



Neo Inbuilt and Freestanding Gas Fireplaces

Operation guide

Rinnai

Important

Appliance must be installed with a Rinnai approved flue system.

This appliance must be installed in accordance with:

- Manufacturer's installation instructions
- AS/NZS 5601 Gas Installations
- AS/NZS 5263 Gas appliances standards
- AS/NZS 3000 Electrical Standards

For use with Natural Gas or Universal LPG as indicated on the appliance.

Appliance must be installed, commissioned, serviced, and removed by an authorised person, being in New Zealand a licensed gasfitter.

Warning

THIS APPLIANCE REQUIRES PERMANENT VENTILATION FOR THE ROOM WHERE IT IS INSTALLED.

Improper installation, adjustment, alteration, service and maintenance can cause property damage, personal injury or loss of life.

For more information about buying, using, and servicing of Rinnai appliances call: 0800 RINNAI (0800 746 624).

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Servicing and serial number

Gas fires require regular maintenance and servicing. For reliable operation Rinnai gas fires should be serviced **every two years**, including inspection of the flue system.

On the back of this guide is a serial number for your fire. You **must have** this to register your fire and use the app (If Wi-Fi module has been installed). We recommend taking a photo or noting it down, just in case you misplace your guide.

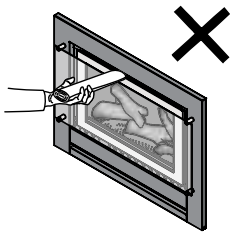
Safety

Important

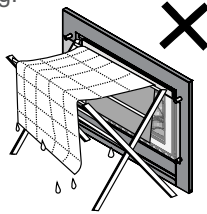
This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.

- The heater must not be used or operated if any part of the appliance is damaged
- 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 while it is in operation
- Do not modify this appliance
- The fire must not be located immediately below a power socket outlet (potential fire hazard)

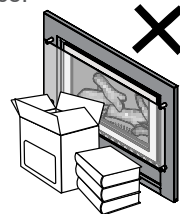
Do not allow anyone to post articles through into the heater.



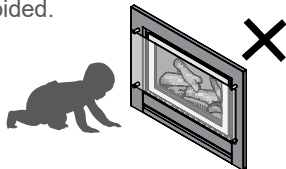
This appliance must not be used for any other purpose other than heating.



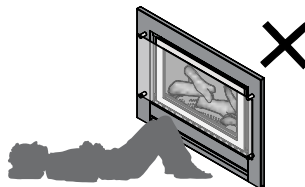
Do not restrict warm air discharge by placing articles in front of the appliance.



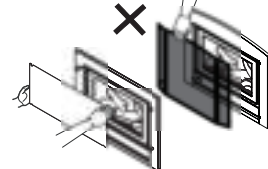
Children should be supervised at all times to ensure they do not play with the appliance. Hand or body contact with the appliance must be avoided.



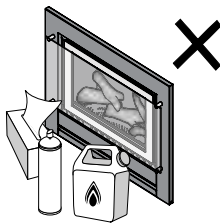
Do not allow anyone to sit, lean or sleep directly in front of the appliance.



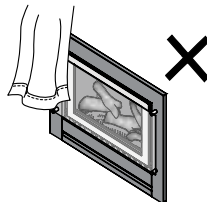
The glass dress guard must be fitted to reduce the risk of serious burns, and no part of it should be permanently removed.



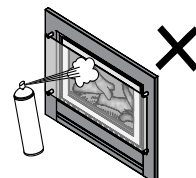
Do not use or store flammable materials near this appliance.



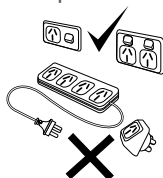
Combustible materials must not be placed where the heater could ignite them.



Do not spray aerosols while the appliance is operating. Most contain butane gas which can be a fire hazard if used near the unit.



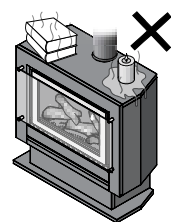
A dedicated 230 V earthed 10 A power point must be used. Do not use power boards or double adaptors to operate the unit.



Do not place containers of liquid on top of the appliance. Water can cause extensive damage and create an electrocution hazard.



Do not place articles on or against this appliance.



General information

Before operation please read these instructions to get an overview of how to operate, maintain and service your Rinnai gas fire.

Electrical connection

The Neo is fitted with a 1.5 m power cord and 3-pin plug. The standard electrical connection is to the right side of the heater. If necessary, this can be changed by your electrician to terminate on the left

The connection is either direct wired¹ or connected to a power point within the cavity. This must be connected to a dedicated earthed power point. The electric isolation switch must be accessible after the appliance has been installed.

If the supply cord is damaged, it must be replaced by a licensed tradesperson using genuine replacement parts from Rinnai.

Installation by a licensed tradesperson

Only a licensed tradesperson can install, adjust, maintain, service, and remove this gas fire. Any work carried out by a non-licensed tradesperson is illegal and will void any warranty.

Installer handover

Ensure your installer talks to you about the use and care of this appliance, and that you understand these instructions. The installer also needs to complete the appliance installation checklist and installer details, and leave this guide with you.

Safety devices

Overheat switches - if the Neo gets too hot during operation, for example if the air outlet louvres get blocked, the overheat safety switches will turn off the gas and will only allow the fire to restart when it has cooled down.

Electrical fuse - the electrical circuits are protected by a fuse.

Flame failure sensing system - this device automatically cuts off the gas supply to the heater in the event the fire does not ignite after several attempts—this is to prevent gas building up inside the unit.

Power failure - in the event of a power cut, the gas valves will automatically close and shut down the unit.

Soot deposits

Small soot deposits inside the heater or glass is normal. Significant soot build-up however is not normal and will require a service call. Refer to the troubleshooting section for further information.

Environmental

The Neo is manufactured from a number of recyclable materials. At the end of its useful life please consider what parts could be recycled, for example scrap metal, PCB etc.

Care and maintenance

All external surfaces of the unit can be cleaned using a soft damp cloth and mild detergent. Do not use solvents and do not attempt to clean while the unit is still operating or hot.

Servicing

Rinnai has a maintenance, service and spare parts network with personnel who are fully trained and equipped to give the best advice on your Rinnai appliance.



Servicing and repair should only be carried out by authorised personnel, please call Rinnai (0800 746 624).

For reliable operation Rinnai gas fireplaces should be serviced every two years, including inspection of the flue system. If they are in a particularly dusty environment or subject to excess lint, for example dog hair, or where there are newly laid carpets, then annual servicing would be beneficial.

Regular maintenance and servicing is not covered by the Rinnai warranty.

¹ Consult a qualified electrician if direct wiring is required as it must comply with AS/NZS 5601 and AS/NZS 3000 and other relevant local regulations

About your Rinnai Neo gas fire

Congratulations on the purchase of your Rinnai Neo gas fire. We hope you love this product as much as we do, and on the off chance that something does go wrong, or if you need help, we're only a phone call away.



Manual control panel on the side of the unit

The control panel is located on the top left corner of the outer frame. The control panel houses the ON/OFF button and also the LED indicator. This lets you know what the unit is doing. For example:

- Standby - LED is red
- Power disruption - LED flashes red



How the Rinnai Neo starts

By pressing the power button ON, the fire will start the ignition sequence.

Ignition sequence

1. When the ON/OFF button is pressed on the control panel, the infra-red receiver window will pulse green.
2. The ignition sparker will operate, and as soon as a spark is sensed gas will flow to the main burner.
3. When the main burner establishes a flame, the heater will automatically modulate between the burner settings to achieve and maintain a default temperature of 22 °C¹.

Do not unplug or turn off the main power supply to the fire as this will stop the convection fan from cooling down the unit. The convection fan operates for several minutes after the fire has been turned off.

Power cut or power disruption

If the power is disrupted while the Neo is operating, once the power has been restored the fire will go into flame failure mode and there will be flashing zeros in the error display window in the lower left hand side of the frame. The error will show through two narrow cutouts—you will need to walk up to the fire and look down to see these.

To reset the fire, press the ON/OFF button on the control panel or remote control twice to turn the fire back on.

Position of the Rinnai Neo Inbuilt on a wall

The Neo Inbuilt looks and performs best when installed close to the floor. If the unit is installed higher up the wall the movement of air from the convection fan, depending on the room configuration, could create draughts.

Wall surface above the fire

The temperature of the wall surface directly above the appliance may get warm and discolour paint finishes or distort vinyl wall coverings. For durability of surfaces, please contact the manufacturer for their specification.

¹ The Neo modulates the flame and heat output to try and maintain the default temperature setting of 22 °C. If the room temperature starts to climb above 22 °C, the Neo will modulate to its lowest flame and fan setting, but will not turn off. Depending on the size of the room this could mean the room temperature could steadily rise.

Operation using the remote

For the remote control functions to be available, the appliance On/Off button must be in the On position.

Signal transmission to the unit

The unit will beep and flash to confirm the settings have been received from the remote.

Lost or misplaced remote

If you misplace the remote the fire can still be used, albeit in a limited capacity, by using the power On/Off button on the control panel. The fire will automatically modulate between flame settings to maintain the default set temperature of 22 °C.

Remote - safety



WARNING

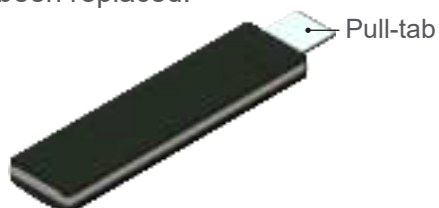
Keep the remote away from young children. Also ensure they can't access the batteries—they can become a choke hazard and are potentially life-threatening if swallowed.

Breakage of the plastic housing could expose sharp edges—replace the remote if this occurs.

Avoid getting the remote wet as water entry will damage the remote.

Batteries

The remote uses two Lithium cell CR2450 batteries. Never mix old and new batteries. The remote will be supplied with the batteries already inserted, pull the clear tab to activate (OH, meaning OK, will flash on the display). This will also occur when the batteries have been replaced.

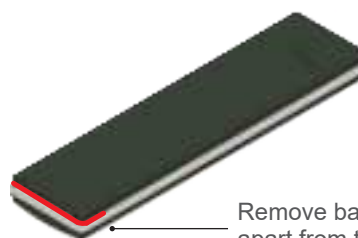


Remove the batteries if the remote is not going to be used for a long time. This will help avoid damage from leaking batteries. If leakage has occurred the remote will need to be replaced as leaking chemicals could be a risk if touched or ingested.

Changing the batteries

• Remove the back

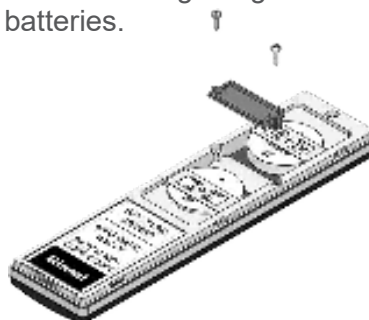
Slide your fingernail under the bottom corner and along the base, and gently pry apart. With some coaxing the cover will pop off. Patience required, remember it's designed so little fingers cannot easily access the batteries.



Remove back cover by prising apart from the bottom first

• Unscrew the black retaining bridge

Undo the two small screws holding the black retaining bridge between the two batteries.



• Replace the batteries

The batteries can only be inserted one way—printed side facing up as shown on the next page. The battery contact edges can be sharp, take care when replacing the batteries.

• Replace the black bridging plate

Ensure you replace the black bridging plate as this will reduce the risk of young children getting access to the cell batteries.

Flame and heat setting

Once the fire is turned on the flame setting defaults to level five (on high). Use the up and down buttons to control the height of the flame and heat output.

The relationship between the flame height and fan speed is preset and cannot be adjusted. The fire has five flame and fan settings:

Flame height	Fan speed
1	low
2	low
3	high
4	high
5	high

Turning on and off

This button switches the fire on and off. For it to work the power button on the fire must be ON.

Indicative room temperature display

Displays the room temperature* (at the point of the remote) and low battery symbol if the batteries need changing. 

The back light will stay on for approximately five seconds. Constant activation will shorten battery life.

* Checks the room temperature every minute.

N.B: Do not compare the temperature readings from the remote and the app (if Wi-Fi module is fitted). The readings are being taken from different places and could vary significantly.

Black retaining bridge

Safety device that needs to be removed before replacing the batteries—DO NOT DISCARD, this MUST BE put back on.



Pry point for removing the back cover

Gently pry open the back cover from the base of the remote

Battery retainer

Temperature sensor position

The temperature sensor is located in the bottom of the remote. Please be aware the sensor will be affected by direct sunlight, draughts, and body temperature (your hand).



Positioning

The clearances below are minimum clearances unless otherwise stated. The Neo must not be installed where curtains or other combustible materials could come into contact with the fire. For the inbuilt model, the 400 mm side clearance, measured from the edge of the inner glass, includes side walls. The 1000 mm clearance is in front of the fire.

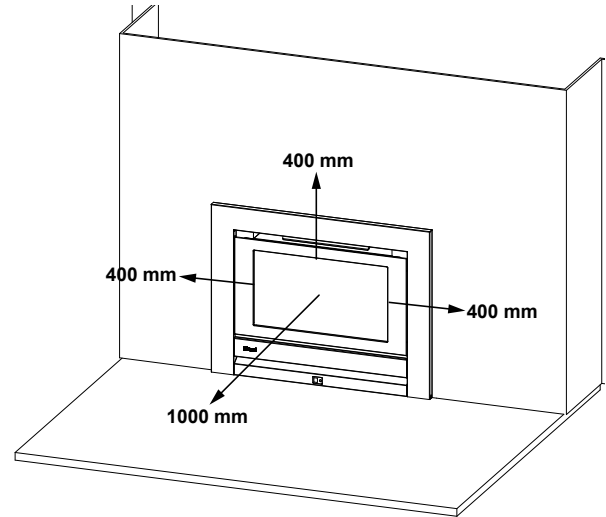
Floor protection

Heat radiating from the fire may affect the appearance of some materials used for flooring such as vinyl planks, carpet¹, cork, or timber. To avoid this occurring it is recommended a mat be placed in front.

¹ Carpet cannot be fitted hard up against the fire as it will affect operation.

Hearths

A hearth is not necessary but can be used for decorative purposes. It must not obscure the front of the fire or obstruct the fire in any way.



Mantels and surrounds - inbuilt models

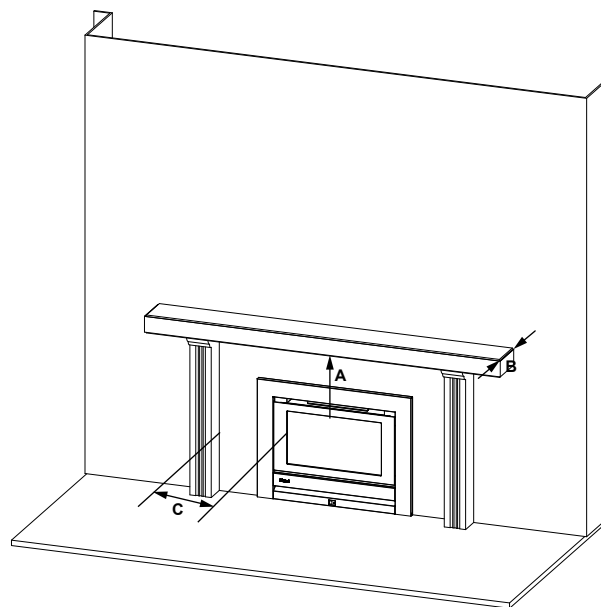
Combustible mantels and surrounds require clearance from the unit to minimise the risk of fire. Mantels and surrounds, made of combustible materials such as wood, are allowed providing they are outside the minimum clearances shown.

The Neo gas fireplace is not designed to be built into bookcases.

- | | |
|----------|--|
| A | Mantel needs to be a min. of 400 mm away from the edge of the inner glass |
| B | Max. mantel depth at 400 mm (A) is 250 mm |
| C | Surround needs to be a minimum of 150 mm away from the edge of the inner glass |

For every 50 mm of added mantel depth there must be an additional 100 mm of clearance from the edge of the inner glass. For example:

Mantel depth	Vertical clearance req. (A)
300 mm	500 mm
350 mm	600 mm
400 mm	700 mm



TV installation

The Neo has a fan that distributes warm air from the top of the appliance out into the room. As warm air is dispersed outwards and not directly upwards, installation of a TV may be an option.

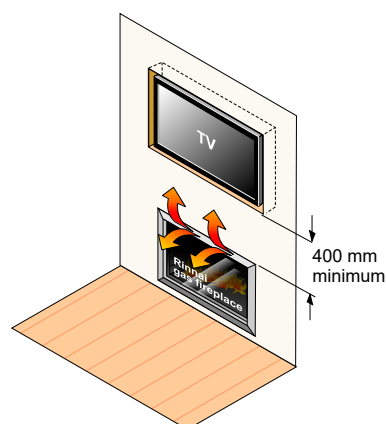
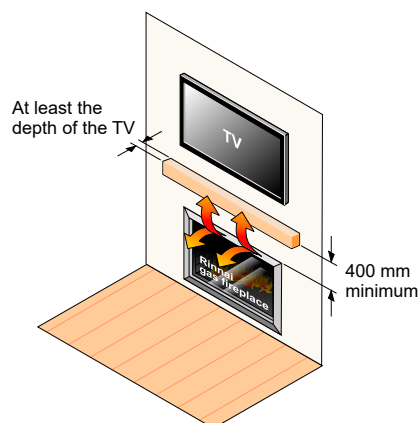
The general rule for television installations is that the bottom of the television should be at least 400-450 mm above the fire.

For a TV mounted directly above the fire, the mantel must be at least the depth of the TV to deflect heat away.

Always check with the TV manufacturer

It is up to the owner to check the TV installation with the TV manufacturer—some have warranty conditions that state a TV is not to be installed above a fireplace.

Rinnai does not accept any responsibility for damage to a TV resulting from the use of this information.



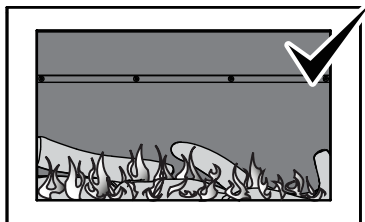
Abnormal flame pattern

Each Rinnai flame fire has a distinct flame pattern, refer images below. This should look the same every time you start your fire, after an initial warm up period of approximately 20 minutes.

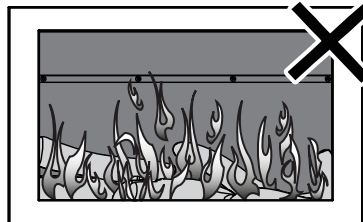
Abnormal flame performance and/or pattern can indicate a problem with your fire, such as blocked gas injectors, or shifting of burn media. There are some warning signs that could indicate a problem:

- Unusual smell from the appliance
- Continued difficulty or delay in establishing a flame
- Either very short or very long flames
- Flame only burns part way across the burner
- Severe soot building up on the inside of the glass¹.

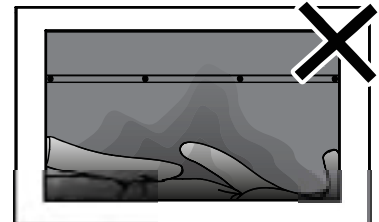
If any of the above signs occur, please contact Rinnai.



Normal flame pattern



Abnormal flame pattern



Soot build up

Your flame pattern should look like this (may vary slightly depending on gas type)



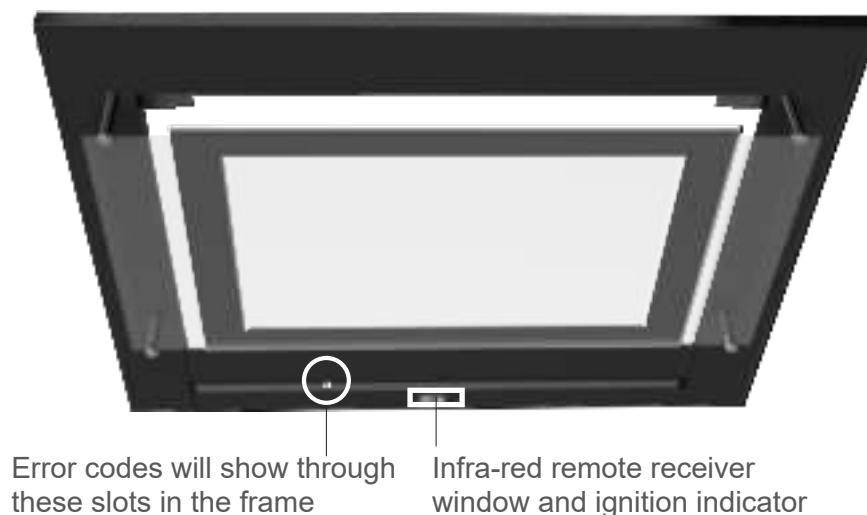
¹ Appliances incorporating a live fuel effect, and designed to operate with luminous flames, may exhibit slight carbon deposits—this is normal.

Error codes

The Neo has 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 numbers in the error display. The error will show through two narrow cutouts—you will need to walk up to the fire and look down to see these.

Error code	Likely cause	Suggested solution
00	Mains power failure	Reset the fire, press the On/Off button on the control panel, remote control, or app twice (if Wi-Fi module fitted), to turn the fire back on.
11	Ignition failure	Check the gas supply is turned on. Turn the heater OFF then ON again. If the problem continues a service call will be required.
12	Incomplete / interrupted combustion	Check the gas supply is turned on. Turn the heater OFF then ON again. If the problem continues a service call will be required.
14	Overheat safety device	Overheat sensor registering, possible fan fault or heat buildup in the cavity—service call.
16	Room overheat	Lower room temperature to below 40 °C.
31	Room temperature sensor faulty	Service call
32	Overheat temperature 1 sensor faulty	Service call
33	Overheat temperature 2 sensor faulty	Service call
53	Spark sensor faulty	Service call
61	Combustion fan motor faulty	Service call
70	Model error	Incorrect PCB for model, service call.
71	Solenoids faulty	Service call
72	Flame detection circuit fault	Service call
If you have the optional Wi-Fi module		
73	Communication error	Service call
90	Communication error detected between the main PCB and Wi-Fi module	Wi-Fi module in the fire needs resetting, refer to your Wi-Fi user guide.
91	Communication error detected between the Smart device and Wi-Fi module	Check your Wi-Fi settings and Rinni Wi-Fi module are within range. Check your network settings.

Neo - top view of frame looking down



Troubleshooting

Check the following information before making a service call as some performance characteristics of the fire are a normal part of operation. If you are still unsure or concerned after reading this section, please contact Rinnai on 0800 746 624.

During installation there will be an initial burning in period where some smoke and smell may be experienced, this could last for a couple of hours— this is a normal part of the operation.

The appliance is fitted with an overheat safety switch which will shut off the appliance. If the appliance shuts off repeatedly servicing may be required.

Using the heater for the first time, or after a long period 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 the unit will switch off automatically. Try operating the heater again if this occurs.

The heater may make noises after ignition or switching off. This is due to the expansion and contraction of the internal components—this is normal. The heater will not immediately ignite if the On/Off button is pressed straight after the heater has turned off. Wait a few seconds before switching the unit on again.

What's happening	Explanation and/or possible solution
Unusual smells	
Smoke or strange smells are produced when first operating the appliance after installation.	This is caused by grease, oil, or dust within the appliance. This will stop after a couple of hours. Have you been painting? Have new carpets been laid? Have you been cooking with spices? If yes to any of the above, then this is normal as these odours will mix with the warm air to emit an unusual smell—this will dissipate over time.
Smell of gas	There could be a leak. Turn off the gas at the meter or LPG cylinder and call your installer.
Unusual sounds	
Clicking noises when the heater starts or stops, or changes to a higher or lower setting.	This is expansion and contraction of the heat exchanger and is a normal part of operation.
Clunking noise when the thermostat operates.	This is the sound of the gas valve opening and closing to regulate the flow of gas.
Soot marks and condensation on the glass	
Small soot deposit on logs or stones.	Normal operation, no action required.
Severe soot deposits forming on logs, stones, or glass	Inadequate flue system, incorrect gas pressure or incorrect installation of burn media. Contact a Rinnai Service Centre.
Condensation and/or water marks on the glass	Normal operation. Condensation should disappear once the fire has warmed up.

What's happening	Explanation and/or possible solution
Performance problems	
Warm air not coming from the unit on startup	The fan starts automatically after a short delay. This is to allow the fire to warm up, helping avoid cold draughts.
Fan continues to run after the unit is turned off	This is to remove the residual heat and will stop once the fire cools down.
Fire will not light when switched on	Ensure the power cord is plugged in and turned on. Ensure the gas supply is on.
Unit stops during operation	Possible power failure, or gas supply may have been turned off
Remote problems	
Remote control doesn't work	Unit not plugged in properly or has been turned off—plug in power cord or press the On/Off button.
	Remote lock-up due to signal being out of range, incorrectly aimed at the unit, or obstructed.
	Battery may be flat.

Limited Warranty

Rinnai brings you peace of mind with a:

5-year firebox warranty

This warranty is applicable to all Rinnai Neo models. All terms of the warranty, subject to the conditions below, are effective from the date of first installation. The attending service person reserves the right to verify this by requesting a copy of the certificate of compliance prior to commencement of any warranty work. Proof of purchase and installation date will be required at the time of any warranty claim. This warranty is only valid within the country of purchase.

Any warranty claim must be made within a reasonable time of discovery of the potential fault or defect.

FIREBOX ¹		ALL OTHER PARTS	
Parts	Labour	Parts	Labour
5 years	2 years	2 years	2 years

¹ The firebox is the metal outer casing that surrounds the fire. All other parts of the fire will be covered by a two year limited warranty.

General warranty terms

All Rinnai appliances meet or exceed the safety standards required by New Zealand gas and electrical regulations. The company is constantly improving its products and as such, specifications are subject to change or variation without notice.

For the purposes of the Consumer Guarantees Act 1993, Rinnai only guarantees the availability of repair facilities and spare parts for the express warranty period recorded in the table above.

This warranty does not limit any consumer rights or guarantees that may apply under the Consumer Guarantees Act 1993. If the product is acquired for the purposes of a business, the provisions of the Consumer Guarantees Act 1993 do not apply and no other warranties (either express or implied by law) apart from those stated in the warranty will apply.

Warranty terms and conditions

1. All terms of this warranty are effective from the date of first installation. The attending service person reserves the right to verify this by requesting a copy of the certificate of compliance prior to commencement of any warranty work. The installer must issue a certificate of compliance by law in New Zealand. Warranty claims may be invalid if not accompanied by details of the installing or supervising gas fitter's registration number and the gas certification number.
2. All Rinnai appliances must be installed, commissioned, serviced, repaired and removed in accordance with the manufacturer's installation instructions, local regulations, and building codes by persons authorised by local regulations to do so.
3. All appliances must be operated and maintained in accordance with the manufacturer's operating instructions. Rinnai recommends that gas appliances are serviced as per our servicing statement on p.5.

Warranty terms and conditions continued

4. Servicing of the product is to be carried out by a Rinnai authorised service centre.
5. The warranty applies only to the components supplied by Rinnai. It does not apply to components supplied by others, such as electrical switches, electrical cables, fuses and where applicable flue systems, but is not limited to these.
6. Where a failed component is replaced under warranty, the balance of the original warranty will remain effective.
7. Rinnai reserves the right to transfer functional components from defective appliances if they are suitable.
8. Rinnai reserves the right to have installed product returned to the factory for inspection.
9. Where the gas fire is installed outside the metropolitan area or further than 40 km from a Rinnai authorised service centre, travel costs shall be the owner's responsibility.

Warranty exclusions

The following exclusions may cause the warranty to become void and will result in a service charge and cost of parts (if required).

1. Accidental damage, defects or failure caused by acts of nature (fire, wind, lightning, flood, storm, hail storm fallout), vandalism, earthquake, war, civil unrest, pests, animals, insects, or entry of foreign objects or matter into the product such as dirt, debris or moisture.
2. Failure due to abuse or misuse, improper maintenance or improper storage.
3. Failure due to incorrect or unauthorised installations including but not limited to the use of products, including flue systems, that are not specified by Rinnai, damage caused by installation of indoor fires outdoors and outdoor fires indoors.
4. Failure or damage caused by alterations, service or repair work carried out by persons other than Rinnai service persons or service centres.
5. Where it is found that there is no fault with the appliance and the issue is related to the installation or is due to the failure of electric or gas supplies.
6. Noise caused by minor contraction, movement or expansion of certain parts.
7. Cost of building work to access parts that need repair or replacement, or the costs of building repairs afterwards.
8. Subjective issues such as noise or smell that Rinnai have investigated (or a Rinnai service agent has investigated) and are established to be within normal operating parameters.
9. Variances in fireplace appearance, including flame picture, from Rinnai promotional images that are due to gas type, printing confines, and on-screen display variances.

Installation checklist

The installer must complete the installation checklist below and make sure this guide is left with you. They must also instruct you about the use and care of the appliance, and ensure you understand the safety instructions.



The glass dress guard fitted to this appliance reduces the risk of fire and injury and no part of it should be permanently removed.

Checklist

- ☐ Appliance positioned in a suitable location (clearances, mantels and surrounds).
- ☐ Rinnai flue system installed and tested to ensure effective draw.
- ☐ Gas pressures checked and set.
- ☐ Commissioned as per the commissioning instructions.
- ☐ Burn media installed as per instructions.
- ☐ Manual on/off button checked to ensure it is operational.
- ☐ Glass dress guard fitted and homeowner advised not to remove.
- ☐ Customer instructed on operating procedure and safety requirements.
- ☐ Customer advised to service the heater every two years.
- ☐ Appliance tested for correct operation and to ensure no gas leaks. This includes running on the high and low settings for over five minutes.

Installer details

Company name:

Installer name:

Address:

Phone:

Mobile:

Certificate of compliance number for installation:

Signed:

Date:

Purchase details

Record your purchase details below

ATTACH YOUR PROOF OF PURCHASE HERE: 

Retailer: _____

Retailer address: _____

Date of purchase: _____

Product details: _____

Please keep these details in a safe place for future reference.

Register your gas fire online

Register your fire online at www.rinnai.co.nz/register/. You'll need to know the model, and also the serial number—shown on the sticker on the back page of this guide.

Warranty claim

To make a warranty claim, contact Rinnai on 0800 RINNAI (0800 746 624) or email info@rinnai.co.nz.

Rinnai.co.nz

Tel: 0800 746 624

<http://www.youtube.com/rinnainz>

<http://facebook.com/rinnainz>

Serial number / Wi-Fi code

Neo RIB2312 operation guide: 12149-B