RAPID26®

Continuous Flow Gas Water Heater
26 Litre Series

Operating Instructions & Installation Guide

Including Warranty Conditions

MODELS COVERED

Natural Gas

RAPID R26N

LPG (Propane Gas only)

RAPID R26P

THIS WATER HEATER MUST BE INSTALLED AND SERVICED BY AN AUTHORISED PERSON.

On completion of installation please give these Instructions to the householder.

PRODUCT RECORD

Please take a moment to record the following information below for your own records.

Model No:	REU	Serial No:
Your Retailer:		
Address:		
Contact Number:		
Purchase Date:		
Your Installer:		
Address:		
Installers License No.:		
Contact Number:		
Installation Date:		
Certificate of Compliance No.:		

Certificates of Compliance must be issued by the installer by law in all states and territories of Australia.

This water heater must be installed by a licensed person.

Only a licensed person will give you a Compliance Certificate showing that the work complies with all the relevant Standards.

Only a licensed person will have insurance protecting their workmanship for 6 years.

Make sure you use a licensed person to install this water heater and ask for your Compliance Certificate.

Installing Plumber:

Upon completion of the installation and commissioning of the water heater ensure that the householder receives these operating instructions.

Note: Alliance Appliances Australia Pty. Ltd. has taken great care to ensure accuracy in preparation of this publication. No liability can be accepted for any consequences, which may arise as a result of its application.

CONTENTS

FEATURES AND BENEFITS

Rapid Continuous Flow gas water heaters models R26N, R26P

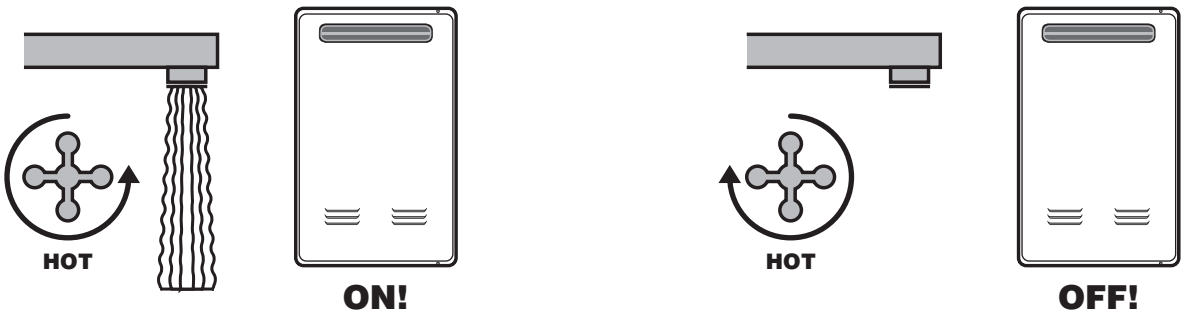
Whisper Quiet. Your Rapid Continuous Flow water heater operates at a very low noise level.

Electronic Ignition. Your Rapid Continuous Flow water heater lights automatically when the tap is turned on. No pilot light hassles. When the tap stops, so does the gas.

Micro processor for maximum Safety. The micro processor in your Rapid Continuous Flow water heater has the ability to limit the maximum temperature of the hot water to protect young children and elderly residents from scalding.

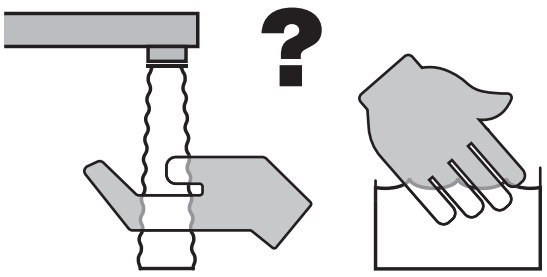
Compact Flue. Your Rapid Continuous Flow water heater saves on installation space with a power flue that makes it much more compact.

CONTROLLER FREE OPERATION

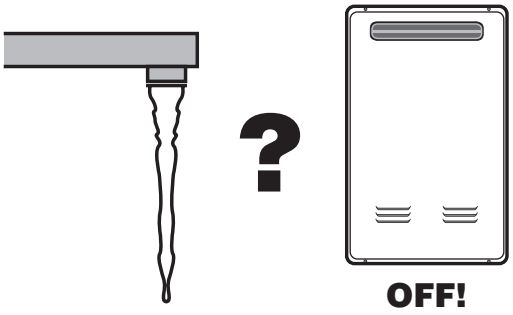


Your Rapid Continuous Flow water heater does not use a pilot light. As soon as you open any hot water tap the appliance will automatically start. Water flowing through the appliance triggers the electronic ignition to ignite the burner and start heating. When the tap is closed and the water stops flowing, the burner will stop heating.

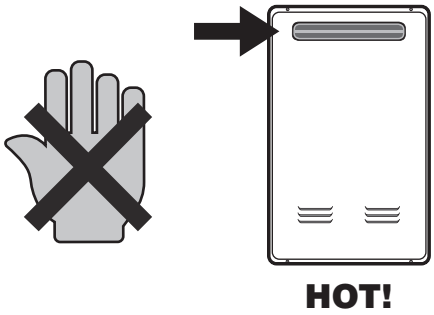
IMPORTANT INFORMATION



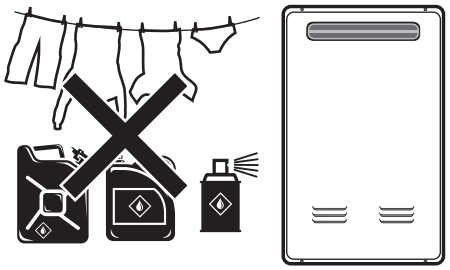
Always check the water temperature carefully before use.



When the water is turned down to a low flow the heating may extinguish without warning. To restart the heating open the tap further.



WARNING!! Do not touch the unit cover or flue outlet. Do not insert objects into the flue outlet. Steam may discharge on cold days, this is normal.



KEEP CLEAR! Keep pool chemicals, spray cans, fuel containers, flammable materials, garden items clear of the flue outlet. NEVER spray water into the flue outlet.

HOW TO GET HOT WATER

- Turn on a hot water tap and the heater will automatically light and commence heating the water.
- Turn off the hot water taps and the heater will automatically turn itself off.
- When one or more hot water taps are turned on the heater will automatically maintain the heater's pre-set outlet hot water temperature.

USEFUL INFORMATION ABOUT THE HEATER'S OPERATION.

- If a hot tap is set to a very low water flow the heater may not light or may automatically turn off causing the water to go cold. If this occurs opening the tap to increase flow will allow the heater to operate normally.
- To quickly attain and/or maintain the pre-set outlet temperature the heater may automatically vary or limit the flow. The heater will only do this if too high a flow rate has been selected or the mains supply is very cold. On any start up at high flow rates this will become apparent and heater will limit flow until water is hot enough. This limits energy wastage.
- On colder days steam may be seen coming out of the flue outlet. This is normal for a gas water heater.
- The heater will not operate if the electrical power supply is interrupted. Once power is restored the heater will operate normally.
- The fan in the heater will continue to run for a short time after all hot taps have been turned off. This is normal. The heater is preparing itself for the next time it has to heat water.
- The drain plug on the heater's hot water outlet is also a pressure relief valve. A small amount of water may drain from the pressure relief valve if a hot water tap or a solenoid water valve in an appliance is closed quickly.

FROST PROTECTION

Provided your heater is connected to a reliable 240V electrical supply it is automatically protected against damaging due to freezing.

If freezing conditions are likely and the electrical power supply is unreliable the heater should be drained of water.

See section in Operating Instructions headed **How to Drain Heater for Frost Protection**

IMPORTANT INFORMATION FOR SAFE OPERATION

- **Hot water can cause a severe scalding injury.**

Those most at risk are children, the elderly the infirm and anyone with disabilities.

We recommend and plumbing regulations may require that that the temperature of the hot water delivered to rooms such as your bathroom and en-suite is limited to 50°C. This will reduce the risk of scalding injuries.

If you have not previously had a 50°C limited supply to your bathroom or en-suite you may find that it takes a little longer for hot water to arrive at the tap. This is normal and indicates the reduced scalding risk a 50°C supply provides.

It is the installing plumber's responsibility to ensure the water delivered to your hot taps is at a temperature which complies with all relevant regulations. However we recommend that you inform yourself of all your hot water taps' delivery temperatures.

In order to lower the hot water delivery temperatures to your bathroom and en-suite or any other taps to a maximum of 50°C an approved temperature limiting device will be required to be fitted to your pipe work.

RAPID R26N and R26P are designed for installation as in series solar boost heaters and are required by plumbing regulations and can be set to have a minimum pre-set delivery temperature of 70°C MIN.

Water heated by the solar heater to temperatures in excess of 70°C may pass through the heater and be delivered to your hot water taps.

In order to lower the hot water temperature to your bathroom and en-suite or any other taps to a maximum of 50°C an approved temperature limiting device will be required to be fitted to your pipework.

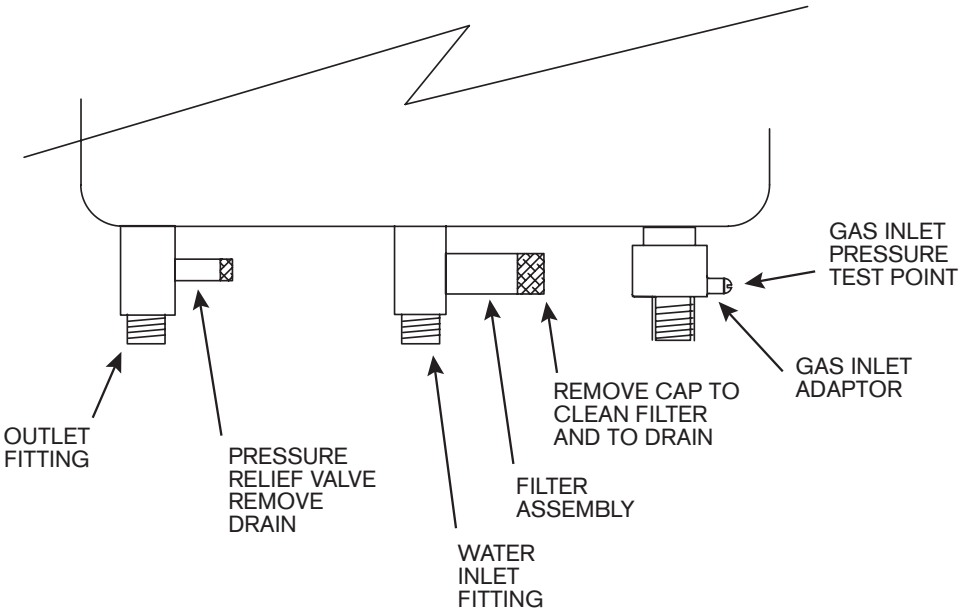
- **There is a hot gas flame inside your heater when it is operating**

Keep flammable materials, spray cans, fuel containers, chemicals, trees and shrubs etc. well clear of the heater.

- **The discharge from the heater's flue outlet is hot.**

Do not touch the heater or outlet.
Do not insert anything into the flue outlet.
Do not spray water directly into the flue outlet.

HOW TO DRAIN HEATER FOR FROST PROTECTION



1. Turn off gas and cold water supply at the isolation valves under heater.
2. Turn off electricity at the power outlet the heater is plugged into.
3. Turn on a hot water tap. Preferably the shower.
4. Remove the drain plug from both the hot water outlet and the cold water inlet at the bottom of the heater.
5. Allow all water to drain from heater. Turn off hot water tap when the water flow stops.
6. Store drain plugs in a safe place.

How to Re-start heater after freezing conditions have passed

1. Re-fit and tighten both drain plugs so they seal.
2. Turn on the cold water supply at the isolation valves under heater.
3. Turn on all hot water taps and allow the air in the pipes to be forced out.
4. Turn off each hot water tap once it flows normally
5. Turn on electricity at the power outlet the heater is plugged into.
6. Turn on gas isolation valve.

The heater will now be ready for normal use.

TROUBLESHOOTING

No water flow from hot tap

Check that both the house mains supply at the water meter and the cold water isolation valve at the heater are fully open. If the mains supply tap is open water should flow from cold taps in the house.

Cold water from hot water taps

Increase flow and see if water begins to heat. Remember heater will NOT heat if tap only permits a very small flow.

Turn off hot tap. Wait 5 seconds and then try again with a strong flow.

Check that electricity and gas are turned on at heater.

You can check if electricity and gas are turned on at their meters by turning on other appliances in the house that are connected to electricity or gas.

Hot water flow varies

The heater is designed to deliver water at a fixed temperature. If you attempt to draw more hot water than the heater can provide e.g. by turning on too many taps, the heater will limit the flow.

Hence when say 3 or 4 taps are turned on strongly and the flow is beyond the heater's capacity to heat, the flow from the taps may be reduced but the temperature will be maintained.

If you have not found a solution to the problem.

Contact Alliance Service Department for further information and a service call if required.

This heater must be serviced only by an authorised person

WARRANTY

Alliance continuous flow gas water heaters models R26N, R26P

WATER SUPPLY QUALITY

This water heater must be connected to water of a quality within the limits described below to be covered by the warranty.

This water heater is manufactured to suit the water conditions of most public reticulated water supplies. However, there are some known water chemistries which can have detrimental effects on the water heater and its operation and / or life expectancy. If you are unsure of your water chemistry, you may be able to obtain information from your local water supply authority.

CHANGE OF WATER SUPPLY

The changing or alternating from one water supply to another can have a detrimental effect on the operation and / or life expectation of a heat exchanger in a continuous flow water heater.

Where there is a changeover from one water supply to another, e.g. a rainwater tank supply, bore water supply, desalinated water supply, public reticulated water supply or water brought in from another supply, then water chemistry information should be sought from the supplier or it should be tested to ensure the water supply meets the requirements given in these guidelines for warranty to apply.

SATURATION INDEX

The saturation index (SI) is used as a measure of water's corrosive or scaling properties. In a corrosive water supply, the water can attack copper parts and cause them to fail.

Where the saturation index is less than –1.0, the water is very corrosive and warranty does not apply to a copper heat exchanger in a continuous flow water heater.

In a scaling water supply calcium carbonate is deposited out of the water onto any hot metallic surface. Where the saturation index exceeds +0.80, warranty does not apply to a copper heat exchanger in a continuous flow water heater.

Water which is scaling may be treated with a water softening device to reduce the saturation index of the water.

WARRANTY CONDITIONS

1. The water heater must be installed in accordance with the water heater installation instructions, supplied with the water heater, and in accordance with all relevant statutory and local requirements of the State in which the water heater is installed.

2. Where a failed component, heat exchanger or water heater is replaced under warranty, the balance of the original warranty period will remain effective. The replaced component, heat exchanger or water heater does not carry a new warranty.
3. Where the water heater is installed outside the boundaries of a metropolitan area as defined by Alliance or further than 25km from an Alliance Accredited Service Agent, the cost of transport, insurance and travelling costs between the nearest Alliance Accredited Service Agent's premises and the installed site shall be the owner's responsibility.
4. Where the water heater is installed in a position that does not allow safe, ready access, the cost of accessing the site safely, including the cost of additional materials handling and / or safety equipment, shall be the owner's responsibility.
5. The warranty only applies to the water heater and original or genuine (company) component replacement parts and therefore does not cover any plumbing or electrical parts supplied by the installer and not an integral part of the water heater, e.g. pressure limiting valve; isolation valves; non-return valves; electrical switches; pumps or fuse.
6. The water heater must be sized to supply the hot water demand in accordance with the guidelines in the water heater literature.

WARRANTY EXCLUSIONS

1. REPAIR AND REPLACEMENT WORK WILL BE CARRIED OUT AS SET OUT IN THE WATER HEATER WARRANTY, HOWEVER THE FOLLOWING EXCLUSIONS MAY CAUSE THE WATER HEATER WARRANTY TO BECOME VOID AND MAY INCUR A SERVICE CHARGE AND / OR COST OF PARTS.

a) Accidental damage to the water heater or any component, including: Acts of God; failure due to misuse; incorrect installation; attempts to repair the water heater other than by an Alliance Accredited Service Agent or Alliance Service.

b) Where it is found there is nothing wrong with the water heater; where the complaint is related to excessive discharge from the pressure relief valve due to high water pressure; where there is no flow of hot water due to faulty plumbing; where water leaks are related to plumbing and not the water heater or water heater components; where there is a failure of gas, electricity or water supplies; where the supply of gas, electricity or water does not comply with relevant codes or acts.

c) Where the water heater or water heater component has failed directly or indirectly as a result of: excessive water pressure; excessive temperature and / or thermal input; corrosive atmosphere; ice formation in the pipe work to or from the water heater.

d) Where the water heater or water heater component has failed directly or indirectly as a result of ice formation in the waterways of a water heater: where the water heater has not been installed in accordance with the water heater installation instructions; where the electricity supply has been switched off or has failed and the water heater has not been drained in accordance with the instructions; due to an ambient temperature below -20°C (including wind chill factor).

Cont...

WARRANTY EXCLUSIONS Cont.

e) Where the water heater is located in a position that does not comply with the water heater installation instructions or relevant statutory requirements, causing the need for major dismantling or removal of cupboards, doors or walls, or use of special equipment to bring the water heater to floor or ground level or to a serviceable position.

f) Where the water heater has been connected at any time to a water supply that does not comply with the water supply guidelines as outlined

WARRANTY PROVIDED

Alliance will repair or replace, at Alliance's sole discretion and subject to the warranty conditions and exclusions, any component or the heat exchanger if it fails within the warranty period below.

Continuous Flow Water Heaters		Heat Exchanger	All other components
Domestic Use	Parts	10 Years	3 Years
	Labour	3 Years*	3 Years
Commercial Use	Parts	1 Year	1 Year
	Labour	1 Year	1 Year

* Years 4-10 on heat exchanger. Replacement of heat exchanger free of charge, installation and repair costs are the responsibility of the owner.

WARRANTY TERMS – Alliance Appliances Australia Pty Ltd (Alliance)

1. Entitlement to claim under this warranty

1.1 To qualify to claim under this warranty you must:

a) Be the owner of the water heater or have the owners consent to act on their behalf

b) Advise Alliance of defect without delay and within warranty period

1.2 You are not entitled to claim under this warranty if your water heater:

a) Does not have its original serial numbers or rating labels

b) Was not installed by a licensed person to all relevant standards and you cannot produce a compliance certificate

c) Is not installed in Australia

2. Making a claim under this warranty

2.1 To make a claim under this warranty you must:

a) Contact Alliance and provide owner details, address of unit, contact number and date of installation or if unavailable the date of manufacture and serial number.

b) After assessment on site, if Alliance deems you have a valid claim, Alliance will repair or replace in accordance with this warranty

2.2 Any costs incurred in making a claim under this warranty will be borne by you

3. Australian Consumer Law

3.1 Our goods come with guarantees that cannot be excluded under Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other unforeseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of an acceptable quality and failure does not amount to a major failure.

3.2 This Alliance warranty is in addition to any rights and remedies that you may have under the **Australian Consumer law.**

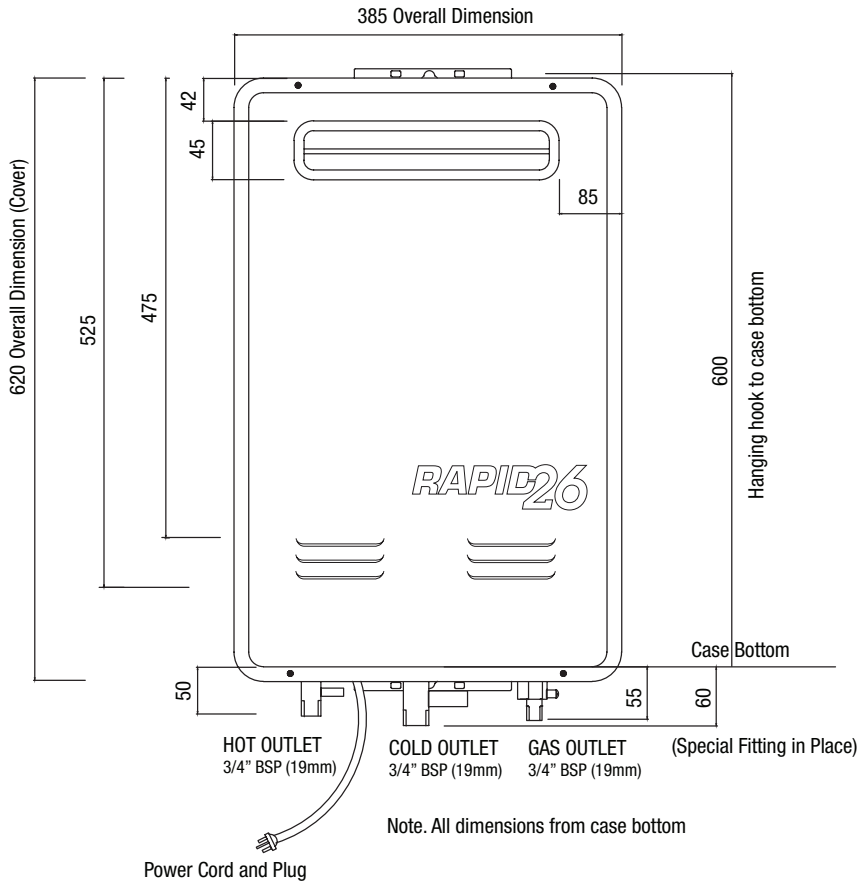
GENERAL INSTALLATION REQUIREMENTS

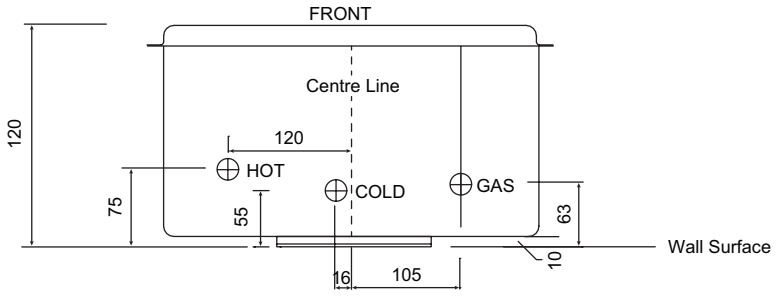
- This heater must be installed in accordance with
  - > Current issues of AS/NZS 3000, AS/NZS 3500.4 and AS/NZS 5601 and
  - > These installation instructions and
  - > All local codes and regulatory authority requirements
- This heater must be installed, serviced or removed only by an Authorised Person
- Alliance continuous flow gas water heaters are designed for “Outdoor” installation only.
- The heater must only be connected to the gas type marked on the heater.
- The gas meter, regulator and supply pipes must be sufficiently large to deliver the rated gas input for all gas appliances that are planned to be installed at the premises. The Gas Installation Standard AS/NZS 5601 sets out the method of determining pipe sizing to the water heater.
- The heater is designed for connection to mains water supply pressure. To achieve the rated flow and performance the supply pressure must be within the range of 200kPa to 1000kPa.
  - > If the water supply pressure exceeds 1000 kPa it must be reduced with an approved pressure limiting valve.
  - > The heater should not be connected to a household gravity water supply.
- For continued and reliable operation the heater must only be connected to water supplies with suitable chemical properties and cleanliness.

  The warranty section of these instructions outlines the limits on the water chemistry and cleanliness.

  Most metropolitan water supplies are suitable but you should contact your water supply authority to confirm that your water is within the limits set out in the warranty.
- An approved and suitably positioned standard 240V AC 10amp outdoor earthed power point is required. Waterproof model if required. The electrical supply lead on the heater is 1.8m long.
- **THIS HEATER MUST NOT BE INSTALLED TO HEAT EITHER A DOMESTIC SPA OR SWIMMING POOL**

HEATER DIMENSIONS AND SPECIFICATIONS





Note: All dimensions from wall surface

BOTTOM VIEW WITH CONNECTION DIMENSIONS

Heater	Gas Type	Hot Water Delivery L/min @25oC Rise	Delivery Tempera-ture oC	Min Max Water Supply Pressure Kpa	Max Gas Input MJ/ hr	Min / Max Gas Inlet Pressure kPa	Min / Max Gas Burner Pressure kPa	Weight Empty kg
A26N	Natural	26	Between 50 - 74°C	Between 200 and 1,000	199	1.25 – 3.0	0.6 kpa	19
A26P	Propane	26	Between 50 - 74°C	Between 200 and 1,000	199	2.75 – 3.0	1.22 kpa	19

HEATER LOCATION

- The heater should be installed as close as practicable to the most frequently used hot water tap.
- The heater must be fixed to a vertical structure e.g. a wall using the screws and fixing points provided. The wall may have timber cladding.

  (Alternative fixing screws may be used if they are more suitable for the mounting surface.)
- The installation location must provide adequate clearance for servicing and permit the data on the rating plate to be easily read.
- The heater must be able to be serviced without having to stand on a ladder.
- The heater incorporates a frost protection system which will protect the heater provided that a 240V supply is connected to the heater. If the heater is to be left unattended for any length of time in very cold weather it should be drained of water to ensure frost protection.

  See section in Operating Instructions headed **HOW TO DRAIN HEATER FOR FROST PROTECTION**

Recessed Installation

The heater can be installed recessed into a wall with a Wall Recess Box Kit.
The Wall Recess Box kit contains the instructions for this type of installation.

- The flue terminal must be positioned so that flue products do not enter a dwelling and so that the operation of the heater is not affected by anything too close to the flue outlet e.g. fences or shrubs.

  See a current issue of AS/NZS 5601 for the full set of rules governing the location of the flue terminal.

  For example. Some of the requirements of AS/NZS 5601 are:

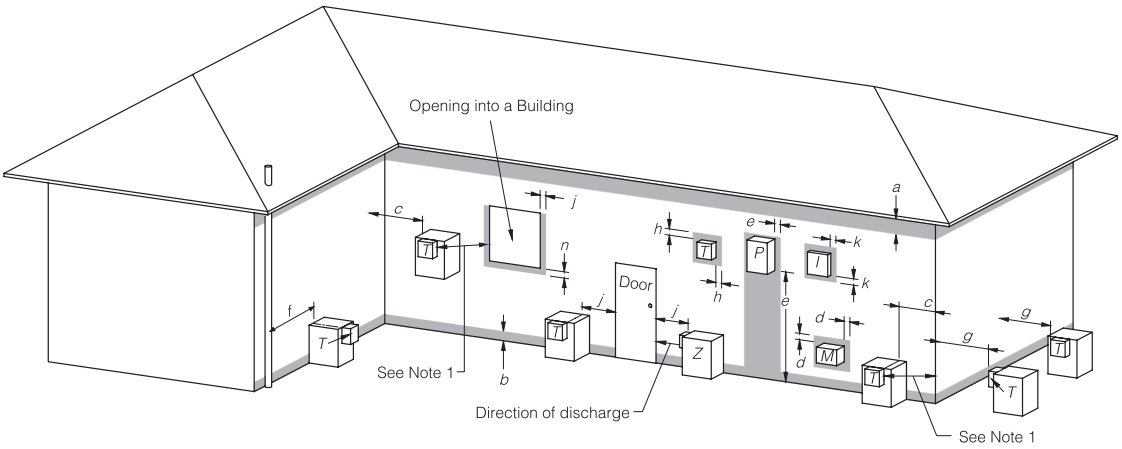
  The flue terminal must be positioned so that there is AT LEAST

  > 300mm between
    - the top of the flue terminal and the eaves
    - the flue terminal and a return wall or external corner measured horizontally along the wall.

  > 500mm between
    - The flue terminal and the edge of any opening into the building measured horizontally along the wall
    - the flue terminal and a fence, wall or other obstruction in the flue discharge path

  > 1500mm between
    - the top of the flue terminal and the closest part of any openable window above the terminal.
    - The flue terminal and any opening into a building which is in the direction of the flue discharge.

See details of AS/NZS 5601 over page.



Ref.	Item	Min 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	Front a return wall or external corner *	500	300
d	From a gas *meter* (M) (see 5.11.5.9 for vent terminal location of *regulator*) (see Table 6.6 for New Zealand requirements)	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, doo, 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 applainces*, 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/hr input	150	150
	• Other *appliances* up to 50 MJ/hr 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

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

Notes

1 Where dimensions c, j or k cannot be achieved ab equivalent horizontal distance measured diagonally from the nearest discharge point of the terminal to the opening may be deemed by the Technical Regulator to comply.

2 See Clause 6.9.4 for restrictions on a flue terminal under a covered area.

3 See Figure J3 for clearances required on a flue terminal to an LP Gas cylinder. A flue terminal is considered to be a source of ignition.

4 For appliances not addressed above acceptable should be obtained from the Technical Regulator.

FIGURE 6.2 (in-part) MINIMUM CLEARANCES REQUIRED FOR BALLANCED FLUE TERMINALS, FAN ASSISTED FLUE TERMINALS, ROOM SEALED APPLIANCE TERMINALS AND OPENINGS OF OUTDOOR APPLIANCES

Extract from AS/NZS 5601

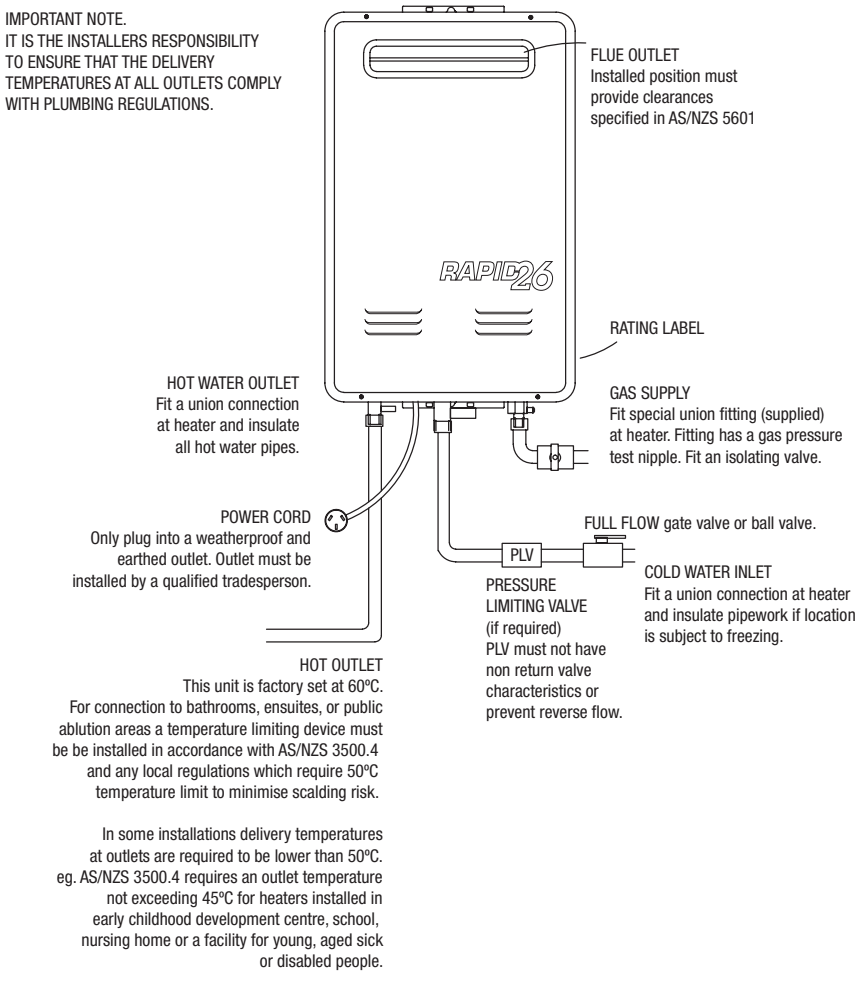
INSTALLATION INSTRUCTIONS

All plumbing work must be carried out by a qualified person and in accordance with the National Plumbing Standard AS/NZS 3500.4 and local authority requirements.

All gas work must be carried out by a qualified person and in accordance with the Australian and New Zealand Gas Installations Standard AS/NZS 5601 and local authority requirements.

Typical Installations

TYPICAL INSTALLATION
MODELS R26N & R26P



HOT WATER DELIVERY TEMPERATURE

WARNING - Water heaters can deliver water at temperatures which can cause scalding.

The installing plumber has an obligation to ensure the water heater is installed so that the outlet delivery temperature at all sanitary fixtures complies with the requirements of AS/NZS 3500.4 and any other regulatory requirements so that potentially scalding water temperatures are not delivered to a bathroom, en-suite or other ablution or public areas.

In order to lower the hot water delivery temperatures to your bathroom and en-suite or any other taps to a maximum of 50°C an approved temperature limiting device will be required to be fitted to your pipe work.

REFER TO AS/NZS 3500.4 AND LOCAL REQUIREMENTS TO DETERMINE IF ADDITIONAL DELIVERY TEMPERATURE CONTROL IS REQUIRED.

R26N and R26P can be pre-set at 70°C for use ONLY as in series solar boosters. However the delivery temperature can be 75°C or more depending on the maximum stored water temperature of the solar hot water system.

REFER TO AS/NZS 3500.4 AND ANY LOCAL REQUIREMENTS TO DETERMINE THE REQUIRED SANITARY FIXTURE DELIVERY TEMPERATURES.

Temperature Limiting Devices

Tempering valves fitted to limit this heater's delivery temperature must:

- Be marked as suitable for use with gas instantaneous water heaters
- Have a specified "minimum temperature differential" between the hot water inlet and the tempered water outlet of no greater than 10°C, and
- Have a specified "maximum permitted pressure variation in the supply between the valve's hot and cold water inlets of no less than 15%. See Note over page...

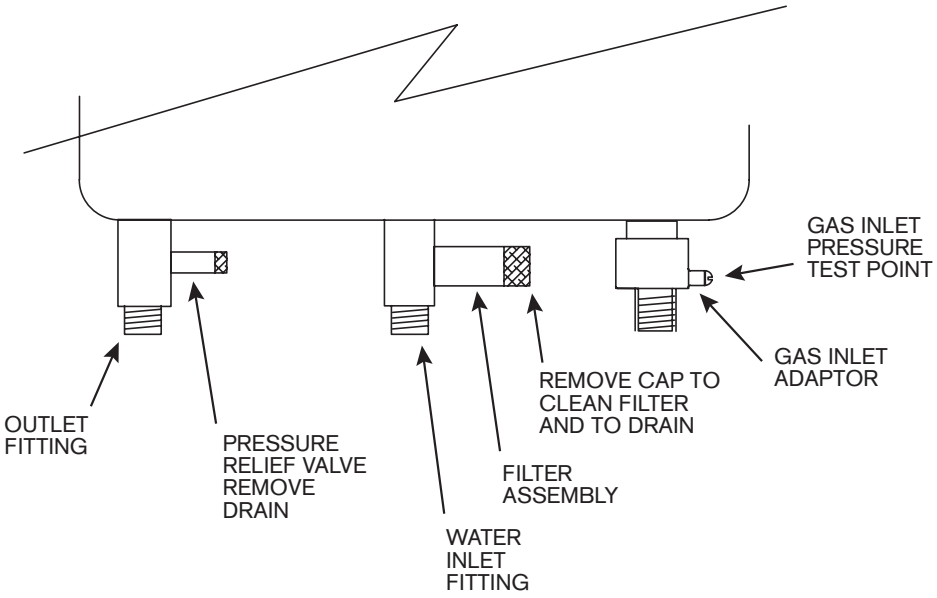
Note. To limit water to a maximum of 50°C to bathrooms and en-suites; an approved temperature limiting device is required to be fitted to comply with AS/NZS 3500.4. Setting the unit to 50°C does NOT negate the need to fit an approved temperature limiting device.

Note. The hot and cold inlet pressures to the tempering valve can be quite different in some piping arrangements.

For example.

If a pressure limiting valve(PLV) is installed on the cold water line to the water heater and the cold water line to the tempering valve branches off before the PLV or is from another cold water line in the premises, then an additional PLV of an equal pressure setting may be required prior to the tempering valve.

WATER INLET AND OUTLET CONNECTION and DRAINS



The heater is designed for connection to mains water supply with a pressure within the range of 200kPa to 1000kPa.

If the water supply pressure exceeds 1000kPa it must be reduced with an approved pressure limiting valve that does not have a non return valve characteristic.
I.E. NO CHECK VALVE

The hot water delivery pipe sizes must be large enough to ensure adequate flow for each outlet and appliance that will be connected.

Refer to the heaters technical specifications and local regulatory authority requirements for assistance in selecting pipe sizes.

The minimum recommended cold and hot pipe size is DN20. In addition the cold water line to the water heater should be the same size or bigger than the hot water line from the heater.

All pipe work must be cleared and purged of foreign matter before connection and before attempting to operate the water heater. After first flow of water through the heater remove and inspect the inlet fitting water filter. It should be free of any debris. Ref Diagram above

Any olive compression fittings used must have brass or copper olives.

A full flow gate valve or ball valve must be installed on the cold water line.

A non-return valve or stop tap must not be installed.

Disconnection unions must be fitted at both the heater's cold inlet and hot outlet so that the heater can be easily removed if required.

Insulation used on the cold and hot water lines must extend up to the cold water inlet and hot water outlet of the water heater.

Use the spanner flats on the water heater fittings to avoid twisting the water inlet and outlet pipes inside the heater case.

GAS CONNECTION

Ensure gas piping to the heater has been sized in accordance with Gas Installation Standard AS/NZS 5601.

The piping installed must provide sufficient gas for both the water heater and all the other appliances on the property to operate at their maximum rated input.

A special fitting incorporating a gas pressure test point is included in the heater packaging. Fit this to the gas inlet on the heater.

The gas supply may then be connected to the heater with a disconnection union at the heater and an isolation valve. See Diagrams showing Typical Installations.

Note. Ensure the heater the isolation valve is turned off before pressure testing the gas supply pipework.

ELECTRICAL SUPPLY

All electrical work and permanent wiring must be carried out by a qualified person and in accordance with the Wiring Rules AS/NZS 3000 and local authority requirements.

The water heater is fitted with a 1.8 metre lead and plug and requires a weatherproof 240 V 50 Hz 10amp general purpose outlet (GPO) located within approximately 1.2 metres of the heater.

The GPO must be clear of the flue exhaust, gas supply pipe, water connections and draining water.

The water heater will only operate on a true sine wave supply at 50 Hz. Devices generating a square wave cannot be used to supply power to the water heater.

The Maximum power consumption of the heater with the burners on and the anti-frost system active is 150Watts

COMMISSIONING

Check gas and water supply connections for leaks

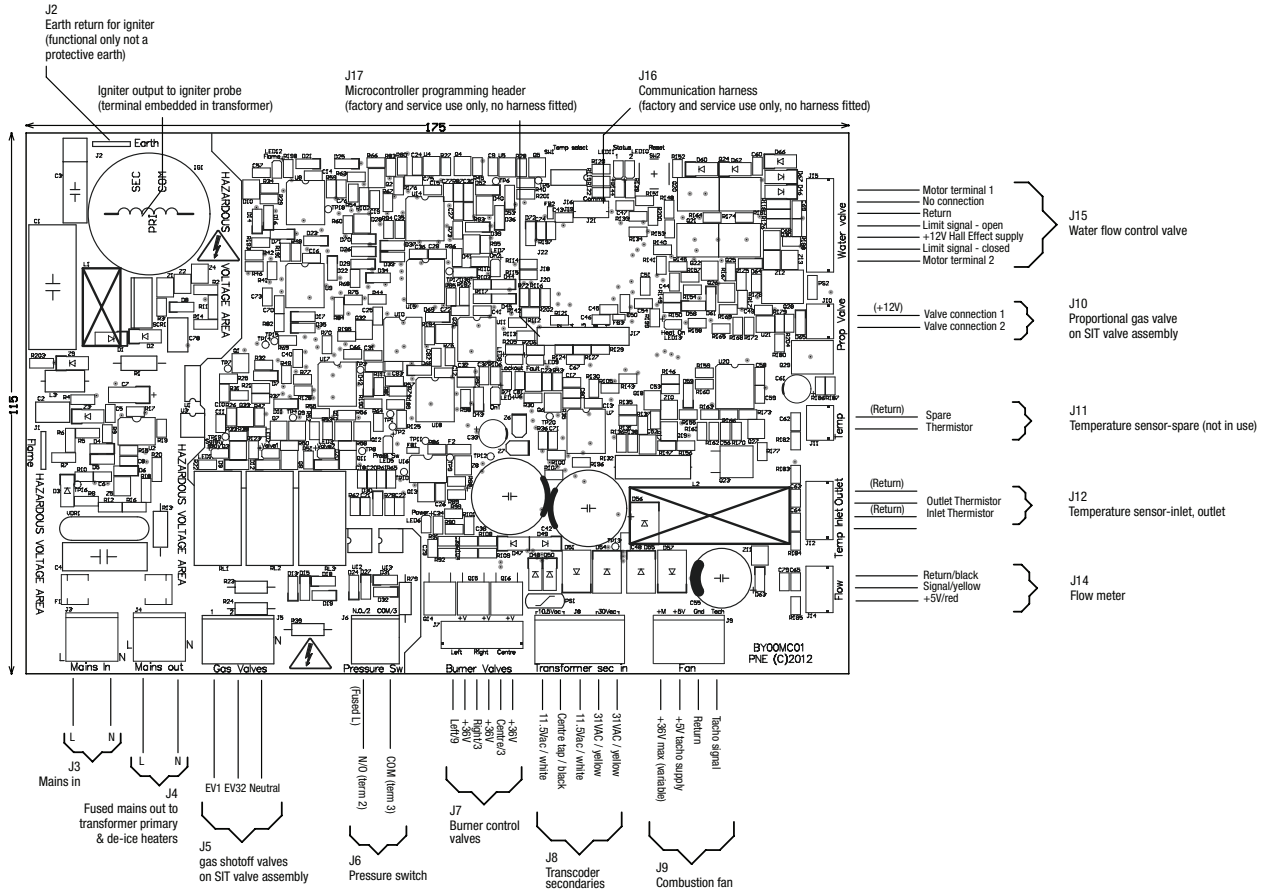
1. Ensure electricity to the heater is turned off.
2. Fully open the cold water isolation valve.
3. Check the water pipe work for leaks.
4. Open the gas isolation valve fully.
5. Check the gas pipe work for leaks.

Check hot water flow and confirm pre-set delivery temperature

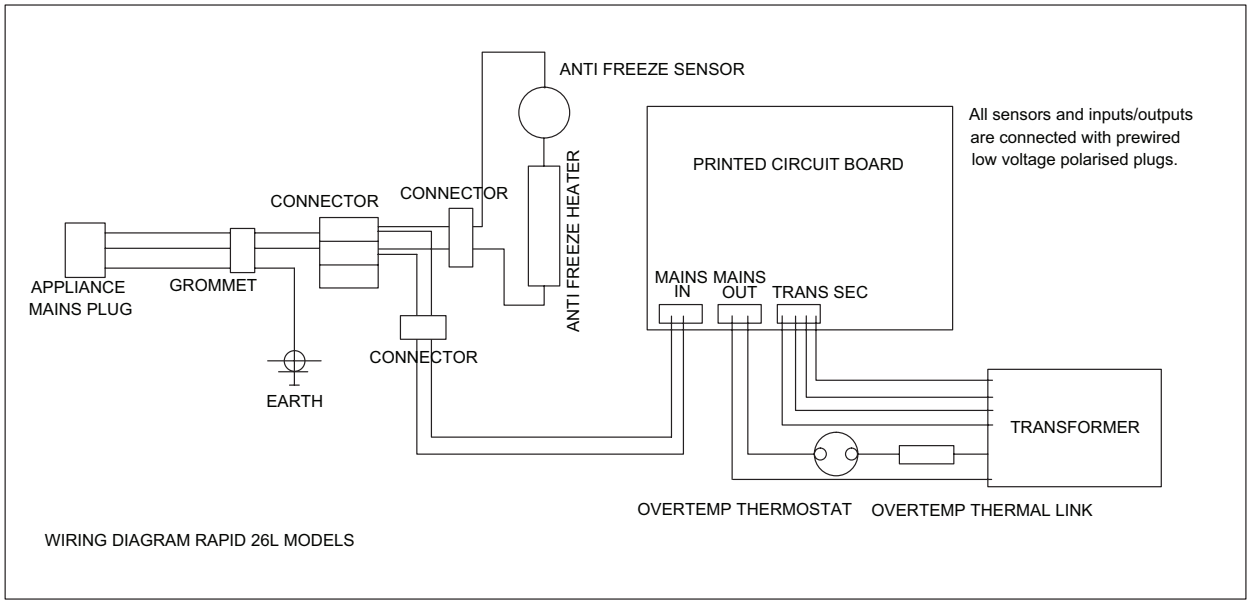
1. Plug in the water heater at the power outlet and switch on the electrical supply.
2. Open a hot tap.
3. The water heater will operate automatically.
4. Check there is sufficient flow from each connected hot tap to operate the water heater.
5. Confirm hot water delivery temperatures at closest tap using a thermometer.

   Note 1. Hold thermometer in the water flow and take reading when the temperature stops rising.

CONNECTION DIAGRAM



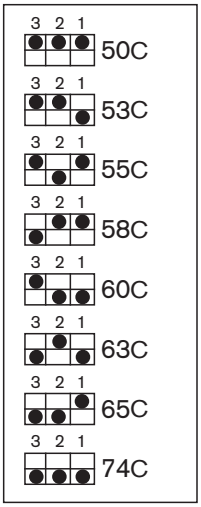
WIRING DIAGRAM



TEMPERATURE ADJUSTMENTS. (By licensed installers only)

The Rapid 26 can be incrementally preset to temperatures between 50°C to 74°C.

Note. To limit water to a maximum of 50°C to bathrooms and en-suites; an approved temperature limiting device is required to be fitted to comply with AS/NZS 3500.4. Setting the unit to 50°C does NOT negate the need to fit an approved temperature limiting device.



NOTE: THE POWER MUST BE TURNED OFF PRIOR TO CHANGING THIS SET OF SWITCHES.

Check gas supply pressure to heater and the burners.

To ensure that the heater will operate safely and achieve its rated delivery check both the gas supply pressure and burner pressure.

Checking the gas supply inlet pressure:

1. Close the gas isolation valve at the inlet to the water heater.
2. Connect a manometer to the gas inlet test point on the gas connection fitting under the water heater.
3. Open the gas isolation valve fully.
4. Open 2 hot taps fully and ensure all the heater's burners are alight.
5. Turn on all other gas appliances in the premises at their maximum gas rate
6. The gas pressure reading on the manometer should be.

   Natural Gas 1.13 – 3.5kPa. LPG 2.75 – 3.5kPa

6. If the manometer reading is lower than the specified range then either the gas pipe to the water heater is undersized and needs to be increased or adjustment is required at the gas supply regulator.
7. If the manometer reading is above the specified range then adjustment is required at the gas supply regulator.

Checking the burner pressure

NOTE.If the gas supply inlet pressure is in the correct range it is unlikely that the burner pressure will need adjustment.

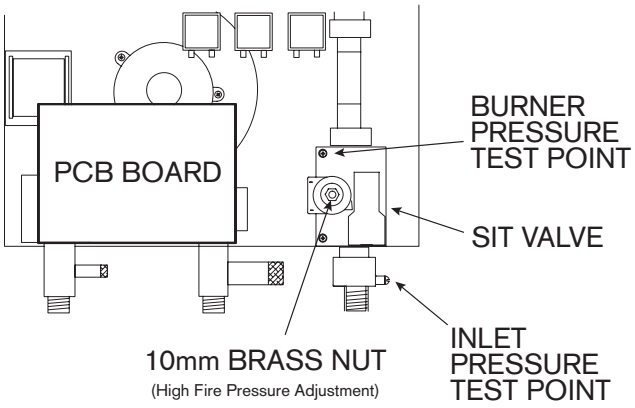
1. Turn off all hot outlets to ensure the heater is not operating.
2. Turn off both the electrical and gas supply
1. **BEWARE** Removing the heater front cover will expose 240V wiring and some connections that are 240V at all times while the heater is switched on.
3. Remove front cover from heater case (4 screws). Be sure that the rubber gasket around the exhaust flange is not dislodged.

   Do not touch any components on the PCB even if the power is off as static electricity can damage components.
4. Connect manometer to the burner pressure test point on the burner manifold. SEE Diagram
5. Turn on electrical and gas supply
6. Press max gas switch FOR AT LEAST ONE SECOND. This will ensure max water FLOW AND THEREFORE MAX GAS CONSUMPTION for several seconds. When the water is turned off the unit reverts to normal mode.
7. Open at least 2 hot water outlets fully and ensure all burners ignite at maximum.
8. Check that the manometer reading is within the range specified on the data plate.

If adjustment is required refer to section headed “Adjusting burner pressure”

9. Re-assemble heater ensuring that the
   - SIT Valve manometer test point sealing screw and washer have been refitted and tightened.
   - The clear cover over the burner pressure adjustment nut is in place. VERY IMPORTANT
   - The rubber exhaust flange gasket is correctly in place as the front cover is re-fitted

ADJUSTMENT OF GAS BURNER PRESSURE.



26L GAS PRESSURE TEST POINTS

The burner pressure test point is located on the gas valve to the left of and just above the blue solenoids as shown.

NOTE: THE UNIT MUST BE SWITCHED TO TEST MODE TO CANCEL THE WATER MODULATION TO HELP ENSURE THAT HIGH FIRE GAS PRESSURE IS MAXIMUM. THIS MODE WILL RUN MAX WATER THEN CANCEL WHEN WATER IS TURNED OFF. IF FLOW IS INSUFFICIENT UNIT WILL REDUCE GAS CONSUMPTION AND GIVE WRONG PRESSURE.

The test switch is located as shown on PCB Board.

The burner high fire pressure adjustment is a 10mm brass nut as shown.

REMOVE PLASTIC COVER AND RETAIN IT AS IT MUST BE REPLACED.

MANOMETER TUBE MUST BE ROUTED THROUGH GROMMET IN BASE OF UNIT AND FRONT COVER MUST BE IN PLACE FOR READING TO BE ACCURATE.

To increase pressure turn nut clockwise and to reduce pressure turn nut anticlockwise.

The red plastic low fire screw in the centre of the nut must be prevented from turning whist any changes are made for high fire.

The red screw normal position is completely backed off where it will just clear the plastic cover when it is refitted. NOTE: THE CLEAR PLASTIC COVER OVER THE ADJUSTMENT SCREWS MUST BE REPLACED OR THE UNIT WILL NOT OPERATE PROPERLY.

NOTE: IT IS HIGHLY UNLIKELY THAT THIS UNIT WILL NEED ADJUSTMENT IF THE SUPPLY PRESSURE IS WITHIN STATED LIMITS. DO NOT ADJUST THE BURNER PRESSURE TO COMPENSATE FOR LOW INLET PRESSURE. ENSURE THAT INLET PRESSURE IS TESTED AT THE TEST POINT PROVIDED AT THE INLET CONNECTION AND ENSURE THAT IT IS CHECKED WITH ALL OTHER GAS APPLIANCES OPERATING AT MAX.

NOTE: ALLIANCE APPLIANCES AUSTRALIA WILL NOT BE RESPONSIBLE FOR ANY SERVICE COSTS IF THIS GAS SUPPLY IS FOUND TO BE OUTSIDE STATED LIMITS

IF HEATER CANNOT BE CORRECTLY ADJUSTED OR DOES NOT FUNCTION PROPERLY CONTACT ALLIANCE SERVICE FOR ADVICE.
Telephone 0438 397143

Assisting the householder

Where possible explain to the householder how to operate the heater and what to do if they feel the heater is malfunctioning.

Leave these operating instructions with the consumer or a suitable responsible person.

How to leave the heater

When the heater will be put into immediate use leave the heater with gas, water and electrical supply turned on.

When the heater may not be used for some time leave the heater in an appropriate way.

Remember that

- The heater must be connected to a reliable electrical supply for the antifrost protection to function.
- Antifrost protection can be achieved when there is no electricity supply by draining all water from the heater.

See Section headed **How to Drain Heater for Frost Protection**

Name of Appliance:	Alliance Appliances 26LPM
Certificate holder:	Alliance Appliances Australia P/L
Manufactured by:	INTEK China
Certificate number:	AGA 8059 G
Date of issue of specification:	06 Sept 2013

GENERAL	
Type	26LPM External Continuous Flow Water Heater
Model designation	26L
Rated capacity	26L per minute @ 25°C rise
Maximum working water pressure	1000 kPa
Minimum working water pressure	70 kPa
Minimum pressure for full performance	200 kpa
Relief pressure	1000 kPa
Max water temp @ over-temp	99°Cmax
Nominal gas consumption in MJ/h	199 MJ/Hr Natural gas
Injector diameter in mm	2.0 mm X 17 Natural gas
Burner test point pressure in kPa,	Natural 0.6-0.65 kPa
DIMENSIONS	
Dimensions (mm): Height	620
Dimensions (mm): Width	380
Dimensions (mm): Depth	220
Colour	Beige
Temperature (Celsius)	50, 53, 55, 58, 60, 63, 65, 74°C
Water Pressure (kPa): Minimum	200
Water Pressure (kPa): Maximum	1000
Gas Rate Min/Max Mj: NG	15 /199
Flow Rate @25 Degrees C Rise : L/min	26
Star Rating	5 .1
Connection Sizes Gas - Hot	20 BSPm or flat union
Connection Sizes Gas - Cold	20 BSPm or flat union
Dimensions (mm): Height Inc Brackets	650
Dimensions (mm): Hot Water Outlet	76 (From Wall)
Dimensions (mm): Hot Water Outlet	120 (Left from Centre)
Dimensions (mm): Cold Water Inlet	50 (From Wall)
Dimensions (mm): Cold Water Inlet	16 (Left from Centre)
Dimensions (mm): Gas Connection	62.5 (From Wall)
Dimensions (mm): Gas Connection	105 (Right from Centre)
Weight (kg)	19
Gas Valve	SIT 845 with Modulation (AGA App)
Pressure switch	SIT 380 Aria or equivalent (AGA App)
Controller	Alliance Appliances Electronic (Hardware based ignition and gas critical safety control.)
Case material	0.8mm Zinc Plated mild steel powder coated for UV resistance and outdoor application.

GENERAL	
Type	26LPM External Continuous Flow Water Heater
Model designation	26L
Rated capacity	26L per minute @ 25°C rise
Maximum working water pressure	1000 kPa
Minimum working water pressure	70 kPa
Minimum pressure for full performance	200
Relief pressure	1200 kPa
Max water temp @ over-temp	99°Cmax
Nominal gas consumption in MJ/h	199 MJ/Hr LPG(Propane Gas only)
Injector diameter in mm	1.2 mm x 17 LPG(Propane Gas only)
Burner test point pressure in kPa,	Propane 1.22 kPa
DIMENSIONS	
Dimensions (mm): Height	620
Dimensions (mm): Width	380
Dimensions (mm): Depth	220
Colour	Beige
Temperature (Celsius)	50, 53, 55, 58, 60, 63, 65, 74°C
Water Pressure (kPa): Minimum	200
Water Pressure (kPa): Maximum	1000
Gas Rate Min/Max Mj: PG	15 /199
Flow Rate @25 Degrees C Rise : L/min	26
Star Rating	5 .1
Connection Sizes Gas - Hot	20 BSPm or flat union
Connection Sizes Gas - Cold	20 BSPm or flat union
Dimensions (mm): Height Inc Brackets	650
Dimensions (mm): Hot Water Outlet	76 (From Wall)
Dimensions (mm): Hot Water Outlet	120 (Left from Centre)
Dimensions (mm): Cold Water Inlet	50 (From Wall)
Dimensions (mm): Cold Water Inlet	16 (Left from Centre)
Dimensions (mm): Gas Connection	62.5 (From Wall)
Dimensions (mm): Gas Connection	105 (Right from Centre)
Weight (kg)	19
Gas Valve	SIT 845 with Modulation (AGA App)
Pressure switch	SIT 380 Aria or equivalent (AGA App)
Controller	Alliance Appliances Electronic (Hardware based ignition and gas critical safety control.)
Case material	0.8mm Zinc Plated mild steel powder coated for UV resistance and outdoor application.

ALLIANCE®
WATER HEATERS

RAPID26®

ALLIANCE®
APPLIANCES AUSTRALIA

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