"COBRA"

WOOD HEATER Ref. 991129

INTALLATION GUIDE & USER MANUAL



The COBRA is a wood-burning heater. We thank you for having confidence in the Godin brand and for buying this product.

1. DEFINITIONS

This heater operates with a closed combustion chamber with the primary combustion occurring at the base of the firechamber. This heater has been tested according to European norms.

a. Characteristics:

- Spigot size: 153mm diameter
- Fuel: firewood logs up to 33cm in length
- Unsuitable fuel: ALL others
- The draw necessary to obtain proper functioning of the unit and to maximise the calorific output is 12Pa (Pascal) but this may vary between 10 and 20 Pa.
- IMPORTANT: THIS UNIT CAN ONLY BE CONNECTED TO ONE CONDUIT AND IT MUST BE FIRE-RESISTANT. THE UNIT IS DESIGNED TO OPERATE WITH THE DOOR CLOSED.

b. Technical characteristics:

Mass	
Power	8.0 kW*
• Average fume temperature during normal operation	322°C
Unit efficiency	78.4%
• Level of CO in the fumes	0.06%
• Level of CO ² in the fumes	11.2%
Combustion mode	Intermittant

- Safety distances to combustible materials:
 - 1. Sides 50cm
 - 2. Rear 50cm
 - 3. Floor 50cm
 - 4. From the glass 150cm

*The performance obtained is standardised on a trial of a 42 minute burn with a wood load of 1.94kg at 14.2% humidity. The calorific output being 14.876MJ/kg and a draw of 12 +/-2 Pa. Longer burns are obtained using bigger loads and wood of greater diameter.

2. THE HEATER ENVIRONMENT

Recommendation concerning the installation site

The calorific radiation through the vitroceramic glass is substantial, necessitating that any objects or materials that may deteriorate due to heat (furniture, paper, tables, carpets) should be at least 150cm away from the glass surface.

Before Commencing Works/ Installation

- If the heater is to be connected to an existing chimney or flue the integrity thereof must first be verified and it must conform to any regulations or specifications required.
- Verify security distances with regard to any combustible material.
- If an existing chimney is going to be used and it is not suitable it may be necessary to run tubing for the entire height of the chimney or use a new chimney, flue altogether. This should be done by a professional.
- In all cases mechanical sweeping of the flue must be possible.
- Verify where the unit is to be installed with regard to the safety distances to any potentially combustible material – be this beams, trusses, insulation material in walls and ceilings – ^owhich may degrade if exposed to excess heat.
- Ensure that the wall behind the unit is suitable. If the wall contains combustible insulation material (e.g. polystyrene sheeting), the entire section, including 30cm either side of the unit, up to the ceiling must be removed. A new wall section would be built with good insulation and mechanical properties (e.g. cellulose concrete more than 7cm thick). Any prior ventilation components in this section should be re-instated.

• Lightly constructed walls (internal) that are either slightly combustible or even non-combustible should be replaced by a suitable non-combustible wall of suitable strength and thickness. In either case this section should be covered by a non-combustible material that will not degrade or be altered by heat.

Allowing for Fresh Air in the Room

- If the volume of fresh air coming into the room is insufficient, for example if there is a mechanical air extraction system in the room, it is important that allowance is made for fresh air to come into the room.
- The Cobra is a fully sealed unit and a fresh air intake can be connected directly to the unit onto the 100mm spigot at the base of the unit.

	Remove wall section and existing insulation	Build a new reinforcing wall
Exterior wall containing combustible insulation	YES	YES
15cm thick rear wall, non- combustible	NO	NO
Lightweight external wall, slightly combustible	YES	YES
Lightweight internal wall, slightly combustible	YES	YES

- The air intake, if required, must be directly from the outside and should be fitted with a grille. Direct connection to the heater would be using a 100mm duct.
- External fresh air carry condensation and in order to avoid this an insulated duct is recommended.
- In the case of a non-airtight home (most South African homes) the arrival point of fresh air into the room should be in a position as close as possible to the heater and should be the equivalent of at least ¼ of the cross-sectional area off the chimney, with a minimum of 200cm².



INSTRUCTIONS FOR THE USER

1. Use of the Heater

a. Parts schematic: see schematic #1.

b. Before using the Heater:

If any wet-works have taken place it is important to allow for 2 to 3 days of drying. Hereafter fires may be lit in the unit but only using moderate loads of wood. This will allow for a slow rise in temperature of the heater, minimising rapid expansion of the constituent parts and avoiding the risk of thermal shock.

During the first few fires it is possible that the heater will give off a smell. This could be excess paint, from the manufacturing process, that needs to burn off. It may take a couple of sustained fires to eliminate this odour, During this initial "burning-in" stage one must take particular care of your treatment of the heater as the painted surface can be delicate and susceptible to scratches and marking.

c. Fuel:

The heater is designed to burn with wood. Coal or other combustible materials should not be used.

Hard wood is preferred to soft wood, it should be very dry (20% maximum humidity) which would be the equivalent of stockpiling it for 18 to 24 months. Wood that has a high humidity will result in poor combustion and rapid deposits on the glass of the unit and within the flue liner/ conduit.

Never burn household waste, plastics, rubber, oiled products, etc. which pollute the environment and heighten the risk of chimney fires as excess deposits occur in the chimney.

d. Lighting:

To light the fire: scrunched up newspaper or straw with a bed of kindling on the grate and a few small logs on top of 3cm diameter.

Light the fire by lighting the newspaper and close the door of the heater. Open the air register completely. Please note that leaving the air register fully open for prolonged periods can damage the heater.

Close down the air register as soon as there are sufficient coals to support a fresh load of firewood. Therefore, as soon as the fire is burning well, load more firewood.

Never use petrol or alcohol in the heater.

In order to facilitate lighting of the fire it is recommended to keep a layer of ash on the grid.

NOTE: The performance of the heater is affected by the external atmospheric conditions. One has to be aware of, for example, strong winds (high draw) or fog (no draw).

e. Performance:

To get the most out of your heater special care must be taken of the chimney and/ or flue. It is recommended to also load the fire progressively rather than start off with one large load of firewood.

It is not recommended to burn long, slow fires over prolonged periods, especially at the beginning and end of winter and during periods of mild weather. This can result in incomplete combustion that is favourable towards the deposit of creosote and tar on the glass and within the chimney or flue.

Never leave the heater with the air intakes fully open and loaded with an excessive load of firewood – this could damage the heater, flue connection and the chimney/ conduit.

f. Air Intake Regulation:

The air intake is regulated at the base of the firechamber, at the top of the door and at the position of the log retainer.

Combustion air is also injected at the mid-rear position of the firechamber to ensure secondary combustion of gases.

g. Loading Precautions:

To open the door, unlatch the door handle gently, and while observing slowly open the door. This is in order to avoid potential blowbacks into the room through the door.

IMPORTANT: The glove supplied is not non-combustible. The glove is only to be used for opening the door and for adjusting the air-intake control. It must never be used to handle burning embers. Take care when loading firewood as it is possible that some embers may be dislodged and fall out the door.

h. Suggestions and Precautions:

Take care if burning ecologic compressed logs. They tend to have a very high calorific output and a large load could severely damage the heater. These loads should be limited to 1kg.

PROBLEM	RECOMMENDATION
Smoke comes out the door when it is opened.	 See above with regard to loading precautions. Verify that there is sufficient fresh air coming into the room (open a window or door). Check the integrity of the unit (the draw, integrity of the flue and connection to the heater.
Not enough heat output, the fire smolders or goes out.	 Reload the fire on a good bed of coals and if necessary relight with a good load of kindling. Use drier wood (15 to 20% humidity) Check the integrity of the unit (the draw, integrity of the flue and connection to the heater.
Not enough heat but the fire burns vigorously.	 Load larger diameter logs. Check the draw of the unit (it may be necessary to install a damper).
The glass gets dirty very quickly.	 Use dry wood. Avoid slow burns too frequently.

Never use water to put out the fire.

The glass can get very hot and give off, by radiation, a significant amount of heat. Items that are sensitive to heat must be kept at a distance of at least 150cm from the glass. Take care to avoid burns, especially with young children.

It is possible that some colours may discolour (yellowing) on objects in close proximity to the heater due to the significant heat given off by the heater.

If wood is stored beneath or around the heater it must not be stacked in such a way as to obstruct the free flow of air that is part of the convection. It is equally important to not store any combustible products or heat-sensitive objects in close proximity to the heater (paper, firelighters, electronic devices).

Note: In the case of a chimney fire, close the door and air-intakes on the heater and call the emergency services.

MAINTENANCE

A mechanical chimney sweep is recommended twice a year (once is acceptable). The flue connection to the heater must be checked and the integrity of the entire chimney/ flue. The heater itself must be checked and, if necessary, the door seals can be replaced. Take care in using the correct products to clean the glass and the heater.

Using excess product, especially on joints and hinged parts could put excess pressure on the glass and cause breakage thereof.

If there is a fault or breakage on the heater it should not be used. Any necessary repair must first be carried out before lighting the heater. Your installation must be checked by a professional installer.

After the fire season all the internal parts of the heater should be cleaned. Any build-up of tar should be removed and all the parts should be brushed down. After having removed all the dirt it is recommended to apply the graphite polish (Godin ref. 0012) to all the cast-iron parts. This will enhance the appearance of the unit and inhibit the formation of surface rust. The external parts of the heater can be touched-up using a special high-temperature paint (Godin ref. 0001).

To clean the glass: when the glass is cold rub it with a moist sponge (dipped in a liquid containing a cleaning product with a caustic soda base). It is important to avoid using excess product that could negatively impact on the integrity of the door and/ or glass seals. Always follow the instructions supplied with any cleaning product used (e.g. Godin glass cleaner: Ref. 0009).

The outer panels of the heater are covered with a high temperature paint resistant to 550°C – this is not a lacquer nor an enamel. It can be wiped with a slightly damp cloth and then dried. With time, and depending on the frequency of use of the heater, the paint undergoes some changes due to thermal shocks and some pigment may be released – these may be transferred to your cleaning cloth. This is not an indication of a deterioration in the quality of the paint. The paint also get a more matt appearance in time and with exposure to higher temperatures.

Depending on how intensely the heater is used it is possible that some exposed parts may discolour.







Linedrawing:



SPARE PARTS

Take note of the reference number of your heater. This will enable your installer to correctly help you with any spares or recommendations you may need.

THE HEATER CANNOT BE MODIFIED IN ANY WAY AND THE USER CANNOT MODIFY THE INSTALLATION. THIS WOULD RENDER ANY WARRANTY NULL AND VOID.





WARRANTY CONDITIONS

Any warranty is subject to: correct installation, use and maintenance of the unit.

All our appliances have a 2 year guarantee (except inserts running with wood – closed fireboxes running with wood) against any defect starting on the date of purchase. This guarantee is subject to the inspection of the installation, use and maintenance conditions described in the instruction manual supplied with the appliance.

Parts that are in direct contact with high temperatures and that could undergo distortions caused by wear and tear are guaranteed for 1 year. This includes:

- 1. Decorative panels, side panels, grills, front hearth floors, grates.
- 2. Guide plates, baffles, valves, ash pits, air channels and fire-bricks.
- 3. Articulation mechanisms (Door hinges and handles etc.)
- 4. Fans, thermostats for overheating of appliances equipped with blast engine
- 5. Temperature control elements, oven thermostats, and for fan heated gas/electric cookers
- 6. Burners, catalysers, burner rings for fuel appliances
- 7. Boilers for central heating and cooking systems for wood/coal.

Our appliances have been specially designed to facilitate replacing of these parts.

Some parts have a longer guarantee:

3 years for cast iron or steel heating body of our boilers for central heating.

Wood-burning Inserts and closed fireboxes running with wood, have a 5 year warranty (only the heating body,

parts in direct contact with high temperatures and undergoing wear and tear, described above have 1 year guarantee.)

Only the parts/s that are deemed to have failed will be covered by the warranty. Any indemnity, compensatory damage, cost of labour and transportation is not included.

In cases the repair or replacement reveals to be too expensive compared to the price of the appliance, the decision to replace or to repair the appliance is to be taken by Godin after sales service only.

Parts not covered by warranty:

- 1. GLASS ceramic glass can withstand temperatures of up to 750°C. The glass can only break because of a mechanical shock while using or handling the appliance.
- 2. Glass seals and ceramic rope seals are considered wear and tear items.

The following will invalidate any warranty:

- 1. Damage caused by burning fuels other than those for which the unit is intended.
- 2. Any defect or deterioration caused by a fall, shock, negligence or lack of supervision and maintenance.
- 3. Deterioration of parts caused by abnormal conditions (back draft, dampness, storm effects, pressure and depression of non conform, temperature shock etc).

- 4. Abnormal usage of the unit (using a unit with the door open, running it on maximum for extended periods)or abnormal usage of the appliance in conditions that are different from the conditions in our manual for which it has been designed, for example non observation of our technical manuals (wrong electric connection, running an empty boiler etc)
- 5. Any defect, deterioration or accident caused by fall, shock, negligence, lack of the buyer's supervision or maintenance.
- 6. Any modifications or transformations made to the unit and non-compliance with installation norms.

Godin SA will not be responsible for any installation, assembly, dismantling costs and consequential removal of the appliance.

Consequently Godin SA, cannot be held responsible for any materials loss or human accidents, being a result of incorrect installation non – observing the legal provisions and regulations (for example, lack of ground connection, incorrect draft of the chimney etc...)

In order to constantly improve our products, we reserve the right to modify our appliances without prior notice. All the dimensions and specifications give are subject to variation according to technical requirements. In case of a problem occurred during your guarantee period, please contact your retailer providing him with a copy of your bill and guarantee containing the appliances product codes, the retailers stamp, the date of the appliance installation.