

# **RUNSWICK INSET MULTI-FUEL STOVE**

The Runswick inset stove has a nominal heat output of 4.3kW., and a weight of 72 kg. The flue gas mass flow is 3.9g/s for mineral fuel and 3.4g/s for wood logs. The mean flue gas temperature directly downstream of the flue spigot at nominal heat output is 294 degrees C. The stove is designed as a closed appliance and is capable of intermittent operation.

The stove must be installed to comply with Health and Safety at Work Act 1974, and to all local Building Regulations, including those referring to National and European standards. These need to be complied with when installing the appliance.

# UNPACK THE STOVE CONTENTS

Runswick Inset Multi-Fuel Stove Ashpan Stove Gloves (in ashpan) Fixing Kit (incl. Sealing Rope & 4 Hilti Bolts) Instructions

Carefully unpack the multi-fuel stove, leaving the plastic cover on if building work is still in progress, it is important to protect the black finish from any damage, water, dust, water or fire cement.

#### **CLEARANCES**

A suitable back and hearth of non-combustible material must be provided. The hearth must extend at least 300mm in front of the stove. If the Runswick is to be installed with a fire surround, we recommend a minimum clearance of 400mm from the top of the stove, and 150mm at each side of the stove, from any combustible material. We cannot guarantee that a wooden mantle or painted finishes will not crack or discolour with the heat. All fire surrounds, fireplaces etc. should be suitable for use with solid fuel heating appliances.

### INSTALLATION

A minimum flue draught of 12 Pa is required for nominal heat output. As referred to in document J of the Building Regulations, the Runswick does not require any purpose

provided ventilation. It is important that any inlet grilles are so positioned that they are not liable to blockage. The appliance must be installed on a floor with an adequate load-bearing capacity. If an existing construction doesn't meet the prerequisite, suitable measures (e.g. load distributing plate) shall be taken to achieve it.

The Runswick inset stove requires a Class 1 chimney which must be sound, free from leaks and swept before installation. The length of the chimney must be at least 4 metres from the top of the stove, and must finish in a down draught free area. A stove must not be installed into a room where there is an extractor fan, or fumes could be pulled down the chimney. The Runswick inset stove can be fitted straight into a fire opening. If there is a flue liner, this must be suitable for solid fuel and a minimum of 150mm internal diameter. In this case it will be necessary to use the optional adaptor. The adaptor connects to the rectangular flue socket towards the back of the appliance with the bolts provided and the round adaptor at the top will then need to be sealed to the liner.

It is possible to sweep the chimney from inside the Runswick stove, after removing the baffle plate. Alternatively a facility for sweeping the chimney may be provided, and this may be done by installing a soot door in the brickwork.

Take the Runswick stove off the pallet. In the sealing kit provided there is some ceramic rope with an adhesive strip, cut this rope to length so it fits around edge on the back of the stove. Remove the wax strip on the ceramic rope and adhere it into position, adhesive side to the stove.

The steel body of the Runswick has several possible connection points, which are only noticeable before the stove is inset into the fireplace. It is not necessary to all of these connecting points 2 - 4 will do. See Figure 1.

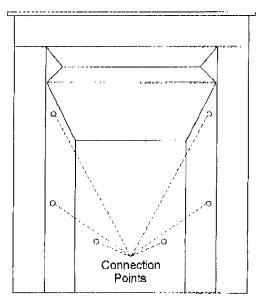


Figure 1.

Remove the firebricks from inside the stove and push out the centres of the connecting

points required. Carefully manoeuvre the stove into the fireplace opening, being careful not to damage the hearth or the paint work on the body of the stove. When the stove is in position carefully drill into the existing fireback through the connecting points. Place the provided Hilti bolts into the holes and gently tighten until the stove feels secure. Fill these holes with fire cement to make an air tight seal. It is important to make these connection points air tight as failure to do so could result in the stove not working correctly and efficiently. You may now put the firebricks back into the stove.

The bottom tapered section under the stove must also be airtight to stop any air finding its way under and around the back of the stove. See Figure 2.

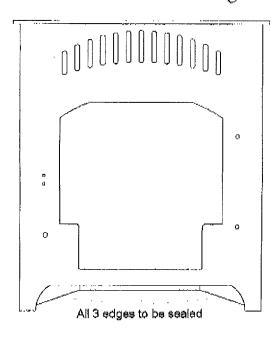


Figure 2.

Using fire cement press a sufficient amount all around the base under the stove and the bottom of the fireplace opening. Make sure that all joints and connections are well sealed. Then, using fire cement, seal up where the firebrick (or throat area) meets the flue outlet of the stove. This is to prevent fumes coming out of the stove and going back down behind the Runswick.

When installation is complete, light a fire and make sure all joints are sealed. The stove is painted with a high temperature paint finish. The paint will be cured when most surfaces have reached about 246 degrees C. During the initial burn off period you will notice an unpleasant smell; you should not touch or wipe the paint during this period as it will be soft and may mark.

The room should be well ventilated, children and pets should be kept away. Do not use water to clean the stove, either before or after it is cured.

#### LIGHTING THE STOVE

When ready to light the stove for the first time, make sure that everything is removed from the ashpan, and open the spin wheels at the bottom of the stove to let air in under the grate. First burn some newspaper in the stove, with the door closed, to warm the flue, as there may be down draught initially. The temperature in the flue has to be increased to change the down draught to up draught. If down draught persists, try burning a blow torch in the stove, facing the flue for a minute or two. If there is a soot door fitted, try warming the flue through the soot door. If this does not work, call in your installer.

When ready to light the stove, put a small piece of fire lighter, about 25cm square is big enough, and then add small sticks, taking care not to smother the flames. When the sticks are well alight, open the top air vents gradually, this will push air downwards in front of the glass and keep the glass clean. Then add small logs, gradually increasing the size. Once the fire is well established the bottom spin wheels can be closed, and the fire can be controlled from the top air controls, with out having to bend down. The spin wheels do become hot, so use a glove or small poker to open or close the air vents, they only need moving slightly to open or close the air gap. When burning solid fuel, it may be necessary to leave the bottom air vents slightly open.

To close the stove down, close the bottom spin wheels and the top spin wheels. Depending on the fuel and the amount of draught in the chimney, it may be necessary to leave the top vents open slightly to allow the glass to burn clean, and it may be necessary to leave a small amount of air through the bottom vents when burning certain solid fuels. DO NOT OPEN THE BOTTOM SPIN WHEELS WITH THE TOP ONES CLOSED, THIS WILL DAMAGE THE GLASS. When all the spin wheels are closed the glass may become black because the clean burn will be shut off. To burn the glass clean, make a good fire to get the stove hot, close the bottom vents and leave the top spin wheels open. The appliance is designed to operate efficiently with the fire door closed. The door should be kept closed at all times, except when refuelling or removing ashes.

# TO RE-FUEL THE STOVE

Open all air vents and then open the stove door gently, using the stove gloves. Put more logs or solid fuel on the stove and close the door. Do not overfill the firebox, maximum filling height 100mm. Allow the fire to burn through before closing the bottom spin wheels and then close the top spin wheels as much as required.

#### **FUELS**

This appliance has been tested using seasoned wood logs and manufactured briquetted smokeless fuel (Ancit) for closed appliances, sized between 20g and 140g. Other fuels are commercially available and may give similar results. Try to avoid household coal, the stove will burn the fuel all right but it will be necessary to sweep the chimney more often. It is a good idea to try small quantities of different fuels until you find one that suits your chimney. Petrocoke or any petroleum based fuel must NOT be used, they burn excessively hot and will destroy parts of the stove in a very short time If using logs, the

logs need to be dry, seasoned logs, i.e. no more than 20% moisture content, maximum log length up to 300mm. Small pieces of kiln dried timber can burn very hot, take care that the fire does not get out of control. The stove is designed to burn wood or solid fuel, DO NOT BURN ANY LIQUID FUEL DO NOT BURN RUBBISH ON THE STOVE.

# **CLEANING THE STOVE AND FLUE**

The riddling knob to shake the ashes through is on the front of the stove, left hand side near the bottom corner of the door. Using the tool, or a stove glove, pull the lever in and out to rotate the grate and shake the ashes into the ashpan. It is important to remove the ashes regularly, if the ash builds up through the grate, the grate could overheat and distort. Open the fire door with the stove glove provided, and using the tool, gently pull out the ashpan a little way. Then remove the tool and slot it in from the top of the slot in the middle of the ashpan. The tool will then have a firm grip on the ashpan. Carefully carry the ashes out to dispose of them, or use a 'Tippy' or similar ash carrier.

When the stove is being used regularly, it will be necessary to remove the baffle once a year to clean any debris that may have collected there. The chimney/flue should be swept and checked every year. The glass on the stove door can be cleaned (better when the glass is cool), using a damp cloth, or sponge pan scrubber for any stubborn marks. Stove glass cleaner may be used if required.

The body of the stove can be brushed with a soft brush, do not use water on the paint

work. If, in time, the body of the stove needs touching up, a touch-up aerosol of paint, the same as originally used in the factory, can be obtained from you supplier.

This appliance should be regularly maintained by a competent service engineer. There must be no unauthorised modification of the appliance. Any replacement parts must be recommended by the Manufacturer.

### **TROUBLE SHOOTING**

1. The stove is not burning well.

The stove may need more fuel loading - load more fuel, see 'lighting the stove' The wood may be un-seasoned or damp - avoid using unsuitable wood, burn smokeless fuel until the wood is dry and seasoned.

The chimney may need sweeping, or there may be a build up of debris above the baffle - see 'Cleaning the Stove and Flue'

The fuel may be too hard, e.g. some anthracites and cokes require a lot of draught to

maintain a high burning temperature, so try a solid fuel that burns at a lower temperature. There may not be the required flue draught in the chimney/flue. In this case a longer chimney pot may help, or there may be a blockage in the flue.

2. Smoke is coming into the room.

There may be down draught conditions, see paragraph 1 of 'Lighting the Stove'. If it is not possible to stop the down draught by warming the flue as described, it is advisable to leave the stove unlit and test conditions later.

3. The stove is burning too hot.

Make sure the stove door is closed properly, and check that all spin wheels and turbo burner are closed

Check the rope seal on the door. If this needs replacing, ceramic rope and heatproof adhesive can be obtained from your supplier.

IN CASE OF A CHIMNEY FIRE - CLOSE ALL AIR VENTS IF POSSIBLE. MAKE SURE THERE IS NOTHING COMBUSTIBLE NEAR THE STOVE. MOVE PEOPLE AWAY FROM THE ROOM.

CLOSE THE ROOM DOOR PHONE THE FIRE BRIGADE.