Installation and Operating Instructions







Salamander Hobbit SE Model 0901 Exempt under the Clean Air Act 1993 for use within UK Smoke Control Areas

Installation and operating instructions for the Hobbit SE model 0901 (Ref 0901SE March 2013)

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1 - The Clean Air Act 1993 and Smoke Control Areas

Under the Clean Air Act local authorities may declare the whole or part of the district of the authority to be a smoke control area. It is an offence to emit smoke from a chimney of a building, from a furnace or from any fixed boiler if located in a designated smoke control area. It is also an offence to acquire an "unauthorised fuel" for use within a smoke control area unless it is used in an "exempt" appliance ("exempted" from the controls which generally apply in the smoke control area).

The Secretary of State for Environment, Food and Rural Affairs has powers under the Act to authorise smokeless fuels or exempt appliances for use in smoke control areas in England. In Scotland and Wales this power rests with Ministers in the devolved administrations for those countries. Separate legislation, the Clean Air (Northern Ireland) Order 1981, applies in Northern Ireland. Therefore it is a requirement that fuels burnt or obtained for use in smoke control areas have been "authorised" in Regulations and that appliances used to burn solid fuel in those areas (other than "authorised" fuels) have been exempted by an Order made and signed by the Secretary of State or Minister in the devolved administrations.

The **Hobbit SE** has been recommended as suitable for use in smoke control areas when burning wood.

Further information on the requirements of the Clean Air Act can be found here : <u>http://smokecontrol.defra.gov.uk/</u>

Your local authority is responsible for implementing the Clean Air Act 1993 including designation and supervision of smoke control areas and you can contact them for details of Clean Air Act requirements

2 - Air Control modifications to assure smokeless Operation

To assure smokeless operation on the Hobbit SE, the following modifications were made to the primary and secondary air supply controls.

Primary air Control

A 1mm spacer installed behind the primary air wheel to ensure the minimum air setting is maintained.



Secondary air Control

Six 8mm air inlets added to the secondary air supply valve on the rear of the stove to ensure the minimum air setting is maintained.



PLEASE READ THESE INSTRUCTIONS CAREFULLY For your safety it is very important that your stove is correctly installed. Take care when assembling and moving the stove. It is made of cast iron and is very heavy (47kg)

3 - Important information about installing and using the Hobbit stove

- All national and local regulations, including those referring to national and European standards need to be complied with when installing the stove.
- The stove must be installed by a registered installer or approved by your local building control officer.
- Only use for domestic heating purposes only.
- Burn only approved fuels (Wood or smokeless fuel). Do not use petroleum based products or use as an incinerator.
- This stove will become very hot whilst in operation and due care should be taken. Use only the tool provided to operate the door handles, air controls, riddling control and ash pan.
 Always use a fireguard in the presence of children, the elderly or the infirm. Do not place flammable objects on or near the stove.
- The stove must NOT be installed into a chimney that serves any other appliance and is suitable for intermittent burning.
- There must be a suitable air supply into the room where the stove is installed and care should be taken so it is not possible to block the front or back air inlets to the stove.
- There must NOT be an extractor fan in the same room as the stove as this may cause fumes to be emitted into the room.
- Do not make unauthorised changes or modifications to the stove and use only recommended spare parts.
- The stove and chimney flue must be regularly cleaned. It is especially important to check for blockages following a prolonged shutdown period. It is recommended that the stove and flue is regularly maintained by a competent engineer.

5 – Assembly of the Hobbit Stove

4 – Unpacking the Hobbit Stove

TAKE CARE

Remember the stove is made of cast iron and is very heavy.

The stove is supplied with the flue collar fitted to the top. If the installation requires the flue to exit from the rear of the stove, swap the collar for the blanking plate on the back before assembling the firebox as described below.

5.1 Lay the stove carefully on its side and attach one leg to each corner of the base using the bolts and washers. Carefully lift the stove back upright to rest on its feet.



Packing list for the Salamander Hobbit

Carefully open the firebox door and remove the packing. Inside the stove will be the following

items

- 1 Stove body with grate and grate centre installed.
- 2 Legs x 4
- 3 Leg bolts with washers x 4
- 4 Back air box
- 5 left Air Box
- 6 Right Air Box
- 7 Baffle Plate
- 8 Fire bars
- 9 Ash pan
- 10 Salamander multipurpose tool
- 11 Dustpan and brush

5.2 Check that the grate and grate centre is located correctly and sitting horizontal in the stove. Check the riddling mechanism operates and moves freely.



5.3 Build the firebox inside the stove by locating first the rear air box. then the baffle. then the left fire brick, followed by the right fire brick. The weight of the baffle holds the assembly together.

7 – Installation of the Hobbit

6 – Components of the Hobbit Stove



PLEASE READ THESE INSTRUCTIONS CAREFULLY

For your safety it is very important that your stove is correctly installed.

Salamander Stoves cannot accept any responsibility for any fault arising through incorrect installation or use.

7.1 Regulations

All national and local regulations, including those referring to national and European standards need to be complied with when installing the stove.

7.2 Installation

The stove must be installed by a registered installer or approved by your local building control officer.

7.3 Safety clearances

The stove must be installed with the following minimum safety clearances from combustible materials.

Side	400mm

Rear 450mm

If the stove is to be installed in a non combustible recess it is recommended that 100mm clearance is left at the back and sides for maintenance and to allow air to circulate around the stove.

7.4 Floor

National and local building regulations must be complied with when considering the floor or hearth where the stove is to be installed. The floor must be capable of bearing the weight of the stove and the hearth temperature which on test was measured at 66.4 deg C on full fire.

7.5 Access for cleaning

Although access to the flue can be gained by removing the stove firebox components, consideration must be given to installing extra access in the flue system to ensure all sections can be cleaned and maintained.

8 – Operating Instructions

8.1 **Fuel**

Wood

Use only seasoned timber with a moisture content of less than 20%. Typically this means wood which has been cut and stored in an open dry shelter for between one and two years.

DO NOT BURN wet or unseasoned wood, construction timber, painted or treated wood, driftwood or manufactured board products. Doing so will result in the wood burning inefficiently and excess smoke, soot and tar will be produced. This will coat and damage the internal components of the stove and flue and could result in a chimney fire.

8.2 **Before lighting**

If using for the first time, or following a long period out of use check that the flue is clear and unobstructed.

Check that the riddling control is free to move and is pushed fully in towards the stove.

Check that the ash pan is empty, in position and the ash pan door is closed

WARNING

During the first few times the stove is used, the heat resistant paint will be curing, and may give off small amounts of smoke and odours. This is completely normal for this type of appliance, and the room should be well ventilated. To aid this process and not damage the stove finish, the first few times a new stove is used the fire should be kept to a moderate size, and not fired vigorously.

8.3 Lighting a wood fire

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- Open the primary air control approx 1cm by turning anti-clockwise. (The circular wheel in the centre of the bottom door)
- Open the secondary air control fully by moving the lever fully to the left (Top right back of the stove)
- Place 2 or 3 firelighters or screwed up newspaper onto the fire grate with about 1 kg of kindling and light the fire with a taper.

- When the firelighters or newspaper are burning, leave the door ajar about 1 to 2 cm to achieve a good draw and avoid condensation. Allow the burning kindling to warm up the chimney.
- After 2 to 5 minutes the chimney should be warm enough create a good draw and the door can be closed.
- Once the kindling has formed a good bed of glowing embers the stove can be
 refuelled with 2 or 3 pieces of wood. (*do not be tempted to overfill the firebox and risk
 fuel falling onto the glass or out the fire as the door is opened OVERFUELLING CAN
 ALSO CAUSE EXCESS SMOKE*)

Close the door, and once the new fuel is burning fully close the primary air control (on the ash pan door) then just slightly open about half a turn.

If required the bottom door can be opened 1cm for a short while until the new fuel is alight.

When opening the door always open gently for the first 2 to 3 cm to allow the pressure to equalise and stop smoke from escaping.

The stove should not be operated with either door left open for long periods as excess smoke may be generated.

The stove door should never be left open when the stove is in use.

Adjust the secondary air control to achieve the desired burning rate.

Under normal chimney draft conditions expect to refuel the stove every 45 to 60 minutes.

Operation with the air controls open can cause excess smoke. The stove must not be operated with the air controls or door left open except as directed in these instructions.

8.4 **Refuelling**

If there is insufficient burning material in the firebed to light a new fuel charge, excessive smoke emission can occur. Refuelling must be carried out onto a sufficient quantity of glowing embers and ash that the new fuel charge will ignite in a reasonable period. If there are too few embers in the fire bed, add suitable kindling to prevent excessive smoke

Remember

Wood that is smouldering and producing smoke with no flame, is burning very inefficiently and producing unburnt gases and soot that deposit on the inside of the stove and flue and the door glass.

Wood burns best when lying on a bed of about 1cm of ash.

Burning the stove too slowly (with the secondary air valve closed for too long) is not recommended as this is very inefficient and produces unburnt gases and deposits in the stove. It is therefore not recommended that the stove is left lit overnight.

After refuelling, increase the amount of air to get the wood lit as quickly as possible. Once lit reduce the air again.

It will take time to get to know your stove and how best to operate it under different conditions. The type and condition of the wood, chimney draught, weather, wind and outside temperature will all slightly change the way the wood burns and therefore how you should use the stove.

When in use, burning the stove vigorously for a short period will remove any build up of unwanted deposits on the inside of the stove and glass.

8.5 **De-ashing the stove**

The action of riddling the grate will allow ash to fall from bed of the fire into the ash pan underneath.

To riddle the grate place the forked end of the tool in the slot in the riddling lever located between the hinges of the bottom door.

Pull and push the lever backwards and forwards and ash will fall through the grate into the ash pan.



Remember

When burning wood it is good to maintain a bed of ash on the grate about 1cm thick.

Do not be tempted to over riddle the grate, as hot or burning fuel may fall through into the ash pan.

Do not let the ash level in the ash pan get higher than the sides of the pan. This will reduce airflow to the fire through the grate.

To remove the ash pan use the rounded end of the tool as shown.



WARNING

Take great care when removing and emptying the ash pan. It may be very hot and still contain burning or smouldering embers and is a fire risk.

9 - Guidance on safe operation

10 - Maintenance

Fire can be very dangerous

During operation, the stove and all the fittings (door handles and controls) get very hot.

Do not overfire the stove.

It is possible to fire the stove to such an extent that excess smoke may be generated or damage may occur. Look out for parts of the stove or flue glowing red hot. If such a situation occurs adjust the air supply accordingly to reduce the burning rate.

Chimney fire

In the event of a chimney fire

Shut all air controls immediately Raise the alarm and evacuate the building Call the fire brigade Do not re-enter the building

Fumes

If installed, operated and maintained correctly the stove will not emit fumes into the room other than occasionally very small amounts when re-fuelling or de-ashing.

If fumes are being emitted during normal operation

Ventilate the room by opening all doors and windows. Let the fire burn out Leave the room Check the stove, flue and chimney for blockages Do not re-use the stove until the cause of the problem has been identified and rectified. If required seek expert help.

Adverse weather conditions

In a small number of installations, very occasionally in specific weather conditions (direction of wind) the draw of the chimney may be affected causing a downdraught and fumes to be emitted into the room.

If this is the case the stove should not be used and advice sought from a professional flue installer who would be able to advise on possible solutions such as an anti-downdraught cowl.

Maintenance should only be carried out when the stove is cool

Before use

Between burns in the stove it is good practice to keep ash and debris to a minimum. Especially empty the ash pan and ash pan section. Remember that if only burning wood it is recommended to keep a bed of ash about 1cm thick on the grate.

Cleaning the stove

Clean the outside of the stove with a soft brush.

Regularly remove and clean the baffle and back and side air boxes of soot and debris. also clean the internal surfaces of the stove. The frequency will be dependent on how vigorously the stove has been fired and what fuel has been used. Any deposits allowed to build up in this area could reduce the lifespan of the stove.

Note that if required the flue can be accessed for cleaning from inside the stove.

Gaskets

The rope gaskets in both doors will need regular inspection to check the condition and ensure that the doors seal and full control of the air supply to the fire can be maintained.

Stove glass

Clean the stove glass only when cool with a specialist glass cleaner. Use of any abrasive cleaner will scratch the glass and make subsequent cleaning more difficult.

Chimney

It is important to have the chimney cleaned at least once a year. Regular inspection and cleaning of the internal components of the stove can indicate if the chimney requires more frequent cleaning.

If the stove has been unused for an extended period (during the summer) the chimney should be checked by a competent person before use.

Note

All parts that are in direct contact with the fire (grate, Baffle, back and side air boxes) are considered as normal wear parts. Their life will be dependent on how vigorously the stove is operated and they must be inspected and maintained on a regular basis. If they become worn, damaged or not positioned correctly, non wear parts such as the stove top and sides will be exposed to excessive heat and may be damaged.

Remember

If the stove is not to be used for an extended period set both air controls to half open to allow an airflow through the stove and avoid condensation.

11 – Fault Finding

Fire will not burn

The fuel is too wet and not suitable Air inlets to the stove are blocked The flue is blocked or restricted Inadequate air supply into the room

Soot build up on glass

Fuel is too wet Fuel pieces are too large and "smouldering" rather than burning. The stove operating temperature is too low The stove is being run too "slow" with not enough air Poor chimney draft Too little secondary air washing over the window

Excessive wear on internal parts

Stove fired too vigorously Too little air passing through the bottom grate Use of wood that is too dry (eg wood from old furniture)

12 – Spare Parts

A full range of products are available to maintain your stove including :-

Rope Rope Glue Glass cleaner Stove paint

All individual components of the hobbit are available as spares.

For the complete list of available spares with prices go to Salamanderstoves.co.uk

O EN 13240:2001 / A2:2004 O Roomheater fired by solid fuel Salamander Hobbit SE Model 0901 Defra Approved Wood Burning Stove Fuel types Wood Nominal heat output 4 Kw Total net energy efficiency Wood 74.7 % Distance to adjacent combustable materials Side 400 mm Rear 450 mm Emission of CO in combustion products Wood 0.40 % Flue gas temperature 258 C Wood The appliance is capable of intermittent operation The appliance cannot be used in a shared flue Follow the users manual and only use recommended fuel Salamander stoves Ltd 2013 Rosemount, Canada Hill Ogwell, Devon, TQ12 6AF ()О

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