
INSTRUCTIONS FOR INSTALLATION AND OPERATION

SPIRIT

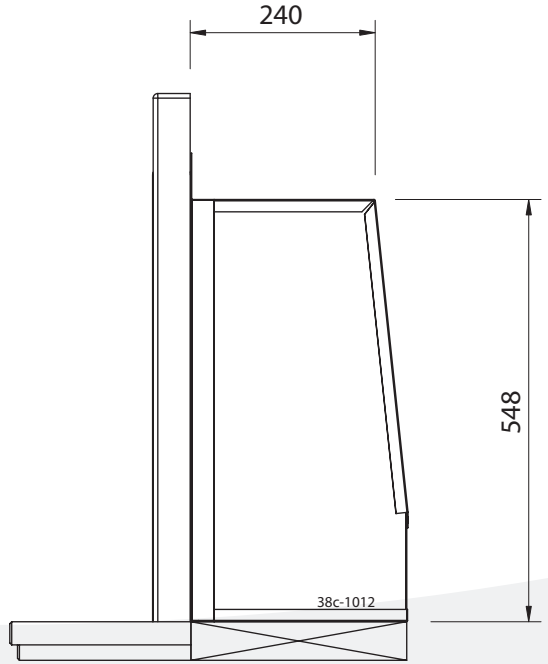
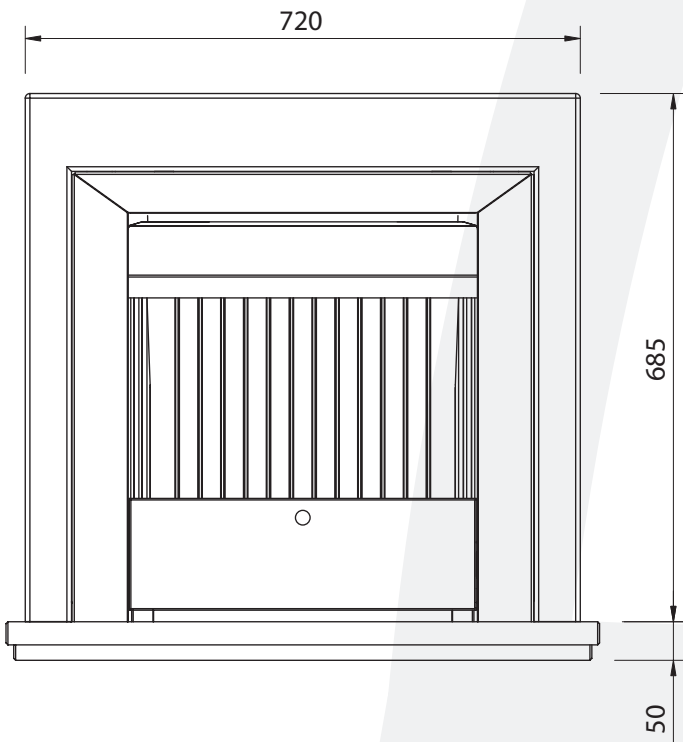
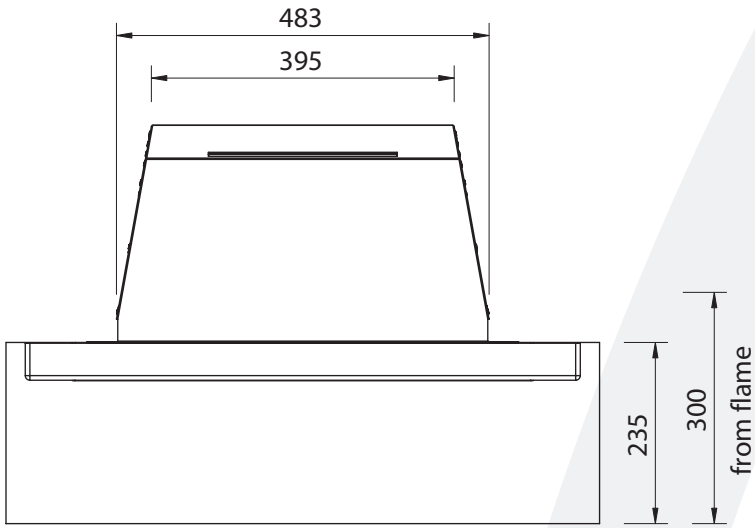
Please retain this document carefully



**DRU VERWARMING B.V.
HOLLAND**

957.560.01





Foreword

Dear Customer,

We would like to thank you for buying this DRU product. Our products have been designed and produced to meet the highest possible quality, performance and safety requirements, allowing you to enjoy years of problem-free use.

In this booklet you will find instructions for the installation and use of your new log fire. Please read these instructions and the manual carefully to familiarize yourself with the appliance. If you require any further support, please do not hesitate to contact your supplier.

Unpacking

Once the heater has been unpacked, all packaging should be disposed of in the regular manner.

Connection

This appliance should be connected by a registered installer.

INSTRUCTIONS FOR INSTALLATION

Type of gas

This appliance is suitable for G20/G31 gasses. Please check that the local gas and pressure correspond with the specifications on the type identification tag. This tag can be found on the inside of the Fire box. All regulations regarding gas installation, including any local regulations, must be observed at all times. The appliance is to be installed by a registered installer.

Important

- Keep curtains and any other flammable materials at least 50cm away from the appliance.
- Caution! Touching the heater when hot can cause burns and blisters!

Conditions of installation

It is the law that all gas appliances are installed only by a CORGI Registered Installer, in accordance with these install appliances correctly could lead to prosecution. It is in your own interest and that of safety to comply with the law.

The installation must also be in accordance with all relevant parts of the Local and National Building Regulations where appropriate, the Building Regulations (Scotland Consolidation) issued by the Scottish Development Department, and all applicable requirements of the following British Standard Code of Practice.

- B.S. 6891 Installation of Gas Pipework
- B.S. 5440 Parts 1 & 2 Installation of Flues and Ventilation

- B.S. 1251 Open fire place components
- B.S. 715 Metal flue pipes for gas appliances
- B.S. 6461 Part 1 installation of chimneys and flues

No additional ventilation is required for this appliance.

Positioning the fire

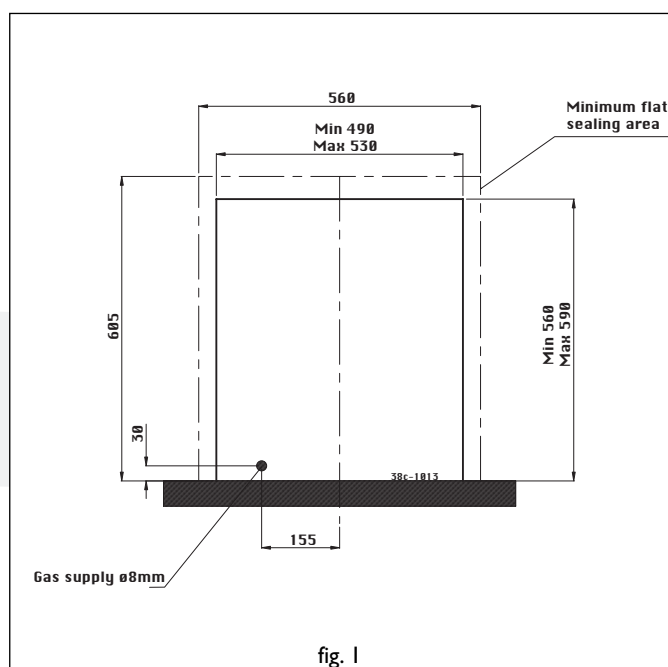
- The gas fire may only be installed in a well-ventilated room allowing a constant air supply.
- The appliance is suitable for installation in a fireplace or hearth made of incombustible materials only.
- The chimney must be swept before the appliance is installed and the flue duct must be tested in accordance with national guidelines.
- This appliance must only be installed on to a concrete or non-combustible hearth.
- The hearth material must be a minimum thickness of 13 mm with the top surface at least 50 mm above the floor.
- The hearth must be fitted symmetrically about the fire opening and have a minimum width of 770mm. The minimum projection of the hearth forwards from the fire opening must be 235 mm, this is 300 mm in front of the naked flame (BS 7977-1: 2002).

Fire place opening and chimney catchment space

The front opening of the fire place must be between 490 and 530 wide, and between 560 and 590mm high. If the opening exceeds these dimensions then a surround must be constructed from suitable non-combustible material to produce a suitable sized opening.

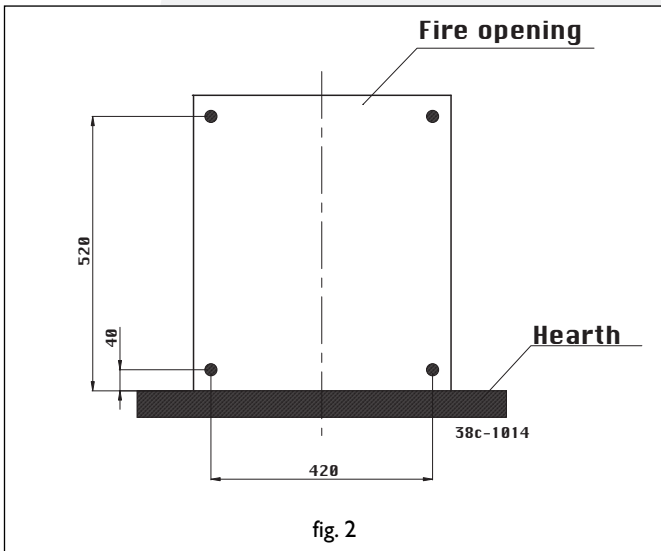
Any surround must be suitably sealed to the fire place to prevent leakage. (fig 1)

A minimum sized builders opening with a flat rear face and no chair brick fitted must be a minimum depth of 300 mm to accommodate any debris which may fall from the chimney.



Installation the fire

- Remove the tray for vermiculite.
- Remove the burner plate.
- Mark out and drill 4 holes (8mm) in the back face of the fire opening in the positions shown in fig 2.



- Position the fire carefully on the (protected) surface of the hearth and reach into the fire opening. Thread each of the cables vertically downwards through the pair of fixing eyes on the same side of the fire. Thread the free end of the cables through the corresponding circular hole on each side of the lower rear of the fire. Carefully slide the firebox back into the fire opening and pull both cables tight .
- Thread a tensioning screw over each of the cables and ensure that the tensioning nut is screwed fully up against the hexagon shoulder of the tensioning screw (this provides maximum travel for the tensioning nut).
- Fit a screwed nipple on to each of the cables and pull hand tight up against the tensioning screw, then secure each nipple with a hexagonal wrench.

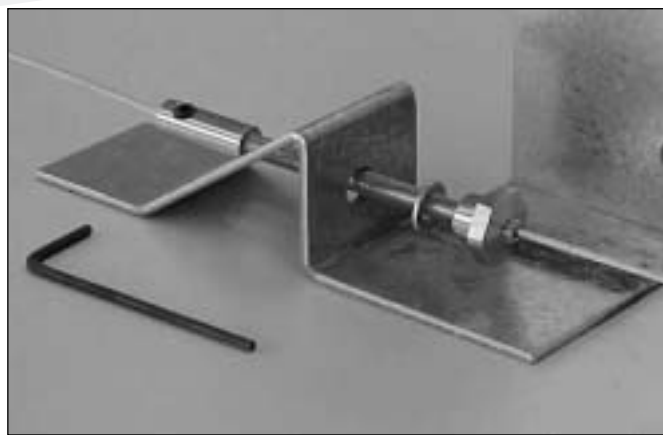
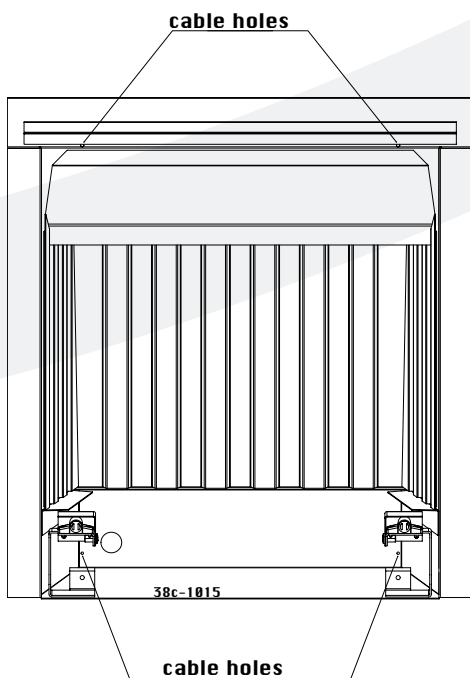


fig. 3

- Fit the expanding shells with eye bolt and fixing the eyes securely into the rear of the fire opening.
- Making the Gas Connection.
- The gas connection should be made to the appliance inlet elbow using 8 mm rigid or semirigid tubing. An isolating elbow or gas cock must be fitted to the pipe work.
- Uncoil the two fire fixing cables and thread one end of each of the cables through one of the two holes at the top of the fire box.

- Evenly tighten the tensioning nuts to tension both cables and pull the fire snugly against the wall. Do not overtighten, it is only necessary to pull the seal up against the sealing face of the wall, it does not need to be compressed. Check that there are no gaps behind the seal.
- Seal the bottom with lute.
- With the fire securely in place, if a concealed gas connection has been made through the access hole in the rear of the fire, the cover should be slid down so that the circular cutout neatly traps the gas supply pipe. The securing screws should then be tightened to lock the cover in position.
- Replace the burner plate.
- Replace the tray for vermiculite.



Checking for clearance of combustion products

- Close all doors and windows in the room.
- Light the fire and allow to run for approximately **5 minutes** on high position.



fig. 4

- After approximately 5 minutes hold a smoke match just inside and below the centre of the lower front edge of the top of the fire. (It is recommended that a suitable smoke match holder is used when checking for clearance of combustion products). All smoke generated should be drawn back into the flue. If slight spillage occurs or if in doubt, repeat the test after a further 5-10 minutes. If spillage persists, the flue is not functioning correctly and a fault exists. If, after investigation the fault cannot be traced and rectified, the fire must be disconnected from the gas supply and expert advice obtained.
- **If there is an extractor fan fitted anywhere in the vicinity of the appliance, the test should be repeated with the fan running on maximum and all interconnecting doors open.**
- After ensuring that the fire is safe to use it should be left on high position to fully warm up. During this time a slight odour may be noticed, this is due to the "newness" of the fire and will soon disappear. At this stage any minor adjustments to the coals should be made using suitable long handled tongs and taking care not to damage the coals.
- Finally, hand the instructions over to the customer and explain the operation of the fire.

Remote control

Remote control is supplied as a standard accessory. Batteries, with a life expectancy of approximately one year, feed the electrical supply. The remote control will only work if the pilot light is lit.

Connecting the receiver

The remote control system comprises a receiver and a remote control, packed together in one box. The receiver must be connected to the appliance.

This is done as follows:

- Take the receiver out of the box.
- Slide the plug of the cable onto the receiver circuit board (fig. 5).
- Connect the wires to the connectors on the gas control valve. The different sized plugs correspond with the connectors on the gas control valve.
- Open the lid.
- Insert 4 penlight batteries (type AA). Make sure they are the right way round.
- Replace the lid.
- Place the receiver under the appliance on the floor. Make sure that the red LED points to the front.
- **NB:** Fit the receiver as far away from the burner tray as possible to prevent the receiver from getting too hot.

Replacing the batteries in the receiver

- Open the flap at the front.
- Take the receiver and open the cover. The batteries are under that cover.
- Remove the old batteries and insert the new ones, making sure that the + and - signs on the batteries correspond with those in the holder.

Inserting or replacing the batteries in the remote control

- Remove the cover on the back of the remote control.
- Connect a square battery (type 6LR61) to the clip.
- Fit the battery in the holder.
- Replace the cover.
- The temperature is shown on the display in Fahrenheit, press both buttons for a few seconds and it will change to Celsius.

NB: Do not throw old batteries in the dustbin. They should be treated as Chemical Waste.



fig. 5

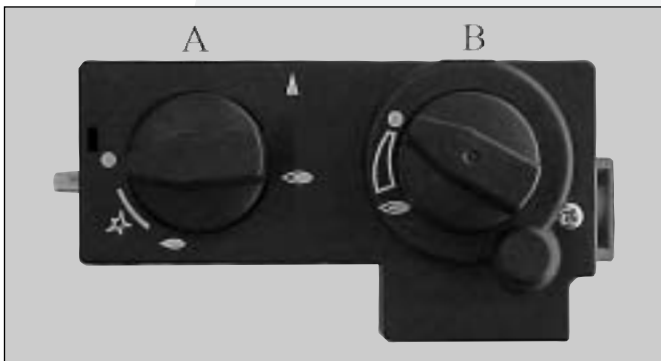





fig. 10



OPERATING INSTRUCTIONS

Pay attention: Make sure that the flap is cooled down.

Lighting

Press button A and turn to the left to the small flame . The flame will ignite at . Check that the pilot is alight. If that is the case, hold button **A firmly pressed for** another 5 seconds. Then release button A and check that the pilot light is still burning. Now turn button A to the large flame , which will open the main valve of the control block. Depending on the setting of the control button B, high or low flames will be visible. If the ignition does not operate properly, relight.

Remote Control

The height of the flames can be regulated by remote control, which will turn button B on the gas control block. Press the bottom button () on the remote control for a smaller flame. When you push the button above () and the little button at the remote control at the same time, the flames become higher. Manually adjusting button B will have the same effect. A certain force is required when rotating button B, a clicking sound is quite normal.

Pilot light setting

If the heater is not in use but you would like the pilot light to remain alight, set button A to the small flame. The gas supply to the main burner will then be turned off.

Switching off

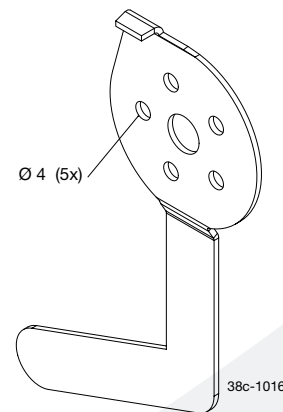
Turn button A to the "0" setting. The gas supply to the burners will then be turned off.

Important

A built-in safety lock is activated when the appliance is switched to "OFF" (closed down setting). Therefore, wait 5 minutes before relighting the heater. Within this period, do not try to push the lighting button, as this has been blocked by the safety lock. Do not force the button, as this may result in damage to the mechanism.

FLAME CONTROL

The flame control (see fig. 11 and 12) enables you to 'play' with the flames. Turning the flame control forwards or backwards, will adjust the amount of yellow in the flames.



flame control with little holes (only for twigs, natural gas)

fig. 11

INSTALLING THE FASCIA

- Unpack the Fascia
- Remove the fitting screws from the engine (Fig 12)

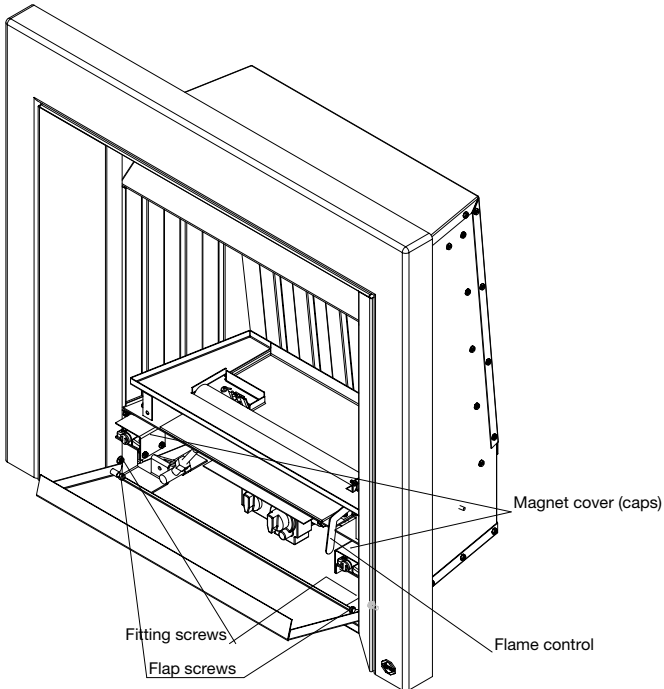


fig. 12

- Hang the fascia behind the lug at the top of the engine as shown in fig 13.

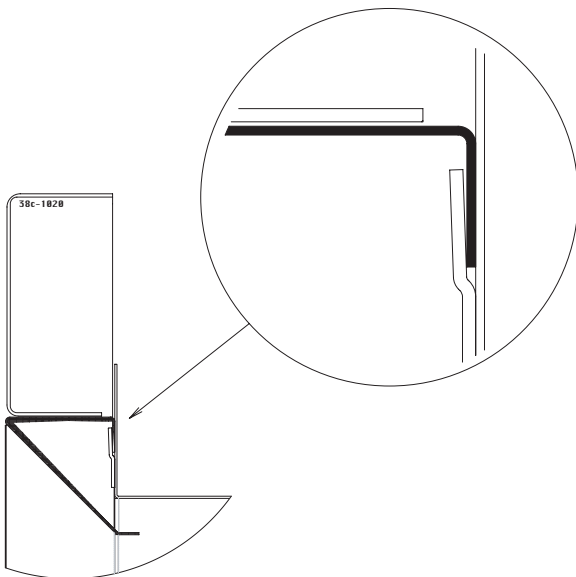


fig. 13

- Replace the fitting screws
- Fit the flap as shown in fig. 12, screwing the two screws in the side of the flap into the bottom holes of the black frame.
- If the flap is not positioned straight you can correct it by changing the position of the magnet
- Make sure that the caps are replaced once the magnets have been adjusted.

GENERAL NOTES

Flue-gas protection

An insufficient air supply or a malfunctioning chimney duct could reduce the concentration of oxygen in the room to such an extent that there would not be enough oxygen left for complete combustion of the gas, resulting in the formation of carbon monoxide. The air supply must comply with national guidelines.

This appliance is fitted with an 'oxypilot' (pilot-light burner), which also prevents a dangerous concentration of combustion products forming in the room as a result of incomplete gas combustion. The installer should allow the fire to burn for 10 mins. and then check that the flue gases are discharged properly.

The pilot-light burner cannot be serviced. If it is defective, you can order a new one via your installer. Only authentic replacement parts are to be used. The pilot-light burner must not be adjusted or altered in any way whatsoever. The installer must not short-circuit the pilot-light system in any way whatsoever.

Gas Safety Regulations (for installation & use) 1998 (amended)

In your own interest and that of safety, it is law that all gas appliances are installed by competent persons in accordance with the above regulations. Failure to install appliances correctly could lead to prosecution.



NB: The Council of Registered Gas Installers, whose members are identified by the emblem shown here, are all required to work to the recognised standards.

Maintenance and Cleaning

Periodic maintenance should be carried out by a registered installer. The gas-control block must not be greased. Do not use any caustic or abrasive agents when cleaning the appliance. The chimney must be inspected regularly to make sure that all flue gases are discharged through the chimney. Do not allow excesses of soot to build up in the chimney. Any soot that has formed in the chimney should be removed, only when it is cooled down. The ventilation should be checked regularly to make sure that there is no obstruction.

Discoloration of walls and ceiling

Brown discoloration is an annoying problem, which is difficult to solve. It can be caused by dust burning as a result of poor ventilation, for example, or by cigarette smoke or candles.

These problems can be avoided by ensuring that the room the heater is in is properly ventilated. A good guideline for ventilation is:

- New buildings : 3.24 m³ / hour per m² floor surface of the room.
- Existing buildings : 25.20 m³ / hour for a room.

Use candles and oil lamps as little as possible, keeping the wick as short as possible. While they enhance the atmosphere, candles and oil lamps also cause the formation of large quantities of unhealthy soot particles in your home. Cigarette and cigar smoke contains tar, which upon heating will precipitate on cold or damp walls. If you have a newly cemented chimney or have had any other reconstructions / renovations done, you are advised to wait at least 6 weeks before lighting your fire, to allow the walls, floor and ceiling to dry out completely.

Lighting the heater for the first time

There can be an unpleasant smell when you light the heater for the first time. This is caused by the varnish evaporating and will disappear after a few hours. We therefore advise you, on initial use, to heat the appliance at the highest setting while ventilating the room it is installed in.

Extra protection

This heater meets the normal safety standards regarding surface temperatures, but physical contact with heated surfaces should be avoided where possible. An additional guard is recommended to protect young children and elderly, infirmed or handicapped people.

GUARANTEE REGISTRATION CARD

In order to register your guarantee, please complete and return this card (no stamp required)

Details of equipment:

Model:

Type of gas: Natural Gas L.P.G. (please tick).

Model an serial no. are to be found on data badge inside heater.

Serial No.:

Customer:

Name

Address (of installation)

Post Code

Tel. No.

Appliance installed in (Office, Church, etc.)

Installed by:

Name

Address

Post Code

Tel. No.

Appliance installed in (Office, Church, etc.)

Is appliance replacing alternative fuel: Solid Fuel Oil Electricity (please tick).
 If replacing existing balanced flue heater make of original
 Date of installation

N.B. Where more than one appliance installed, please complete all cards and return in envelope using freepost address on reverse.
 Completion of this card in no way affects your statutory rights

Thank you DRUGASAR LIMITED

Disposal

When replacing or otherwise removing the appliance, it should be disposed of in compliance with current regulations.

Shut off the connecting tap with coupling before commencing disassembly. Undo the coupling between the connecting tap and the appliance. The whole appliance can now be disassembled and removed.

Guarantee

Please complete the enclosed REGISTRATION CARD and post it in an envelope (no stamp required) to the address below within 5 days of purchase.

**DRUGASAR LIMITED
FREEPOST
DEANS ROAD
SWINTON
MANCHESTER M27 1 BX**

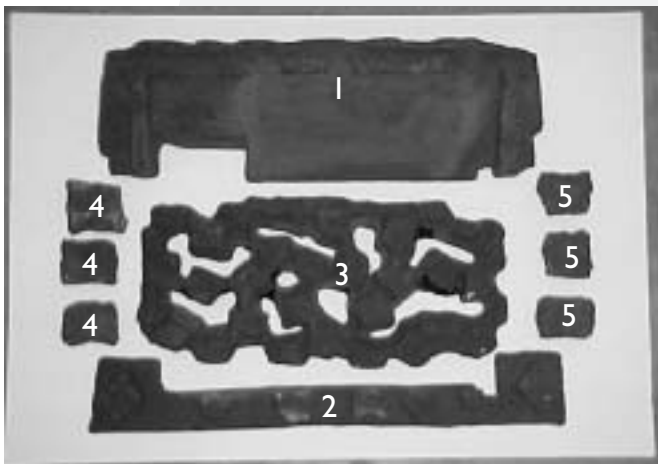
Please retain the GUARANTEE CARD (page 5) for your own reference. The guarantee will become effective upon receipt by DRUGASAR Limited of the fully completed registration card.

**PLEASE SEND IN AN
ENVELOPE**

DRUGASAR, GAS HEATING FOR PEOPLE WHO DON'T HAVE MONEY TO BURN.



Installation of the coal



1



2



3



4

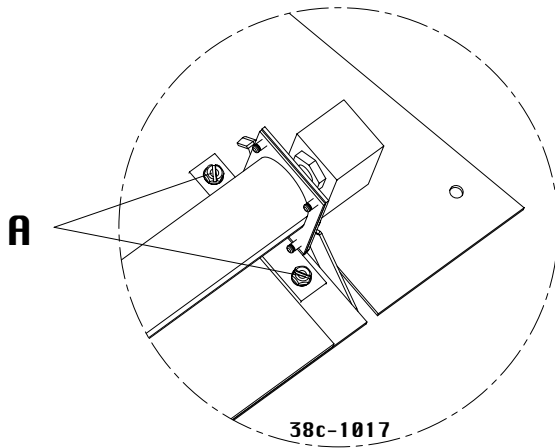


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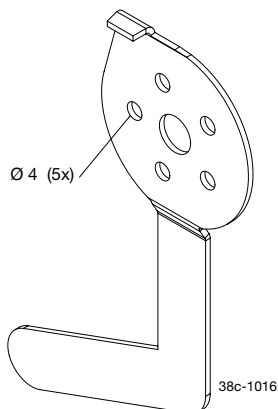
Installation of the twigs

When installing twigs in the heater for gas G20 you have to change the flame control.

- Remove the tray for vermiculite
- Remove the burner by removing the screw A

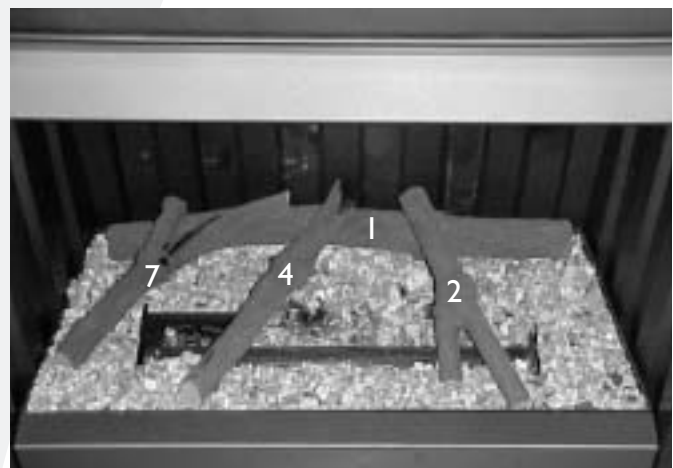
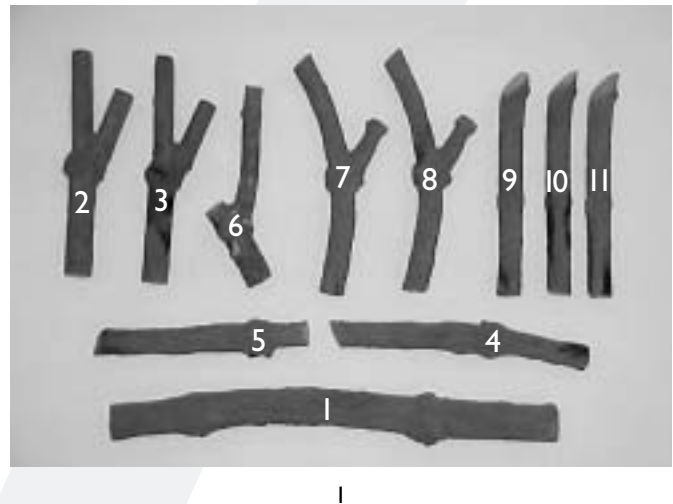


- Change the flame control for the one with the little holes



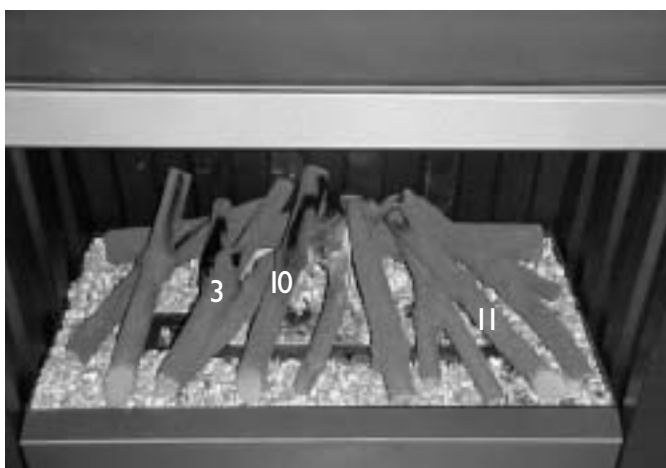
**flame control with little holes
(only for twigs, natural gas)**

- Replace the burner (don't forget the spring)
- Replace the tray for vermiculite
- Fill the tray with vermiculite
- Make sure that no vermiculite gets onto or into the oxypilot, as this could prevent the pilot light from working correctly.
- Sprinkle the bag of embers (the bag with black contents), on top of the vermiculite to create a glowing effect on the burner bed.
- Now lay the twigs as illustrated



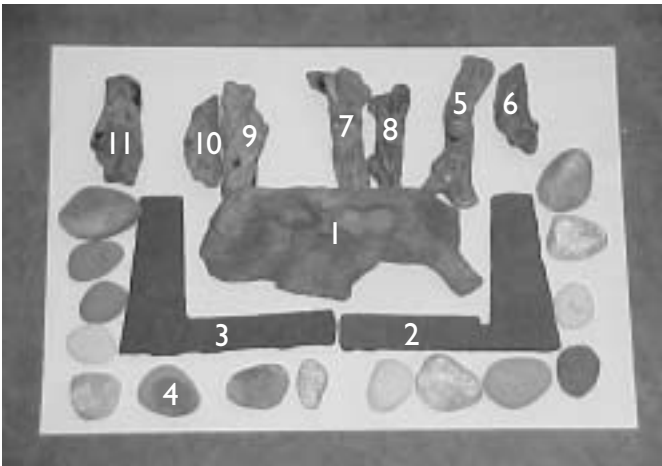


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Installation of the pebbles /driftwood



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7

The conversion must be carried out by a qualified fitter.

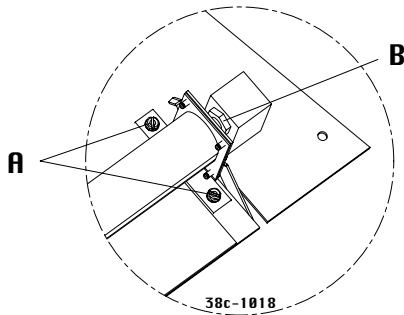
Before commencing the conversion:

1. Close off the gas supply
2. Disconnect the gas supply

Remove the tray for vermiculite

Replacing the components

- 1 Remove the burner by removing the screw (A)



- Change the jet (B) for the new one with an open-ended spanner
- Replace the burner (don't forget the spring)
- Change the oxypilot

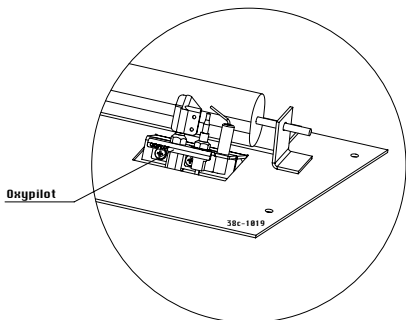


Fig. 1

2. Fine adjustment jet (fig 1)

Remove the fine adjustment jet (1) from the gas block. Fit the new fine adjustment jet and tighten firmly.

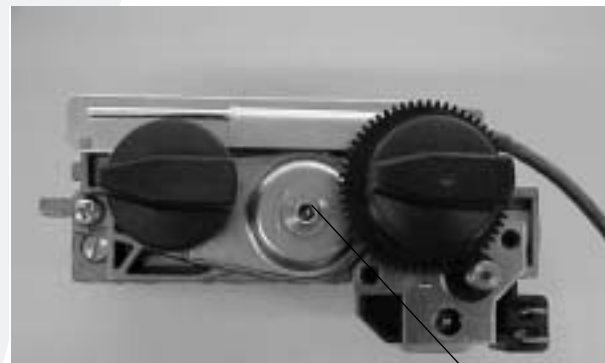


Fig. 2

3. Adjusting the burner pressure (fig 1,2)

Reconnect the gas supply to the heater and open the new gas pipe.

On the gas control block is point of pressure measurement where the burner pressure can easily be measured with a manometer. Loosen the screw at the point of pressure measurement (2) and connect the manometer. Remove the cover of the gas control block by removing the screw (3). To convert the appliance to propane or natural gas the burner pressure must be adjusted with the pressure regulating screw (4) as specified in the table. Replace the cover.

Ignite the pilot light. Set the thermostat to the highest setting and adjust the burner pressure as specified in the table. Check the gas tightness! Turn the burner off again, remove the manometer and tighten the screw at the point of pressure measurement.

- 4 Replace the tray for vermiculite

Type of gas		G20	G31
Pre pressure	mbar	20	37
Burner pressure	Mbar	7	24
Nom. Load (Hs)	kW	5.3	5.85
Nom. Load (Hi)	kW	5.9	6.5
Nom. Output	kW	2.0	2.5
Consumption on full output	l/h	556	242 468 gr/h
Consumption on low output	l/h	248	36
Burner injector	mm Ø	2.30	1.40
Colour oxypilot	kode	blank	black
Low setting injector	mm Ø	1.30	1.10



