State Domestic Balanced Flued Storage Water Heater Models PRV 40 & 50 N/PODS and SR8 40 & 50 N/PADS

Manual

INSTALLATION
MAINTENANCE
USER INSTRUCTIONS

This manual contains instructions for the installation, operation and maintenance of your gas-fired water heater for both Natural and LP Gas, for use in the UK and Eire. Read the appropriate section carefully before servicing or using the water heater. Then keep it handy for quick future reference by inserting it in the plastic envelope provided on the appliance.

⚠ WARNING

This water heater is equipped for one type of gas only. Check the data plate near the gas control valve for the correct gas. DO NOT USE THIS WATER HEATER WITH ANY GAS OTHER THAN THE ONE LISTED ON THE DATA PLATE. Failure to use the correct gas can cause problems which can result in DEATH, SERIOUS BODILY INJURY OR PROPERTY DAMAGE. If you have any questions or doubts consult your regional gas authority.

⚠ WARNING

Improper installation, adjustment, alteration, service or maintenance can cause DEATH, SERIOUS BODILY INJURY, OR PROPERTY DAMAGE. Sealed components such as gas controls must not be tampered with or attempted to be repaired.

IMPORTANT NOTICE
THIS HEATER MUST BE LEFT UNDER THE CONTROL OF THE GAS CONTROL VALVE AND THERMOSTAT AT ALL TIMES.

FOR YOUR SAFETY
IF YOU SMELL GAS:

1. Turn off Gas and open windows.
2. Don't touch electrical switches.
3. Extinguish any open flames.
4. Immediately call your local Gas Board.

FLAMMABLE VAPOURS MAY BE DRAWN BY AIR CURRENTS FROM OTHER AREAS OF THE STRUCTURE TO THIS APPLIANCE.

FOR YOUR SAFETY:
DO NOT STORE OR USE PETROL, AEROSOL OR OTHER FLAMMABLE VAPOURS AND LIQUIDS IN THE VICINITY OF THIS OR ANY OTHER ATMOSPHERIC GAS APPLIANCE.

This water heater is manufactured by:
State Industries Inc.,
500 Lindahl Parkway, Ashland City,
Tennessee, 37015, USA

184145-000
01-03

Table of Contents

General Description

The State Balanced Flued Water Heater described in this manual is a floor standing, balanced flued, direct fired storage water heater. The unit is fitted with a multi-functional gas control valve which incorporates a gas governor, thermo-electric flame supervision device and a user adjustable thermostat. Ignition is by piezo ignitor. Each storage vessel is internally lined with a vitreous enamel coating and is fitted with sacrificial magnesium anode rods to protect against tank corrosion, and a low level drain tap. The tank is insulated with a layer of CFC free foam insulation and is covered by a metal casing finished in a grey stove enameled paint with a grey trim.

The water heater is approved for fitting to an unvented, direct on mains system, and in such cases it must be installed by a "Competent Person", as laid down in Building Regulations - G3.

IMPORTANT NOTICE

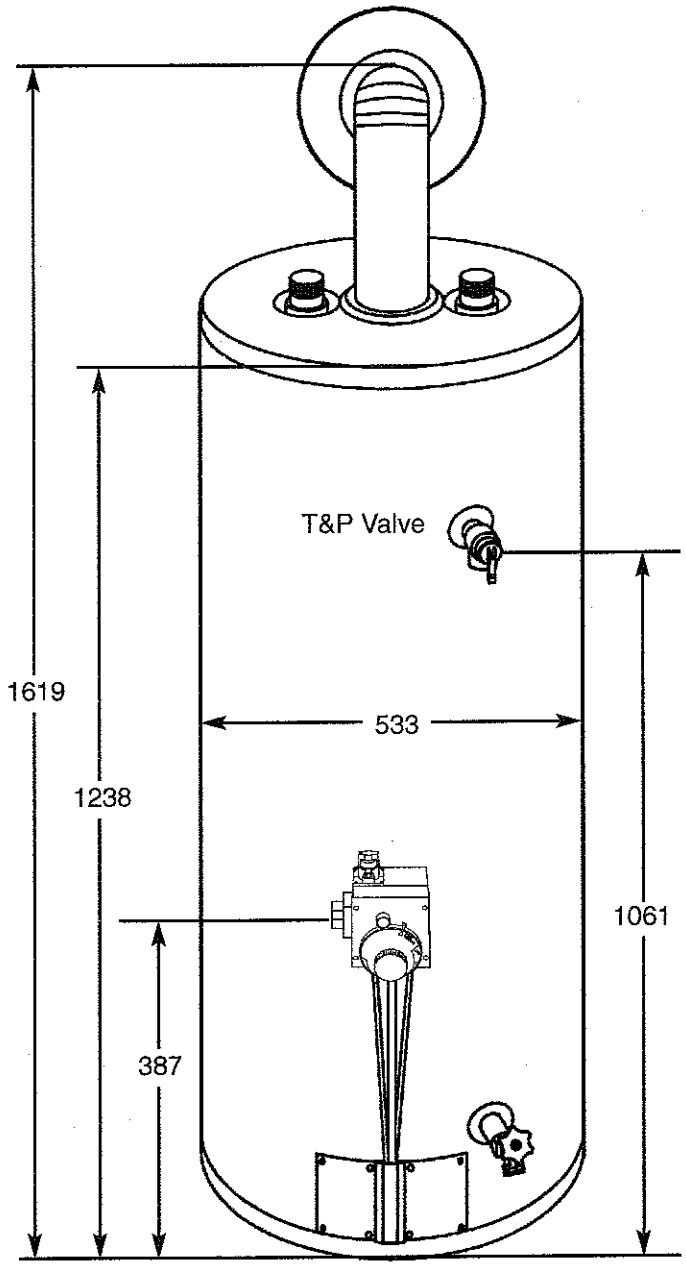
THE HEATER MUST BE LEFT UNDER THE CONTROL OF THE GAS CONTROL VALVE AND THERMOSTAT AT ALL TIMES.

The Appliances listed in this manual are a Category I Appliance of the Type C11, as classed by the Gas Appliance Directive.

Technical Data

Technical Data PRV 40 N/PODS

Continuous at 40°C temperature rise	185 litre/hr	41 UK gal/hr
Storage capacity	149 litres	33 UK gal
Weight filled	232 kg	511 lb
Time to recover storage with 44°C temperature rise	48 minutes	48 minutes
Input rate	0.98 m^3/hr	34.7 ft^3/hr
Input gross	10.54 kW	36,000 Btu/hr
Output gross	8.67 kW	29,628 Btu/hr
Maximum working head	10.3 bar	150 psig.
Minimum working head	3 metres	10 ft
Nominal gas inlet pressure (natural gas)	17.5 mbar	7 in wg
Nominal gas inlet pressure (LPG)	27.5 mbar	11 in wg
Maximum gas inlet pressure (natural gas)	35 mbar	14 in wg
Maximum gas inlet pressure (LPG)	35 mbar	14 in wg
Burner setting pressure (natural gas)	10 mbar	4 in wg
Burner setting pressure (LPG)	25 mbar	10 in wg
Injector size (natural gas)	2.7mm	
Injector size (LPG)	1.8mm	
Water connections–cold inlet –hot outlet	¾″ BSP ¾″ BSP	¾″ BSP ¾″ BSP
Open Vent	20mm	¾″ Minimum
Cold feed pipe	19mm	¾″ Minimum
Gas connection	–	½″ BSP
Shipping weight	82kg	181lbs
MINIMUM CLEARANCE All round	0mm	0″
SERVICE CLEARANCE Front Above	 610mm 1030mm	 24″ 40.5″
Safety Valve	19mm	¾″

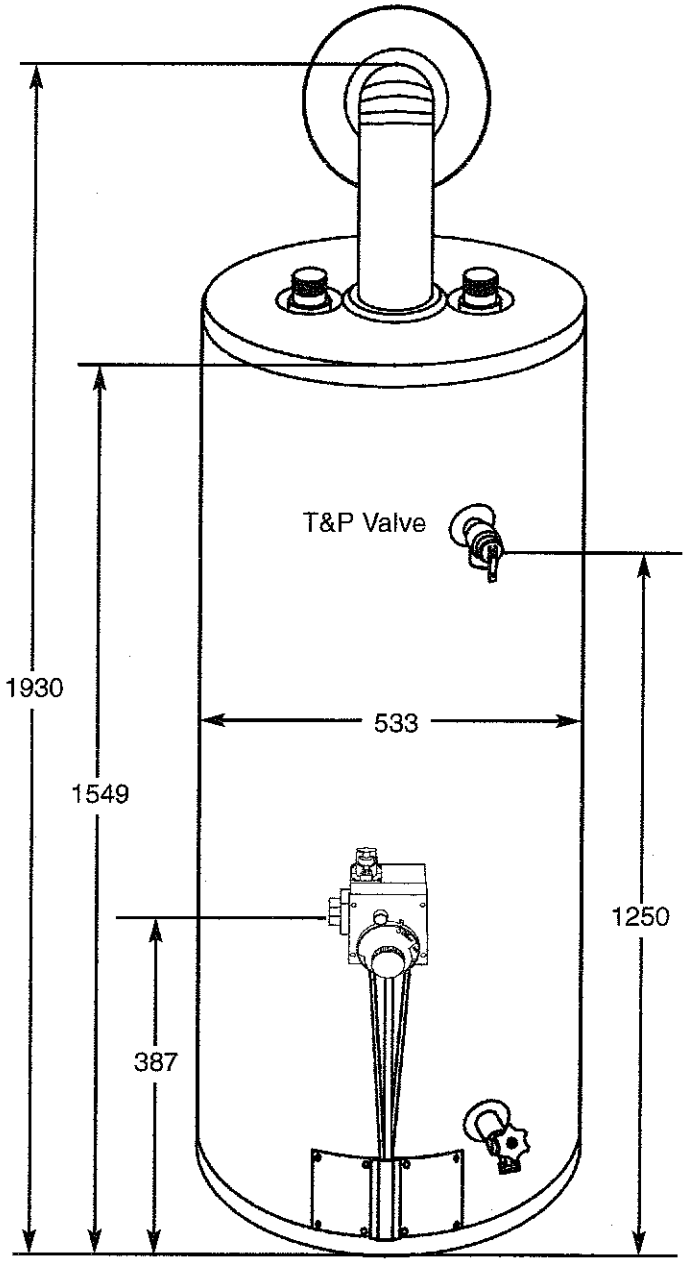


All dimensions are in mm

Technical Data

Technical Data PRV 50 N/PODS

Continuous at 40°C temperature rise	196 litre/hr	43 UK gal/hr
Storage capacity	190 litres	42 UK gal
Weight filled	286 kg	629 lb
Time to recover storage with 44°C temperature rise	58 minutes	58 minutes
Input rate	1.04 m^3/hr	36.7 ft^3/hr
Input gross	11.13 kW	38,000 Btu/hr
Output gross	9.16 kW	31,280 Btu/hr
Maximum working head	10.3 bar	150 psig.
Minimum working head	3 metres	10 ft
Nominal gas inlet pressure (natural gas)	17.5 mbar	7 in wg
Nominal gas inlet pressure (LPG)	27.5 mbar	11 in wg
Maximum gas inlet pressure (natural gas)	35 mbar	14 in wg
Maximum gas inlet pressure (LPG)	35 mbar	14 in wg
Burner setting pressure (natural gas)	10 mbar	4 in wg
Burner setting pressure (LPG)	25 mbar	10 in wg
Injector size (natural gas)	2.75mm	
Injector size (LPG)	1.8mm	
Water connections–cold inlet –hot outlet	¾" BSP ¾" BSP	¾" BSP ¾" BSP
Open Vent	20mm	¾" Minimum
Cold feed pipe	19mm	¾" Minimum
Gas connection	–	½" BSP
Shipping weight	95kg	209lbs
MINIMUM CLEARANCE All round	0mm	0"
SERVICE CLEARANCE Front Above	 610mm 1030mm	 24" 40.5"
Safety Valve	19mm	¾"

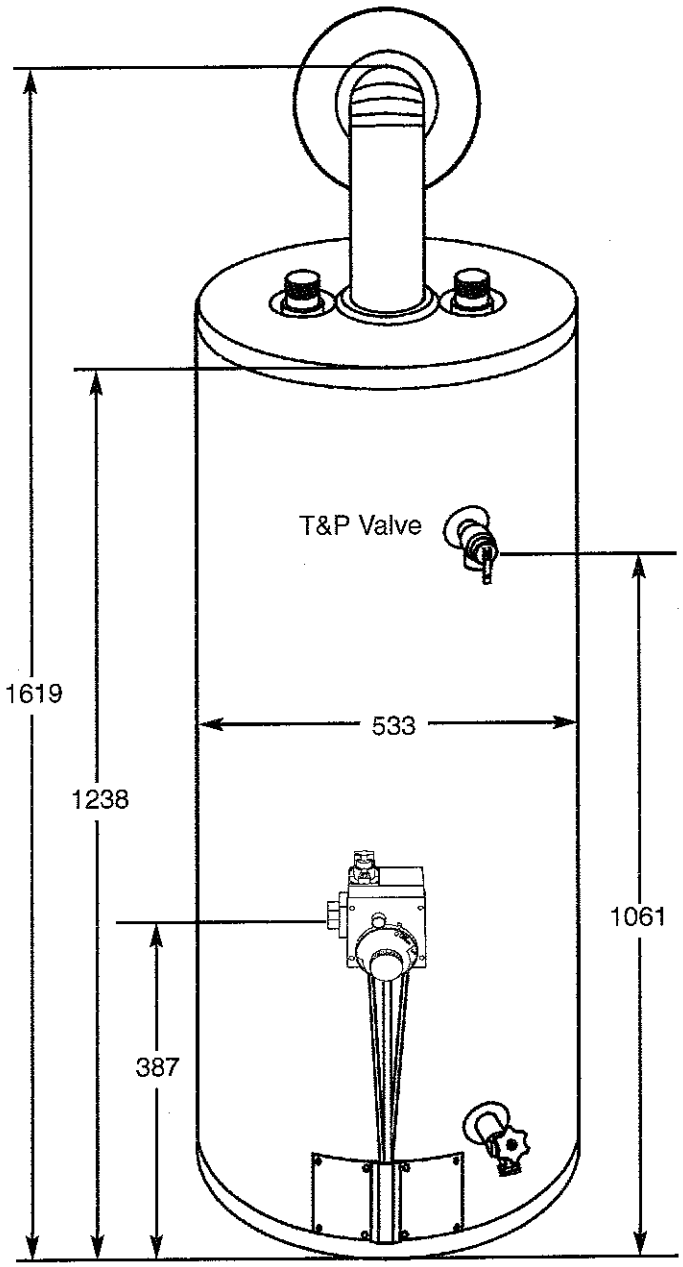


All dimensions are in mm

Technical Data

Technical Data SR8 40 N/PADS

Continuous at 40°C temperature rise	210 litre/hr	46 UK gal/hr
Storage capacity	149 litres	33 UK gal
Weight filled	232 kg	511 lb
Time to recover storage with 44°C temperature rise	42 minutes	42 minutes
Input rate	1.09 m^3/hr	38.6 ft^3/hr
Input gross	11.71 kW	40,000 Btu/hr
Output gross	9.83 kW	33,569 Btu/hr
Maximum working head	10.3 bar	150 psig.
Minimum working head	3 metres	10 ft
Nominal gas inlet pressure (natural gas)	17.5 mbar	7 in wg
Nominal gas inlet pressure (LPG)	27.5 mbar	11 in wg
Maximum gas inlet pressure (natural gas)	35 mbar	14 in wg
Maximum gas inlet pressure (LPG)	35 mbar	14 in wg
Burner setting pressure (natural gas)	10 mbar	4 in wg
Burner setting pressure (LPG)	25 mbar	10 in wg
Injector size (natural gas)	2.9mm	
Injector size (LPG)	1.9mm	
Water connections–cold inlet –hot outlet	¾″ BSP ¾″ BSP	¾″ BSP ¾″ BSP
Open Vent	20mm	¾″ Minimum
Cold feed pipe	19mm	¾″ Minimum
Gas connection	–	½″ BSP
Shipping weight	82kg	181lbs
MINIMUM CLEARANCE All round	0mm	0″
SERVICE CLEARANCE Front Above	 610mm 1030mm	 24″ 40.5″
Safety Valve	19mm	¾″

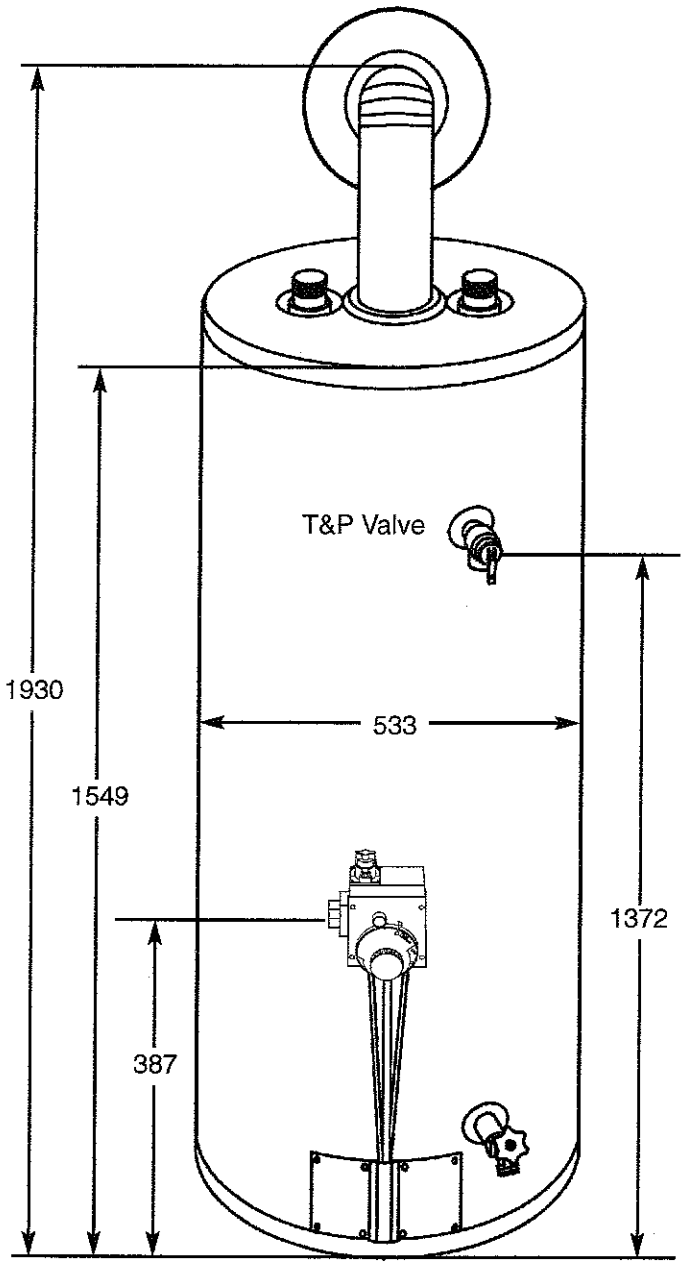


All dimensions are in mm

Technical Data

Technical Data SR8 50 N/PADS

Continuous at 40°C temperature rise – Natural Gas – LPG	231 litre/hr 213 litre/hr	51 UK gal/hr 47 UK gal/hr
Storage capacity	190 litres	42 UK gal
Weight filled	292 kg	642 lbs
Time to recover storage with 40°C temperature rise – Natural Gas – LPG	49 minutes 53 minutes	49 minutes 53 minutes
Input rate – Natural Gas – LPG	1.31 m³/hr 1.04 m/hr	46.3 ft³/hr 42.44 ft/hr
Input gross – Natural Gas – LPG	14.05 kW 12.88 kW	48,000 Btu/hr 44,000 Btu/hr
Output gross – Natural Gas – LPG	10.81 kW 9.93 kW	36,916 Btu/hr 33,910 Btu/hr
Maximum working head	10.3 bar	150 psig.
Minimum working head	3 metres	10 ft
Nominal gas inlet pressure (natural gas)	17.5 mbar	7 in wg
Nominal gas inlet pressure (LPG)	27.5 mbar	11 in wg
Maximum gas inlet pressure (natural gas)	35 mbar	14 in wg
Maximum gas inlet pressure (LPG)	35 mbar	14 in wg
Burner setting pressure (natural gas)	10 mbar	4 in wg
Burner setting pressure (LPG)	25 mbar	10 in wg
Injector size (natural gas)	3.1mm	
Injector size (LPG)	1.9mm	
Water connections–cold inlet –hot outlet	¾" BSP ¾" BSP	¾" BSP ¾" BSP
Open Vent	20mm	¾" Minimum
Cold feed pipe	19mm	¾" Minimum
Gas connection	–	½" BSP
Shipping weight	101kg	222lbs
MINIMUM CLEARANCE All round	0mm	0"
SERVICE CLEARANCE Front Above	610mm 1030mm	24" 40.5"
Safety Valve	19mm	¾"



All dimensions are in mm

Installation

Related Documents

The installation of the storage water heater must be in accordance with the relevant requirements of the Gas Safety (Installation and Use) Regulations: 1984 and Byelaws of the local water Authority, the Model Water Byelaws and the Building Regulations.

Also, it should be in accordance with any relevant requirements of the Local Authority, the local Gas Region, and the requirements of the following British Standard Codes of Practice:

BS 5540: Part 1	*Flues for Gas Appliances up to 60 kw*
BS 5440: Part 2	*Air Supply For Gas Appliances up to 60 kw*
BS 5546	*Installation of Gas Hot Water Supplies for Domestic Purposes (2nd Family Gases).*
BS 6700	*Design, Installation, Testing and Maintenance of services supplying water for Domestic use within buildings and their curtilages*
BS 7200	*Unvented Hot Water Storage Units and packages*

It is the law that all gas appliances are installed and serviced by competent persons in accordance with the above regulations. It is in your own interest and that of safety to ensure that the law is complied with.

Location

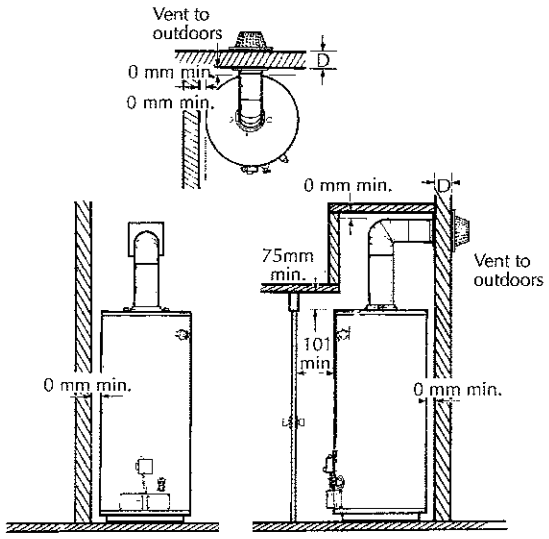
The location of the storage water heater must permit a satisfactory flue and an adequate air supply. The location must also provide the minimum clearances for servicing and air circulation around the water heater. The water heater must not be installed in a bedroom, bed sitting room, or a room containing a bath or shower. The floor on which the heater is installed must be flat, level, and of sufficient load bearing capacity to support the weight of the filled water heater with allowance for the weight of additional pipework bearing on the appliance.

A clearance of 610 mm should be accessible at the front of the heater for removal of the burner assembly and 1030 mm above the heater for removal of the flue baffle and anode rod. Minimum clearances at the sides and rear of the heater should be 0 mm.

The location selected should be as centralized with the piping system as possible. It should be located in an area not subject to freezing temperatures.

The water heater must not be installed on carpeting. Carpeting must be protected by a suitable panel beneath the appliance extending beyond the full width and depth of the appliance by at least 75 mm in any direction.

Any combustible material adjacent to the heater must be so placed or shielded as to ensure that its temperature does not exceed 65°C.

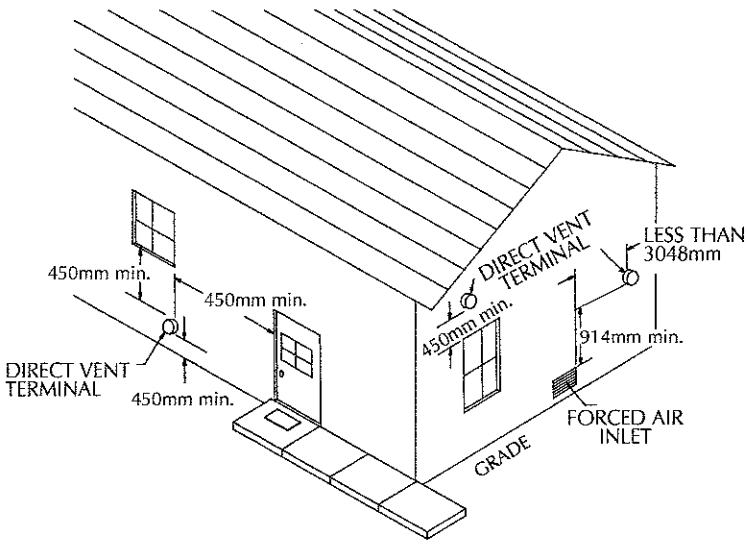


Flueing Requirements

When determining the installation location for a balanced flued water heater, snow accumulation and drifting should be considered in areas where applicable.

Flue Clearances

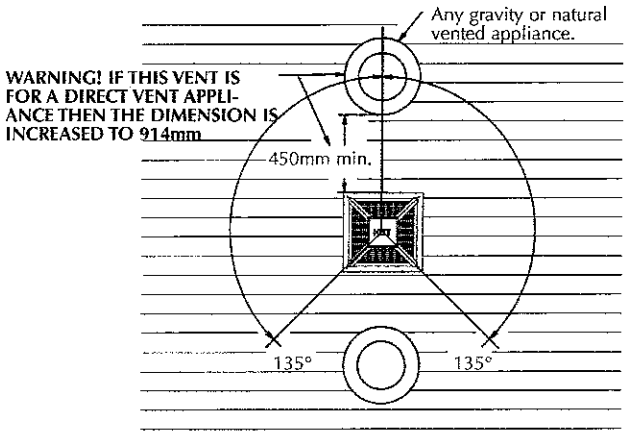
The centre line of the water heater flue must be at least 450 mm in all directions from windows or other openings in the installation structure. This will lessen the likelihood of the water heater flue gases entering an occupied room.



Installation (cont'd)

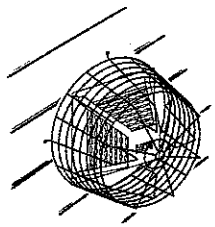
Flue Clearances

The centre line of the water heater flue must be located at least 914 mm from all other flues.



Optional Wire Grill

Where the flue terminal is less than 2 meters from ground level, it must be protected by a suitable wire mesh grille, which is available from the water heater manufacturer.

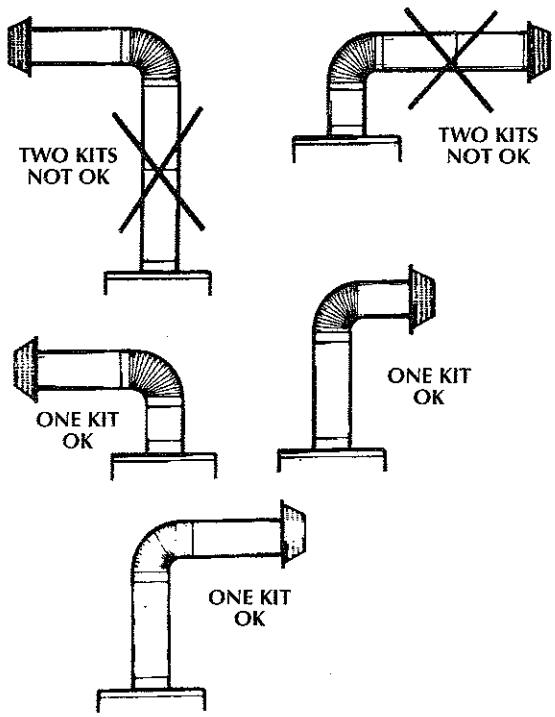


Flue Extensions

There are two optional extension kits available. Any combination of the two kits can be chosen; however, only one kit can be used vertically or horizontally.

Unless otherwise specified at the time of ordering, a standard extension kit (9001246) is individually packaged and shipped within the water heater carton.

POSSIBLE EXTENSION COMBINATIONS



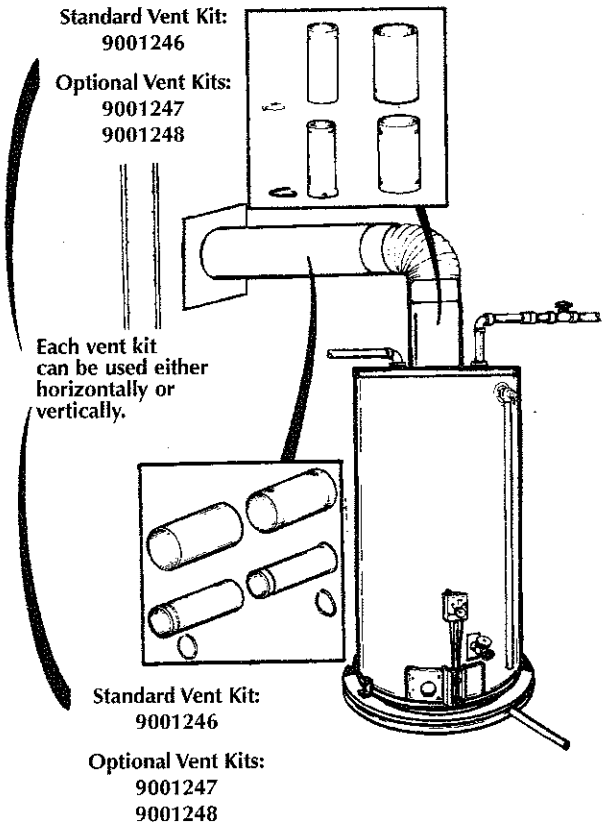
WARNING

At no time can more than one Vertical and or one Horizontal Flue Kit be used.

Installation (cont'd)

VERTICAL (EXTENSION KIT) HEIGHT

It is simple to determine which kit is needed for vertical height. Take the total height (to the top of the flue) required and comparing that to "F dim." in chart 1. It can be determined which kit needs to be used vertically.



WARNING

Failure to have required clearances between flue piping and combustible material will result in a fire hazard.

WARNING

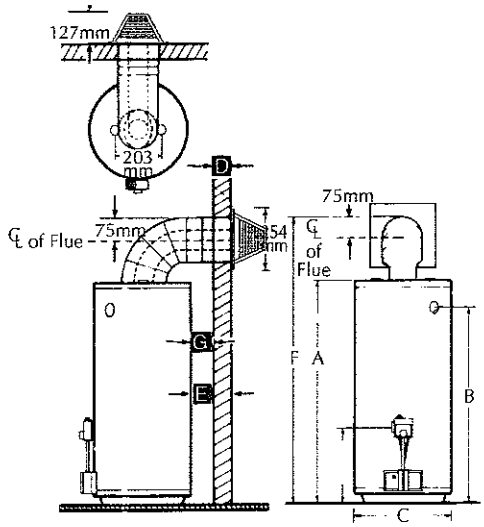
Obstructions and deteriorated flue systems may present serious health risk or asphyxiation.

HORIZONTAL (EXTENSION KIT)

To determine the horizontal length and extension kit needed, simply put the dimensions "D" and "G" into the equation below. The answer "E" should then be located in chart #2. The size range in which "E" dimension falls indicates the kit that should be used horizontally to obtain the desired length.

"D" = The wall thickness
"G" = The distance wanted between the edge of the water heater and the **inside** edge of the wall
"E" = The distance the extension kit must be able to extend

The Equation D + G = E



DIMENSIONS OF VERTICAL EXTENSION KITS

CHART #1

MODEL NUMBER	F DIMENSION					
	9001246 STD.		9001247		9001248	
	MIN	MAX	MIN	MAX	MIN	MAX
PRV 40 NODS	1829	1956	1956	2235	2235	2794
PRV 50 NODS	2040	2167	2167	2459	2459	3018
SR8 40 NADS	1829	1956	1956	2235	2235	2794
SR8 50 NADS	2140	2267	2267	2559	2559	3118

DIMENSIONS OF HORIZONTAL EXTENSION KITS

CHART #2

EXTENSION KITS	E DIMENSION	
	MINIMUM	MAXIMUM
9001246	254	394
9001247	394	673
9001248	673	1220

DIMENSIONS

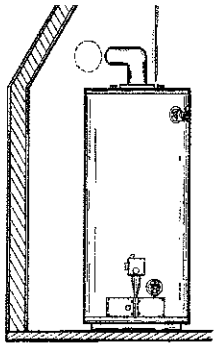
MODEL NUMBER	A	B	C
PRV 40 NODS	1245	1060	533
PRV 50 NODS	1467	1283	533
SR8 40 NADS	1245	1060	533
SR8 50 NADS	1549	1372	533

Flue Extensions (cont'd)

CUTTING THE OPENING THROUGH THE OUTSIDE WALL

After thoroughly reading the "Locating the New Water Heater" section of this manual and you have chosen a suitable water heater installation site, use the chart below to determine dimensions for the opening in the wall.

Cut a 160mm diameter hole completely through the outside wall.



WATER HEATER ATTITUDE

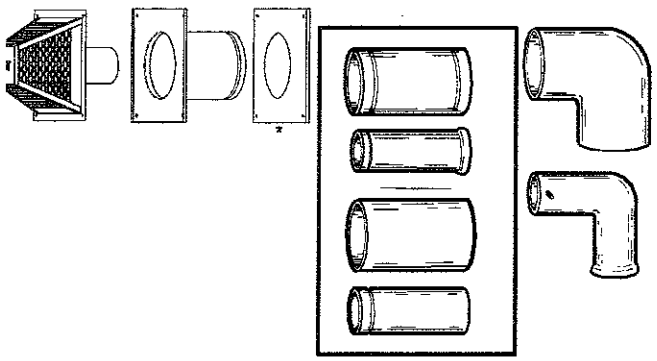
There is a certain amount of variance with regard to the direction the water heater faces.

Standing in front of the water heater (gas control facing you), set the 75mm diameter elbow (slotted end) on the flue. This will give you a better understanding of the relation of the flue assembly to the opening in the wall and more importantly any possibly of interference of flueing and water piping.

The direction of the water heater can now be made. Also consider the gas control valve to insure installation, lighting, and maintenance accessibility are retained.

Standard and Optional Flue Kit Installation

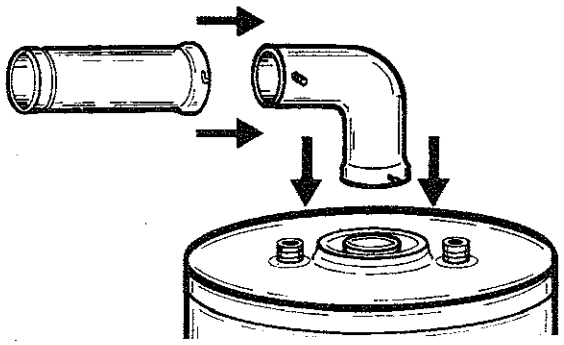
Standard Flue Kit 9001246
Optional Flue Kits 9001247
and 9001248



* Each part is stamped with a part number

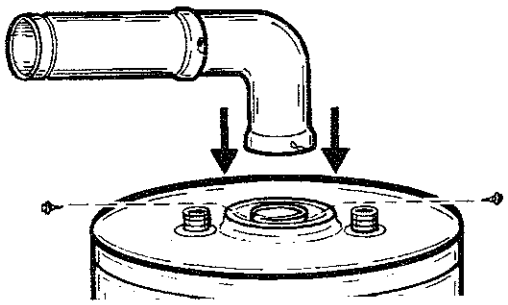
The opening through the wall should be cut at this time. If it hasn't been, refer back to that section.

1. Lock the elbow to the straight 75mm flue pipe. Set this assembly in place on the end of the water heater's flue collar.

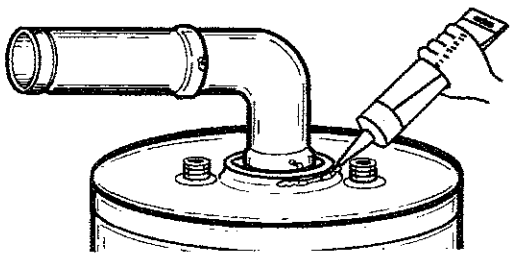


2. Mark the flue collar at the slots in the elbow. Using a 3mm drill bit, drill holes into the flue collar at the two slots and secure the elbow to the flue collar using the screws provided.

   NOTE: Make sure elbow is properly aligned to opening in the outside wall.

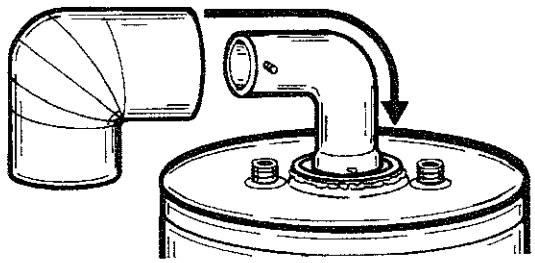


3. Using the tube of sealant supplied, run an ample amount around the oval flare of the jacket.

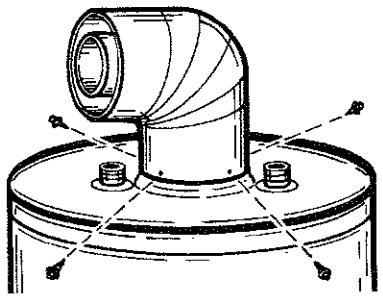


Standard and Optional Flue Kit Installation (cont'd)

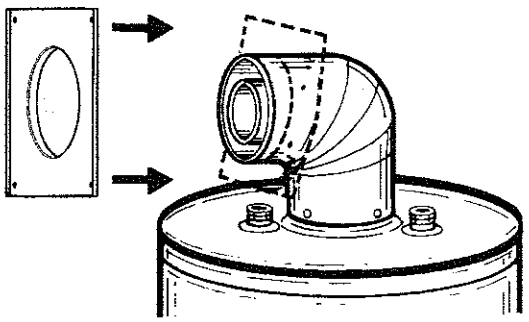
4. First remove the 75mm horizontal extension from the elbow. Starting with the long end (with four securing holes), place the 150mm diameter flue elbow over the 75mm diameter elbow. Bend the round end "oval" to fit the flared oval end of the jacket top.



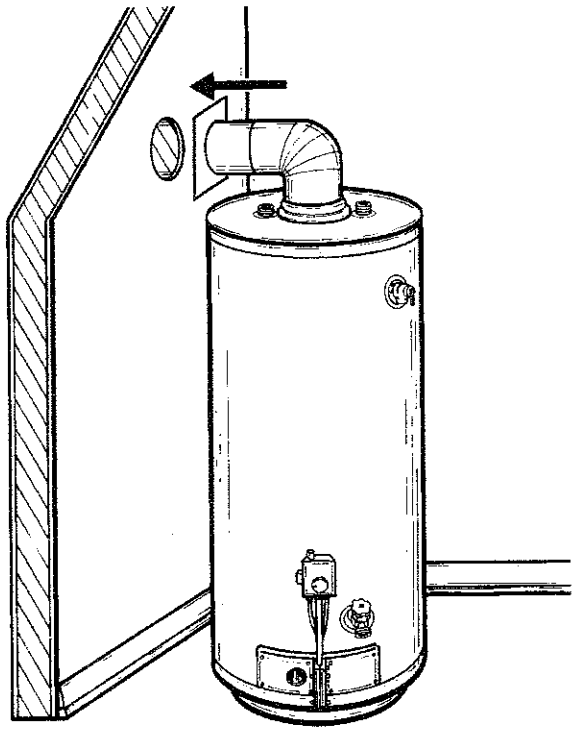
5. Making sure the 150mm diameter elbow is centered around the 75mm diameter flue, secure the 150mm diameter flue pipe using four sheet metal screws at the connection of the jacket top.



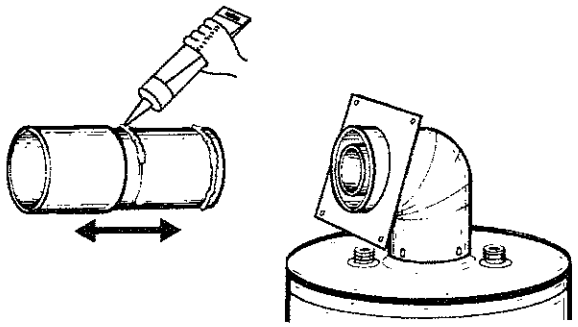
6. Slide the flue collar (to be installed later) over the 150mm flue elbow.



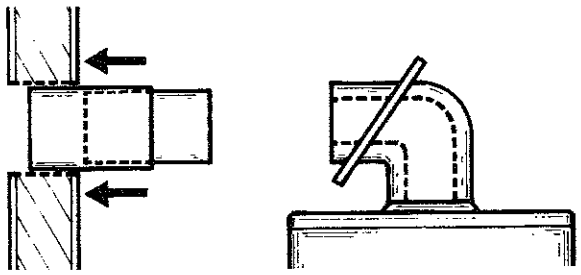
7. Place the water heater at the opening in the wall, at the predetermined clearance.



8. Slide the 150mm telescoping flue section apart to reveal the beads.
NOTE: The section of 150mm pipe with beads will connect to the elbow. Using the caulking supplied, fill the beads.

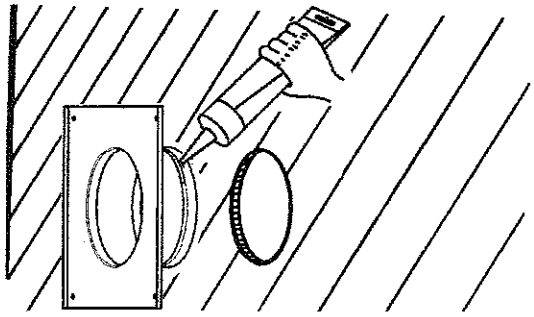


9. Insert the 150mm telescoping flue section into the wall.

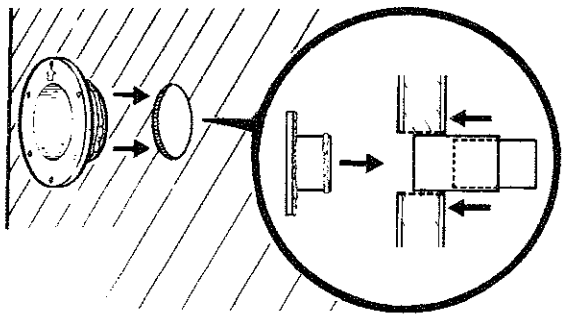


Standard and Optional Flue Kit Installation (cont'd)

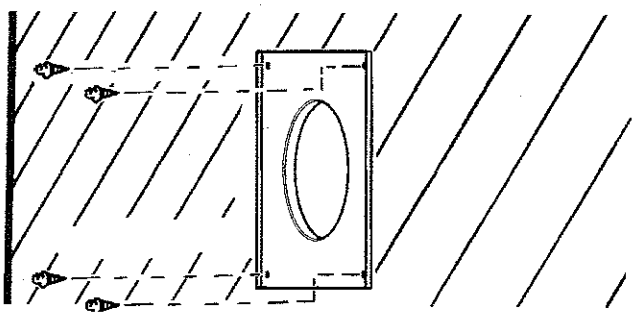
10. Move outdoors with all the remaining flue parts. Using the tube of sealant supplied, run an ample amount on the inside surface of the collar assembly that will contact the exterior wall and also fill the bead on the end of the 150mm diameter flue collar.



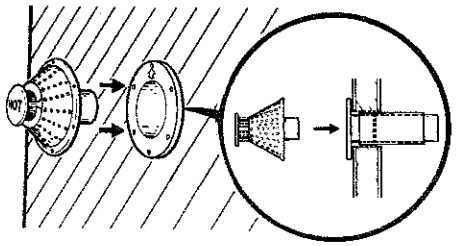
11. Making sure the arrow points "UP", install the flue collar assembly through the wall, connecting it to the 150mm telescoping extension. Remember, the extension is not connected yet, and it may be necessary to go back indoors and push it back up for a tight fit to the collar.



12. We have supplied 3 wood screws to attach the collar to the exterior wall of the building. However, other types of screws may have to be substituted depending on the construction of the exterior wall.
NOTE: Alternate screws used must not have heads larger than 9.5mm.
The three screws must be placed at every other hole (120° apart) to secure the flue collar assembly to the outside wall.

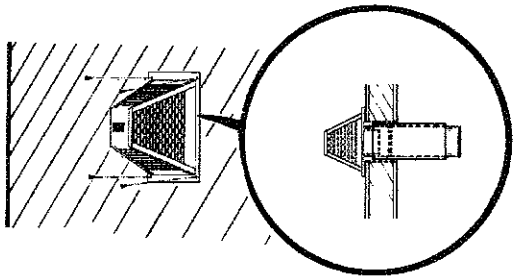


13. Place the flue cap in the flue collar assembly.



14. The flue cap has 6 holes around its outer edge. The three larger ones are to accommodate the 3 screws securing the flue collar assembly to the exterior wall. The three smaller ones will now be used to attach the flue cap assembly.

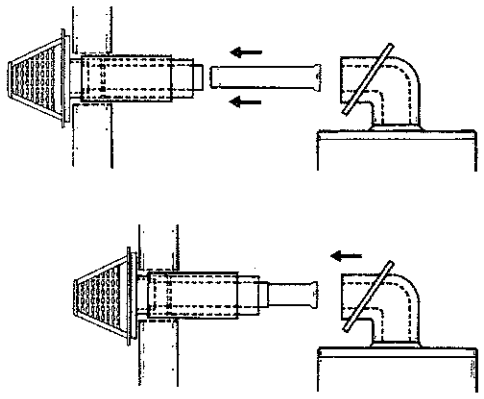
NOTE: Again screws are supplied; however, substitution may be necessary depending on the exterior wall material.



15. Move indoors to complete the assembly process.

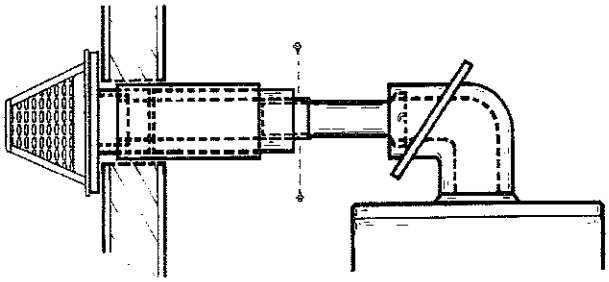
16. Collapse the 150mm flue extension assembly as shown below and install the 75mm extension by first slipping the end with the O-ring approximately 31-75mm into the end of the flue cap. Lock the other end of the 75mm extension to the studs in the elbow.

NOTE: To facilitate ease of assembly of the flue cap to the 75mm pipe, a soap solution can be applied to the O-ring gasket.

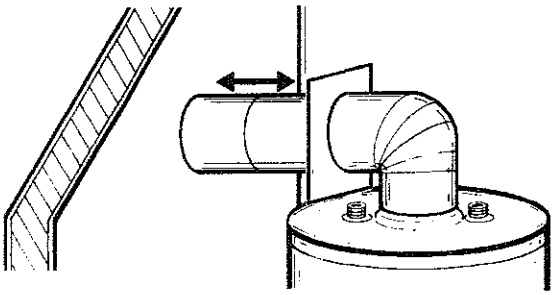


Installation (cont'd)

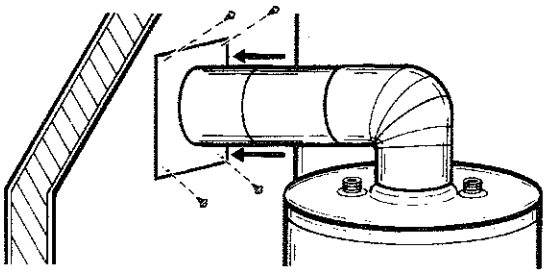
17. Using a 3mm drill bit, drill holes 180° apart at the connection point of the two 75mm flue extensions. Then using 2 screws provided, lock these pipes together.



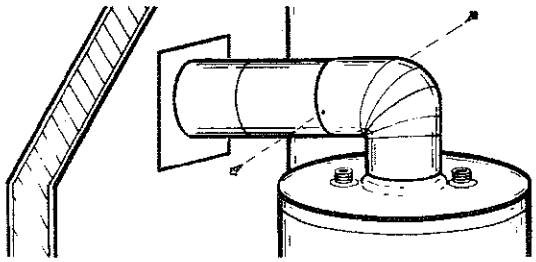
18. Now the 150mm flue extension pipes can be expanded to connect at the flue elbow.



19. Pull the flue collar from the elbow to be against the wall and secure it using the screws provided.

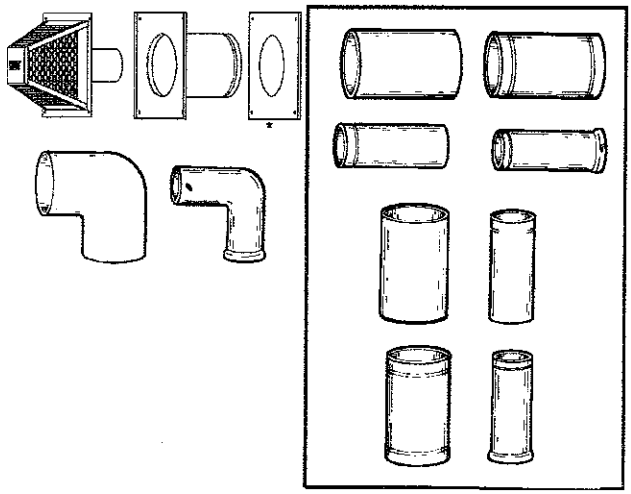


20. Lock the 150mm flue extension to the flue elbow by using two screws provided, placing them 180° apart.



Standard or Optional Vertical Flue Kit with Horizontal Flue Kit

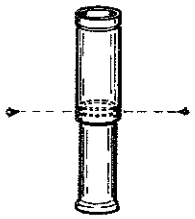
Any Two Standard or Optional Flue Kits



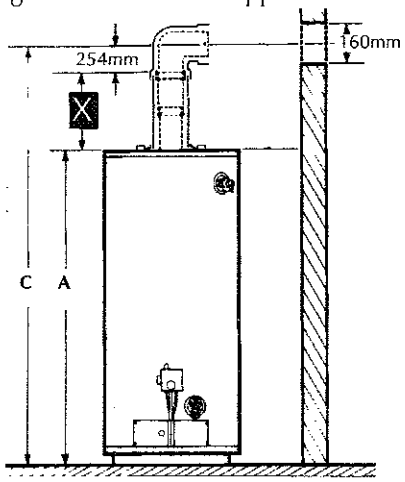
* Each part is stamped with a part number

The opening through the wall should be cut at this time. If it hasn't been, refer back to that section.

1. First it must be determined how far the vertical (75mm dia.) telescoping flue sections are set and locked together using the two screws supplied as shown below.



Use the chart, drawing and simple equation below to find the length of expansion of the telescoping flue sections. Because of manufacturing tolerances, place the telescoping extension on the water heater and adjust the height ("X" Dimension) and mark the point. Once the length has been determined, lock the two sections together by drilling two holes (180° apart) in the pipe and securing with the screws supplied.

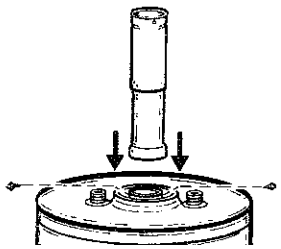


C - A - 254mm = X

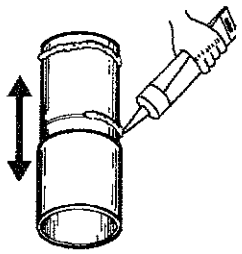
MODEL NUMBER	A
PRV 40 NODS	1245
PRV 50 NODS	1467
SR8 40 NADS	1238
SR8 50 NADS	1549

***See models and rating plate attached to the water heater for specific model number and other detailed information.**

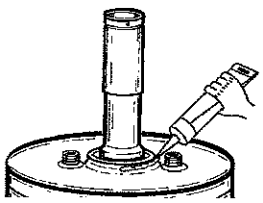
2. Set the vertical (75mm dia.) telescoping flue section in place on the flue collar. Using a 3mm drill bit, drill two holes (180° apart) and screw the vertical assembly to the flue collar.



3. Slide the 150mm flue telescoping section apart to reveal the beads. Using the caulking supplied, fill the beads.

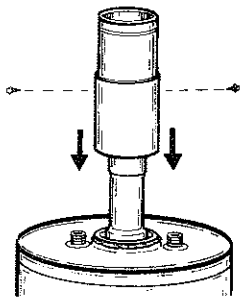


4. Using the tube of sealant supplied, run an ample amount around the oval flare of the jacket.

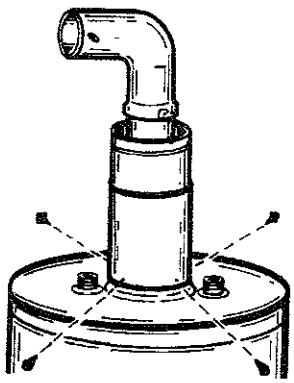


Installation (cont'd)

5. Place the 150mm flue section over the 75mm flue section. Subtract 20mm from the X dimension used earlier and this gives the length of the 150mm flue extension. Slide the 150mm flue extension apart to this dimension and lock it together using the two screws supplied.

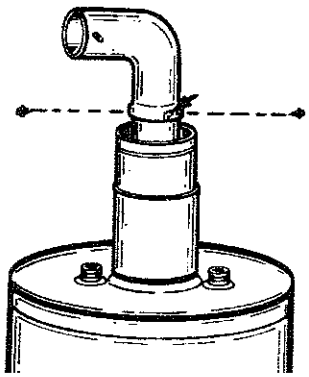


6. Bend the round end of the 150mm flue extension oval at the jacket tip and secure it using four sheet metal screws.

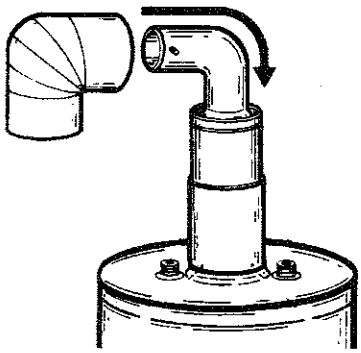


7. Place the 75mm elbow on the flue extension.
NOTE: Make sure elbow is properly aligned to opening in the outside wall.

   Mark the 75mm dia. end of the flue extension at the slots in the elbow. Using a 3mm drill bit, drill holes into the flue extension at the two slots and secure the elbow to the flue extension using the screws provided



8. Making sure the 150mm diameter elbow is centered around the 75mm diameter flue, secure the 150mm diameter flue pipe using two sheet metal screws at the connection of the elbow and 150mm vertical extension.



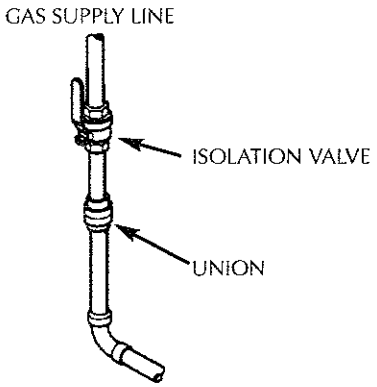
9. Follow steps 6 through to 20 of the Standard and Optional Flue Kit installation to complete the flue assembly.

Gas Meter

The gas piping to the water heater is connected to a gas meter by the local Gas Region or the local Gas Regional contractor. An existing gas meter and service should be checked preferably by the local Gas Region to ensure that the meter is adequate to deal with the additional rate of gas supply required.

Gas Piping

Installation of the gas supply pipes should be in accordance with BS 6891. A gas line of sufficient size should be run to the water heater. Make sure the gas supplied is of the same type as listed on the data badge.



There must be:

- A readily accessible and clearly identified manual isolation valve in the gas supply in accordance with the Gas Safety (Installation and Use) Regulations: 1984
- A ground joint union between the manual isolation valve and the appliance control valve to permit servicing on the water heater.

To prevent damage, care must be taken not to allow the torque to be applied across the gas control when attaching the gas supply pipe to the control valve inlet.

Before commissioning the heater, the installation pipes must be tested for soundness and purged, see BS 6891. When the gas line is tested, it should be disconnected from the gas control valve on the heater and capped. If the gas control is subjected to pressures in excess of 35 m bar (14 in WG), the damage to the gas valve could result in an extremely hazardous condition. The manufacturer of the water heater will not be liable either direct or contingent for incidental or consequential damages in the event these instructions are not followed.

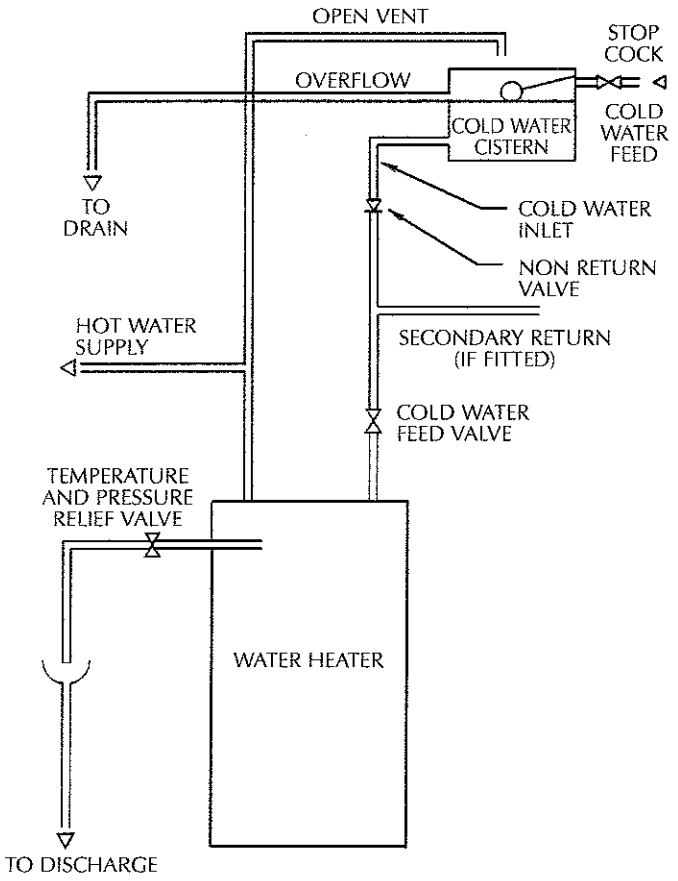
CORRECT GAS PIPE DIAMETER (Inches) FOR WATER HEATERS OPERATING ON NATURAL GAS

Total Input	Distance from Meter, In Metres (Feet)						
kw (BTU/h)	9 (30)	18 (60)	27 (90)	36 (120)	46 (150)	55 (180)	64 (210)
19 (65,000)	½	¾	¾	¾	1	1	1
22 (75,100)	¾	1	1	1	1¼	1¼	1¼
44 (150,000)	¾	1	1	1	1¼	1¼	1¼
59 (200,000)	1	1¼	1¼	1¼	1¼	1¼	1¼

Water Connections

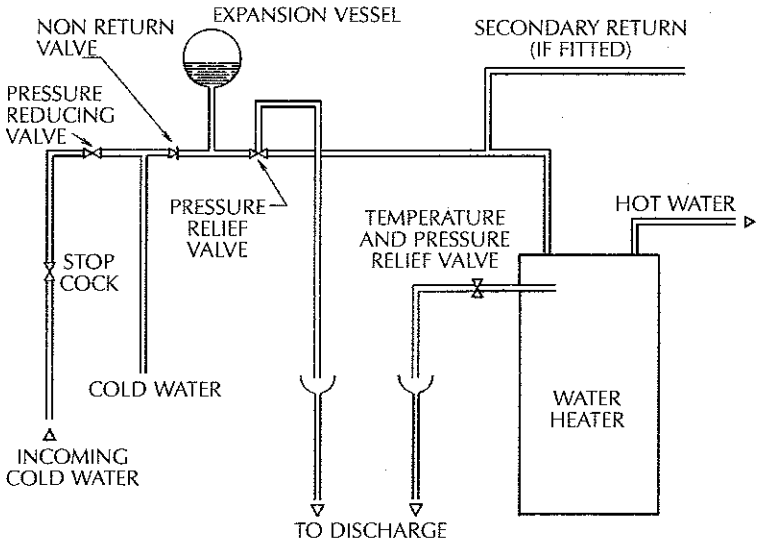
Detailed recommendations for the water system are given in BS 5546 and 6700. The following notes are of particular importance:

- The water heater should be fitted to an open vent system or an unvented system.
- In an open system, the cistern should be fitted with a stop valve and its capacity should be in accordance with the local water byelaws and in addition must always be greater than the hourly recovery of the heater. (See Technical Data Sheet for Recovery Rate)
- It is recommended that copper tubing, complying with BS 2871: Part 1 is used for water carrying pipework.
- All pipes must be supported as shown in BS 6700.
- All pipework situated in areas which may be exposed to freezing conditions should be insulated.
- Drainage taps must be located in accessible positions which will permit the draining of the whole system. Draining taps should be at least ½" nominal size and be in accordance with BS 2879.



- **The Open Vent** must be connected, normally from the top of the flow pipe of the heater, rising continuously to discharge over the cold feed cistern. Its size must not be less than that specified in the Technical Data Table. It must not be valved and must be insulated along any part where freezing may occur.
- **The Cold Feed Pipe** should be valved as shown and not be less than the size specified in the Technical Data table.
- Dead legs of hot water pipes to draw off points should be as short as possible and should not exceed the lengths laid down in BS 5546.
- If lengths required are greater than those mentioned, a return circuit must be fitted.

On **Unvented** systems, the equipment must be approved to BS 7206, and must be installed toe the manufacturers recommendations. It must also be installed by a "Competent Person", as laid down in the Building Regulations – G3.



When an installation is of the **Unvented** type, the following points must be borne in mind:-

1. The maximum water supply pressure to the pressure reducing valve is 12 bar.
2. The Expansion Vessel charge pressure must be 3.5 bar.
3. The pressure setting on the Expansion Valve must be 6.0 bar.
4. The set opening pressure and temperature of the T & P Valve is 7.0 bar and 95°C respectively.
5. No valve must be fitted between the Expansion Valve and the Water Heater.

Water Treatment

The use of water softening equipment is strongly recommended in all cases where conditions of high or extreme water hardness exist.

When a water treatment plant (water softener) is used in conjunction with State water heaters, it is recommended that the total hardness be reduced to 50-85 mg/l.

High water temperatures generally cause an increase in corrosion and scale forming activity; waters below 60°C scale and corrode less, thus, it is desirable to keep the water temperature as low as possible.

IMPORTANT NOTICE

Warranty on this water heater will not be valid if lime or scale deposits are allowed to accumulate causing failure of the tank due to restricted heat transfer. IN HARD WATER AREAS, CLEANING MUST BE PERFORMED AT LEAST AS OFTEN AS EVERY 90 DAYS. Failure to keep accurate records of dates of each cleaning will constitute lack of proper maintenance and void the warranty.

Temperature and Pressure Relief Valve

For protection against excessive pressures and temperatures in this water heater, a combined temperature/pressure relief valve has been installed. This valve conforms to BS 6238: Part 2: *Safety and Control devices for use in hot water systems - specification for combined temperature and pressure relief valves for pressures from 1 bar to 10 bar.* The valve is marked with the maximum set pressure not to exceed the hydrostatic working pressure of the water heater - 10 bar (150 psi).

The discharge pipe must be fitted with a tundish, with the tundish fitted as close to the valve as possible, but must be within 500 mm of the valve.

The discharge pipe from the tundish should be terminated outside of the building, in a safe place where there is no risk to persons in the vicinity of the discharge, be of metal, and:

a. be at least one pipe size larger than the nominal outlet size of the valve unless its total equivalent hydrostatic resistance exceeds that of a straight pipe 9 meters long. Bends must be taken into account in calculating the flow resistance.

b. have a vertical section of pipe at least 300 mm long below the tundish before any elbows or bends in the pipework.

c. be installed with a continuous fall.

d. have discharges visible at both the tundish and the final point of discharge, but where this is not practical or possible, there should be clear visibility at one or other of these discharges.

NOTE: The discharge will consist of scalding water and possibly steam. Asphalt, roofing felt and non-metallic rainwater goods may be damaged by such discharges

The relief valve should be manually operated at least once a year. Caution should be taken to ensure that:

1. No one is in front of or around the outlet of the valve discharge pipe, and

2. That the water manually discharged will not cause any damage to property.

Commissioning and Testing

Water Installation

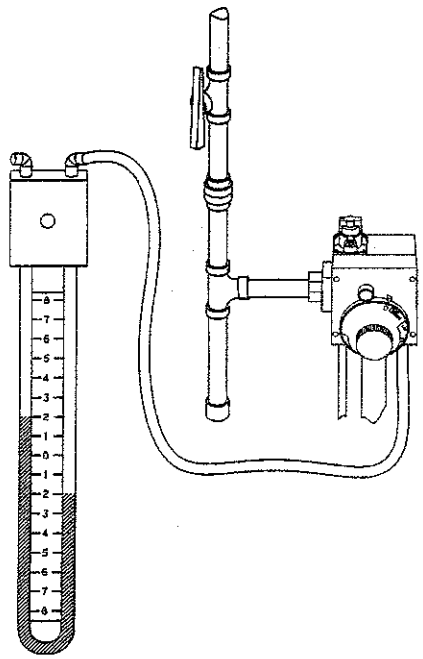
The entire system should be flushed out with cold water with all valves open. Close all hot taps. Ensure the system is filled and clear of any air locks by checking at the hot taps. Check the whole installation for water soundness and for proper operation of the feed cistern, when fitted. Repair any leaks.

Gas Installation

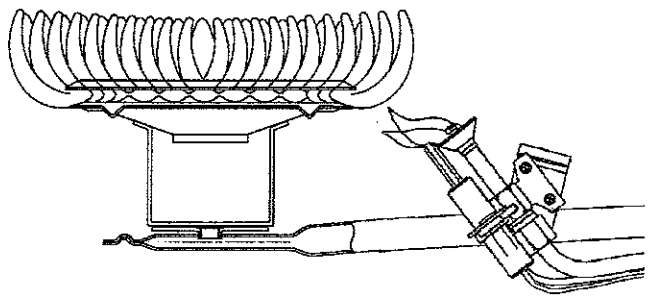
Check the whole of the pipe work, including the meter, for gas soundness and purge thoroughly - as per BS 6891. Test for gas soundness round the control and fitting of the water heater with leak detection fluid or other material suitable for the purpose, when the heater is in operation.

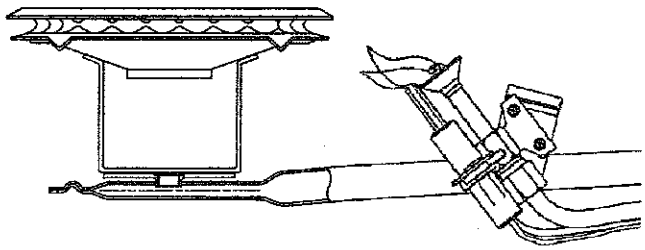
After the flame has been established at the main burner, the following points must be checked:

A. Turn the thermostat to the highest setting and check the burner setting pressure (see Technical Data Table) at the test point. A test point is situated on the bottom of the gas valve, in front of the pilot tube connection. To measure the pressure of the burner, the plug must be removed and a test nipple needs to be fitted in its place.



B. Check the pilot flame by looking through the sight glass located in the left hand outer door. The correct flame picture of the pilot flame is blue in colour and 28mm long. The flame should envelope the thermocouple tip.





C. Allow the water system to warm up and check for water soundness and general operation of the system.

D. Check the operation of the flame failure device to ensure that it closes off the gas to the burner assembly within a maximum period of 50 seconds. Have the main burner alight for several minutes, turn off the gas and start a stop watch immediately. Time the interval prior to the closure of the valve. It is possible to hear a "click" from the valve on closure.

E. Relight the water heater as instructed.

F. Adjust the thermostat to the desired setting.

G. Hand the instructions to the user for retention. Users instruction as an aid. Also, what to do in an emergency (See p.1)

   I. That the heater should be left on continuously and only turned off for emergencies or long periods eg. holidays.

   II. Of the precautions necessary to prevent damage from frost, and scale build up.

   III. Of the importance of regular servicing by a competent person to ensure continued safe and efficient operation.

   IV. Of the heater servicing frequency ie. at least annually, and maintenance frequency of the water softening plant when fitted.

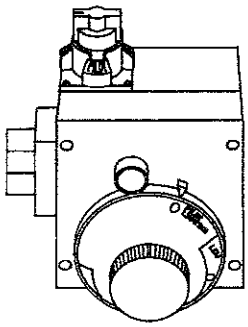
Leave this manual with the user, owner or occupier of the premises in which the appliance is installed, for reference when maintenance and servicing are undertaken. Point out the "User Instructions" at the back of the manual.

Commissioning and Testing

Temperature Regulation

The thermostat of this water heater has been factory set at its lowest position, to reduce the risk of scald injury. It is adjustable and must be reset to the desired temperature setting. The mark (▲) indicative of approximately 50°C is the preferred starting point. Some local byelaws have a requirement for a lower setting. If you need hotter water, follow directions for temperature adjustment, but beware of the warnings in this section.

Turn the water temperature dial clockwise to decrease the temperature, or counter clockwise to increase the temperature.



PILOT LIGHTING–Set here before attempting to light pilot.

▲ – Is a thermostat setting of approximately 50°C, which will supply hot water at the most economical temperatures. The temperature adjust ment knob can be turned lower than 50°C if desired.

A–Is a thermostat setting of approximately 55°C.

B–Is a thermostat setting of approximately 60°C.

C–Is a thermostat setting of approximately 65°C.

VERY HOT–Is a thermostat setting of 70°C. It is recommended that the dial be set lower whenever possible.

NOTE: Water temperature range of 50°C–60°C recommended by most dishwasher manufacturers.

⚠WARNING

Should overheating occur or the gas supply fail to shut off, turn off the manual gas control valve to the appliance.

Maintenance

Servicing Instructions

To prolong the life of the water heater, it is recommended that the unit is serviced at least once a year. The service should be carried out by a qualified service engineer.

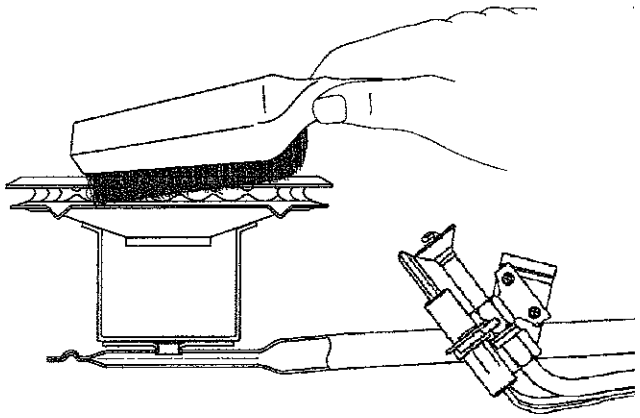
Before Commencing the service work:

1. Turn off the gas tap on the gas control valve.
2. Turn off the main gas isolation cock.
3. Turn off the cold water feed supply to the heater.
4. Open a nearby hot water outlet.
5. Attach a hose to the drain valve, and turn on and run to waste.

To Clean the Main Burner Assembly

1. Remove the outer doors by unscrewing the four retaining screws on both the right hand door and the left hand door, together with the two screws which hold the doors together.
2. Remove the inner door.
3. Unscrew the thermocouple from the gas control valve.
4. Unscrew the pilot and main burner supply fitting from the gas control valve.
5. Disconnect the piezo electrode wire from the piezo ignitor button.
6. Carefully withdraw the burner assembly by pulling straight out until clear of the combustion chamber.

7. Brush the burner flame ports with a stiff bristle brush and remove any scale from inside the burner. Care should be taken not to damage the pilot burner and piezo electrode during this operation.



8. Check the condition of the thermocouple tip and pilot burner and renew if necessary.
9. Check the pilot supply pipe for tightness at the pilot burner.
10. Clean any deposits from the pilot burner with a small brush.
11. Examine the condition of the burner and pilot injectors. To do this, disconnect the thermocouple and piezo electrode from the pilot burner. Remove the screw holding the pilot burner to the burner manifold. Remove the two screws securing the burner manifold from the burner assembly. Clean the burner injector, if necessary, with a soft cloth and wood splinter. Do not attempt to clean with a drill or metallic reamer. Blow through the pilot injector, and replace if necessary.
12. Re-assemble the manifold to the burner assembly.
13. Re-assemble the pilot burner, together with the thermocouple and piezo electrode.
14. Check the condition and operation of the control knob of the gas valve for damage. Replace the entire valve if found damaged.

To check the Anodes:

1. Remove the magnesium anode rod by unscrewing the hexagonal securing nut from the top of the tank, adjacent to the exit of the flue tube. Use a correct size socket or box spanner.
2. Replace the anode if the diameter is below 9 mm, or if more than 100 mm of the steel core rod is exposed.
3. Using the correct sized spanner or socket, refit the anode using a suitable pipe jointing compound to BS 5292 on the threads.

After the Servicing is completed:

1. Insert the burner assembly into the combustion chamber, ensuring that the end of the burner peg locates positively in the burner location slot.
2. Re-assemble burner pipe, pilot tubing and thermocouple to the underside of the gas control valve.
3. Re-connect the piezo electrode wire to the piezo ignitor button.
4. Replace the inner door by placing the top of the door into the top of the opening in the combustion chamber, then slide down the inner door until the tabs on the bottom of the door locates on the bottom of the opening in the combustion chamber.
5. Replace the outer doors, making sure all the screws are fastened securely and that the tubes passing through the top of the rubber gaskets are housed correctly.
6. Turn off the drain valve and remove the hose.
7. Turn on the cold water supply to the heater and refill, leaving a hot tap open until water is seen to run freely from the tap. Check at other taps for any air locks. Close all hot taps.
8. Turn on the main gas isolation cock.
9. Check water connection for soundness.
10. Check gas pipe work for soundness.
11. Recommission the heater as instructed.
12. Test for gas soundness, with leak detection fluid, any joints or threads broken or disturbed.

Unvented Systems:

If the water heater is fitted to unvented system, the following actions are required when the unit is serviced.

1. The pressure in the expansion vessel needs to be checked to make sure that it is at the required pressure of 3.5 bar. If the pressure is lower than this the vessel needs to be pumped back up to the correct pressure.
2. The expansion valve requires to be manually tested.
3. The temperature/pressure relief valve fitted to the water heater needs to be manually tested.
4. The line strainer in the combined pressure reducing valve/line strainer needs to be cleaned.

Maintenance

Replacement of Parts

Gas Control Valve:

1. Turn off the cold water feed valve.
2. Open a nearby hot water outlet.
3. Attach a hose to the drain valve, and turn on and run to waste.
4. Turn off the gas tap on the gas control valve.
5. Turn off the main gas isolation cock and disconnect the union.
6. Disconnect the pilot supply pipe at the compression fitting on the gas control valve.
7. Disconnect the thermocouple and move clear of the gas control valve body.
8. Disconnect the burner supply pipe at the gas control valve.
9. Unscrew the gas valve from the storage tank.
10. Unscrew the union cock gland nut and nipple from the old gas valve and re-assemble onto the inlet connection of the replacement valve, using fresh jointing compound on the threads. Jointing compound to BS 5292 should be used.
11. Re-assemble in the reverse order.
12. Turn off the drain valve and remove hose.
13. Turn on the cold feed valve and hot taps and refill the system; ensuring no airlocks.
14. Turn off the hot taps, starting at low level.
15. Recommission the heater.
16. Check for gas soundness on all remade or disturbed joints, with leak detection fluid and seal any leaks found. Recheck for gas soundness following any leaks found.

Thermocouple Replacement:

1. Proceed as instructed for cleaning the main burner assembly, in the "Servicing Instructions" steps 1 to 5.
2. Disconnect the tubing nut on the thermocouple at the pilot assembly and remove the thermocouple.
3. Replace with a new thermocouple and re-assemble in reverse order.
4. Turn on the main gas cock and relight the burner.
5. Carry out check D from the Commissioning and Testing on page 19.
6. Test for gas soundness, the broken and disturbed joints.

Burner Replacement:

1. Proceed as instructed for cleaning the main burner assembly in the "Service Instructions"; steps 1 to 5.
2. Remove the screws securing the main burner pipe manifold to the burner.
3. Replace the burner and reassemble in reverse order.
4. Turn on the main gas isolation cock and light, and check the burner.
5. Test for gas soundness, the broken and disturbed joints, and seal any leaks.

Pilot with Piezo Electrode Assembly:

1. Proceed as instructed for the Thermocouple replacement steps 1 and 2.
2. Disconnect the wire to piezo electrode from the bottom of the piezo ignitor.
3. Unscrew the nut securing the pilot pipe to the pilot assembly and remove the pilot pipe, taking care not to lose the pilot injector.
4. Remove the screw securing the pilot assembly to the burner manifold assembly, and remove pilot assembly.
5. Replace any parts necessary of the pilot assembly and re-assemble in the reverse order.
6. Test the ignitor to ensure that it works properly.
7. Turn on the main gas isolation cock, and light, and check the burner and pilot.
8. Carry out steps E, F, and G from the Commissioning and Testing if the thermocouple was replaced.
9. Test for gas soundness joined broken or disturbed.

Temperature/Pressure Relief Valve:

1. Proceed as instructed for the Servicing Instructions" steps 1 to 5.
2. Disconnect the discharge pipe from the temperature/pressure relief valve.
3. Unscrew the temperature/pressure relief valve from the tank.
4. Replace as necessary.
5. Re-assemble in reverse order.
6. Turn off the drain valve and disconnect the hose.
7. Turn in the cold water feed valve to the heater and refill, leaving a hot tap open until water is seen to run freely. Check at other hot taps for any air locks. Close all hot taps once the tank is full.
8. Recommission the heater.

Piezo Ignitor:

1. Disconnect the wire to piezo electrode from the bottom of the piezo ignitor button.
2. Unscrew nut securing the ignitor to the bracket.
3. Remove the ignitor and replace as required.
4. Re-assemble the ignitor in the reverse order.
5. Test the ignitor to ensure that it works properly.

Maintenance

General Notes

1. To ensure the safe and efficient operation of your water heater, it should be serviced at least once a year, by arrangement with a qualified service engineer. (See item 8 below).
2. Keep the area around the water heater clean and well clear from dust and lint or other combustible materials.
3. Do not place anything on or near the heater and always ensure there is clear passage for combustion and ventilation air to the heater.
4. Do not block or obstruct any purposely made ventilation grilles or ducts.
5. Do not attempt to operate the heater without an adequate or fully functional water supply.
6. If you think the heater is malfunctioning, turn it OFF and seek expert advice and assistance.
7. If a leak of gas is suspected, turn OFF the gas supply and ventilate the area. Contact the local office of British Gas immediately. Do not touch electrical switches and extinguish any open flame.
8. Failure of the water heater tank may occur if scale is allowed to build up. If a water softener is not used, the water heater may need attention as frequently as every three (3) months in hard water areas.

   Failure due to scale build up will invalidate the warranty.
9. Obtain advice from your local gas region before making any alterations which may affect the air supply and ventilation of the water heater. eg. building alterations, fitting extractor fan. etc.

To clean the outer casing of the water heater, wipe the paint clean with a soft damp cloth and dry with a clean dry cloth.

If the water heater is not giving you the service you need:

1. Check that the pilot burner is alight.
2. Check the setting of the temperature selection knob and adjust if necessary.
3. Do not dismantle any of the gas components, but seek expert advice and assistance by calling your local Gas Region or Service engineer for service.

Frost Protection

If the water heater is not to be fully operative during freezing conditions, the entire water system should be completely drained to prevent damage to the heater and pipework from the effects of burst pipes.

Volatile or Explosive Liquids and Corrosive Solutions

Flammable vapours and corrosive fumes may be drawn by air currents from other areas of the structure to this appliance, therefore, these types of products should not be stored anywhere near the water heater, as the pilot flame could cause a hazardous condition or the life of the heater could be reduced through undue corrosion.

FOR YOUR SAFETY READ BEFORE LIGHTING

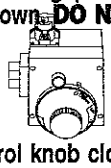
WARNING
If you do not follow these instructions exactly, a fire or explosion may result causing property damage, personal injury or loss of life.

A. This appliance has a pilot which must be lighted by hand. When lighting the pilot, follow these instructions exactly.
B. BEFORE LIGHTING smell all around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.
WHAT TO DO IF YOU SMELL GAS
- Do not try to light any appliance.
- Do not touch any electric switch; do not use any phone in your building.
- Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
- If you cannot reach your gas supplier, call the fire department.

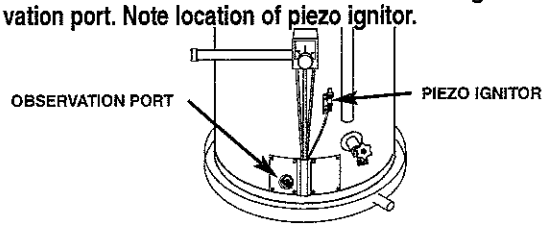
C. Use only your hand to push in or turn the gas control knob. Never use tools. If the knob will not push in or turn by hand, don't try to repair it, call a qualified service technician. Force or attempted repair may result in a fire or explosion.
D. Do not use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control which has been under water.

LIGHTING INSTRUCTIONS

1. STOP! Read the safety information above on this label.
2. Set the thermostat to lowest setting by turning the water temperature dial clockwise, ( ) to its lowest temperature setting (with arrow on dial) as shown. **DO NOT FORCE.**



3. Turn gas control knob clockwise to "OFF" position. Knob cannot be turned from "PILOT" to "OFF" unless knob is depressed slightly. **DO NOT FORCE.**
4. Wait five (5) minutes to clear out any gas. If you then smell gas, STOP! Follow "B" in the safety information above on this label. If you don't smell gas, go to the next step.
5. If you don't smell gas, turn knob on gas control counter clockwise to "PILOT" position.
6. Pilot can be viewed through observation port. Note location of piezo ignitor.

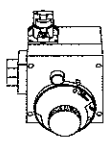


7. Depress the gas control knob all the way down. Immediately depress the piezo ignitor button until a click is heard and then release. Check to see if pilot is lit through the observation port. If pilot is not lit, continue to depress and release piezo ignitor button up to six (6) times. If pilot is still not lit, repeat steps 3 through 7. After the pilot is lit, continue to hold control knob down for about one (1) minute. Release knob and it will pop back up. Pilot should remain lit. If it goes out repeat steps 2 through 7.
   - If knob does not pop up when released, stop and immediately call your service technician or gas supplier.
   - If the pilot will not stay lit after several tries, depress and turn the gas control knob clockwise to "OFF" and call your service technician or gas supplier.
8. At arms length away, turn gas control knob counter-clockwise to the **full** "ON" position. **WARNING: Do not use gas control knob to regulate gas flow.**
9. At arms length away, set the thermostat to desired setting. The mark (▲) indicative of approximate 120°F is preferred starting point. Some local laws may require a lower starting point. If hotter water is desired, see instruction manual and "warning" below.

WARNING
Hotter water increases the risk of scald injury. Before changing temperature setting see instruction manual.

TO TURN OFF GAS TO APPLIANCE

1. Set the thermostat to lowest setting by turning the water temperature dial clockwise ( ) to its lowest temperature setting (with arrow on dial) as shown. **DO NOT FORCE.**



2. Turn gas control knob clockwise to "OFF" position. Knob cannot be turned from "PILOT" to "OFF" unless knob is depressed slightly. **DO NOT FORCE.**

Troubleshooting

Fault Finding Chart

CONDITION	CAUSE	REMEDY
Unable to light pilot	Gas valve tap not correctly positioned	Turn to pilot position Depress knob fully
	Pilot injector clogged	Clean or replace
	Pilot Tube pinched or clogged	Clean, repair or replace
	Air in gas line	Purge air from gas line
Pilot does not remain alight when button is released	Loose thermocouple	Tighten connection at control valve
	Defective thermocouple	Replace
	Defective magnet in control valve	Replace control valve
	Thermocouple too tight	Remove and tighten by hand
	Dirt in pilot injector	Clean injector
	Too much draught	Provide shielding or reduce draught
	E.C.O. open with water at normal temperature	Replace control valve
Main burner will not ignite	Tap on gas control valve not turned to "ON" position	Turn control valve tap to proper position
	Thermostat out of calibration	Replace gas control valve
Pilot goes out	Low gas pressure	Turn off until gas pressure is corrected
	Draught or downblow	Check that the flue system is clear and the terminal unaffected
	Pilot tube leak	Check and tighten or replace if necessary
	Pilot flame too small	Check/clean pilot injector
	Thermocouple defective	Replace/tighten
Flame too large	Burner pressure set too high	Replace gas control valve
	Defective governor	Replace gas control valve

Troubleshooting

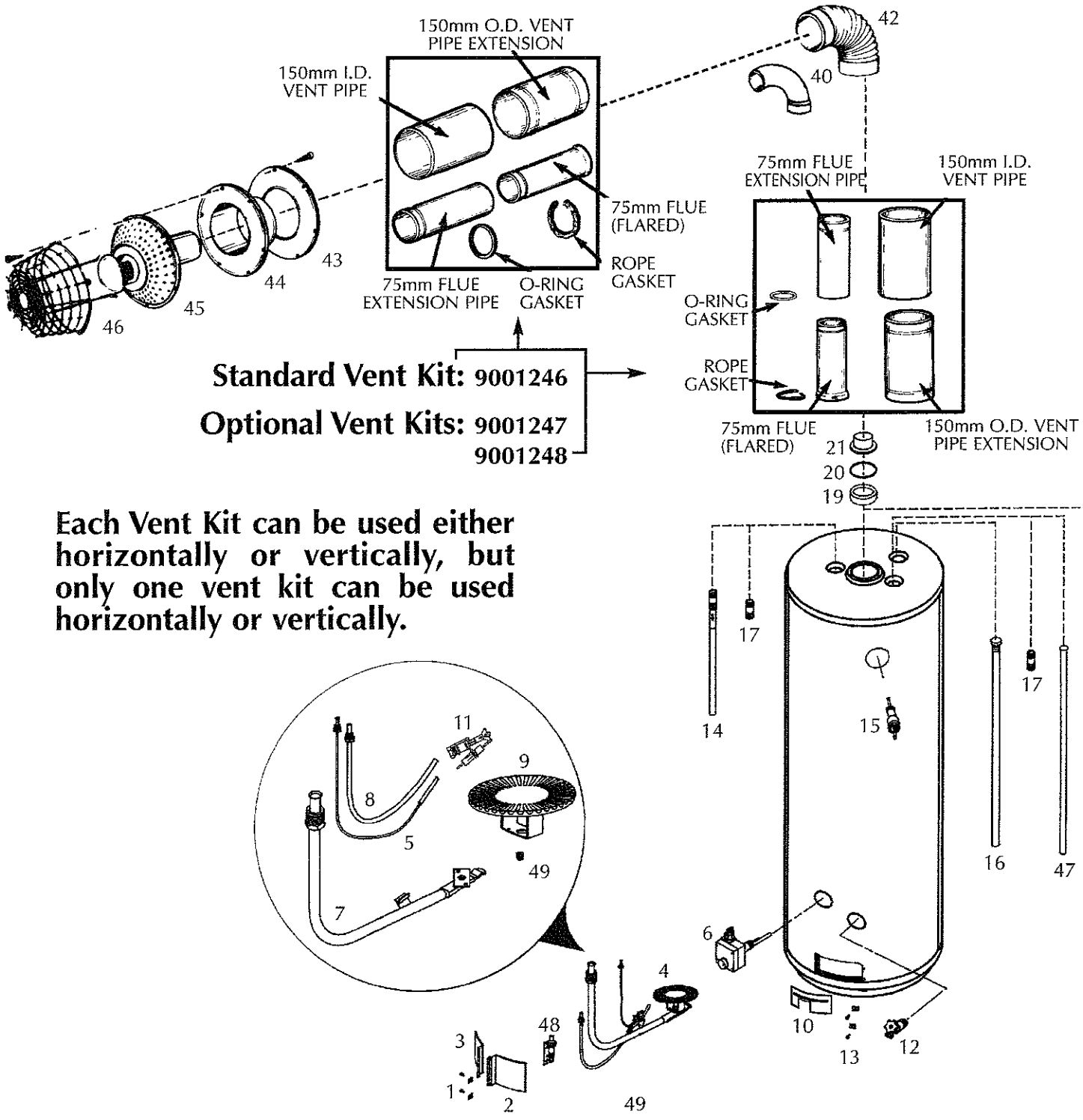
Fault Finding Chart

CONDITION	CAUSE	REMEDY
Noisy Flame	Noisy pilot	Change pilot assembly if necessary
	Burr in injector	Remove burr or replace injector
	Too much gas	Replace gas control valve
Yellow tipped flame	Clogged burner ports	Clean burner ports
	Clogged flue system	Remove debris and instruct user of danger of this
	Gas pressure too high	Change gas control valve
Not enough hot water	Heater undersized	Advise user of inadequacy
	Water flow rate inadequate	Ball valve stuck. Cold feed valve not fully open
	Low gas pressure	Check gas supply pressure and manifold pressure
Heater Sooting	Negative air pressure at water heater area causing downblow due to incorrect terminal location	Resite terminal
	Too much gas	Replace gas control valve and/or burner injector
	Flue blocked	Check flue baffles and flue system and clear
	Inadequate servicing	Advise user of need for regular or more frequent servicing

Notes

Repair Parts

150mm I.D. VENT PIPE	150mm O.D. VENT EXTENSION PIPE	O-RING GASKET	75mm FLUE PIPE	75mm FLUE EXTENSION PIPE	ROPE GASKET
23 31 37	24 29 35	27 33 39	25 30 36	22 28 34	26 32 38 41



Each Vent Kit can be used either horizontally or vertically, but only one vent kit can be used horizontally or vertically.

Repair Parts

KEY #	PARTS DESCRIPTION / *GAL. CAP. *BTU's in 1000's NAT/L.P.	PRV 40 NODS	PRV 50 NODS	SR8 40 NADS	SR8 50NADS
1.	Access Door Clips (Pkg. 2)	9000694	9000694	9000694	9000694
2.	Right Access Door w/Gasket	9000695	9000695	9000695	9000695
3.	Left Access Door w/Gasket	9000696	9000696	9000696	9000696
4.	Burner Assembly (Nat.)	9002526	9002527	9002528	9002529
4.	Burner Assembly Propane (L.P.)	9002530	9002530	9002531	9002532
5.	Thermocouple	9002002	9002002	9002002	9002002
6.	Gas Control Valve (Nat.)	9000249	9000249	9000249	9000249
6.	Gas Control Valve Propane (L.P.)	9002123	9002123	9002123	9002123
7.	Gas Manifold (Nat.)	9002413	9002413	9002413	9002413
7.	Gas Manifold Propane (L.P.)	9002415	9002415	9002415	9002415
8.	Pilot Tubing w/Fittings	9000278	9000278	9000278	9000278
9.	Burner	9002411	9002411	9002411	9002411
10.	Inner Door	9000281	9000281	9000281	9000281
11.	Pilot w/piezo Electrode (Nat.)	9003320	9003320	9003320	9003320
11.	Pilot w/piezo Electrode Propane (L.P.)	9003319	9003319	9003319	9003319
12.	Drain Valve	9000679	9000679	9000679	9000679
13.	Jacket Clips (Pkg. 8)	9001305	9001305	9001305	9001305
14.	Secondary Anode w/Nipple*	9000705	9000705	9000705	9000705
15.	Temperature-Pressure Relief Valve	9000728	9000728	9000728	9000728
16.	Anode Rod	9000707	9000279	9000707	9000279
17.	Nipple	9000399	9000399	9000399	9000399
18.	Flue Baffle	9002838	9002839	9002840	9002841
19.	Flue Adaptor	—	—	9001289	9001290
20.	Adaptor Gasket	—	—	9001291	9001292
21.	Adaptor Plate w/Gasket	—	—	9001293	9001294
	Standard Extension Kit AVK-1 No. 9001246				
22.	75mm I.D. x 200mm Flue Extension Pipe with Gaskets	9001280	9001280	9001280	9001280
23.	150mm I.D. x 206mm Vent Pipe	9001277	9001277	9001277	9001277
24.	150mm O.D. x 206mm Vent Extension Pipe	9001274	9001274	9001274	9001274
25.	75mm O.D. x 213mm Flue Pipe	9001283	9001283	9001283	9001283
26.	Rope Gasket	9000712	9000712	9000712	9000712
27.	O-Ring Gasket	9000710	9000710	9000710	9000710
	Extension Kit No. 9001247				
28.	75mm I.D. x 340mm Flue Extension Pipe with Gaskets	9001281	9001281	9001281	9001281
29.	150mm O.D. x 346mm Vent Extension Pipe	9001275	9001275	9001275	9001275
30.	75mm O.D. x 352mm Flue Pipe	9001284	9001284	9001284	9001284
31.	150mm I.D. x 346mm Vent Pipe	9001278	9001278	9001278	9001278
32.	Rope Gasket	9000712	9000712	9000712	9000712
33.	O-Ring Gasket	9000710	9000710	9000710	9000710

Repair Parts

KEY #	PARTS DESCRIPTION	*GAL. CAP. *BTU's in 1000's NAT/L.P.	PRV 40 NODS	PRV 50 NODS	SR8 40 NADS	SR8 50NADS
	Extension Kit No. 9001248					
34.	75mm I.D. x 619mm Flue Extension Pipe with Gaskets		9001282	9001282	9001282	9001282
35.	150mm O.D. x 610mm Vent Extension Pipe		9001276	9001276	9001276	9001276
36.	75mm O.D. x 619mm Flue Pipe		9001285	9001285	9001285	9001285
37.	150mm I.D. x 619mm Vent Pipe		9001279	9001279	9001279	9001279
38.	Rope Gasket		9000712	9000712	9000712	9000712
39.	O-Ring Gasket		9000710	9000710	9000710	9000710
40.	75mm Flue Elbow		9000718	9000718	9000718	9000718
41.	Rope Gasket		9000712	9000712	9000712	9000712
42.	150mm Vent Elbow		9000719	9000719	9000719	9000719
43.	Inside Wall Collar		9000723	9000723	9000723	9000723
44.	150mm Vent Wall Assembly		9000724	9000724	9000724	9000724
45.	Vent Cap Assembly		9000725	9000725	9000725	9000725
46.	Wire Grill Protector		9000915	9000915	9000915	9000915
47.	Dip Tube		9001322	9000908	9002067	9002444
48.	Piezo with Bracket		9001940	9001940	9001940	9001940
49.	Burner Orfice (Nat.)		#36 0230141	#35 0230186	#33 0230120	#38 0230125
49.	Burner Orfice (L.P.)		#50 0230225	#50 0230225	#49 0230223	#48 0230249

Notes

Unit 5, Mitchell Point, Ensign Business Park, Hamble Lane, Hamble, Southhampton SO31 4RF
Tel: (01703) 456497 Fax: (01703) 456468