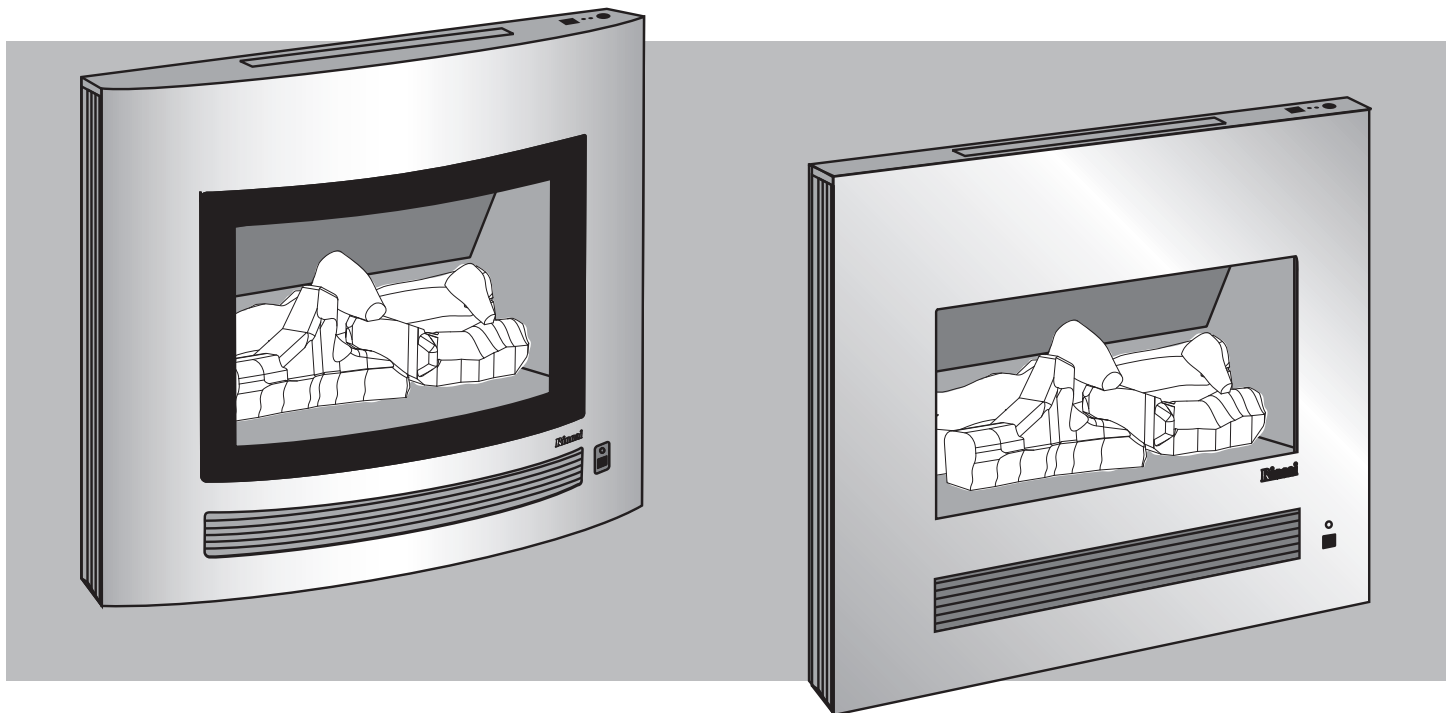


Rinnai

ASPIRATION

Power Flued Flamefire Space Heater Operation / Installation Manual MODEL RHFE-750ETR



This appliance shall be installed in accordance with:

- Manufacturer's Installation Instructions
- Current AS/NZS 3000, AS/NZS 3500 & AS 5601
- Local Regulations and Municipal Building Codes

This appliance must be installed, serviced and removed by an Authorised Person.



The Australian
Gas Association
All Rinnai gas products
are A.G.A. certified.



N10378



**Quality
Endorsed
Company**

ISO 9001 Lic 4983

SAI Global

Head Office Certified

Distributed and serviced in Australia under a Quality
System certified as complying with ISO 9001 by
SAI Global

INSTALLATION RECORD

INSTALLERS / GAS FITTERS DETAILS

Installers Name: _____

Company Name: _____

Company Address: _____

Company Contact Details

Telephone: _____

Mobile Phone: _____

Certificate of Compliance / Certification Number: _____

Autorised Persons - Licence Number: _____

Installers Signature: _____

Installation Date: _____

APPLIANCE DETAILS

Model Number: _____

Serial Number: _____

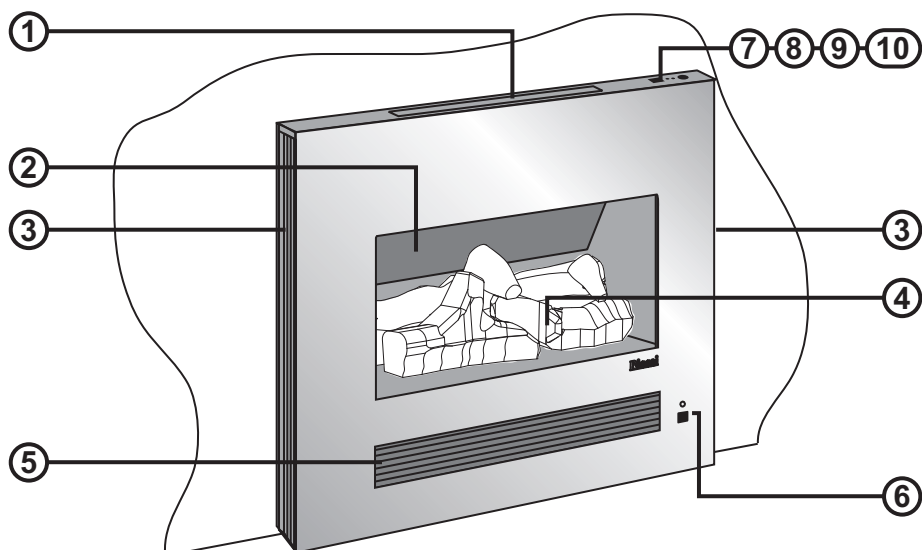
Installation Address: _____

OPERATION MANUAL

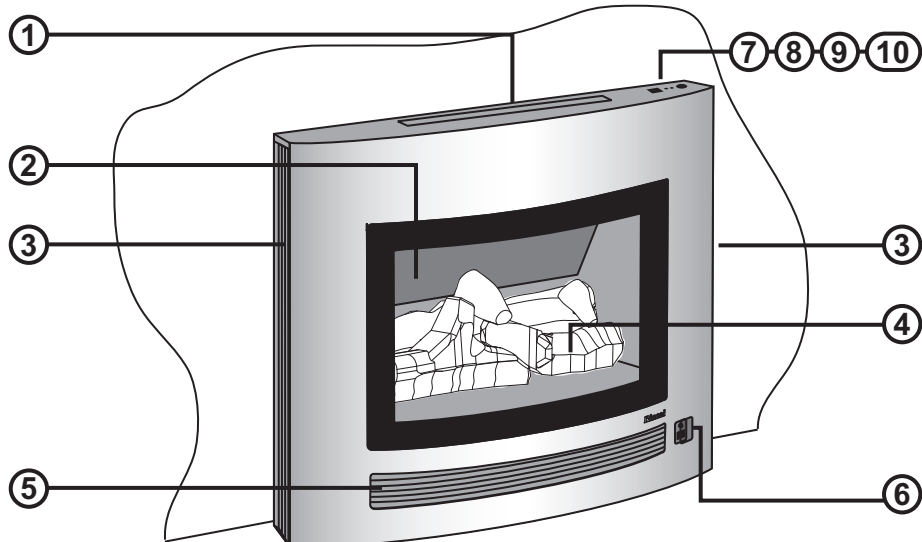
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ABOUT YOUR NEW ASPIRATION SPACE HEATER

GENERAL DESIGN LAYOUT



Flat front model - Stainless steel or powder coated finish



Curved front model - Glass

1 AUTO OVERHEAT
DISCHARGE VENT

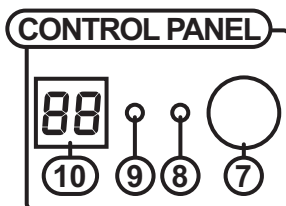
2 DOUBLE GLAZED
FLAME WINDOW

3 ROOM AIR RETURN

4 LOG SET

5 LOUVRE, WARM
AIR DISCHARGE

6 RECEIVER WINDOW /
BLOCKAGE INDICATOR
Remote control receiver, Indicator
for filter/louvre blockages



7 ON/OFF BUTTON
Turns the heater On or Off.

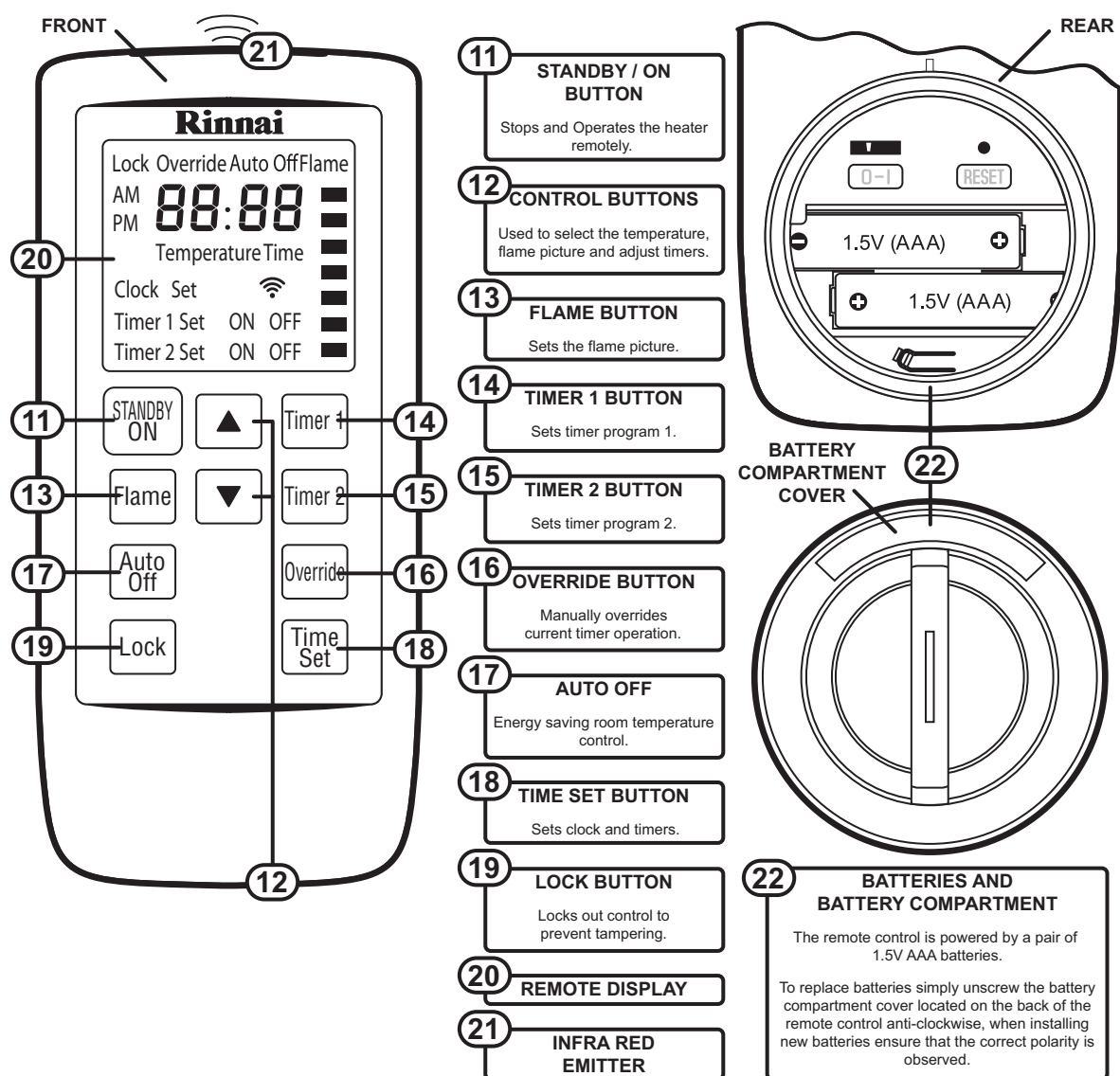
8 OPERATION INDICATOR
Indicates operation status

9 TIMER INDICATOR
Indicates timer program status.

10 ERROR DISPLAY
Displays error codes

ABOUT YOUR NEW ASPIRATION SPACE HEATER

REMOTE CONTROL GENERAL LAYOUT

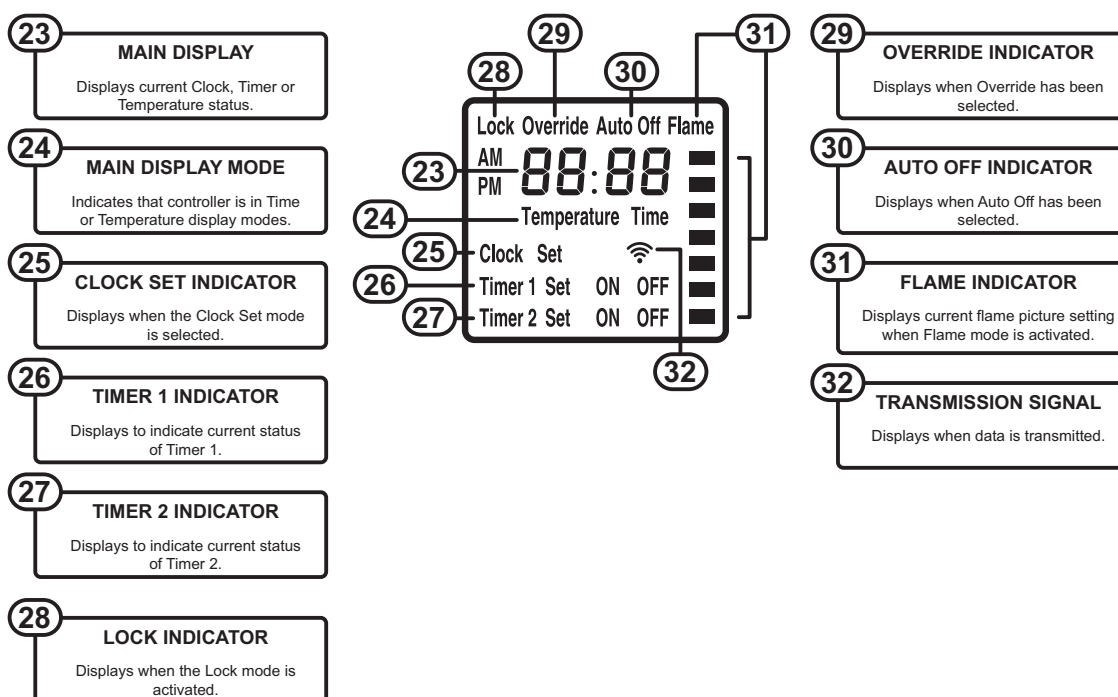


NOTE

- Use 2 x 1.5V AAA batteries. NEVER mix old and new batteries.
- Remove batteries if the remote control is not going to be used for a long period. This will help avoid damage from leaking batteries.
- When using Timers press Override to activate remote control functions.
- If the heater is operating in Override mode, using the STANDBY/ON button will cancel any future timer operations, these will have to be reset manually.
- 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 leaving the remote control in direct sunlight and do not place it close to the warm air discharge louvres of the heater.
- Avoid dropping the remote control or getting it wet.

ABOUT YOUR NEW ASPIRATION SPACE HEATER

REMOTE CONTROL DISPLAY



FEATURES

- **Room Sealed:** Air for combustion is taken from the outside and the flue products are exhausted to the outside. This means heater operation has no effect on the composition and quality of air in the room.
- **Push Button Ignition:** Only one touch of the STANDBY/ON switch is all that is required to operate the heater.
- **Lock:** When the Lock function is activated all controls other than the STANDBY/ON switch will be locked. Deactivating the lock releases the controls. If the lock is activated when the appliance is in STANDBY, all functions will be locked.
- **Memory:** The heaters micro-computer records preset temperatures, timer programming, and operational modes. Even in the event of a power failure, the need for reprogramming is minimised.
- **Dual Timer:** The Dual Timer allows you to program the appliance to operate for two separate periods each day. Once programmed the heater can then be controlled by selection of the Timer 1 and or Timer 2 functions.
The Dual Timer feature means that you can "Set and Forget" your heater. It will turn itself ON or to STANDBY at the times you have programmed until you cancel the Timer program.
- **Pre-Heat:** This function automatically operates the appliance before the programmed ON time of the Timer, in order to heat a room to the pre-set temperature by the programmed ON time.
- **Remote Control:** Full function cordless remote for the convenience of operating the heater from a distance.
- **Auto-Off Function:** The Auto-Off function is an energy saving feature designed to control the room temperature economically. If the room temperature continues to rise when the heater is thermostatically turned down to its lowest setting the front burner will turn off leaving only the pilot flame operating. When the room temperature requires further heating the heater will automatically re-ignite to warm the room.

SAFETY

Unpacking The Appliance:

Check for damage. If the heater is damaged, contact your supplier for advice.

Before installing the appliance, check it is labelled for the correct gas type (see label on top rear of heater). Refer to local gas authority for confirmation of gas type if you are in doubt.

The following additional items should also be included in the carton:

- Customers Operation Information
- Remote Control and Remote Control Caddy
- Batteries

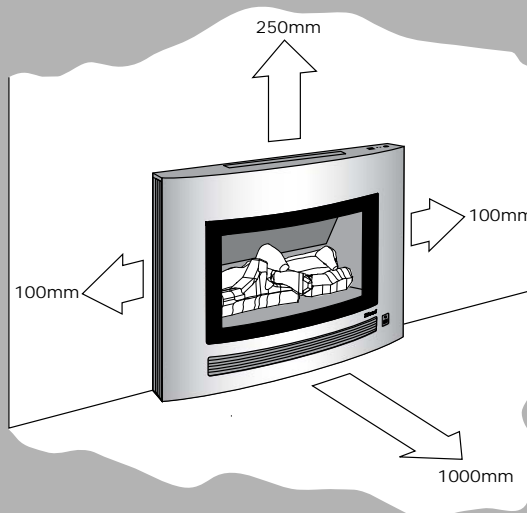


Failure to comply with these instructions could result in a fire or explosion, which could cause serious injury, death or property damage.

Improper installation, adjustments, service or maintenance can cause serious injury, death or property damage. Such work must be performed by an authorised person.



- The appliance must be installed in accordance with the local gas and electrical authority regulations.
- For information on gas consumption, see data plate on the appliance.
- This appliance must not be installed where curtains or other combustible materials could come into contact with it. In some cases curtains may need restraining.
- Heat emanating from the front of this appliance may over time affect the appearance of some materials used for flooring such as carpet, vinyl, cork or timber. This effect may be amplified if the air in the room contains cooking vapours or cigarette smoke. To avoid this possibility, it is recommended that a mat be placed in front of the appliance, extending at least 750 mm in front of it.
- The appliance is not intended for use by young children or infirm persons without supervision.
- Young children should be supervised to ensure they do not play with the appliance.
- If the supply cord is damaged or requires replacing, it must be replaced by the manufacturer or the manufacturer's agent or similarly qualified person in order to avoid a hazard.



The above diagram shows the clearances required around this heater whilst in operation.

SAFETY

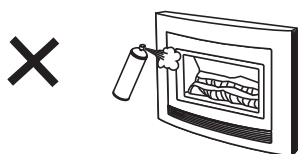
Do not restrict the warm air discharge by placing articles in front of the heater.



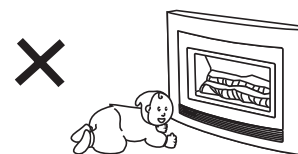
This appliance must not be used for any purpose other than heating.



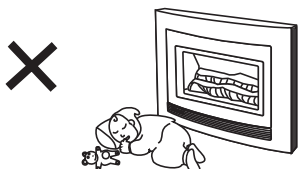
Do not spray aerosols whilst the heater is operating. Most aerosols contain butane gas, which can be a fire hazard if used near the heater when it is in use.



Young children should be supervised at all times. Hand or body contact with the warm air discharge louvres and glass must be avoided.



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



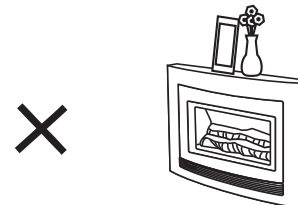
Do not allow anyone to sit on or lean against the appliance.



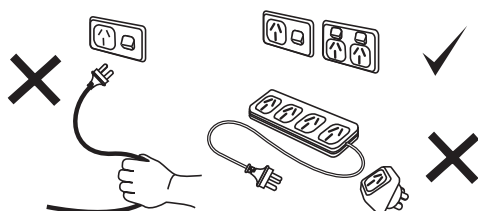
Do not allow anyone to post articles through the louvres or let flammable and combustible materials to come into contact with the heater.



Do not place articles on the heaters top panel or obstruct the auto overheat discharge vent.



Do not unplug the heater while it is in operation or while the fans are still cycling. Unplugging the heater will cause any timer operation to stop. Timer programs are stored in the memory of the remote control.



A dedicated 230~240V 50Hz 10 Amp power point must be used with this appliance. Do not use power boards or double adaptors to operate this appliance. Heater must not be located below a power socket outlet.

Heat emanating from the front of this appliance may over time affect the appearance of some materials used for flooring such as carpet, vinyl, cork or timber. This effect may be amplified if the air in the room contains cooking vapours or cigarette smoke. To avoid this possibility, it is recommended that a mat be placed in front of the appliance, extending at least 750 mm in front of it.

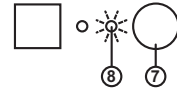


BASIC HEATER OPERATION

GENERAL NOTES ABOUT IGNITION

This appliance has a sealed combustion chamber that requires purging before gas is allowed to flow and the ignition sequence begins. As a result the combustion fan starts several seconds before there are any signs of ignition. The normal ignition sequence is as follows:

1. When the On/Off (7) button is pressed the Operation Indicator (8) LED will glow red and Combustion fan will rotate to purge the system.
2. Pilot sparker operates.
3. As soon as a spark is sensed, gas will flow to the pilot.
4. When the pilot flame is established gas will flow to the front burners and then to the rear burners.
5. When all burners are established the heater will automatically modulate between burner settings to achieve and maintain the default set temperature of 22°C.



When using the heater for the first time or after long periods of non use, ignition may not occur the first time it is operated due to air in the gas pipes. If ignition does not occur within approximately 60 seconds the appliance will attempt to re-light, however if ignition continues to fail the unit will cease operation automatically. Try operating the heater again if this occurs.

The heater may make noises after ignition or extinction. This is due to expansion and contraction of the internal components and is normal.

The heater will not ignite if the ON/OFF button is pressed straight after extinction. After approximately 20 seconds has passed the unit will automatically go into ignition mode.

OPERATION WITHOUT THE REMOTE CONTROL (AUTOMATIC MODE)

The remote control stores the clock, timer and temperature settings for the heater. The heater can be operated and stopped without the remote control by simply using the On/Off (7) button on the top panel of the heater. Operation in this manner is known as automatic mode. In automatic mode the default set temperature is 22°C. For operation in other modes the remote control must be used.

OPERATION WITH THE REMOTE CONTROL

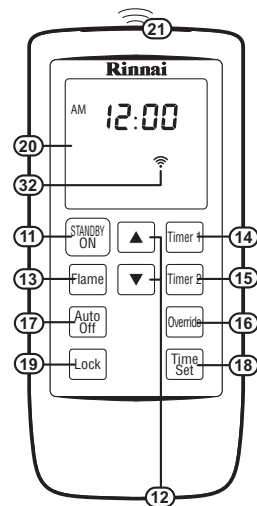
For the remote control functions to be available, the heater must be switched between standby and off using the remote control.

The remote control emits an Infra Red (IR) signal and must be aimed at the receiver unit located to the right of the warm air discharge louvre (5). The normal operating range is approximately 5 metres, up to an angle of approximately 40 degrees to the horizontal. This range may vary depending on the position of the installation and the strength of the remote controller batteries. The remote control transmits information to the heater whenever a button is pressed except as follows:

1. When the remote control display is de-activated and any button is pressed to restore the display
2. When the lock function is activated

When the timers are being set, timer information is transmitted only when the 'Time Set' button is pressed.

Signal transmissions are confirmed by a brief illumination of the Transmission Signal (32) Indicator on the Remote Display (20) and at the heater the Remote Control Indicator (6) located to the right of the warm air discharge louvre (5) will flash and a beep will sound to confirm that the settings have been received.



When the remote control is not used for a period of approximately 5 seconds the display will then default to stand-by mode, displaying only the time.

To re-activate the remote control press any button on the keypad. This returns the display to the previous mode. No information is transmitted from the controller to the heater when re-activating the display.

BASIC HEATER OPERATION

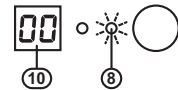
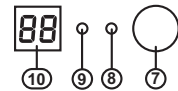
TURNING ON THE POWER

Press the On/Off (7) button located on the heater control panel once. The Operation Indicator (8) will illuminate and glow 'Red' and the ignition process will commence.

The heater will continue to operate in the automatic mode to achieve and maintain a default temperature setting of 22°C until an alternate command is received from the remote control.

If the main power is disrupted whilst the heater is operating, once the power is restored the heater will go into power failure mode. This is indicated by a pair of flashing zeros in the Error Display (10) window and a 'Green' flashing Operation Indicator (8).

To reset the heater, press the On/Off (7) button once. Press the STANDBY/ON (11) button a second time to switch the heater on.



To operate the heater in automatic mode without using the remote control, press the main power switch on the heater off and then on again. The heater will operate with a default set temperature of 22°C.

If the heater is turned off using the On/Off (7) button on the heater control panel when it is turned back on it will lose all timer and clock settings until the remote control is used to re-transmit this information.



DO NOT unplug the main power supply, to extinguish the flames as this may cause damage. The convection fan is required to continue operation for several minutes after extinction of the flames to assist cooling.

USING THE REMOTE CONTROL TO OPERATE THE HEATER

Turning The Heater On

When the heater is in standby mode (Operation Indicator (8) illuminated 'Green') pressing the STANDBY/ON (11) button will start the ignition sequence and the Operation Indicator (8) will glow 'Red' to indicate that the heater is now in operation.

Turning The Heater To Stand-By

Press the STANDBY/ON (11) button. This will extinguish all flames and the Operation Indicator (8) will glow 'Green' to indicate the appliance is now in stand-by mode.

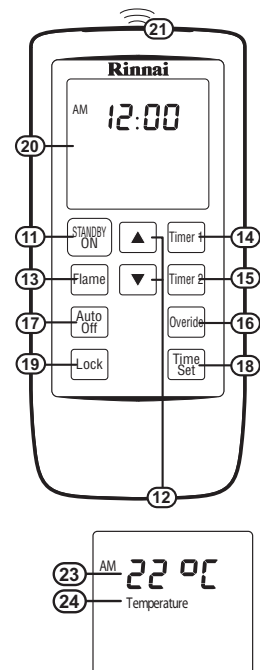
ADJUSTING THE TEMPERATURE

When in automatic mode, pressing the Up and Down (12) buttons will change the pre-set temperature by increments of 1°C with each press.

"Temperature" (24) will be displayed to confirm that the function has been initiated. The Remote Display will show the selected temperature (23) in degrees °C.

The temperature can be pre-set to:

- A. **L (Low)** – Continuous combustion on low.
- B. **16°C ~ 26°C (in 1°C steps)** – Thermostatic control to pre-set temperature selected. Combustion rate varies to maintain the selected temperature.
- C. **H (High)** – Continuous combustion on high.



BASIC HEATER OPERATION

FLAME FUNCTION

The flame function is used to select a desired flame picture and overrides the automatic mode. There are seven separate flame picture settings available.

While the heater is in operation press the Flame (13) button once to activate this function. The heater will automatically default to the last used flame picture setting. "Flame" and a series of seven short bars (31) (one bar for each of the seven flame picture settings) will be displayed to show that the flame function is in operation.

Use the Up and Down (12) buttons to select the desired flame picture. The number of bars illuminated correspond to the flame picture setting selected.

To return to automatic mode press the Flame (13) button a second time.



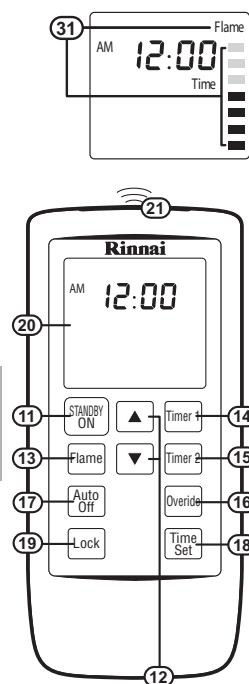
Should the room temperature reach 40°C whilst the flame function is activated the heater will switch off automatically. This is a safety feature.

REMOTE CONTROL BATTERIES

Use 2 x 1.5V AAA batteries. NEVER mix old and new batteries.

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

To replace batteries simply unscrew the battery compartment cover located on the back of the remote control anti-clockwise. When installing new batteries ensure that the correct polarity is observed, the polarity is engraved into the battery compartment. See the illustration on page 2.



PROGRAMMED HEATER OPERATION

PROGRAMMING THE CLOCK AND TIMERS

The clock must be set before the timers will operate. The clock may need to be re-set whenever the remote control batteries are changed. This heater has two timers which allow the heater to start and stop during two distinct periods each day. The set temperature during timer operation is the temperature which was selected when the heater was last used.

Clock Setting

1. Press the Time Set (18) button once. "Clock Set" (25) will be displayed to confirm that the function has been initiated. The Remote Display will show "AM 12:00" (23).
2. Use the Up and Down (12) buttons to set the desired "AM" or "PM" clock time. Then press the Time Set (18) button once.



If you do not want to set the timers at this point then press the Time Set (18) button 4 more times until the display returns to the time. If there is no button pressed for approximately 90 seconds then the screen will deactivate and any settings that have not been transmitted will be lost.

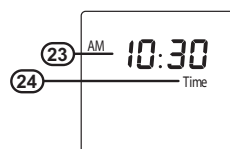
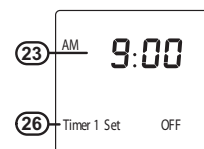
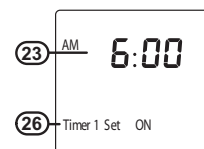
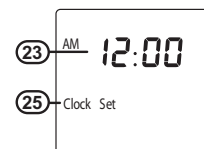
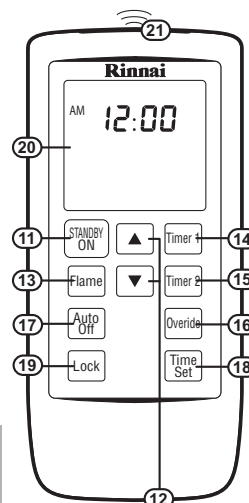
Timer Setting

3. "Timer 1 Set ON" (26) and "AM 06:00" (23) will be displayed. Use the Up and Down (12) buttons to set the desired "AM" or "PM" "ON" time. Press the Time Set (18) button once.
4. "Timer 1 Set OFF" (26) and "AM 09:00" (23) will be displayed. Use the Up and Down (12) buttons to set the desired "AM" or "PM" "OFF" time. Press the Time Set (18) button once.
5. To set-up Timer 2 repeat steps 3. and 4 above or just press the Time Set (18) button three times to exit the timer set-up.
6. The set On/Off timers will be displayed briefly to confirm settings.

When the programs have been received the Remote Display will revert to Time mode (23) and (24).



After battery replacement the clock and timers may need to be re-programmed.

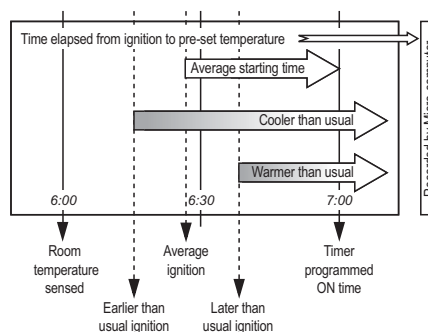


PRE-HEAT

This function operates automatically in conjunction with the Timers. When a Timer is selected, the heater may operate anywhere within an hour prior to the programmed ON Time.

This function is called Pre-heat as it ensures the room reaches the desired temperature by the programmed ON time. This is achieved by sensing the rooms temperature one hour prior to start.

The difference in room and set temperatures at the time of sensing the room temperature determines exactly how long before the programmed ON time the micro-computer will ignite the burner.



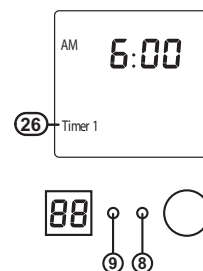
PROGRAMMED HEATER OPERATION

USING THE TIMERS

Prior to using timers ensure that the desired temperature has been set. See ADJUSTING THE TEMPERATURE on page 7.

One or both Timers can be used. While the heater is in operation press to start Timer 1 press the Timer 1 (14) button. To start Timer 2 press the Timer 2 (15) button. The display briefly shows the status of each Timer (e.g. Timer 1 ON Timer 1 OFF). If the current time is outside those programmed the heater will go in to stand-by mode and the Timer Indicator (9) will glow 'Green'.

To turn the Timer(s) off simply press the relevant Timer button again. The heater will return to stand-by mode and the Operation Indicator (8) will glow 'Green', if there are no timers set the Timer Indicator (9) will go out.



When operated by the Timer(s) the Flame Function is not available. If desired the flame picture can be controlled by raising or lowering the set temperature.

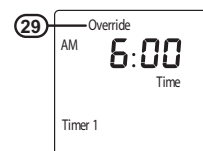
USING THE OVERRIDE FUNCTION

This function is used to manually override Timer programmed operation.

When the Override (16) button is pressed "Override" (29) will be displayed to confirm that the function has been selected. Whilst in Override mode all remote control functions except for the flame function are available until the next Timer event.

To return to Timer programmed operation press the Override (16) button a second time.

If the STANDBY/ON (11) button is pressed during Override operations the heater will revert to STANDBY and the Timer programs will be cancelled.



USING THE AUTO OFF

The Auto Off function is useful in situations when the room temperature keeps rising even when the heater is on the lowest heat setting.

Auto Off Function 'OFF'

When the room temperature reaches the preset temperature with the Auto Off function 'OFF', the heater continues to operate with the front burner on low to provide a flame picture with minimal heat output. In some cases this may still cause the room to become warmer than desired.

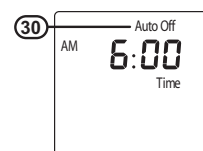
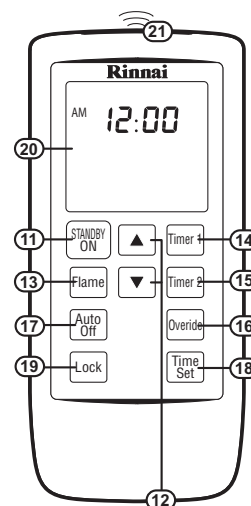
Auto Off Function 'ON'

When the room temperature reaches the preset temperature with the Auto Off function 'ON' all burners will extinguish resulting in pilot operation only. Burners will re-ignite as required to maintain the set temperature.

To switch the Auto Off function 'ON', press the Auto Off (17) button once.

"Auto Off" (30) will be displayed to confirm that the function has been selected.

To switch the Auto Off function 'OFF', press the Auto Off (17) button again.

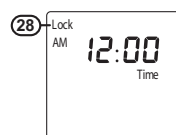


THE LOCK FUNCTION

By pressing the Lock (19) button all the functions of the remote control will be locked with the exception of the STANDBY/ON (11) button for the purpose of turning the heater to STANDBY only.

The Remote Control Display (20) will show "Lock" (28) in the top left hand corner.

To cancel the Lock function hold down the Lock (19) button for 3 seconds.



CARE AND MAINTENANCE

CLEANING

Your heater needs very little maintenance, however the following information will help you keep it looking good and working efficiently.



- **Unplug electrical cord before cleaning.**
- **DO NOT USE SOLVENTS.** All parts of the heater and remote control can be cleaned using a soft, damp cloth and a mild detergent.
- **DO NOT attempt to clean the heater while the appliance is hot or operating.**

FILTERS

The filters for this appliance are located inside the Room Air Return ③ doors and consist of two metal mesh strips.

The build up of dust or other particles on these filter strips reduces the air flow through to the heater which in turn reduces heater's efficiency and can lead to the appliance shutting down.

Filter Care

Filters require cleaning regularly during the heating season to prevent these unnecessary cut-outs.

To remove filter strips for cleaning:

- Open both the Room Air Return ③ doors, the doors have spring loaded latches and are hinged to open towards the rear. Pressing the front edge of these doors will unlock the spring loaded latches and allow the doors to swing open.
- Carefully slide filter strip upwards until the bottom tab clears the lower retaining slot.
- Slide the filter strip down and away from door to remove.

Cleaning filter strips:

- Clean any dust and other debris from both faces of the filters with either a vacuum cleaner, a soft dry cloth or a soft brush. **NEVER** attempt to clean filters with water.

To re-insert filter strips:

- Carefully slide the upper tab labelled "TOP" (no hole) back into the upper retaining slot.
- While holding the filter flush with the door lower the filter until the lower tab has engaged the lower retaining slot.
- Close both the Room Air Return ③ doors so that the spring loaded latches re-engage.

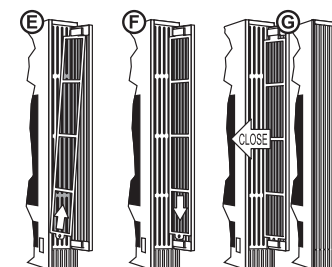
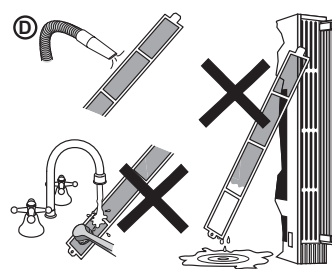
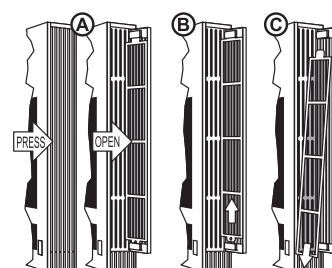
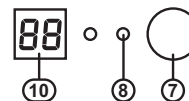
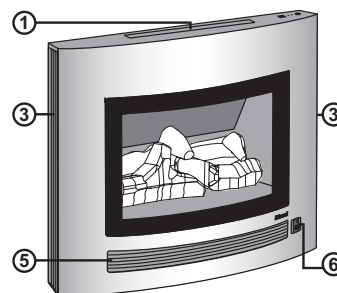
Heater shut down due to filter blockages

DO NOT wait for the Filter Blockage Indicator to come on before cleaning filters.

DO NOT continue to use the heater once this Indicator is flashing.

When an obstructive build up is detected the Blockage Indicator LED which is located above the Receiver Window ⑥ will begin to flash RED to let you know that there is a problem.

Once the Indicator is flashing if no action is taken the heater will eventually shut down to avoid overheating and a fault code of 14 will be displayed in the Error Display ⑩ window.

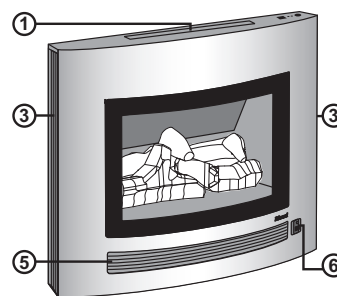


CARE AND MAINTENANCE

Returning the appliance to normal operation after a shut down

To restore to normal operation after a filter blockage shut down do the following:

1. Press the On/Off ⑦ button once to turn off the heater.
2. Remove obstruction (see "Filter Care" on page 11).
3. Press the On/Off ⑦ button once to turn the heater back on.
4. Use the remote control to resume normal heater operation.

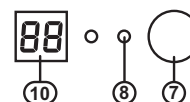


LOUVRES

It is important that the Louvres of the Warm Air Discharge ⑤ be kept clear of any obstructions as this will cause your heater to operate less efficiently.

When an obstruction is detected the Blockage Indicator LED which is located above the Receiver Window ⑥ will illuminate RED and the combustion state reduces to front burner, low operation only.

To restore normal operation remove the obstruction and use the remote control to resume normal heater operation



GENERAL HEATER CHARACTERISTICS

Before asking for a service call please check the following table as these characteristics are part of the normal operation of the appliance and do not indicate a fault.

CHARACTERISTIC	→	EXPLANATION
At ignition:		
Warm air does not start when the burner lights.	→	The room fan air is started automatically after a short delay. This is to allow the heat exchanger to warm up, helping to avoid cold draughts.
Smoke or strange smells are produced on the first up operation after installation.	→	This is caused by grease, oil or dust on the heat exchanger. This will stop after a short time.
Sharp clicking noises at ignition, or when the unit thermostat modulates to a lower or higher setting, or shuts down.	→	This is simply expansion and contraction noise from the heat exchanger.
During combustion:		
Clunking noise when the thermostat operates	→	This is the sound of the solenoid gas valves opening and closing to regulate the gas flow.
When the appliance is turned off:		
Convection fan continues to run after turning off.	→	This is to remove residual heat from the heat exchanger and stops once the appliance cools.
Other points:		
Steam is discharged from the flue terminal.	→	High efficiency appliances tend to discharge water vapour on cold days. This is normal.
Heater does not start when the STANDBY / ON button is pushed, thermostat is on High (H).	→	Check that the appliance On / Off button is ON. Check Timer(s). Timer(s) programmes must be turned off or overridden for manual operation.
Timer(s):		
Timer(s) do not operate at set time.	→	Timer(s) may either be inactivated or incorrectly programmed. Please confirm Timer(s) are set correctly. See page 9 for correct Timer(s) operation.
Timer operates for a short period and then cuts out.	→	Room temperature may be higher than the set temperature. Increase set temperature if desired. Cancel the Auto Off function.

CARE AND MAINTENANCE

TROUBLE SHOOTING CHECKLIST

Use the following chart to help determine whether a service call is required, however if you are unsure about the way your heater is operating, contact Rinnai or your local agent.

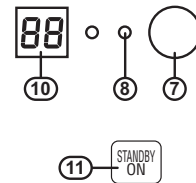
Fault Condition →	→	No Display on remote	No ignition or control panel indicators	Burners fail to ignite	Combustion stops during operation	Smell of gas	Remote control doesn't work	Possible Remedy ↓
Probable Cause ↘								
Not plugged in or turned off.		●					●	Plug in power cord or press On/Off (7) button.
Mains power failure.		●			●			Use power failure reset procedure on page 7.
(Initial Install) Air in gas pipe.				●				Installer to purge air from gas supply.
Filter obstructed.					●			Remove and clean filters.
Gas escape.						●		Isolate gas supply, call Rinnai service, page 29.
On Timer set.							●	Use the Override as described on page 10.
Lock set.							●	Cancel Lock as described on page 10.
Gas supply turned off.				●	●			Turn gas supply on at the meter or cylinder.
Flat batteries.		●						Replace remote control batteries 2 x 1.5v (AAA).
Remote Control lock-up due to mis operations such as the remote signal being out of range, incorrectly aimed or obstructed.							●	Press the STANDBY/ON (11) button.

ERROR CODES

Your ASPIRATION space heater is also fitted with self diagnostic electronics that monitor the appliance during start-up and operation.

Should a fault occur the heater will shut down, the fault that has caused the shut down will be indicated by a pair of flashing digits in the Error Display (10) window and a 'Green' flashing Operation Indicator (8).

Refer to the table below for probable cause and the suggested remedy.



Code	Probable Cause	Suggested Remedy
00	Mains power failure	To reset the heater, press the On/Off (7) button twice or use the remote control and press the STANDBY/ON (11) button once for stand-by mode, press the STANDBY/ON (11) button a second time to set the heater to On.
11	Ignition failure	Check gas supply is turned on, switch the heater to Standby and then On again. If ignition failure continues to occur a Service call will be required.
12	Incomplete combustion	As above
14	Filter Blockage / Overheat	Clean filters, if error continues service call.
16	Room overheat	Lower room temp to below 40°C.
31	Room temperature sensor faulty	Service call.
32	Overheat temperature sensor faulty	Service call.
33	Overheat temperature sensor faulty	Service call.
53	Spark sensor faulty	Service call.
61	Combustion fan motor faulty	Service call.
71	Solenoids faulty	Service call.
72	Flame detection circuit fault	Service call.
73	Communication error	Service call.

CARE AND MAINTENANCE

SERVICE

Rinnai recommend that this appliance and installation be inspected and serviced every 2 years.

If the power supply cord or any other component of the heater are damaged, they must be replaced by Rinnai or a suitably qualified person.

Any service or repair work should only be carried out by an authorised person. Rinnai has service and spare parts departments nationally see back cover for contact details.



Service calls for general cleaning, maintenance and wear and tear are not necessarily covered under the warranty. Service calls of this nature may be chargeable.

Faults caused by insufficient gas supply, gas quality, installation errors or operation errors are not covered by the Rinnai warranty. Refer to Warranty Card in this manual.

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INSTALLATION GENERAL

PRODUCT SPECIFICATIONS

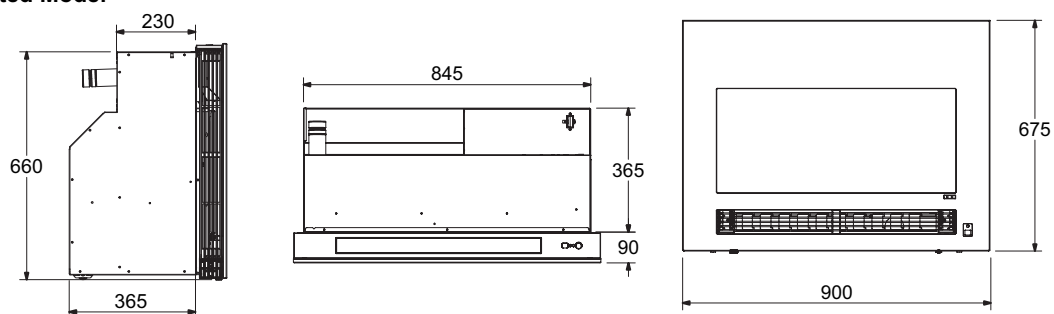
Model: RHFE-750ETR **Name:** Aspiration

General description:	Inbuilt, glass or steel fronted, ceramic log space heater with forced convection heating and power flue system.		
Gas input rate:		Natural Gas	Propane
	Pilot and Low (MJ/hr):	8	8
	High, Extended flue / Direct flue (MJ/hr):	28 / 31.5	28 / 31.5
Gas control:	Electronic control		
Burners	Ember bed and flame burner		
Gas Supply Pressure:	(kPa)	1.13 - 3.0	3.0
Gas Connection:	1/2" MI BSP		
Flue System:	Fan assisted, twin chamber coaxial flue system, provides air for combustion to the appliance and allows expulsion of combustion products to atmosphere. Results in 'room sealed' appliance.		
Convection Fan:	Three speed radial flow fan		
Combustion system	Multi port burners		
Logs:	Ceramic		
Ignition system:	Continuous spark electronic ignition		
Operation:	Push button electronic / Remote control		
Safety devices:	Overheat thermistor Flame failure sensing system Thermal fuse	Overcurrent fuse Spark detector Air temperature thermistor	
Combustion method:	Naturally aspirated burner		
Installation type:	Inbuilt only		
Weight:	70 kg.		

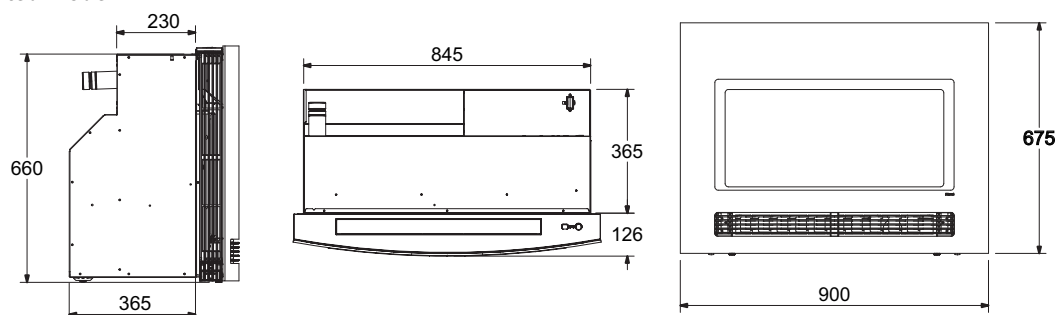
The manufacturer reserves the right to change or modify specifications without notice.

APPLIANCE DIMENSIONS

Steel Fronted Model



Glass Fronted Model



HEATER LOCATION

When positioning the heater the main variables governing the location are Flueing and Warm Air Distribution.

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.

ENCLOSURE REQUIREMENTS

As the Rinnai Aspiration has a cool outer casing it can be installed into existing Masonry fireplace or into a decorative fireplace constructed from combustible materials such as wood or plaster.



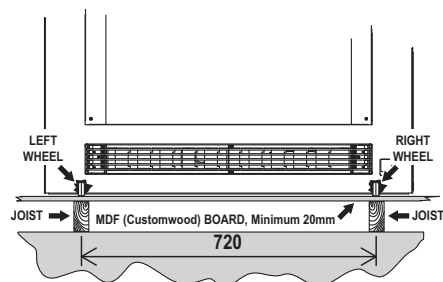
For all installations, ONLY Rinnai Aspiration Flue components MUST BE used. The Rinnai Aspiration MUST NOT be flued into 'natural draft' flue system or via a chimney.

Consult the Rinnai Aspiration RHFE 750ETR 'Flue Installation Manual' included with the 'On Wall' or 'Direct' flue kits for detailed flue installation instructions.

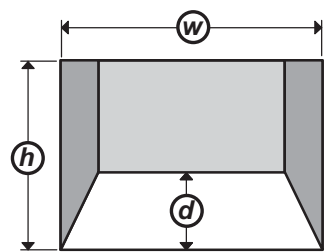
A pair of wheels located at the rear the heater allows it to slide in and out of the enclosure for ease of commissioning and maintenance. As such the heater must be positioned on a flat and level surface that allows free movement.

In a masonry fireplace, use a slurry of sand and cement to level the base as required.

In a decorative fireplace, if the appliance is elevated from the ground, a base must be constructed using a board with supporting joists as shown.



Enclosure Dimensions		
(w)	Width	860 mm
(h)	Height	660 mm
(d)	Depth	450 mm *
*Enclosure depth for 'down and out' flueing applications is a minimum of 500 mm. See Rinnai Aspiration flue instructions for details.		



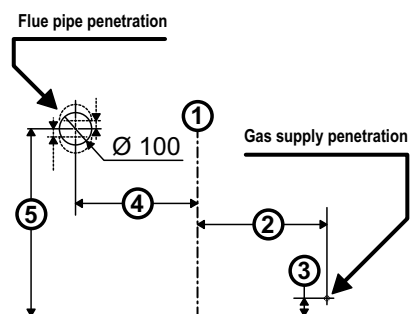
The enclosure dimensions specified are critical to the successful installation of this appliance and must be strictly adhered to.

WALL PENETRATION REQUIREMENTS

Mark the location of the gas supply (consumer piping) and flue pipe penetrations from the centreline ① of the heater enclosure using the following dimensions:

- ① Centreline of enclosure ② 400 mm right of centreline
- ③ 55 mm from base of enclosure ④ 378 mm left of centreline
- ⑤ 580 mm from base of enclosure plus or minus 25mm

Consideration must be given to the position of any studs, noggins or other components of the wall structure.



Ensure the penetration points are marked accurately as this is critical for successful appliance installation.

The penetration for the flue pipe only needs to be made for 'Direct' flue installations, where the flue terminal is located directly to the rear of the appliance.

If no flue pipe penetration is required the markings are still useful for indicating the correct position of the flue transition within the enclosure for extended horizontal flue applications.

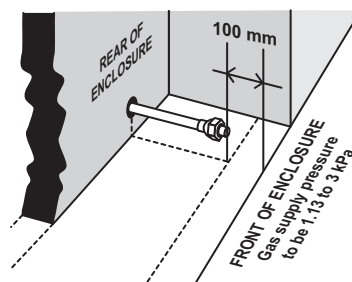
HEATER LOCATION

GAS SUPPLY

The gas supply terminates inside the heater and enters the appliance from the rear. To ensure correct positioning, terminate the gas supply so that it is 100 mm in from the front of the enclosure opening.



Gas pipe sizing must consider the gas input to this appliance as well as all other gas appliances in the premises. The gas meter and regulator must be specified for the total gas rate. Suitable sizing chart such as the one in AS 5601 should be used.



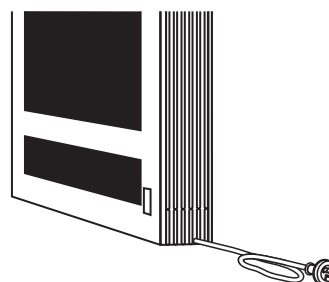
Purging The Gas Supply

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

ELECTRICAL SUPPLY

This heater has a power cord with a three pin plug supplied. The power cord passes through a slot in the lower right of the appliance. If a left hand entry is required contact Rinnai for details.

Rinnai recommend the heater be plugged into a 240V, 10A earthed power point. The power point must be a maximum of 1500 mm to the side of the heater (it must not be above the heater). Alternatively the appliance can be direct wired if the power supply is to be concealed.



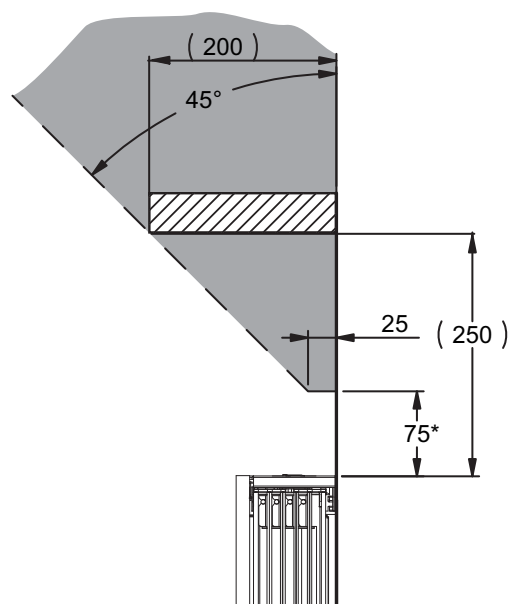
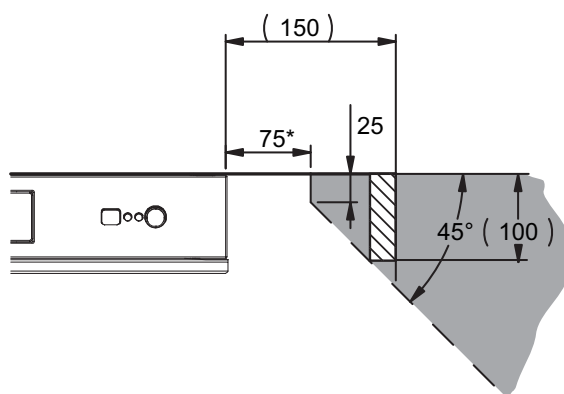
Consult a qualified electrician if direct wiring is required as it must comply with the requirements of AS 5601 and AS 3000 and any other relevant local regulations.

MANTLE INSTALLATIONS

A mantle is permitted providing the following clearances are met.

Top View

Side View



Mantles are allowed within the shaded areas



*** 75 mm is the minimum clearance required for access to the heater controls and to allow cleaning / servicing of the filters.**

FLUE INSTALLATION

TYPES OF FLUE INSTALLATIONS



Consult the Rinnai Aspiration RHFE 750ETR 'Flue Installation Manual' included with the 'On Wall' or 'Direct' flue kits for detailed flue installation instructions.
Use only Rinnai Aspiration flue components with this appliance.

Option	Components	Order Codes	
I Direct	'Direct Flue' Kit	ASPDFK	
II A Vertical Extension	'On Wall' Kit Co-axial Pipe 900mm* Roof Cowl	ASPKIT03 ESPIPE900 ESROOFCOWL	
II B Vertical Extension	'On Wall' Kit Co-axial Pipe 900mm* Bends (2 x 45°) Roof Cowl	ASPKIT03 ESPIPE900 ESBEND ESWTKIT	
III A Vertical Extension	'Direct Flue' Kit Co-axial Pipe 900mm* Bends (2 x 45°) Condensate Trap Kit Roof Cowl	ASPDFK ESPIPE900 ESBEND ESCONDK ESROOFCOWL	
III B Vertical Extension	'Direct Flue' Kit Co-axial Pipe 900mm* Bends (2 x 45°) Condensate Trap Kit Wall Terminal Kit	ASPDFK ESPIPE900 ESBEND ESCONDK ESWTKIT	
IV Sideways Extension	'On Wall' Kit Co-axial Pipe 900mm* Wall Terminal Kit	ASPKIT03 ESPIPE900 ESWTKIT	
V Down & Out Extension	'On Wall' Kit Co-axial Pipe 900mm* Bends (2 x 45°) Wall Terminal Kit	ASPKIT03 ESPIPE900 ESBEND ESWTKIT	

* Order number of lengths as required



Flue is NOT to be terminated under the floor or in a roof space.

'Down & Out' and vertical 'through roof' flue installations are permitted ONLY when the flue terminal is located externally.



For horizontal installations there must be a continuous fall of at least 2° to the termination point to drain condensate.

All terminations exceeding a vertical height of 1.5 metres must incorporate a condensate trap.

'Down & Out' flue systems must have a continuous fall of at least 2° to the termination point to drain condensate. Flue terminal must be at least 300 mm above the ground in accordance with AS 5601 Clause 5.13.6.2 & Fig. 5.3.

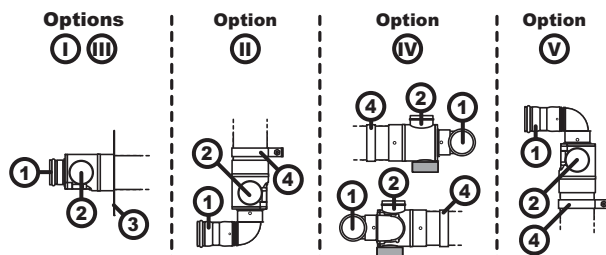
FLUE SYSTEM TRANSITION CASTING

The flue system transition casting provides a connection between the flue system and the heater's flue spigot and air intake hose.

A minimum 5 mm clearance from combustible materials to the transition casting is required.

This clearance is provided automatically when the 'stand off' brackets ④ that are supplied are used.

Flue system transition casting components are: ① transition casting flue outlet, ② transition casting air inlet and ③ Wall plate.



FLUE INSTALLATION

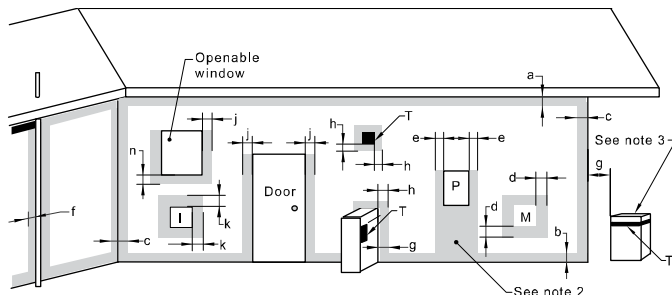
FLUE TERMINAL LOCATION



The flue terminal should be positioned away from flammable materials.

The Aspiration RHFE 750ETR flue terminal is 'Fan Assisted' with a maximum input of 32 MJ/h

Ensure that the location of the flue terminal can comply with the requirements of AS 5601 2004 Clause 5.13.6.2 and Fig. 5.3 which is reproduced below.



LEGEND:

T = Flue terminal
I = Mechanical air inlet

M = Gas meter
P = Electricity meter or fuse box

Shading indicates prohibited areas for flue terminals

Ref .	Item	Minimum clearances (mm)	
		Natural draft	Fan assisted
a	Below eaves, balconies and other projections:		
	• Appliances up to 50 MJ/h input	300	200
	• Appliances over 50 MJ/h input	500	300
b	From the ground, above a balcony or other surface †	300	300
c	From a return wall or external corner †	500	300
d	From a gas meter (M) (see 4.7.11 for vent terminal location of regulator)	1000	1000
e	From an electricity meter or fuse box (P)	500	500
f	From a drain pipe or soil pipe	150	75
g	Horizontally from any building structure † or obstruction facing a terminal	500	500
h	From any other flue terminal, cowl, or combustion air intake †	500	300
j	Horizontally from an openable window, door, non-mechanical air inlet, or any other opening into a building with the exception of sub-floor ventilation:		
	• Appliances up to 150 MJ/h input	500	300
	• Appliances over 150 MJ/h input up to 200 MJ/h input	1500	300
	• Appliances over 200 MJ/h input up to 250 MJ/h input †	1500	500
	• Appliances over 250 MJ/h input †	1500	1500
	• All fan-assisted flue appliances, in the direction of discharge	-	1500
k	From a mechanical air inlet, including a spa blower	1500	1000
n	Vertically below an openable window, non-mechanical air inlet, or any other opening into a building with the exception of sub-floor ventilation:		
	• Space heaters up to 50 MJ/h input	150	150
	• Other appliances up to 50 MJ/h input	500	500
	• Appliances over 50 MJ/h input and up to 150 MJ/h input	1000	1000
	• Appliances over 150 MJ/h input	1500	1500

† Unless appliance is certified for closer installation

All distances are measured to the nearest part of the terminal.

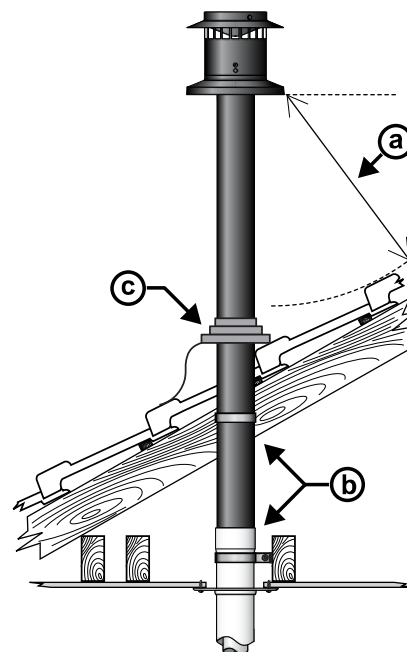
Prohibited area below electricity meter or fuse box extends to ground level.

See Clause 5.13.6.6 for restrictions on a flue terminal under a covered area.

See Appendix J, Figures J2(a) and J3(a), for clearances required from a flue terminal to an LP Gas cylinder. A flue terminal is considered to be a source of ignition.

For appliances not addressed above acceptance should be obtained from the technical regulator

FIGURE 5.3 (in part) MINIMUM CLEARANCES REQUIRED FOR BALANCED FLUE TERMINALS, FAN-ASSISTED FLUE TERMINALS, ROOM-SEALED APPLIANCE TERMINALS OR THE TERMINALS OF OUTDOOR APPLIANCES



(a) Minimum clearance 500 mm to nearest part of roof.

(b) Minimum clearance 25mm to combustible materials.

(c) Decktile or lead collar flashing.



AS 5601-2004 was current at the time of printing but may have been superseded. It is the installer's responsibility to ensure that requirements of the current version of AS 5601 are met.

When installing the condensate trap kit (ESCONDK) the included condensate tray MUST BE fitted. Consult the Rinnai Aspiration RHFE 750ETR 'Flue Installation Manual for detailed flue installation instructions.



The flue system must be fully assembled and secured in place before the heater is installed into the enclosure.

HEATER INSTALLATION

1. UNPACKING THE APPLIANCE

The heater is supplied in two separate cartons. One carton contains the heater body assembly and the log set, while the other contains the facia and top panel assemblies.

Check for damage. If the heater is damaged DO NOT install it. Contact your supplier for advice. Before installing the heater, check it is labelled for the correct gas type (see label on top of heater). Refer to local gas authority for confirmation of gas type if you are in doubt.

Carefully remove the log set packing from the carton and place in a safe location until required.

Remove the heater body assembly from the carton and position in front of the enclosure opening.



The heater does not come supplied with flue components. These are purchased separately.

ONLY Rinnai RHFE750ETR flue components can be used with this appliance.

2. CONNECTING THE APPLIANCE TO THE CONSUMER PIPING



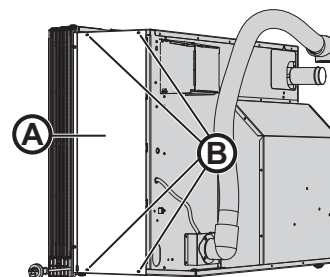
240 VOLTS, RISK OF ELECTRICAL SHOCK! Isolate the electricity supply before removing any panels.

Remove the right-hand side access panel (A) by removing the four retaining screws (B).

Extend the flexible gas connection (C) through the gas fitting access point (D) to the outside of the heater body.

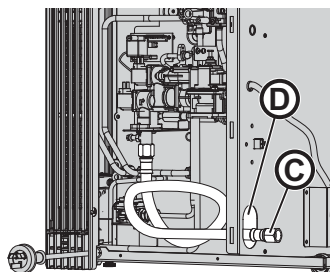
Position the appliance in front of the enclosure so that the end of the consumer piping aligns with the gas fitting access point (D).

Securely connect the flexible gas connection (D) to the consumer piping. Test all connections for gas leaks.



Use a soapy solution to test all gas connections. If a leak is present bubbles will form at the leak point. When finished remove any residue with a rag. Prevent any soapy solution from coming in contact with the electrical components.

Replace the right-hand panel (A) and secure with the four retaining screws (B).



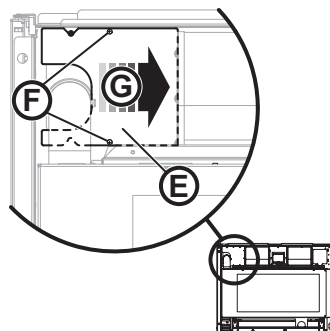
3. OPENING THE FLUE SYSTEM ACCESS PANEL

Unscrew the flue system access panel (E) (two screws) (F) located inside the top left-hand corner of the appliance, slide this panel to the right behind the convection fan (G).

Remember to position the air inlet hose so that it can still be accessed once the appliance is moved into the enclosure.



Tie a piece of string to the air hose and pass this through the flue system access opening. This will allow the air inlet hose to be pulled up into position as required.



HEATER INSTALLATION

4. HEATER BODY INSTALLATION

Carefully move the appliance body into the enclosure cavity ensuring that both the consumer piping and flue transition are aligned with their access openings.

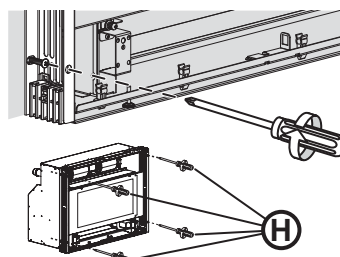
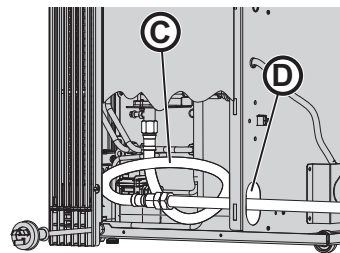
As the appliance is pushed home ensure that the flexible gas connection ③ coils freely inside the appliance and that the consumer piping penetrates through the centre of the gas access point ④.

Securing The Heater Body

Once the heater is in position open both air return louvre doors to gain access to the appliance mounting points ⑧.

The upper and lower mounting points (four) are located on each side of the appliance.

Secure heater body through these points using appropriate fixings.



5. CONNECTING THE FLUE SYSTEM TO THE APPLIANCE



Only Rinnai RHFE 750 ETR flue components MUST be used with this appliance.

Connections between the heater and the flue system MUST BE made in accordance with the Aspiration flue instructions supplied with the flue components.

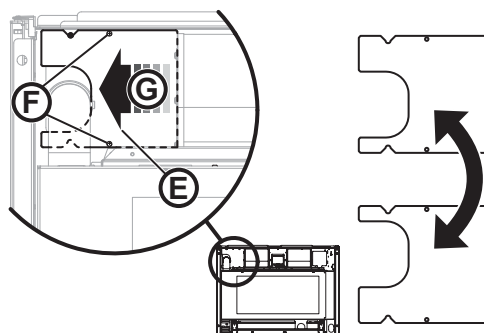
Ensure the flue spigot of the heater is properly secured to the flue connection on the flue system transition casting using the clip and clamp provided. If this joint is not secured properly products of combustion could disperse into the room being heated which may result in a dangerous condition.

Ensure the elbow of the air intake hose from the heater is properly secured to the air connection on the flue system transition casting using the cable tie provided and that the rubber seal is placed on the unused air intake connection of the transition piece.

6. CLOSING THE FLUE SYSTEM ACCESS PANEL

Once the flue and air connections are secured slide ③ the flue system access panel ⑤ back into position and fasten ⑥ (two screws).

The hole in the flue system access panel is offset and can be reversed (flipped) as shown to align the position of the heater flue spigot with the flue system transition casting.



HEATER INSTALLATION

7. INSTALLING THE LOG SET

Remove the two retaining screws ① that secure the combustion chamber glass panel ②.

Rotate and lift the combustion chamber glass ② clear of the combustion chamber and place in a safe location until required.

The log-set components have been packed in foam and cardboard for protection during shipping.

Remove the outer cardboard packaging and then carefully separate the foam packaging halves.

The log set assembly is made up of seven pieces as follows:

- | | |
|-------------------------|------------------------|
| ③ Rear main log | ④ Left-hand front log |
| ⑤ Right-hand front log | ⑥ Centre top log |
| ⑦ Right-hand top log | ⑧ Left-hand bottom log |
| ⑨ Right-hand bottom log | |

Assembling the log set

- I. Place the rear main log ③ into the combustion chamber. Seating it the rear location pins ⑩.

- II. Place the left-hand front log ④ into the combustion chamber. Seating it on the left-hand location pins ⑪.

Place the right-hand front log ⑤ into the combustion chambers. Seating it on the right-hand location pins ⑫.

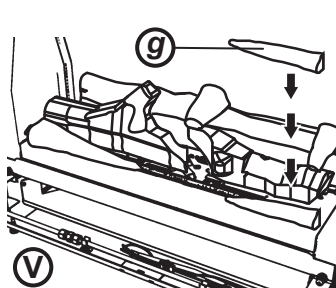
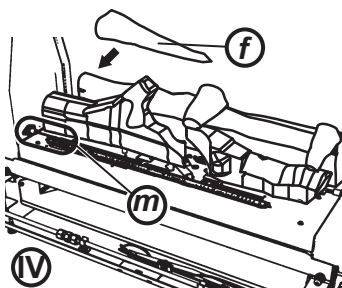
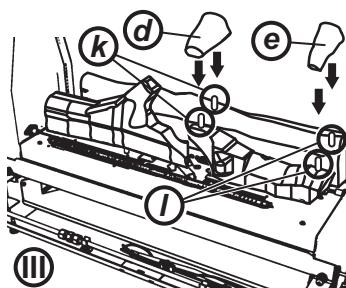
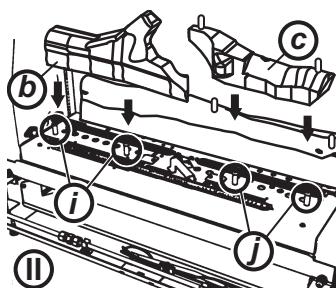
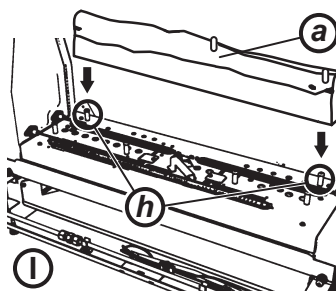
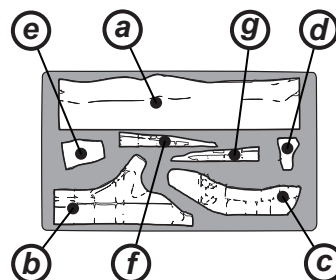
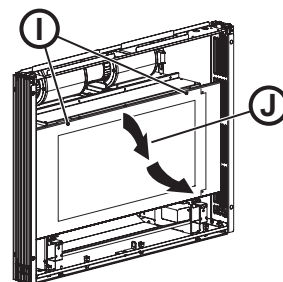
- III. Place the centre top log ⑥ into the combustion chamber. Seating it on the centre set location pins ⑬, located on top of logs ③ and ⑤.

- IV. Place the right-hand top log ⑦ into the combustion chamber. Seating it on the right set of location pins ⑭ located on top of logs ③ and ⑤.

Place the left-hand bottom log ⑧ into the combustion chamber so that it hides the flame sensor rod ⑮ from view.

- V. Place the right-hand bottom log ⑨ into the combustion chamber on the opposite side to left-hand bottom log ⑧.

Replace combustion chamber glass panel ② and secure in place with the two retaining screws ①.

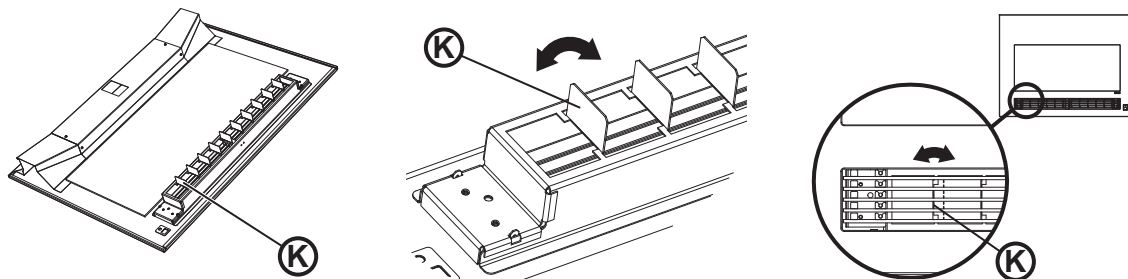


HEATER INSTALLATION

8. SETTING AIR GUIDE VANES (AIR FLOW CONTROL)

The air guide vanes (K) allow the installer to set and adjust the horizontal air flow distribution of the appliance.

This is done by carefully bending the air guide vanes (K) to the either the left or right as required with a screwdriver or a similar object.



DO NOT repeatedly adjust the air guide vanes (more than 5 times) as this may cause the metal of the vanes to fracture or break.

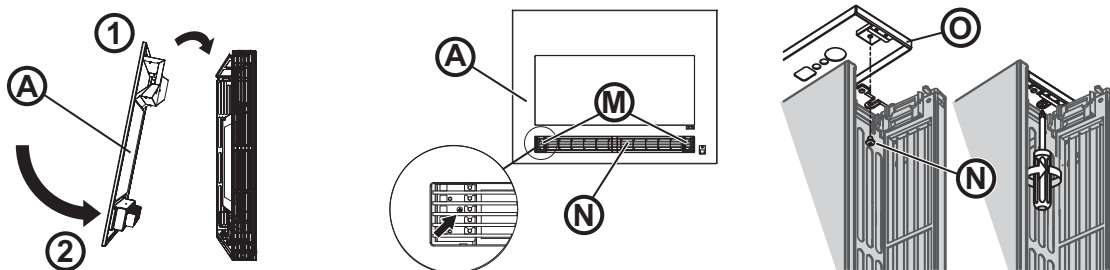
DO NOT attempt to adjust the air flow direction while the appliance is in operation or hot as this can result in burn injury.

The horizontal louvres (which direct vertical air flow) are fixed and cannot be adjusted.

9. INSTALLING THE FACIA PANEL

Install the facia (L) by hooking the top of the facia (1) to the body and rotating the bottom (2) in towards the appliance body (this is the same for both Glass and Metal facia models).

Secure the facia to the appliance body with two retaining screws (M) through the front of the warm air discharge louvre (N).



10. INSTALLING THE TOP PANEL

Push the top panel (O) down into place and secure with the screws (N) provided as shown.

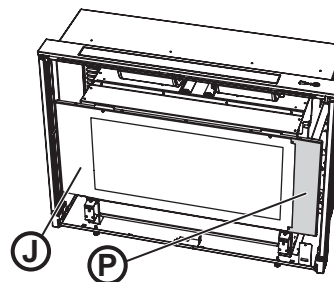
11. COMMISSIONING

The gas pressures of the appliance are factory pre set for 'extended flue' installations (page 20 Options (II), (III), (IV) and (V)) and will normally not require adjustment.

If the appliance is used with a 'direct' flue system (page 20 Option (I)), the gas pressures will need to be adjusted in accordance with the commissioning instruction sheet (which is located in a plastic pouch behind a removable access panel (P) on the right edge of the combustion chamber glass panel (J)).

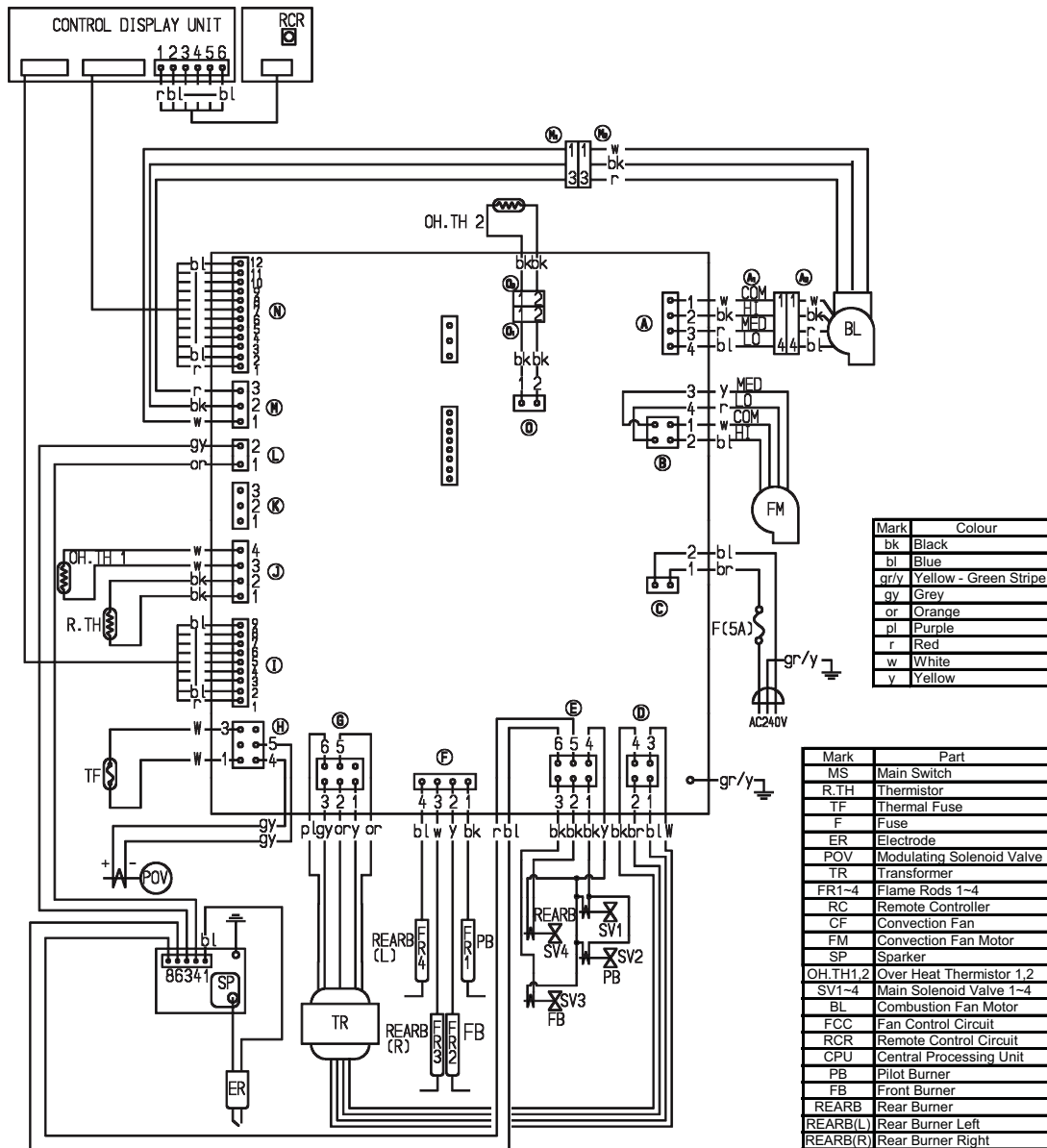
After installation check operation of the appliance.

Once installed explain to the householder the functions and operation of the heater and remote control. Remind the customer of the need for regular service and maintenance. Ensure the 'Customer Record' on page i of this manual is filled in and that the booklet is handed to the customer.

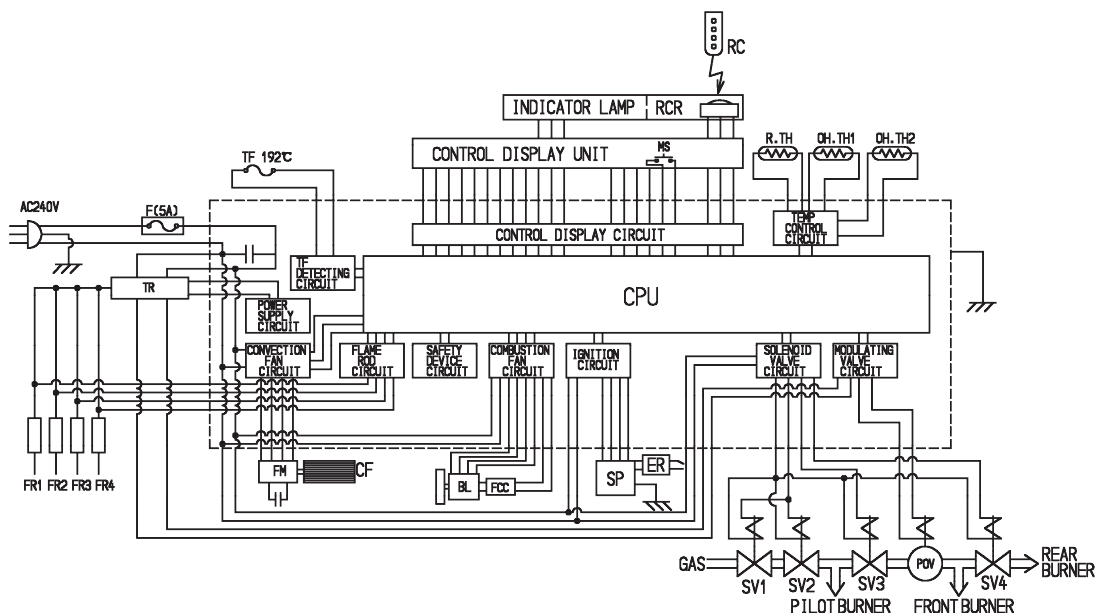


TECHNICAL INFORMATION

WIRING DIAGRAM



BLOCK DIAGRAM



NOTES

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Rinnai has a Service and Spare Parts network with personnel who are fully trained and equipped to give the best service on your Rinnai appliance. If your appliance requires service, please call our National Help Service Line. Rinnai recommends that this appliance be serviced every 2 years.

Internet: www.rinnai.com.au E-mail: enquiry@rinnai.com.au

National Help Lines

Spare Parts & Technical Info

Tel: 1300 366 388*
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**Cost of a local call Higher from mobile or public phones.*