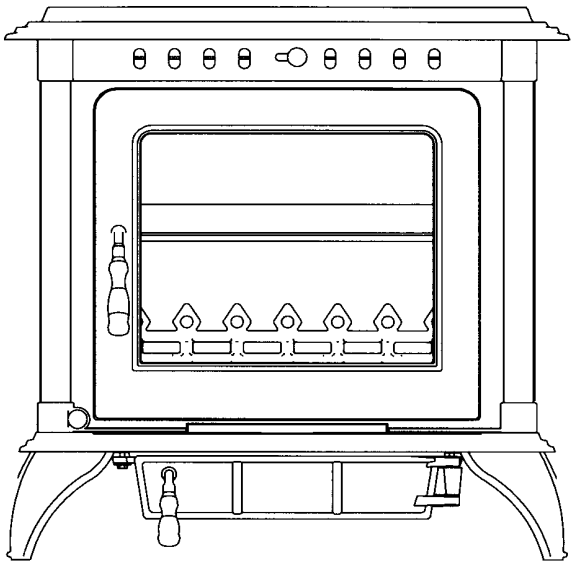
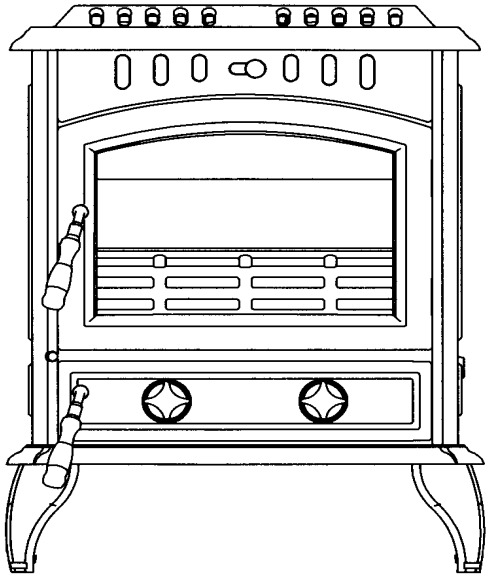
BILBERRY

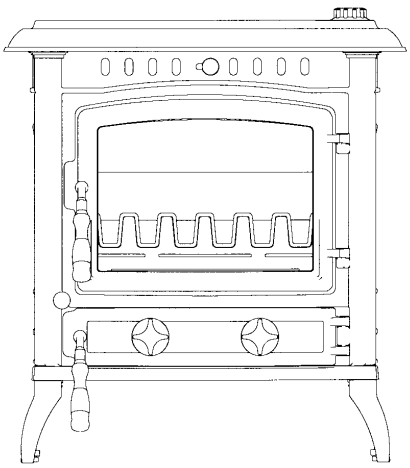
BILBERRY BOILER STOVES
14kW / 17kW / 22kW



22kW



17kW



14kW

Installation & Operating Instructions

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BILBERRY SOLID FUEL STOVES
INSTALLATION INSTRUCTIONS

PRE-INSTALLATION CHECKS

Installation of a stove must be done according to local codes and regulations. National and European standards must be observed when installing this product.

Please read the Installation & Operation manual enclosed with this product before use.

TECHNICAL DATA	14kW Stove		17kW Stove		22kW Stove	
	Max	***Nominal***	***Max***	***Nominal***	***Max***	***Nominal***
Total Output to Water:	9.5	7.5	12 kW	11.1	14 kW	13.5
Total Output to Room:	4.5	4.2	5 kW	4.3	8 kW	7.8
Total Heat Output:	14	11.7	17 kW	15.4	22 kW	21.3
Boiler Tappings:	1" BSP		1" BSP		1" BSP	
Max Water Pressure:	2 Bar		2 Bar		2 Bar	
Material:	Cast Iron		Cast Iron		Cast Iron	
Finish:	High Temp Resistant Paint		High Temp Resistant Paint		High Temp Resistant Paint	
Fuel:	Solid Fuel		Solid Fuel		Solid Fuel	
Log Length - Max.:	40cm		45 cm		55 cm	
Flue Outlet:	Top & Rear		Top & Rear		Top & Rear	
Flue Pipe Dimension- ID:-	150mm		150mm		150mm	
Weight [Approx.]:	150kgs		193kgs		200kgs	
Dimensions:	W 587x H 640 x D 542		W 590 x H 780 x D 587		W 730 x H 740 x D 581	
Recommended Chimney Draught:	0.06" w.g. min		0.06" w.g. min.		0.06" w.g. min.	

*** Note: All outputs were obtained using mineral smokeless fuel.**

GENERAL

Special care must be taken when installing the stove such that the requirements of the Health & Safety at Work Act are met.

Handling

Adequate facilities must be available for loading, unloading and site handling.

Fire Cement

Some types of fire cement are caustic and should not be allowed to come into contact with the skin. In case of contact with the skin wash immediately with plenty of water.

Asbestos

This stove contains no asbestos. If there is a possibility of disturbing any asbestos in the course of installation then please seek specialist guidance and use appropriate protective equipment.

Metal Parts

When installing or servicing this stove care should be taken to avoid the possibility of personal injury.

"IMPORTANT WARNING"

This stove must not be installed into a chimney that serves any other heating appliance.

Please refer to the current standards, BS EN 15287-1:2007 Design, Installation and Commissioning of chimneys. BS EN 14336:2004: Heating Systems in Buildings. Installation & Commissioning of Water Based Heating Systems. BS EN 12828: 2003; Heating Systems in Buildings. Design of Water Based Heating Systems. BS EN 12831: 2003; Heating Systems in Buildings. method for calculation of the design heat load.

ELECTRICAL CONNECTIONS

The installation of any electrical services during the installation of this stove must be carried out by a registered competent electrician and in accordance with the requirements of the latest issue of BS 7671.

INSTALLATION

Unpacking The Stove

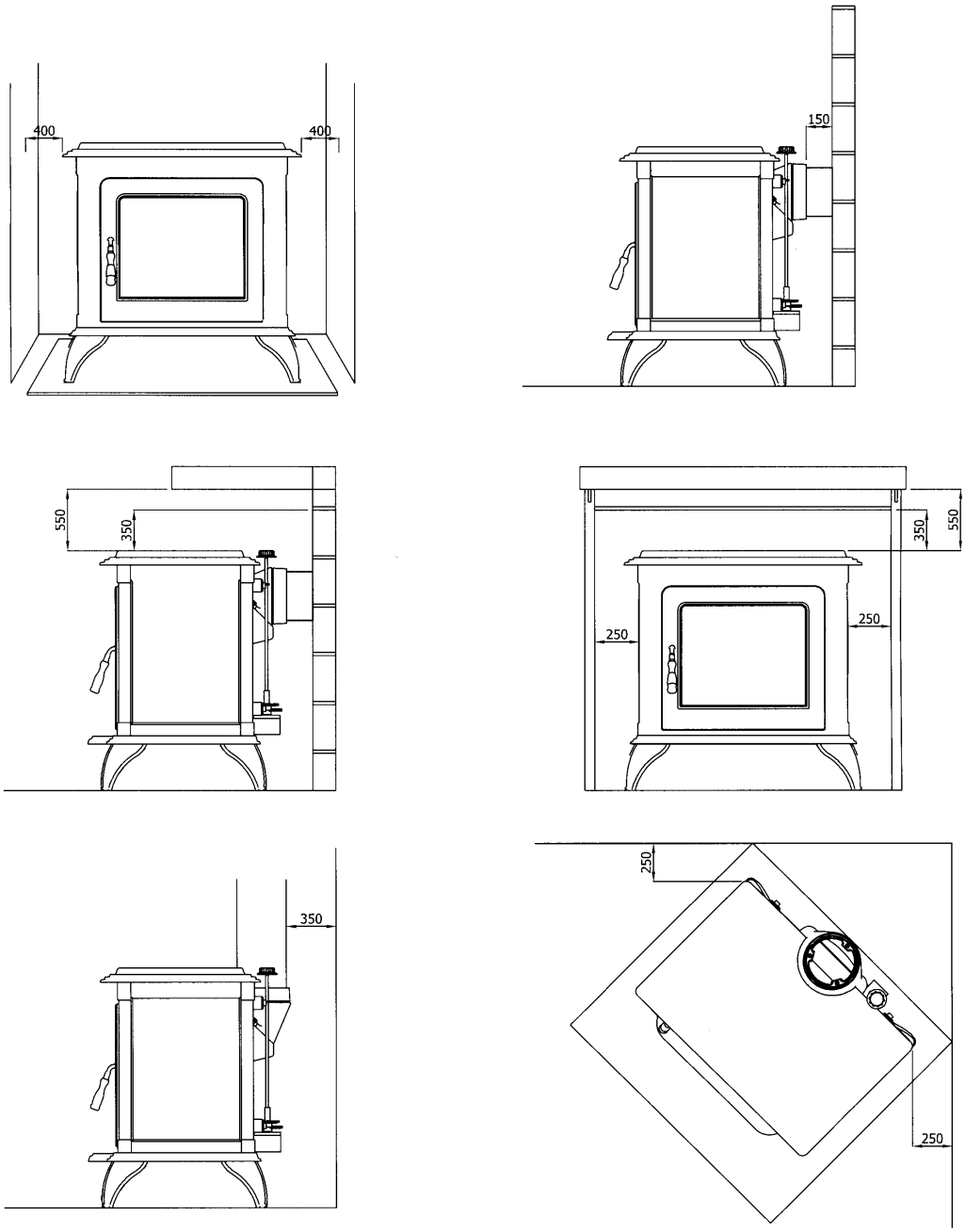
After removing the outer packaging, unbolt the combustion chamber from the wooden pallet and place it gently on its back. The cardboard packaging can be placed underneath to prevent damaging the stove. Remove the leg pack from the stove and bolt each leg securely to the underside of the base on the combustion chamber, using the bolts provided (these can be found inside the stove).

We recommend that two people perform the assembly and installation procedure.

Installing The Stove

The stove and chimney installations MUST comply with current National & Local Building Regulations; your approved dealer or your local building officer can advise regarding this. Ultimately, it is you and your installer who is responsible that the installation complies.

Fig.1



CLEARANCES FOR INSTALLATION / SERVICE TO NON COMBUSTIBLES

Maintain at least the following clearances to all non combustible material:

From the front	460 mm (18”)
From the back	150 mm (6”)
From the sides	150 mm (6”)

CLEARANCES TO COMBUSTIBLES

Maintain at least the following clearances to all combustible material:

From the front	800mm (31”)
From the sides	250mm (10”)
From the flue pipe	350mm (14”)
Alcove From Sides	400mm (16”)

Mantle Clearance:-

To the top	550mm(22”)
To the sides	250mm (10”)

CEILING PROTECTION

There must be a minimum distance of 1200mm to a combustible ceiling above the fireplace.

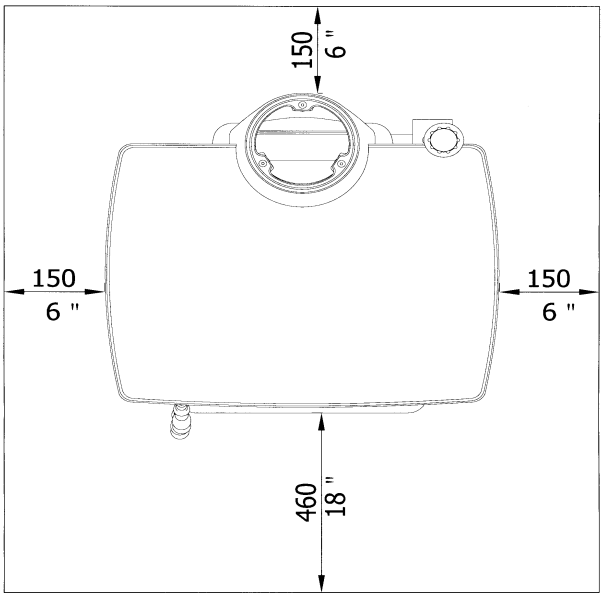
Clearances to Furniture & Soft Furnishings

We recommend the stove be installed 800mm from combustible material. Serious consideration should also be given to positioning of any furniture that could be adversely affected by heat. The clearances to combustible materials in front of the stove should be a minimum of 800mm. When lighting, a solid fuel stove will get very hot and therefore adequate protection must be provided, particularly in situations It is recommended that this appliance is sited next to and on a non-combustible surface. A minimum all round clearance of 150 mm will allow air circulation and not impede the performance of the stove. Where there is a safety risk to children or the infirm, a suitable safety guard around the stove should be considered.

FLOOR PROTECTION

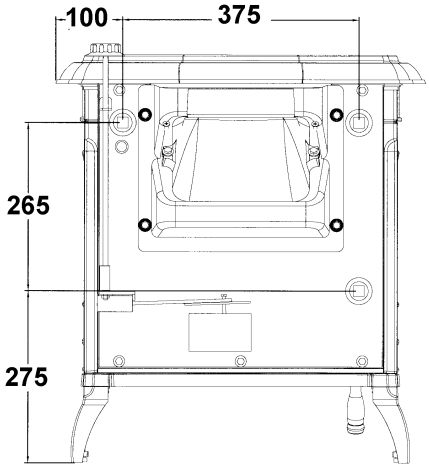
When installing this heater on a combustible floor, a floor protector, consisting of a layer of non combustible material at least $^{3}/_{8}$” (10mm) thick or $^{1}/_{4}$” (6mm) thick covered with $^{1}/_{8}$” (3mm) sheet metal. It is required to cover the area under the heater and to extend to at least 18” (460mm) at the front and 6” 150mm) to the sides, and rear, this will provide protection from sparks and embers which may fall out from the door when stoking or fuelling. See Fig.2.

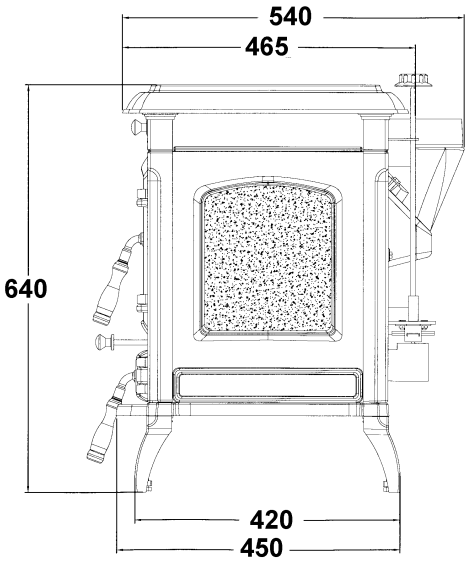
Fig.2



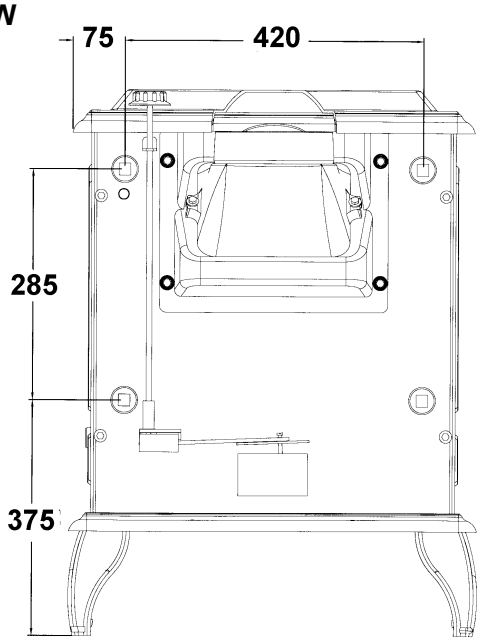
STOVE DIMENSIONS

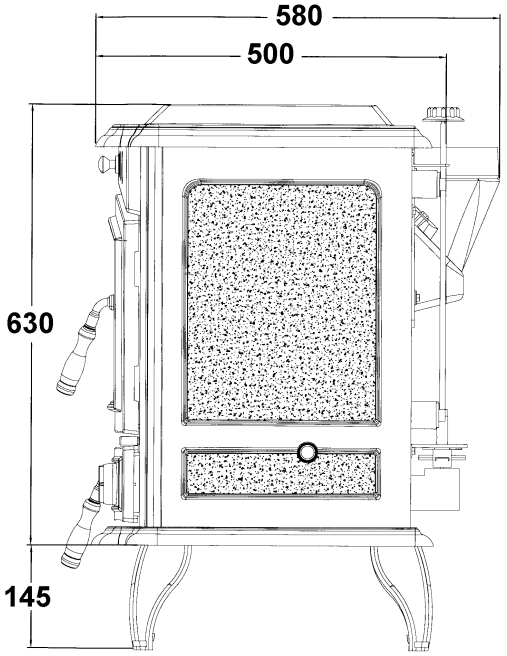
Bilberry 14kW



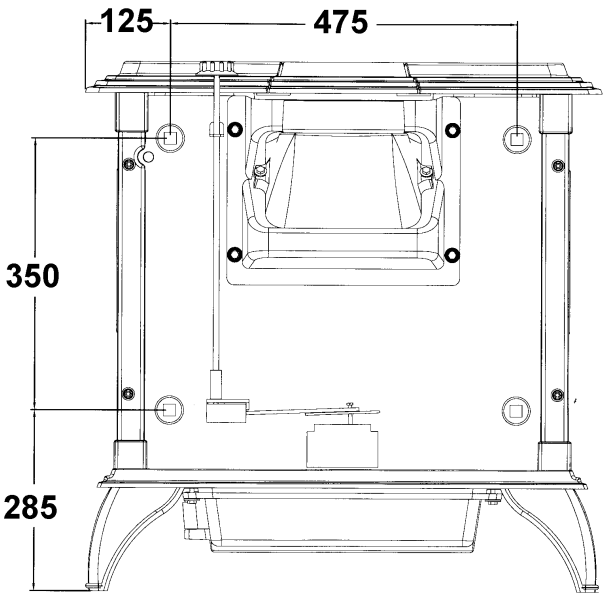


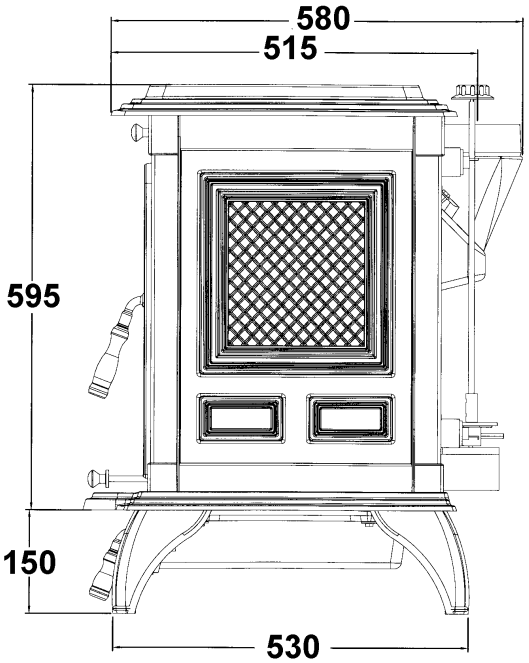
Bilberry 17kW





Bilberry 22kW





CHIMNEY

The stove is a radiant room heater and must be connected to a chimney of the proper size and type. The chimney must have a diameter of at least 6" (150mm). It is best to connect to a chimney of the same size, as
connection to a larger size may result in a somewhat less draught.

Do not connect to a chimney serving another appliance. A chimney height of not less than 4.5 metres measured vertically from the outlet of the stove to the top of the chimney should be satisfactory. Alternatively the calculation procedure given in EN 13384-1 may be used as the basis for deciding whether a particular chimney design will provide sufficient draught.

Chimneys for use with solid fuel appliances should be capable of withstanding a temperature of 1100^{o}C without any structural change which would impair the stability or performance of the chimney.

If the stove is fitted in place of an open fire then the chimney should be swept again, one month after installation, to clear any soot falls which may have occurred due to the difference in combustion between the stove and the open fire.

BS EN 15287-1:2007, Design Installation and Commissioning of Chimneys; Part 1: Chimneys for non-room sealed heating appliances should be used.

FLUES

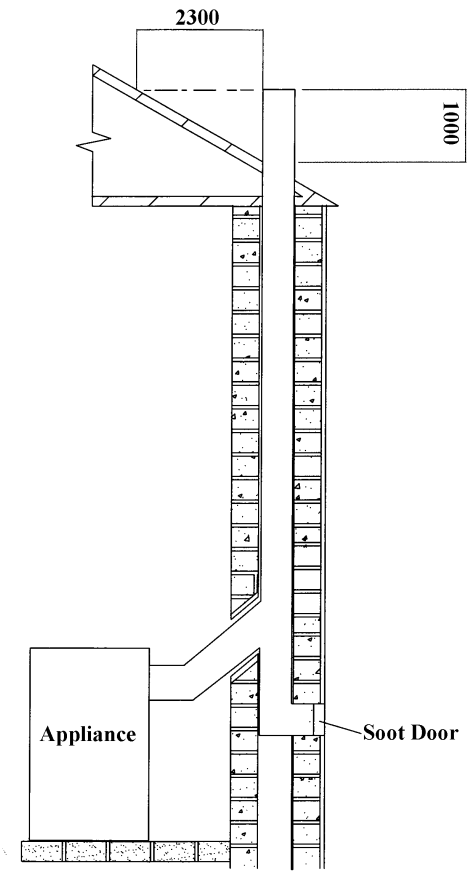
Flues should be vertical wherever possible and where a bend is necessary, it should not make an angle of more than 45^{o} with the vertical. Horizontal flue runs should be avoided except in the case of a back outlet from the appliance, when the length of the horizontal section should not exceed 150mm.

In order to minimise flue resistance and to make sweeping easier it is recommended to use 2 x 45^{o} bends rather than a 90^{o} bend.

The flue termination point must be located to minimise any wind effects. Wind effects of suction, pressure zones and turbulence can be created by the roof and adjacent objects. Wind effects can also be created by natural land contours.

To minimise the wind effects, the flue termination point should be located a minimum of 1000mm from the roof measured vertically and 2300mm measured horizontally. Where this termination point does not suffice it may be necessary to extend the flue pipe so that the termination point is above the apex. See Fig.6.

Fig.6



FLUE PIPES

A flue pipe should only be used to connect an appliance to a chimney and should not pass through any roof space.

Flue pipes may be of any of the following materials:

(a) Cast iron as described in BS 41: 1973 (1981), or
(b) Stainless steel with a wall thickness of at least 1mm and as described in BS EN 10095:1999 Specification for stainless and heat resisting steel plate, sheet and strip, for Grade 316 S11, 316 S13, 316 S16, 316 S31, 316 S33, or the equivalent Euronorm 88-71 designation, or
(c) Vitreous enamelled steel complying with BS 6999: 1989.

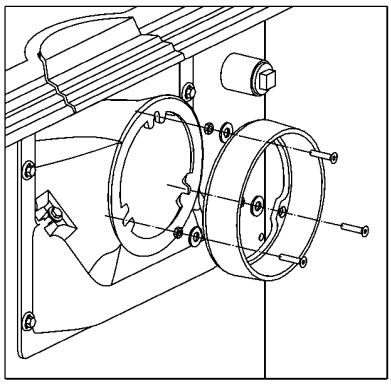
Flue pipes with spigot and socket joints should be fitted with the socket uppermost and all joints should be sealed with fire cement.

Clearance to combustibles must be adhered to when fitting the flue pipe.

The flue outlet spigot for this appliance is inside the burn chamber during transportation. You can choose between top or rear outlet from the flue pipe. (Fastening screws are included with the stove). See Figs. 7 & 8.

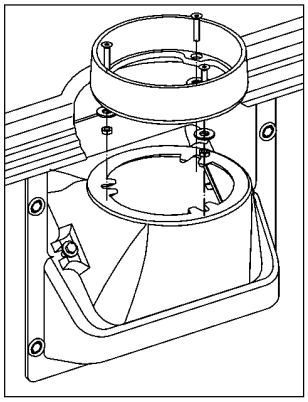
Rear Flue Outlet

Fig.7



Top Flue Outlet

Fig.8



Flue pipes are placed directly onto the product flue outlet, there are 3 screw holes to secure the flue pipe in place. See Figs. 7 & 8.

Note: It is important that the joints are completely sealed using a suitable fire cement. Air leakage etc may lead to malfunction.

CONNECTING TO A STEEL CHIMNEY

If your installation involves taking the chimney straight up and through the ceiling, you must comply with National, Local and Building Regulations or flue manufacturers instructions concerning clearances to combustible materials such as walls, floor joists and ceilings. The joint between the stove flue collar and the stove pipe must also be sealed using the fire cement. It is important that the insulated flue system is properly supported both at ceiling level and at roof level. **THE STOVE MUST NOT BEAR THE WEIGHT OF THE CHIMNEY SYSTEM** (see chimney manufacturer's instructions). Excessive weight on the stove will
inhibit expansion and could lead to damage of the stove top. Damage caused to the stove in this way would not be covered by the Manufacturers Warranty.

IN THE EVENT THAT A CHIMNEY FIRE OCCURS RESULTING FROM FAULTY OPERATION OR PROLONGED USE OF DAMP WOOD FUEL, CLOSE THE AIR VENTS COMPLETELY AND CONTACT YOUR LOCAL FIRE DEPARTMENT IMMEDIATELY.

CAUTION

The chimney should be swept at least twice a year by a competent and approved person. All chimney joints should be inspected during cleaning.

VENTILATION

It is imperative that there is sufficient air supply to the stove in order to support correct combustion. The air supply to this appliance must comply with current Building Regulations.

A solid fuel appliance requires a continuous supply of air to support combustion. If another air using appliance such as extractor hood or clothes dryer is installed in the same or an adjacent room, the ventilation supply will need to be increased to ensure there is adequate air for ventilation and combustion when all appliances are in operation.

In houses equipped with mechanical ventilation an external vent must be installed to provide adequate air for combustion.

Especially Airtight Properties:-

If the stove is being fitted in a property where the design air permeability is less than $5m^3$ / ($h.m^2$) (normally newer properties built from 2006), then a permanent ventilation must be fitted to provide $550mm^2$ of ventilation for each kW of rated output. If a draught stabiliser is also fitted then the requirement is $850mm^2$ per kW of rated output.

DRAUGHT CONDITIONS

If smoke spillage occurs when the firedoor is opened, it is probably due to poor chimney draught. This type of stove requires at least 0.06" w.g. of chimney draught to achieve satisfactory combustion and smoke spillage prevention. However, in cases where the stove door is opened too vigorously you could expect that slight smoke spillage may occur.

If you have any doubts, you may want to have your installer measure the draught in the chimney.

The chimney's draught is the resulting effect within the flue caused by the difference in temperature within the flue and the cooler temperature outside. Other factors that can influence the level of draught

include the length of the flue, insulation of the chimney, adverse weather conditions, tall buildings or trees nearby the flue terminal.

PLUMBING

REGULATIONS

The plumbing must be in accordance with all relevant regulations and practices. It must include a gravity circuit with expansion pipe, open to the atmosphere. The central heating will normally be pump-driven as with other types of boilers.

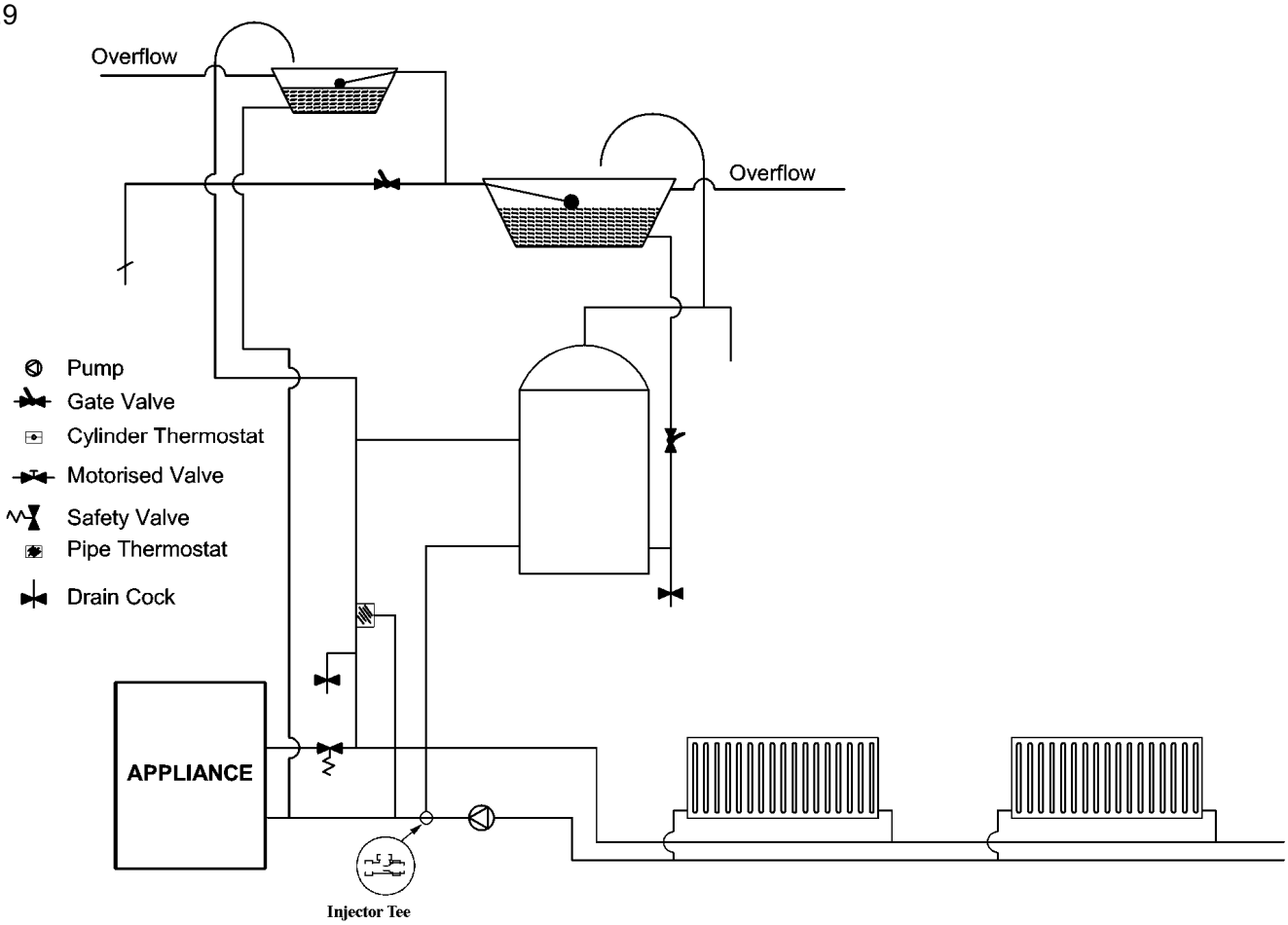
GRAVITY CIRCUIT

The gravity circuit consists of the domestic hot water tank of 135 litres indirect cylinder, fixed in an upright position, recommended for hot water storage and it should be connected to the boiler by 28mm diameter flow and return piping. The pipes should not exceed 7.8 meters (25ft) in length and cylinder and pipework should be fully lagged. The shorter the run of pipe work the more effective the water heating.

There must be no gate valves on this circuit and it must have an expansion pipe exhausting to atmosphere. Cylinder and pipe work should be lagged to minimise heat loss.

This diagram illustrates the basic principal of water heating systems and must not be regarded as a working drawing. See Fig.9.

Fig.9



FEED & EXPANSION REQUIREMENTS

The feed and expansion tank must be heat resistant up to 110°C, with a substantially sized overflow. It must be adequately supported incorporating a copper float.

INJECTOR TEE

Where the gravity and central heating circuits join together to return to the stove we recommend the use of an injector tee connection, situated as close to the unit as possible. This type of tee encourages a stable flow of water through both circuits and helps to prevent priority being given to the stronger flow, which is most commonly the pumped central heating circuit.

WATER CIRCUIT TEMPERATURE

The return water temperature should be maintained at not less than 40°C so as to avoid condensation on the boiler and return piping. Fitting a pipe thermostat to the flow pipe of the gravity circuit and wiring it into the pump control will ensure rapid circulation of the hot water.

In some circumstances it may be possible to overheat the appliance and the water inside will boil. This will be evident by the sound of a knocking noise coming from the appliance and pipes around the house. If this occurs close off all air controls and manually start the central heating pump if fitted. One radiator on the heating circuit should be uncontrolled to act as a heat leak in the event that the appliance overheats and has nowhere to discharge a build up of hot water should the heating circuit be satisfied. Be aware that steam and boiling water will be expended from any open vent from the heating system probably in the roof space at the expansion tank.

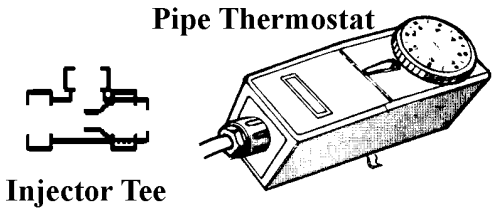
In the unlikely event that the appliance is not operating in freezing conditions the water must be drained from the boiler to prevent frost damage.

PIPE THERMOSTAT

The fitting of a pipe thermostat to the flow pipe is essential in order to activate the water circulation pump when the water reaches the selected temperature.

When the water temperature falls below the selected temperature the pipe thermostat will cut off the water circulation pump in order to allow the boiler to recover. See Fig. 10.

Fig.10



OPERATING INSTRUCTIONS

SUITABLE FUELS

COAL, ANTHRACITE, PEAT, WOOD SYNTHETIC LOGS, OR OTHER FUELS. “Never use gasoline” gasoline type lantern fuel, kerosene, charcoal lighter fluid or similar liquids to start or ‘freshen up’ a fire in this heater. Keep all such liquid well away from the heater while in use. Operate stove only with fuelling door and ashpit doors closed. This heater is hot whilst in operation. Keep children, clothing and furniture a safe distance away.

These appliances were tested and approved using a smokeless mineral fuel. Whilst other fuels maybe used, however stated outputs and performance will vary.

All fuels should be stored under cover and kept as dry as possible prior to use.

NEVER BURN HOUSEHOLD RUBBISH OR ANY FORM OF PETROLEUM BASED COKE IN THIS STOVE.

USE

Odours on First Lighting of The Stove:
Painted stoves may emit an unpleasant odour when used for the first time. The room must be thoroughly ventilated. (ie. it is recommended to open all windows in the room in which the appliance is fitted). Let the fire burn with a high draught until all traces of the odour have dissipated and no smoke or smells can be detected.

AIR CONTROL

The amount of heat produced is regulated by the air controls. The primary air control is operated by turning the knob on the right hand side. The damper can be seen to move when the knob is turned unless the water in the boiler is hot. The automatic thermostat will automatically shut down the air supply to the stove when the water gets hot. The primary air supply passes up through the grate. The secondary air is controlled using the knob overhead the door, the air is supplied over the glass and helps maintain a clean viewing glass.

Primary air is to be used when burning coal with minimal secondary air. Secondary air is to be used when burning wood with minimal primary air.

When burning anthracite and smokeless fuels the secondary air must be fully closed.

USE WITH WOOD

Lighting:

* Slide the top air control to open and open the primary air.
* Lay firelighters or rolled up newspapers on the grate with a reasonable quantity, if necessary, of dry kindling, place 2 or 3 small logs on top.
* Light the newspaper or firelighters using a long taper and close the door.
* When the fire is lighting well, add further logs of a diameter up to 10cms.
* When the fire is established, adjust the primary air to the closed setting (0).
* The burning rate can now be controlled by moving the top air control.

Refuelling:

* Slide the top air control to open, and open the primary air fully.
* Open the door slowly to avoid a sudden rush of air intake, causing smoke to escape into the room and then refuel.
* Leave the primary air open for a few minutes to allow the initial volatiles in the wood to burn.
* Close the primary air.

IMPORTANT: Wood contains a large amount of volatiles which need to be ignited quickly to prevent blow-back. If the wood just lies smouldering, especially after re-stoking, a lot of smoke is created, which in the worst case may cause an explosive ignition of the gases resulting in damage to the stove.

In order to ignite the gases that are released from the wood, and to keep clear lasting flames during the combustion process, it is important to let in the required quantity of oxygen (air supply) at all times. The setting of the air supply, the method of ignition and the lighting intervals depend on the draught in the chimney, the wind and weather, and amount of heat required, fuel etc.. This means that it may take some time before you get to know the correct functioning of the stove under any given circumstances.

USE WITH SOLID FUEL

Lighting:

* Slide the top air control to open and open the primary air.
* Lay firelighters or rolled up newspapers on the grate with a reasonable quantity of dry kindling. Place a small amount of solid fuel on top.
* Light the newspaper or firelighters using a long taper and close the door.
* When the fire is burning well, add further fuel.
* When the fire is established, close the top air control.
* The burning rate can now be adjusted by the primary air control.

Refuelling:

* Open the door slowly to avoid a sudden rush of air intake, causing smoke to escape into the room and then refuel.
* Leave the primary air open for a few minutes to allow the initial volatiles in the fuel to burn.
* Adjust the primary air to the desired position.

See Figs. 11 & 12.

PRIMARY & SECONDARY AIR REGULATION

Fig 11

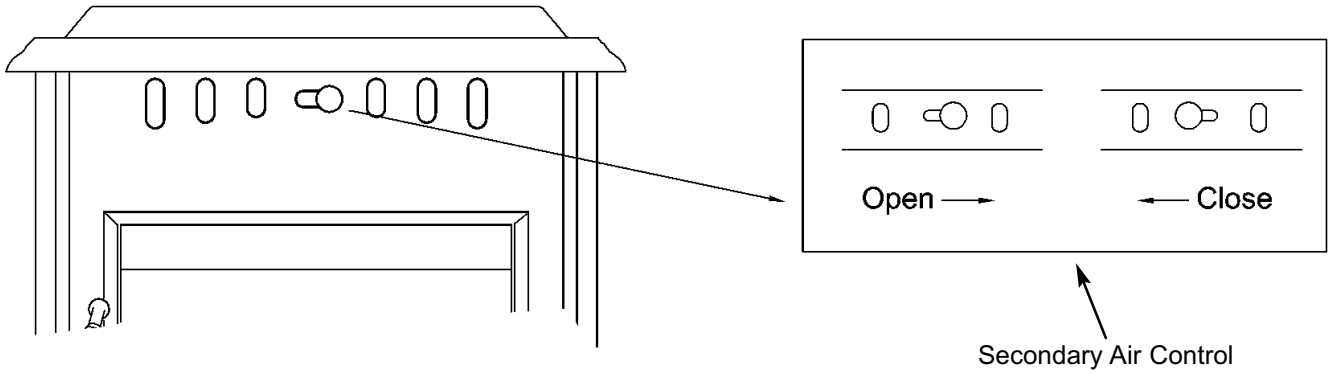
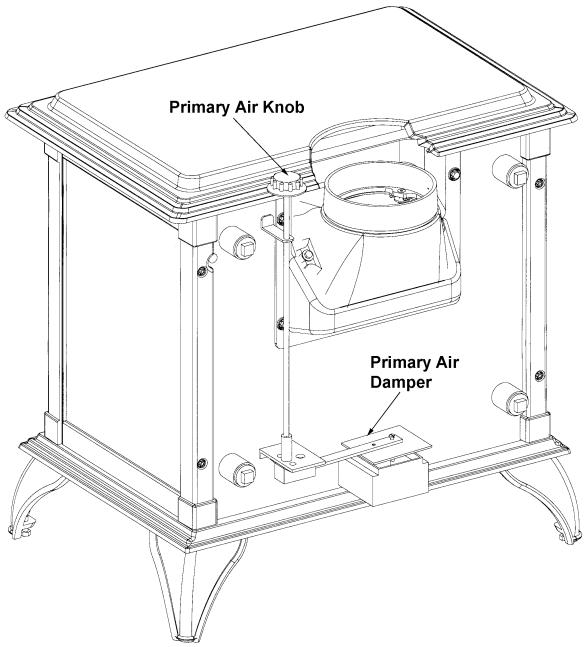


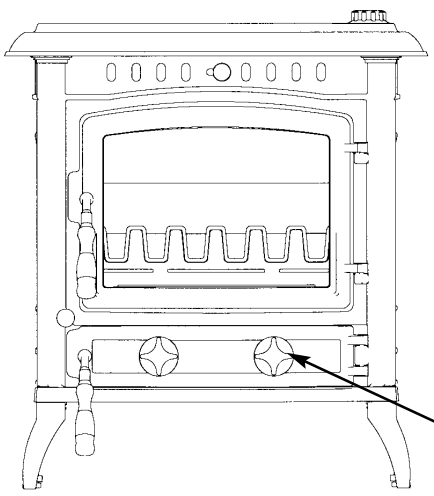
Fig 12



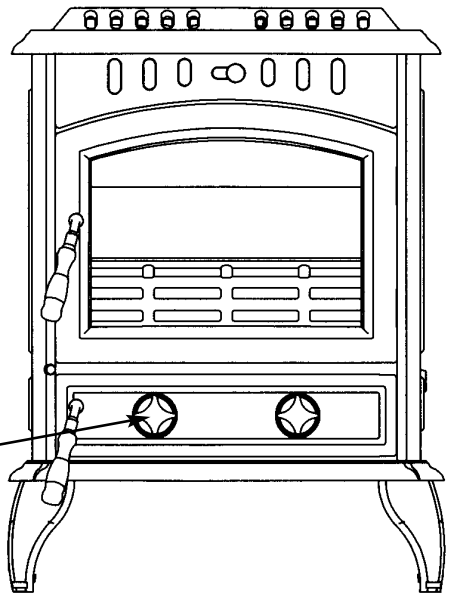
*** If the stove is lit using wet wood, a lot of the fuel's thermal energy will be spent drying the water out of the wood, without releasing any heat to the stove. This incomplete combustion results in a layer of soot being left in the stove, pipe and chimney.**

SPIN VALES - 14kW & 17kW STOVES

Fig 13



Open spin valves fully to light stove, close fully when a fire is established approx 5 mins. It is essential that these remain closed when fire is lighting.



DISPOSAL OF ASHES

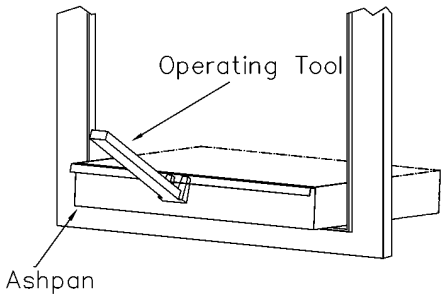
It is essential to keep the grate free from a heavy build up of ashes. This product is equipped with a grate riddling tool which is used to shake ashes off the grate into the ashpan. Whenever the stove is burning low, and the spin valve is open, use the riddling lever to clear the grate of surplus ashes.

If burning solid fuel, always empty the ashpan at least once a day or whenever it is full of ashes. Never allow the ashpan to over-fill allowing ash to be in contact with the underside of the grate. If this condition is allowed, the grate will burn out prematurely.

DO NOT TRANSPORT HOT ASHES FROM THE STOVE USING THE ASHPAN OR THE OPERATING TOOL - See Figs 14 & 15.

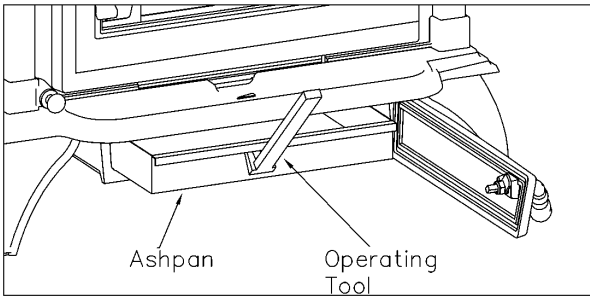
14kW & 17kW Stove

Fig.14



22kW Stove

Fig.15



CO ALARM

We recommend the fitting of a CO Alarm in the same room as the appliance, this is a requirement under UK Building Regulations. Further guidance on the installation of a carbon monoxide alarm is available in BS EN 50292:2002 and from the alarm manufacturers instructions.

Provision of an alarm must not be considered a substitute for either installing the appliance correctly or ensuring regular servicing and maintenance of the appliance and chimney system.

WARNING:-

If the CO Alarm sounds unexpectedly:-

1. **Open Doors and windows to ventilate the room and then leave the premises.**
2. **Let the fire go out.**

MAINTENANCE

Cleaning The Glass:

This product is equipped with an air wash for the glass. Air is sucked in through the air vent above the door and down along the inside of the glass.

However, some soot will always stick to the glass, but the quantity will depend on the draught conditions and adjustment of the air wash vent. Most of the soot layer will normally be burned off when the air wash vent is opened all the way and a fire is burning briskly in the fireplace.

Note - To clean glass, use an approved suitable stove glass cleaner in accordance with the manufacturers instructions.

External Surface Cleaning:

The cast surface of the stove is painted with heat-resistant paint. It is best maintained by simply vacuuming it with a soft brush attachment or wiping it down with a dry, dust-free cloth.

Over time, the painted surface of the stove can turn a greyish colour, however it can easily be freshened up with a spray paint which is available from your local retailer.

Gaskets:

The gaskets in the door will wear out over time, and should be replaced as required in order to prevent overfiring.

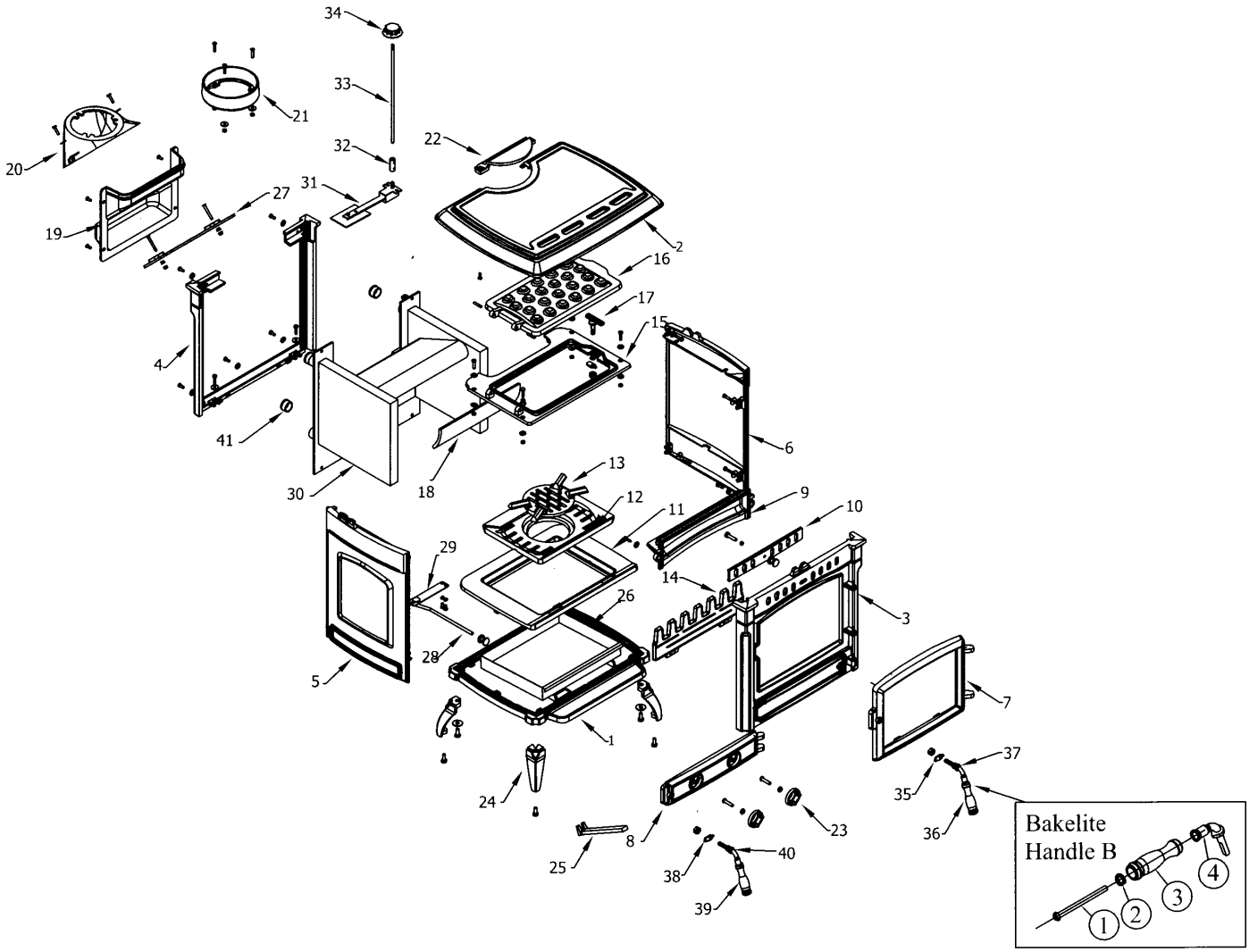
SAFETY NOTES

1. **Clean the flue-ways of the stove every week and ensure that there are no blockages. Please refer to manual for instructions.**
2. **Never allow a build up of ashes in the ashpan, as this will cause the grate to burn out prematurely.**
3. **Do not burn rubbish/household plastic.**
4. **Do not leave ash-door open during operation as this will over heat the unit causing unnecessary damage.**
5. **Clean the chimney at least twice a year.**
6. **Keep all combustible materials a safe distance away from unit, please consult section on clearance to combustibles.**
7. **For safety reasons never leave children unaccompanied while stove is in use.**
8. **Avoid contact with unit when in use as stove reaches very high operating temperatures.**

TROUBLE SHOOTING

PROBLEM	POSSIBLE CAUSE	ACTION
Fire difficult to start	**Unseasoned wood, too damp or poor quality.**	Use recommended fuel only.
	Logs too big	To light fire use small, very dry twigs. To maintain fire use split logs.
Fire Goes Out	**Air Starvation**	Open lower spin wheel and top air control lever.
	Insufficient Draught	Check that the flue is not obstructed, sweep if necessary - (seek advice from a chimney specialist).
Fire Burns Too Quickly	**Too much draught**	Ensure that the lower spin wheel is closed and partially close the top air control lever.
	Poor Quality Wood/Fuel	Do not continuously burn small wood, sticks, bundles , carpentry off-cuts (plywood / pallets etc)
Smokes When Lighting Up	**Flue duct is cold**	Burn paper and kindling to increase heat.
Smokes While Burning	**Draught is insufficient**	Consult a chimney specialist. Check that the flue is not obstructed, sweep if necessary.
	Down Draught	Install an anti-down draught cowl. Consult your dealer.
	Room is in decompression	In houses equipped with Mechanical Ventilation, an outside air intake must be installed for the chimney.
Low Heat Output	**Incorrect Fuels**	Use the recommended Fuel
Fire Shuts Down After a Period of Time	**Insufficient Water Circulation Through The Boiler**	Check Plumbing
Excessive Condensation On The Boiler	**Cold Water Being Circulated**	Check That Pipe Thermostat Is Fitted And Set Correctly
	Fuel used Has Excessive Moisture Content	Season Fuel to Achieve Lower Moisture Content

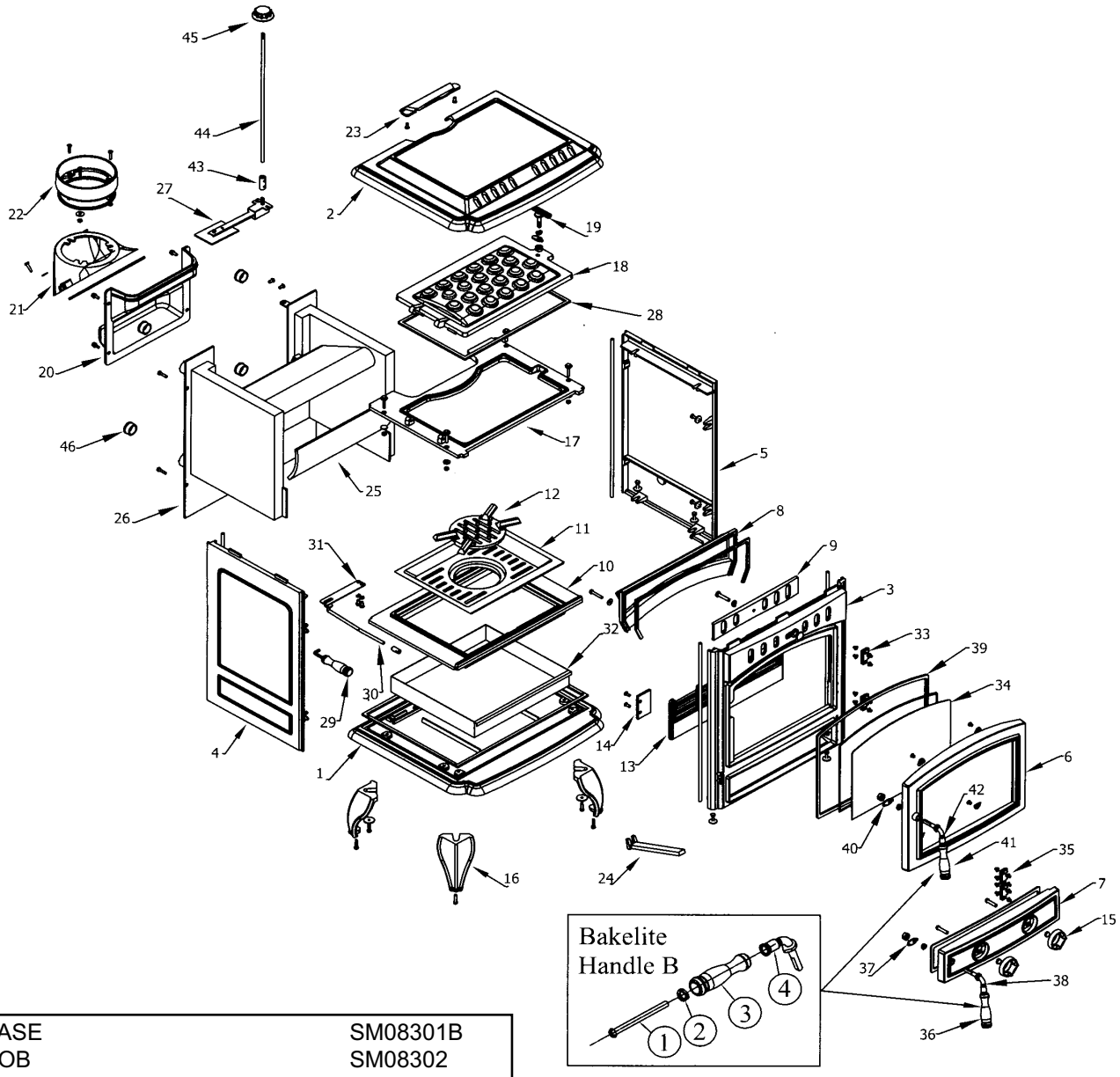
14kW EXPLODED VIEW



1.	BOTTOM	MB08601-2
2.	TOP	MB08602-3
3.	FRONT	MB08603-3
4.	BACK	MB08604-2
5.	LEFT PLATE	MB08605-2
6.	RIGHT PLATE	MB08606-2
7.	DOOR	MB08607-S32
8.	ASHPAN DOOR	MB08608-S3
9.	AIR WASH COVER	MB08609-S3
10.	AIR WASH PIECE	MB08610-S3
11.	GRATE FRAME	MB08639-S32
12.	GRATE	MB08614-S3
13.	MOVING GRATE	SM08115x
14.	FIRE BAR	MB08620-S3
15.	INNER FRAME	MB08624-S32
16.	INNER DOOR	MB08625-S3
17.	INNER HANDLE	SM08326-S0
18.	BOILER BAFFLE	MB08649-S3
19.	FLUE BASE	MSM0853-1B
20.	FLUE LINK	MSM0852-1B

21.	FLUE SLEEVE	M150-S2
22.	FLUE SLEEVE COVER	MB08655-S1
23.	BACK AIR COVER	MCAF0155
24.	LEG	MB08623-S0
25.	ASHPAN HANDLE	MCA0105
26.	ASHPAN	CA1201
27.	FLUE BAFFLE	B08735
28.	RIDDLING ROD	CA1401-SM086
29.	SHAKER GRATE EXT PLATE	CA1102-A
30.	BOILER	CAB01086
31.	DAMPER	CABWKQ
32.	SWING PIPE	CA0138-T
33.	ROD ROTATION	CA1304-03
34.	THERMOSTAT HANDLE	CA0138
35.	FIRE DOOR HANDLE LATCH	CA1505
36.	FIRE DOOR HANDLE	CA01011-ZHB
37.	FIRE DOOR HANDLE AXLE	CA0101-ZH
38.	ASH DOOR HANDLE LATCH	CA1505
39.	ASH DOOR HANDLE	CA01011-ZHB
40.	ASH DOOR HANDLE AXLE	CA0101
41.	WATERT TANK BULKHEAD	CA1701-SL

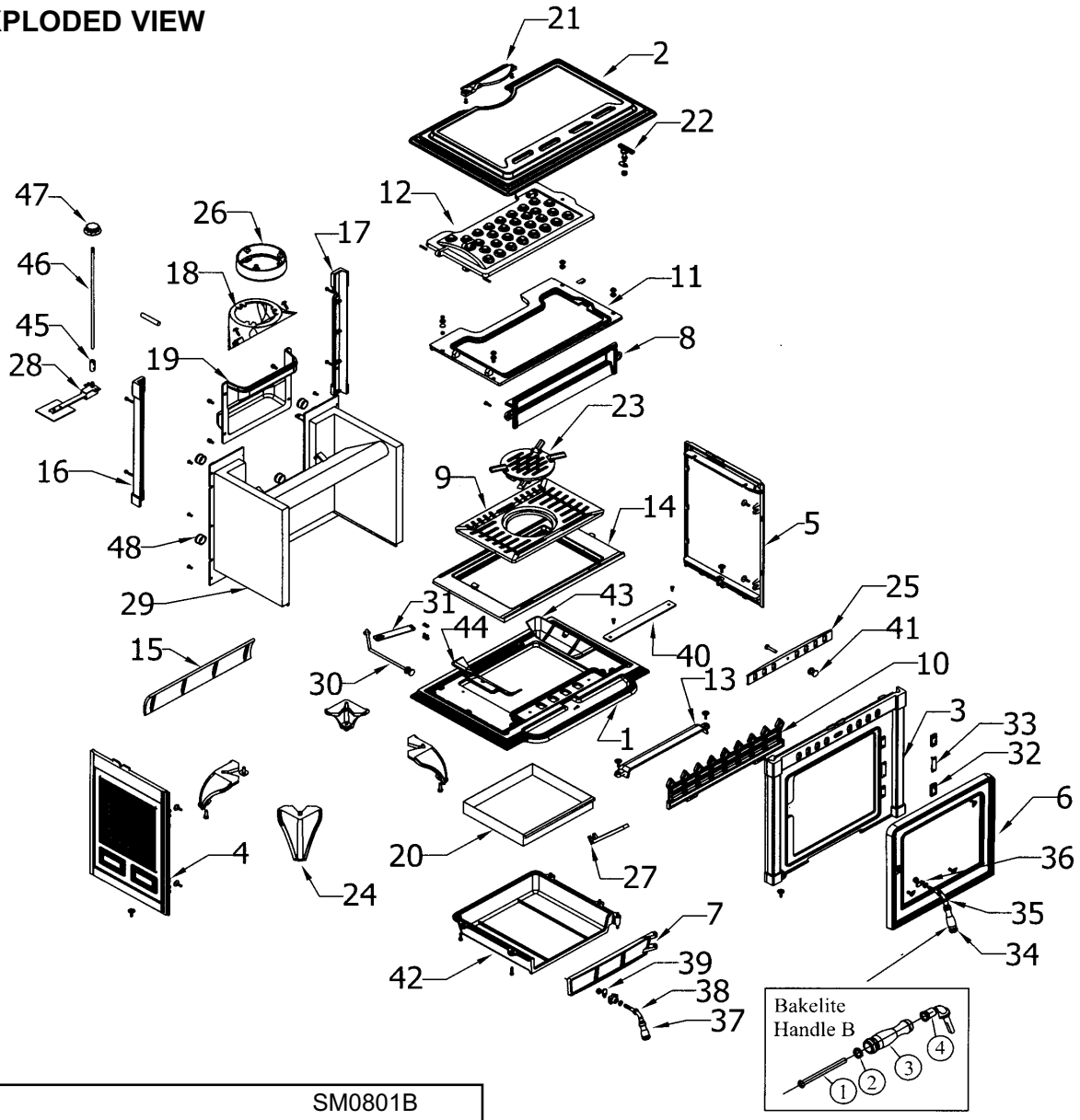
17kW EXPLODED VIEW



1.	BASE	SM08301B
2.	HOB	SM08302
3.	FRONT	SM08303
4.	LH SIDE	SM08305
5.	RH SIDE	SM08306
6.	FIRE DOOR	SM08307
7.	ASH DOOR	SM08308HM
8.	AIR WASH COVER	SM08309
9.	SECONDARY AIR SHUTTER	SM08310
10.	GRATE FRAME	SM08327B
11.	GRATE	SM08314B
12.	RIDDLING GRATE	SM08115X
13.	FIRE FENCE	SM08319
14.	FIRE FENCE BRACKET	SM08320
15.	SPIN VALVE	CAF0160
16.	LEG	SM08323
17.	INNER TOP FRAME	SM08324
18.	INNER TOP DOOR	SM08325
19.	INNER TOP DOOR HANDLE	SM08326
20.	FLUE OUTLET FRAME	SM0853B
21.	FLUE OUTLET	SM0852B
22.	FLUE SPIGOT	150
23.	HOB FILLER PIECE	SM08330
24.	ASHPAN LIFTING TOOL	CA0105
25.	BOILER BAFFLE	SM08349

26.	BOILER	CAB01083TB
27.	DAMPER	CABWKQ
28.	INNER TOP GASKETS	CA0802
29.	RIDDLING TOOL	CA0137
30.	RIDDLING ROD	CA1401-SM083
31.	SHAKER GRATE EXTENSION PLATE	CA1102-A
32.	ASHPAN	CA1211
33.	FIRE DOOR HINGE	CA1602
34.	FIRE DOOR GLASS	CA10083(SM083)
35.	ASH DOOR HINGE	CA1602
36.	ASH DOOR HANDLE	CA01011-ZHB
37.	ASH DOOR HANDLE LATCH	CA1505
38.	ASH DOOR HANDLE AXLE	CA0101-ZH
39.	FIRE DOOR GASKETS	CA0802
40.	FIRE DOOR HANDLE LATCH	CA1505
41.	FIRE DOOR HANDLE	CA01011-ZHB
42.	FIRE DOOR HANDLE AXLE	CA0101-ZH
43.	SWING PIPE	CA0138-T
44.	ROD ROTATION	CA1304-03
45.	THERMOSTAT HANDLE	CA0138
46.	WATER TANK BULKHEAD	CA1701-SL

22kW EXPLODED VIEW



1.	BASE	SM0801B
2.	HOB	SM0802B
3.	FRONT	SM0803B
4.	LH SIDE PANEL	SM0805B
5.	RH SIDE PANEL	SM0806B
6.	FIRE DOOR	SM0807B
7.	ASH DOOR	SM0808B
8.	AIRWASH COVER	SM0809B
9.	GRATE	SM0814B
10.	FIRE FENCE	SM0820B
11.	INNER TOP FRAME	SM0824B
12.	INNER TOP DOOR	SM0825B
13.	AIR COVER TO BASE	SM0834B
14.	GRATE FRAME	SM0839B
15.	BOILER BAFFLE	SM0849B
16.	LH POST	SM0850B
17.	RH POST	SM0851B
18.	FLUE OUTLET	SM0852B
19.	FLUE OUTLET FRAME	SM0853B
20.	ASHPAN	CA1208
21.	HOB FILLER PIECE	SM0855B
22.	INNER TOP DOOR HANDLE	SM08326
23.	RIDDLING GRATE	SM0115x
24.	LEG	SM0823x
25.	SECONDARY AIR SHUTTER	SM0810x
26.	FLUE SPIGOT	150

27.	ASHPAN LIFTING TOOL	CA0105
28.	DAMPER	CABWKQ02
29.	BOILER	CAB0109T
30.	RIDDLING ROD	CA1401-SM09B
31.	SHAKER GRATE EXTENSION PLATE	CA1102-A
32.	HINGES (FIRE DOOR)	CA1602
33.	SERIAL NO. PLATE	CAL0101-ZJ
34.	FIRE DOOR HANDLE	CA01011-ZHB
35.	FIRE DOOR HANDLE AXLE	CA0101-ZH
36.	FIRE DOOR HANDLE LATCH	CA1505
37.	ASH DOOR HANDLE	CA0102-S
38.	ASH DOOR HANDLE AXLE	CA0101-S
39.	ASH DOOR HANDLE LATCH	CA1505
40.	BASE BLANKING PLATE	SXMB-001
41.	SECONDARY AIR CONTROL KNOB	CA0104
42.	ASH COMPARTMENT	SM0854B
43.	ASH DEFLECTOR RH	SM0857B
44.	ASH DEFLECTOR LH	SM0858B
45.	SWING PIPE	CA0138-T
46.	ROD ROTATION	CA1304-04
47.	THERMOSTAT HANDLE	CA0138
48.	WATER TANK BULKHEAD	CA1701-SL

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NI Sales: 028 8772 2195

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