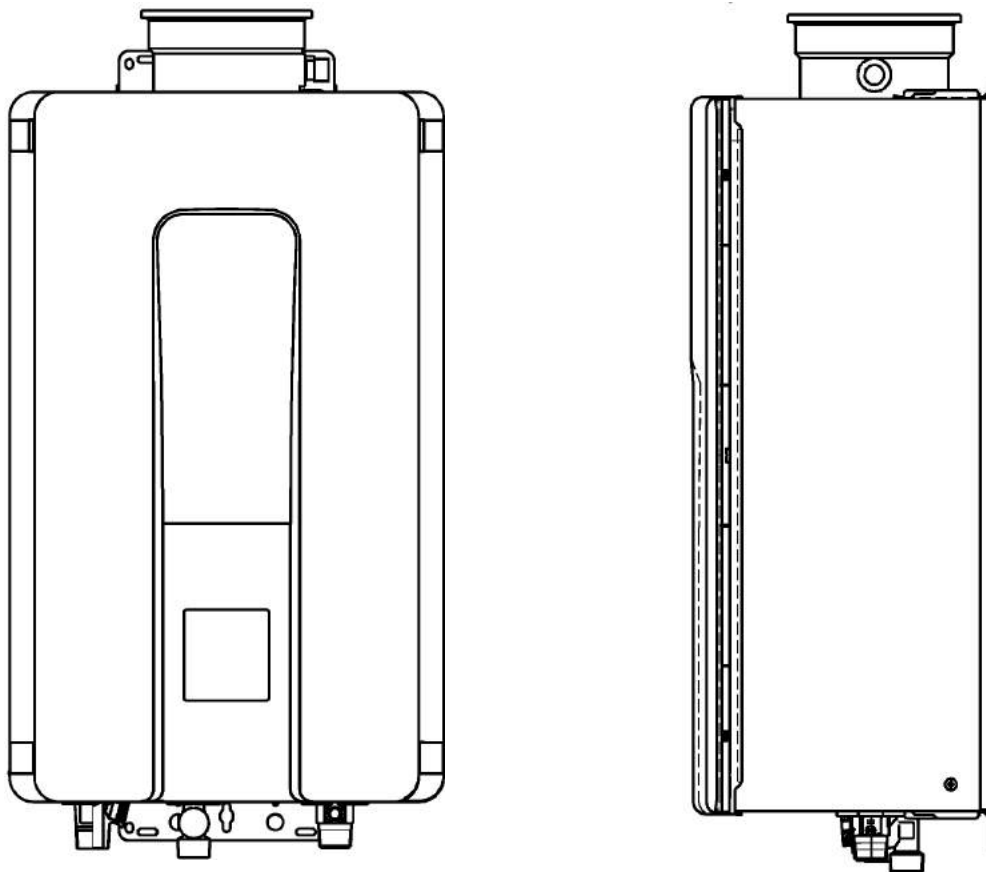


Rinnai

Service Manual

REU-VR2632FFUD - 26i
REU-VR2632 FFU-HD-E- HD50i



Continuous Flow Water Heater

Important.

Read these instructions carefully before attempting installation or use of this appliance.

All work must be carried out by competent persons.

The Rinnai range of water heaters, when correctly installed, comply with the requirements of the United Kingdom Water Regulations / Byelaws (Scotland). These Products can be found listed in the Water Fittings and Materials Directory.



The Rinnai water heaters are CE Marked as allowed by Technigas

26i - REU-VR2632FFUD-E

HD50e - REU-VR2632WDHD-E

HD50i - REU-VR2632FFUDHD-E

HD70e - REU-VRM3237WHD-E

HD70i - REU-VRM3237FFUHD-E



Certificate numbers: *E0841/5386 Rev.5 - E0716/5360 Rev.05*
E1061/5498 Rev.1 - E1060/5498 Rev.1

ID number: *0461BP0795 - 0461BO0739 - 0461BS0903 - 0461BS0903*

Date of Issue: *23/12/2004 - 28/07/2003 - 26/10/2007 - 26/10/2007*

Quality System Standard

ISO 9001 - 2000

The Design, Development, and Manufacture of Gas Water Heating Appliances done under Rinnai's Quality Management System is certified under the Quality Management System Standard ISO 9001.

Registration Number JQ0003D
Registered since: February 1994
Certified by JIA—QA Centre.

This manual is intended for use by Gas Safe Registered Engineers

*No portion or part of this manual may be copied without prior permission from Rinnai U.K.
Rinnai U.K. reserves the right to make modifications and change specifications without notice.*



WARNING



*Failure to comply with these instructions may result in serious personal injury or damage to the
appliance.*

**ALL WIRING INSIDE THIS APPLIANCE MAY BE AT 230 VOLTS POTENTIAL
ALL SERVICE WORK MUST BE CARRIED OUT BY AN AUTHORISED PERSON.
DO NOT TEST FOR GAS ESCAPES WITH AN OPEN FLAME**

This manual has been published by Rinnai U.K. Technical Services. While many individuals have contributed to this publication, it will be successful only if you - the reader and customer - find it useful. We would like to extend an invitation to users of this manual to make contact with us, as your feedback and suggestions are valuable resources for us to include as improvements. Rinnai are constantly working toward supply improved appliances as well as information, and specifications may be subject to alteration at any time.

Produced by Rinnai Technical Services Department

Issue N^o1

November 2012

CONTENTS

CONTENTS.....3

Glossary of Terms and Symbols

dB(A)	-	sound pressure level in decibels, “A” range
DC	-	direct current
AC	-	alternating current
WFCD	-	water flow control device
FB	-	feedback information
FF	-	feedforward information
Hz	-	Hertz
IC	-	integrated circuit
kcal/h	-	kilocalorie per hour
kW	-	kilowatts
LED	-	light emitting diode
L/min	-	Litres per minute
mA	-	milliamps
mbar	-	millibars of pressure
mm	-	millimetres
bar	-	gauge pressure
OHS	-	overheat switch
PCB	-	printed circuit board
CPU	-	central processing unit
POT	-	potentiometer
rpm	-	revolutions per minute
SV	-	solenoid valve
σ	-	diameter
Δ °C	-	temperature rise above ambient
POV	-	modulating valve
TE	-	thermal efficiency
TH	-	thermistor
T _{IN}	-	temperature of incoming water
T _{OUT}	-	temperature of outgoing water

FEATURES AND BENEFITS

- Rinnai water heaters will NEVER RUN OUT of hot water. As long as electricity, water, and gas supplies are connected, hot water is available when 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 set to various temperatures. This is particularly useful when the hot water unit is installed where young children or the infirm may be using the hot water. If required, the temperature can be changed via the dip switches on the PCB or with a localised controller. For further information, please contact Rinnai.
- Rinnai water heaters are powered flue appliances. This makes them 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 the burner is shut OFF and only turned ON again when the temperature falls to below the selected temperature.
- The burner lights automatically when the hot water tap is opened, and extinguishes 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.
- Up to four external temperature controllers can be mounted remotely from the heater. One Standard control is supplied with all appliances (except for HD range). The remote offers the following additional features:
 - Localised temperature setting
 - Diagnostic information
 - Error Codes
- 'Deluxe' Temperature Controllers are an optional extra. These provide functions including Bath Fill, Voice Prompt, and Clock Setting.
- Temperatures selected at the controllers are retained in the SYSTEM MEMORY.
- Operating NOISE LEVEL IS VERY LOW.
- ERROR MESSAGES ARE DISPLAYED on the Temperature Controllers and Status Monitor, assisting with service.
- FROST PROTECTION device built in as standard providing a power supply is maintained

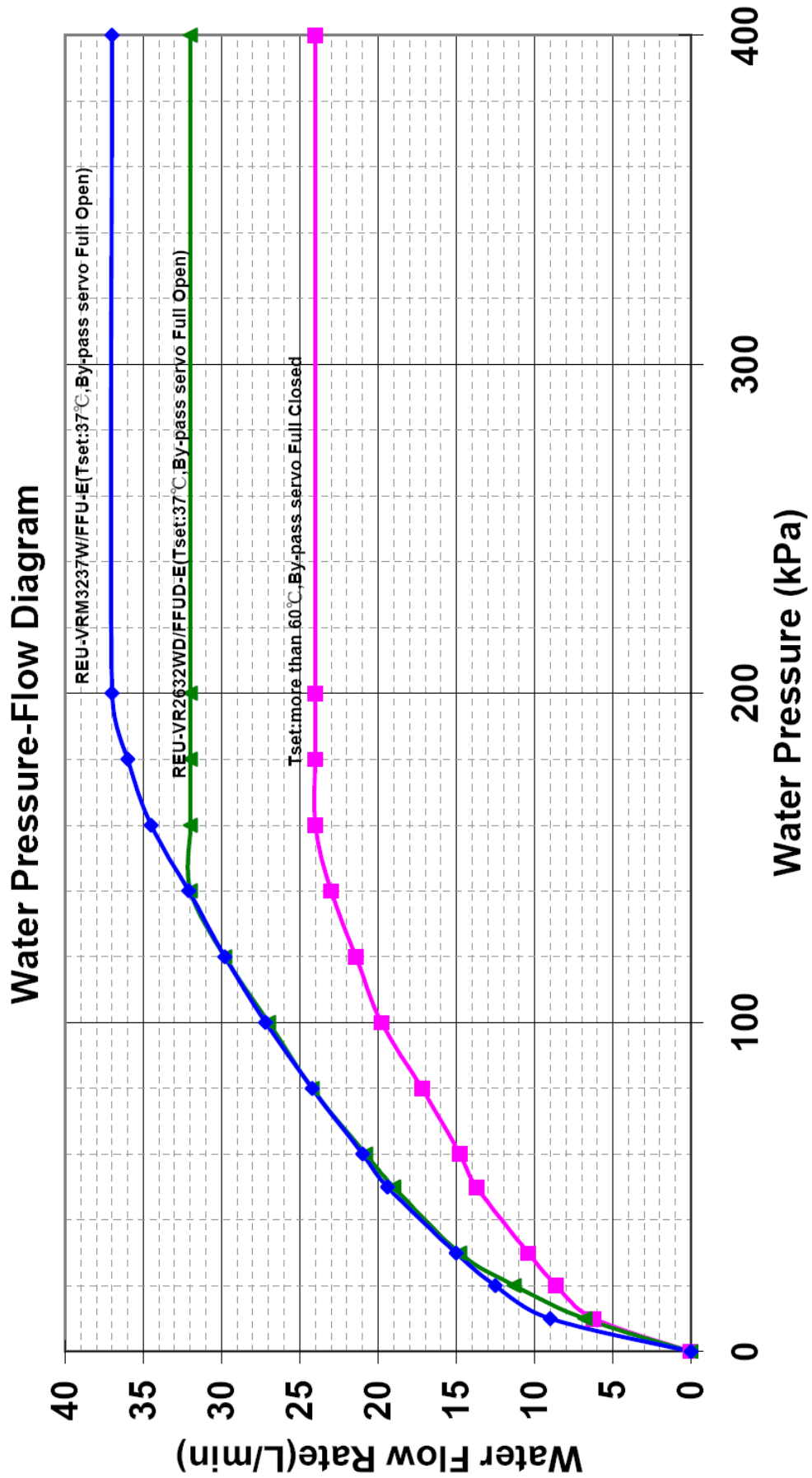
TECHNICAL DETAILS

Model	HD50e	26i - HD50i	Units
Installation	External	Internal	
G20 Nat Gas Press Low	1.29	1.75	mbar
G20 Nat Gas Press High	6.81	9.35	mbar
G31 Propane Press Low	2.21	2.36	mbar
G31 Propane Press High	11.2	11.1	mbar
Flue System	Direct Forced Exhaust	Forced, Room Sealed	
Temp. Range Controllers	37-46, 48, 50, 55, 60, 65, 75		°C
Temp. via dip switches	40, 42, 50, 55, 60, 65, 75, 85		°C
Ignition	Direct Electronic Ignition		
<u>Gas Consumption & Capacities min conditions</u>	(H _i = net calorific value H _s = gross calorific value)		
G20 Nat Gas: Input Q _m : Hi/Hs Useful output P _m	3.93/4.36 3.49	3.93/4.36 3.49	kW
G20 Nat Gas flow V	0.42	0.42	m ³ /hr
G31 Input Q _m : Hi/Hs Useful output P _m	4.01/4.36 3.49	4.01/4.36 3.49	kW
G31 flow normal operating conditions M _m	0.31	0.31	Kg./hr
<u>Gas Consumption & Capacities nominal condit.</u>	(H _i = net calorific value H _s = gross calorific value)		
G20 Nat Gas: Input Q _n : Hi/Hs Useful output P _n	49.8/55.3 45.9	48.6/54.0 44.8	kW
G20 Nat Gas flow ref. conditions V _r	5.27	5.14	m ³ /hr
G31 Input Q _n : Hi/Hs Useful output P _n	50.9/55.3 45.9	49.7/54.0 44.8	kW
G31 flow normal operating conditions M _n	3.95	3.86	Kg./hr
Country of destination	GB/IE		
Gas category and pressure	I _{2H} G20-20mbar / I _{3P} G31-37mbar		
Type	A3 Outdoor	C13/33 Indoor	
Max Flow	32	32	L/min
Min Operation Flow	ON = 2.4* / OFF = 1.7*	ON = 2.4* / OFF = 1.7*	L/min
Water Pressure (P _w)	1.4* - 10.0		bar
Power Supply	230 V / 50 Hz		
Electric Consumption (normal/stand-by/anti-frost)	50 / 2 / 100	66 / 2 / 100	Watts
Noise Level	50	50	dB (A)
Ignition safety time T _{SAmax}	4.2		Sec.
Weight	23	24	Kg.

* Minimum operation pressure and flow based on temperature set point and inlet water conditions.

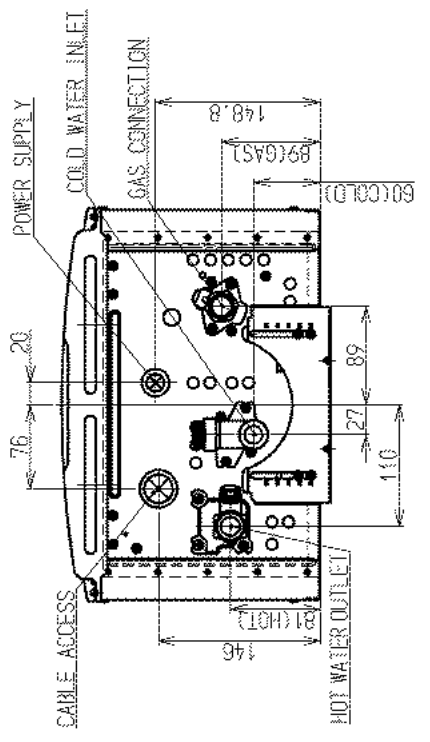
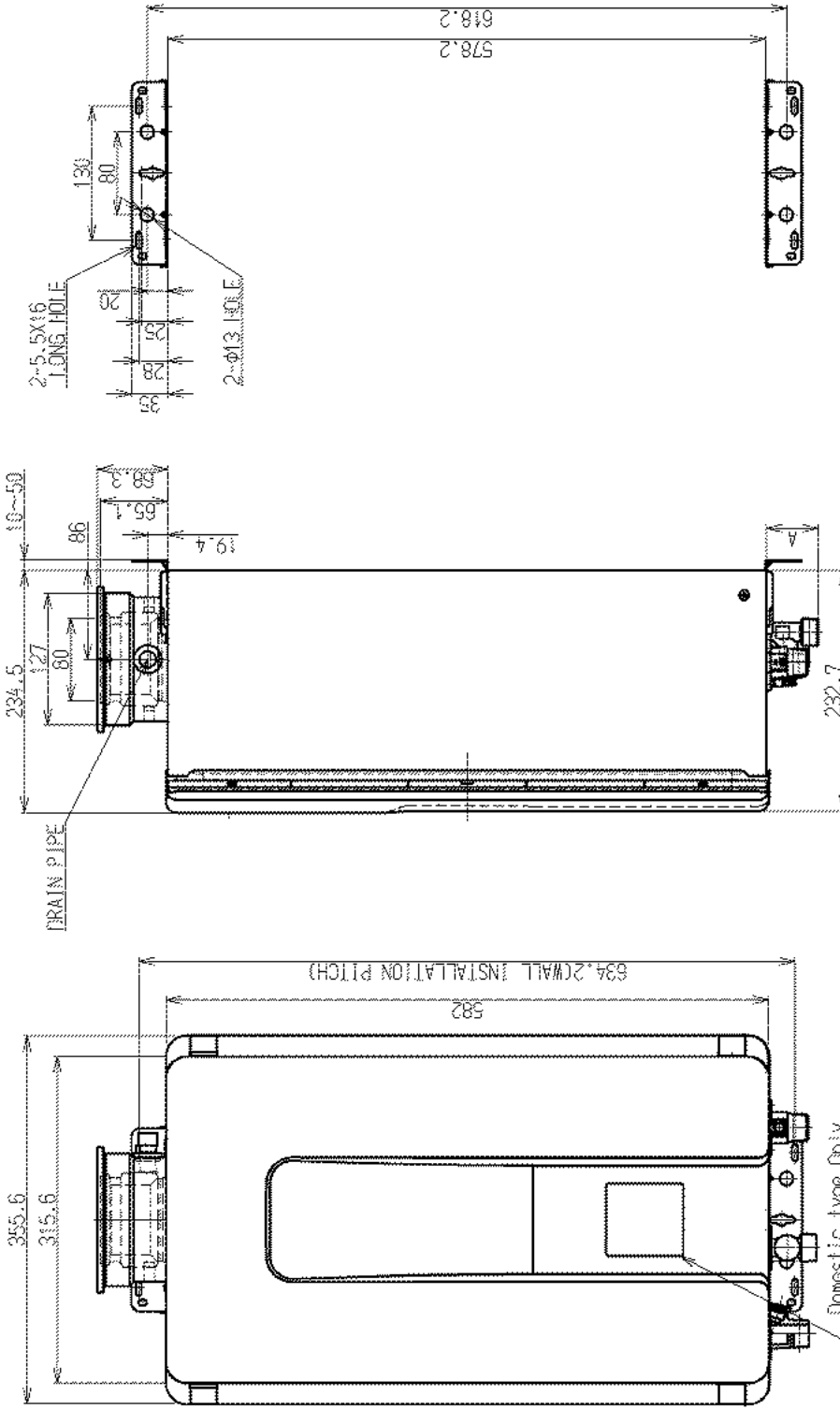
WATER FLOW CHARACTERISTICS

26i - HD50e - HD50i - HD70e - HD70i



DIMENSIONS

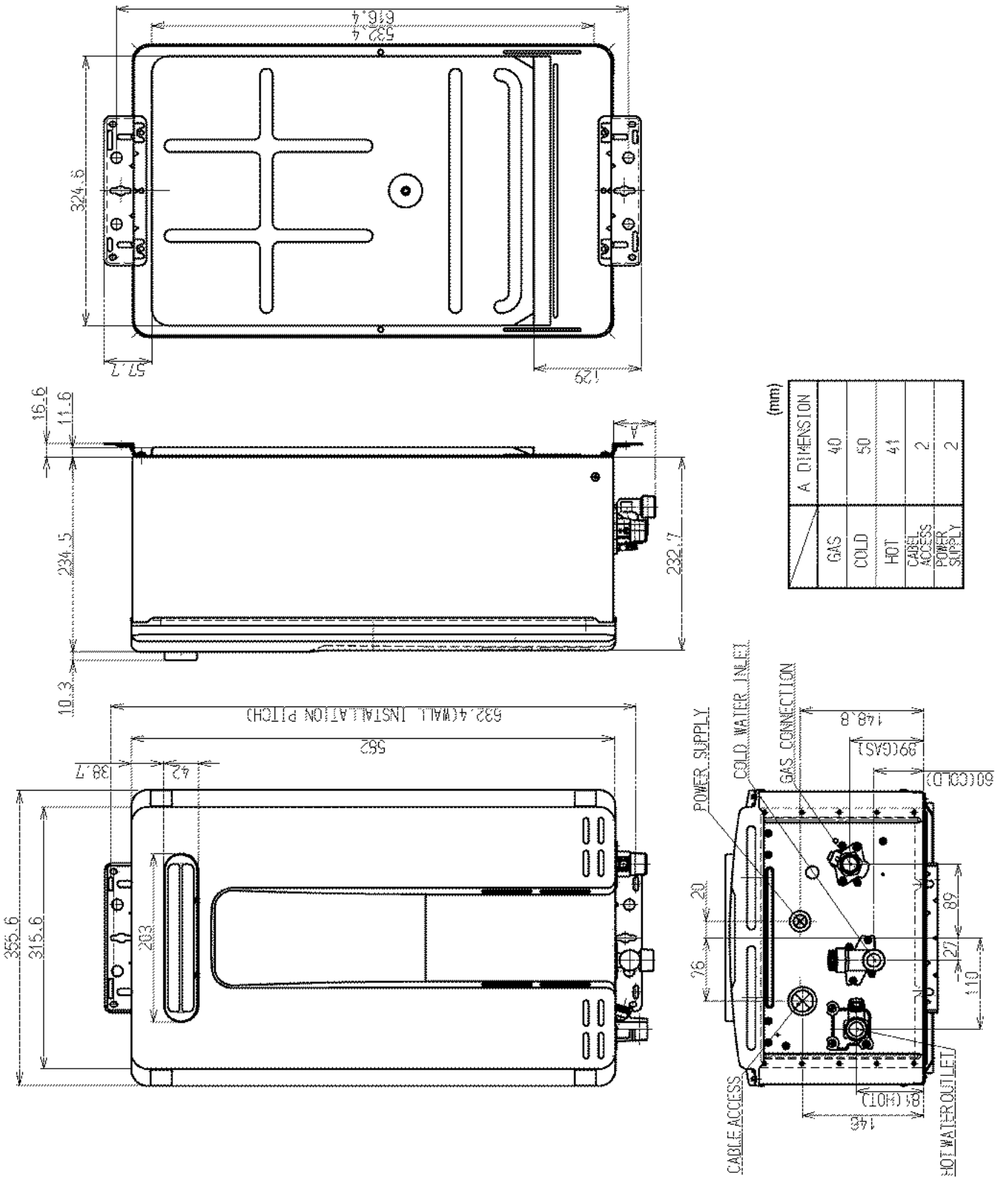
26i - HD50i



(mm)	
A DIMENSION	
GAS	40
COLD	50
HOT	41
CABLE ACCESS	2
POWER SUPPLY	2

DIMENSIONS

HD50e



TEMPERATURE CONTROLS

The purpose of a Temperature Controller is to enable the user to have localised control over the hot water supply.

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.

Up to four universal can be fitted with Rinnai water heaters. Universal Controllers allow temperature selection only and one comes as standard with the water heater.

Deluxe Temperature Controllers are available as an optional extra.

These controllers have temperature selection, bath fill, voice prompt, and time clock functions.

When more than one universal Controller is used one may be set as the Master Controller to allow temperatures above 50°C.

(ask Rinnai for more information)

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

Universal Controller:

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

Master universal Controller:

37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 48, 50, 55°C (60, 65°C HD)

Deluxe Bathroom Controller:

Hot Water Delivery: 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 48, 50°C

Bath fill Delivery: 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48°C

Deluxe Kitchen Controller:

37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 48, 50, 55°C (60, 65°C HD)

If a temperature of 43°C or higher is selected on any controller and this temperature is then decreased to below 43°C and increased again whilst the water is running, the maximum selectable temperature will be 43°C. This provides additional safety for the user.

Suggested temperatures are:

Kitchen 50°C - 65°C**; Shower 39°C - 43°C; Bath fill 39°C - 45°C

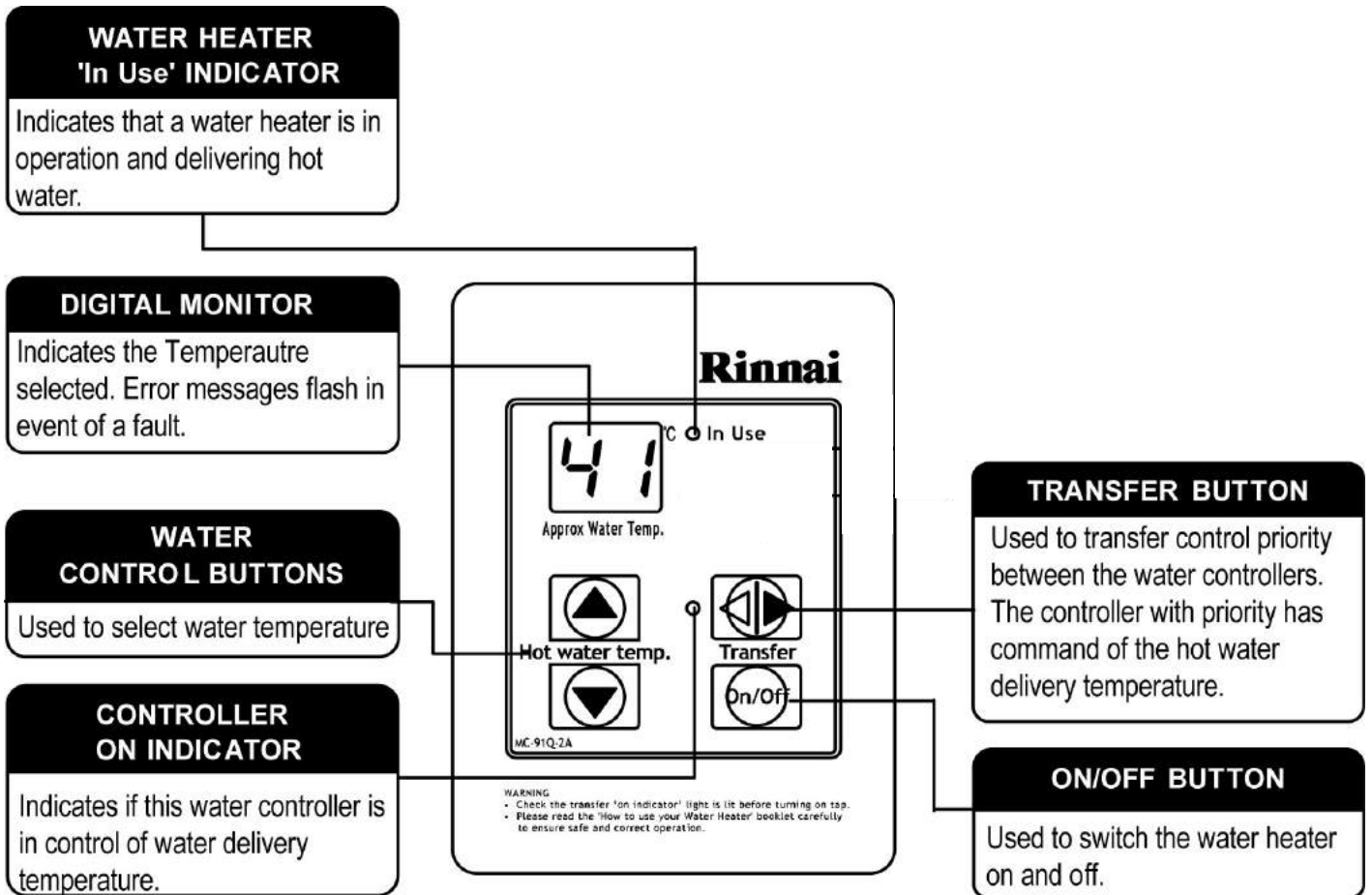
*** This temperature may not be available on all installations.*

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.

When multiple temperature controllers are used they allow the temperature to be set from various locations by pushing the transfer button which gives that controller priority over the system. The temperature selected by the controller with priority will be available to all outlets.

TEMPERATURE CONTROLS

Remote temperature controllers provide control over the water temperature. Rinnai water heaters can be operated with 1, 2, 3, 4 or no temperature controllers.



NOTE

Each time a button is pressed, a BEEP will sound. The BEEP sound can be muted by depressing the Temperature Controller Up and Down buttons simultaneously for more than 3 seconds. This can be done for each Temperature Controller. To return to original settings, repeat this step.

Safety features

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

- Temperature selection cannot be transferred.
- The temperature set point on the controller with priority can always be lowered, but the set point can only be raised to 43°C.
- Other controllers are unable to take priority or change the delivery temperature of the water.
- If off, the controller cannot be turned on.



NOTE

The temperature of the outgoing 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 display, or the preset limit if 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 display (or the pre-set limit of the Rinnai heater).

TEMPERATURE CONTROLS

Table A	Models		
	MC91	MC70	BC100
Information Given			
All Maintenance	N/A	↓ + Power	↓ + Power
Error History	Power + ↑	↑ + Power	↑ + Power
Water Flow Rate	↑ + Power	_____	_____
Outlet Water Temperature	↓ + Power	_____	_____
Higher temperature Function	Transfer + Power Held for 5 sec till noise	N/A	
Turn off PIP Noise	↑ + ↓ Held for 5 sec till noise	↑ + ↓ Held for 5 sec till noise	↑ + ↓ Held for 5 sec till noise

Table B

Maintenance Monitor			
Section No.	Information Given	Units Given	Data Range
01	Water Flow sensor Recognition (Flow Rate)	Liter per Min	0 - ???
02	Water Outlet Thermistor Temperature	°C	0 - ???
03	Combustion Time	100 Hours (eg. 6 = 600hours)	000 - ???
04	Operation Frequency	100 (eg. 6 = 600hours)	000 - ???
05	Fan Frequency	Hz	0 - ???
06	Remote Control Connection	None	0 - 3
07	Water Flow Servo Position Recognition	None	0 - 2
08	Fan Current	10mA	0 - ???
09	Inlet Water Temperature	°C	0 - ???
10	Bath Fill Amount	Litre (this counts the bath fill amount)	0 - ???
11	Heat Exchanger Exit Thermistor	°C	0 - ???
12	By Pass Servo Position Recognition	Degrees	0 - ???

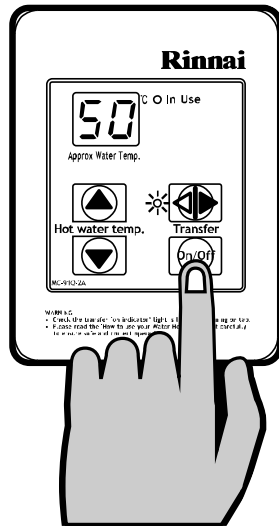
TEMPERATURE CONTROLS

Using the Temperature Controllers

Press the **ON/OFF** button on a temperature controller after making sure that water is not flowing.

The system will become active, the temperature will default to 40°C and the controller that turned the system on will have priority.

The temperature setting on the controller will light up.



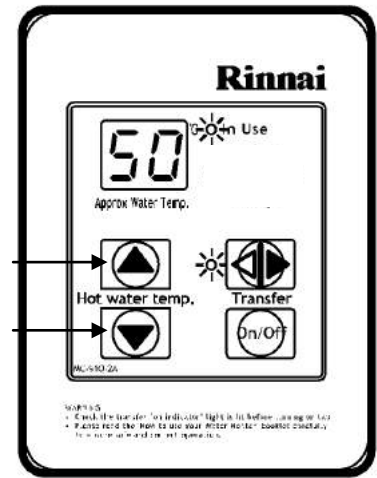
Adjusting Temperature

Simply press the Hot Water Temperature Up or Down arrow button

HOTTER

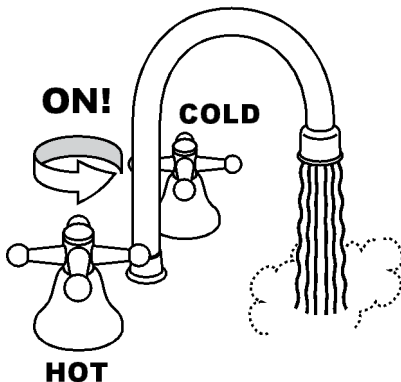
COOLER

until the desired temperature is displayed on the digital display.



Using Hot Water

To operate the heater, 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.



To turn off your hot water system

During normal operation the system is left on.

To turn the system off simply press the **ON/OFF** button on any temperature controller (where fitted). This will shut the water heater down completely including the temperature controller digital display.

The Digital Monitor will go out.

If hot water taps are opened when the Rinnai is off, cold water will flow from the taps.

If the system is to be left off over the winter be sure to drain it down if there is a possibility of freezing temperatures.

Using High Temperature Display Controllers

You will need to program the Master controller if you want to display and use temperatures over 50°C. Programming only needs to be done on Master universal controller; other universal controllers will not allow this. Deluxe Kitchen controllers are supplied already programmed to allow high temperatures.

STEP 1: On the Master controller only press and hold the **Transfer** and **ON/OFF** buttons simultaneously (see Fig. 1) until a "beep" is heard (approx. 5 seconds).

STEP 2: When the Primary controller is switched on it should be possible to select temperatures higher than 50°C. If not repeat STEP 1.

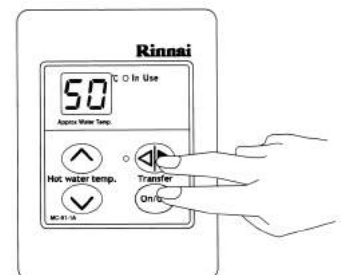


Fig. 1



NOTE

If the master controller is replaced, repeat STEP 1 above for the new controller.

TEMPERATURE CONTROLS

Using 2 or more universal 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. Do not push the **ON/OFF** button when water is running.

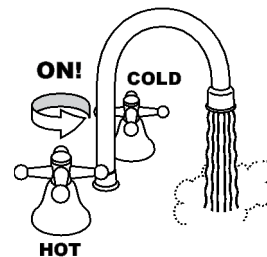
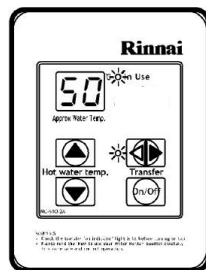
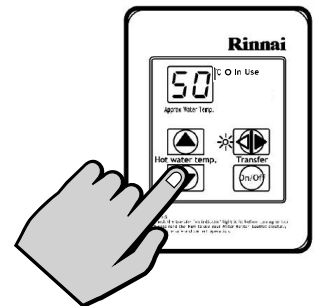
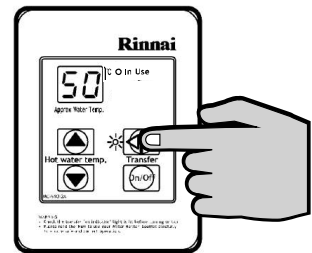
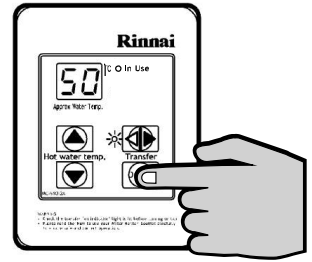
Using hot water.

Ensure the system is switched **On** by verifying the temperature display is lit. Ensure the local controller has priority by verifying the **Transfer** LED indicator is lit. If it is not then press the **Transfer** button once. This gives the local controller priority of temperature over the system.

Select the desired temperature using the **Hot water temp.** buttons. The selected temperature will be displayed on all controller displays. This is the water temperature which will be supplied from the heater.

Bathroom temperatures should be no more than 50°C.

Open the hot water tap. The appliance will be activated and the **In Use** indicator will be lit.



Using 4 Universal Temperature Controllers.

You will need to activate the fourth controller.

STEP 1: On the Master controller press and hold the **Transfer** and **ON/OFF** buttons simultaneously (see Fig. 2) until a “beep” is heard (approx. 5 seconds).

STEP 2: Check that the display on all Four controllers is lit and displaying a temperature when switched on. If any ONE of the controllers displays two dashes (see Fig. 1) in the display repeat STEP 1.

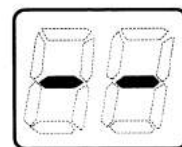


Fig. 1

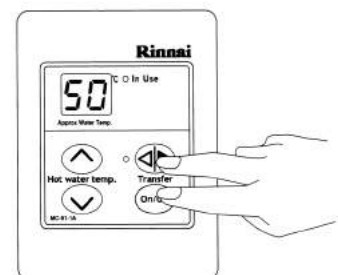


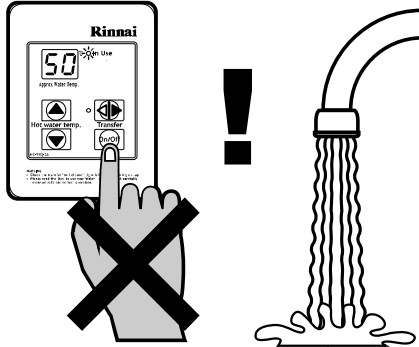
Fig. 2



NOTE If the master controller is replaced, repeat STEP 1 above for the new controller.

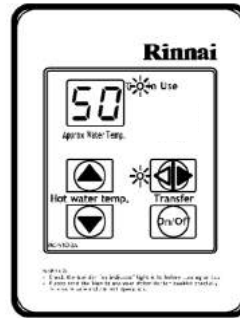
TEMPERATURE CONTROLS

Do not push the ON/OFF button on the Master controller after transferring priority of temperature selection to a Secondary controller as the system will shut down.

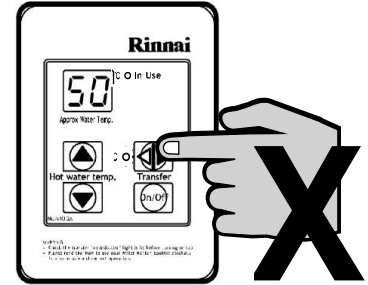


Do Not Turn OFF the Master Controller

Temperature priority cannot be switched to another controller when the water is flowing through the water heater.



Controller 1
in use

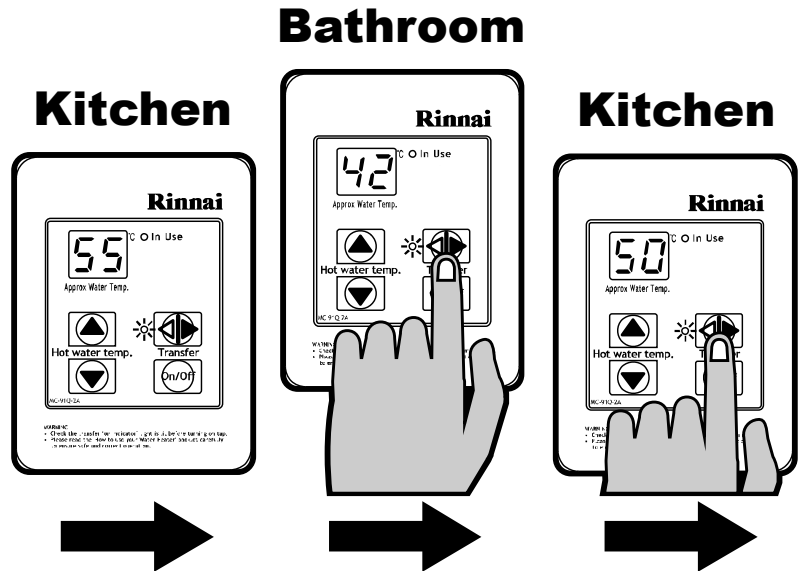


Controller 2
cannot take
priority

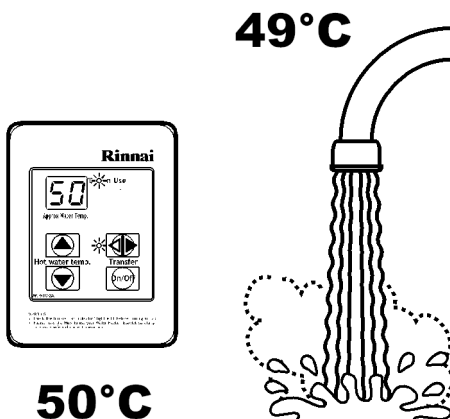
If a temperature over 50°C has been selected on a controller and priority of temperature selection is transferred to another controller, then back again, the temperature on the controller will automatically drop to 50°C.

If the set point is 50°C or less it will not alter.

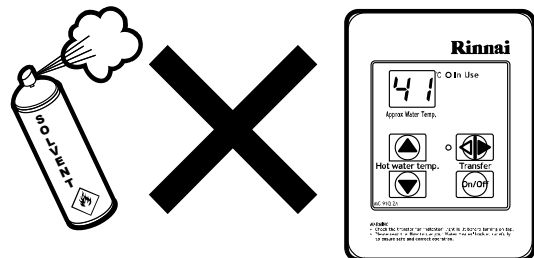
This is a safety feature.



Depending on the weather conditions and the length of the pipe between the heater and the tap in use, there may be a variation between the temperature displayed at the controller and the temperature at the tap.



Do not clean the control with solvents or detergents. Use only a soft damp cloth.



TEMPERATURE CONTROLS

General Information

Commercial installations do not generally have controllers installed. These installations usually have one permanent set temperature that is constant at all times. The public should not have access to alter the temperature in these situations. These installations do not require controllers as the temperature can be set by a series of dip switches on the PCB.

Exceptions to this are the following:

- 1.Circumstances where the required temperature is not available with the dip switches (for example 41°C or 47°C).
- 2.Circumstances where the temperature needs to be raised periodically by the building occupant in order to flush the system.
- 3.Domestic situations where the user needs control of the temperature of the water so that different temperatures can be used at different outlets.

In situations such as 1 and 2 the controllers should be installed in places out of reach of the public, such as in the maintenance room or in a locked cupboard.



This **Commercial Setting** will allow the controller to come back on automatically after a power cut at the temperature set point previous to the power cut, regardless of whether water is flowing through the unit. This should only be used for commercial installations.

NEW FEATURE

The maximum temperature available on the primary universal remote controller is the set point on the dip switches. If only one controller is installed it will not go beyond 50°C when first installed. To bypass this see **page 11**.

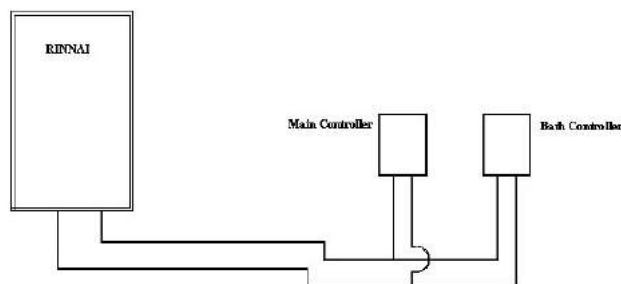
Positioning the temperature controls, the following points should be taken into account:

- Fit the controls out of reach of children (suggested height from the floor 1.5m).
- Avoid positions where the controllers will become hot. Do not fit them near stoves or ovens, or above radiators or heaters.
- If possible, avoid exposure to direct sunlight or positions where bright lights will make the digital display difficult to read.
- Position away from areas where the controller will be prone to splashing by cooking products such as oils and fats.
- The temperature controllers are water resistant, however they should be positioned away from areas where direct or persistent splashing could occur.
- Refer to the local electrical wiring regulations current edition for location requirements in shower and bath areas.
- The cables to the temperature controller carry only 12VDC (extra low voltage).
- When using more than one temperature controller the signal cable should be run in parallel. Do not wire the controllers in series.

The installation in every application will vary, therefore the temperature controller cable has been provided so that you may cut the length accordingly and fit the spade connectors, ensuring a good connection.

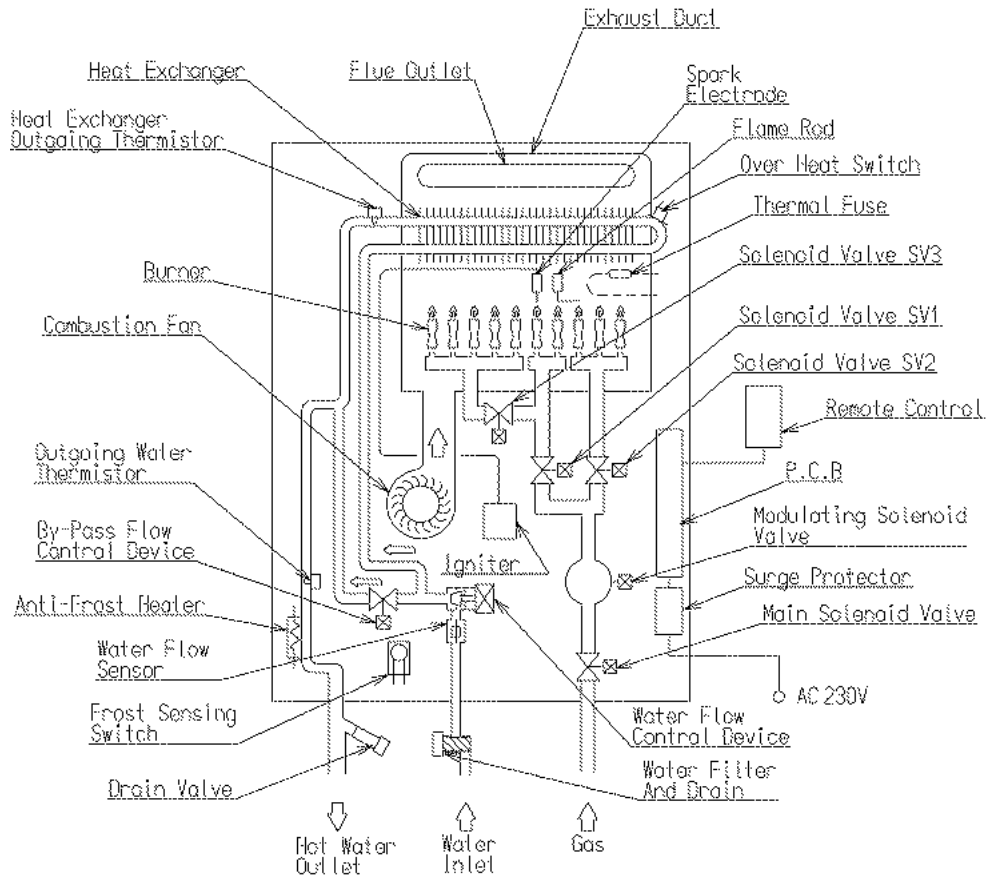
Cables are simply 'piggy-backed' at the water heater or at the primary temperature controller. Polarity is not important when connecting the cables, either colour wire can be connected to either terminal at both the heater or primary temperature controller. If more cable is needed any cable with similar specification to the cable supplied with the controller can be used. Maximum length is 50m.

Controller Connection in Parallel

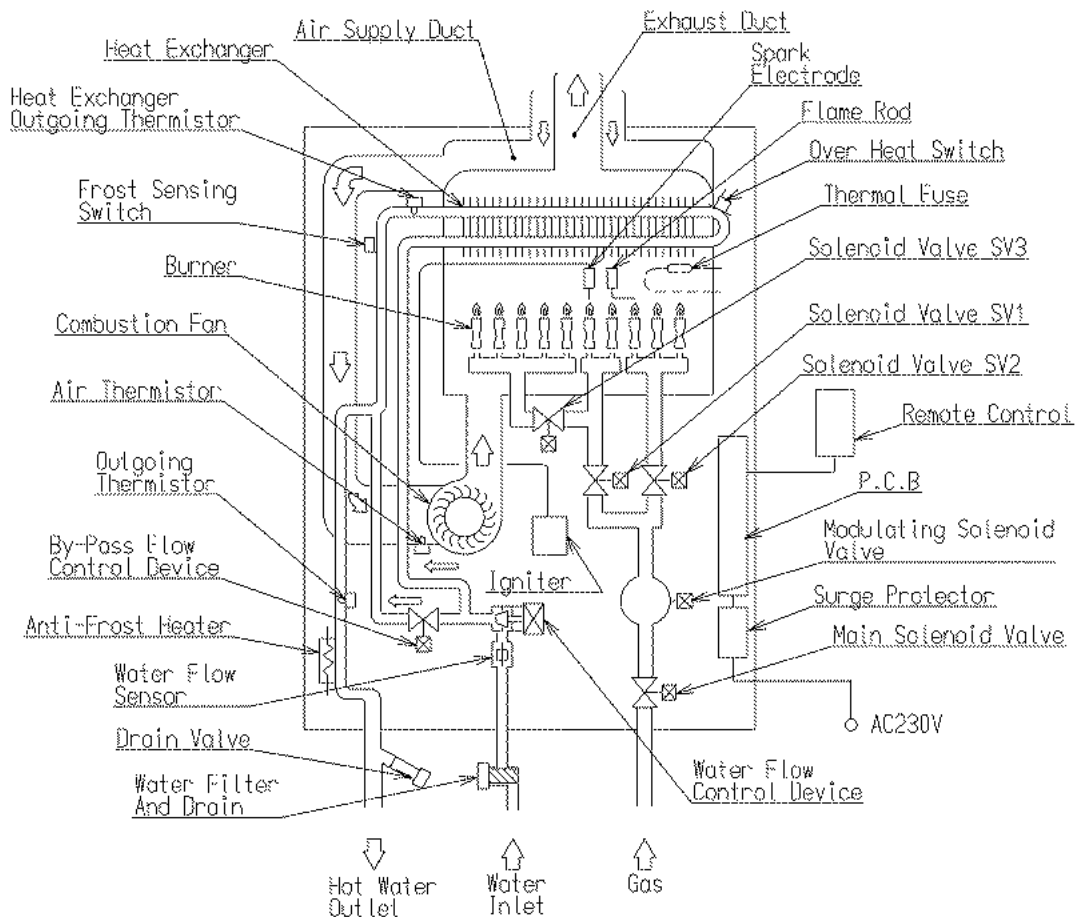


OPERATION

HD50e



26i - HD50i



MAIN COMPONENTS

1. Gas Control Unit

1.1 Modulating Valve

This device is used by the PCB to adjust the volume of gas to the burner in proportion to the volumetric flow rate of water in order to maintain a supply of constant temperature hot water amid changes in water flow rates and incoming temperatures.

1.2 Change-over Solenoid Valves

Additional solenoid valves are included to section the burner and stage the control in several steps. This gives the burner more steady combustion at the required capacity and allows the water heater to operate at very low flow rates and temperature rises.

2. Flame Rod

Monitors combustion characteristics inside the combustion chamber. If the flame fails, gas supply is stopped. Works through rectification of the combustion flame. An AC voltage is supplied to the flame rod. Electrons can only pass from the rod to the earthed burner through the flame, and never from the burner to the rod, so the resultant DC current is used to prove combustion. When the DC current is present the burner has normal combustion, if the DC current is not present (or an AC current is present) the unit shuts the solenoid valve.

3. Thermal Fuse

The thermal fuse is an electric link which must be intact for the unit to operate. If the thermal fuse reaches a set temperature it will melt and the unit will shut down. The thermal fuse must be replaced if it melts. It is to protect against overheating and heat exchanger splits where water may leak out and be superheated into steam.

4. Overheat Safety (Bi-metal Switch)

This Bi-metal Switch is fixed at the inlet bend of the Heat Exchangers final pass. If the temperature outlet from the heat exchanger reaches 97°C the bi-metal switch will open and the solenoid valve circuit is broken. This will cease combustion in case of overheat.

5. Combustion Fan

The combustion fan supplies primary air into the burner wings and secondary air up through the Bunsen style burners. The fan is DC low voltage and the speed is controlled by the PCB depending on the hot water supply and temperature. The fan speed is compared to the current required to attain that speed for air proving. If the fan current is over or under the parameters for the given speed the unit will shut down on air proving.

6. Water Flow Servo with Water Flow Sensor

6.1 Water Flow Sensor

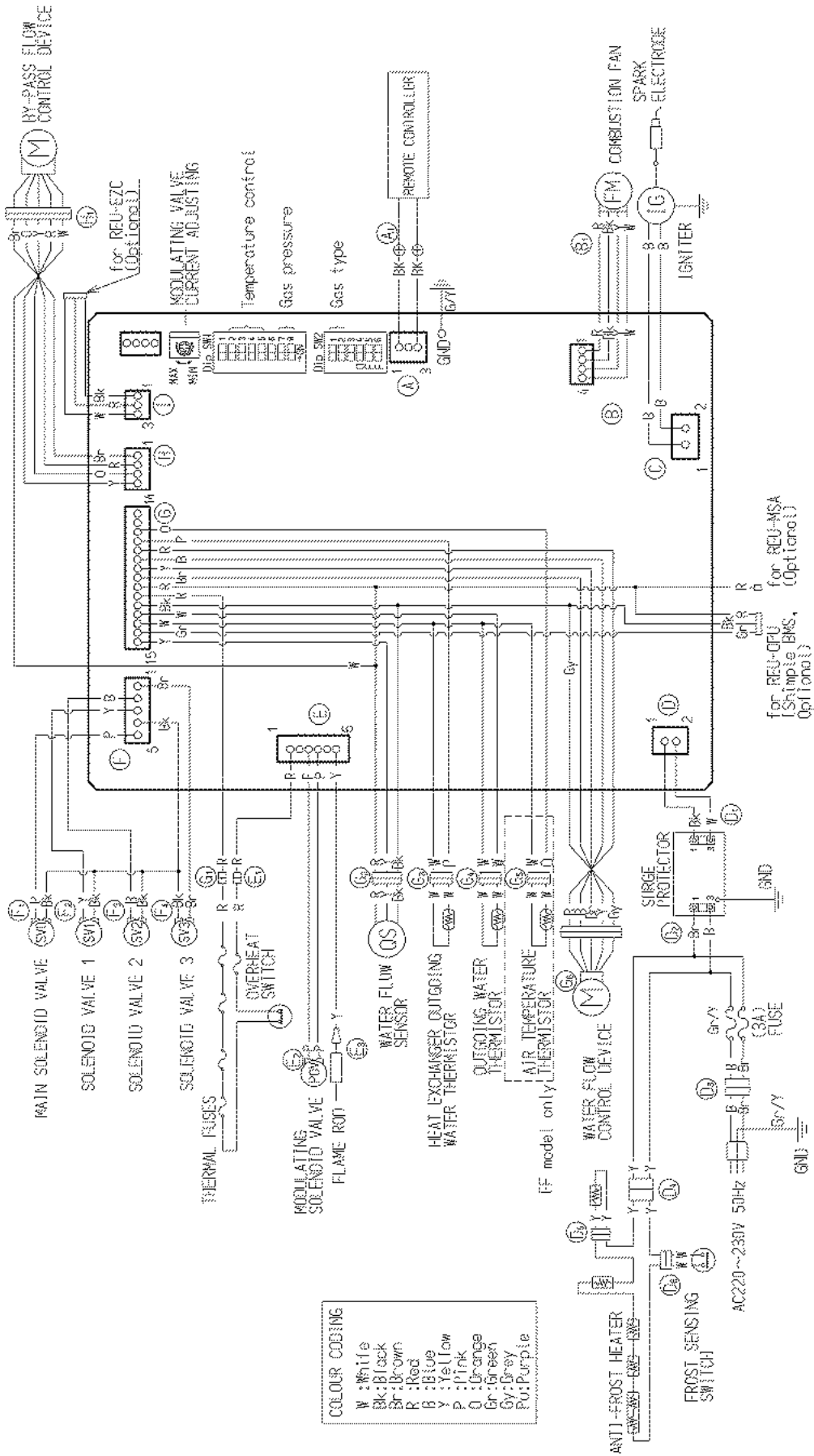
Water flow sensing is done with a small turbine that spins when water travels through it in the correct direction. Each of the four fins on the turbine has a small magnet on it. Outside of the valve there is a magnetic sensor that detects the speed that the turbine is revolving. The revolution speed is input to the PCB which relates this speed to the water flow volume and determines whether it is sufficient for ignition.

6.2 Water Volume Flow Servo

Water flow control is achieved through the use of servo driven water flow and bypass valves. The servo motor is controlled by the PCB. The 'Water Flow Valve' restricts the flow of water into the heat exchanger assembly if the programmed temperature cannot be achieved. This will limit the maximum water flow, and will limit the hot water flow further when the burner is at high fire to ensure the temperature set point is met.

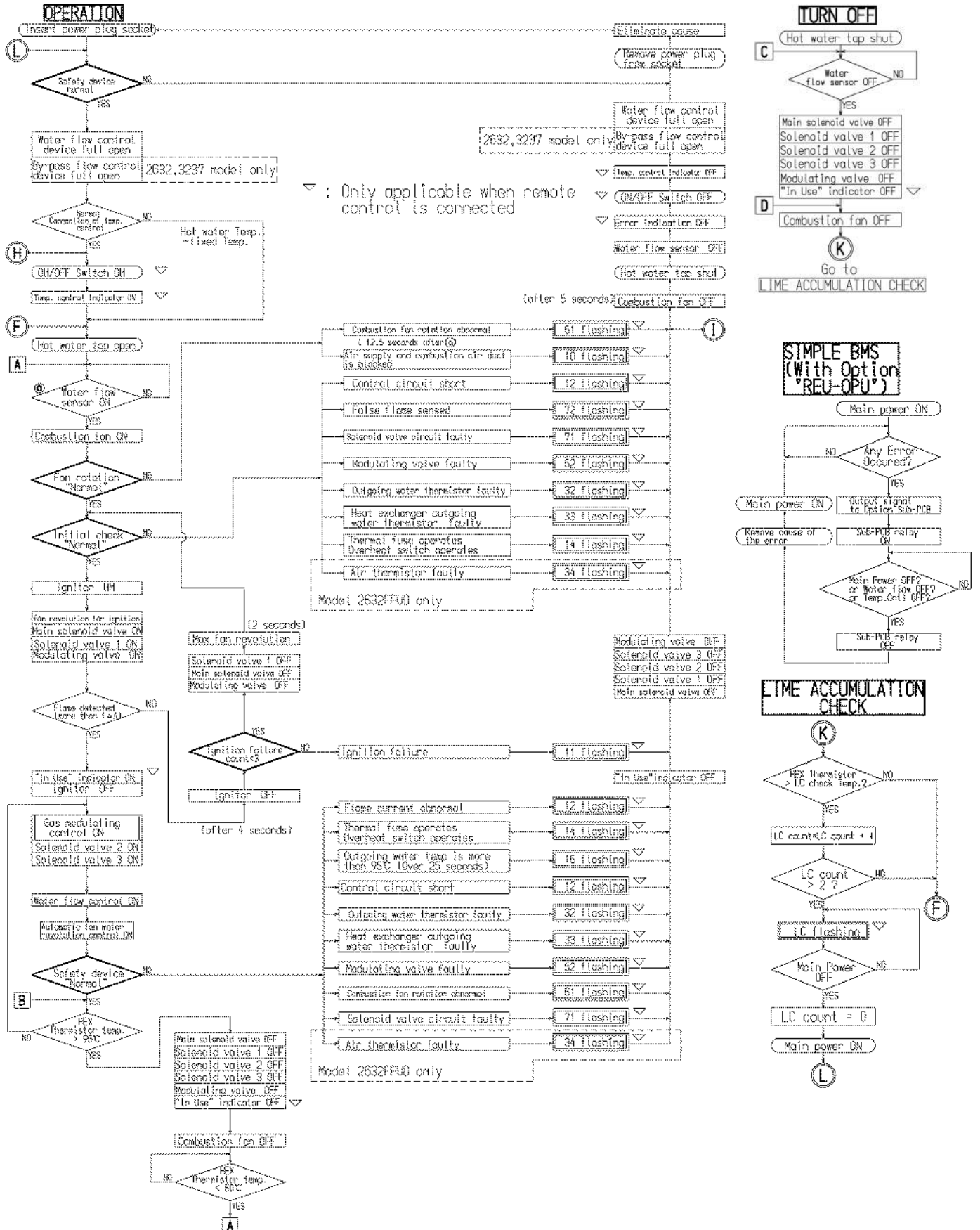
WIRING DIAGRAM

26i - HD50e - HD50i



FLOW CHART

26i - HD50e - HD50i - HD70e - HD70i



DIP SWITCH SETTING

Dip Switches Explained

OFF	ON	SW1	
<input type="checkbox"/>	<input type="checkbox"/>	1	- Model Choice
<input type="checkbox"/>	<input type="checkbox"/>	2	- Temperature
<input type="checkbox"/>	<input type="checkbox"/>	3	- Temperature
<input type="checkbox"/>	<input type="checkbox"/>	4	- Temperature
<input type="checkbox"/>	<input type="checkbox"/>	5	- Temperature
<input type="checkbox"/>	<input type="checkbox"/>	6	- Warm Water Switch
<input type="checkbox"/>	<input type="checkbox"/>	7	- Forced Combustion
<input type="checkbox"/>	<input type="checkbox"/>	8	- Forced Combustion

OFF	ON	SW2	
<input type="checkbox"/>	<input type="checkbox"/>	1	- Gas Type
<input type="checkbox"/>	<input type="checkbox"/>	2	- Gas Type
<input type="checkbox"/>	<input type="checkbox"/>	3	- Model Choice
<input type="checkbox"/>	<input type="checkbox"/>	4	- Model Choice
<input type="checkbox"/>	<input type="checkbox"/>	5	- Commercial Setting
<input type="checkbox"/>	<input type="checkbox"/>	6	- Not in use (OFF)

Dip Switch Positions Explained

LEGEND:

Black Section indicates position of dip switch:



WARM WATER SWITCH

If activated reduces the min flowrate to light

OFF ON SW1 Rinnai when inlet water temperature is close to setpoint temperature

OFF = +3°C (default setting)

ON = Infinity off when outgoing temp +6°C

COMMERCIAL SETTING

OFF ON SW2 OFF = No Autoreset
ON = Autoreset

FORCED COMBUSTION

NORMAL

OFF	ON	SW1	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	7	off
<input checked="" type="checkbox"/>	<input type="checkbox"/>	8	off

FORCED LOW

OFF	ON	SW1	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	7	on
<input checked="" type="checkbox"/>	<input type="checkbox"/>	8	off

FORCED HIGH

OFF	ON	SW1	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	7	on
<input type="checkbox"/>	<input checked="" type="checkbox"/>	8	on

GAS TYPE

LPG

OFF	ON	SW2	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	off
<input checked="" type="checkbox"/>	<input type="checkbox"/>	2	off

NATURAL GAS

OFF	ON	SW2	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	on
<input checked="" type="checkbox"/>	<input type="checkbox"/>	2	off

NOT IN USE

Switch nr.6 of SW2 is always "off" position

OFF	ON	SW2	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	6	

MODEL CHOICE

HD70e

OFF	ON	SW1	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	off

OFF	ON	SW2	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	3	off
<input checked="" type="checkbox"/>	<input type="checkbox"/>	4	off

HD70i + Long Flue

OFF	ON	SW1	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	off

OFF	ON	SW2	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	3	on
<input checked="" type="checkbox"/>	<input type="checkbox"/>	4	off

HD70i + Short Flue

OFF	ON	SW1 (Factory setting)	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	on

OFF	ON	SW2	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	3	on
<input checked="" type="checkbox"/>	<input type="checkbox"/>	4	off

HD50e

OFF	ON	SW1	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	on

OFF	ON	SW2	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	3	off
<input type="checkbox"/>	<input checked="" type="checkbox"/>	4	on

26i / HD50i + Long Flue

OFF	ON	SW1	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	off

OFF	ON	SW2	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	3	on
<input type="checkbox"/>	<input checked="" type="checkbox"/>	4	on

26i / HD50i + Short Flue

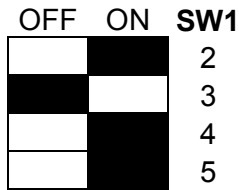
OFF	ON	SW1 (Factory setting)	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	on

OFF	ON	SW2	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	3	on
<input type="checkbox"/>	<input checked="" type="checkbox"/>	4	on

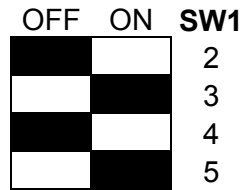
DIP SWITCH SETTING

26i - HD50e - HD50i - HD70e - HD70i

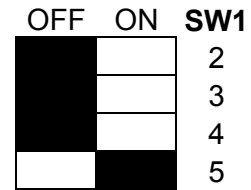
Temperatures - with or without remotes connected



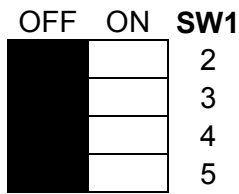
40°C



42°C

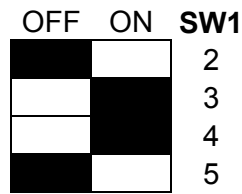


50°C

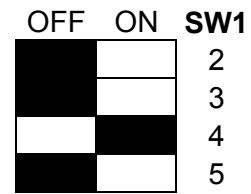


55°C

(Factory Setting for:
32e - 32i - 26e - 26i)

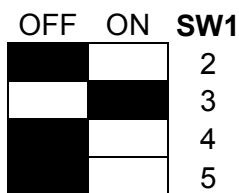


60°C



65°C

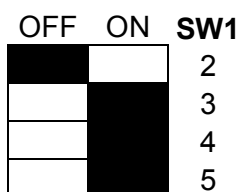
(Factory Setting for:
70e - 70i - 50e - 50i)



75°C

NOTE: Bypass valve automatically closes if appliance is set at temperatures of 60°C or higher.

Temperatures - without remotes connected



85°C

TESTING



1. Purge gas, hot water and cold water supply lines before making the final connection of the water heater. Swarf in either the gas or water supplies may cause damage.
2. Turn on gas and cold water supplies.
3. Test for water leaks and gas escapes near the unit.
4. Isolate gas and electric supply. Remove test point screw located on the inlet gas pipe work below the heater and attach pressure gauge.
5. Turn the power on at the switch and turn on gas. **Warning:** There are 230V AC live supplies inside the heater.
6. If remote controllers are fitted, turn the controller on, select the maximum delivery temperature and open ALL available hot water outlets. If remote controllers are not fitted, simply open all available hot water outlets. (CAUTION: Ensure building occupants do not have access to hot water outlets during this procedure).
7. The gas pressure check must be carried out with all other appliances on the same main operating at maximum capacity to ensure that there is sufficient gas pressure.
8. With all appliances on the same main operating at high fire check the pressure at the test point on the inlet to the gas valve. The pressure must be within the local defined limits for the type of gas that is being used. If the pressure is lower, the gas supply is inadequate and the water heater will not operate to specification. Check gas meter, regulator and pipe work for correct operation/sizing and rectify as required. Note that the gas regulator on the appliance is electronically controlled and factory pre-set. Under normal circumstances it does not need adjustment during installation.

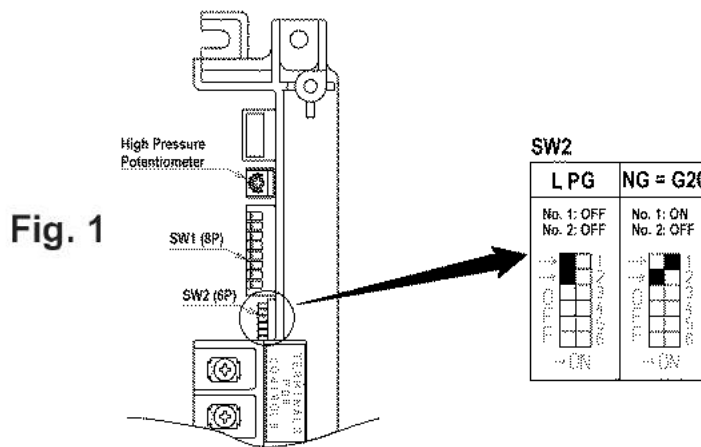
UK: the gas pressure must be at least **20 mbar** and no more than **21 mbar** for G20 Natural Gas as used in UK. For G31 Propane as used in the UK the pressure must be at least **34.5 mbar** and no more than **37 mbar**.
9. Close hot water outlets.
10. Inspect and clean the strainer and the filter located on the cold water inlet pipe. This procedure may need to be repeated to ensure the strainer remains clear.
11. If temperature controllers are fitted, it is necessary to test their operation through the complete range of functions.
12. Confirm the hot water delivery temperature using a thermometer. If controllers are fitted, compare the measured value to the set point.
13. After testing is completed, explain to the user the functions and operation of the water heater and temperature controllers.

GAS PRESSURE SETTING

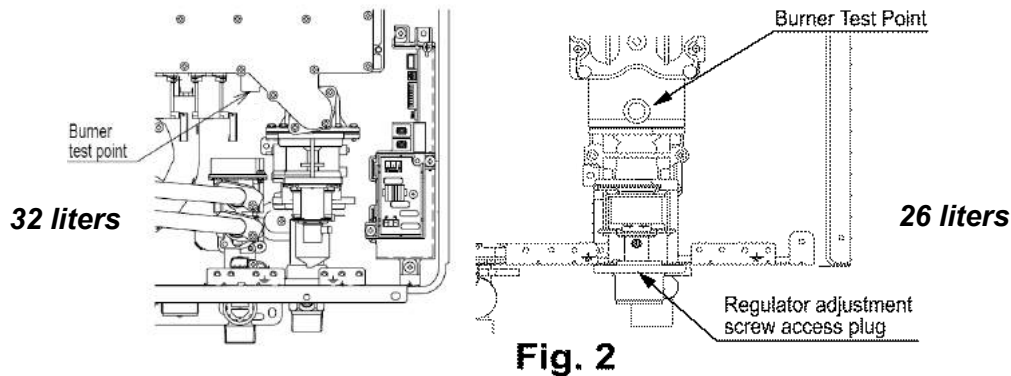
The working gas pressure on the water heater is electronically controlled and factory set. Under normal circumstances it **does not require adjustment during installation**. The pressure should be checked when the unit is installed and each time it is serviced to ensure that it is correct.

Contact Rinnai before attempting to alter the gas pressure if you are unsure of what to do. Incorrect adjustment can void the warranty.

1. Turn 'OFF' the gas supply.
2. Turn 'OFF' 230V power supply.
3. Remove the front cover from the appliance.
4. Check gas type dip switches no.1 and no.2 of SW2 are in the correct position for the type of gas used. See Fig. 1



5. Attach pressure gauge to burner test point. (Fig. 2)



6. Turn 'ON' the gas supply.
7. Turn 'ON' 230V power supply.
8. If remote controllers are fitted, turn the unit 'ON' at the controller and select a maximum delivery temperature.
9. Open a hot water tap fully. (**CAUTION: Ensure building occupants do not have access to hot water outlets during this procedure.**) Wait for the unit to light.



*** Simply changing the position of the dip switches will not convert the unit from one gas type to the other. The conversion procedure requires a change of injector manifold. Contact Rinnai or your supplier.**

GAS PRESSURE SETTING

10. Set the Rinnai to '**Forced Low**' combustion by setting No.7 dip switch of SW1 to 'ON'. (Fig. 3)

11. Check the burner test point operating pressure.

LOW	GAS	HD50e	HD70e	26i HD50i	HD70i
NG	G20	1.29	1.83	1.75	1.86
LPG	G31	2.21	2.34	2.36	2.22
<i>(pressures in mbar)</i>					

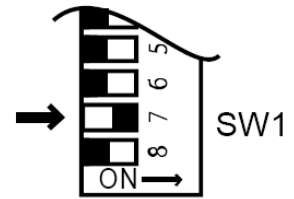


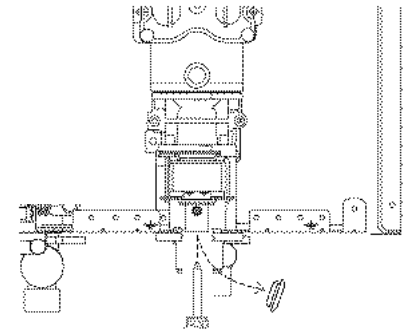
Fig. 3

12. Remove rubber access plug and adjust the regulator screw on the modulating valve (Fig. 4) as required to the pressure above. Replace rubber access plug and seal it shut.

13. Set the Rinnai to '**Forced High**' combustion by setting No.7 and No.8 dip switches to 'ON' (Fig.5). Ensure maximum water flow.

14. Check the burner test point pressure.

MAX	GAS	HD50e	HD70e	26i HD50i	HD70i
NG	G20	6.81	7.95	9.35	7.95
LPG	G31	11.2	9.25	11.1	9.25
<i>(pressures in mbar)</i>					



Regulator adjustment
screw access plug

Fig. 4

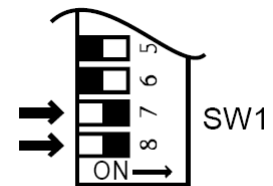


Fig. 5

15. Adjust the **High Pressure Potentiometer** on the Printed Circuit Board SW1 (Fig. 6) to the pressure shown above. The potentiometer is very sensitive, turn no more than a few degrees at a time; then let the pressure settle down before turning it more.

16. **IMPORTANT:** Set dip switch No.7 and No.8 of SW1 to 'OFF' to return the appliance to '**Normal**' combustion.

17. Close hot water tap and turn 'OFF' the gas supply and 230V power supply.

18. Remove pressure gauge and replace sealing screw. Turn 'ON' the gas supply and power.

19. Operate unit and check gas leaks.

20. Replace the front cover of the appliance.

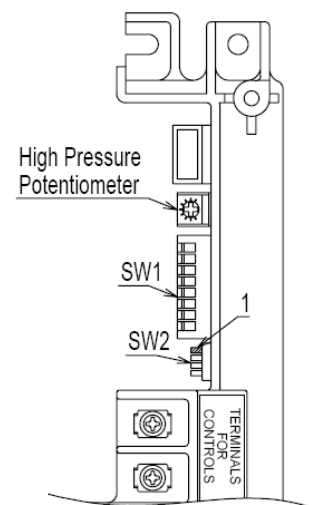
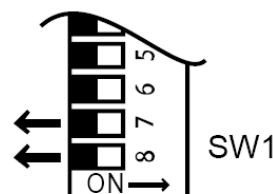


Fig. 6



ERROR MESSAGES

Troubleshooting without controllers

If you have not installed temperature controllers and experience the following symptoms, please carry out the suggestions below. If symptoms continue, please contact Rinnai for advice.

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

Fault	Remedy
Heater does not attempt to start at all.	Check the power is on at the heater. Check the cold water valve supplying the heater is open.
Heater starts then shuts down immediately.	Check the power is on. Open the hot water tap fully. Check the gas valve at the heater and at the gas meter is fully open.
Heater starts then water goes cold.	Check the power is on. Open your hot water tap further or try another hot outlet.

Installations with circulation pumps

With temperature controller fitted.

If you have an installation using a secondary circulation pump this must be switched off so that there is no flow through the heater when starting or after a power failure. If the pump is running the unit will not operate (no display on the controller). Isolate pump then start heater before restarting pump. This is a safety feature. The pump should also be fitted with a timer to prevent the consumption of energy while the building is not used. The timer should bring the system back on at least one hour before it is to be used.

Without temperature controller fitted.

The heater should automatically reset and provide water at the temperature set by the internal limit switches.

RESTARTING THE RINNAI WATER HEATER

Standard system.

Single or multiple water heaters without remote controllers.

The heaters will automatically reset without any user involvement.

Single or multiple water heaters with remote controllers.

The heaters will be required to be switched on using the ON/OFF button on a remote controller. Ensure that all taps/water outlets are closed and no water is flowing through heaters.

Hot water system incorporating secondary recirculation pump.

Single or multiple water heaters without remote controllers.

The heater(s) will automatically reset without any user involvement.

Single or multiple water heater(s) with remote controller(s).

To reset the heaters follow the steps.

1. Turn off all hot water taps.
2. Turn off supply to secondary circulating pump or alternatively, isolate pump flow.
3. Turn on heater at remote control.
4. Select required temperature.
5. Switch on supply to secondary circulating pump or open valve on pump flow.

The heater will now be ready to supply water at the set temperature.

If following the above procedure does not reset the heater switch it on and off at its main supply, and then go through these steps again. If heater is still not working call your local service agent or Rinnai for assistance.

ERROR MESSAGES

For extra assistance in Fault Diagnostics follow the FLOW CHART of page 21

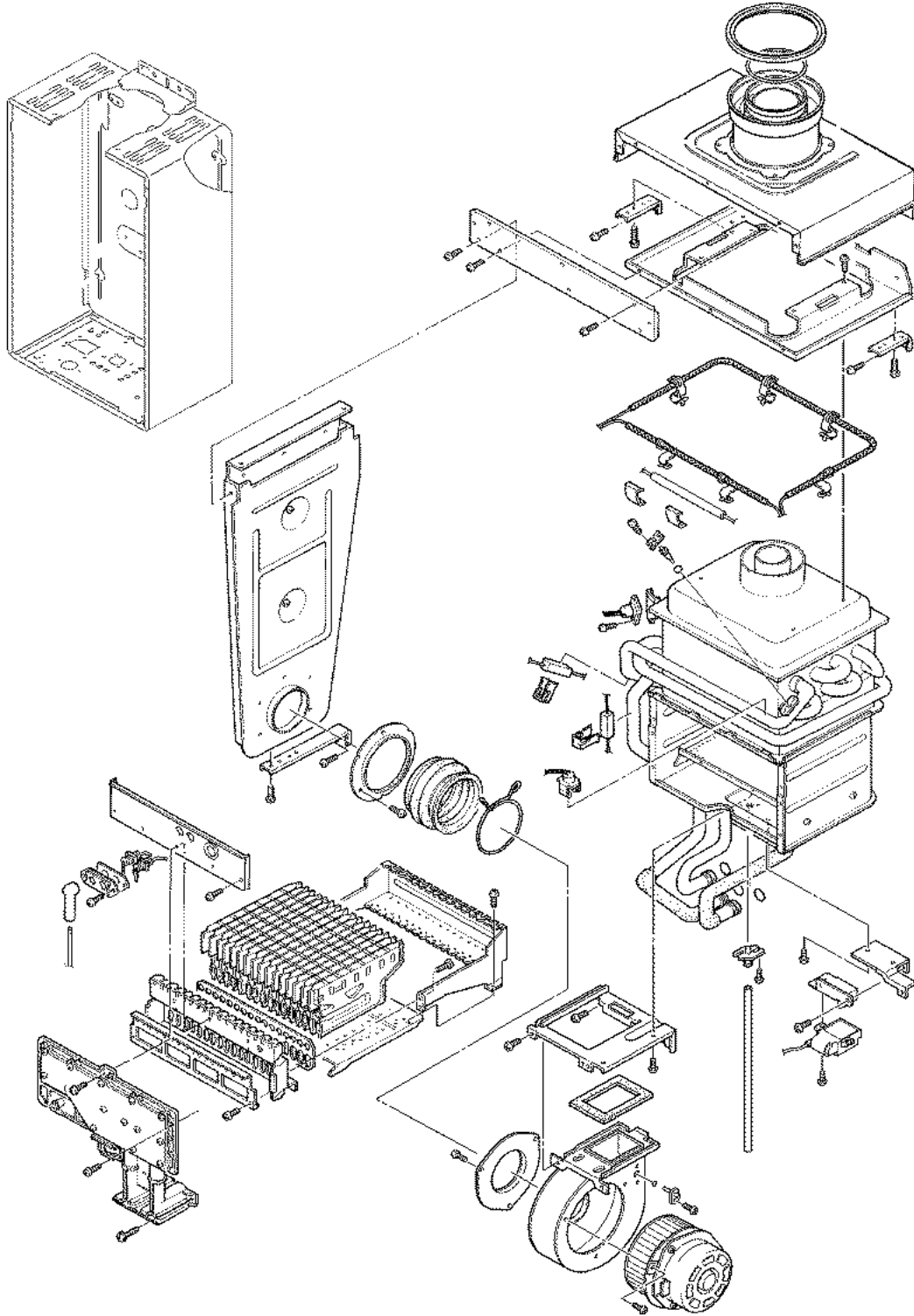
Code Displayed	Fault	Remedy
-	Noticeable reduction in water flow	Inlet water filter needs to be cleaned.
03	Power interruption during operation (water will not flow when power returned)	Turn off all hot water taps and circulating pumps. Press 'On/Off' twice
10	Not enough combustion air	Check for physical blockages around air intake or exhaust. Check combustion fan. Diagnostic page 29
11	No Ignition / Gas supply	Check Burner Pressure p25 gas valves p32, gas supply, ignition & ionisation electrodes p31 Diagnostic p29
12	Flame failure / Earth Leakage	Check gas valves and gas supply. Check flame rod. Check earth wire lead. Check remote control. Diagnostics p29
14	Thermal Fuse & or Overheat	Check Overheat circuit inc Thermal link p29 Check dip switches p22 Check gas Pressures p26
16	Over temperature warning	Check Gas Type dip switches p22 Check gas pressure p26 Check flow servo diagnostic p29 Check flow sensor diagnostic p29 Check Heat ex outlet thermistor diagnostic p29 Check Hot Water outlet thermistor diagnostic p29
32	Outgoing water temperature sensor faulty	Check Hot Water outlet thermistor diagnostic p29
33	Heat exchanger outlet sensor faulty	Check Heat ex outlet thermistor diagnostic p29
34	Combustion Air Temperature Sensor faulty	Check Thermistor p34 Diagnostic p29
52	Gas modulating valve faulty	Check Gas valve p32 Diagnostic p29
61	Combustion fan failure	Check fan p34 Diagnostic p29
65	Water flow control faulty, Water flow not controlled or temp too low	Check Water Flow Servo p35 Diagnostic p29
71	Solenoid Circuit error	Check Gas valve p32 Diagnostic p29
72	Flame rod circuit error	Check electrode p32 Diagnostic p29
LC (00)***	Scale build-up in heat exchanger	De-scale or Replace Heat Exchanger

DIAGNOSTIC POINTS

FLOW CHART No.	COMPONENT	MEASUREMENT POINT		NORMAL VALUE	A NOTE
		CN	WIRE COLOUR		
①	SURGE PROTECTOR	D ₁	W-Bk	AC198~253V	
② ⑬	WATER FLOW CONTROL DEVICE	G ₆	R-B	DC11~13V	OPERATE ELECTRICITY
			Gy-0	DC11~13V	CONTROL ELECTRICITY
			Gy-Y	BELOW DC1V(LIMITER ON) DC4~6V(LIMITER OFF)	FULL OPEN POSITION
			Gy-Br	BELOW DC1V(LIMITER ON) DC4~6V(LIMITER OFF)	FULL CLOSE POSITION
③	BY-PASS FLOW CONTROL DEVICE	H ₁	Br-W O-W Y-W R-W GND	DC12V(OPERATING DC2~6V)	
				15~35 Ω	
④	REMOTE CONTROL	A ₁	Bk-Bk	DC11~13V	
⑤	WATER FLOW SENSOR	G ₂	R-Bk	DC11~13V	
			Y-Bk GND	DC4~7V(PULSE 17~460Hz)	
⑥	COMBUSTION FAN	B ₁	R-Bk	DC6~45V	
			Y-Bk	DC11~13V	
			W-Bk GND	DC6~45V (33~400Hz)	
⑦	FLAME ROD	E ₃	Y-BODY EARTH	AC5~150V	AFTER IGNITION
			Y-FLAME ROD	OVER DC1 μA	FLAME CONDITION
⑧	MODULATING VALVE	E ₂	P-P	DC2~15V 67~81 Ω	
⑨	OUTGOING THERMISTOR	G ₄	W-W	15°C... 11.4~14.0kΩ 30°C... 6.4~7.8kΩ 45°C... 3.6~4.5kΩ 60°C... 2.2~2.7kΩ 105°C... 0.6~0.8kΩ	
⑩	HEAT EXCHANGER OUTGOING THERMISTOR	G ₃	W-W		
⑪	AIR TEMPERATURE THERMISTOR	G ₅	W-W		
⑫	THERMAL FUSE	G ₁	R-R		BELOW 1 Ω
		E ₁			
⑬	IGNITER	C	B-B	AC207~264V	
⑭	MAIN SOLENOID VALVE	F ₁	P-Bk	DC11~13V 37~43 Ω	
⑮	SOLENOID VALVE 1	F ₂	Y-Bk	DC11~13V 37~43 Ω	
⑯	SOLENOID VALVE 2	F ₃	B-Bk	DC11~13V 37~43 Ω	
⑰	SOLENOID VALVE 3	F ₄	Br-Bk	DC11~13V 35~41 Ω	

Maintenance

REU-VR2632FFUD-E
REU-VR2632FFUDHD-E



DRAWING A

Maintenance

SERVICE PROCEDURE

To carry out a full service on this appliance the following has to be carried out:-

1. The Injector manifold should be removed, inspected and cleaned if required (see page32)
2. The combustion chamber plate removed and both ignition and ionisation electrodes inspected and cleaned (see page 32)
3. Remove complete burner box visually inspect and clean if required, paying particular attention to where the ignition electrode sparks to (see page 32)
4. Visually inspect combustion chamber and up onto base of heat exchanger, check for leaks, soiling of fins ect.
5. Remove fan assembly being careful of the air thermistor (see page 34)
6. Inspect impellor and clean if required (See Page 34)
7. Rebuild fan
8. Replace burner box
9. Replace combustion chamber cover
10. Replace manifold ensuring `O` rings on gas valve are securely in place and not damaged, see drawing C `O` rings 1
11. Remove sealing screw on test nipple,TP1 on gas valve (see page 33) and fit manometer
12. Turn as many taps on as possible, or get as much water flowing through the heater as possible
13. Once the flame is stable go through gas pressure setting procedure as per pages 25 –26
14. Once burner pressures are set, turn off water flow
15. Remove manometer and replace TP1 sealing screw
16. Turn on flow of water and when unit has fired check for any gas leaks.

Care

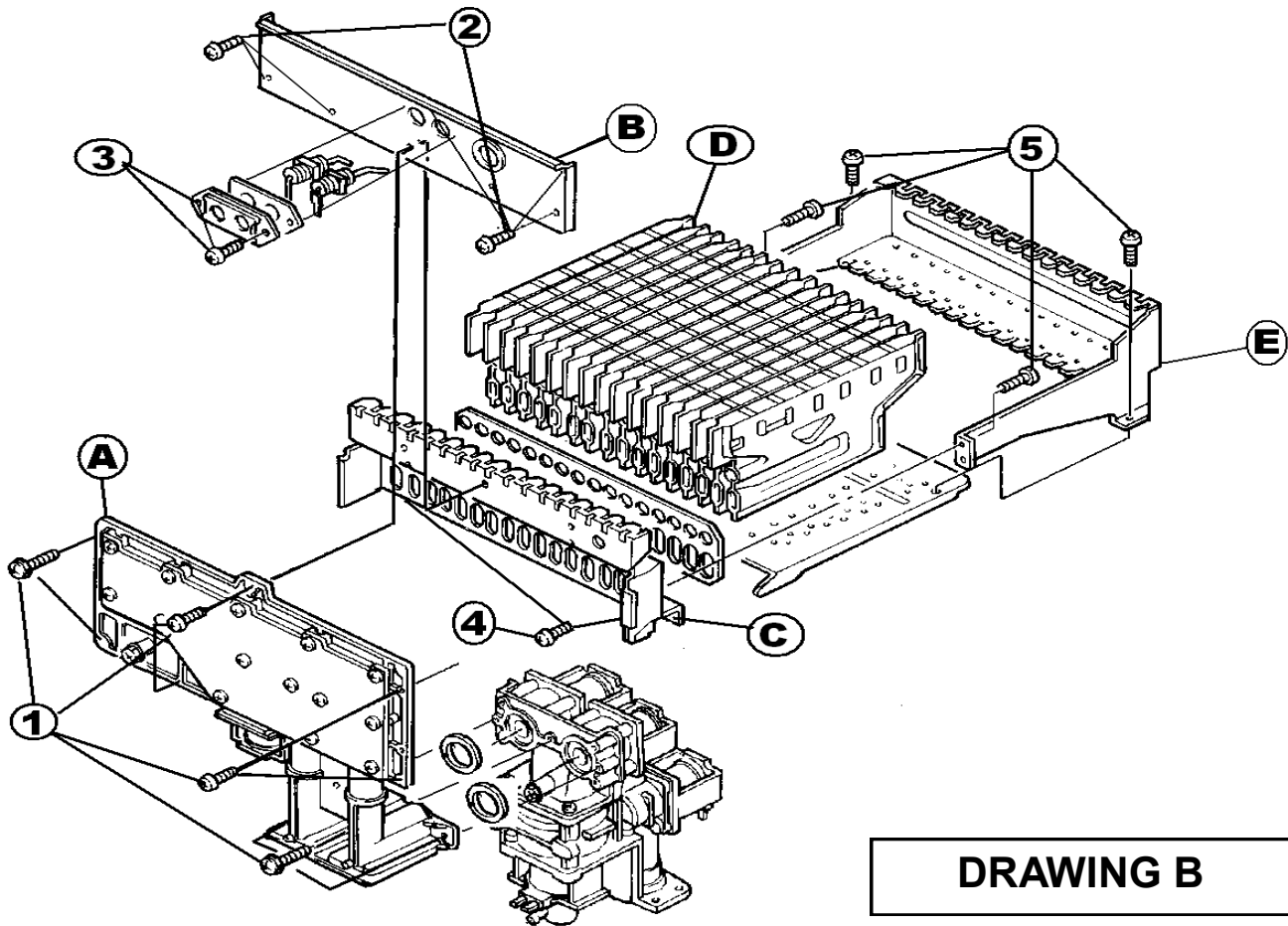
When the appliance casing, operation panel, and remote controls surfaces become dirty gently wipe them clean with a soft, damp cloth. Do not use detergents on these parts.

Filter

The water heater has a filter on the cold water inlet connection. This filter will need to be cleaned occasionally. How often will be determined by the local water conditions; contact Rinnai or ask your installer for information.

Isolate the cold water inlet and hot water outlet with the valves near the heater. Release the pressure in the heater by unscrewing the drain valve. Then remove the filter, clean it and replace it.

Maintenance

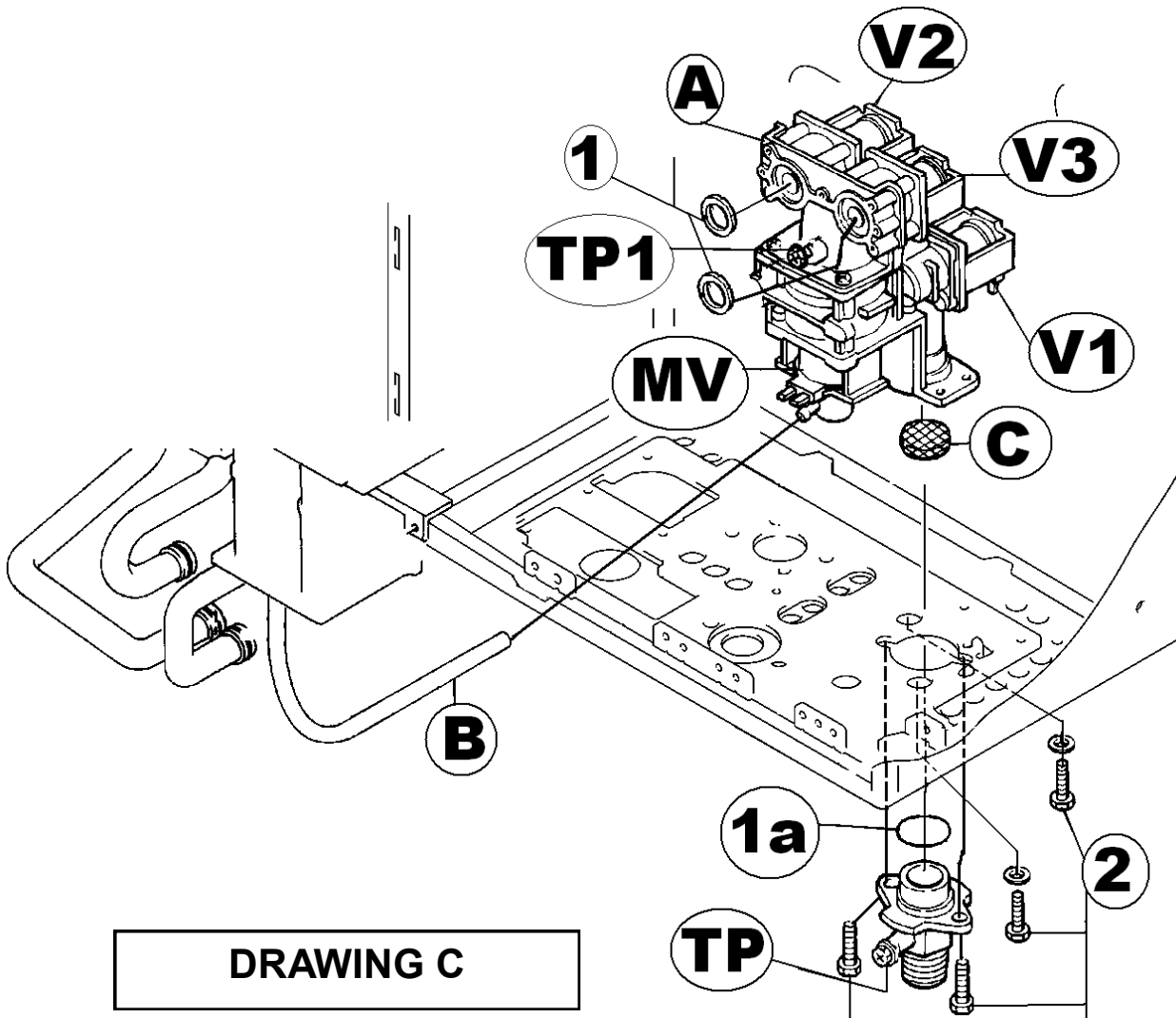


DRAWING B

Manifold & Burner Box Removal

1. To remove Manifold (A) undo all 9 screws (1) then pull forward, disconnect solenoid (see drawing G connection 2A) Inspect injectors if required remove front plate off manifold and clean injectors outwards
2. Remove Combustion Chamber Plate (B) by undoing all screws (2) and clean ignition and Ionisation electrodes, to remove these undo screws (3) PRIOR TO CARRYING THIS OUT ENSURE YOU HAVE THE GASKET
3. To remove burner box undo 2 screws (4) on plate C this will now allow full burner box to be withdrawn and the burners to be cleaned (turn upside down and shake and blow through with air brush)
4. If any burner wings (D) are damaged remove bracket (E) by undoing screw (5) and pull damaged wing out and replace
5. To Rebuild reverse above ENSURING `O`RINGS ARE INTACT AND IN PLACE ON GAS VALVE

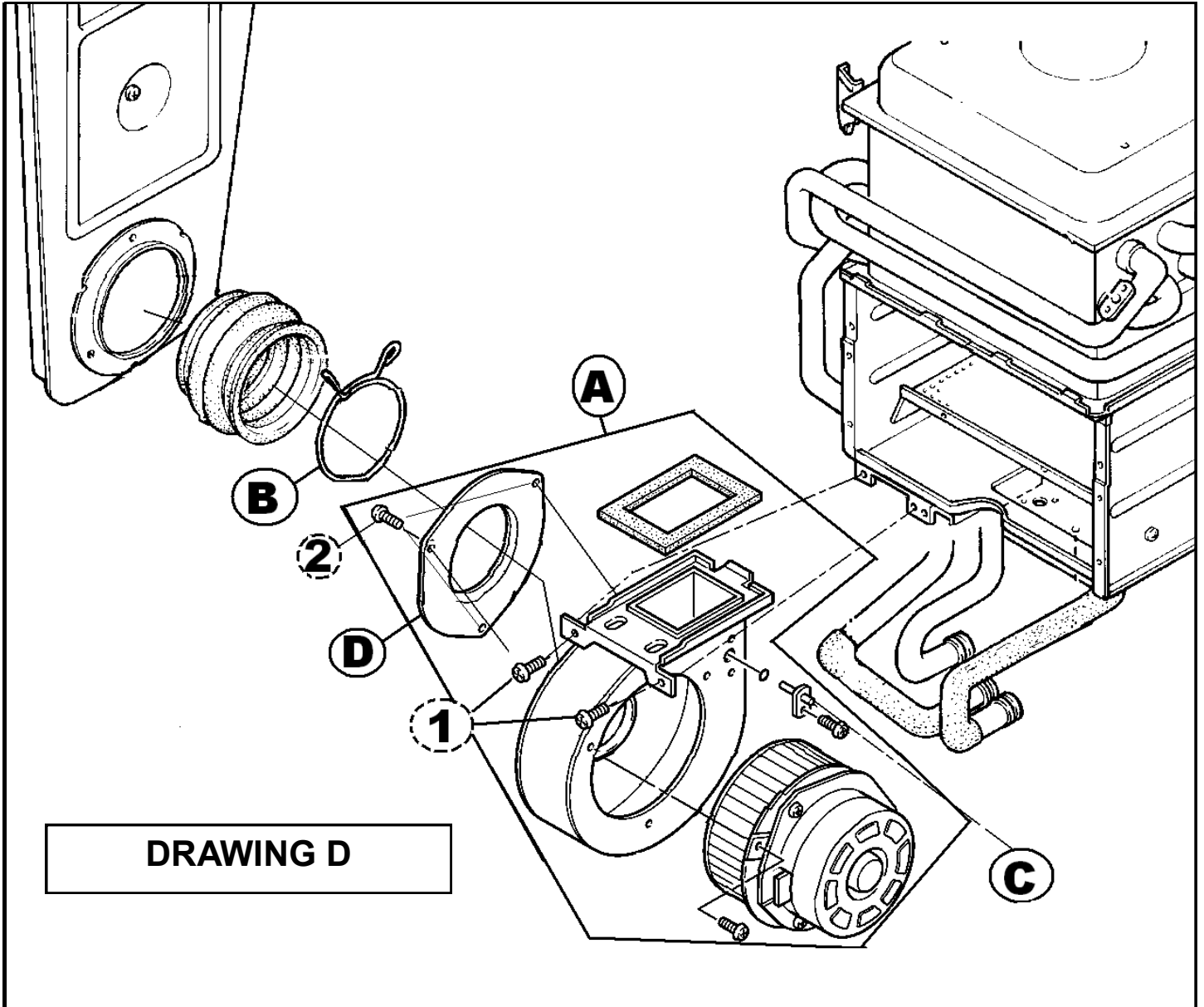
Maintenance



Gas Valve

1. Remove Manifold as per previous page
2. Disconnect breather pipe (B)
3. Undo 4 screws (2)
4. Grasping Gas Valve (A) lift up and pull out
5. Disconnect all solenoids V1, V2, V3 & MV (see drawing G connection (2))
6. Refit in reverse order ENSURING 'O'RINGS (1) ARE INTACT AND IN POSITION

Maintenance

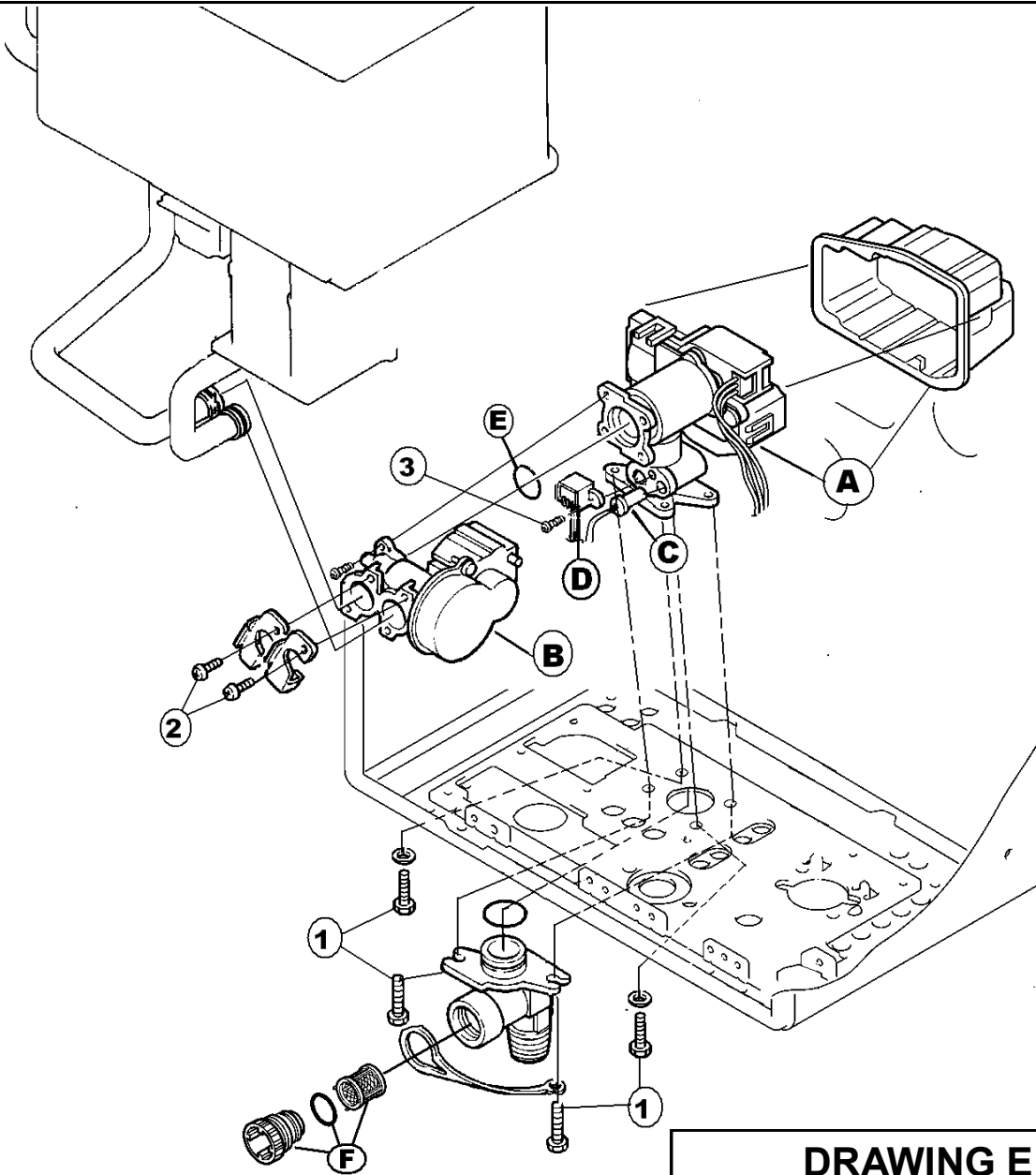


DRAWING D

Fan Removal

1. Undo Spring clip `B` and push rubber boot back off fan housing
2. Disconnect wiring plug from fan motor (see Drawing G connection 3)
3. Undo 2 screws `1`
4. Fan assembly will now drop
5. Carefully pull forward
6. Find air thermistor `C` follow the white cables and disconnect at it plug and socket (see drawing G connection 4)
7. Visually inspect impellor, if heavily soiled either remove plate `D` by removing screws `2` or remove motor fully
8. Once completed cleaning reverse the above procedure

Maintenance



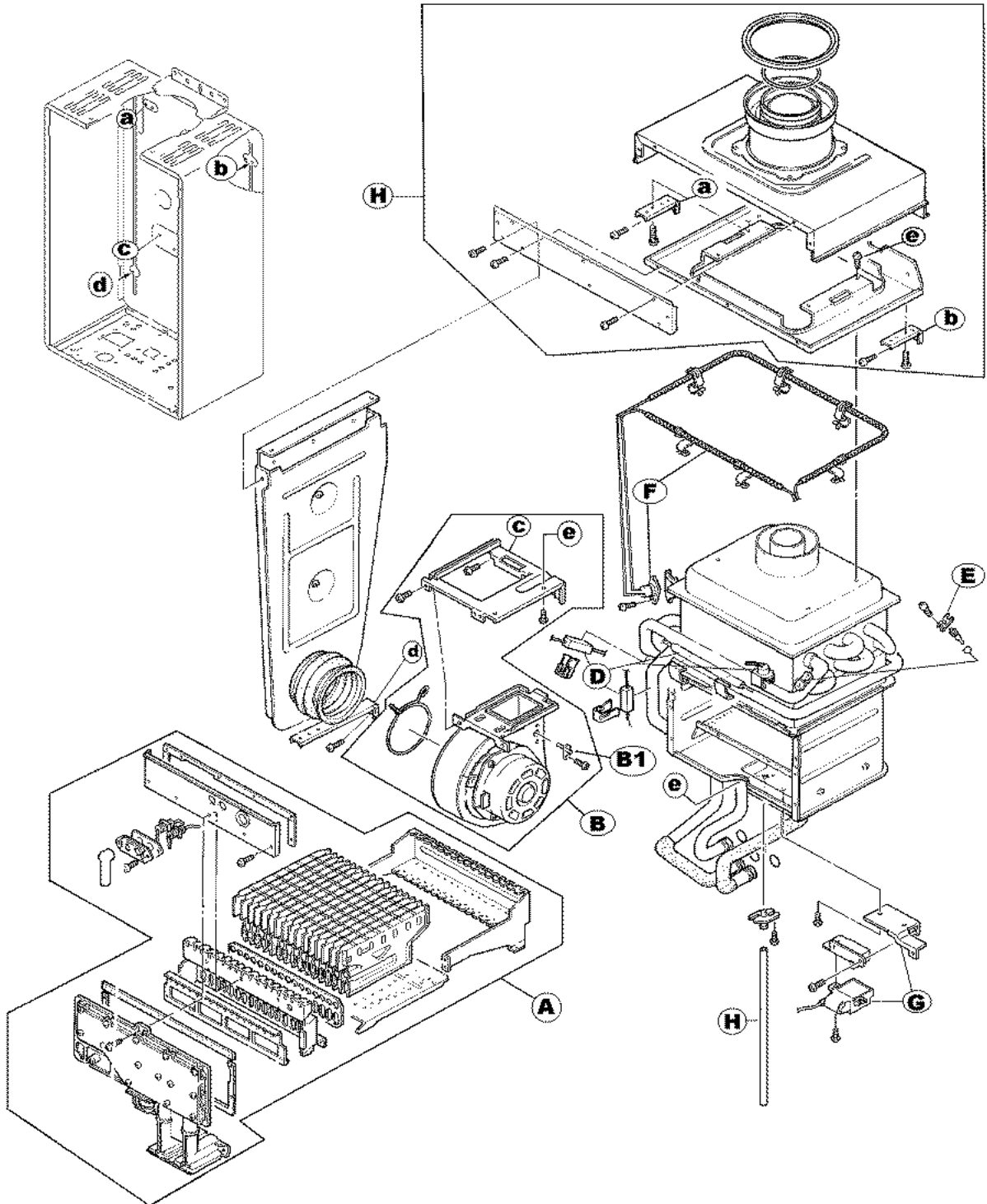
DRAWING E

Filter , Flow / By Pass Servo`s and Flow Sensor

1. To remove Flow (A) and Bypass (B) servo`s undo screws (2) and remove clips pull forward the two pipes
2. Undo the 4 screws (1) situated outside of the case on the base then lift both units out and disconnect the units individual plug and sockets (see drawing G connections 5 & 5A)
3. To separate both units undo screws (3) and pull apart
4. To remove flow sensor (D) undo screw (3) and un plug its connection (see drawing G connection 5C)
5. To replace anti frost heater (C) remove flow sensor (D)
6. Reverse to re-build ENSURE `O` Ring `E` IS IN PLACE
7. Filter (F) is removed by unscrewing from the appliance fitting

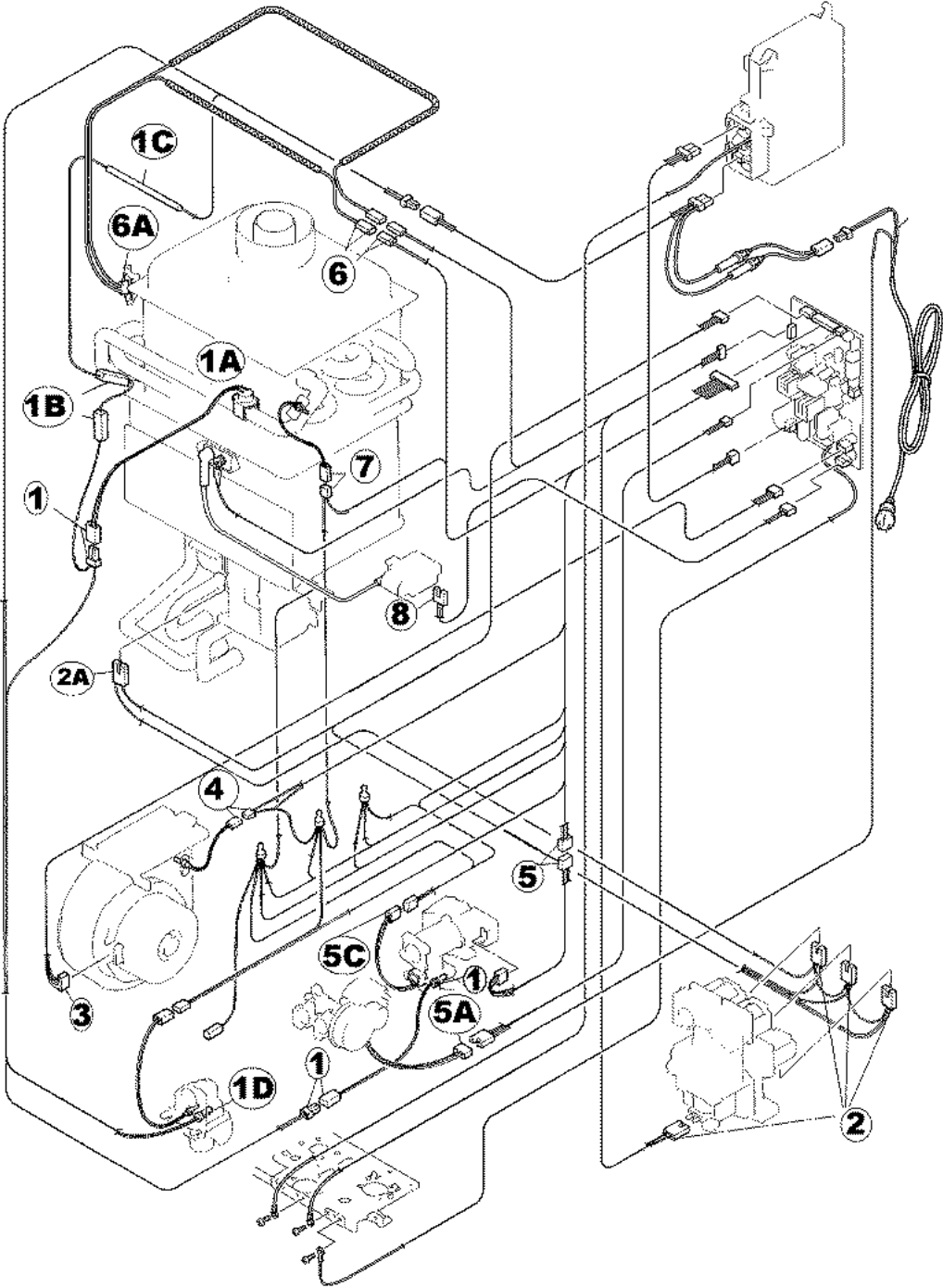
Maintenance

REU-VR2632FFUDHD-E



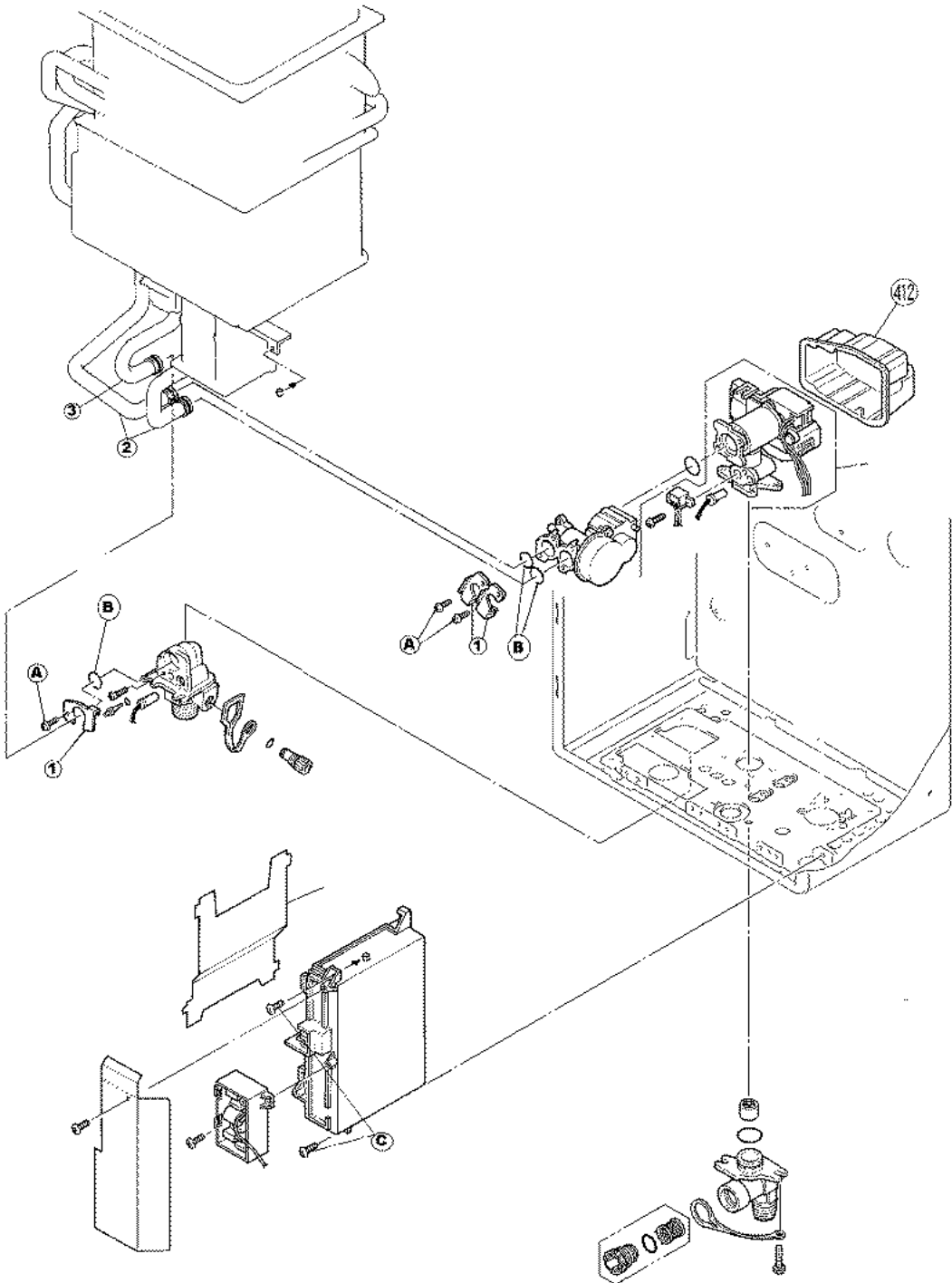
Drawing F

Maintenance



Drawing G

Maintenance



Drawing H

Maintenance

To Remove Heat Exchanger

As each item is removed keep the relevant screws with that item

DRAWING F

1. Remove assembly `A` (see Manifold & Burner Box Removal page 39)
2. Remove assembly `B` (see Fan Removal page 41)

DRAWING H

1. Disconnect Heat Exchanger Pipes, undo screws `A` from plates `1` and spin plates out of the way and remove plates.
2. Pull the 2 cold feed pipes `2` from out of the by pass servo
3. Pull Hot feed pipe `3` from it's housing.
4. Undo 2 PCB securing screws and pull out PCB and leave hanging picture H screws **C**

DRAWING G

1. Unclip anti frost heaters, items **1A, 1B, 1C** and leave hanging outside the case.
2. Unclip the Thermal link ,connection **6**
3. Disconnect Heat Exchanger Thermistor, connection **7**
4. Disconnect Sparker connection, connection **8**

DRAWING F

1. Disconnect breather pipe from gas valve, item **H**
2. Undo screw below air box screw **d**
3. Undo 3 screws under fan bracket on base of heat exchanger, screws **c**
4. Undo 2 screws top left hand corner of heat exchanger, screws **a**
5. Whilst supporting heat exchanger assembly, remove 2 screws top right hand side of heat exchanger, screws **b**
6. Remove complete heat exchanger
7. Unclip remove over heat stat and thermal fuse from around heat exchanger, item **F**
8. Remove heat exchanger thermistor ensuring the `O` ring is not left in place, item **E**
9. Remove sparker from base of heat exchanger, item **G**
10. Undo screws from cover of air box, item **H** screws **f**
11. Remove side box and top of air box
12. Undo screws holding base of air box onto the top of the heat exchanger, screws **e**

To Rebuild New Heat Exchanger

Reverse the above instructions placing all components onto new heat exchanger.

NOTE

ENSURE NEW `O` RINGS SUPPLIED WITH NEW HEAT EXCHANGER ARE FITTED ONTO THE PIPE see drawing H `O` rings `B`

LETTER OF COMPLIANCE

Conformity Declaration

We, Rinnai Corporation, Nagoya herewith confirm that the following models:

REU-VRM3237W-E
REU-VRM3237WHD-B
REU-VRM3237FFU-F
REU-VRM3237FFUID-E

REU-VR2632WJ-F
REU-VR2632WDHD-E
REU-VR2632FFU-E
REU-VR2632FFUIDHD-F

comply with the directives mentioned below:

2009/142/EC Gas Directive
73/23/EEG Low Voltage Directive
89/336/EEG EMC Directive

The following harmonized standard has been used:

Gas-fired instantaneous water heaters for the production of domestic hot water, fitted with atmospheric burners (EN26)

Nagoya, 29th August Rinnai Corporation



Yuzo Yoshida,
Managing Executive Officer
& General Manager

CE CERTIFICATE

Technigas €

Module B

EC TYPE EXAMINATION CERTIFICATE

Annex II Paragraph I directive 2009/142/EC



Certificate number : E0716/5360 Rev.5
ID number : 0461BO0739

Date of issue : 28/07/2003
Revised : 23/08/2010

Fabricant : RINNAI Corporation
Manufacture : Fukuzumi-Cho 2-26
Fabrikant : J - Nakagawa, Nagoya

Marque commerc. : RINNAI
Trade mark
Handelsmerk

Type : REU-V2632 FFU-E(Infinity 26i)(*
Model : HD 50i (HD50i)(* - REU-VR2632FFUD-E(Infinity 26i)
Type : REU-VR2632FFUDHD-E(HD50i)

Genre d'appareil : INSTANTANEOUS WATER HEATER
Kind of product
Soort toestel

Type d'appareil : B23/ C13/ C33
Appliance type : B23X/ C13X/ C33X
Type toestel

Countries of destination, appliance categories :

AL-AT-BE-BG- CH- CY- CZ- DE- DK- EE- ES- FI- FR-GB-GR- HU-HR-IE- IS - IT- LT- LU- LV- MK- MT-
NL-NO- PL-PT- RO- SE- SI- SK- TR

I2H // I2E // I2E(S) // I2Esi // I2HM // I3B/P // I3P // I3R
(*): I2L // I2E // I2E(S) // I2Esi

G20-20 mbar // G30-28/30 mbar G30-30 mbar // G30-37 mbar // G31-30 mbar // G31-37 mbar //
G31-50 mbar // G230-20mbar
(*): G25/25 mbar // G20/G25-20/25 mbar

Normative references : EN 26

This document cancels and replaces the previous one of : 18/09/2006

DIRECTOR
K DE WIT

n° 199-PROD



TGP-08-14
2002-04-12

TECHNIGAS - Rodestraat, 125 - B-1630 Linkebeek
Phone +32 2 383 02 00 - Fax +32 2 380 87 04
e-mail : technigas@technigas.be - website : www.technigas.be

CE CERTIFICATE

Technigas

Module B

EC TYPE EXAMINATION CERTIFICATE

Annex II Paragraph I directive 2009/142/EC



Certificate number : E0841/5386 Rev.5
ID number : 0461BP0795
Date of issue : 23/12/2004
Revised: 23/08/2010

Fabricant : RINNAI Corporation
Manufacture : Fukuzumi-Cho 2-26
Fabrikant : JP - Nakagawa, Nagoya

Marque commerc. : RINNAI
Trade mark
Handelsmerk

Type : REU-V2018 W-E - REU-V2632 W-E - REU-VRM1120WD-E(Infinity 11e)
Model : REU-VRM1420WD-E(Infinity 14e) - REU-VRM1720WD-E(Infinity 17e)
Type : REU-VRM2024WD-E(Infinity 20e) - REU-VR2632WD-E(Infinity 26e)
REU-VR2632WDHD-E(HD50e)

Genre d'appareil : INSTANTANEOUS WATER HEATER
Kind of product
Soort toestel

Type d'appareil : A₃ - Only outdoor installation
Appliance type
Type toestel


Countries of destination, appliance categories :
AL-AT-BE-BG- CH- CY- CZ- DE- DK- EE- ES- FI- FR-GB-GR- HU-HR-IE- IS - IT- LT- LU- LV- MK- MT- NL-NO- PL-PT- RO- SE- SI- SK- TR

I2H // I2L // I2E // I2E(S) // I2Esi // I2HM // I3B/P // I3P

G20-20 mbar // G25-25 mbar // G20/G25-20/25 mbar // G30-28/30 mbar
G30-30 mbar // G30-37 mbar // G31-30 mbar // G31-37 mbar // G31-50 mbar
G230-20mbar (except for REU-V2626W-E /REU-V2018 W-E)

Normative references: EN 26

This document cancels and replaces the previous one of : 06/08/2008


DIRECTOR
K DE WIT

n° 199-PROD

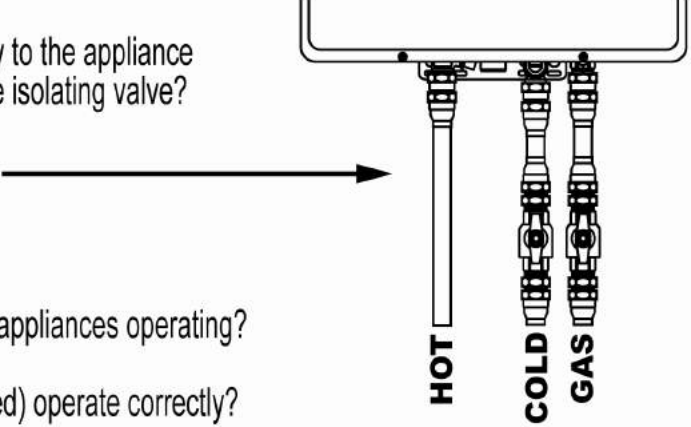


TGP-08-14
2002-04-12

TECHNIGAS - Rodestraat, 125 - B-1630 Linkebeek
Phone +32 2 383 02 00 - Fax +32 2 380 87 04
e-mail : technigas@technigas.be - website : www.technigas.be

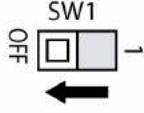
COMMISSIONING CHECK LIST

Attention Installer - have you checked!

- Gas supply pipe is purged of foreign matter before connection.
- For hot and cold cross connections i.e. capped breaches / shower mixers, taps closed and reversed 'flick mixer' connections?
- That isolating valves are not connected directly to the appliance and there is a means of disconnection after the isolating valve?
- That plumbing connections are correct? 
- Have you turned on the power?
- Is appliance inlet gas pressure correct with all appliances operating?
- Do the kitchen and bathroom controllers (if fitted) operate correctly?
- Tempering valve (if fitted) - Is it for continuous flow water heater use?

- Have you checked water temperature at all outlets?
- Have you cleaned cold water inlet filter?
- Have you shown the customer how to operate the temperature controllers? (if fitted)
- Have you explained to the customer the benefits of controllers (if not fitted) and that they can be added later?
- Have you explained to the customer the minimum flow rate required to operate the unit?
- Have you checked the flue clearances and installation?

For Internal (FFU) models only

- Have you used only Rinnai flueing components?
- If flue length exceeds 7m, dip-switch 1 of SW1 is to be switched to the 'OFF' position as shown. 
- If flue length exceeds 1,5m, connect a condensate drain pipe in accordance with the flueing Instructions.

PLEASE NOTE:

That warranty may be voided and a service charge may be incurred as a result of Rinnai staff attending to a problem related to installation.

UK WARRANTY

As the purchaser of this high quality Rinnai Water Heater you are provided with the following conditional warranty.

Standard Use	Heat Exchanger		All Other Parts	
	Parts	Labour	Parts	Labour
	3 Years	1 Year	3 Years	1 Year
Rinnai 26i				
Commercial Use	5 Years	1 Year	5 Years	1 Year
HD50e / HD70e				
HD50i / HD70i				

Definition of Standard Use.

The warranty period allocated under Standard Use is based on Domestic and Light Commercial hot water usage. Rinnai Standard Use warranty periods apply only where Rinnai water heaters are installed in domestic and light commercial situations at operating temperatures below 65°C and do not include installations incorporating storage cylinders or building flow and return systems.

The warranty shall apply to any Rinnai water heater.

Definition of Commercial Use.

The warranty period allocated under Commercial Use are for Rinnai water heaters installed at premises such as commercial and industrial buildings, cafes, caravan parks, and sporting complexes. Commercial Use warranty applies to:

- Water heaters supplying a central shower block.
- Water heaters supplying kitchens used for the bulk preparation of food.
- Water heaters set to 65°C or higher.
- Water heaters used in commercial or industrial processes.
- Any application that uses Rinnai water heaters in conjunction with storage tanks.
- Any application that uses Rinnai water heaters in conjunction with a flow / return system.
- Water heaters installed as components of centralised bulk hot water systems.

Rinnai units used in Commercial Situations are only subject to a 1 year warranty across the board.

No Rinnai warranty will cover damage/ faults arising from moving or storing the unit; improper installation or gas supply; water contaminants beyond defined limits; environmental factors; plumbing fittings, or other outside influences of which Rinnai is not responsible. Service calls for these issues will be chargeable.

The unit must be serviced annually to validate the warranty.

The warranty period begins on customer's date of purchase.

Description	pH	Total Dissolved Solids (TDS)	Total Hardness	Chlorides	Magnesium	Calcium	Sodium	Iron
Maximum Recommended Levels	6.5 - 9.0	600 mg/litre	150 mg/litre	300 mg/litre	10 mg/litre	20 mg/litre	150 mg/litre	1 mg/litre

UK WARRANTY

WHAT IS COVERED?

This Warranty covers any defects in materials or workmanship when the product is installed and operated according to Rinnai installation instructions, subject to the terms within this limited warranty document. This Warranty applies only to products that are installed by a registered gas engineer. Improper installation may void this Warranty. This Warranty extends to the original purchaser and subsequent owners, but only while the product remains at the site of the original installation. This Warranty only extends through the first installation of the product and terminates if the product is moved or reinstalled at a new location.

WHAT WILL RINNAI DO?

Rinnai will repair or replace the product or any part or component that is defective in materials or workmanship, except as set forth below: All repairs must be performed using genuine Rinnai parts. All repairs or replacements must be performed by a registered gas engineer. Replacement of the product or replacement of the heat exchanger may only be authorised by Rinnai. Rinnai does not authorise any person or company to assume for it any obligation or liability in connection with the replacement of a product or heat exchanger. If Rinnai determines that repair of a product is not possible, Rinnai will replace the product with a comparable product, at Rinnai's discretion. If a component or product returned to Rinnai is found to be free of defects in material or workmanship, or damaged by improper installation the warranty claim may be denied.

HOW DO I GET SERVICE?

Contact your supplier or Rinnai UK.

Proof of date of purchase is required to obtain warranty service. You can show proof of purchase with a dated invoice or by completing and returning the enclosed Warranty registration card.

Receipt of warranty registration by Rinnai will constitute proof-of-purchase for this product. However, Warranty registration is not necessary in order to validate this Warranty.

WHAT IS NOT COVERED?

This Warranty does not cover any failures or operating difficulties due to accident, abuse, misuse, alteration, misapplication, acts of God, improper installation, improper maintenance or service, inadequate water quality, scale buildup, freeze damage or for any other causes other than defects in materials or workmanship. This warranty does not apply to any product whose serial number or manufacture date has been defaced.

This Warranty does not cover any product when used as a pool or spa heater.

Rinnai is not liable for any special, incidental, indirect or consequential damages that may arise, including damage to person or property, loss of use, failure to install drain pan under unit, or inconvenience.

This warranty does not effect your statutory rights as defined in the UK.

CONTACT

Rinnai UK LTD.

9 Christleton Court

Manor Park

Runcorn

Cheshire

WA7 1ST

Tel. 01928 531870

Fax. 01928 531880

E-mail. info@rinnaiuk.com

Web. www.rinnaiuk.com

HEATER DETAILS

Model Number _____

Serial Number _____

Date of Purchase _____

