INSTALLATION INSTRUCTIONS

morsø

PANTHER
GAS STOVE

MODEL NUMBER 553

Before installation ensure that the local distribution conditions (identification of the type of gas and pressure) and the adjustment of the appliance are compatible

This is not a "Do It Yourself" product
This appliance must be installed by a competent person

These instructions must be left with the user

CE

This appliance meets the requirements of the European Gas Directive

Manufactured by Morsø Jernstøberi A/S, Furvej 6, 7900 Nykøbing Mors, Denmark

Distributed by Wonderfire, Wood Lane, Erdington, Birmingham B24 9QP, England

600B476/02

As supplied, this appliance is for use with natural gas (G20)
When converted using conversion kit no. 555311 this appliance is for use with propane gas (G31)
This appliance is for use in the United Kingdom (GB) and the Republic of Ireland (IE) only.

LIST OF COMPONENTS

1 Cast iron stove containing gas burner unit & interior flueway
1 Door handle with fixing screw
1 Ceramic rear base piece
1 Pair of ceramic front base pieces
1 Set of 3 top coals
1 Pair of ceramic firebox side walls
1 8mm nut & olive
1 Key for window
1 Set of Installation and user's instructions
1 Flue sealing rope

APPLIANCE DATA

This product uses fuel effect pieces, firebox side walls and gaskets containing Refractory Ceramic Fibres (RCF), which are man-made vitreous silicate fibres. Excessive exposure to these materials may cause temporary irritation to eyes, skin and respiratory tract. Consequently, it makes sense to take care when handling these articles to ensure that the release of dust is kept to a minimum. To ensure that the release of fibres from these RCF articles is kept to a minimum, during installation and servicing we recommend that you use a HEPA filtered vacuum to remove any dust and soot accumulated in and around the fire before and after working on the fire. When replacing these articles we recommend that the replaced items are not broken up, but are sealed within a heavy duty polythene bag, clearly labelled as RCF waste. This is not classified as "hazardous waste" and may be disposed of at a tipping site licensed for the disposal of industrial waste. Protective clothing is not required when handling these articles, but we recommend you follow the normal hygiene rules of not smoking, eating or drinking in the work area and always wash your hands before eating or drinking.
This appliance does not contain any component manufactured from asbestos or asbestos related products.

Gas		**Natural (G20)**	**Propane (G31)***
Inlet Pressure		20mbar	37mbar
Input	Max. (Gross)	6.8kW	6.8kW
	Min. (Gross)	3.1kW	3.0kW
Output	Max. (Gross)	4.9kW	4.9kW
	Min. (Gross)	2.2kW	2.1kW
Burner Test Pressure (Cold)		18.7±0.75mbar	36.5±0.75mbar
Gas Connection		8mm pipe	8mm pipe
Burner Injector		Cat.82 Size 420	Cat. 92 Size 200
Gas rate		0.639m^3/h	0.253m^3/h
Efficiency class		2	2

GENERAL INSTALLATION REQUIREMENTS

The installation must be in accordance with these instructions.
For the user's protection, in the United Kingdom it is the law that all gas appliances are installed by competent persons in accordance with the current edition of the Gas Safety (Installation and Use) Regulations. Failure to install the appliance correctly could lead to prosecution.
The Council for the Registration of Gas Installers (CORGI) requires its members to work to recognised standards.
In the United Kingdom the installation must also be in accordance with:

a) All the relevant parts of local regulations.
b) The current edition of the Building Regulations issued by the Department of the Environment and the Welsh Office or the Building Standards (Scotland) Regulations issued by the Scottish Development Department.
c) All relevant codes of practice.
d) The relevant parts of the current editions of the following British Standards:-
   BS 1251
   BS 5440 Part 1
   BS 5440 Part 2
   BS 5871 Part 1
   BS 6891
   BS 8303

In the Republic of Ireland the installation must also conform to the relevant parts of:

a) The current edition of IS 813
b) All relevant national and local rules in force.

The hearth must be made from a non-combustible material and be at least 600mm wide x 500mm deep x 12mm thick

Clearances from combustible and non-combustible materials must be at least those shown in figure 1

The flue may be: (a) A conventional open flue.
(b) A metallic gas flue pipe. The connection collar is for 150mm dia. flue pipe. The flue installation dimensions are shown in figure 1.

- No restrictor plate or flue damper is permitted. Where a variable damper is fitted it must be removed or be permanently fixed in the open position.

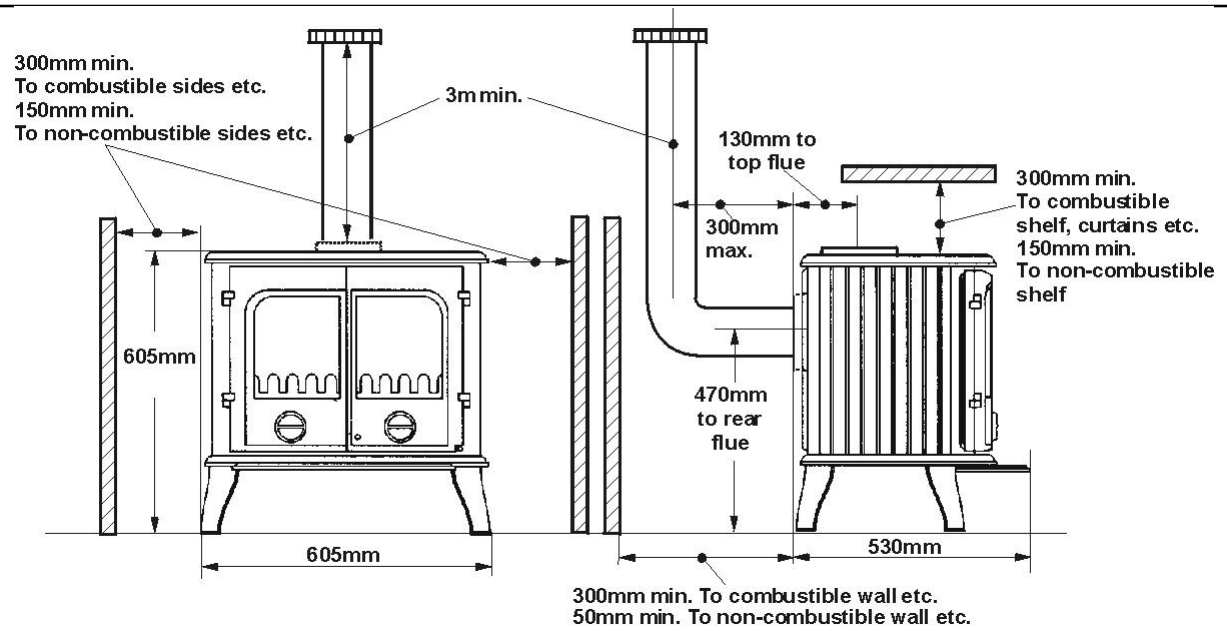

Figure 1

- The flue must be swept before the appliance is installed.

Ventilation: In the United Kingdom (GB) no special ventilation bricks or vents are required in the room for this appliance.
In the Republic of Ireland (I.E.), permanent ventilation must comply with the regulations currently in force.

Location: This appliance must not be installed in a private garage or any room, which contains a bath, or shower or where steam is regularly present.

Propane gas appliances must not be installed in a cellar, basement or other room which is built entirely below ground level (See Gas Safety (Installation & Use) Regulations).

POSITIONING THE STOVE

1. Decide on whether the stove is to be used in rear or top outlet set-up and remove the appropriate outlet cover plate. The cover plate must be securely attached to the unused flue outlet.
2 Place the stove in position on the hearth ensuring that the minimum dimensions specified in figure 1 are adhered to. Connect the flue pipe to the outlet and seal in place.
3. Due to its weight there is normally no requirement for additional fixing with this appliance. However, where the stove may be subjected to some vibration (e.g. transit in a narrow boat), the legs should be secured with wooden blocks or by some means that prevents lateral movement.

CONNECTING THE GAS SUPPLY

- A nut and olive are provided for an 8mm pipe inlet connection to the elbow at the bottom front of the appliance. The elbow can be rotated to allow a connection from any direction. The elbow includes a valve for isolating the gas supply.
- The supply pipe must be rigid material. Flexible pipe must not be used.
- *Note: Prior to connecting the gas supply it is advisable to blow out the gas supply so that any dirt which may be present in the pipe is cleared and cannot enter the gas valve or pilot burner and so cause a blockage*
- With the supply connected pressure check the installation pipework for gas soundness. In the United Kingdom check in accordance with the current edition of BS6891. In the Republic of Ireland check in accordance with the rules in force.

FITTING THE CERAMIC FIREBOX WALLS & FUEL BED

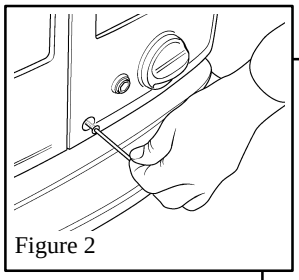
Figure 2

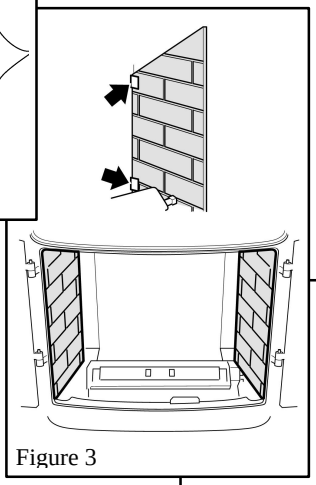
Figure 3

1. The windows are secured with a locking screw. Remove the screw with the Allen key supplied. See figure 2. Open the windows.
2. Place the ceramic walls against the firebox sides. Locate the back edges of the walls in the tabs at the back corners of the firebox. See figure 3.
3. Place the ceramic rear base coal in position. The front of the coal must rest behind the two stops at the rear of the burner and not rest on top of them. See figure 4.
4. Place the left front coal behind the metal lip at the front of the burner. See figure 5.
5. Place the right front coal behind the metal lip at the front of the burner. Its left side should rest over the projection on the left front coal. See figures 5 & 6.
6. The double top coals are marked “L” and “R”. Place the coal marked “L” behind the front left coal. Place the coal marked “R” behind the front right coal. Place the single coal between the two double coals. See figure 7.
7. Close and secure the windows by refitting the locking screw.

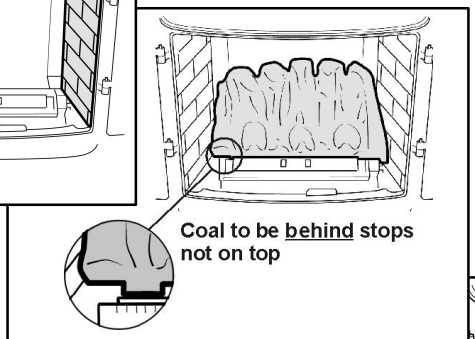

Figure 4

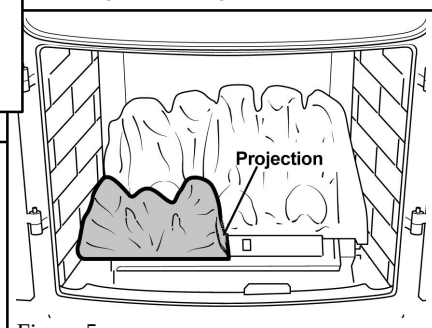

Figure 5

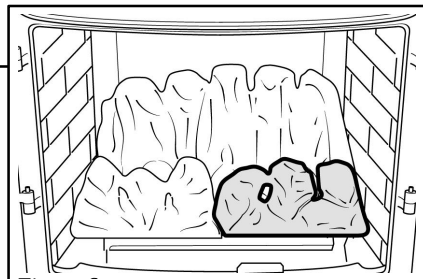
Figure 6

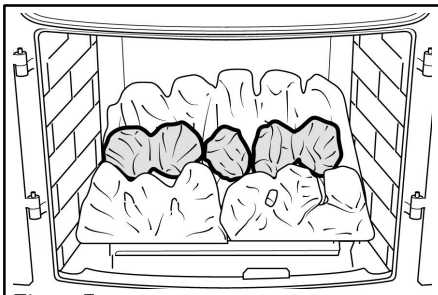
Figure 7

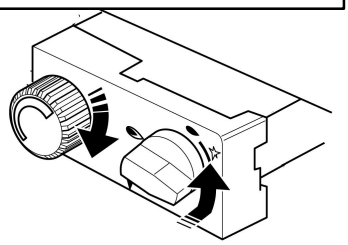
Figure 8

CHECK FULL OPERATING SEQUENCE

See figure 8.

If the fire is turned off or the flames go out, wait at least 3 minutes before attempting to relight. A safety device in the control stops the fire being turned back on until it is safe.

- Turn the left hand control knob fully clockwise.
- Push in the right control knob and, while keeping it depressed, turn anticlockwise through the ignition position marked ✧ and up to the pilot position marked ⬬. The spark should light the pilot.
- If the pilot does not ignite, keep the knob depressed for a few seconds to purge air from the supply pipes. Then turn back to the off position marked ● and repeat the ignition procedure.
- When the pilot has lit, keep the right hand control knob depressed for a few seconds to allow the pilot flame to stabilise then release it. If the pilot does not remain alight ensure that the air has been purged.
- Partially depress the right control knob and turn to the main burner position marked ◠ . The main burner should now light at its low position.
- The left-hand knob is for burner flame adjustment. Turning it anticlockwise should gradually increase the flame height.
- The flame height control does not have to be re-set every time the fire is lit. It can be kept at any position enabling the customer to use the right hand control only to ignite the burner at the set flame height.
- After checking turn the right hand knob to off. Depress the control knob partially at the pilot position (⬬), turn clockwise to off (●) and release the knob. If any resistance is felt when turning, release the downwards pressure on the knob before continuing to turn.

CHECK REFERENCE PRESSURE

The burner aeration is non-adjustable. The appliance is pre-set to give the correct heat input on Natural Gas at 20 mbar (8in w.g) inlet pressure and no further adjustment is necessary. The burner pressure should be checked at the pressure test point located at the side of the control unit (See figure 9) . The pressure check should be carried out using a calibrated pressure gauge after removing the test point screw. The fire should be alight and the left hand control knob at its fully anticlockwise setting (Maximum flame height). The pressure setting should be within the limits shown on page 2 of this manual (Appliance data). After checking the pressure, turn off the fire, remove the pressure gauge and replace the pressure test sealing screw. Relight the fire and test all gas joints for soundness using a suitable leak detection fluid.

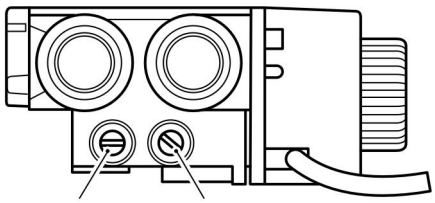

Figure 9

CHECK FOR SPILLAGE

A spillage check must be made before leaving the installed appliance with the customer. Make this with all the ceramic coals in position.

1. Close all doors and windows in the room containing the appliance.
2. Light the appliance and turn the flame-height control to the maximum position.
3. Leave the appliance on for 5 minutes.
4. Hold a lighted smoke match close to the draught diverter outlet at the back of the stove. See figure 10.
5. The installation is satisfactory if the smoke is drawn into the appliance.
6. If the smoke is not drawn into the appliance, leave the appliance alight at the maximum setting for a further ten minutes and then repeat the test.
7. If the smoke is still not drawn into the appliance, turn off the appliance and allow to cool. Check the flue installation and clearance of the draught diverter from the rear surface. **If no solution can be found, turn off the appliance and disconnect it. Advise the customer of the problem and stress that the appliance must not be used until the problem is solved**. If necessary seek expert advice.
8. If the above test is satisfactory, open all internal connecting doors, hatches, etc. in the room. Keep all doors and windows that open to the outside of the building closed. Switch on any extractor fan installed in the same room as the appliance or a connecting room. Open all doors and other openings between the fan and the appliance. Recheck for spillage as above. The installation is satisfactory if the smoke is drawn into the appliance. **If the test is not satisfactory, turn off the appliance and disconnect it. Advise the customer of the problem and stress that the appliance must not be used until the problem is solved.**

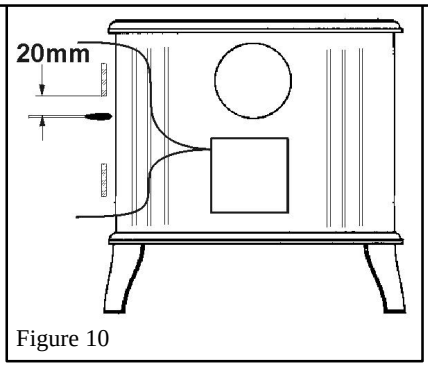

Figure 10

FINAL REVIEW & CUSTOMER BRIEFING

- Visually inspect the appliance. Clean off any marks incurred during installation.
- Advise the customer how to operate the appliance. Advise the customer that they should read their Owner's guide before operating the fire and always follow the advice in the section headed "Cleaning".
- Advise the customer that the top, front, sides and back of the appliance are working surfaces and become very hot during use and, therefore care should be exercised, particularly with the young, elderly or infirm.
- Explain to the customer that the appliance has a flame failure & spillage monitoring system. Point out the explanation of this system shown in the user's instructions under "Operating the fire". Advise that if the fire goes out for any reason wait at least three minutes before relighting. Stress that if the monitoring system repeatedly shuts off the fire, the appliance should be switched off and a specialist should be consulted.
- Advise the customer that the windows can be opened for cleaning the interior by using the special key supplied. **Stress that the window locking screw should be refitted afterwards to prevent inadvertent opening when the stove is alight.**
- **Stress that no extra coals must be added over and above those supplied with the appliance and that any replacements must only be the authorised spares. Warn that ignoring this advice could cause incomplete clearance of the products of combustion with consequent health hazards.**
- Hand these instructions, the owner's guide and the window key to the customer.
- Recommend that the appliance should be serviced and the flue checked by a competent person *(In the UK preferably a CORGI registered person)* at least annually. *If the appliance is in premises in the United Kingdom occupied by a tenant, point out that by law a landlord must have any gas appliance, flue and pipework which is situated in a tenant's premises checked for safety at least every 12 months*

SERVICING

- ***Always turn off the gas supply before commencing any servicing***
- ***This product uses fuel effect pieces, burner compartment walls and gaskets containing Refractory Ceramic Fibres (RCF), which are man-made vitreous silicate fibres. Excessive exposure to these materials may cause temporary irritation to eyes, skin and respiratory tract. Consequently, it makes sense to take care when handling these articles to ensure that the release of dust is kept to a minimum. To ensure that the release of fibres from these RCF articles is kept to a minimum, during installation and servicing we recommend that you use a HEPA filtered vacuum to remove any dust and soot accumulated in and around the fire before and after working on the fire. When replacing these articles we recommend that the replaced items are not broken up, but are sealed within a heavy duty polythene bag, clearly labelled as RCF waste. This is not classified as "hazardous waste" and may be disposed of at a tipping site licensed for the disposal of industrial waste. Protective clothing is not required when handling these articles, but we recommend you follow the normal hygiene rules of not smoking, eating or drinking in the work area and always wash your hands before eating or drinking.***
- Check that the appliance is clean and that no matter is blocking the burner or pilot which may cause imperfect flames or prevent a correct electrode spark.
- After servicing, make sure that the ceramic walls and fuel effect pieces are replaced correctly as described in the installation instructions. Make sure that the window locking screw is in place.
- ***Always test for gas soundness after servicing the appliance.***