Rinnai

Flame Fire ETR Electronic Timer and Remote Operating and Installation Instructions

Timberflame IB35 ETR - New Zealand

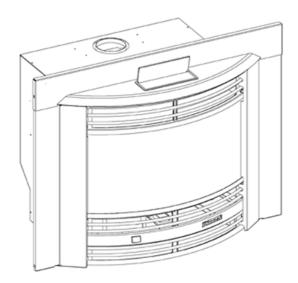


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Installer Details

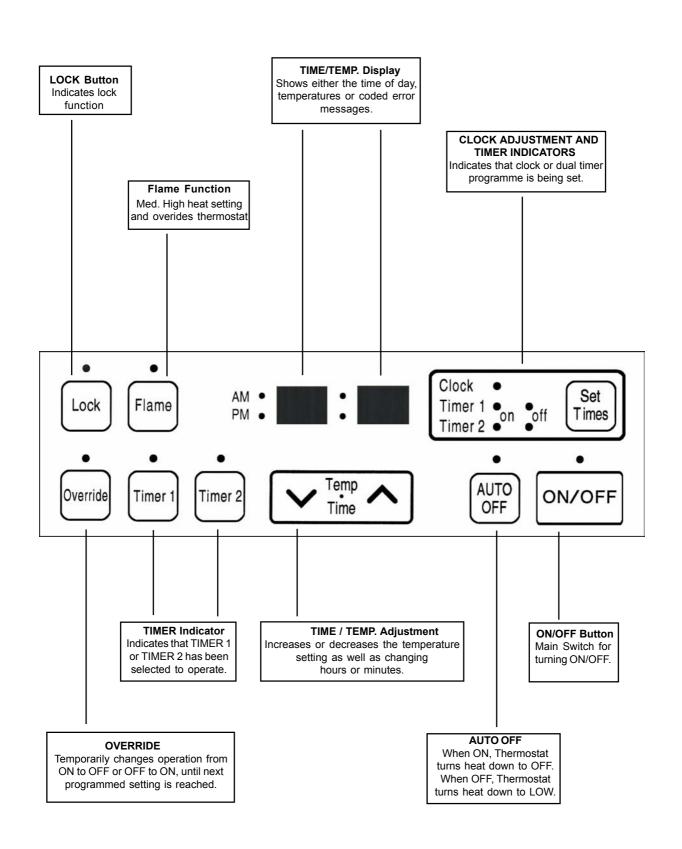
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IMPORTANT

This appliance shall be installed in accordance with:

- Manufacturers Installation Instructions.
- Local Gas fitting regulations.
- · Municipal Building codes.
- AGA Gas Installation Code AG601 NZ 5261.
- Any other relevant statutory regulation.
- Rinnai strongly recommend that this product be installed with an appproved flue system for optimum product performance.
- This appliance must only be installed, serviced and removed by an authorised person.

CONTROL PANEL LAYOUT



OPERATION

TO OPEN THE CONTROL PANEL

Lift lightly in the centre of the lid where there is a catch. The control panel lid will then open backward to an angle.

TURNING ON

Press the ON/OFF button to operate the heater. 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 heater 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 heater. 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 unplug the appliance while the convection fan is running.

DO NOT turn heater off by unplugging at the power point. The convection fan will continue to run until the appliance cools.

ROOM TEMPERATURE ADJUSTMENT

The room temperature and pre-set temperatures can only be displayed and adjusted when 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:

a) [L] low (about 10°C)

b) [16°C] to [26°C] in 1°C steps

c) [H] (continuously high)

If the heater does not ignite then the pre-set temperature may not be set to a setting which is higher than the room temperature. The ON indicator will change colour from red to green when the heater reaches the pre-set temperature and stops running.

· LOCK

The LOCK function will help to prevent accidental operation as well as small children from altering the controls.

To operate the lock simply press the LOCK button. The function is activated immediately and the LOCK indicator will glow. To deactivate the LOCK simply press the LOCK button for 3 seconds and the LOCK indicator will go out. The LOCK can be deactivated at any time in this way.

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 whilst the heater is turned OFF, then all functions will be locked. If the heater 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, simply press the FLAME button. This function will automatically override the thermostat and set the heater to a default Medium High heat setting for full visual flame effect.

AUTO OFF

To operate the Auto Off function, simply press the Auto Off button.

When the Auto Off function is ON, the indicator light will flash and the thermostat will turn the burners down to the OFF heat setting.

When the Auto Off function is OFF, the indicator light will go Off and the thermostat will turn the burners down to the LOW heat setting.

OVERRIDE

This function is intended to be used to manually override the current operation of the heater. For example; If the heater is in standby 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.

To operate the OVERRIDE simply press the OVERRIDE button. The OVERRIDE indicator will flash.

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

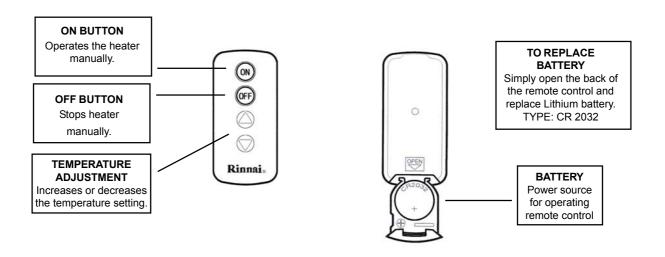
The heater will continue to operate on OVERRIDE until the OVERRIDE button is pressed again, or one of the Timers takes over the operation of the appliance. This means that the OVERRIDE mode will automatically drop out if a programmed starting time is reached. The appliance will then return to operating at times programmed into the Timer(s).

REMOTE CONTROL

Remote Control will not turn heater ON if Timer(s) have been selected.

To manually operate when Timer(s) are not selected, simply press the ON or OFF button.

To alter the temperature at anytime while the heater is operating, simply press the "▲" or "▼" buttons.



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 5 metres and an angle of 40° to the receiver on the heater.

Only use the battery type specified. (CR2032).

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

If the Timer(s) have been selected, and the heater is in standby mode, and the OFF button on the Remote Control is pressed, the Timer(s) will be deactivated.

SETTING THE CLOCK

SETTING THE CLOCK

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

As an example, let's set the clock to 10:35 am:

Press the SET TIMES button once, the Clock indicator will flash.

Press and hold the "\(\Lambda \)" button; the minutes will begin to change first, then the time will change by whole hours.

Release the button when AM 10:00 shows on the Digital Display. Confirm that you have selected AM, a small indicator on the left hand side of the Digital Display indicates the AM setting.

Press and hold the "▲" button again, release the button when AM 10:35 shows. If you go past AM 10:35, then the "▼" button can be used to change the time settings in reverse.

Press the Timer Set button five times to lock in and complete setting 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.

PROGRAMMING THE ON / OFF TIMERS

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

As an example, let's program Timer 1 to heat the room by 7:10am and finish at 9:00am.

Press the Set Times button twice. The Digital Display will show AM 6:00. Timer 1 indicator will flash.

Press the "▲" button until AM 7:00 appears, release the button, then press it again until AM 7:10 appears. (Press the "▼" button if you go past AM 7:10.)

Press the Set Times button again, the Timer 1 OFF indicator will flash. Press the "▲" button until AM 9:00 appears. (Press the "▼" button if you go past AM 9:00.)

Press the Set Times button three times to lock in the program time. 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.

Timer 2 is programmed in the same way, remember to ensure that the Timer 2 indicator is flashing when you program in the desired setting. The Timers can be programmed to operate for any two periods in any 24 hours.

Turn to the next page to operate the dual timer. The programmed time must be selected and locked-in within one minute of the On Timer indicators flashing otherwise the programmed times will not be retained in the system memory.

OPERATING THE TIMERS

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 5. The two Timers operate in the same way. This heater does not commence operation at the programmed starting time. It will attempt to heat a room by the programmed starting time. See Pre-heat page 6, for further explanation.

To select the Timer(s) to commence heating.

Check the time shown on the Digital Display is correct.

Check the ON and OFF times, for both Timers if necessary.

Press the ON/OFF button to operate the heater. The ON indicator will glow green and the heater will begin to operate.

Select the desired temperature setting.

Press the Timer 1 and/or Timer 2 button(s). The timer indicator(s) will glow and the heater will remain on standby until one hour prior to the time programmed into the selected Timer(s) is reached. When this time is reached, the Timer indicator will flash and the heater will operate. The ON indicator glows red when the heater commences operation.

SET AND FORGET OPERATION

Your heater can be operated to alternate between Timers automatically during cold weather by selecting Timer 1 and Timer 2 together. Both Timer indicators will glow. The appliance will remain on standby at intervals between the programmed finishing and starting times of each Timer. While the heater is operating during programmed intervals the Timer indicator will flash.

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 5.

PREHEAT

This function operates automatically in conjunction with either of the timers. When a timer is selected, the heater may operate anywhere within an hour prior to the programmed starting time of the timer.

The preheat function will attempt to preheat the room by the programmed ON time.

This function is called pre-heat due to the way it operates. The room temperature is sensed one hour before reaching the programmed time of either timer.

The temperature differential at the time of sensing the room governs how long before the program ON time the microcomputer will operate the heater and ignite the burner.

ERROR CODES

• ERROR CODE MESSAGE

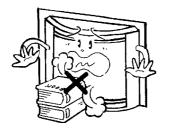
The Flame Fire ETR has the ability to check its own operation continuously. If a fault occurs, an Error Message will flash on the Digital Display of the control panel. This assists with diagnosing the fault, and may enable you to overcome a problem without a service call. Please quote the code displayed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

Error Code	Probable Cause	Comments
11.	Ignition Failure	Check gas is turned on. Service call if repeated.
12	Flame Failure	Check gas is turned on. Service call if repeated.
14	Overheat	Service call.
16	Room Overheat	Lower room temperature to less than 40°c.
31.	Room temperature Sensor Faulty	Service call.
32	Room temperature Sensor Faulty	Service call.
33	Overheat temperature Sensor Faulty	Service call.
70	Faulty ON / OFF Switch	Service call.
71	Faulty Solenoids	Service call.
72	Faulty Flame Rod	Service call.
73	Communication error	Turn heater OFF, then ON again.
99	Flue Block	Service call.
:	Power Failure	Turn heater OFF, then ON again.

In all cases, you may be able to clear the Error Message simply by turning the heater 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.

SAFETY POINTS

Do not restrict the warm air discharge by placing articles in front of the heater.



This appliance must not be used for any purpose other than heating.



Do not spray aerosols whilst the heater is operating. Most aerosols contain butane gas, and can be a fire hazard if used near the heater when it is in use.



Young children should be supervised at all times. Hand or body contact with the louvres should be avoided.



Do not allow young children or the infirm to sleep directly in front of the heater.



Do not allow anyone to sit on or lean against the appliance.



Do not allow anyone to post articles through the louvres.



Do not allow curtains or other flammable or combustible materials to come into contact with the heater.



DO NOT PLACE ARTICLES ON OR AGAINST THIS APPLIANCE.
DO NOT USE OR STORE FLAMMABLE MATERIALS NEAR THIS APPLIANCE.
DO NOT SPRAY AEROSOLS IN THE VICINITY OF THIS APPLIANCE WHILST
IT IS IN OPERATION.

TROUBLESHOOTING

SYMPTOM	CAUSE	SOLUTION
Burner will not light	No powerpresent	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	Purge air (installer)
	Ignition Failure	Repeat lighting procedure (refer page 3)
Smell of gas	Leaking gas	Turn gas off at meter and call installer
Fan not working	Heat switch not activated	Allow heater to run on HIGH for 15 minutes minimum.
	Fan not turned on	Ensure appliance fan switch is in ON position
Small soot deposit	Normal operation	No action required
Severe soot deposit forming on Glass or Logs	Inadequate Flue System Log Misalignment Incorrect Gas Pressure	Call Rinnai Service Dept./Agent
Condensation on Glass	Normal operation	Allow heater to warm up
Streaky lines on Glass	Normal operation	Remove and clean glass
Digital Error Message on Control Panel	Electronic fault detected	See Error Messages Page 8

. NOTE

If you have any other faults or problems, please refer to your Installer.

• CLEANING INSTRUCTIONS.

Before cleaning, ensure the power and gas are turned off and that the plug is removed from the power socket. Wait until the heater has cooled down.

• OUTER CASE

The outer case of the heater should be cleaned with a soft, damp cloth. Do not use aerosol polishes to clean the casing while the heater is in operation.

GLASS CLEANING

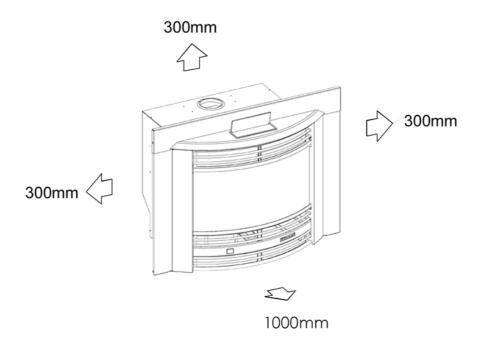
After a period of use the glass panel may require cleaning. When your heater is cold, refer to Page 12 and follow the initial log installation instructions to remove side panels and glass for cleaning purposes.

LOCATION

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

- 1. Flueing.
- 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.

 See below for minimum clearances required.



- 5. The heater is not designed to be built into bookcases or shelves or any combustible opening. However, mantles are allowable providing outside the minimum clearance and protrude no further than 150 mm from the wall.
- 6. Check that room ventilation complies with local regulations.
- 7. Check that an EARTHED power point is within 1500 mm of the right hand side of the heater. The fire must not be located below a power socket. If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.
- 8. The heater must be mounted on a hearth no less than 50 mm high, and the width and depth of the heater.
- 9. Under no circumstances must combustible materials be present on the inside of the fireplace recess or flueway. For combustible opening installations, a Rinnai Zero Clearance Kit is available from your gas appliance retailer.

FLUEING

Rinnai strongly recommends that this appliance be installed with an approved flue liner system in all installations.

Installation without a flue liner is however permissible into masonry chimneys only after physical inspection and testing of the chimney to set criteria. Installation of this appliance into a chimney that fails to meet this criteria will not only void the product warranty, but is highly likely to impede product performance.

The following criteria must be met in all cases:-

Internal Criteria:

- Allow sufficient height above the firebox to enable the debris diverter (See page 8) to be fully operational (ie. open 45°). Failure to do so will result in incomplete combustion and emissions discharged into the room.
- All loose/broken bricks must be repaired ensuring the chimney is of sound construction and free from leakage. Failure to do so may result in emission discharge into the room.
- The chimney must be free of soot and creosote accumulation resulting from previous slow combustion wood fires. It must also be clear of all blockages and swept prior to installation.
- Any damper plate must be fixed in the open position or removed.
- Any underfloor air supply to the fireplace must be completely sealed off to prevent secondary air draw.

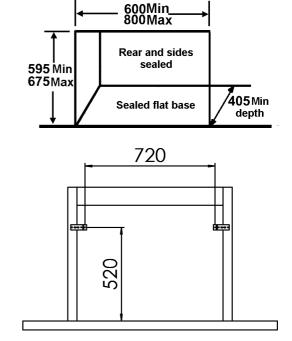
External Criteria:

- An approved chimney cap and cowl must be installed with this appliance. If there is an existing cap, it must be free of defects/deterioration and repaired if found to be faulty.
- Inadequate chimney height can also effect product performance. Some applications may require the chimney height to be extended to reduce possible down drafts.
- A flue draft smoke test must be carried out to confirm that an updraft occurs and the flue system is sound. There must be no leakage of smoke through the structure of the chimney during or after the test. Inside, upstairs and/or adjacent rooms should also be checked.

If any of the above criteria is not met, a Rinnai approved flue liner system must be installed.

· CHECK DIMENSIONS OF FIREPLACE

Check dimensions of fireplace and if necessary bring them to dimensions shown.



CHECK FLUEWAY

Check flueway is clear of obstructions.

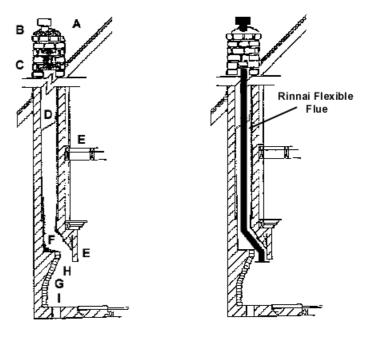
Provide a firm, flat and sealed base for unit.

Sealed means no holes or openings in fireplace.

A rough base may affect the performance of this unit

CHIMNEY INSPECTION

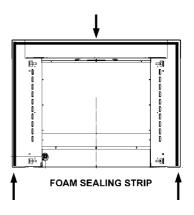
- A. Improper chimney height.
- B. Chimney Cap deterioration.
- C. Creosote stains.
- D. Blockage within flue.
- E. Clearance to combustibles.
- F. Soot / Creosote accumulation.
- G. Structural deterioration.
- H. Loose or broken bricks.
- I. Smoke Pellet test. (Leakage)



SEALING THE INBUILT INSTALLATION

Peel protective backing off the foam strips supplied with the heater. Attach strips to rear of casing as shown.

The strip is intended to form a seal between the heater and fireplace. If an adequate seal cannot be formed with this strip, another means of sealing must be used (eg. non-combustible insulation), between the fireplace and the heater body.



GAS CONNECTION

RUN GAS SUPPLY

For pipe sizing, refer to your local gas installation codes. Copper supply should be run leaving the end of the pipe in a suitable position to be able to attach to the stainless steel flexi-tube and the 1/2" BSP male union provided.

(refer diagram)

PURGE SUPPLY OF AIR AND SWARF.

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

SLIDE HEATER INTO FIREPLACE

Slide the heater carefully into position, while feeding the stainless steel flexi-tube through the supply access opening at right hand rear.

NOTE: A spring-loaded flue protector plate is fitted to prevent the entry of foreign objects for a masonry chimney installation.

The plate will fold down as the heater slides through the fireplace opening.

IMPORTANT: Make sure that the flue protector plate is not restricted and returns to its normal position when the heater is installed.

If the fire has to be removed, the plate will pivot backwards to allow the heater to slide clear.

When a flue liner or Zero Clearance Box is used, the flue protector plate must be unscrewed and removed.

Secure the heater to the fireplace. There are pre-drilled holes in the heater surround behind the doors. Drill additional holes if the existing ones are not in suitable positions.

Refer to Page 9 for removal and replacement of logset.

Remove the front and middle burners by undoing the left hand end screws, sliding the burners to the left, and lifting out.

Slide out and remove the bottom louvre rods which are held in place by tension.

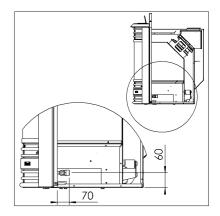
Carefully remove the screws from both ends of the front panel. Remove the top and bottom screws from the centre louvre rod retaining bracket.

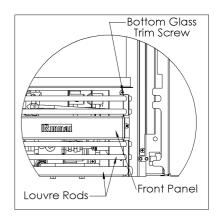
Slide out the fan partition tray exposing the gas control and flare connection.

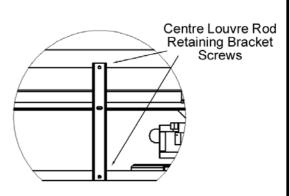
Bend the flexi-tube and connect to the gas control valve. Check for gas leaks.

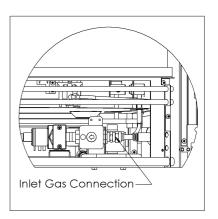
Replace and refit all parts that have been removed in reverse order.

On completion of all work, check all connections for gas leaks.









LOG INSTALLATION

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

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

The logset consists of a Main Log which has four pins on the top, for the location of the Top and Right Logs and two holes underneath for location onto the pins inside the heater.

Place the logset into the heater ensuring that the locating pins enter the two locating holes on the bottom face of the logset, if not already attached.

Carefully position the Top Log and the Right Log on the locating pins of the Main Log as shown.



Gently place loose ember bed material in front of the front log. 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 <u>after</u> 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 join/gap in the glass seal is at the bottom.
- Take care not to damage seals.
- · Reinstall side panels.

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

TESTING & COMMISSIONING

TESTING PROCEDURE

Turn gas supply on and plug the unit into the power supply. (Caution 240V.)

TO CHECK BURNER PRESSURE

- · Refer to Data Plate.
- · Remove the wiring cover panel.
- Remove test point screw and attach manometer to test point. The test point is on the left hand side 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 screw.
- 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 9, before contacting your local service contact as listed on Page 14.
- 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. Please refer to NZS 5261: 1996

COMMISSIONING

· INSTALLATION AND COMMISSIONING CHECKLIST

Complete the installation / commissioning checklist and the installer / gasfitter details on page 12 and make sure that this instruction book is left with the customer.

· INSTRUCT CUSTOMER ON USE OF UNIT

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

EXPLAIN

Ignition, Adjusting heat level, Fan Switch, Turning "OFF".

NOTE:

RINNAI RESERVES THE RIGHT TO CHANGE OR MODIFY SPECIFICATIONS WITHOUT NOTICE.

TECHNICAL DATA

Model: IB35ETRN (NG) New Zealand

IB35ETRL (Propane) New Zealand

Description: Rinnai Inbuilt Radiant/Convector, glass-fronted, ceramic log space heater

with forced convection and natural draught flue system.

Input: 33 MJ/h Natural Gas and Propane. Gas Control: Rinnai Electronic Control Valve.

Burner: Ceramic Logs, Ember Bed and Heat Burner.

Gas Inlet: 15mm. Copper Flare Connection.
Test Point Pressure: Natural Gas 0.95 kPa; Propane 2.00 kPa.

Flue: Natural Draught.

Flue Termination: An approved 100mm. cowl must be fitted

to all installations.

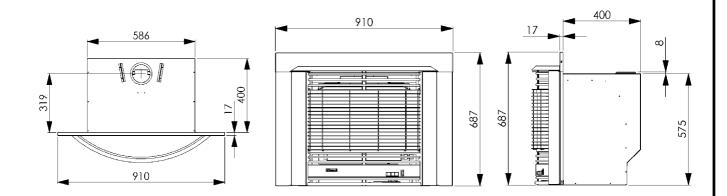
Ignition: Electronic Spark.

Fan:

Power Supply: 230/240v. 50Hz unit is supplied with 3 pin

plug and supply lead, replace only with Rinnai P/N 90179599(Aust.) 6765B(NZ). Tangential 2 Speed, Watt Rating 90W.

Data Plate: Bottom R/H side of pillar.



SERVICE CONTACT POINTS

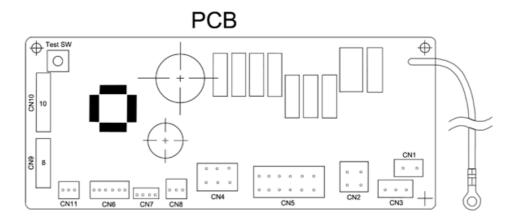
RINNAI NEW ZEALAND LTD.

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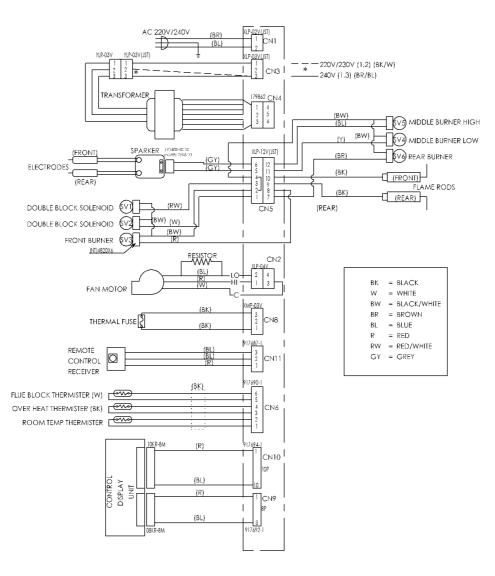
Fax: (09) 257 3899

Internet: www.rinnai.co.nz Email: **info**@rinnai.co.nz

WIRING DIAGRAM



WIRING DIAGRAM ETR



PN 7570

INSTALLATION / COMMISSIONING CHECKLIST

		NO	YES
 Was a fireplace inspection carried out? (ie. clearances, combustibles etc.) 			
2. Was chimney inspected?			
3. Did chimney require flue liner system to be insta	lled?		
If NO, did chimney meet specified criteria as per n	manual?		
4. Has specified gas pressure been set?			
5. Are decorative logs located correctly on pins?			
6. Have ember granules been placed and free of du	ıst and powder?		
7. Has appliance been sealed around the fireplace?			
8. Has the appliance been commissioned?			
9. Is the end-user fully aware of operating procedu	re?		
INSTALLER / GASF	ITTER DET		
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INSTALLER / GASF coany Name: tters Name: ress :	ITTER DET		
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