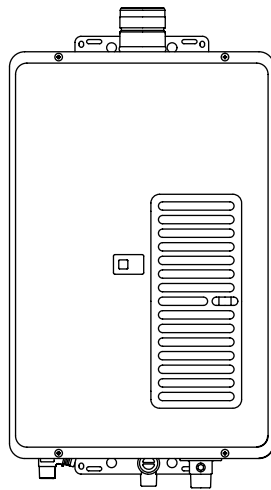


How to use your Water Heater

Rinnai

Infinity 16
Internal FE



Your installer is responsible for correct installation.
Installation instructions are located in a pouch attached
to the inside front panel of the water heater.

**Temperature
Control
Operation**

24 Hour Hot Water
In all areas
0800 746624

IMPORTANT

Rinnai New Zealand has a service and spare parts network in all areas.

Our Service network personnel are fully trained and equipped to give the best service on your Rinnai appliance. If your appliance needs service, please ring the 0800 Rinnai Service contact numbers on the back of this booklet. Rinnai recommend that this appliance should be serviced every 3 years.

This appliance shall be installed in accordance with:

- Manufacturer's Installation Instructions.
- Current AS/NZS 3500.4
- Current AS/NZS 3000
- Local Water Authority Regulations.
- Local Gas Fitting Regulations.
- Municipal Building Codes.
- NZS 5261 Gas Installations Code.
- Any other relevant Statutory Regulations.

This Infinity must be installed correctly by an authorized person. The installation of gas, water, and electricity must conform to local regulations.

The installation must also comply with the instructions supplied by Rinnai.

Your heater has been approved by the Australian Gas Association
A.G.A. Approval Number shown on Data plate.

Please keep this instruction booklet in a safe place for future reference.

All dimensions referred to in these instructions are in millimeters, unless otherwise specified.



N10378



Rinnai New Zealand
Limited is an ISO 9001
Registered Supplier.

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FEATURES AND BENEFITS

- The Rinnai Infinity NEVER RUNS OUT of hot water. Whilst electricity, water and gas supplies are connected, hot water is available whenever hot water taps are open.
- Built into the main micro-processor is the facility to LIMIT THE MAXIMUM TEMPERATURE of the hot water supplied. The water temperature may be limited to various maximum temperatures. This is particularly useful when the hot water unit is installed where young children or the infirm may be using the hot water. The Infinity is delivered with a preset temperature of 55°C. If required, the temperature limits can be changed by an authorised person. For further information, please contact Rinnai.
- The Rinnai Infinity is a power flued appliance. This makes it COMPACT, saving both floor and wall space.
- The temperature of outgoing hot water is CONSTANTLY MONITORED by a BUILT-IN SENSOR. If the temperature of the outgoing hot water rises to more than 3°C above the selected temperature shown on the Digital Monitor (or the pre-set limit when Temperature Controllers are not fitted) the burner will be shut off until the outgoing hot water temperature falls to that shown on the Digital Monitor (or the pre-set limit).
- The burner lights automatically when the hot water tap is opened, and goes out when the tap is closed. IGNITION IS ELECTRONIC, so there is no pilot light. When the hot water tap is off, no gas is used.
 - a. Temperature Controllers are available as an optional extra. These offer Localised Temperature Control for up to one kitchen and two bathrooms.
 - b. Temperatures selected at the Controls are retained in the SYSTEM MEMORY.
 - c. ERROR MESSAGES ARE DISPLAYED on the Temperature Controllers, assisting with service.
- Operating NOISE LEVEL IS VERY LOW.

IMPORTANT OPERATIONAL SAFETY POINTS

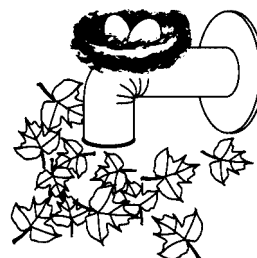


WARNING

If the following caution advice is ignored, this may result in death, serious injury or property damage.

DO

Inspect flue regularly to check if a part of the flue system is dislodged or is being blocked by foreign material such as tree litter or bird nests.

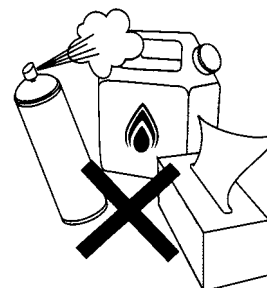


DO NOT

Obstruct the flue terminal.

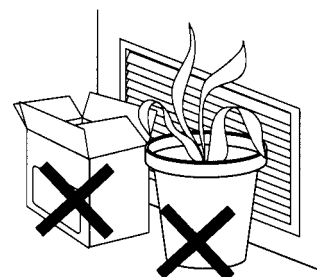
DO NOT

Use hair spray or detergent spray near appliance.



DO NOT

Place chemical substances such as chlorine or ammonia near the appliance.



DO NOT

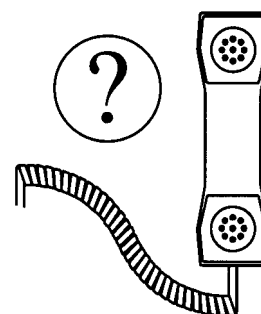
Use this appliance for any purpose other than the supply of hot water.

DO NOT

Place flammable materials and chemicals, or spray aerosols near this appliance.

DO NOT

Block or obstruct any ventilation openings deemed necessary for the operation of this gas appliance by your installer.



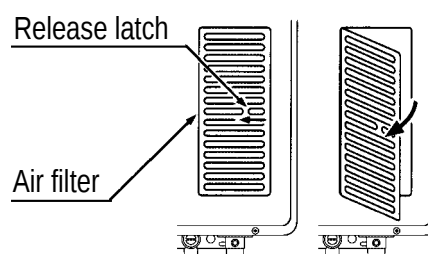
If abnormal operation, odour or noise are observed, stop operation and contact Rinnai.

Air filter care:

Clean air filter at least once a month.

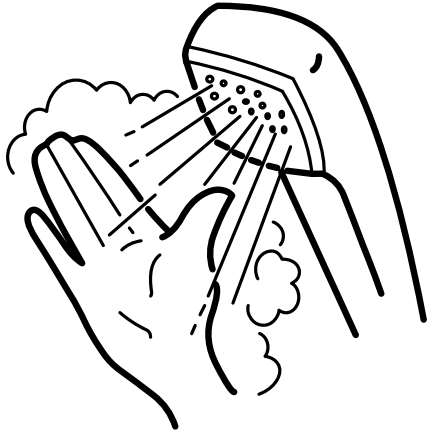
Do not operate the appliance without air filter fitted.

Air filter can be detached as follows for cleaning.

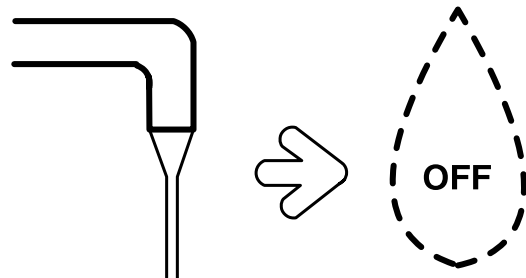


SAFETY POINTS

Always check water temperature by hand before entering the shower or bath.



At low water flows, the hot water unit may go out without warning.



If freezing conditions are expected, turn off water and gas, and drain all water from the appliance.

Water Off

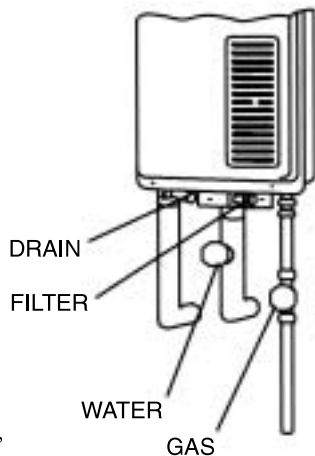


Gas Off

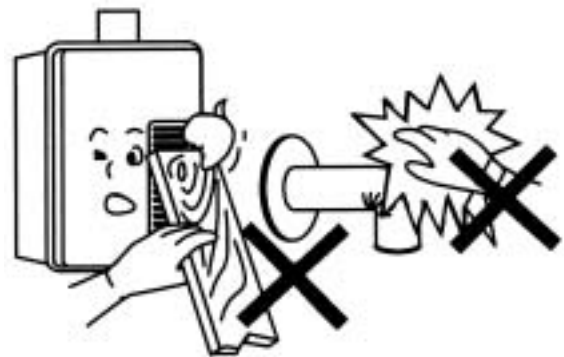


Drain Water

If power and the automatic frost protection are connected, freezing will be prevented.
("K" Series only)

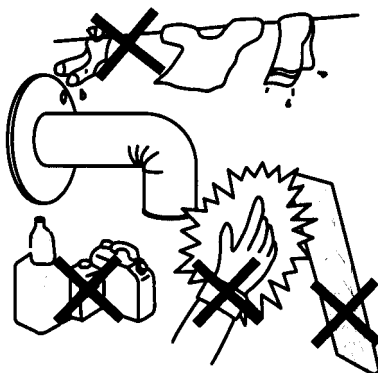


Do not touch the flue outlet whilst in operation.
Do not insert objects into the flue outlet.
Do not cover the filters whilst in operation.



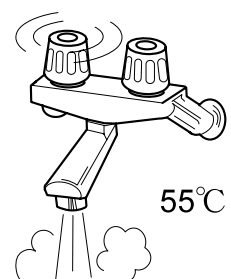
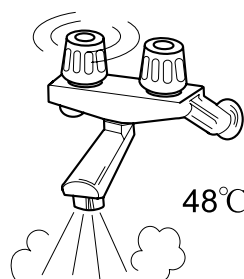
On cold days steam may be discharged from the flue outlet. This is normal with a high efficiency appliance and does not indicate a fault.

Keep flammable materials, trees, shrubs etc. away from the flue outlet.



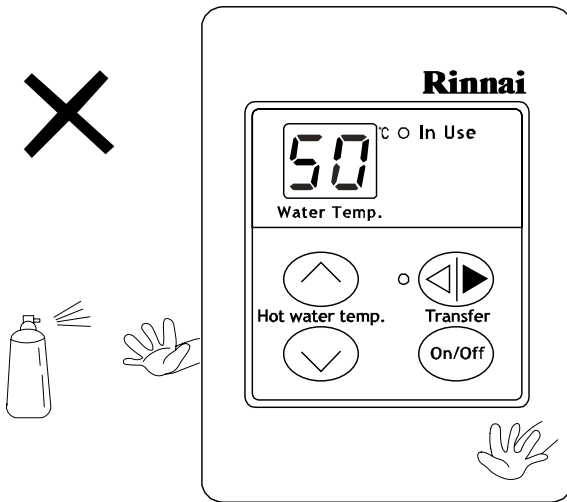
Do not spray water directly into the flue terminal.

The hot water unit controls the water temperature automatically. To do this it sometimes needs to change the water flow accordingly. The water flow from the hot water tap may vary after the selected temperature at the Temperature Controller is altered. The water flow may also vary from summer to winter, as incoming water temperatures differ.

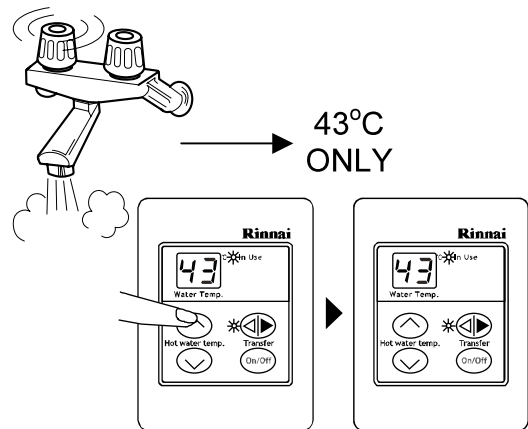


SAFETY POINTS

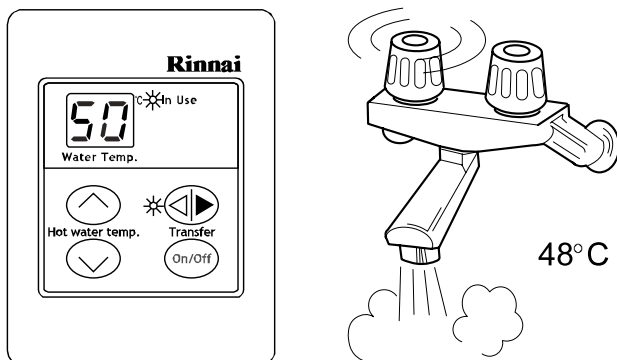
Do not clean the Temperature Control with solvents. Use a soft damp cloth.



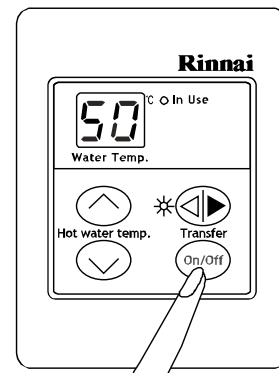
When the hot water tap is open, and hot water is flowing, the water temperature can only be increased to a maximum of 43°C on the Temperature Controller with priority.



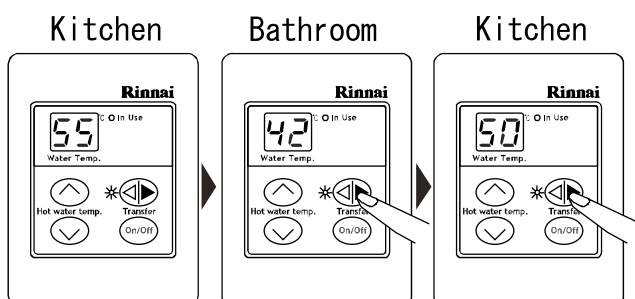
Depending on the weather conditions and the length of the pipe between the hot water unit and the tap in use, there may be a variation between the temperatures displayed at the Temperature Controller(s) and the temperature of the water at the tap.



There is no need to turn the Temperature Controller(s) off after use. However, if you prefer to turn the Temperature Controller(s) off, selected temperatures will be stored in the system memory at all times whilst mains power remains connected.

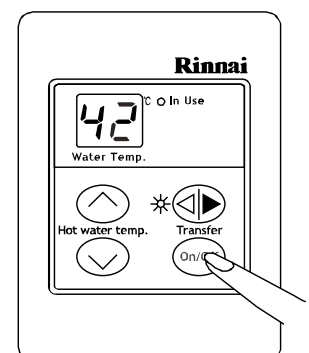


If a temperature higher than 50°C, has been selected at the Kitchen Controller and then priority of temperature selection is transferred to a Bathroom Controller and back again, the temperature on the Kitchen Controller will drop to 50°C. This is a safety feature.



Do not push the ON/OFF button on the Kitchen Controller after having transferred priority of temperature selection to the Bathroom Controller as the system will no longer heat the water.

Turn OFF then ON.



WARNING

Someone may be about to enter a shower or fill the bath.

WARNING ABOUT HOT WATER

Excessively hot water is dangerous, especially for young children and the infirm. The Infinity allows you to control the temperature of your hot water to safe levels.



Water temperatures over 50°C can cause severe burns instantly or death from scalds.

Children, disabled, and the elderly are at highest risk of being scalded.

Feel water before bathing or showering.

Burns from hot water taps can result in very severe injuries to young children.

Hot water at 65°C (the average hot water temperature in New Zealand) can severely burn a child in less than half a second. At 50°C it takes five minutes.

Burns can occur when children are exposed directly to hot water or when they are placed into a bath which is too hot.

DO

Do stay with children whenever they are in the bathroom. (Take the phone off the hook).

Do take them out of the bathroom if you need to answer the phone or door.

Do test the temperature of the water with your elbow before placing your child in the bath.

Do make sure that the tap is turned off tightly.

Do consider setting your Infinity at a maximum temp. of 50°C.

(Contact Rinnai New Zealand)

Do install a child proof tap cover OR,
Do install a child resistant tap.

DON'T

Don't leave a toddler in the care of another small child. The older child may not have set the water temperature to a safe level.

- **Consider child-resistant taps or inexpensive tap covers**, both of which prevent a small hand being able to turn on the tap.

- **Consider reducing the temperature of the water coming from the hot water tap to 50°C.** This approach can be extremely valuable because it requires a one time action for a long-term reduction in the risk of scalds.

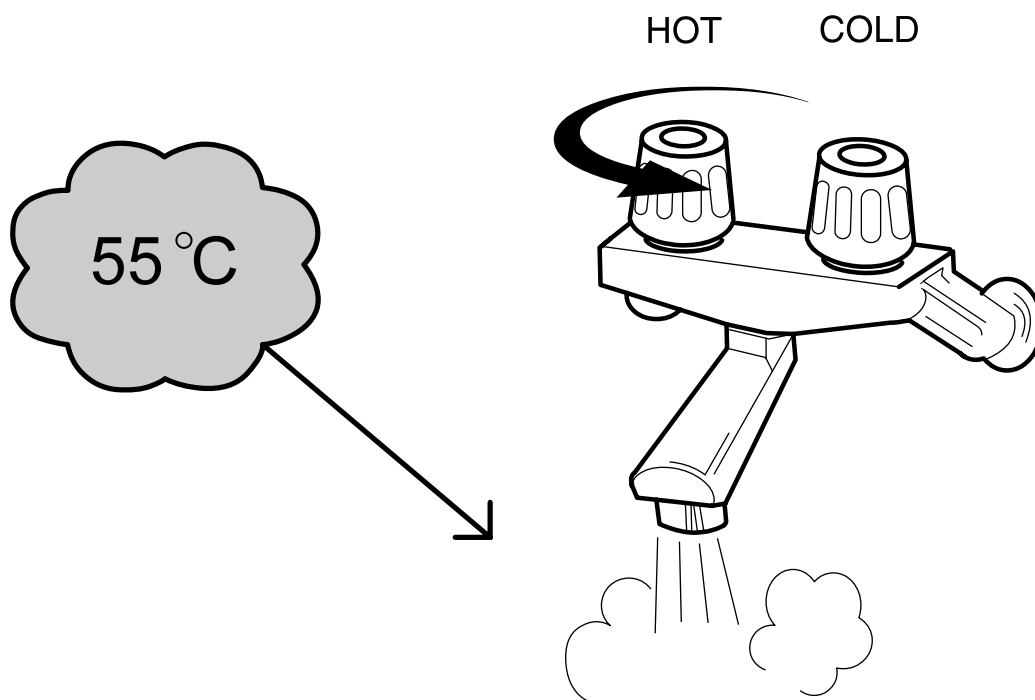
This type of automatic protection is important during times when a parent or carer has been distracted.

OPERATION WITHOUT TEMPERATURE CONTROLLERS

The Infinity has no pilot light and when installed without Temperature Controllers, the Infinity will operate automatically as soon as a hot water tap is opened.

The burner ignites with electronic ignition and the flame extinguishes as soon as water flowing through the appliance stops.

Simply, open a hot water tap.



The Infinity is factory pre-set to 55°C. If you require greater control over the temperature of your hot water, contact Rinnai about our temperature controllers to allow precise digital temperature control in the range 37°C ~ 55°C.



Controllers can be easily fitted at any time after installation.

TEMPERATURE CONTROLLERS

The purpose of the Temperature Controllers is to enable the user to have complete control over the hot water unit. Used correctly, the hot water unit will supply hot water at the temperature selected, even when the water flow is varied, or when more than one tap is used. Adjustments to the operation of your hot water unit can be made with any of the Temperature Controllers. Each Temperature Controller can be individually programmed.

Various water temperatures (°C) can be selected as follows:

Kitchen Controller:

37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 48, 50, 55°C

Bathroom Controller

37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 48, 50°C

Suggested temperatures are:

Kitchen 50°C

Shower 42°C

Bath 40°C

These temperatures are suggested starting points for selection. You may find higher or lower temperatures are more comfortable. Maintaining lower temperatures helps to save energy. To obtain water temperatures lower than 37°C simply add cold water.

Temperature Controllers are an optional extra. 'Standard' Temperature Controllers can be fitted. Standard Controllers allow temperature selection only.

Temperature Controllers allow the temperature to be set from various locations. The temperature selected will be available to all outlets.

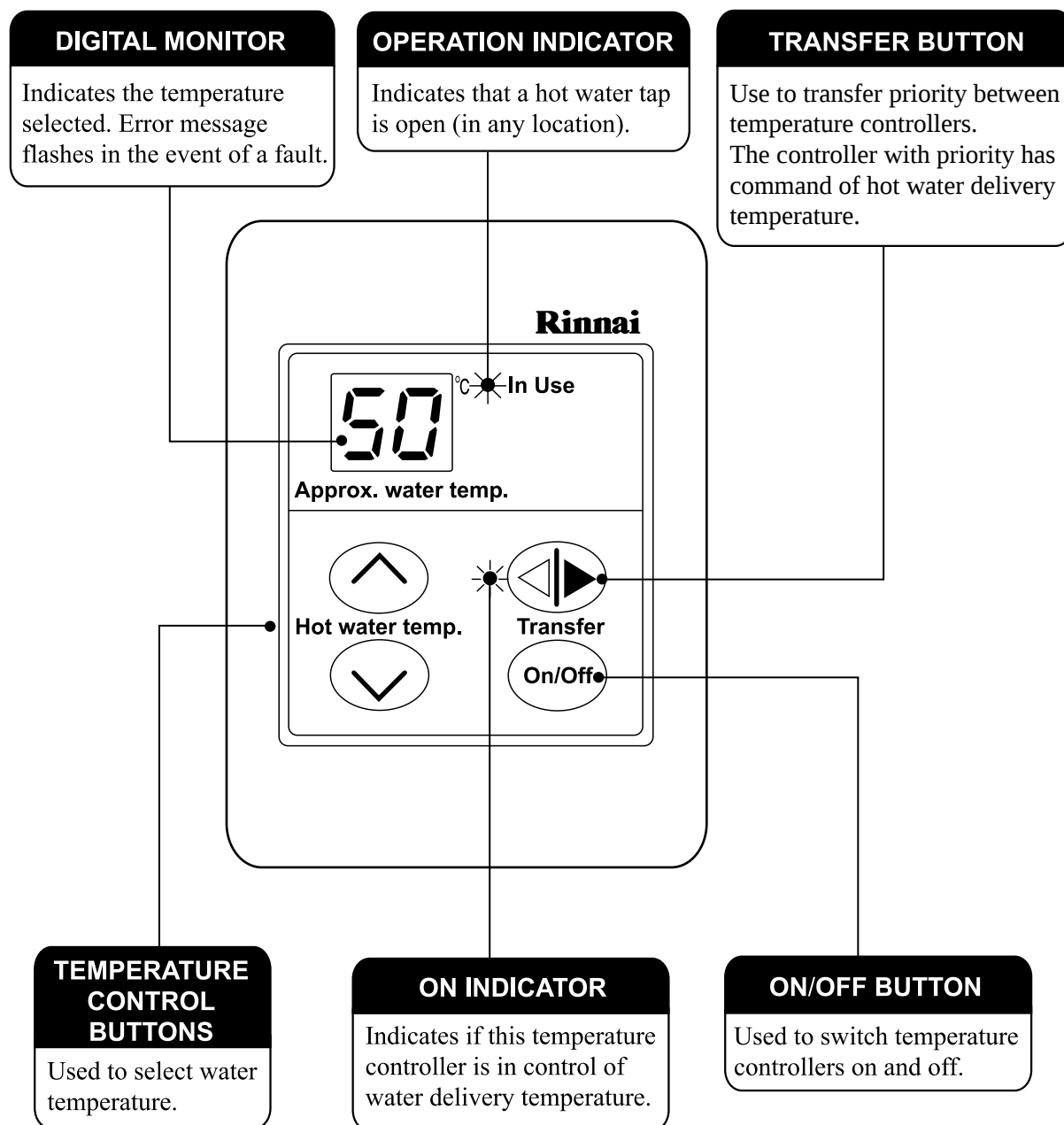
Controller Options

Model	Standard Temperature Controllers
Infinity 16FE	MC-91-1A

STANDARD TEMPERATURE CONTROLLER

Standard Temperature Controller (MC-91-1A)

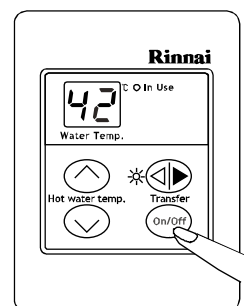
Temperature Controllers are not required to operate the unit, they are a feature that provides control over water temperature. Rinnai Infinity 16WF water heater can be operated with 1, 2, 3 or no Temperature Controllers.



OPERATION WITH STANDARD TEMPERATURE CONTROLLERS

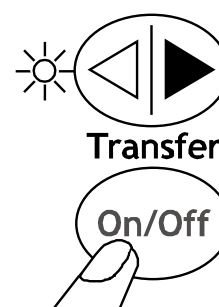
Using the Infinity with 1 Standard Temperature Controller

Press the ON/OFF button on the Temperature Controller.



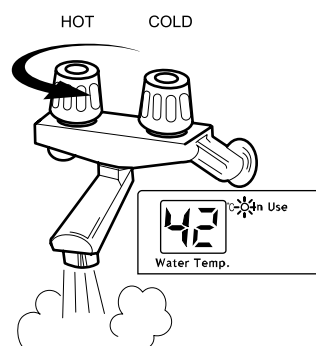
1

The yellow ON indicator will glow on the Temperature Controller. This indicates that the hot water unit is ready to supply hot water when a tap is open.



2

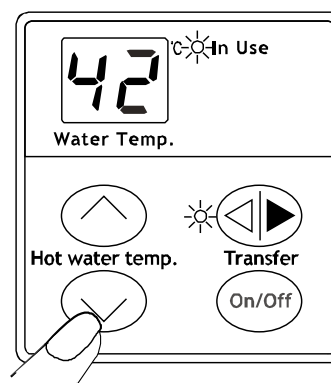
To operate the hot water unit, simply turn any hot water tap on. This will automatically light the burner providing hot water. The red **IN USE** indicator will glow on the Temperature Controller.



3

Adjusting Temperature

Simply press the HOTTER (up arrow) or COOLER (down arrow) button until the required temperature is displayed on the Digital Monitor.



CHECK WATER TEMPERATURE BEFORE USE.

A parent should always check the temperature before a child is placed in contact with hot water.



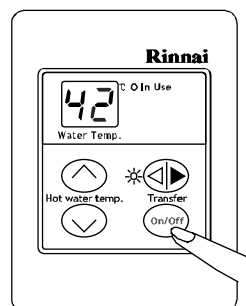
When any hot water tap is open, temperature cannot be adjusted except between 37°C and 43°C.

OPERATION WITH STANDARD TEMPERATURE CONTROLLERS

Using the Infinity with 2 to 3 Standard Temperature Controllers

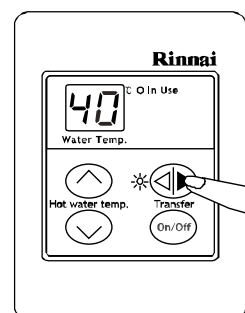
Switching the System 'ON':

The hot water system and all controllers can be switched ON and OFF from any controller by pressing the 'ON/OFF' Button as shown. When the system is turned ON the water Temperature display will be lit. During normal operation the system is left ON.

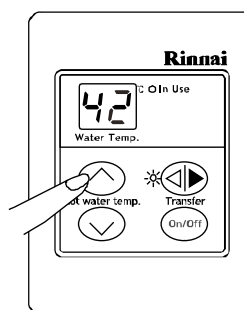


Using Hot Water

1 Ensure the system is switched 'ON'. When the system is ON, the temperature displays will be lit. Ensure the transfer indicator is lit. If not press the TRANSFER button once. This will transfer priority to this controller which will then have control of the water delivery temperature.



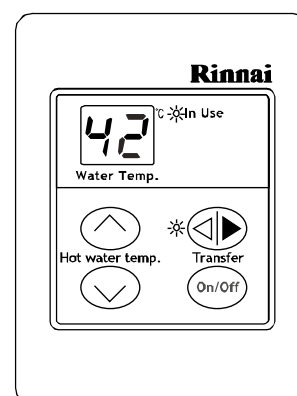
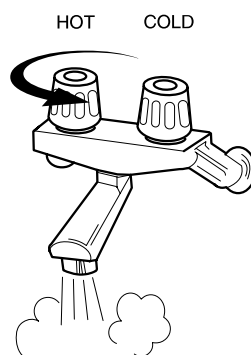
2 Select the desired temperature using the 'hot water temp' buttons. The selected temperature will be displayed on all controller monitors. This is the water temperature which will be supplied to all outlets.



NOTE

Temperatures no higher than 50°C should be able to be selected on controllers installed in bathrooms, ensuites or toilets. This is to help reduce the risk of burns from hot water. If this is not the case, the controllers have been incorrectly installed. **CONTACT YOUR INSTALLER.**

3 Open the Hot Water Tap. The Infinity unit will be activated and the 'in use' indicator will light up.



NOTE

When any hot water tap is open, temperature can not be adjusted except between 37°C and 43°C. For safety reasons, temperature 'priority' can not be transferred between controllers when hot water tap is open.

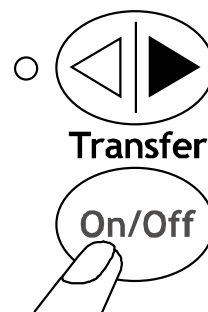
OPERATION WITH STANDARD TEMPERATURE CONTROLLERS

To TURN OFF your hot water system

Simply press the ON/OFF button on any Temperature Controller (where fitted). This will shut the Infinity down completely including the Temperature Controller digital displays.

The ON indicator will go out.

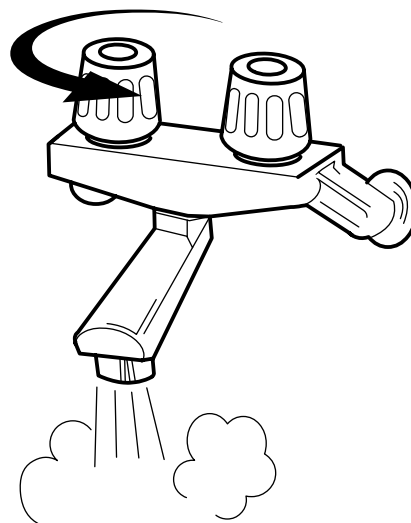
If hot water taps are opened when the Infinity is OFF, cold water will flow from the taps.



Additional SAFETY features

Whilst the hot water tap is open, the following safety features apply.

- Temperature selection cannot be transferred.
- Water temperature can only be adjusted between 37°C and 43°C from the controller that has control.
- Other controllers are unable to select priority.



NOTE

The temperature of outgoing hot water is constantly monitored by a built-in sensor. If the temperature of the outgoing hot water rises to more than 3°C above the selected temperature shown on the Digital Monitor or the pre-set limit when Temperature Controllers are not fitted, the burner will automatically go out. The red operation indicator will also go out. The burner will ignite again once the outgoing hot water temperature falls to that shown on the Digital Monitor (or the pre-set limit).

TROUBLESHOOTING

The hot water unit has the ability to check its own operation continuously. If a fault occurs, an Error Code will flash on the Digital Monitor if you have Temperature Controllers. This assists with diagnosing the fault, and may enable you to overcome a problem without a service call. Please quote the code displayed when enquiring about service. (Refer to Warranty page for Warranty Conditions.)

Code Displayed	Fault	Remedy
-	Noticeable reduction in water flow	Inlet water filter needs to be cleaned. Service call.**
02	Combustion time out (activated after 60 minutes of continuous use to ensure that the room does not run out of oxygen)	Reset the appliance by turning the water heater off at the power point, leave the unit off for 10 seconds and then turn the power back on.
05	Blocked air filter	Clean air filter as per instructions on page 15.
10	Air intake or flue blocked	Service Call
11	No ignition / No gas supply	Check gas is turned on at water heater and gas meter or cylinder. * **
12	Flame Failure / Low gas flow	Check gas is turned on at water heater and gas meter or cylinder. Check that nothing is obstructing flue outlet. Turn on gas supply to water heater.*
14	Remaining Flame Safety Device	Service Call
16	Over Temperature Warning	Service Call
32	Outgoing Water Temperature Sensor Faulty	Service Call
52	Gas Modulating Valve Faulty	Service Call
61	Combustion Fan Failure	Service Call
71	Micro-processor Failure	Service Call
72	Micro-processor Failure	Service Call

* In all cases, you may be able to clear the Error Code simply by turning the hot water tap OFF, then ON again. If this does not clear the Error Code, try pushing the ON/OFF button OFF, then ON again. If the Error Code still remains, contact Rinnai or your nearest service agent for advice.

** Faults caused by insufficient gas/water supply or gas/water quality and installation errors are not covered by the manufacturer's warranty.

Troubleshooting Without Controllers

If you have no Temperature Controllers and experience the following symptoms, please carry out the suggestions below. If the symptom continues, please contact Rinnai for advice.

Fault	Remedy
The unit does not attempt to start at all.	Check the power is on at the unit. Check the cold water valve at the unit is on.
The unit starts then shuts down immediately.	Check the power is still on. Check the gas valve at the unit and the gas meter is fully open.** Open your hot water tap fully.
The unit starts then the water goes cold	Check the power is still on. Open your hot water tap further or try another tap. (Your unit requires a minimum flow of 2.4 L/min. required to operate.) Clean air filter as per instructions on page 15.

** Faults caused by insufficient gas/water supply or gas/water quality and installation errors are not covered by the manufacturer's warranty.

FILTER CARE

Your Infinity 16FE is provided with an air filter, this is located on the front panel of the appliance. To keep the unit operating correctly, inspect the filter regularly, cleaning at least once a month. To remove light dust or lint a vacuum cleaner may be used.

DO NOT operate the appliance without the air filter fitted.

DO NOT tap or strike the filter to remove contaminants.

DO NOT use hot water.

DO NOT use solvents.

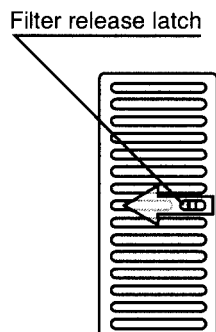
AVOID contact with insecticide sprays.

If the filter is severely clogged, use cold water and a soft brush to remove contaminants.

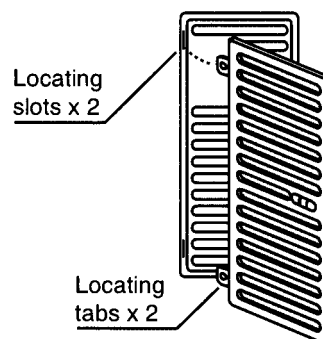
Failure to observe these instructions can adversely effect the performance of the water heater, this may reduce the life expectancy of the appliance.

Removing and cleaning your filter

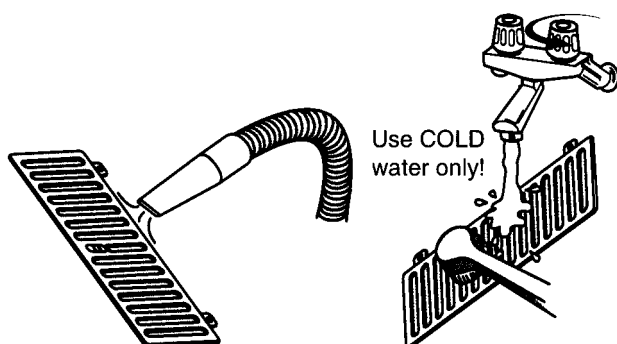
1. Move the release latch to the left to un-lock the filter.



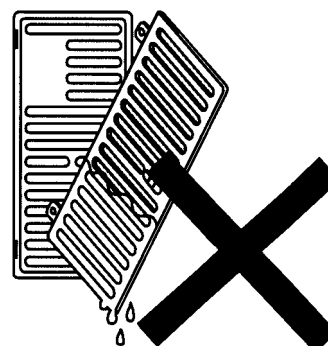
2. Gently pivot the filter to the left until the locating tabs become free in their slots, pull towards you to remove the filter from the appliance.



3. Use a vacuum cleaner or cold water and a soft brush to remove foreign materials.



4. Be sure that the filter is completely dry before attempting to replace.



REMEMBER DO NOT OPERATE THE UNIT WHILE THE FILTER IS REMOVED!

WARRANTY

The benefits conferred by this warranty are in addition all other rights and remedies in respect of the product which you have under the Trade Practices Act Given installation is in accordance with the manufacturers specification, this appliance is warranted by Rinnai for the cost of labour and components in the event of defects arising from faulty materials and/or workmanship with the ensuing warranty conditions.

Domestic Use :	Labour :	Parts :	Commercial Use :	Labour :	Parts :
Heat Exchanger	3 Years	10 Years (pro-rata)	Heat Exchanger	5 Year	1 Year (pro-rata)
All Other Parts	3 Years	3 Years	All Other Parts	3 Year	1 Year

*All terms are effective from date of installation.

Faults arising from improper installation, gas supply, water quality *, plumbing fittings and other outside influences are not the responsibility of Rinnai New Zealand and service calls for these issues will be charged for.

* The recommended water quality levels are as follows:

Description	pH	TDS (Totally dissolved solids)	Total Hardness	Chlorides	Magnesium	Calcium	Sodium	Iron
Maximum Recommended Levels	6.5 to 8.5	Up to 600 mg/litre	Up to 200 mg/litre	Up to 300mg/litre	Up to 10 mg/litre	Up to 20 mg/litre	Up to 150 mg/litre	Up to 1 mg/litre

Please record below the following information for your own records.

Your Retailer :	-----	
Address :	-----	Phone : -----
Date of Purchase :	-----	
Your Installer :	-----	Installer's License No. : -----
Address :	-----	Phone : -----
Date of Installation :	-----	Certificate of Compliance No. : -----
Model No. :	REU -----	Serial No. : -----

SERVICE CONTACT POINTS

RINNAI NEW ZEALAND LTD.

691 MT ALBERT RD ROYAL OAK

AUCKLAND

PO BOX 24-068 AUCKLAND

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