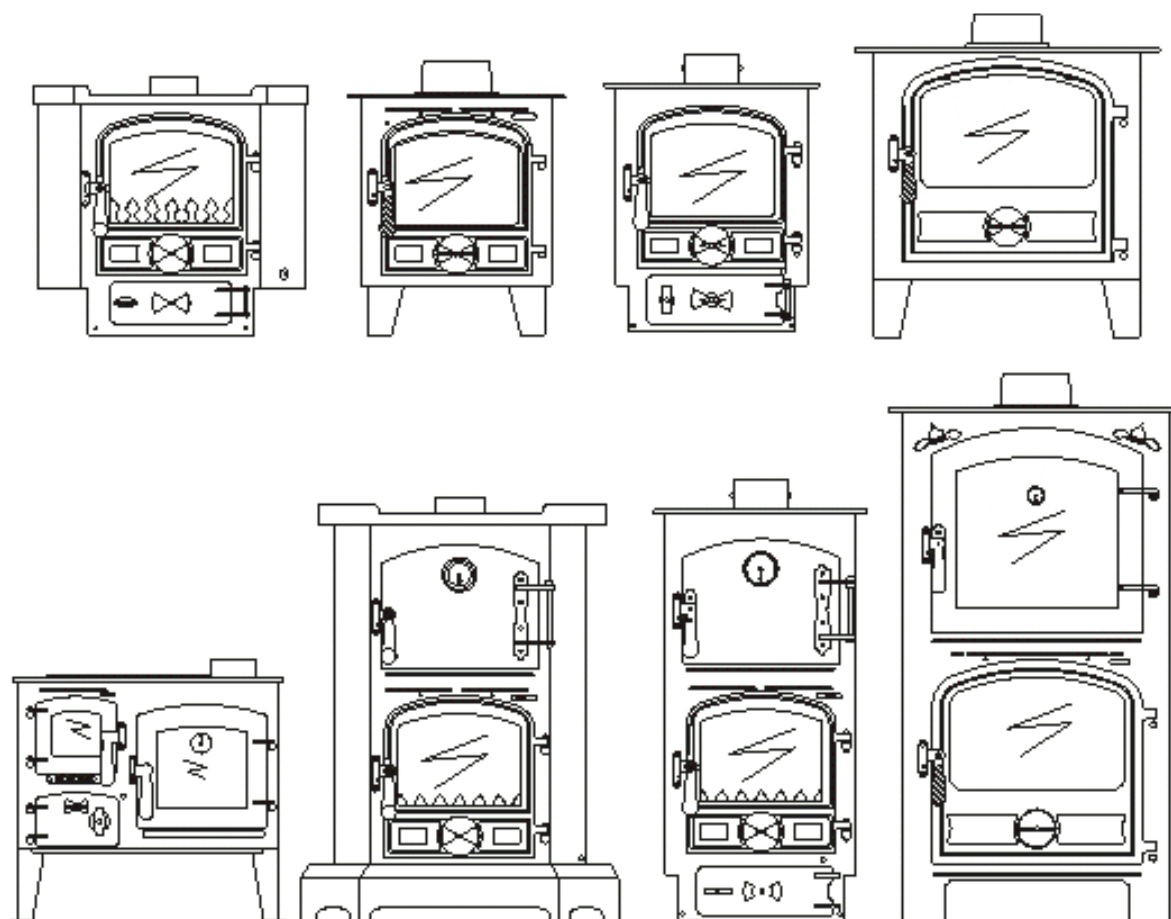


# User Information



## Wood and Solid Fuel Stoves and Oven Stoves ©

21-11-17



[www.bubbleproducts.co.uk](http://www.bubbleproducts.co.uk)

## INDEX

WARNINGS ALL STOVES.....	2
Tools .....	3
Spare Parts .....	3
INTRODUCTION.....	3
Safety.....	3
Correct Installation and Use.....	3
Fumes - Protection From.....	4
Burns - Protection From.....	4
FUELS.....	4
About Wood Burning.....	4
About Fuels Generally all stoves.....	5
LIGHTING all stoves.....	5
Controlling the Stove.....	6
Refuelling and de-ashing the stove.....	6
Overnight Burning.....	8
TIPS.....	8
Riddling the Stove.....	8
MAINTAINANCE.....	8
Day to day attention.....	8
Front Fret (All stoves except Back Cabin Cooker).....	9
Baffle Plate.....	9
Riddling Grate.....	9
Riddling Grate Carrier.....	10
The Firebricks.....	10
Keeping the stoves clean.....	10
Clean the chimney.....	10
Cleaning the door glass on all stoves.....	11
To Replace Door Sealing Rope and Glass.....	11
STOVE SPARE PARTS .....	12
www.harworthheating.co.uk.....	12
tel 01302742520.....	12

## WARNINGS ALL STOVES.

- During normal use, many parts of this appliance and appliance chimney can become too hot to touch. It is essential that you provide secure and suitable fireguards.
- Always use fireproof gloves when attending to or using the appliance.
- The lower glass door panel on this appliance conforms to the requirements of BS 1945: 1971 and satisfies the heating appliance (Fireguards Safety) regulations 1991.
- On initial firing of the appliance the paint finish on the appliance and chimney will cure through the application of heat. During this process open all windows, door and ventilators until all traces of fumes have cleared.
- When using this appliance always make sure that adequate ventilation is available, do not block or obstruct purpose made vents. The appliance must have an adequate and unrestricted supply of fresh air.
- Frost Protection, if you have a boiler version appliance, make sure that the water in your heating system circuit has a suitable water treatment is added, your installing engineer will advise you on this.

- If you are unsure about these warnings, **seek advice from any HETAS registered engineer.**

### Tools

- All stoves are supplied with a stay cool, wire handled poker and a riddling / de ashing tool, the oven stoves are supplied with an additional oven tray tool.

### Spare Parts

- ORDER ON LINE @ [www.harworthheating.co.uk](http://www.harworthheating.co.uk) go to Spare parts - Bubble
- ORDER DIRECT FROM 01302 742520 if at all possible, make sure that you have your stove model to hand.
- To ensure your stove operates as it was designed to do, make sure that you use only genuine and original, Bubble Spare Parts.



## INTRODUCTION.

Bubble Stoves bring a whole new dimension to space heating, in addition to all the outstanding features of our stoves the oven stove provides a new and exiting cooking feature.

As a user - owner you will need to familiarise yourself with how the stove side works and if you have an oven stove, how the oven side works, once you have acquired the necessary skills you will be able to provide a wide variety of wonderfull home cooked food for up to four people.

### Safety.

Safety issues are set out below.

### Correct Installation and Use.

The appliance must be installed and used in line with our installation and user instructions.

## **Fumes - Protection From.**

If fumes leak from the appliance this is a sure sign that:-

- The chimney is blocked or partially blocked.
- There are too many bends in the chimney. (Chimneys should be straight)
- The chimney is not airtight.
- Wind is blowing down the chimney.
- The chimney is not high enough.

Make sure that a functioning Carbon Monoxide Alarm is fitted within 1.5 meters of the appliance and keep it well maintained and regularly tested.

## **Burns - Protection From.**

During normal use many parts of this appliance and appliance chimney can become too hot to touch. We recommend that you provide and secure suitable fireguards.

**ALWAYS USE heatproof gloves when refuelling, cooking or maintaining your appliance.**

The glass door panel on this appliance conforms to the requirements of BS 1945: 1971 and satisfies the heating appliance (Fireguards Safety) regulations 1991 but it does get very hot and must not be touched whilst the stove is running.

The door-opening handle is designed to stay cool and can be used whilst the stove is running.

## **FUELS.**

- **Before purchasing fuel for your appliance, always check with the supplier that the fuel does not contain Petro Coke.**
- **Do not use Petro Coke or any petro Coke derivatives on this appliance. This type of fuel will cause damage to the stove grate, door glass and other internal components.**

## **About Wood Burning.**

The first thing to learn about burning wood is that the fuel has to be dried or seasoned and technically this means moisture content of less than 20%. To achieve this the wood needs to be stored for about 12 months after cutting, before burning. This is a general guide and dependent upon the type of wood to be used, Pine will dry out faster than Elm, and some woods such as Willow will take much longer to dry.

Cut logs sizes to suit the size of the stove you are going to burn them on.

We recommend log length of about 200mm x 150 dia, if you are going to quarter a log, then any size up to about 250mm dia will be adequate.

Quartered logs are ideal as they are roughly triangular in shape and will fit nicely into the firebox.

When loading with a fresh charge of fuel rake the charcoal forward and put the logs to the back of the firebox, this way the airwash will fall down the glass into the charcoal and then onto the fresh fuel.

Don't be tempted to put too much fuel on in one go, a little and often is always better.

You will not be able to burn wood properly until you have built up at least 30mm of wood ash on top of the wood grate, this can take two to three days of burning to build up, when it has, riddle with care as you can soon riddle it away.

You will find that when you are wood burning you will only have to empty the ash only once a week, if that.

Take great care with very dry fuel such as compressed wood waste, peat briquettes or kiln dried timber, if the stove is excessively loaded with these fuels it can race away and over fire, it is better to mix these fuels with other fuels or use them sparingly.



**Burning green or wet wood is a complete waste of time, it will be totally unsatisfactory and result in increased fuel consumption, reduced heat output and excessive tarring of the chimney.**

### **ABOUT FUELS GENERALLY ALL STOVES.**

Do not use Petro Coke on Bubble Stoves, if you do it may cause damage to the grate, grate frame, stove glass and could also damage the stove beyond repair.

Petro Coke is the waste products from oil refining, kilo for kilo, it is three to four times more powerful than ordinary house coal.

It is supplied by coal merchants and mixed with hard coke to form a pretty powerful combustible cocktail. If the cocktail is mixed correctly it can be a good fuel, but we have found that the mixing process is not reliable and sometimes a bag of fuel can be almost all petro coke.

There is a large variety of solid fuel available such as -:

- Anthracite nuts 50mm. (Stovesse Nuts) Anthracite is a hard fuel and difficult to get going. It burns with very little ash and gives off lovely wispy blue flames.
- Furnacite is good and stays in well.
- Coalite burns with plenty of clean flames and is very easy to light. It is designed specifically to be run on open fires in smoke control zones.

### **LIGHTING ALL STOVES**

Open the door and build a fire in the normal way using newspaper or firelighters first, then place plenty of small chopped pieces of dry sticks onto the paper or firelighter.





Open

1. The ash pit door air valve in the ash pit door.
2. The over fire air valve in the refuelling door.
3. The air wash air valve slider on the upper front face of the stove.

Light the fire at the base and let it get going before closing the door.

Because the chimney is cold it will take a little while for the fire to get going, when it does you will find it draws well and you will be able to partially close the air valve in the ash pit door.

Keep an eye on the fire through the lighting process and once the sticks are well alight put some larger wood on and get that well alight before putting any solid fuel onto the fire.

When your fire is well alight you can start to control the burn rate and heat output.

### **Controlling the Stove.**

There are **three** air control valves on multi fuel stoves and two on wood burning stoves.

- Under fire air for solid fuel.
- Over fire air for wood burning.
- Air wash air to help keep the door glass clean.

You will find your own way to run the stove but to start with we give guidance on the use of the air control valves.

**On Multi Fuel stoves the under fire air control valve** in the ash pit door will be used mainly for burning solid fuels.

It controls the volume of air allowed to go through the grate and into the burning fuel.

**The over fire air valve** in the bottom of the fuel door is used for wood burning and additional air wash for keeping the door glass clean,

**The air wash air** is used for keeping the glass clean and burning wood or coal.

When the fire is well established control can be achieved by using one or more or all of the controls.

### **Refuelling and de-ashing the stove.**

Correct refuelling is the key to keeping.

- A nice looking fire.
- A clean door glass.

- A clean chimney.
- **Happy neighbours.**



If you put a small amount of fuel onto a good fire it will soon recover and rapidly get back up to temperature.

Depending upon the fuel being used, smoke will only come from the fire immediately after it has been re fuelled or during the lighting stage, if the fire recovers or is allowed to burst into flame quickly, smoke emission is kept to a minimum and will only occur for a short period of time.

To help you make this happen the stove has the potential to allow massive amounts of air into the combustion zone from a variety of different directions.

Even with all this available air it is sometimes advisable just to open the door slightly if the fire is particularly smoky during lighting or immediately after re-fuelling.

#### **ON THE OTHER HAND**

If you let the fire burn low and then put a huge load of fuel on, you will kill the fire and it will go out or take some considerable time to recover, during this time it will smoke and soot the chimney up.

#### **RECOVERING THE FIRE**

If the fire is allowed to get low, refuel with small amounts of wood and give the stove plenty of air until the firebox temperature recovers. Slowly build the fire up by adding fuel little and often.

When the fire is established it is possible to control the burning rate by reducing the airflow. Use the air valves but keep plenty of air wash going to keep the glass clean.

**Excessive smoke emission is a sure sign that you are not running the stove correctly.**

When the stove is running correctly there will be no or very little smoke coming from the chimney.

After a fresh charge of fuel it may be necessary to open all three air controls, when the fire has settled down, use the over fire air and the air wash.

Once the stove is up to temperature you will see how the fuel gasses off to produce lovely light wispy flames rolling around the firebox. These flames are very controllable and by building on your experience you will be able to get the stove to respond to most of your requirements.

De Ashing the stove is important, if the ash is allowed to build up it will touch the grate and stop cooling air reaching it, this will in turn cause the grate to overheat and become damaged and unserviceable.

This sort of damage will not be allowed as fair wear and tear and will not be covered by the warranty.

### **Overnight Burning.**

There is a skill and knowledge to acquire if you want to get the stove to burn for long periods.

### **Here are the critical factors**

- What type of fuel to use.
- How and when to re-fuel.
- Where to set the air controls.

### **TIPS.**

Maximum length of burn will be achieved using a smokeless fuel on multi fuel stoves and hardwood on wood burning stoves.

Build the fire up slowly by adding fuel during the evening, try to get the firebox full of red-hot fuel, before retiring to bed, give the stove a slight riddle and then top it up with a final load of smokeless fuel. Leave the over fire air and the air wash just cracked.

If you admit too much air it will burn all the fuel away.

If you don't admit enough air the stove will go out without burning all the fuel and the glass will become dirty.

You will have to experiment to find out the best way to keep the fire in.

### **Riddling the Stove**

To riddle the stove simply insert one end of the tee bar tool into the brass eye at the end of the riddling rod and pull / push until the ash has been riddled away.

## **MAINTAINANCE**

To keep your stove working well, you must make sure that it is kept in good condition.

As you can see we have linked cleaning with maintenance, if you pay attention to keeping the stove clean and tidy, maintenance will be much reduced and the stove will work to its maximum potential.

ASH and clinker are the major problems with solid fuel stoves.

To try and minimise them we have designed our stoves with a large ash pan and an externally operated riddling grate allowing you to riddle the stove with the door closed.

### **Day to day attention.**

Make sure that the fuel-loading door and ash pit doors close correctly and that there is no ash or dirt trapped behind them.

Make sure that the base of the ash pit is clean, any dirt or pieces of coke could trap behind the ash pan stopping it from going fully up to the back of the stove.

This could cause the ash pan to catch the back of the ashpit air inlet valve and hold it open.

For the stove to work correctly, it is important that all the air coming into the stove goes through the air valves only, if the upper and lower door are not properly closed this will not happen as well as it should.



## **Front Fret (All stoves except Back Cabin Cooker)**

The **front fret** is fully insulated and fits up to the front of the stove firebox with the insulation board facing the fire. It is fitted down the front of the stove and locates on two fasteners, one at either side of the stove, when refitting it make sure that the hearth plate is clear of ash so as not to stop the fret fitting flush down to the hearth plate.

This has four very important functions-:

- It stops high temperature build up on the front plate of the stove.
- It acts as a passage for the over fire air to come through the air valve and through into the fire.
- It acts as an insulator to keep the hearth hotter for longer thus adding to the overall burn time length.
- It keeps the hearth at a higher temperature than conventional stoves increasing combustion efficiency.

## **Baffle Plate.**

The baffle plate is designed to stop the flames or heat from the fire going straight up the chimney.

As the flames rise in the stove they hit the baffle plate and are pushed forward to hit the front and top plate of the stove. This slows them down and makes them lose more heat to the stove and less up the chimney.

On the Corner stoves it is a triangular plate, which fits into the top of the stove and is supported by three small brackets and on the rectangular stoves it is a rectangular plate supported on two horizontal supports at either side of the stove.

The baffle plate is only fitted to the non water-heating stove.

It should be inspected occasionally to make sure that it is in good condition and not badly distorted.

The baffle plate is a consumable item and may need replacing from time to time.

## **Riddling Grate.**

**On all stoves the riddling grate** fits in the circular hole in the bottom of the grate carrier plate.

It can be riddled by pulling and pushing the riddling rod, always use the tool for this job as the brass end of the riddling rod gets hot when the stove is running.

To remove the grate the riddle rod must be detached from it.

To do this proceed as follows-:

Let the stove go out.

Clean all the ashes out of the grate.

Open the de ashing door and remove the ash pan.

Remove the nut on the end of the riddle rod under the grate. You will have to stop the riddle rod rotating by inserting the tee bar into the brass eye.

Note the nut is punched on one end to allow it to lightly lock on to the riddle rod end.

When replacing this nut put it back with the punched end outermost.

If you over tighten this nut it will cause the riddling action to lock up.

When the nut is removed, pull the rod out of the grate lever and it should then be possible to remove the grate by lifting it out.

Re build in reverse order.

It is possible to fit the wood burning grate which just drops directly onto the coal burning grate.

### **Riddling Grate Carrier.**

The riddling grate carrier supports the riddling grate.

To remove it first remove the riddling grate.

Remove the baffle.

Remove all the firebricks.

Then lift out the riddling grate frame.

When replacing, it is important that the frame is flat and sits snugly down on to the fixed hearth plate.

### **The Firebricks.**

#### **CORNER STOVES FIREBRICKS**

The firebricks comprise of -:

One centre rear.

One right side and one left side.

Ditto-small fillet bricks at either side front which can be secured with fire cement.

They are self supporting and are fitted:-

Rear centre first.

Sides next.

Small fillets to lock the assembly in place.

#### **4B STOVES FIREBRICKS**

Comprise of two rear back bricks, one off left and one off right side bricks.

The firebricks are consumable items and will need to be replaced from time to time.

If the stove is left to run with damaged fire bricks the outer steel panels could burn through.

### **Keeping the stoves clean.**

To clean the stove externally allow it to go out and simply give it a slight dusting with a very soft small brush.

### **Clean the chimney.**

Make sure that the flue pipe and chimney are always kept clean and clear from obstruction. N.A.C.S. registered chimney sweeps should be employed to regularly sweep the chimney and keep it in good working order.

### **To remove and repair the front fret on all stoves except Back cabin Cooker (NEW STYLE FIRE BOARD TYPE)**

Let the stove go out, open the front door, clean the ashes out and simply lift the front fret up vertically, twist slightly and remove.

Before replacing it, make sure that all the ash is removed from the base of the left and right side fasteners and make sure that the front fire board has not degraded by more than a thickness reduction of 10mm max.

If it has reduced in thickness it will be necessary to replace the front fret lining board as follows:-

The board is fastened in one of two ways:-

1. On the first series appliances produced 2014-15 the front board was fastened by split pins pushed into the brick through the 6 small holes on the top and bottom edges of the stainless brick carrier, three pins on top and three on bottom generally suffice.
2. On the later series stoves starting late 2015 the bricks were simply held in place via high temperature silicone applied in three 12mm dia blobs equi spaced across the inner front face of the stainless carrier.

Note that the silicone should be allowed to cure for 24 hrs before being used.

Note that the part number for the board is 87-02-900-FFB.

The part number for the stainless carrier is 87-02-900-FFP.

The part number for the complete fret assembly is 87-02-900-FFASS

### **Cleaning the door glass on all stoves.**

If you are running the stove correctly and using the specified fuel the door glass will remain clean, there may be slight sooting after lighting or re fuelling but this can be easily removed using a damp cloth but **do not attempt to clean the glass door with a damp cloth whilst the stove is running or the door is hot.**

If the door glass does become tarred up you will have to use a glass cleaner available from Bubble Products.

When using these cleaners you should carefully follow the detailed instructions on the product packaging.

Avoid contact with skin, eyes and items other than the glass.

Before closing the stove door always make sure that there are no obstacles likely to break the glass upon closing.

Do not use the door glass to push awkward shaped logs into the firebox as this can break the glass.

### **To Replace Door Sealing Rope and Glass**

Before carrying out any repair or cleaning work on your stove make sure that it is thoroughly cooled down first.

The door sealing rope should be replaced before the start of the heating season. (15mm dia rope.)

The door glass should be replaced if it becomes etched or discoloured.

The door glass sealing rope should be replaced at the start of the heating season.

Remove the door and lay it down on some bubble pack.

Support it around its periphery taking great care not to break the door glass.

Use an old flat bladed screwdriver to scrape the old rope and cement from the cast socket.

Apply high temperature silicone adhesive to the socket and then re fit the new rope.

### **To Replace the Door Glass.**

If you need to replace the door glass make sure that you order the door glass sealing rope.

Remove the door and lay it down on some bubble pack.

Support it around its periphery.

Undo the 4 screws and clamping plates then lift the glass out.

Remove the sealing rope under the glass and replace it with new rope.

Replace the glass and the plates and screws.

Make sure that the rope forms a good airtight seal, make sure that the ends of the rope but up together.

- **Parts not covered by warranty are: -**
- Riddling Grate
- Riddling Grate Frame
- Firebricks
- Baffle plate

- Door Glass
- Paint finish
- **Note the use of Petro Coke or Petro coke based fuels will invalidate the warranty and lead to damage of all the components not covered under warranty.**

## **STOVE SPARE PARTS**

Note that we are continuously expanding our spare parts diagrams and we will add them as and when they are available.

Keep visiting our web site for the latest updates or call in on our sales line for further assistance, we are here to help and will be pleased to do so.

[WWW.HARWORTHHEATING.CO.UK](http://WWW.HARWORTHHEATING.CO.UK)

**TEL 01302742520**