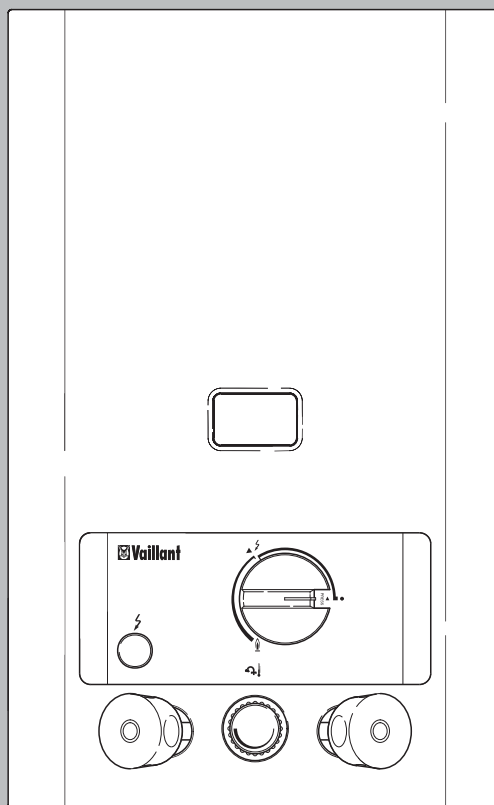


INSTRUCTIONS FOR USE AND INSTALLATIONS

Vaillant Geyser **MAG® GB 9/1 OZ** with atmosphere sensing device





Dear customer

Thank you for buying your Vaillant
MAG water heater. In order to guarantee optimum performance from the appliance please read these instructions fully before use.

These instructions must be kept by the user.

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Operating controls

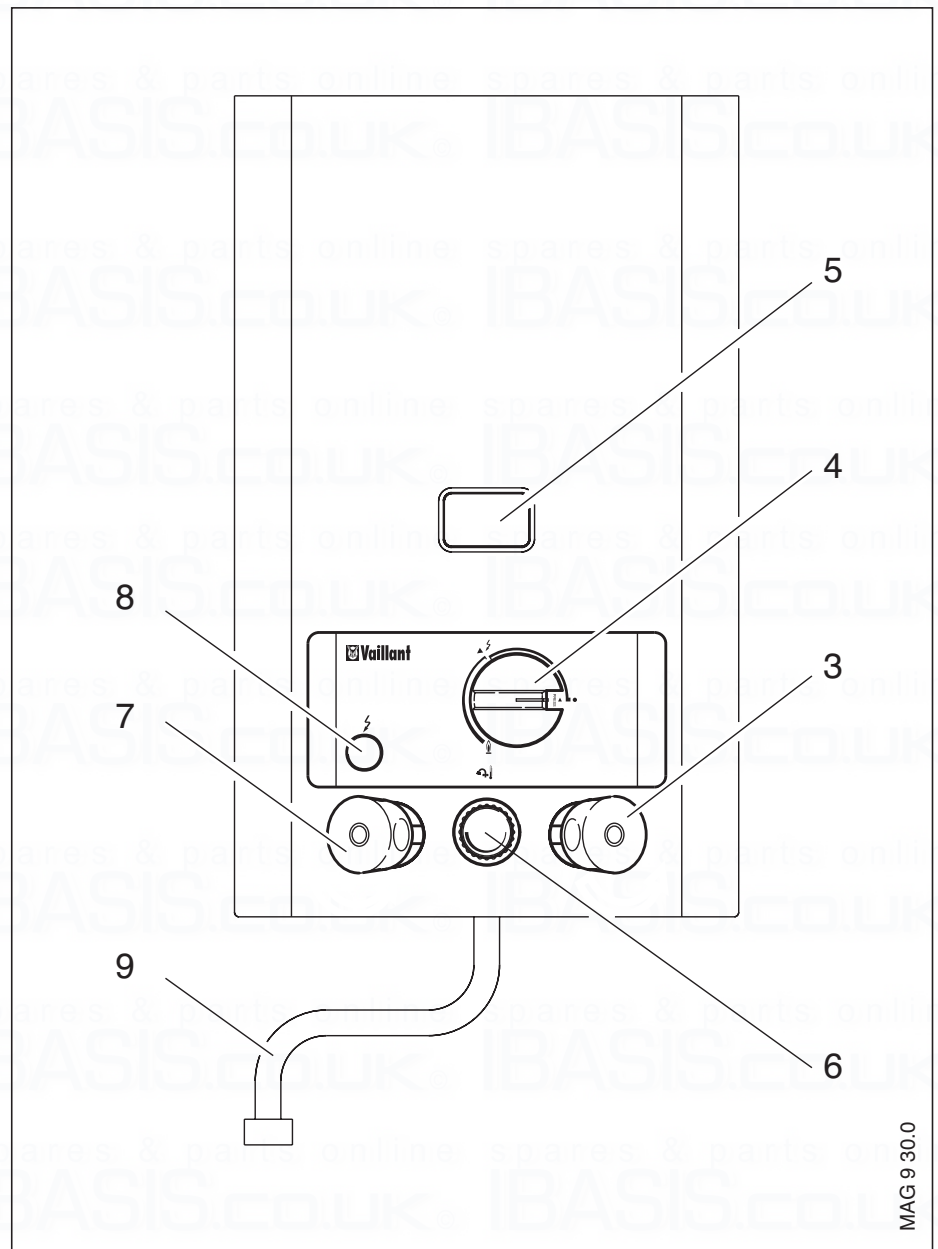


Fig. 1

- 3 cold water tap
- 4 gas control knob
- 5 pilot viewing window
- 6 temperature selector control
- 7 hot water tap
- 8 piezo igniter
- 9 water outlet

We do not accept any liability for damage arising as a result of the non-observance of these operating instructions.

CE Mark

The MAG 9/1 OZ carries the CE Mark. This demonstrates that the appliance fulfils the requirements of the Gas Appliance Directive (90/396/EEC) and the Gas Appliance (Safety) Regulations 1992.



GENERAL POINTS

Operating precautions

Initial installation

This appliance must be installed and serviced by a competent person (CORGI registered) in accordance with the Gas Safety (Installation and Use) Regulations 1998.

Use for intended purpose

The MAG 9/1 OZ is designed for flueless applications only, i.e. intermittent use for short periods only. A typical application is supplying hot water to a sink. The MAG 9/1 OZ which is available for natural gas and LPG cannot be installed with a down draught diverter and flue system.

Safety precautions

Set-up and adjustment

For your own safety, please ensure that the appliance is installed, set up and placed into service by a suitably-qualified service engineer. This condition likewise applies to inspection and repair work on the appliance, plus any adjustment that may be required to the gas flow rate.



Escape of gas

If you smell gas or otherwise suspect a gas leak:

- do not switch on/off the light or activate any electrical switch;
- do not use the telephone;
- do not use open flames (e.g. lighter, match);
- do not smoke;
- turn off the gas supply;
- open doors and windows;
- inform your gas supply company or your competent engineer.

Rules, regulations and directives

This Vaillant Geyser must only be installed by a qualified service engineer, who will also assume responsibility for correct installation and initial start-up.

Ensure before installing the Vaillant Geyser that you are in possession of any official permits that legislation or regulations may require (see Installation requirements).

Modifications

It is not allowed to cancel the atmosphere sensing device function (only by a competent person - CORGI registered).



OPERATION

To light the water heater

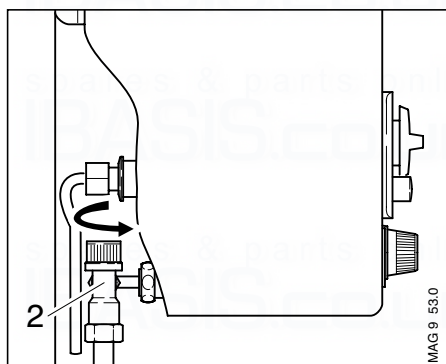


Fig. 2

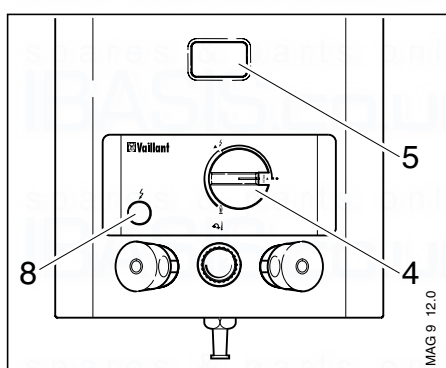


Fig. 3

- Make sure the gas and water (2) supplies are turned on.
- Press and turn the gas control knob (4) anti-clockwise from the OFF position to the IGNITION position.
- Continue holding the gas control knob in and press the piezo igniter (8) several times.
- Check that the pilot flame can be seen through the inspection window (5).
- Once the pilot light is alight continue to hold the gas control knob in for a further 10 seconds.
- If the pilot flame fails to light or goes out after the gas control knob is released, turn the gas control knob to the OFF position and wait three minutes before repeating the lighting procedure.
- Turn the gas control knob fully anticlockwise to the ON position.
- Your water heater will now automatically operate in the ON position whenever a hot water tap is opened.

Note:

Flueless water heaters must not be used for periods of more than 5 minutes at a time.

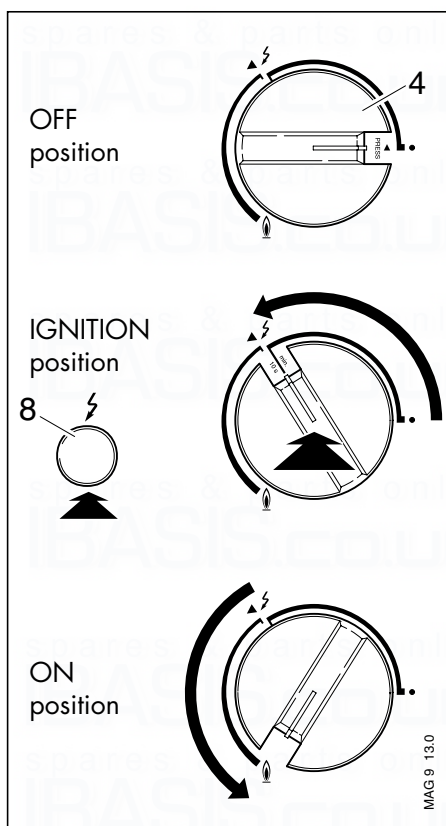


Fig. 3.1

OPERATION



Selecting the required water temperature

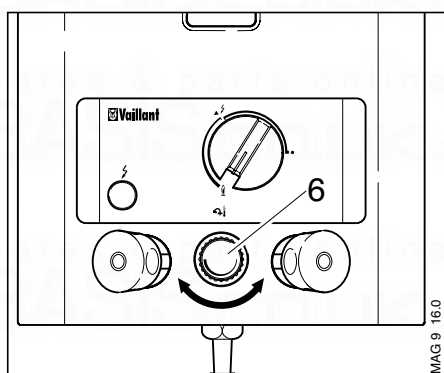


Fig. 4

Turn the temperature selector (6) to achieve the desired water temperature.

- Turn the temperature selector clockwise to increase the temperature.
- Turn the temperature selector anticlockwise to decrease the temperature.

To turn off the water heater

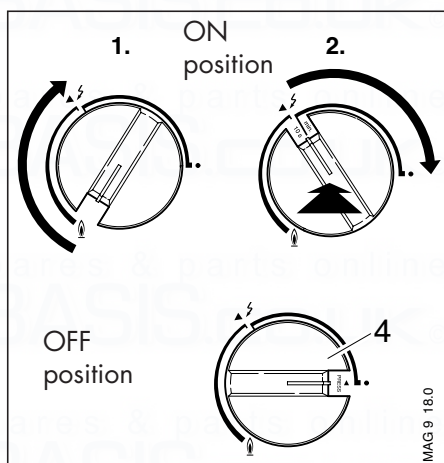


Fig. 4.1

Turn the gas control knob (4) clockwise to the IGNITION position, then press in and continue turning clockwise to the OFF position •.

If the appliance is to be out of operation for a longer period:

- Isolate the gas supply.
- Close the cold water service valve (2).

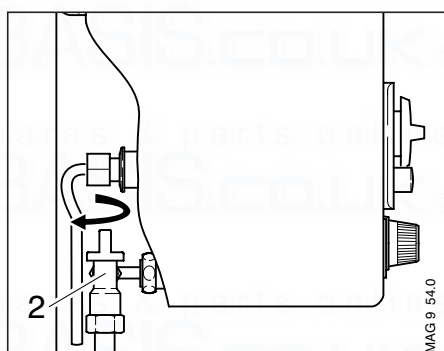


Fig. 4.2



OPERATION

Frost protection

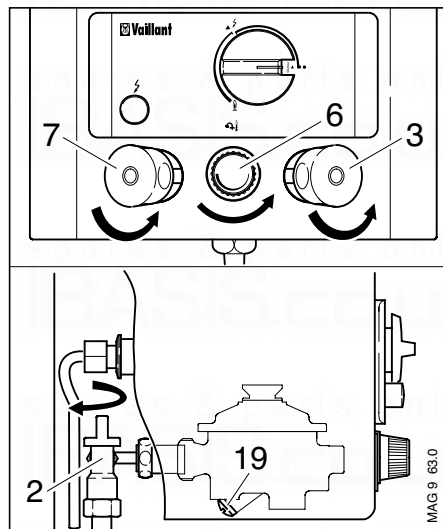


Fig. 5

If the appliance is installed in a position likely to be affected by frost it must be drained as follows when the appliance is not in operation for a long period.

1. Isolate gas supply and close cold water shut-off valve (2).
2. Turn the temperature selector knob (6) anticlockwise to the stop.
3. Open the hot water tap (7).
4. Remove the drain screw (19) and drain the appliance completely.
5. Keep the drain screw safely in the vicinity of the appliance.

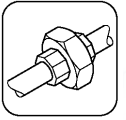
Note: There is a possibility that some water remaining in the system will drain out of the appliance at a later stage. It is therefore recommended that a bowl or similar receptacle is placed underneath the drain point.

Important: Replace the drain screw (19) before restoring the water supply to the appliance.

Do not take the appliance into operation before restoring the water supply to the appliance.

Cleaning

The appliance case can be wiped over with a damp soapy cloth when the water heater is cold. Do not use abrasive cleaners.



Dimensions

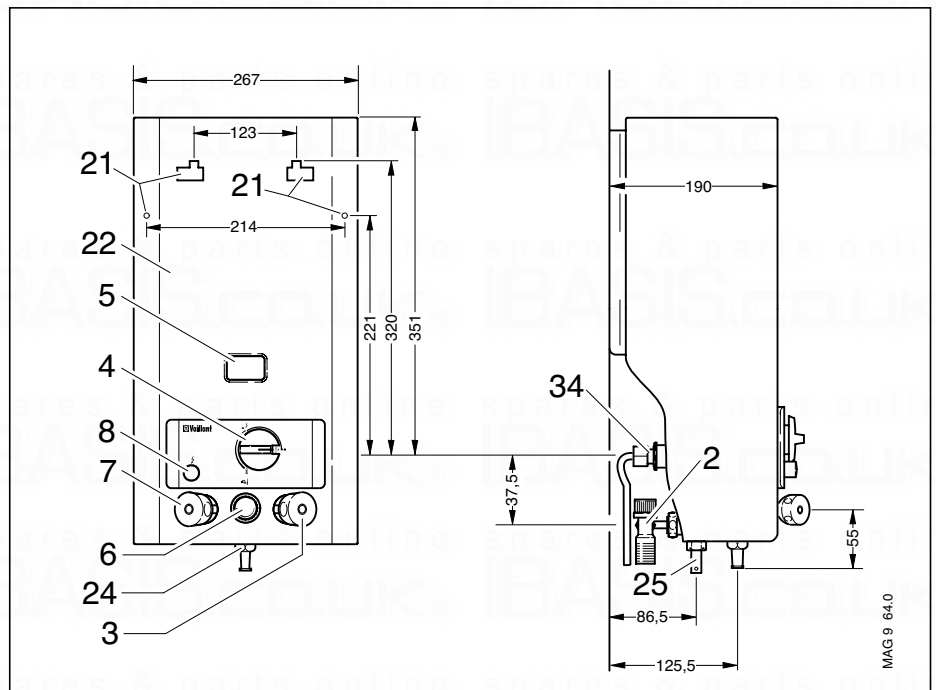
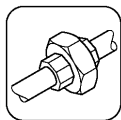


Fig. 6

- 2 cold water inlet service valve
- 3 cold water tap
- 4 gas control knob
- 5 pilot viewing window
- 6 temperature selector control
- 7 hot water tap
- 8 piezo igniter
- 21 fixing holes
- 22 casing
- 24 hot water outlet
- 25 hot water outlet connection
- 34 gas inlet connection



INSTALLATION

Installation requirements

General

The installation of the MAG 9/1 must be in accordance with the relevant requirements of the Gas Safety (Installation and Use) Regulations, Building Regulations, Building Standards (Scotland) Regulations and the byelaws of the local water undertaking. It must also be in accordance with any relevant requirements of the local authority and the relevant recommendations of the following British Standard:

BS 5440: Flues and air supply for gas appliances of rated input not exceeding 60 kW.

Part 1: Flues

Part 2: Ventilation

BS 5482: Domestic butane and propane gas burning installations.

Part 1: Installations in permanent dwellings.

Part 2: Installations in non permanent dwellings.

Part 3: Installation in boats, yachts and other vessels.

BS 5546: Installation of gas hot water supplies for domestic premises.

BS 6700: Design, installation, testing and maintenance of services supplying water for domestic use within buildings and their curtilages.

BS 6891: Installation of low pressure gas pipework of upto 28 mm (R1) in domestic premises.

BS EN 271: Leisure accommodation vehicles-safety ventilation requirements.

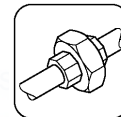
Location

The appliance, must not be installed in a bathroom or a room containing a bath or shower.

Flueless appliances must not be installed in a cupboard or a room of less than 5m³.

L.P.G. burning appliances must not be installed in a room or internal space below ground level, e.g. cellar or basement.

INSTALLATION



Installation requirements

(continued)

Gas supply

The gas supplier should ensure the availability of an adequate supply of gas.

A gas meter may only be connected to the service pipe by the supplier of gas or their contractor.

An existing meter should be checked to ensure that it is capable of passing the rate of gas supply required.

Installation pipes should be fitted in accordance with BS 6891 or BS 5482.

Pipework from the meter to the water heater must be of an adequate size. Do not use pipes of smaller size than the water heater gas connection.

The complete installation must be tested for soundness and purged in accordance with BS 6891 or BS 5482.

Air supply

Detailed recommendations for air supply are given in BS 5440: Part 2. The following notes are intended for guidance only.

Flueless applications - installation in permanent dwellings

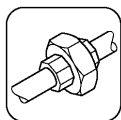
Where the appliance is to be used in a flueless application the room or internal space in which the MAG 9/1 is installed must be provided with a permanent air which communicates directly with outside air and is sized in accordance with Table 1. In addition the room or internal space must have an openable window or equivalent opening directly to outside air.

Flueless applications - installations in caravans and non permanent dwellings

Owing to the many installation variations which are possible, reference must be made to BS 5482 Part 2. In any event the total fixed ventilation effective free area required for the MAG 9/1 will never be less than 284 cm² divided equally between high and low level.

	< 5 m ³	5-10 m ³	11-20 m ³	> 20 m ³
Air vent free area	Installation not permitted	100 cm ²	50 cm ²	Nil

Table 1: Air vent requirements for flueless applications



INSTALLATION

Installing the appliance

General

The MAG 9/1 is designed to be wall mounted and a vertical flat area of wall is required as shown in Fig. 6.

The appliance requires side clearances for installation and servicing of 25 mm. To prevent staining of the ceiling a minimum of 300 mm should be left above the top of the flue cap. If the appliance is fitted on a wall of combustible material the wall shall be protected by a suitable heat resistant material.

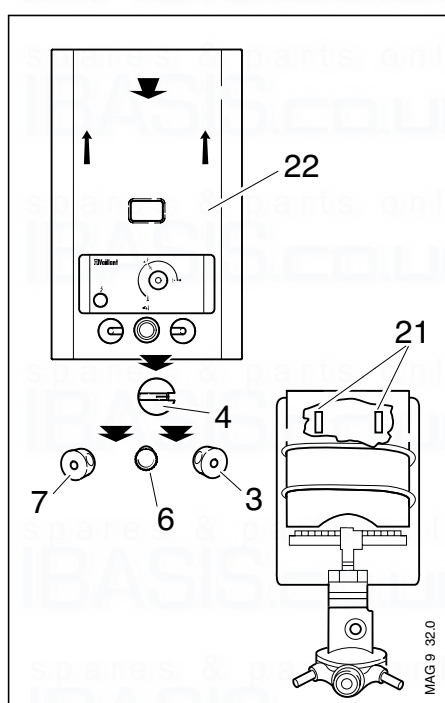


Fig. 7

- Unpack the appliance from the box.
- Take off all control knobs.
- Take off the casing (22) by pulling the lower part of it and lifting upwards.
- Mount the appliance to the wall by means of the fixing holes (21) and fixings provided.
- Unpack gas and water connections from the separate box.

Connect appliance to gas and water pipes

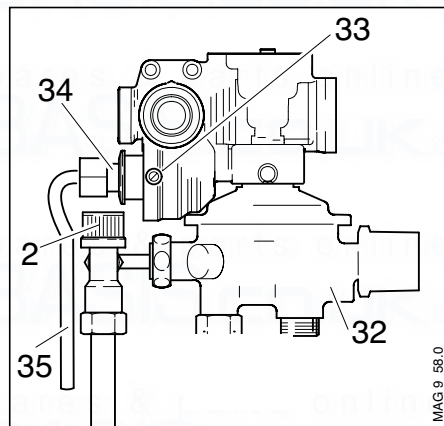
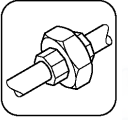


Fig. 7.1

INSTALLATION



LP gas connection

Grease the O-ring of the gas inlet adapter (34) with the grease provided. Fit the gas inlet adapter (34) with connecting tube (35) into the gas section and secure with fixing screw (33). Connect the gas tube (35) to the gas supply.

Natural gas connection

Fit the combined inlet adapter and gas service valve (not shown) into the gas section and secure with fixing screw (33).

Cold water connection

Fit the cold water shut-off valve (2) to the water section (32) of the appliance and connect to the cold water supply.

Hot water connection

The MAG 9/1 is supplied with a 250 mm swivel spout. As an optional extra, spouts of 150 mm, 350 mm and 500 mm are available.

Unpack the spout and connections from the separate box. Slide the metal washer and union on to the spout. Ensure the O-ring is fitted and fit the spout to the appliance.

Place casing

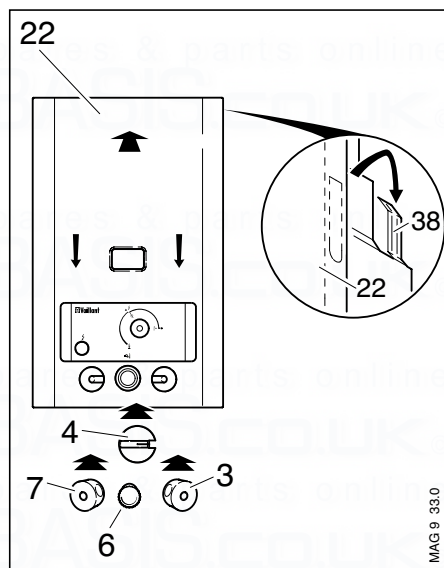


Fig. 7.2

- Place casing (22) from above on the two supports (38) of the back panel and press on the lower part of the casing.
- Replace all control knobs.



GAS SUPPLY SETTINGS

Commissioning and testing

Gas installation

The complete gas installation should be inspected, tested for soundness and purged in accordance with the recommendations of BS 5482.

Adjustment of the appliance

The MAG 9/1 OZ B is supplied suitable for use on L.P.G. at an inlet pressure of

28 mbar (11.2 in w.g.) BUTANE or 37 mbar (14.8 in w.g.) PROPANE.

The MAG 9/1 OZ H is supplied suitable for use on natural gas at an inlet pressure of 20 mbar (8 in w.g.).

Atmosphere sensing device

This appliance incorporates an atmosphere sensing device. The pilot burner is designed such that the pilot flame will lift off and extinguish if there is insufficient ventilation to the room. This action will shut down the appliance.

If the appliance shuts down during use, thoroughly ventilate the room before attempting to relight the pilot light (see section 3.1). If difficulty is experienced in relighting the pilot, further ventilate the room.

If the appliance repeatedly shuts down do not use it and consult your installer or service engineer.

The gas rates are pre-set during manufacture and adjustment is therefore not necessary.

Burner pressure		
Propane G31	Butane G30	Natural gas G20
30.2 mbar	23.9 mbar	6.7 mbar

Table 2: Burner pressure

The burner pressure test point is situated on the left hand side of the gas section.



Troubleshooting in the event of shutdown caused by temperature-limiting device

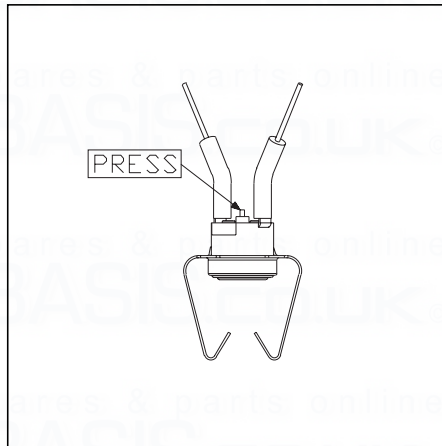


Fig. 8

The appliance is equipped with a temperature-limiting device which, in the event of the heater element overheating, shuts down the system and blocks further operation.

Whenever the temperature-limiting device is triggered, the gas and water system must be checked for correct functioning and possible leaks - and any defective parts replaced with genuine Vaillant parts - BEFORE putting the appliance back into service.

Note that gas and water leaks may occur if inspections and repairs are not carried out as specified.

Press the pin in (see fig. 8) to reset the temperature-limiting device.



WARNING

Appliance inspections and repairs, along with the resetting of the temperature-limiting device, must always be carried out by an appropriately-qualified and approved service provider.

Maintenance

To ensure the continued safe and efficient operation of the appliance it is recommended that it is checked and serviced at regular intervals. The frequency of servicing will depend upon the particular installation and usage conditions but in general once per year should be adequate. It is the law that all servicing work is carried out by a competent person (CORGI registered).

Please contact Vaillant Ltd. (FREEphone 0870 6060777) for further details of maintenance agreements.

Spare parts

In order to maintain the safe and efficient operation of this appliance, only genuine Vaillant spare parts must be used.

TECHNICAL DATA

¹⁾ Pressure loss in the appliance. Pipes are to be considered separately.

	MAG 9/1 OZ	
Nominal rated output	9.3	kW
Nominal rated input (based on gross CV)		
Natural gas	12.2	kW
LPG	12.0	kW
Hot water flow rate at		
40 °C rise	3.3	l/min
25 °C rise	5.3	l/min
Minimum water pressure required p _ü ¹⁾		
temp. selector in „hot“ position	0.35	bar
temp. selector in „warm“ position	0.8	bar
Max. admissible water pressure p _ü	13	bar
Gas consumption		
Propane gross CV = 95.8 MJ/m ³	1.04	kg/h
Butane gross CV = 125.8 MJ/m ³	0.79	kg/h
Natural gas gross CV = 35.9 MJ/m ³	1.04	m ³ /h
Inlet pressure p _ü in front of the appl.		
LPG	28-30/37	mbar
Natural gas	20	mbar
Weight approx.	6	kg

We do not accept any liability for damage arising as a result of the non-observance of these operating instructions.

10.001.655 GB03



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