12	9	7130	FAN MTG SLEEVE	
13	9	7129	FAN MTG GROMMET	
14	1	7069V	FAN MT BRKT FS MVL VIPER	BLACK
	1	7069SP	FAN MT BRKT FS MVL SP	SILVER
15	9	9028	SCREW 8X5/8 MUSH HEAD 33611923	
16	3	6651	CUSHION RUBBER REH210	
17	1	7950	INJECTOR BLOCK BRKT FRONT MKII	
18	1	7951	INJECTOR BLOCK BRKT REAR MKII	
19	1	7338	INJECTOR BRAY 260 CAT33 MULTI	NG
	1	7175	INJECTOR BRAY 120 CAT23 SINGLE	LP
21	1	7337	INJECTOR BRAY 560 CAT33 MULTI	NG
	1	7183	INJECTOR BRAY 200 CAT33 MULTI	LP
23	1	7906	INJECTOR BRAY 180 CAT23 SINGLE	NG
	1	7175	INJECTOR BRAY 120 CAT23 SINGLE	LP
24	6	9064	SCREW M4 X 8 PHPMZ SPRINGWASH	
25	2	7870	PILOT BODY TOP CONVERTIBLE	
26	2	7871	PILOT CONVERTIBLE HOOD 2 FLAME	
27	4	7875	ELECTRODE	
28	2	7876	ELECTRODE NUT (S.I.T)	
29	2	7872	INJECTOR NG 51	NG
	2	7873	INJECTOR LPG 31	LP
31	2	7900	ELECTRODE NUT ETR	
32	2	7902	SPACER ELECTRODE PILOT	
33	2	7986	ELBOW 6mmx1/8"BSPT BFM690602	
34	1	7904	PILOT BRACKET FRONT USA	
35	1	7985	PILOT BRACKET REAR ETR USA	
36	1	7928	GAS SUPPLY TUBE A FSETR	
37	1	7929	GAS SUPPLY TUBE B FSETR	
38	1	7930	GAS SUPPLY TUBE C FSETR	
39	1	7943	PILOT TUBE FSETR FRONT	
40	1	7944	PILOT TUBE FSETR REAR	
41	1	7952	INJECTOR BLOCK A+B	
42	2	7953	INJECTOR BLOCK A+C	
43	1	7924	FRONT BURNER US ASSY PAINTED	
44	1	4990	MAIN BURNER NG/LPG USA FLAME	
45	1	7044	CERAMIC LOG SET c/w GRANULES	
46	1	6384	BURNER COSYPANEL	
47	1	7276	BURNER BRACKET	
48	1	7258	AERATION SLEEVE SHORT	
49	1	7508	HEATSHIELD RH FS35ETR	

51	1	7988V	REAR PANEL FS35ETR VIPER USA	BLACK
	1	7988SP	REAR PANEL FS35ETR SP USA	SILVER
52	1	7472	AIR GUIDE LOWER FS35ETR	
53	1	7062	HEATSHIELD LOWER RH FS ETR	
54	1	7060	HEATSHIELD LOWER LH FS	
55	2	7564	ELECTRODE SLEEVE	
56	1	7482V	TOP PANEL ASSY FS35ETR VIPER	BLACK
	1	7482SP	TOP PANEL ASSY FS35ETR SP	SILVER
57	2	7136	MAGNET FS	
58	2	9200	NUT M8 HEX MACH MS ZINC PLATE	
59	2	9025	SCREW 8 X 5/8 S/TAP PANHEAD ZP	
60	4	7050	HINGE BKL	
61	2	7240	LOG LOCATING SLEEVE	
62	2	9115	SCREW M5 X 25 PHSMZ PHIL	
63	1	7019V	SIDE PANEL RH FS35 VIPER	BLACK
	1	7019SP	SIDE PANEL RH PAINTED FS35 SP	SILVER
64	1	7018V	SIDE PANEL LH VIPER	BLACK
	1	7018SP	SIDE PANEL LH PAINTED FS SP	SILVER
65	1	7063	FAN INLET GUIDE FS	
66	5	7029	LOUVRE TUBE FS 9.5 GOLD	BLACK
	5	7029BN	LOUVRE TUBE FS 9.5 BLK NICKEL	SILVER
67	1	7099	LOUVRE TUBE RD 15.8 GOLD	BLACK
	1	7099BN	LOUVRE TUBE RD 15.8 BKL NICKLE	SILVER
68	1	4996	GLASS PANEL ASSY IB35/FS35	
69	1	7004	BURNER DIVERT PANEL PTD ETR	
70	1	7033	GLASS RET TOP ASSY PAINTED	
71	1	7037	GLASS RET BOTTOM ASSY PAINTED	
72	1	7518	FRONT PILOT SHIELD ETR	
73	1	5327G	BRAND BADGE GOLD	
74	1	7513	PARTITION PANEL FS35ETR	
75	1	4991	GAS CONTROL ASSY LP US FS35ETR	NG
	1	4992	GAS CONTROL ASSY NG US FS35ETR	PROPANE
76	2	6308	O RING MAIN GAS	
77	2	6313	GAS TUBE RETAINER	
78	1	7536	RECEIVER UNIT ETR-015X01	
79	1	7537	RECEIVER UNIT HOLDER 35ETR-016	
80	1	7539	RECEIVER COVER 35ETR-017	
81	1	7542	SPARK IGNITOR ETR EI-145	
82	1	7544	PCB ASSY ETR 35ETR-020	
83	1	7507	PCB MOUNTING BRKT ASSY FS35ETR	
84	1	7549	THERMISTOR OH SWIT.35ETR-023	
85	1	7491	AIR GUIDE FS35ETR	
86	1	7545	CONTROL UNIT ASSY 35ETR-010BX0*	
	1	7545S	CONTROL UNIT 35ETR-010B SILVER**	
87	1	7512	WIRING COVER FS35ETR	
88	1	7541	REMOTE CONTROL 556F-2005	
89	1	7514	FAN DIVERTOR PANEL FS35ETR	
90	1	7540	THERMISTOR HOLDER RC-312-628	
91	1	7899	TRANSF. USA ETR ET-277 100V	

INSTALLATION NOTES

INSTALLATION / COMMISSIONING CHECKLIST

- | | NO | YES |
|---|--------------------------|--------------------------|
| 1. Was a fireplace inspection carried out?
(i.e. clearances, combustibles etc.) | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. Was a manufactured flue system installed? | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. Has specified gas pressure been set? | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. Are decorative logs located correctly on pins? | <input type="checkbox"/> | <input type="checkbox"/> |
| 5. Have ember granules been placed and free of dust and powder? | <input type="checkbox"/> | <input type="checkbox"/> |
| 6. Has the appliance been test fired for correct operation
(All burners light without delay) | <input type="checkbox"/> | <input type="checkbox"/> |
| 7. Is the end-user fully aware of operating procedure? | <input type="checkbox"/> | <input type="checkbox"/> |

INSTALLER DETAILS

Company name: _____

Installers name: _____

Address: _____

Phone: _____ Mobile: _____

Permit number for installation: _____

Signed: _____ Date: _____

Rinnai

Part Number 7917

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