

charnwood

— **C-SERIES** —

Operating & Installation Instructions



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Congratulations on becoming the owner of a Hetas approved Charnwood C series Stove. Your stove has been approved by DEFRA to burn wood logs in a smoke control area if it is used in accordance with these instructions. It is therefore very important that you read and understand these instructions before using the stove.

Before lighting the stove check with the installer that the work and checks described in the Installation Instructions have been carried out correctly and that the chimney has been swept, is sound and free from any obstructions. The stove is not suitable for use in a shared flue system.

Remember that the stove will be hot and that it is made from hard materials – ensure that you have good balance before operating the fire.

Do not use an aerosol spray on or near the stove when it is alight. There is a risk of explosion or flash ignition of the spray.

When using the stove in situations where children, aged and/or infirm persons are present a fireguard must be used to prevent accidental contact with the stove. The fireguard should be manufactured in accordance with BS 8423:2002.

The stove is suitable for intermittent operation.

FUEL

This stove has been designated to burn wood. Only dry well seasoned wood should be burnt on this appliance as burning wet unseasoned wood will give rise to heavy tar deposits in the stove, on the glass and within the chimney. For the same reason hard woods (such as Ash, Beech and Oak) are better than soft woods (such as Pine and Spruce.) Burning wet unseasoned wood will also result in considerably reduced outputs. The wood should be cut and split and then left to season in a well ventilated dry place for at least one year but preferably two years before use. Approximate suitable log sizes are:-

C4 & C6	255mm (10in) long and 75mm (3in) diameter
C5 & C8	305mm(12in) long and 75mm (3in) diameter
C7	380mm(15in) long and 75mm (3in) diameter.

PETROLEUM COKE IS NOT SUITABLE FOR USE ON THIS APPLIANCE. ITS USE WILL INVALIDATE THE GUARANTEE.

This stove is not designed to burn household waste.
For advice on other fuels please contact Charnwood.

These appliances have been approved by HETAS as intermittent operating appliances for burning dry seasoned wood logs only. HETAS approval does not cover the use of other fuels either alone or mixed with wood logs nor does it cover the instructions for use of other fuels.

FITTING THE RIDDLING GRATE

Tool required for fitting the riddling grate:

10mm Spanner

Pozidriv screwdriver

Before fitting the riddling grate (Fig. 1) remove the fuel retainer and the wood ash retainer. The wood ash retainer is not required when the riddling grate is fitted.

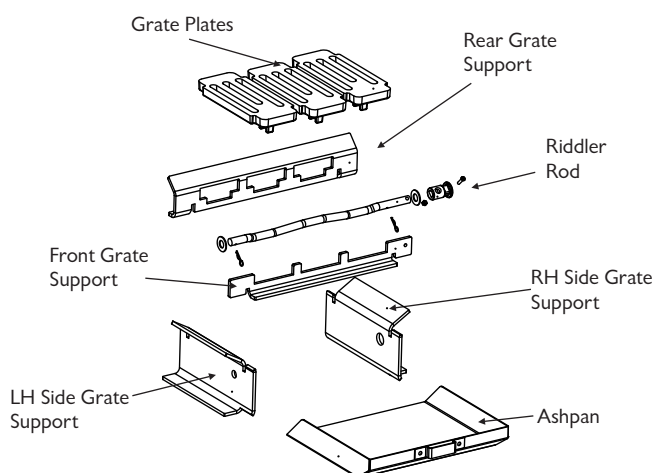
Undo the nut on the riddling blanking hole using a 10mm spanner. Remove the cover and spacing washer (ensure you keep these in a safe place as you will need to replace them if the riddling grate is removed).

Feed the riddler rod through the hole on the right hand side of the stove, and slide one washer onto the rod, (if there is not sufficient room to the right of the stove to do this then remove the riddler knob, fit one washer over the rod and then slide the rod through the hole from the inside of the stove).

Feed the rod through the two side fireplates and slide the other washer on to the rod so that the washers end up outside the two side fireplates. With the side fireplates pushed together fit the retaining clips so that the washers come inside the clips.

Slide the side fireplates apart so that they rest against the sides of the firebox. Slot in the front and rear support plates.

Fig.1. Optional Grate Kit





Fit the grate plates into position through the front and rear grate support plates, making sure they locate correctly onto the riddler rod. Fit the fuel retainer. Slide the ashpan under the grate.

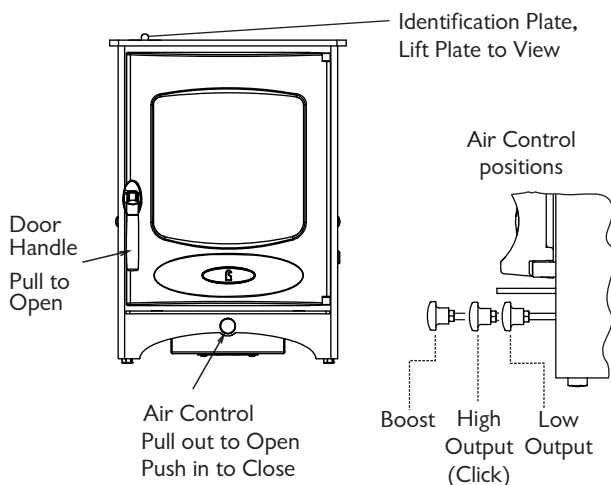
LIGHTING

On initial lighting, the stove may smoke and give off an odour as the silicon paint with which the firebox is painted reacts to the heat. This is normal and will cease after a short time, but meanwhile the room should be kept well ventilated.

At first only light a small fire and burn it slowly for two hours to allow any residual moisture in the chimney to evaporate.

Light the stove using dry kindling wood and paper or fire lighters. Put the paper, or fire lighters, and kindling in the firebox and cover with a few small dry logs. Open the air control fully (see Fig. 2) Light the paper or fire lighters. The door may be left cracked open for a few minutes to assist the combustion and heat up the firebox more quickly. When the kindling wood is well alight add a few more small logs, close the door but leave the air control fully open. When the flames are established around these logs, load the stove with the required fuel load. Maintain the air control at maximum at this stage. Once the fire is up to temperature the airwash system will begin to work, so allow the fire to become hot before adjusting the air control to the required setting. During the lighting period, do not leave the stove unattended. Do not leave the door open except as directed above to avoid excessive smoke.

Fig.2. Stove Controls



When relighting the stove, leave the ash on the base if burning wood, unless it is becoming too deep, in which case some of it may be removed. If burning high ash content fuel, clear the grate and empty the ashpan before relighting.

CONTROLLING THE FIRE

The rate of burning and hence the output is controlled by the air control (see Fig. 2).

Open the air control fully (boost position) when lighting or when rapid burning is required. It should not be left fully open for long periods as this can cause over-firing or excessive smoke production. For high output move the air control to the 'click position' or for low burning to the fully closed position.

When the fire is burning normally the air control gives enough airwash to keep the glass clean. However, it will not always be possible to keep the glass clean with the air control fully closed. For correct firing we recommend the use of a stove pipe thermometer which may be purchased from your supplier or from Charnwood.

REFUELLING

Keep the firebox well filled but do not allow fuel to spill over the top of the fuel retainer.

Logs should be evenly distributed, filling the firebed to give the most pleasing flame pattern. The air control must be fully opened after refuelling until the flames are established above the fire. It is best to refuel on to a hot bed of ash. If at this point the fire starts to die, the door must be cracked open until the fire is revived. If the fire has started to die down before refuelling, then more kindling wood must be added, the air control opened fully and the door cracked open to re-establish the firebed **before** adding larger logs (see suitable log sizes in Fuel section). This will avoid excessive smoke emission.

Care should be taken, especially when burning wood, that fuel does not project over the fuel retainer or damage to the glass may be caused when the door is closed, it can also cause the glass to black up. Maximum filling height is such that logs cannot fall from the fire when the door is opened. In smoke controlled areas do not fill the stove above the level of the front firebars as overloading can cause excess smoke. Liquid fuels are not to be used on this appliance.

ASH CLEARANCE

The ashpan should be emptied regularly before it becomes too full. Never allow the ash to accumulate in the ashpan so that it comes in contact with the underside of the grate as this will seriously damage the grate bars. The ashpan is handled using the tool provided. Care should be taken to ensure that ash is cool before emptying it into plastic liners or bins.

To make ash removal easier there is a special Charnwood ash carrier available. This may be purchased from your supplier or, in case of difficulty, from Charnwood.

REDUCED BURNING

For reduced burning the fire door must be closed.

When burning wood in areas that are not smoke controlled, load some large logs on the fire and allow to burn for half an hour before closing the air control (this will help to reduce tar deposits in the chimney.) Some experimentation may be necessary to find the setting most suitable for the type of fuel being used and the draw on the chimney.

To revive the fire, empty the ashpan, (if burning fuel other than wood), riddle the fire, and open the air control to maximum. When the fire is burning well load on more fuel as necessary and adjust the air control to the desired setting.

MAINTENANCE

Cleaning

The stove is finished with a high temperature paint which will withstand the temperatures encountered in normal use. This may be cleaned with a damp lint-free cloth when the stove is cold. Should re-painting become necessary, high temperature paints are available from your supplier or from stove shops.

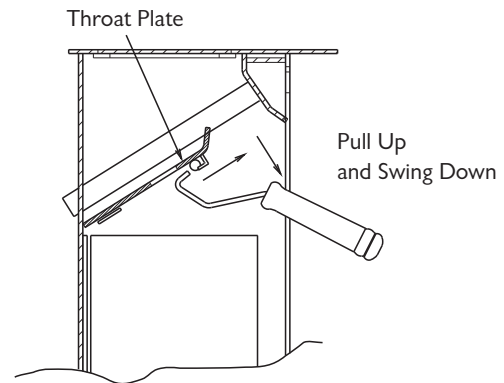
Cleaning the Glass

Most deposits on the glass may be burnt off simply by running the fire at a fast rate for a few minutes. If it becomes necessary to clean the glass then open the door and allow it to cool. Clean the glass using a damp cloth and then wiping over with a dry cloth. Any stubborn deposits on the glass may be removed with a proprietary stove glass cleaner or ceramic hob cleaner. Do not use abrasive cleaners or pads as these can scratch the surface which will weaken the glass and cause premature failure

When Not in Use

If the fire is going to be out of use for a long period (for instance in the summer) then to prevent condensation, and hence corrosion, the air control should be left fully open and the fire door left ajar. It is also advisable to sweep the chimney and clean out the fire. Spraying the inside of the door and firebox with a light oil, such as WD40, will also help to keep all internal parts working well. After long periods where the fire has been out of use, the chimney and appliance flueways should be cleaned before lighting.

Fig.3. Throat Plate Position and Lowering



Door Seals

For the fire to operate correctly it is important that the door seals are in good condition. Check that they do not become worn or frayed and replace them when necessary.

Servicing

It is recommended that the fire is serviced once a year to keep it in first class working order. After cleaning out the firebox thoroughly, check that all internal parts are in good working order, replacing any parts that are beginning to show signs of wear. Check that the doors seals are in good condition and that the door seals correctly. A servicing guide is available on request. Repairs or modifications may only be carried out by the Manufacturer or their approved agents. Use only genuine Charnwood replacement parts.

THROAT PLATE AND FLUEWAY CLEANING

It is important that the throat plate and all the stove flueways are kept clean in order to prevent potentially dangerous fume emission. They should be cleaned at least monthly, and more frequently if necessary. It is necessary to let the fire out to carry out these operations.

The front of the throat plate is pulled forward and then lowered as shown in Fig. 3. Any sooty deposits should then be swept from the plate and into the fire.

Return the throat plate to its correct position - raise the front of the plate, push it back and then lower it onto the retaining lugs.

CHIMNEY SWEEPING

Where the chimney previously served an open fire, it is possible that the higher flue gas temperature from a stove may loosen soot deposits with the consequent risk of flue blockage. It is therefore recommended that the chimney be swept a second time within a



month of regular use after installation.

The chimney should be swept at least twice a year. Where the top outlet or vertical rear flue connector is used it will generally be possible to sweep the chimney through the appliance.

First remove the fuel retainer and the throat plate. Then sweep the chimney ensuring that soot is removed from all horizontal surfaces after sweeping.

In situations where it is not possible to sweep through the appliance the installer will have provided alternative means, such as a soot door. After sweeping the chimney the appliance flue outlet and the flue pipe connecting the stove to the chimney must be cleaned with a flue brush.

After clearing any soot from within the stove, replace the throat plate (see Fig. 3.) and the fuel retainer.

Different types of sweep's brushes are available to suit different flueways. For prefabricated insulated chimneys the manufacturers instructions with regard to sweeping should be consulted.

TROUBLE SHOOTING

Fire Will Not Burn.

Check that:

- a) the air inlet is not obstructed in any way,
- b) chimneys and flueways are clear,
- c) that a suitable fuel is being used,
- d) that there is an adequate air supply into the room,
- e) that an extractor fan is not fitted in the same room as the stove.
- f) there is sufficient draw in the chimney. Once the chimney is warm a draught reading of at least 2.5 mm (0.10 in.) water gauge (25Pa) should be obtained.

Door Glass Blacks Up

Differences in chimney draughts mean that the best settings of the air controls will vary for different installations. A certain amount of experimentation may be required, however the following points should be noted and with a little care should enable the glass to be kept clean in most situations:

- a) Wet or unseasoned wood, or logs overhanging the front fence will cause the glass to blacken.
- b) The airwash relies on a supply of heated air to keep the glass clean, therefore, when lighting the stove allow the firebed to become well established before closing the air control. This may also be necessary

when re-fuelling the stove.

- c) When re-fuelling keep the fuel as far back from the front fence as possible, do not try to fit too much fuel into the firebox.
- d) Do not completely close the air control.

It is always more difficult to keep the glass clean when running the stove very slowly for long periods.

If blackening of the glass still occurs check that all flue connections and the blanking plate are well sealed. It is also important that the chimney draw is sufficient and that it is not affected by down-draught. When the chimney is warm a draught reading of at least 2.5 mm (0.10 in.) water gauge (25Pa) should be obtained. Some blackening of the glass may occur below the level of the fuel retainer. This will not obscure the view of the fire or affect its performance.

Fume Emission

Warning Note:

Properly installed and operated this appliance will not emit fumes. Occasional fumes from de-ashing and re-fuelling may occur. Persistent fume emission is potentially dangerous and must not be tolerated. If fume emission does persist, then the following immediate actions should be taken:

- a) **Open doors and windows to ventilate the room and then leave the premises..**
- b) **Let the fire out and safely dispose of the fuel from the appliance.**
- c) **Check for flue or chimney blockage, and clean if required.**
- d) **Do not attempt to re-light the fire until cause of fuming has been identified, if necessary seek professional advice.**

The most common cause of fume emission is flueway or chimney blockage. For your own safety these must be kept clean.

Fire blazing out of control

Check that :

- a) The door is tightly closed.
- b) The air control slider is fully closed.
- c) A suitable fuel is being used.
- d) Door seals and airwash slide are intact.

Chimney Fires

If the chimney is thoroughly and regularly swept, chimney fires should not occur. However, if a chimney fire does occur close the air control,



and tightly close the door of the appliance. This should cause the chimney fire to go out in which case the controls should be kept closed until the stove has gone out. The chimney and flueways should then be cleaned. If the chimney fire does not go out when the above action is taken then the fire brigade should be called immediately. After a chimney fire the chimney should be carefully examined for any damage. Expert advice should be sought if necessary.

CO ALARM

Your installer should have fitted a CO alarm in the same room as the appliance. If the alarm sounds unexpectedly, follow the instructions given under “Warning Note” above.

IF YOU NEED FURTHER HELP

If you need further help with your Charnwood then your Installer will be able to provide the answers to most questions. Your Local Charnwood Premier Dealer has a great deal of experience and will also be able to provide helpful advice. Further help is available from the Charnwood Customer Services department who will be pleased to give advice, if necessary.



HEALTH AND SAFETY PRECAUTIONS

Please take care when installing the stove that the requirements of the Health and Safety at Work Act 1974 are met.

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

If there is a possibility of disturbing any asbestos in the course of installation then please use appropriate protective equipment.

There must not be an extractor fan fitted in the same room as the stove as this can cause the appliance to emit fumes into the room.

There must be an adequate air supply into the room in which the appliance is installed to provide combustion air. The combustion air supply must be via a permanently open vent. The requirement for minimum free area is partly dependent on the design air permeability of the house. In older properties the air permeability will be above $5.0\text{m}^3/(\text{h.m}^2)$, but in some modern properties it may be less. The vent must be positioned such that it is not liable to blockage.

Minimum areas are given in the following table:

Air Permeability $\text{m}^3/(\text{h.m}^2)$	Minimum Vent Area $\text{cm}^2(\text{in}^2)$				
	C-Four	C-Five	C-Six	C-Seven	C-Eight
> 5.0	No Requirement	No Requirement	9.4 (1.5)	11 (1.76)	16.5 (2.6)
<5.0	27.5 (4.3)	27.5 (4.3)	36.9(5.7)	38.5 (6.0)	44 (6.8)

This stove is capable of intermittent operation, and is not suitable for use in a shared flue system.

In addition to these instructions the requirements of BS.8303 and BSEN 15287-1:2007 must be fulfilled. Local Authority Bylaws and Building Regulations, including those referring to national and European Standards, regarding the installation of Solid Fuel burning appliances, flues and chimneys must also be observed.

CO ALARMS

Building regulations require that whenever a new or replacement fixed solid fuel or wood/biomass appliance is installed in a dwelling a carbon monoxide alarm must be fitted in the same room as the appliance. Further guidance on the installation of the carbon monoxide alarm is available in BS EN 50292:2002 and from the alarm manufacturer's 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.

SPECIFICATION

Specification	C-Four	C-Five	C-Six	C-Seven	C-Eight
Nominal Heat Output kW (BTU/hr)	4.9 (16,700)	5.0 (17,000)	6.7 (22,800)	7.6 (25,900)	8.3 (28,300)
Stove Weight kg (Packed)	83	96	96	115	119
Flue Temperature °C	281	259	272	280	316
Flue gas Mass Flow g/s	4.2	5.3	4.3	7.3	6.3
Hearth Temperature °C	51.6	88.1	88.1	65.0	53.4
Minimum distance from combustibles mm	600 side 600 rear	500 side 400 rear	500 side 500 rear	500 side 550 rear	600 side 650 rear

The outputs in the table are based on a 45minute re-fuelling cycle burning seasoned hardwood logs. All tests are carried out in accordance with BSEN 13240.

CHIMNEY

In order for the appliance to perform satisfactorily the chimney height must not be less than 4 metres measured vertically from the outlet of the stove to the top of the chimney. The internal dimensions of the chimney should preferably be 175 mm (7 in.) or 200mm (8 in.) either square or round and MUST NOT BE LESS THAN 125 mm (5 in.) for C-Four and C-Five or 150mm (6 in.) for C-Six, C-Seven and C-Eight.

If an existing chimney is to be used it must be swept and checked, it must be in good condition, free from cracks and blockages, and should not have an excessive cross sectional area. If it was previously used by an open fire then the chimney should be swept 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. If you find that the chimney is in poor condition then expert advice should be sought regarding the necessity of having the chimney lined. If it is found necessary to line the chimney then a lining suitable for



Solid Fuel must be used.

If there is no existing chimney then a prefabricated block chimney or a twin walled insulated stainless steel flue to BSEN 15287-1:2007 can be used either internally or externally. These chimneys must be fitted in accordance with the manufacturers instructions and Building Regulations.

Single wall flue pipe is suitable for connecting the stove to the chimney but is not suitable for using for the complete chimney.

If it is found that there is excessive draw in the chimney then a draught stabiliser should be fitted.

It is important that there is sufficient draw in the chimney and that the chimney does not suffer from down-draught. When the chimney is warm the draw should be not less than 2.5mm (0.10 in.) water gauge (25 Pa). If in doubt about the chimney seek expert advice.

HEARTH AND FIRE SURROUND

The stove must stand on a fireproof hearth and must not be situated closer than the minimum distance from combustible materials (see specification table) to the sides or rear above hearth level unless adequately fireproofed in accordance with local building regulations. The hearth must be of fireproof material and at least 12mm (1/2in.) thick. The positioning of the stove and the size of the hearth are governed by building regulations for Class 1 appliances. These building regulations state that the hearth must extend in front of the stove by at least 300mm (12 in.) and to the sides of the stove by at least 150mm (6 in.). When the fire door is open, it extends beyond the flat front of the stove by the following amounts:-

C-Four & C-Six 365mm C-Five 436mm C-Seven 515mm and C-Eight 450mm.

If in doubt as to the positioning of the stove, expert advice should be sought either from the supplier or the local building inspector. The fireplace must allow good circulation of air around the appliance to ensure that maximum heat is transferred to the room and also to prevent the fireplace from overheating. A gap of 150mm (6 in.) each side and 300mm (12 in.) above the appliance should give sufficient air circulation. If a wooden mantelpiece or beam is used in the fireplace it should be a minimum of 460mm (18 in.), and preferably 600mm (24 in.) from the appliance. In some situations it may be necessary to shield the beam or mantelpiece to protect it.

In order for the fire to operate correctly and to allow for access, there must be an air gap behind the appliance of at least 75mm, but

be aware that this distance will need to be greater in some cases to meet Building Regulation requirements.

Fig. 4. Vertical Register Plate With Bricked Up Fireplace

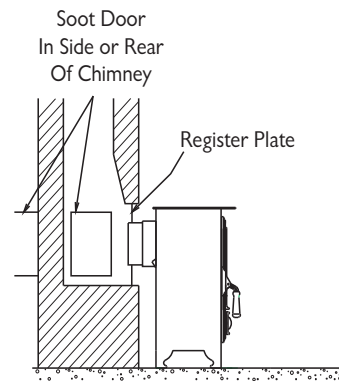


Fig. 5. Horizontal Register Plate With Rear Flue Connection

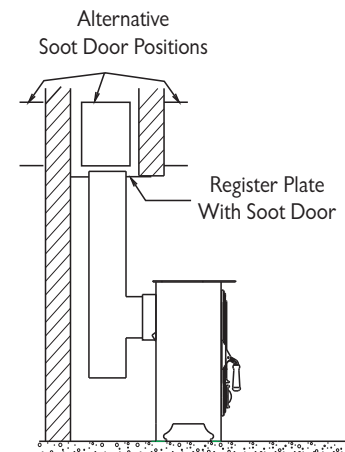


Fig. 6 Horizontal Register Plate With Top Flue Connection

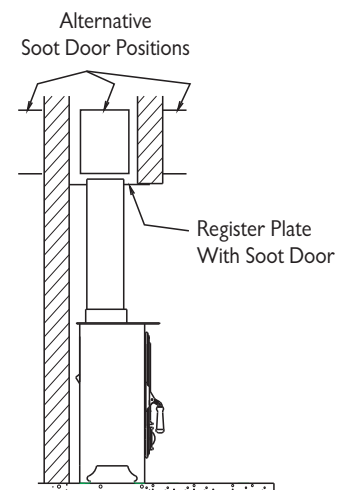
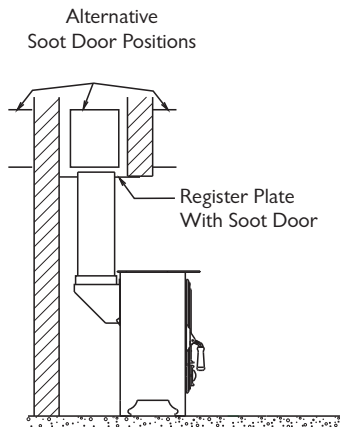




Fig. 7. Horizontal Register Plate With Optional Vertical Rear Flue Connector



CONNECTIONS TO FLUES

The stove must be connected to the flue using flue pipe of the following sizes:-

Stove Model C-Four & C-Five.....125mm (5in.) i/d pipe.

Stove Model C-Six, C-Seven & C-Eight.....150mm (6in.) i/d pipe.

This may be stainless steel, cast iron, or thick wall steel pipe. Straight lengths of Charnwood Pipe to match the stove are available if required.

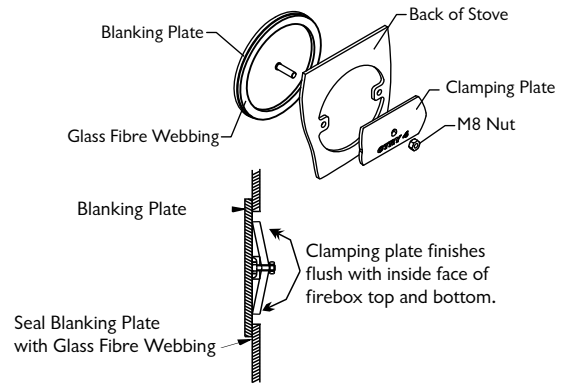
There are several ways of connecting the stove to the flue. These are illustrated in Figs. 4 to 7.

If the optional vertical rear flue connector is used then the chimney may be swept through the appliance.

Horizontal lengths of flue must be kept to a minimum and should not be more in length than the flue diameter.

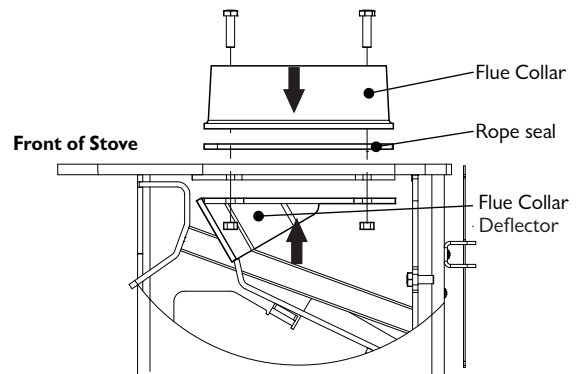
The stove comes with the blanking plate fitted to the top flue outlet. The seal for the **top** outlet is a 180mm dia ring of rope seal. The seal for the **rear** outlet is a length of adhesive backed fibre webbing supplied with instructions. This is applied to the flue collar or the Vertical Rear Flue adapter for rear outlet installations. For top outlet installations, the blanking plate must be removed, have the webbing fitted to its sealing face, and fitted to the rear flue outlet. Ensure that the fold on the clamping plate is in line with the lugs on the firebox as shown in Fig 8. Ensure that the clamping plate does not prevent the throat plate from seating correctly. All flue connections must be well sealed.

Fig. 8. Flue Blanking Plate.



For top outlet installations on the **C Five, Six, Seven & Eight** the flue collar deflector must be fitted at the same time as the flue collar because it uses the same bolts to secure it to the stove. The longest length of the flue collar deflector must be aligned with the front of the stove as shown in Fig 9.

Fig. 9. Flue Collar Deflector fitting.



SOOT DOORS

It is possible to pass a 16 inch diameter sweeps brush through the appliance but in most back outlet installations it will be necessary to have a soot door to enable the chimney to be swept. The optional vertical rear flue connector does allow the chimney to be swept through the stove. Soot doors may either be in the actual brickwork of the chimney or in the register plate. Various positions of soot doors are shown in Figs. 4 to 7.

UNPACKING THE STOVE

The stove arrives bolted and shrink-wrapped to its pallet. There must be adequate facilities for unloading and manoeuvring into position. The wrapping is first removed, then the stove released from the pallet by either removing the single bolt (C-4) or 4 pallet bolts(C-5 to C-8)

INSTALLATION INSTRUCTIONS



using a 10mm spanner. The pallet brackets can now be removed from the stove by tilting it and using a 13mm spanner to remove the bolts. These 4 bolts are required for levelling or fixing on the Store Stand. The Stove may now be moved to its final position. The pallet is intended to be cut up and used for kindling fuel.

PRE LIGHTING CHECK

Ensure that the throat plate is fitted in the roof of the appliance. The location and positioning of the throat plate is shown in Fig. 3.

Check that the front fence is fitted correctly and that the door closes properly.

COMMISSIONING

On completion of the installation allow a suitable period of time for the fire cement and mortar to dry out before lighting the fire. If no grate is fitted make a layer of ash or sand on the base of the stove before lighting. Check to ensure that smoke and fumes are taken from the appliance up the chimney and emitted safely. Also check all joints and seals. On completion of the installation and commissioning please leave the operating instructions with the customer and advise them on the use of the appliance.

CAA AND SMOKE CONTROL

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

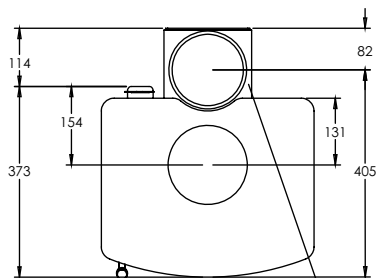
State or Minister in the devolved administrations.

The **Charnwood C-FOUR, Charnwood C-FIVE, Charnwood C-SIX, Charnwood C-SEVEN and Charnwood C-EIGHT** have been recommended as suitable for use in smoke control areas when burning wood logs.

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

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.

C-FOUR DIMENSIONS (mm)

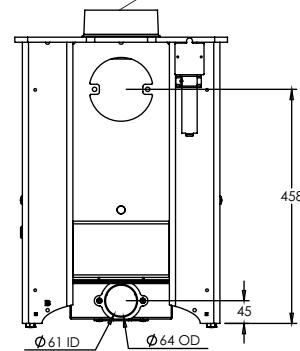
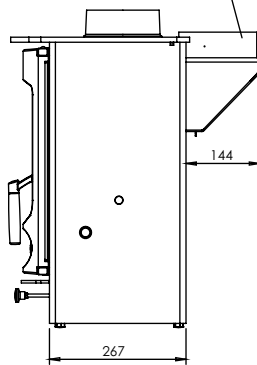
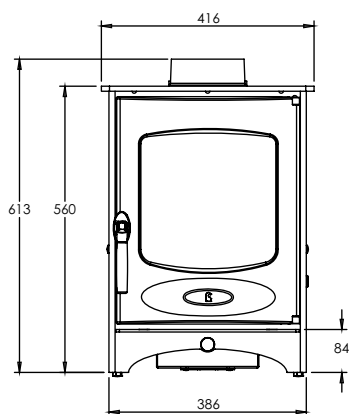


Plan View

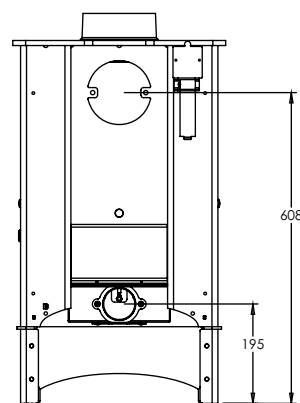
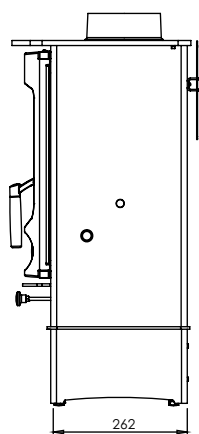
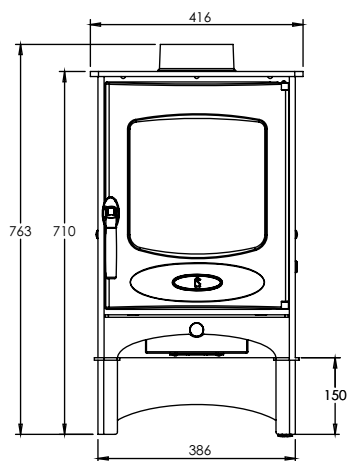
Optional Vertical Rear Flue Adapter

140 i/d to suit 125mm (5")
flue pipe

Standard Model



Store Stand

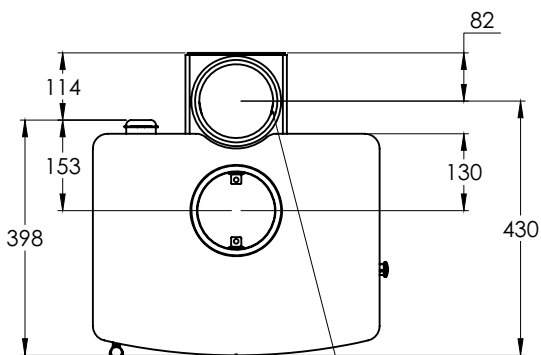


Front

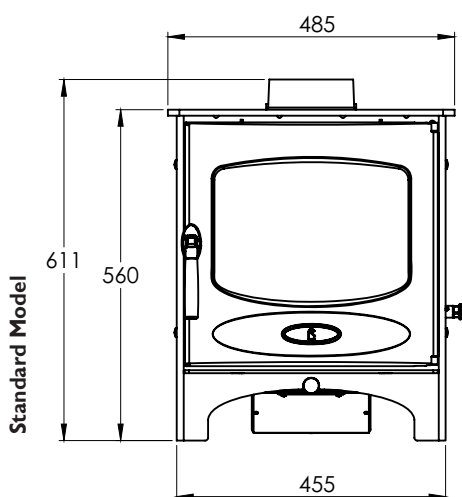
Side

Rear

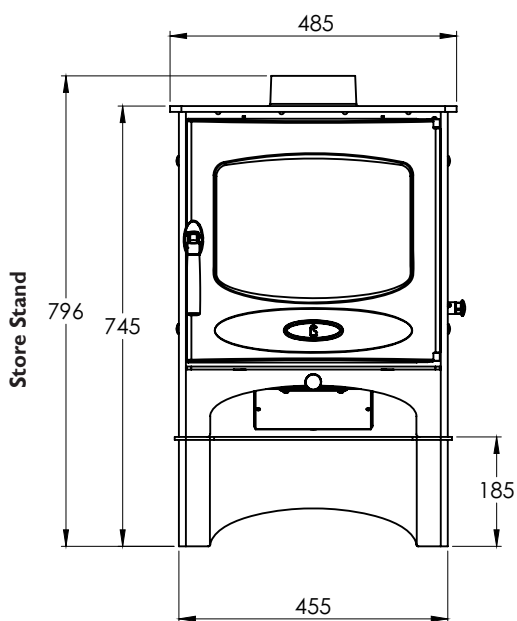
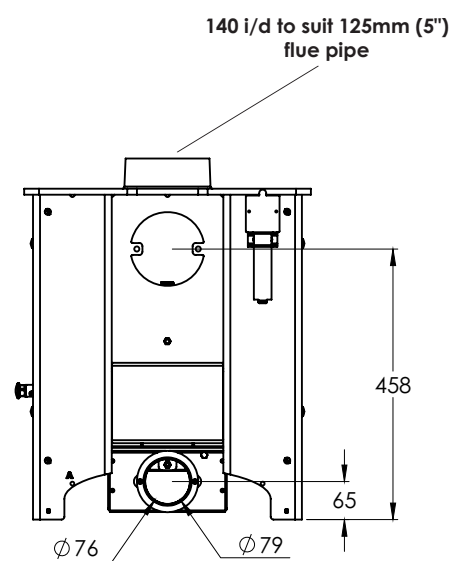
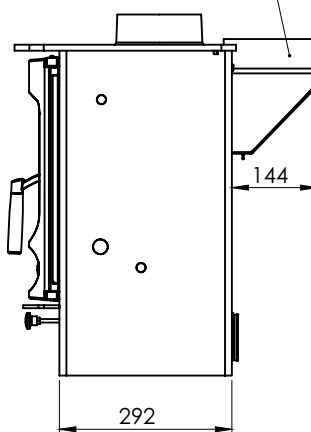
C-FIVE DIMENSIONS (mm)



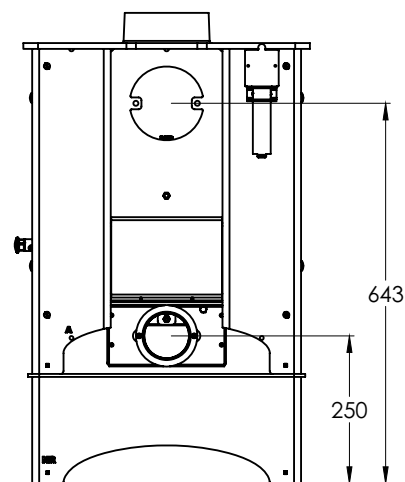
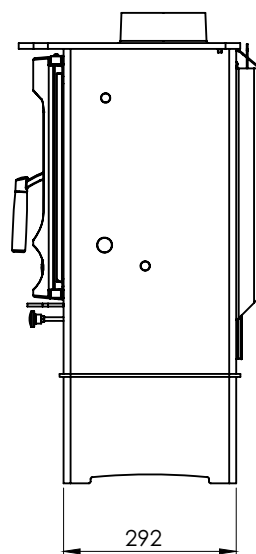
Plan View Optional Vertical Rear Flue Adapter



Standard Model



Store Stand

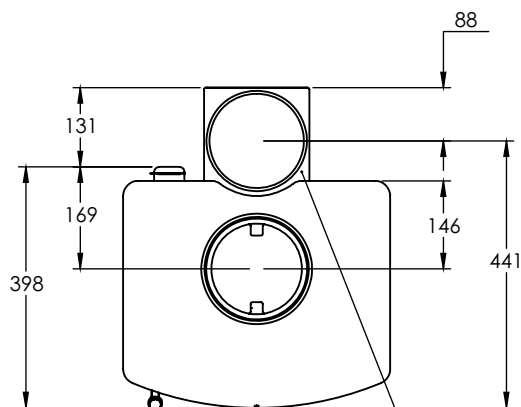


Front

Side

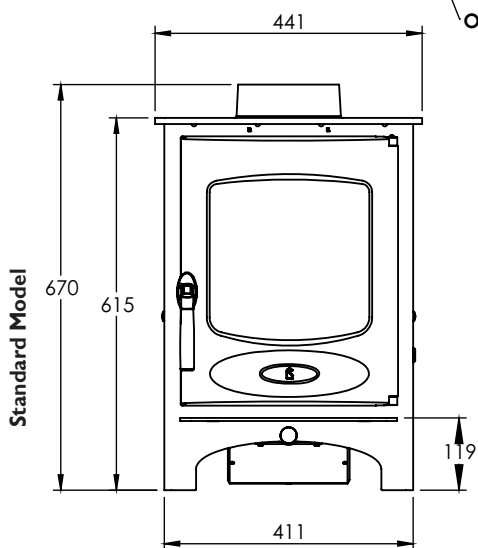
Rear

C-SIX DIMENSIONS (mm)

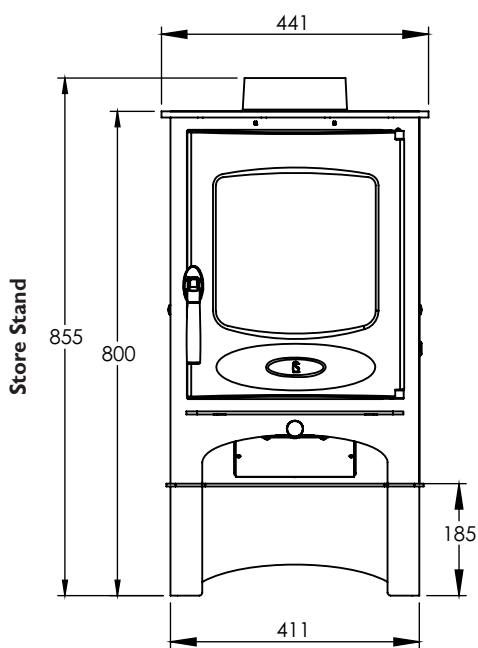
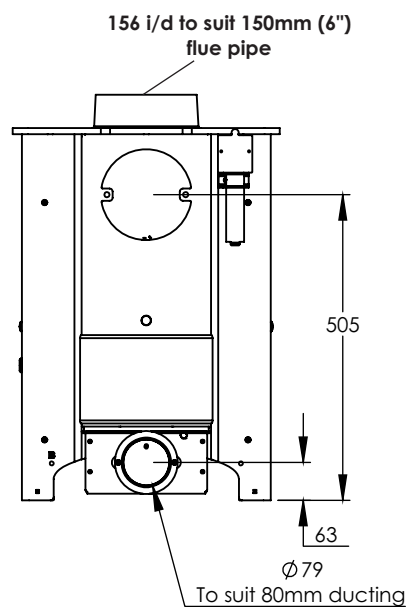
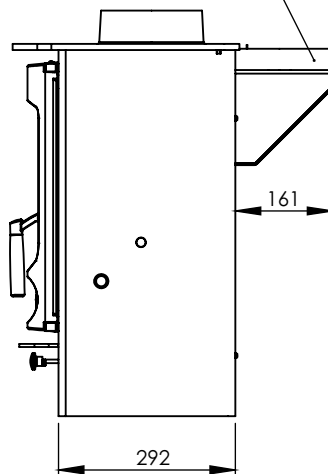


Plan View

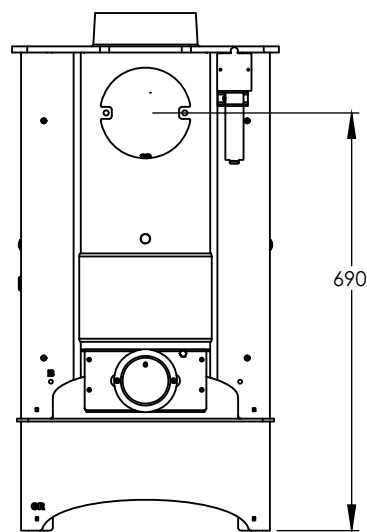
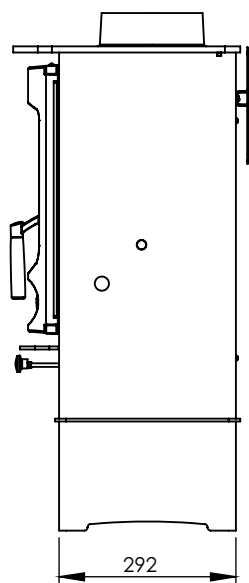
Optional Vertical Rear Flue Adapter



Standard Model



Store Stand

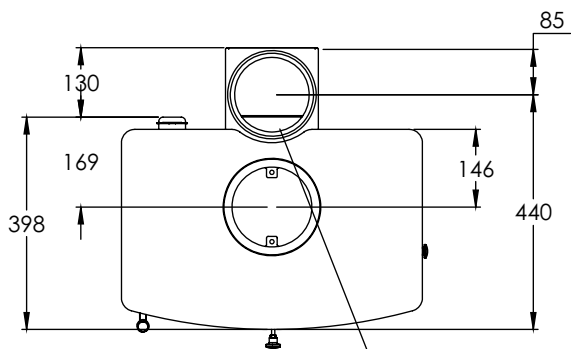


Front

Side

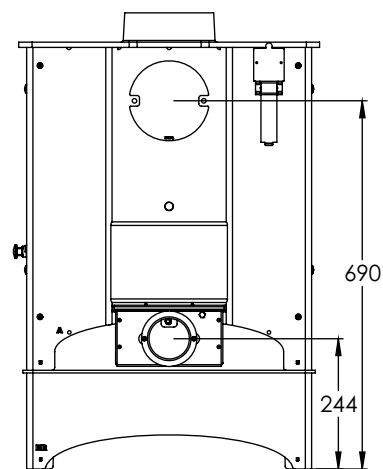
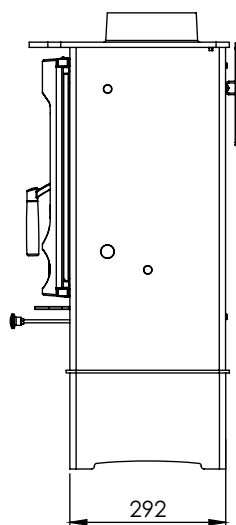
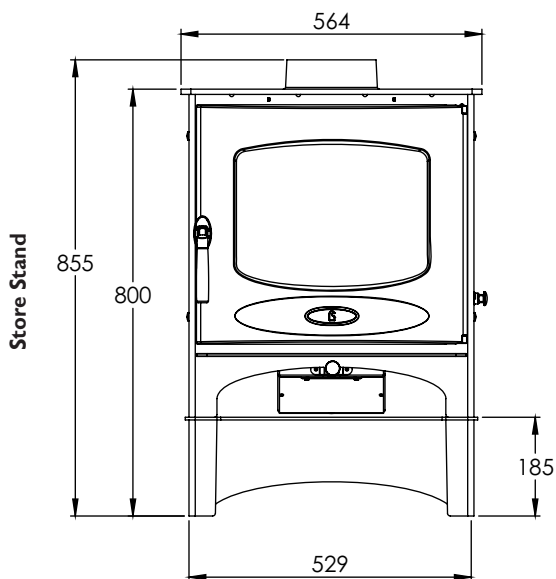
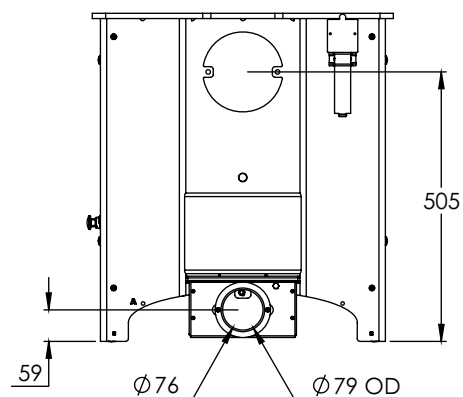
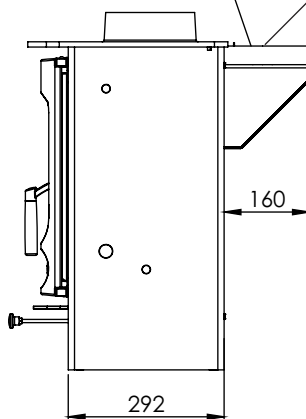
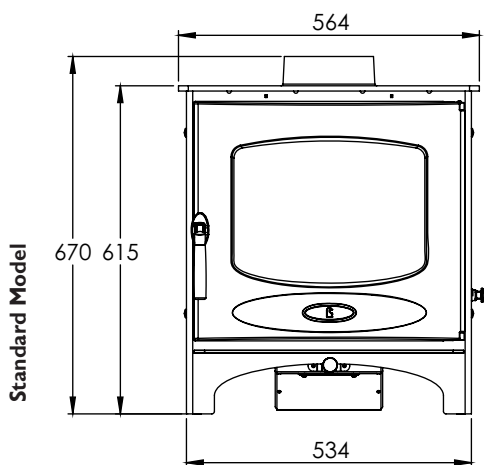
Rear

C-SEVEN DIMENSIONS (mm)



Optional Vertical Rear Flue Adapter

156 i/d to suit 150mm (6")
flue pipe

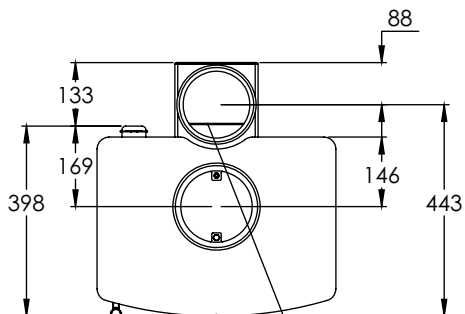


Front

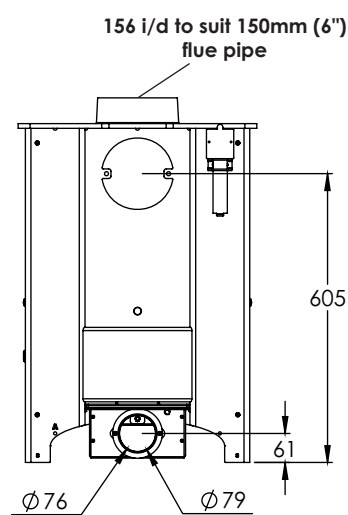
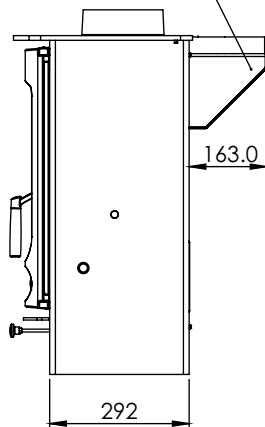
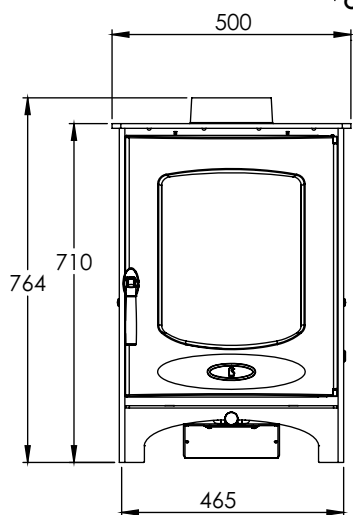
Side

Rear

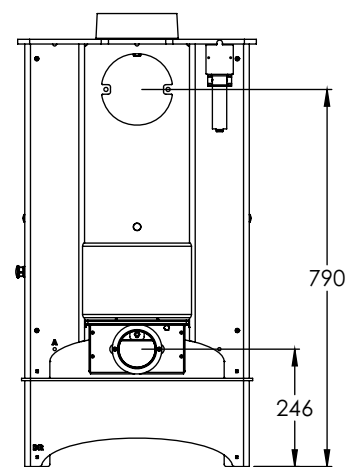
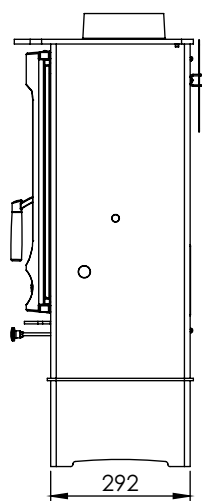
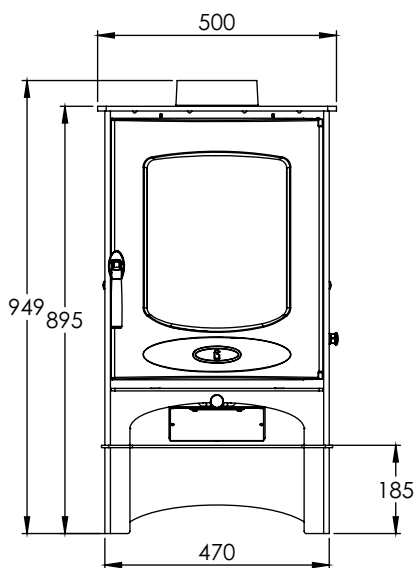
C-EIGHT DIMENSIONS (mm)



Optional Vertical Rear Flue Adapter



Standard Model



Store Stand

Front

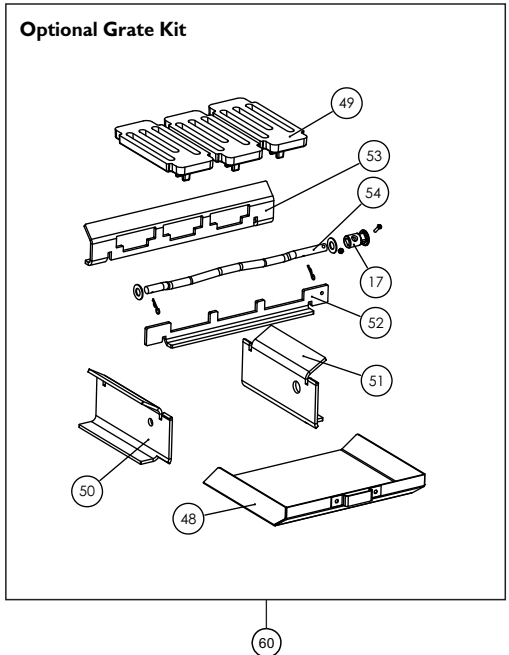
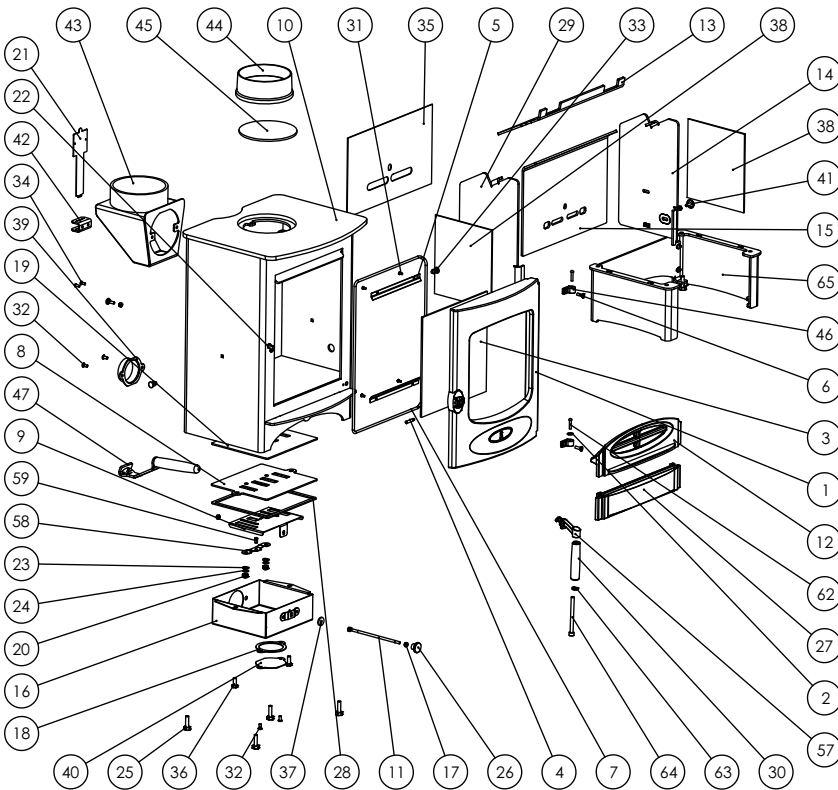
Side

Rear

C-FOUR PARTS LIST



Issue G



Item	Part No.	Description	Item	Part No.	Description
1#	002/BR001	Door Casting	34	008/FFS025	M6 X 12 Bright Pozi Pan Hd
2	008/FFW026	1/4 Heavy Brass Washer	35	008/BR047	Back gasket
3	006/PV19	Glass (inc seal)	36	008/FFS059	M8 x 20 Hex Hd Bolt
4	008/BR014	Handle pivot Pin	37	008/BR052	Felt washer
5	004/BW23	Glass retainer	38	011/PV26	Side Gasket
6	008/FFS018	M6x16 C'sunk Skt Hd Screw	39	004/BR053	Air Inlet Spigot assy
7	008/PV21	Rope door seal	40	004/BR054	Blanking plate
8	004/BR005	Air box control plate	41	004/DY22	Riddler Blanking Disk
9	004/BR007	Air inlet slide	42	010/EY12	Serial number hanger bracket
10#	001/BR010	Firebox	43	010/PV33	Vert Rear Flue Adaptor
11	004/BR016	Control rod	44	002/PV12B	Flue collar
12	002/BR017	Fuel retainer BR	45	012/PV09	Blanking plate
13	010/BR031	Throat plate	46	002/BR020	Hinge
14	010/BR029	RH Sideplate	47	012/BV20	Ashpan tool
15	010/BR030	Inner Backplate	48	004/BR033	Ashpan
16	004/BR040	Airbox Cover	49	002/EY03	Grate Plate
17	002/DY21	Riddler Knob	50	010/EY04	L.H. Grate Support
18	008/BR044	Gasket Blanking plate	51	010/EY05	R.H. Grate Support
19	008/BR006	Gasket Airbox	52	010/EY06	Front Grate Support
20	008/FFB034	M8 Nyloc nut	53	010/BR035	Rear Grate Support
21	012/BR011	Serial No. Label	54	010/EY13	Riddler Rod assy
22	002/PV13	Door Latch	55*	008/PV55	Glass Seal
23	008/FFW025	M8 Wavy Washer	56*	008/FW29	Door Seal Adhesive
24	008/FFW007	3/8" Plain Light Washer	57#	002/BR012	Handle Casting
25	008/FFS050	M8 Bolt 30mm Long	58	004/BR015	Clicker retainer plate
26	008/AY37	Air Control Knob	59	008/ES36~01	Brass Ball Catch
27	002/BR034	Wood ash retainer	60	010/BR022	Grate Kit
28	008/BR045	Air box Gasket	61*	010/EW51	Ash Carrier(Optional Extra)
29	010/BR028	LH Sideplate	62	008/BW39/S	Hinge Pin Set
30	008/BR012	Wooden handle	63	008/FFW015	Spring Washer (Thackery Type)
31	008/FFS003	Pan head screw M5X10	64	008/FFB007	M8 x 100mm Allen Head Bolt
32	008/FFS078	Pozi pan head 4.2 x 9.5	65	010/BR050/##	Store Stand
33	008/FFB003	Coach Bolt M6 x 20	66*	010/BR057	Heat Shield (Optional Extra)

* These items are not shown on the drawing.
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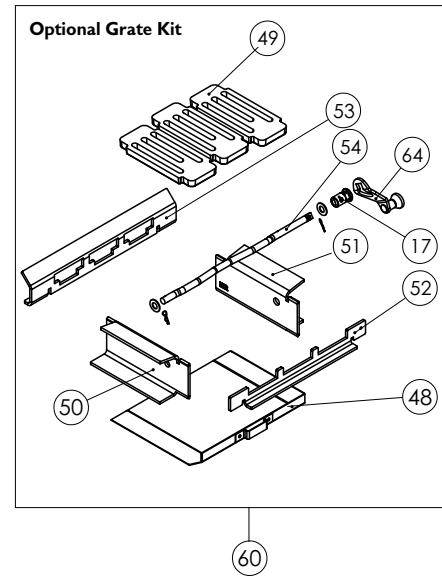
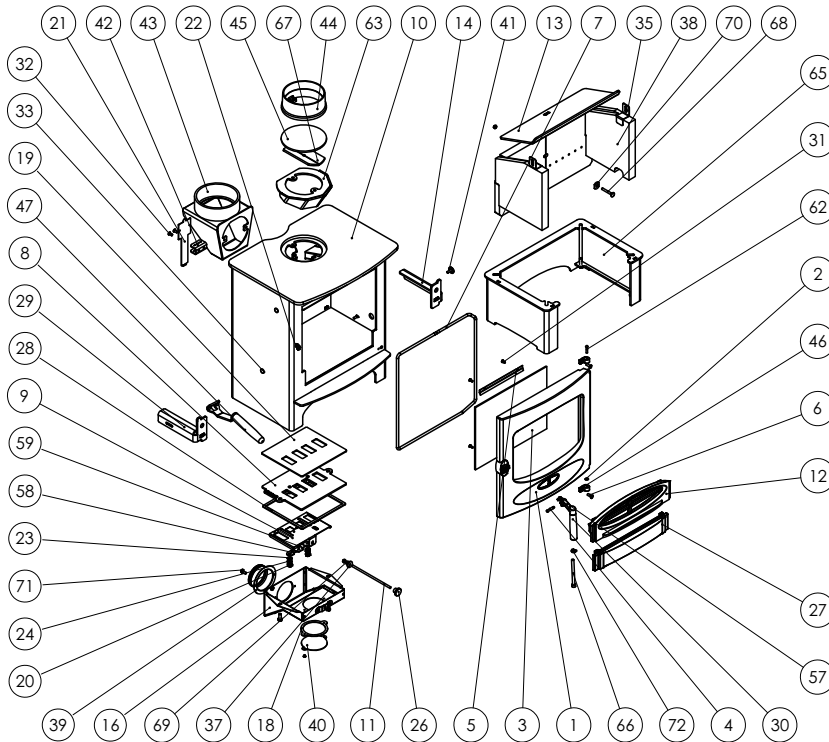
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C-FIVE PARTS LIST



Issue A



Item	Part No.	Description	Item	Part No.	Description
1#	002/NR001	Door Casting	41	004/DY22	Riddler hole Plug
2	008/FFW026	M6 Heavy brass washer	42	010/EY12	Serial number hanger bracket
3	006/NR019	Glass	43	010/PV33	Vertical Rear Flue Adapter
4	004/BR014	Handle pivot Pin	44	002/PV12B	Cast Flue Collar
5	004/BW23	Glass retainer	45	012/PV09	Blanking Plate
6	008/FFS018	M6x12 Countersunk socket head screw	46	002/BR020	Hinge casting
7	008/NR038	Door Seal	47	012/BV20/A	Ashpan/Door Opening Tool
8	004/CR005	Air control plate assembly	48	004/BR033	Ashpan
9	004/CR007	Air inlet slide	49	002/EY03	Grate Plate
10	001/NR010	Firebox Assembly	50	010/NR043	L.H. Grate Support
11	004/ER016	Control rod	51	010/NR042	R.H. Grate Support
12	002/NR017	Fuel retainer	52	010/EY06	Front Grate Support
13	010/NR031	Baffle	53	010/NR061	Rear Grate Support
14	010/NR029	RH Sideplate	54	010/DR060	Riddler Rod Assy
17	002/DY21	Riddler knob	55*	008/NR044	Glass Seal
18	008/CR063	Duct gasket	56*	008/FW29	Door Seal Adhesive
20	008/FFN015	M8 Philidas Nut	57#	002/BR012	Handle arm
21	012/NR011	Serial No. Label	58	004/BR015	Clicker Retainer Plate
22	002/PV13	Door Latch	59	008/ES36	Brass ball catch
23	008/FFW025	M8 Wavey washer	60	010/NR022	Grate Kit (Inc Handle)
24	008/FFW002	Washer 14 x 6	61*	010/EW51	Ash Carrier (Optional Extra)
25	008/FFS050	M8 Bolt x 30mm long	62	008/BW39/S	Hinge Pin Set 5mm x 25mm
26	008/AY37	Air Control Knob	63	010/NR070	Flue Collar Deflector Assy
27	002/BR034	Wood Ash Retainer	64	008/DY27	Riddling Tool
28	008/BR045	Airbox Gasket	65	010/NR050/##	Store stand
31	008/FFS003	M5 x 8mm Philips Pan Hd	66	008/FFB007	M8 x 100 Allen Hd Bolt
32	008/FFS025	M6 x 12 Philips Pan Head Screw	67	010/AY51	Clamping Plate
33	008/FFB003	Coach Bolt M6 x 20	68	008/FFB004	Coach Bolt M6 x 30
35	004/XV30	Brick bracket	69	008/FFN004	M6 Nut
36	008/FFS059	M8 x 20 Hex Hd Bolt	70	008/FFN004	Washer
37	008/BR052	Felt washer	71	008/FFS045	M6x16 Hex headed screw
38	008/NR030/S	Set of Firebricks	72	008/FFW015	Thackery Washer
39	008/CR048	Flanged Spigot 80mm	73	008/FFS078	4.2x9.5 Pozi Pan Head S/T screw
40	004/CR064	Duct coverplate	74*	010/NR057	Heat Shield (Optional Extra)

* These items are not shown on the drawing.
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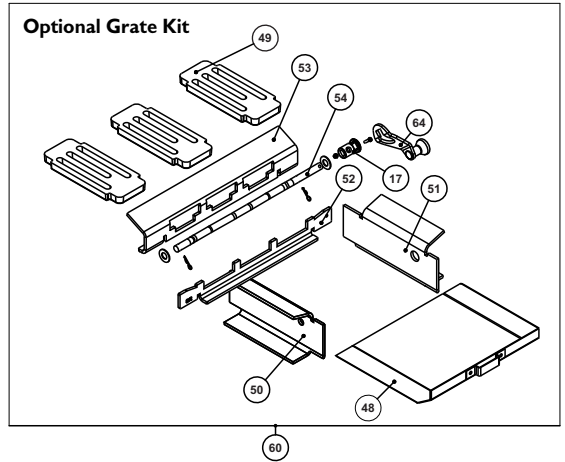
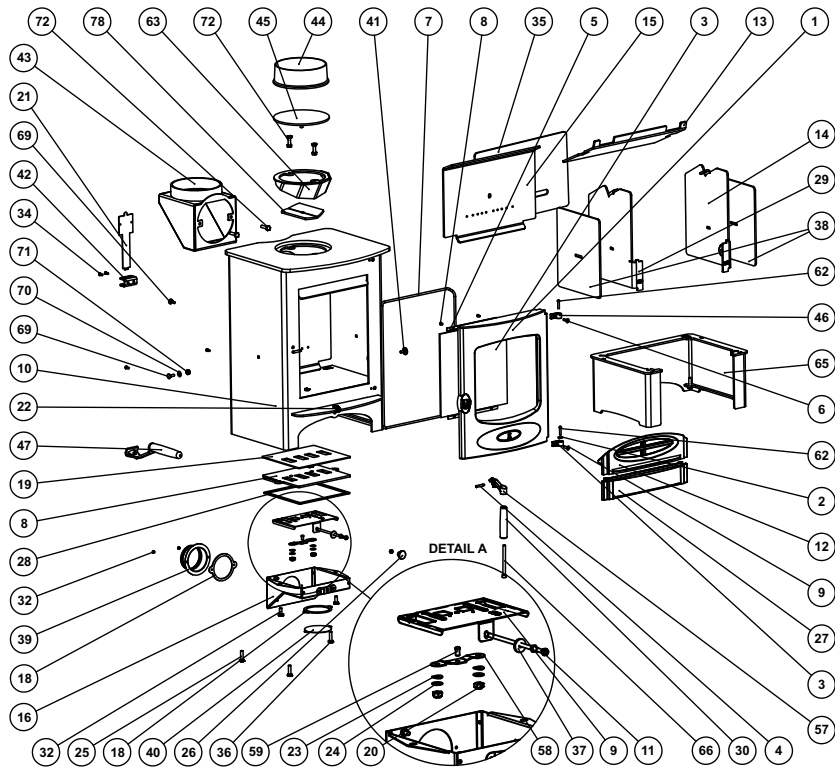
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C-SIX PARTS LIST



Issue F



Item	Part No.	Description	Item	Part No.	Description
1#	002/BR001	Door Casting	34	008/FFS025	M6 X 12 Bright Pozi Pan Hd
2	008/FFW026	1/4 Heavy Brass Washer	35	008/CR027	Back gasket
3	006/PV19	Glass (inc seal)	36	008/FFS059	M8 x 20 Hex Hd Bolt
4	004/BR014	Handle pivot Pin	37	008/BR052	Felt washer
5	004/BW23	Glass retainer	38	008/CR026	Side Gasket
6	008/FFS018	M6x16 C'sunk Skt Hd Screw	39	008/CRO48	Air Inlet Spigot assy
7	008/PV21	Rope door seal	40	004/CR064	Blanking plate
8	004/CR005	Air box control plate	41	004/DY22	Riddler Blanking Disk
9	004/CR007	Air inlet slide	42	010/EY12	Serial number hanger bracket
10#	001/CR010	Firebox	43	010/TW33	Vert Rear Flue Adaptor
11	004/BR016	Control rod	44	002/CH12B	Flue collar
12	002/BR017	Fuel retainer BR	45	012/TW09	Blanking plate
13	010/CR031	Throat plate	46	002/BR020	Hinge
14	010/CR029	RH Sideplate inc gasket	47	012/BV20/A	Ashpan tool
15	010/CR030	Inner Backplate	48	004/BR033	Ashpan
16	010/CR041	Airbox Cover	49	002/EY03	Grate Plate
17	002/DY21	Riddler Knob	50	010/CR043	L.H. Grate Support
18	008/CR063	Duct Gasket	51	010/CR042	R.H. Grate Support
19	008/CR006	Airbox Gasket	52	010/CR065	Front Grate Support
20	008/FFB034	M8 Nyloc nut	53	010/CR061	Rear Grate Support
21	012/CR011	Serial No. Label	54	010/CR013	Riddler Rod assy
22	002/PV13	Door Latch	55*	008/PV55	Glass Seal
23	008/FFW025	M8 Wavy Washer	56*	008/FW29	Door Seal Adhesive
24	008/FFW007	3/8" Plain Light Washer	57#	002/BR012	Handle Casting
25	008/FFS050	M8 Bolt 30mm Long	58	004/BR015	Clicker retainer plate
26	008/AY37	Air Control Knob	59	008/ES36/01	Brass ball catch
27	002/BR034	Wood ash retainer	60	010/CR022	Grate Kit (inc handle)
28	008/BR045	Air box Gasket	61*	010/EW51	Ash Carrier (Optional Extra)
29	010/CR028	LH Sideplate	62	008/BW39/S	Hinge Pin Set
30	008/BR013	Wooden handle	63	010/CR070	Flue Collar Deflector
31	008/FFS003	M5 X 10 Sltd Pan Screw	64	008/DY27	Riddling Tool
32	008/FFS078	Pozi pan head 4.2 x 9.5	65	010/CR050/##	Store Stand
33	008/FFB003	Coach Bolt M6 x 20	66	008/FFB007	M8 x 100 Allen Hd. Bolt
			67*	010/CR057	Heat Shield (Optional Extra)

* These items are not shown on the drawing.
 # Please specify colour when ordering.
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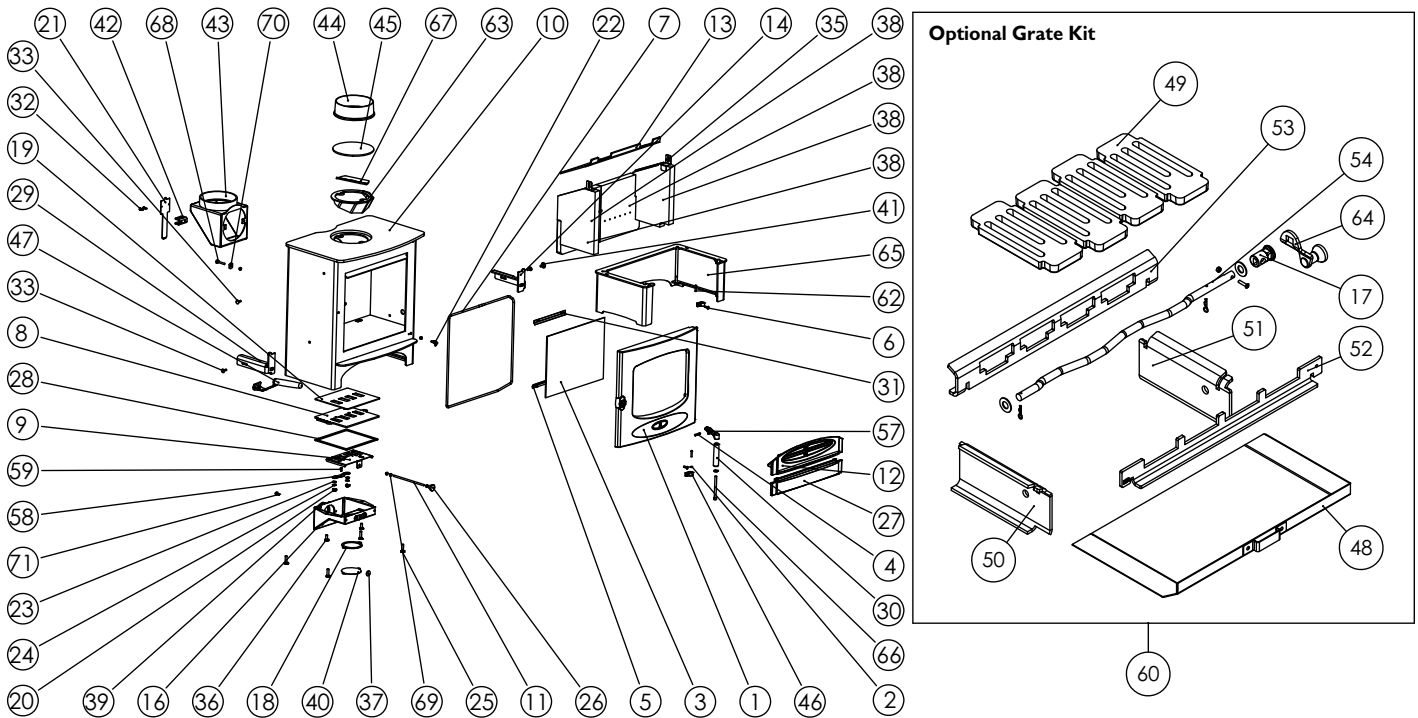
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C-SEVEN PARTS LIST



Issue A



Item	Part Number	Description	Item	Part No.	Description
1#	002/ER001	Door Casting	40	004/CR064	Duct coverplate
2	008/FFW026	M6 Heavy brass washer	41	004/DY22	Riddler hole Plug
3	006/ER019	Glass	42	010/EY12	Serial number hanger bracket
4	004/BR014	Handle pivot Pin	43	010/TW33	Vertical Rear Flue Adapter
5	004/BW23	Glass retainer	44	002/CH12B	Cast Flue Collar
6	008/FFS018	M6x12 Countersunk socket head screw	45	012/TW09	Blanking Plate
7	008/ER003	Door Seal	46	002/BR020	Hinge casting
8	004/CR005	Air control plate assembly	47	012/BV20/A	Ashpan/Door Opening Tool
9	004/ER007	Air inlet slide	48	004/ER033	Ashpan
10	001/ER010	Firebox Assembly	49	002/EY03	Grate Plate
11	004/ER016	Control rod	50	010/ER043	L.H. Grate Support
12	002/ER017	Fuel retainer	51	010/ER042	R.H. Grate Support
13	010/ER031	Baffle	52	010/ER065	Front Grate Support
14	010/ER029	RH Sideplate	53	010/ER061	Rear Grate Support
17	002/DY21	Riddler knob	54	010/ER060	Riddler Rod Assy
18	008/CR063	Duct gasket	55*	008/ER044	Glass Seal
19	008/CR006	Air box Gasket(upper)	56*	008/FW29	Door Seal Adhesive
20	008/FFN015	M8 Philidas Nut	57#	002/BR012	Handle arm
21	012/ER011	Serial No. Label	58	004/BR015	Clicker Retainer Plate
22	002/PV13	Door Latch	59	008/ES36	Brass ball catch
23	008/FFW025	M8 Wavey washer	60	010/ER022	Grate Kit (Inc Handle)
24	008/FFW002	Washer 14 x 6	61*	010/BW51	Ash Carrier (Optional Extra)
25	008/FFS050	M8 Bolt x 30mm long	62	008/BW39/S	Hinge Pin Set 5mm x 25mm
26	008/AY37	Air Control Knob	63	010/CR070	Flue Collar Deflector Assy
27	002/ER034	Wood Ash Retainer	64	008/DY27	Riddling Tool
28	008/BR045	Airbox Gasket	65	010/ER050/##	Store stand
29	010/ER028	L H Sideplate	66	008/FFB007	M8 x 100 Allen Hd Bolt
30	008/BR013	Wooden handle	67	010/AY51	Clamping Plate
31	008/FFS003	M5 x 8mm Phillips Pan Hd	68	008/FFB004	Coach Bolt M6 x 30
32	008/FFS025	M6 x 12 Phillips Pan Head Screw	69	008/FFN004	M6 Nut
33	008/FFB003	Coach Bolt M6 x 20	70	008/ER036	Washer
35	004/XV30	Brick bracket	71	008/FFS045	M6x16 Hex headed screw
36	008/FFS059	M8 x 20 Hex Hd Bolt	72	008/FFW015	Thackery Washer
37	008/BR052	Felt washer	73	008/FFS078	4.2 x 9.5mm Pozi pan head self tapping screw
38	008/ER030/S	Set of Firebricks	74*	010/ER057	Heat Shield (Optional Extra)
39	008/CR048	Flanged Spigot 80mm			

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This drawing is for identification purposes only.

To obtain spare parts please contact your local stockist giving Model, Part No. and Description. In case of difficulty contact the manufacturer at the address shown.

charnwood BISHOPS WAY, NEWPORT, ISLE OF WIGHT PO30 5WS, UNITED KINGDOM

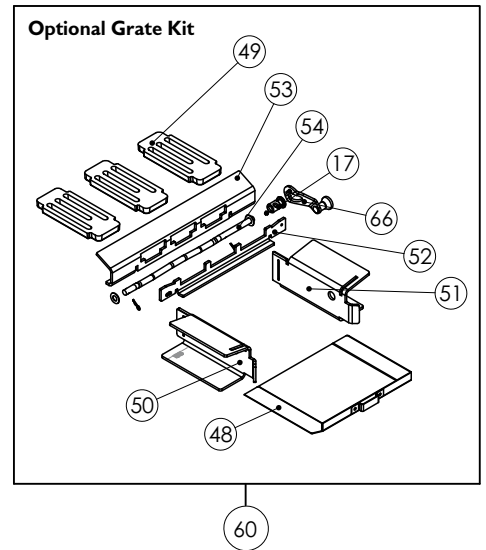
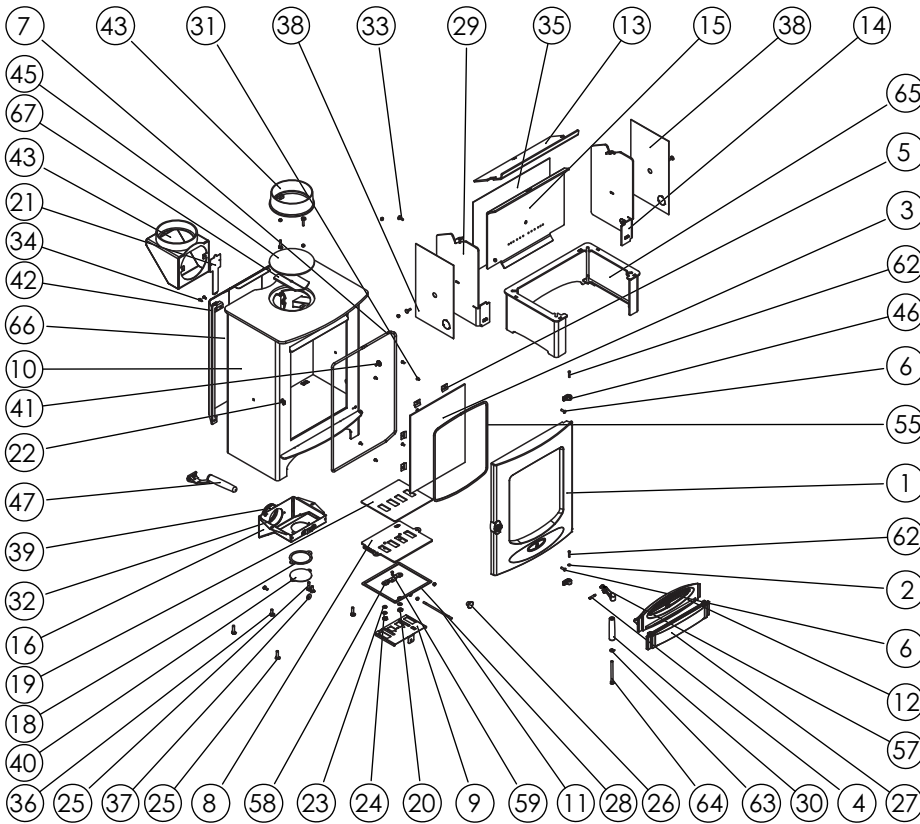
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C-EIGHT PARTS LIST



Issue A



Item	Part No.	Description	Item	Part No.	Description
1#	002/DR001	Door Casting	35	008/DR047	Back gasket
2	008/FFW026	1/4 Heavy Brass Washer	36	008/FFS059	M8 x 20 Hex Hd Bolt
3	006/DR019	Glass (inc seal)	37	008/BR052	Felt washer
4	004/BR014	Handle pivot Pin	38	011/DR038	Side Gasket
5	004/KV23	Glass retainer	39	004/CR048	Air Inlet Spigot assy
6	008/FFS018	M6x16 C'sunk Skt Hd Screw	40	004/CR064	Blanking plate
7	008/DR091	Rope door seal	41	004/DY22	Riddler Blanking Disk
8	004/CR005	Air box control plate	42	010/EY12	Serial number hanger bracket
9	004/DR007	Air inlet slide	43	010/TW33	Vert Rear Flue Adaptor
10#	001/DR010	Firebox	44	002/PV12B	Flue collar
11	004/BR016	Control rod	45	012/TW09	Blanking plate
12	002/BR017	Fuel retainer BR	46	002/BR020	Hinge
13	010/DR031	Throat plate	47	012/BV20/A	Ashpan tool
14	010/DR029	RH Sideplate inc gasket	48	004/BR033	Ashpan
15	010/DR030	Inner Backplate	49	002/EY03	Grate Plate
16	004/CR040	Airbox Cover	50	010/DR043	L.H. Grate Support
17	002/DY21	Riddler Knob	51	010/DR042	R.H. Grate Support
18	008/CR063	Blanking Plate Gasket	52	010/CR065	Front Grate Support
19	008/CR006	Airbox Gasket	53	010/DR061	Rear Grate Support
20	008/FFN015	M8 Philidas nut (Locking nut)	54	010/DR060	Riddler Rod assy
21	012/DR011	Serial No. Label	55*	008/DR091	Glass Seal
22	002/PV13	Door Latch	56*	008/FW29	Door Seal Adhesive
23	008/FFW025	M8 Wavy Washer	57#	002/BR012	Handle Casting
24	008/FFW007	3/8" Plain Light Washer	58	004/BR015	Clicker retainer plate
25	008/FFS050	M8 Bolt 30mm Long	59	008/ES36/01	Brass ball catch
26	008/AY37	Air Control Knob	60	010/DR022	Grate Kit (inc handle)
27	002/BR034	Wood ash retainer	61*	010/EW51	Ash Carrier (Optional Extra)
28	008/BR045	Air box Gasket	62	008/BW39/S	Hinge Pin Set
29	010/DR028	LH Sideplate	63	008/FFW015	Spring Washer (Thackery type)
30	008/BR013	Wooden handle	64	008/FFB007	M8 x 100mm Allen Head Bolt
31	008/FFS003	M5 X 10 Sldt Pan Screw	65	010/BR050/##	Store Stand
32	008/FFS025	Phillips head screw M6X12	66*	010/DR057	Heat Shield (Optional Extra)
33	008/FFB003	Coach Bolt M6 x 20	67	010/AV51	Clamping Plate
34	008/FFS025	M6 X 12 Bright Pozi Pan Hd			

* These items are not shown on the drawing.
 # Please specify colour when ordering.
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A.J WELLS & SONS LTD

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C-SERIES

ROOMHEATERS FIRED BY SOLID FUEL

Roomheater Model	C Four	C Five	C Six	C Seven	C Eight
EC Certificate of conformity no:	BR080-CPD-2011	NR080-CPD-2012	CR080-CPD-2012	ER080-CPD-2012	DR080-CPD-2012
Fuel type:	WOOD LOGS	WOOD LOGS	WOOD LOGS	WOOD LOGS	WOOD LOGS
Emission of CO in combustion products:	0.18%	0.20%	0.25%	0.14%	0.15%
Mean flue gas temperature:	281°C	259°C	272°C	280°C	316°C
Space heating thermal output:	4.9kW	5.0kW	6.7kW	7.6kW	8.3kW
Energy efficiency	78.3%	75.7%	81.9%	76.9%	78.0%
Minimum distance to combustible materials					
Side:	600mm	500mm	500mm	500mm	600mm
Rear:	600mm	400mm	500mm	550mm	650mm
With heat shield and HT+ insulated flue connector (25mm insulation).					
Side:	600mm	500mm	500mm	500mm	550mm
Rear:	200mm	175mm	200mm	200mm	250mm

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