

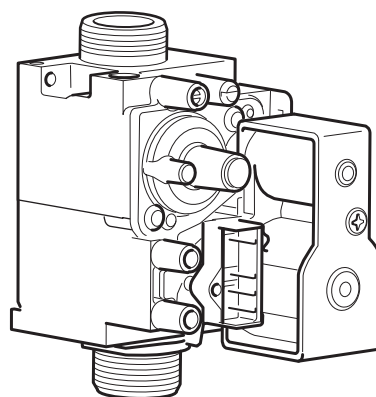
GAS VALVE (SIT)

IMPORTANT NOTE
THESE INSTRUCTIONS SUPERCEDE
THE GAS VALVE SETTING PROCEDURE CONTAINED
WITHIN THE ORIGINAL APPLIANCE LITERATURE.

MODEL
SOLARIS
24S, 30S
24, 30, 35

KIT Pt. No. 3003200657

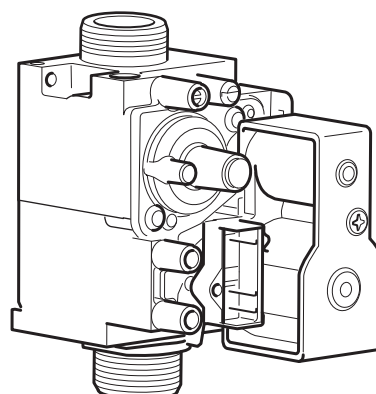
Black Solenoid (230V)



MODEL
SARGON
18S, 24S, 30S,
24, 30, 35
VIZO PLUS 24

KIT Pt. No. 3003201365

Blue Solenoid (21V)



Requirements

It is the Law that any replacement of parts is carried out by a competent person approved at the time by the Health and Safety Executive.

Before commencing with the replacement of a part the boiler should be isolated from the electrical supply and the gas supply should be turned off at the gas isolation valve.

When replacing a part, use only spare parts that you can be assured conform to the safety and performance specification that we require. Do not use reconditioned or copy parts that have not been clearly authorised by Heatline.

After electrical connections have been made, checks to the earth continuity, polarity, short circuit and resistance to earth must be repeated using a suitable multimeter.

Unless stated otherwise, parts are replaced in the reverse order to their removal.

After replacing these parts you MUST always test for gas soundness and carry out functional test of the controls and check the following:

General Inspection

After the replacement of a part, the following must be checked.

- The integrity of the flue system and flue seals.
- The integrity of the appliance combustion circuit and relevant seals.
- Electrical, gas and water connections.
- System pressure.
- the combustion performance, operational gas inlet pressure and gas rates.

Refer to the following procedure.

Refer to the installation and servicing instructions supplied with your boiler to fit the replacement gas valve.

After assembly, test for gas soundness and purge in accordance with the current issue of BS6891 or in IE, the current edition of I.S.813 "Domestic Gas Installations". Do not remove the inner case during the commissioning procedure.

COMPETENCY TO CARRY OUT THE CHECK OF COMBUSTION PERFORMANCE

NOTE: BS 6798: 2009 Specification for installation and maintenance of gas-fired boilers of rated input not exceeding 70kW net advises that:

- The person carrying out a combustion measurement must be assessed as competent in the use of a flue gas analyser and the interpretation of the results.
- The flue gas analyser used should be one meeting the requirements of BS7927 or BS-EN50379-3 and be calibrated in accordance with the analyser manufacturers' requirements.
- Competence can be demonstrated by satisfactory completion of the CPA1 ACS assessment, which covers the use of electronic portable combustion gas analysers in accordance with BS 7967, parts 1 to 4.
- Ensure that the gas analyser is set to the correct fuel setting.

NOTE: Safe combustion can only be verified by measuring CO/CO₂ ratio. This must not exceed the value shown in the table on the back page.

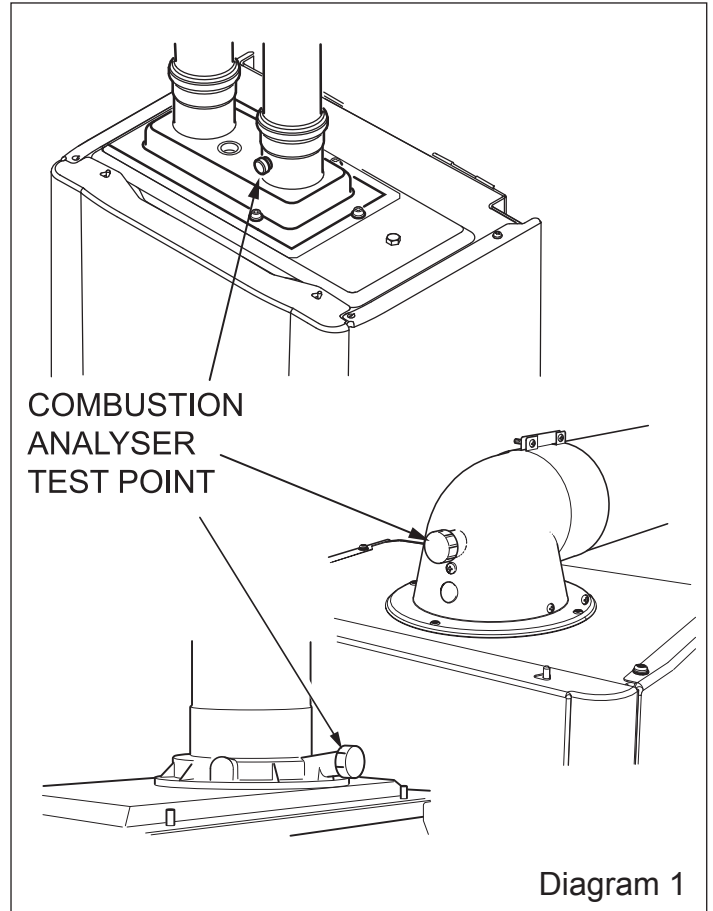


Diagram 1

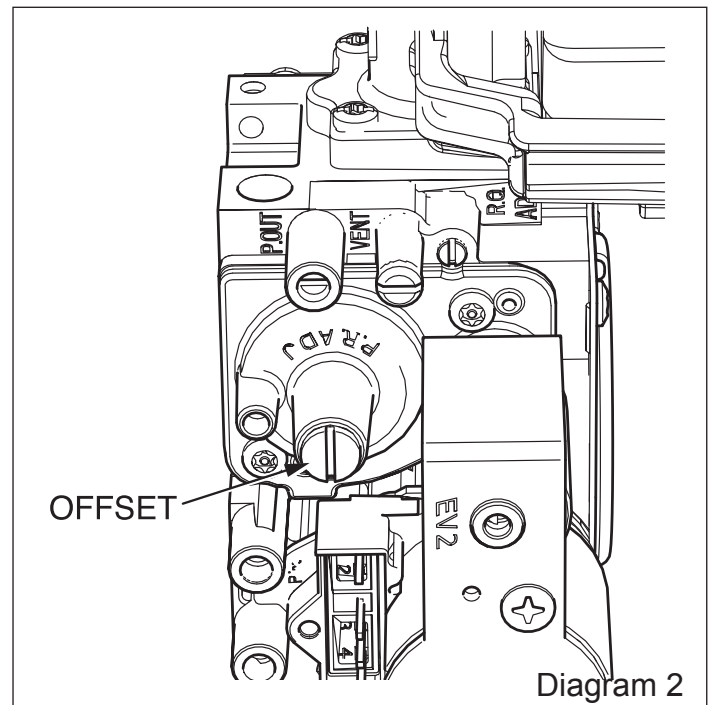


Diagram 2

With the appliance cold.
Connect a CO₂ combustion analyser to the appropriate test point, see diagram 1

1. Turn on the electrical supply.
2. Ensure external controls are calling for heat.
3. Turn on the gas supply.
4. Turn on the appliance.
5. The boiler should fire automatically.

CO₂ Rate Check and Adjustment

Check the potentiometer setting R31, refer to the instructions supplied with your appliance.
In order to set the appliance in service mode turn the DHW and CH control knobs to minimum, then switch the function control knob from “off” to “on” three times, within a two second interval. A wrench symbol will be displayed in the LCD window and the boiler will ignite at minimum rate. In this mode of operation the gas rate will be controlled by the CH control for 15min., after which time normal operation will take over and the wrench symbol will disappear.

NOTE: Adjustment of the CO₂ at minimum rate is very coarse and should not be adjusted more than an 1/8 of a turn at a time. Wait 1 minute to allow the appliance to stabilise before checking or making further adjustments.

With the “CH” control knob at minimum gas rate, use a 6mm allen key to gradually rotate the “offset adjustment”, refer to diagram 2 (anti-clockwise to decrease) to the required CO₂ shown in the “SETTING” column of the table overleaf. Without further adjustment and with the “CH” control knob at maximum gas rate, check the the CO₂ is as shown in the table overleaf.

Check the CO/CO₂ combustion ratio.

Check the CO/CO₂ combustion ratio does not exceed the value in the CO/CO₂ column of the table. If the CO/CO₂ setting exceeds the value in the table, a complete servicing of the appliance will be necessary, refer to the servicing instructions.

Check the Gas Inlet Pressure and Gas Rate

On completion, test the gas installation for tightness using the pressure drop method and suitable leak detection fluid, purge in accordance with the above standard.

NOTE: Due to the modulating operation of the boiler and the need to check the gas inlet pressure and measure the gas rate at maximum rate, it will be necessary to force it to maximum.

Operational Gas Inlet Pressure

With ALL other gas appliances operating, check the operational supply pressure at the gas service isolation valve test point, refer to your Installation literature supplied with your appliance.

The nominal supply pressure for Natural Gas (G20) is 20mbar.

Turn the taps and appliances off, then disconnect the pressure gauge.

Additionally the safe nominal maximum heat input of the appliance can be achieved at an inlet pressure down to 15mbar.

NOTE: The BURNER PRESSURE cannot be measured and is not used to measure the gas rate.

Gas Rate

Make sure that ALL other gas burning appliances and pilot lights are off.

Check the gas rate using the gas meter test dial and stop watch, at least 10 minutes after the burner has lit, see table below for approximate rates.

In communal installations where the gas rate cannot be measured it is acceptable to measure the combustion rate as described in the servicing section.

On completion, reset the boiler to normal operation by referring to the Installation and Servicing Instructions.

Completion

If it is not possible to achieve the required results for either the combustion or gas rates, it will be necessary to complete a full service of the appliance and then repeat the combustion check procedure. If after servicing and adjustment of the appliance the combustion values are still unacceptable and after further remedial work has been carried out, the appliance must be disconnected until the CO/CO₂ ratio is acceptable. Advice can be sought from the Heatline Technical Helpline 0906 8020253.



Models	MIN. SETTING Nat. Gas G20 Inner Case ON	CO/CO2 MAX	MAXGAS RATES (Heating mode) Nat. Gas G20
SOLARIS	9.2%CO2 (+/-0.1%)	0.004	1.93m3/h 68.1ft/h
SARGON	10.0%CO2 (+/-0.1%)	0.004	1.93m3/h 68.1ft/h
VIZO PLUS	9.8%CO2 (+/-0.1%)	0.004	1.93m3/h 68.1ft/h

Models	MIN. SETTING Lpg. Gas G31 Inner Case ON	CO/CO2 MAX	
SOLARIS	10.0%CO2 (+/-0.1%)	0.004	-
SARGON 24	10.3%CO2 (+/-0.1%)	0.004	-
SARGON 30	10.9%CO2 (+/-0.1%)	0.004	-
SARGON 35	10.8%CO2 (+/-0.1%)	0.004	-
VIZO PLUS	10.4%CO2 (+/-0.1%)	0.004	-