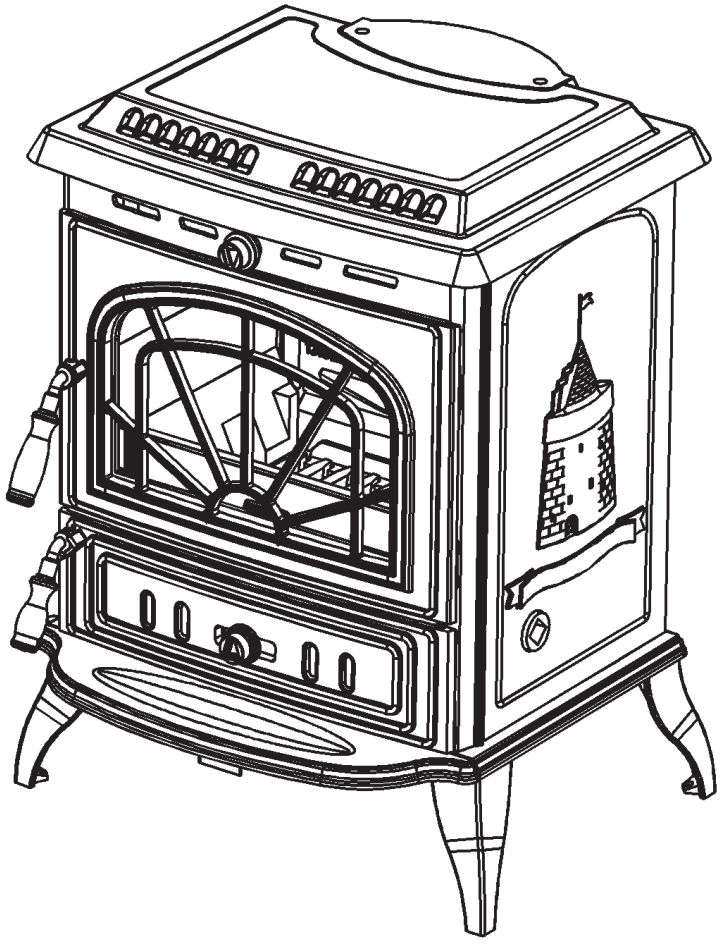
STANLEY

Erin Non Boiler Solid Fuel Stove



INSTALLATION AND OPERATING INSTRUCTIONS

This appliance is hot while in operation and retains its heat for a long period of time after use. Children, aged or infirm persons should be supervised at all times and should not be allowed to touch the hot working surfaces while in use or until the appliance has thoroughly cooled.

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GENERAL

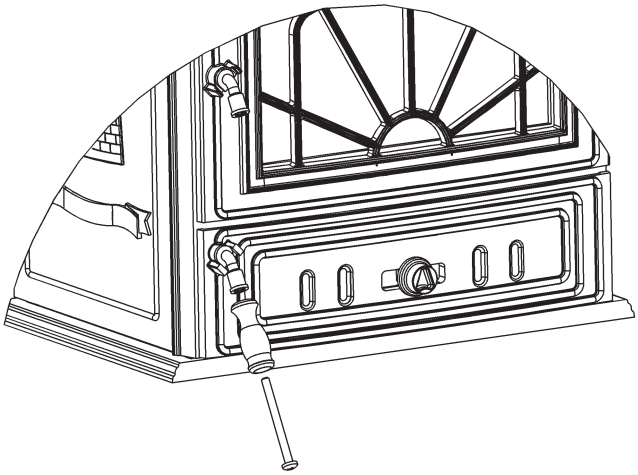
When installing, operating and maintaining your Erin Stove respect basic standards of fire safety. Read these instructions carefully before commencing the installation. Failure to do so may result in damage to persons and property. Consult your local Municipal office and your insurance representative to determine what regulations are in force. Save these instructions for future reference.

The complete installation must be done in accordance with current Standards and Local Codes. It should be noted that the requirements and these publications may be superseded during the life of this manual.

PRE INSTALLATION ASSEMBLY

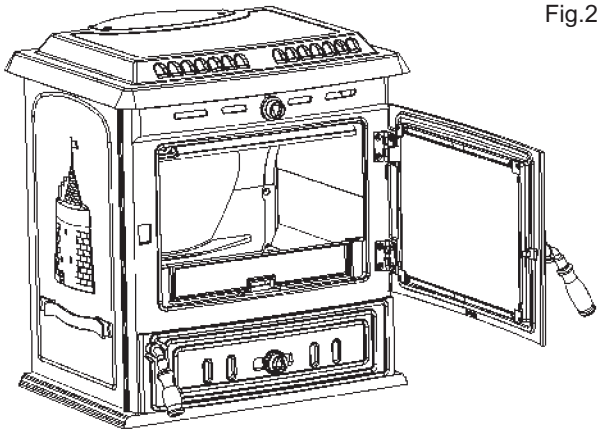
1. After removing the stove from its pack, open the ashpit door and remove the contents from the ashpan. Attach the short timber handle to the ashpit door using the M8 x 70mm long round head screw and the spring washer. (See Fig.1).

Fig.1



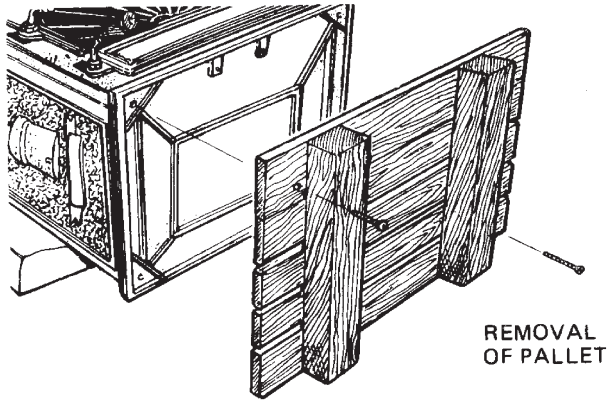
2. Open the fire door using the detachable handle and remove the contents from the fire box.

Fig.2



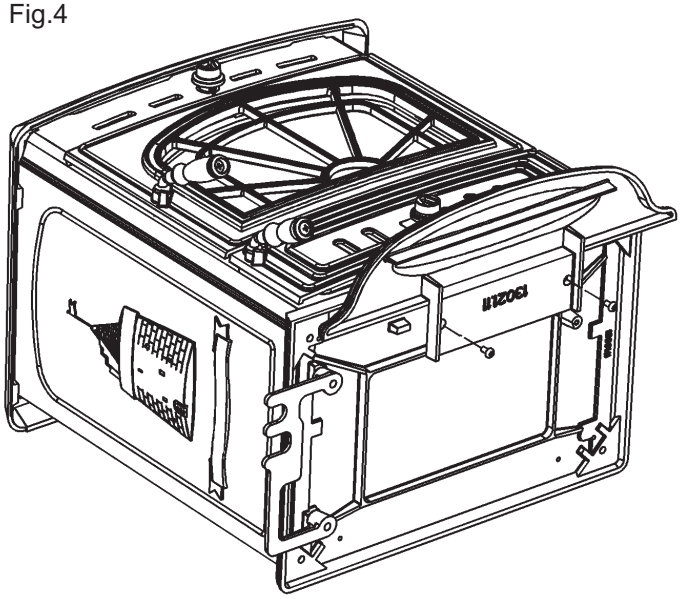
3. Remove the hob and place to one side, taking care not to damage the enamel finish.
4. Place the plastic packing on the ground at the back of the stove and lay the stove on its back on top of the packing. (See Fig.3).
5. Remove the wooden pallet by taking out the two retaining screws from the base of the stove.

Fig.3



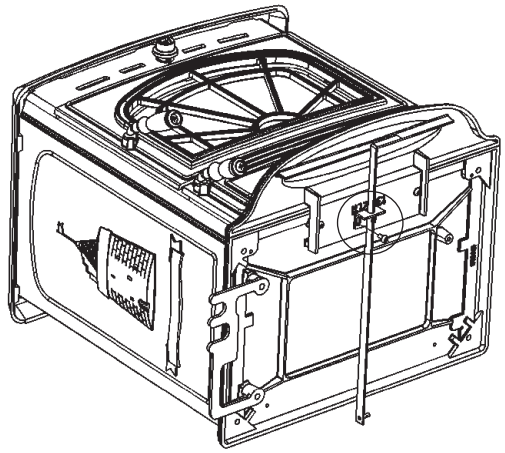
6. Fit the ash tray to the base using the two 1/4" x 1/2" long round head screws and two of the 3/8" washers provided. Fit the tool holder to the base using the two 1/4" x 1 1/2" long countersunk screws, and two of the 3/8" washers provided.

Fig.4



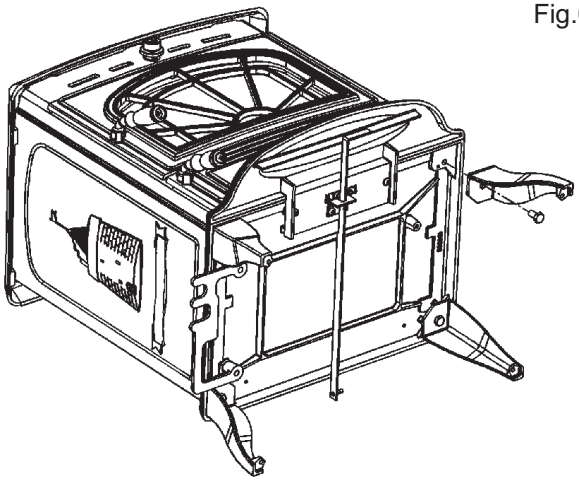
7. Fit the secondary air control rod bracket to the ashtray using the two 1/4" x 1/2" long round head screws and the two lock washers provided. Fit the connecting rod through the control rod bracket with the notches facing downwards and leave it hanging loose until the stove is standing upright. See Fig 5.

Fig. 5



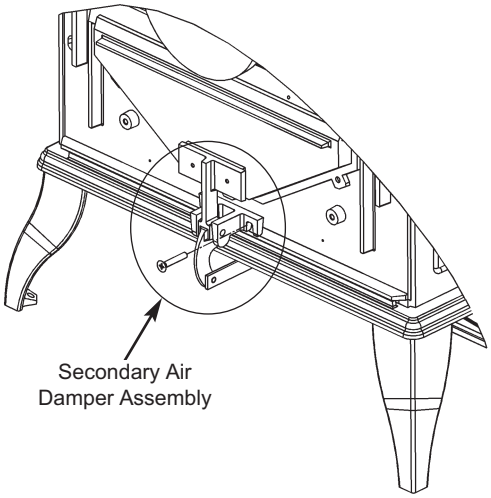
8. Remove the four M10 bolts from the base, and fit the four legs using the four M10 x 20mm long bolts and the 3/8” washers provided in the jiffy bag. (See Fig.6).

Fig.6



9. Stand the stove upright, taking care not to strain the back leg bolts. Attach the secondary air damper assembly to the back panel using the two 1/4” x 3/4” long round head screws and the two lock washers provided (See Fig.7). Connect the connecting rod to the secondary air damper assembly and fix it into place using the split pin and 1/4” washer provided in the jiffy bag. Ensure that the ends of the split pin are bent back with the 1/4” washer between the casting and the ends of the split pin. See Fig 8.

Fig.7

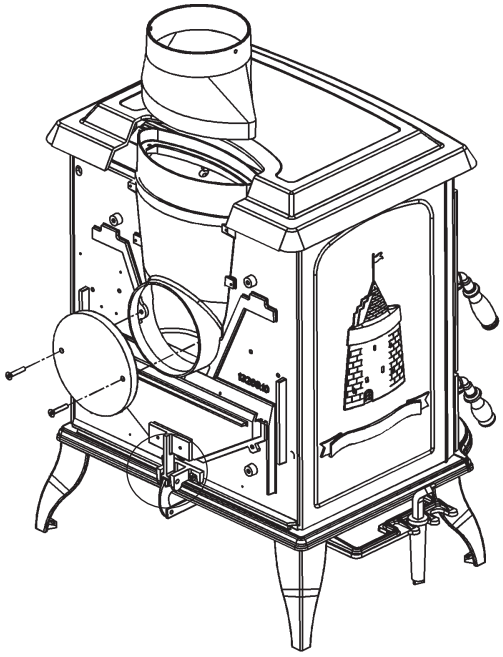


Note: Ensure that the secondary air damper is sealing against the back panel when the connecting rod is in the closed position. (see section on Secondary Air Control).

TOP FLUE EXIT

Fit the top flue spigot to the top of the stove as shown in Fig.8, and cement into place. Ensure that no cement blocks the flue passageway.

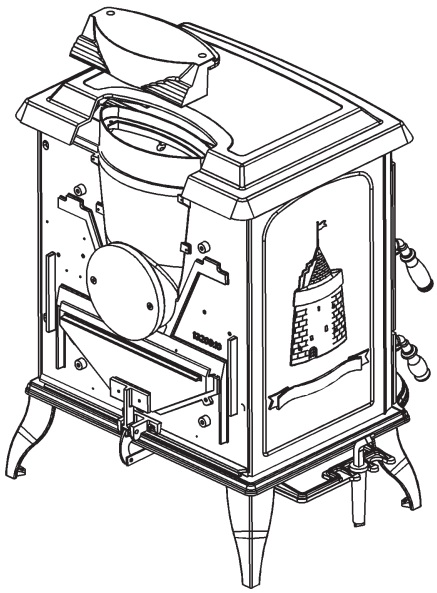
Fig 8



REAR FLUE EXIT

Remove the back flue cover plate from the back of the stove and using the 1/4” countersunk screws for the cover plate, attach the top flue outlet hob cover plate (see Fig.9).

Fig. 9



FLUES

Flues should be vertical wherever possible and where a bend is necessary, it should not make an angle of more than 37.5^{o} with the vertical. Horizontal flue runs should be avoided except in the case of a back outlet appliance, when the length of the horizontal section should not exceed 300mm.

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) Mild steel with a wall thickness of at least 3mm, or

(c) Stainless steel with a wall thick ness 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

(d) Vitreous enamelled steel complying with BS 6999: 1989.

Flue pipes with spigot and socket joints should be fitted with the socket uppermost.

CHIMNEY

The Erin is a radiant room heater and must be connected to a chimney of the proper size and type. The chimney must have a cross-sectional area of at least 30 square inches 18150sq. mm or 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. Minimum chimney height 15' (4.1 meters) from floor on which stove is installed. An existing masonry chimney should be inspected and if necessary repaired by a competent mason. The stove must be connected to a chimney with a minimum continuous draft of .06" wg. Poor draft conditions will result in poor performance.

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.

VENTILATION & COMBUSTION AIR REQUIREMENTS

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 B.S. 8303: Part 1.

The minimum effective air requirement for this appliance is 53cm^2 (8.25 in^2). When calculating combustion air requirement for this appliance use the following equation: a total free area of at least 550mm^2 per kW of rated output above 5kW shall be provided.

If there is another air using appliance fitted in the same or adjacent room, it will be necessary to calculate additional air supply.

All materials used in the manufacture of air vents should be such that the vent is dimensionally stable and corrosion resistant.

The effective free area of any vent should be ascertained before installation. The effect of any screen should be allowed for when determining the effective free area of any vent.

Air vents direct to the outside of the building should be located so that any air current produced will not pass through normally occupied areas of the room.

An air vent outside the building should not be located less than the dimensions specified within the Building Regulations from any part of any flue terminal. These air vents must also be fire proofed as per Building Regulations.

Air vents in internal walls should not communicate with bedsits, toilets, bathrooms or rooms containing a shower.

Air vents traversing cavity walls should include a continuous duct across the cavity. The duct should be installed in such a manner as not to impair the weather resistance of the cavity.

Joints between air vents and outside walls should be sealed to prevent the ingress of moisture. Existing air vents should be of the correct size and unobstructed for the appliance in use.

If there is an air extraction fan or other air using appliance fitted in the room or adjacent rooms where this appliance is fitted, additional air vents will be required to eleviate the possibility of spillage of products of combustion from the appliance/flue while the fan is in operation.

Where such a installation exists, a test for spillage should be made with the fan or fans and other appliances using air in operation at full rate, (i.e. extraction fans, tumble dryers) with all external doors and windows closed.

If spillage occurs following the above operation, an additional air vent of sufficient size to prevent this occurrence should be installed.

LOCATION

There are several conditions to be considered in selecting a location for your Erin Stove.

a. Position in the area to be heated- central locations are usually best.

b. Allowances for proper clearances to combustibles.

NOTE: Sufficient space should be given around the back and sides of the stove to allow access to the secondary air control damper.

INSTALLATION CLEARANCES

Maintain at least the following clearances to all combustible material:

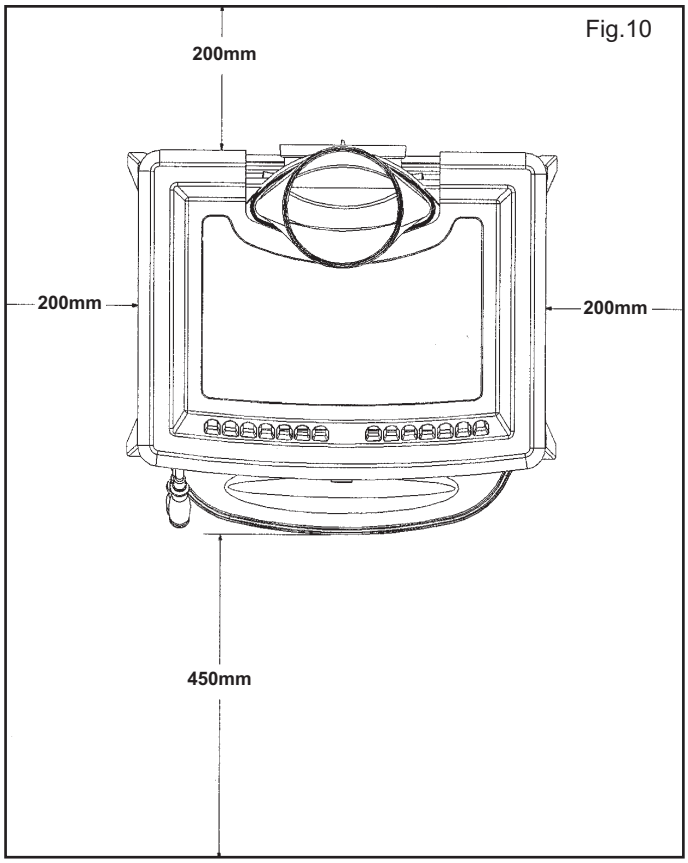
From the front	91 cm (36”)
From the back	30 cm (12”)
From the sides	46 cm (18”)
From the flue pipe	91 cm (36”) straight up only

Brick wall minimum clearance.

FLOOR PROTECTION

When installing this heater on a combustible floor, a floor protector, must be used, consisting of a layer of noncombustible 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” (450mm) at the front and 8” (200mm) to the sides, and rear. This will provide protection from sparks and embers which may fall out from the door when stoking or fuelling.

Fig.10



IMPORTANT NOTES

Now that your Stanley solid fuel Stove is installed and no doubt you are looking forward to many comforts it will provide, we would like to give you some tips on how to get the best results from your stove.

1. We would like if you could take some time to read the operating instructions/hints, which we are confident, will be of great benefit to you.

2. Do not burn fuel with a high moisture content, such as a damp peat or unseasoned timber. This will only result in a build up of tar in the stove and in the chimney.

FUEL CALORIFIC VALUES - SOLID FUELS		
Anthracite 25-50mm	C.V.: 8.2kW/Kg	14,000 BTUs/lb
House Coal 25-75mm	C.V.: 7.2kW/Kg	12,000 BTUs/lb
Timber - Firebox size	C.V.: 5.0kW/Kg	8,600 BTUs/lb
Peat Briquettes	C.V.: 4.8kW/Kg	8,300 BTUs/lb
Bog Peat	C.V.: 3.4kW/Kg	6,000 BTUs/lb

3. **CLEAN THE FLUE-WAYS OF THE STOVE EVERY WEEK AND ENSURE THAT THERE ARE NO BLOCKAGES. PLEASE REFER TO MANUAL FOR INSTRUCTIONS.**

4. Before loading fresh fuel into the firebox, riddle fully to remove all ashes this will allow better and cleaner burning. See directions in manual.

5. Never allow a build up of ashes in the ash pan, as this will cause the grate to burn out prematurely.

6. Avoid slow burning of damp or unseasoned fuel as this will result in tarring flue ways and chimney i.e. peat or timber.

7. Allow adequate air ventilation to ensure plenty of air for combustion.

8. Do not burn rubbish/household plastic.

9. Do not leave ash-door open for long periods as this will over heat the unit causing unnecessary damage.

10. Clean the chimney at least twice a year.

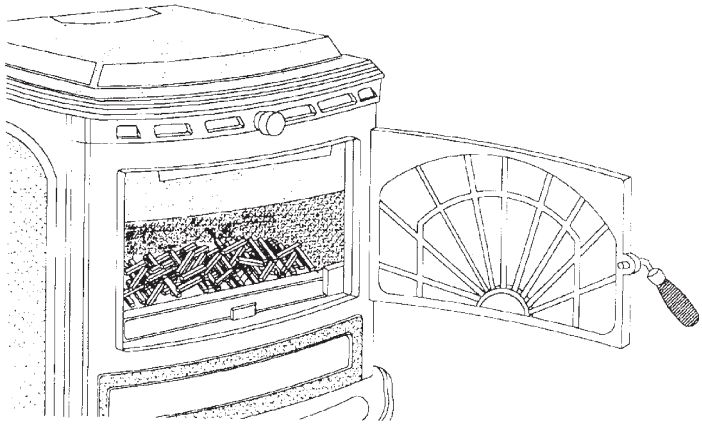
11. Burning soft fuels such as timber and peat will stain the glass. Regular cleaning will prevent permanent staining.

12. Keep all combustible materials a safe distance away from unit, please see section for clearances to combustibles.

13. For safety reasons never leave children unaccompanied while stove is in use.

14. Avoid contact with unit when in use as stove reaches very high operating temperatures.

LIGHTING



1. Before lighting the stove, ensure that any build up in the firebox has been removed (see De-Ashing Section) and that the ashpan has been emptied.

2. Open firedoor and open the primary air inlet by sliding the control knob on the ashpit door to the right hand side.

3. Open the secondary air inlet by turning it anti-clockwise for coal and wood only.

4. Cover with crumpled pieces of paper.

5. Lay 10-12 pieces of kindling on top of the paper towards the back of the firebox.

6. Ignite and close the firedoor.

7. **Under no circumstances should any flammable liquid i.e. petrol, paraffin etc., be used to light the fire**

8. When the kindling is well alight open the firedoor and add more kindling of a larger size to sustain the fire. Close the firedoor.

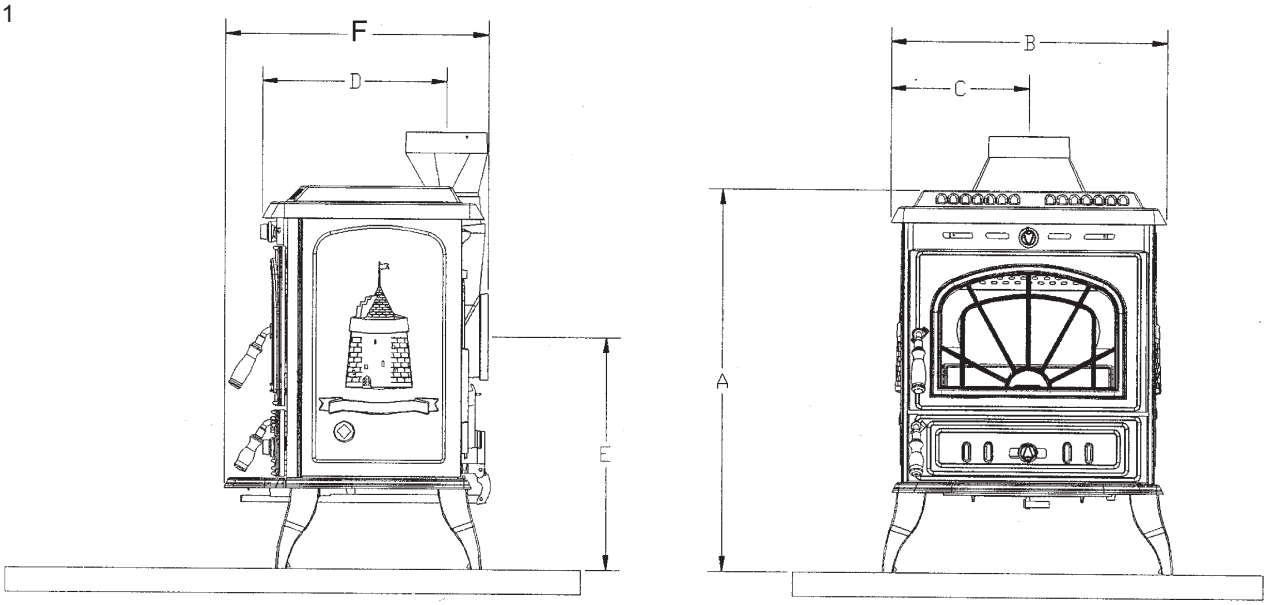
9. When a hot bed of coal is established add the normal fuel.

10. When well lighted, adjust the thermostat to give the required heat output.

Re-fuelling-Open the firedoor and reload, close the firedoor.

SPECIFICATION

Fig.11



Dimensions	A	B	C	D	E	F
Metric (mm)	774	565	282	380	460	505
Imperial (inches)	30 1/2	22 1/4	11	15	18 1/9	20

TECHNICAL DATA

Max. Output to Room	14.7 kW (50,000 Btu)
Total Nett Output	14.7 kW (50,000 Btu)
Gross Weight	172 Kgs (379 lbs)

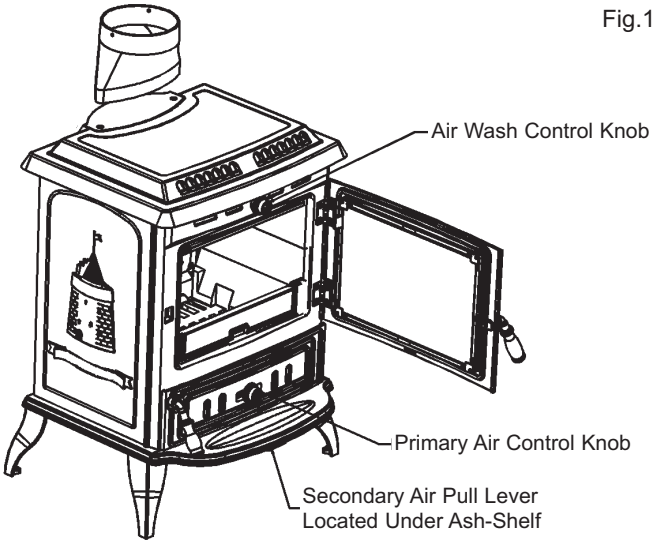
NOTE: Dimensions stated below may be subject to a slight +/- variation.

WARNING: DO NOT OBSTRUCT SECONDARY AIR SUPPLY TO THE AIR DUCT AT THE BACK OF THE STOVE

OPERATING INSTRUCTIONS

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 at all times. 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.

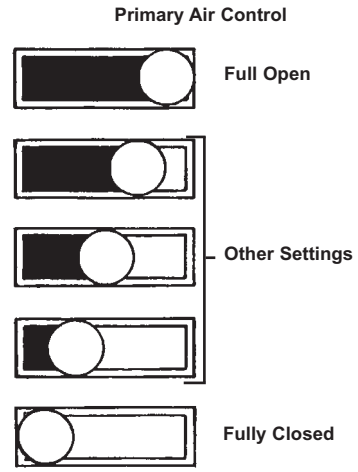
Fig.12



PRIMARY AIR CONTROL

The primary air for the stove is controlled by sliding the primary air control knob on the ashpit door. The control knob should be moved right for the maximum burn setting and moved to the left for the minimum burn setting. Fig.13 shows the various positions for the control knob corresponding to their burn rates.

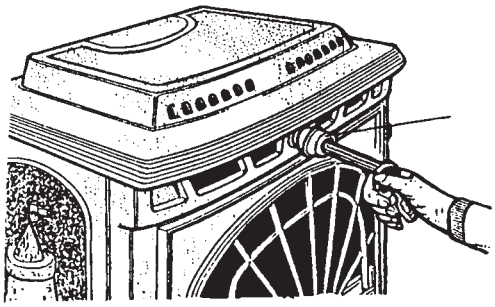
Fig.13



AIR WASH CONTROL

The amount of air supplied to the air wash is controlled by adjusting the air wash control knob on the top of the front casting. The air wash is adjusted by inserting the moulded end of the operating tool onto the air wash control knob and twisting it clockwise to close it and anti-clockwise to open it. (see Fig.14)

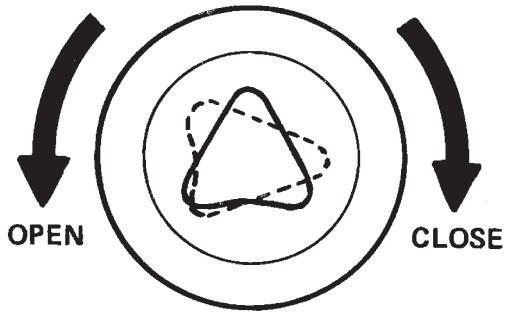
Fig.14



Air Wash Control

Fig.14a

Air Wash Control

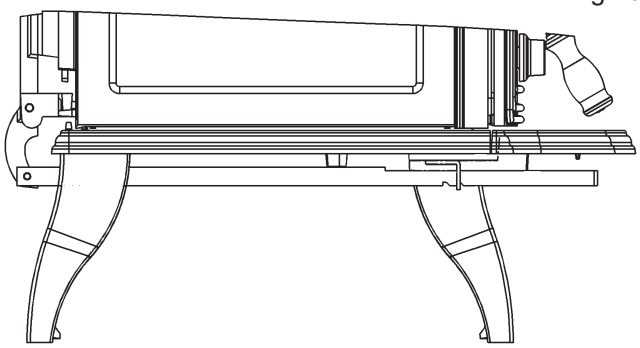


OPEN When burning coal, timber or peat.
CLOSE When burning anthracite, and smokeless fuels.

SECONDARY AIR CONTROL

The secondary air is adjusted by adjusting the position of the secondary air connecting rod, which is located underneath the ash tray. Pulling the rod out to the last notch on the connecting rod, gives the maximum amount of secondary air and pushing it back towards the stove, closes the secondary air completely.

Fig.15



LOW / SLUMBER BURN

To achieve an overnight or a low burn rate, close the air wash control knob and the secondary air control. Slide the primary air control knob until it is approximately 3mm open. If the fuel load is too small or the draught too strong, the primary air control knob may need to be closed even further to sustain the low burn rate.

BURNING OF ANTHRACITE OR SMOKELESS COAL

When burning anthracite or smokeless coal, close the air wash control knob by turning it in a clockwise direction. Open the primary air control knob by sliding it fully towards the right. Close the secondary air control by lifting the secondary air connecting rod and pushing it fully back until the notch engages in the connecting rod bracket.

RECOMMENDED FUELS

The stove output levels are assessed on standard House Coals of good quality. Reduced outputs will result when fuels of lower calorific values are used. Wood logs up to 406mm (16”) long are suitable.

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

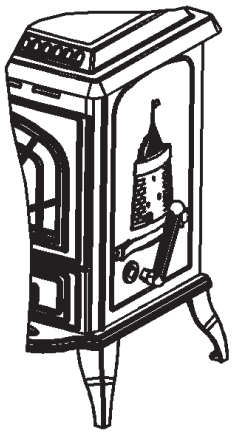
NOTE: When burning anthracite or smokeless coal, the air wash and secondary air damper must be closed.

Anthracite 25 - 50mm	Calorific Value 8.2 kW/KG = 14,000 BTUs/lb.
House Coal 25 - 75mm	Calorific Value 7.2 kW/KG = 12,300 BTUs/lb.
Timber - Firebox Size	Calorific Value 5.0 kW/KG = 8,600 BTUs/lb.
Peat Briquettes -	Calorific Value 4.8 kW/KG = 8,300 BTUs/lb.
Bog Peat -	Calorific Value 3.4 kW/KG = 6,000 BTUs/lb.

DE-ASHING

When ash build-up becomes excessive in the fire chamber shake the firebars by inserting the grate operating tool into the rocker connection at the right hand side of the stove, and turning it clockwise and anticlockwise to achieve the rocker motion.

Fig.16



DISPOSAL OF ASHES

The stove is provided with a steel ashpan. This ashpan must be emptied every day.

If ashes are allowed to build up to grate level the firebars could be damaged by overheating. We recom-

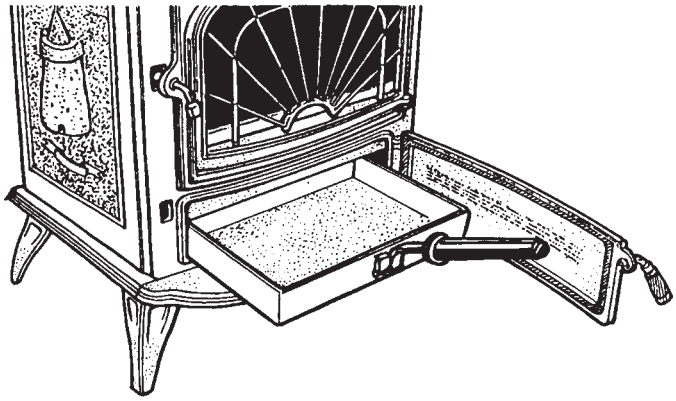
mend that you remove ashes after you have riddled the fire following an overnight burn.

Note: The stove should never be operated with the ashpit door open.

Ashes should be placed in a metal or other non-combustible container with a tight fitting lid. The closed container of ashes should be placed on a non-combustible material, pending final disposal. If ashes are buried in soil, or otherwise dumped they should be retained in the closed container until they are thoroughly cooled.

Fig.17

Replace Ashpan. Close Ashpit Door



TO CLEAN CHIMNEY OUTLET

Remove the hob and place to one side, taking care not to damage the enamel finish. Remove the heat exchanger by unscrewing the four 1/4" round head screws, and insert the cleaning brush. Replace the heat exchanger, ensuring that the rope has not moved out of position or been damaged. Replace the hob before relighting the fire.

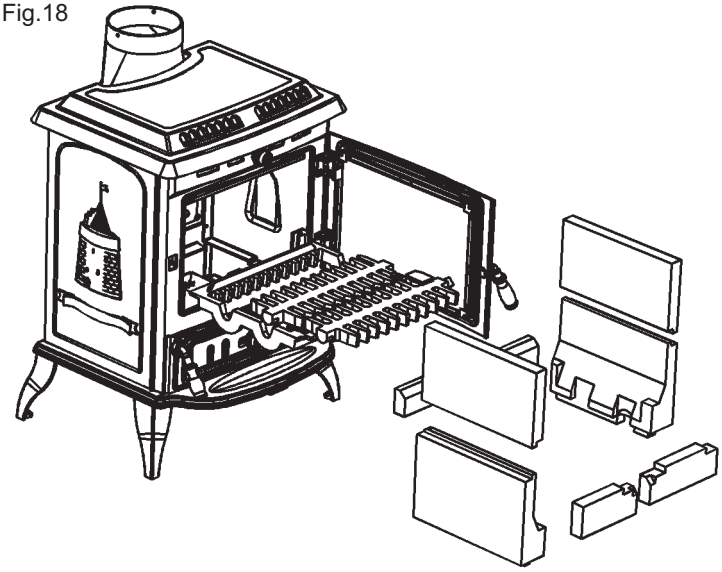
TO REPLACE DAMAGED GRATE OR ROCKER BAR

Clean the firebox thoroughly and remove the fire fence. Lift up the back rocker bar by catching it in the centre until it disengages from the front rocker bar and take it out of the fire box. Lift up the front rocker bar by catching it at the end on the left hand side of the firebox until it disengages from the rocker sleeve and take out of the firebox. Replace the damaged part and replace the rocker bars by doing the reverse of the above. Fig 18 shows all the firebox parts removed.

TO REPLACE DAMAGED BRICKS

Clean the firebox thoroughly and remove any fire cement in the joints of the bricks. Remove the left and right hand front bricks. Remove the two back bricks. To remove the side bricks (left or right), lift the top side brick up and hold it in position. Lift up the bottom side brick to clear the rocker bar frame then swing the bottom brick and take it out. Lower the top firebrick and take it out at the firebox. Replace the damaged brick and replace the bricks by doing the reverse of the above.

Fig.18



FIRE SAFETY

To provide reasonable fire safety, the following should be given serious consideration.

1. Do not over fire the stove.
2. Overfiring will also damage painted or enamel finish.
3. Install a smoke detector in the room.

IN CASE OF FIRE

Close all openings into the stove and watch for ignition of adjacent combustibles from the over heated stove, or hot embers or sparks from chimney.

VITREOUS ENAMEL CLEANING

General cleaning must be carried out when the stove is thoroughly cool.

If this stove is finished in a high gloss vitreous enamel, to keep the enamel in the best condition observe the following tips:

1. Wipe over daily with a soapy damp cloth, followed by a polish with a clean dry duster.

2. For stubborn deposits a soap impregnated pad can be carefully used on the vitreous enamel.

3. Use only products recommended by the Vitreous Enamel Association, these products carry the Vitramel label.

VITREOUS ENAMEL Association

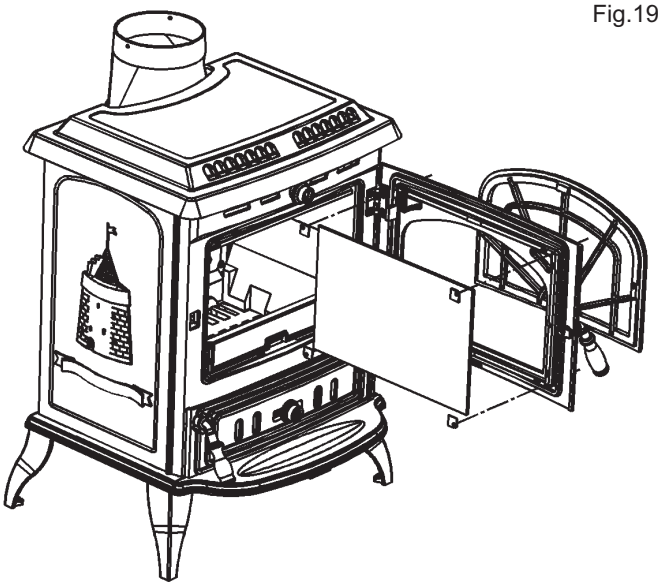
Tested and recommended for use on vitreous enamel

4. **DO NOT USE ABRASIVE PADS OR OVEN CLEANSERS CONTAINING CITRIC ACID ON ENAMELLED SURFACES. ENSURE THAT THE CLEANSER MANUFACTURERS INSTRUCTIONS ARE ADHERED TO.**

GLASS CLEANING

The glass will self clean when there is sufficient heat generated by the burning fuel. If a build-up of creosote occurs on the glass it may be due to draft conditions, poor quality fuel or very low burning for a long time. It is best to clean the glass when it is thoroughly cooled.

Fig.19

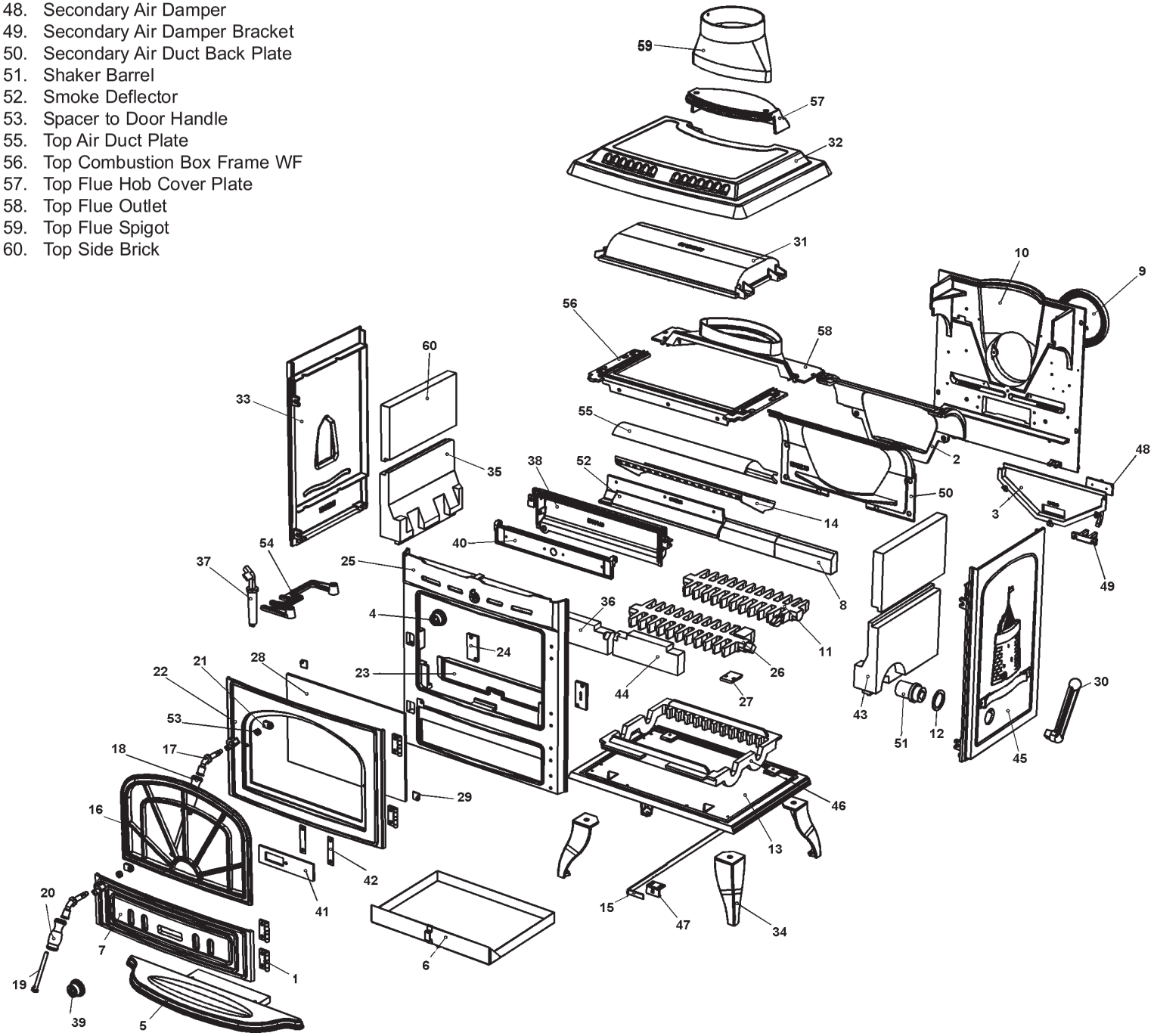


GLASS REPLACEMENT

(a) Open the firedoor fully.
(b) Remove the four corner screws and clips and carefully remove the broken glass.
(c) Clean the glass recess in the door.
(d) Attach adhesive thermal tape to the perimeter of the replacement glass.
(e) Place the thermal tape side of the glass into the door recess and replace the four corner clips.
(f) Tighten screws.
(g) Replace glass only with ceramic glass 5mm thick.

ERIN SOLID FUEL STOVE EXPLODED VIEW

1. 2” Hinge
2. Air Duct Back Plate
3. Air Inlet Box
4. Air Wash Control Knob
5. Ash Tray
6. Ashpan
7. Ashpit Door
8. Back Brick
9. Back Flue Cover Plate
10. Back Panel
11. Back Rocker Bar
12. Barrel Gasket
13. Base
14. Bottom Air Duct Plate
15. Secondary Air Con Rod
16. Door Grill
17. Door Handle Axle
18. Door Handle Long
19. Door Handle Screw
20. Door Handle Short
21. Door Latch
22. Fire Door
23. Fire Fence
24. Fire Fence Retainer
25. Front Frame
26. Front Rocker Bar
27. Front Rocker Bar Clamp
28. Glass
29. Glass Clip
30. Grate Operating Bar
31. Heat Exchanger
32. Hob
33. Left Hand Side Panel
34. Leg
35. LH Bottom Side Brick
36. LH Front Fire Brick
37. Operating Tool
38. Primary Air Box
39. Primary Air Control Knob
40. Primary Air Shutter
41. Primary Air Slide
42. Primary Air Slide Clip
43. RH Bottom Side Brick
44. RH Front Brick
45. RH Side Panel
46. Rocker Bar Frame
54. Tool Holder
47. Secondary Air Con Rod Bracket
48. Secondary Air Damper
49. Secondary Air Damper Bracket
50. Secondary Air Duct Back Plate
51. Shaker Barrel
52. Smoke Deflector
53. Spacer to Door Handle
55. Top Air Duct Plate
56. Top Combustion Box Frame WF
57. Top Flue Hob Cover Plate
58. Top Flue Outlet
59. Top Flue Spigot
60. Top Side Brick



INSTALLATION CHECK LIST

Flue System	*Tick* √
1. Minimum Flue Height of 4.6 metres (15 feet).	☐
2. Appliance should be connected to a minimum of 1.8 metres (6 feet) of 150mm (6”) flue pipe with a horizontal run not exceeding 300mm (12”).	☐
3. Appliance should be connected to a chimney of less than 200mm (8”) in diameter (otherwise the chimney must be lined with a 6” flue liner).	☐
4. The chimney venting position must be above the main ridge of the roof or adjacent outside obstructions.	☐
5. The chimney serving this appliance should not serve any other appliance.	☐
6. Access should be provided to the chimney serving the appliance to allow for cleaning.	☐
Location	
7. Clearance to combustible materials must be adhered to as described in the Clearance to Combustible section.	☐
8. The stove must be installed on a floor protector that covers the area under the stove and extends 18” to the front & 8” to the sides and back.	☐
Plumbing	
9. Appliance must be connected to a gravity circuit using 1” ID flow & return piping.	☐
10. The length of pipes from the cylinder to the cooker should not exceed 7.8 metres ($25^1/_2$ feet).	☐
11. A circulation pump should be fitted to the return pipe of the radiator circuit and controlled by a pipe stat fitted to the flow pipe of the gravity circuit to the cylinder.	☐
Ventilation & Combustion Air Requirements	
12. The room in which the appliance is located should have an air vent of adequate size to support correct combustion (see Ventilation & Combustion Air Requirement Section for specific details).	☐

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