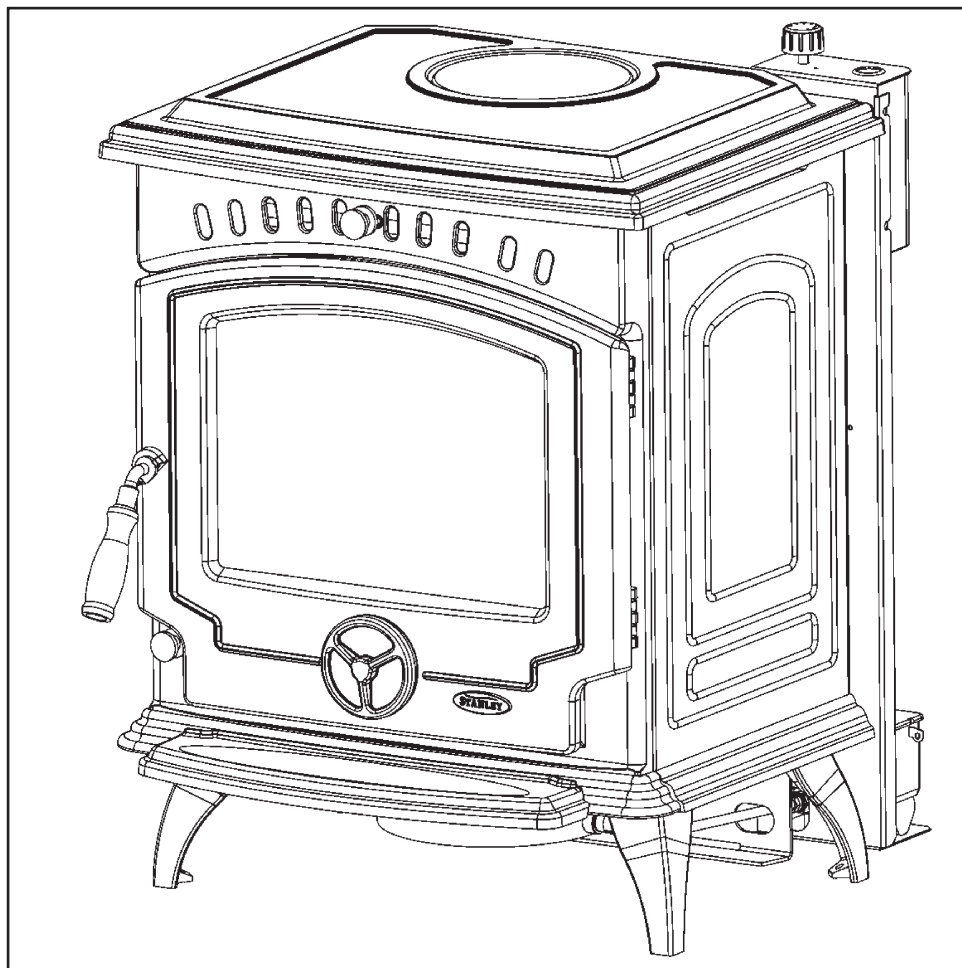




# Tara Oil Stove MK 3



## **INSTALLATION AND OPERATION 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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# STOVE INSTALLATION INSTRUCTIONS

## INTRODUCTION

To ensure safety, satisfaction and reliable operation, this stove should be installed and commissioned by a trained and competent person.

### IMPORTANT NOTICE

As manufacturers of heating appliances we take every possible care to ensure, as reasonably practicable, that these appliances are so designed and constructed as to meet the general safety requirements when properly used, installed and maintained.

#### **Control of substances harmful to health :**

- \* It is the users/installers responsibility to ensure that the necessary personal protective clothing is worn when handling materials that could be interpreted as being injurious to health and safety. See below.
- \* When handling firebricks, fire cement or fuels use disposable gloves.
- \* Exercise caution, use disposable masks and gloves when handling glues and sealants. When working with kerosene oil, fibre glass or mineral wool. Avoid contact with skin, eyes, nose and throat, use disposable protection.

**Installation should be carried out in a well ventilated area.**

**Any alterations to this appliance that are not approved in writing by Waterford Stanley will render the guarantee void.**

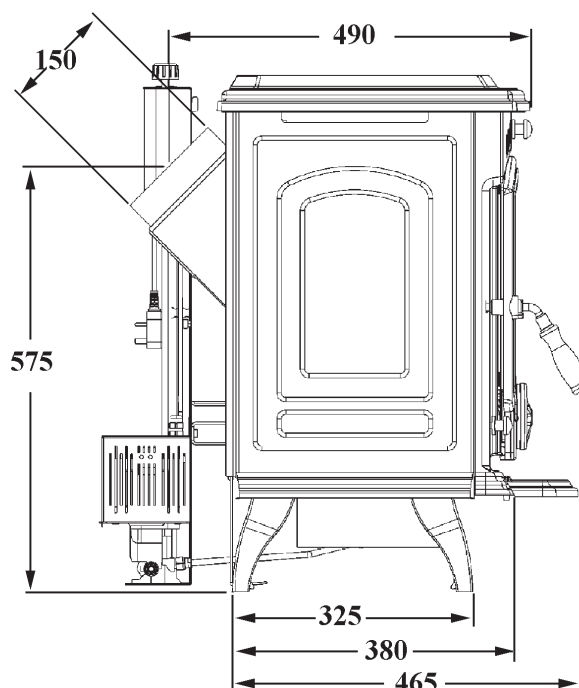
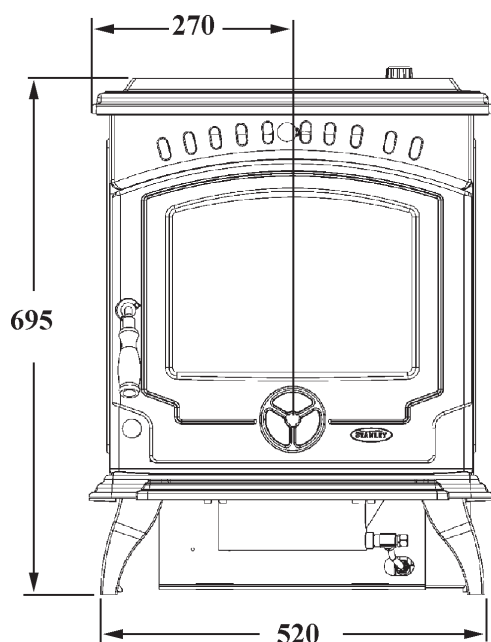
**This appliance is hot while in operation and retains its heat for a long period of time after use. Children, aged or infirm persons should be supervised at all times and should not be allowed to touch the hot working surfaces while in use or until the appliance has thoroughly cooled.**

**The front door should only be opened if it is necessary to clean the glass. This should only be done when the stove is cold.**

**This stove is designed for continuous or intermittent use -When stove is in continuous use it should be serviced at least every 6 months. If it is not used for extended periods (i.e. during the summer months) the service period can be extended to 9 - 12 months.**

**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.**

## STOVE DIMENSIONS



## TECHNICAL DATA

<b>Fuel:</b>	Kerosene 28 sec (Class C2)
<b>Mains Current:</b>	220V - 240V, 50Hz, A.C.
<b>Supply Fuse Rating:</b>	3 amp
<b>Chimney Draught:</b>	12 Pa
<b>Flue Diameter:</b>	5" (125 mm)

Max Flow Rate	15cc / min
Min Flow Rate	5cc / min
Max Permitted Flow Rate	15.5cc/min
Nominal Output	6.5kW
Output Range	2 - 6.5 kW
Weight	90kgs
Flue Gas Temperature (Nominal Output)	275°C
Flue Gas Mass Flow	26.3g/s

**Note:** To achieve the Maximum Output, the flue has to be capable of evacuating the products of combustion generated at the maximum permitted oil flow rate.

This appliance has been tested and approved to EN1 flued oil stoves with vaporizing burners.  
Appliance Class 2<sup>b</sup>

All technical data are taken under laboratory conditions and may vary in use.

The manufacturers reserve the right to make alterations to design, materials or construction for manufacturing or other reasons subsequent to publication.

**Note:** Dimensions stated are in millimetres unless otherwise stated and may be subject to a slight +/- variation.

## INSTALLATION

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

B.S. 5410 Part 1 Oil Installations

The Building Regulations:     Part J England, Wales.  
   Part F Section III Scotland  
   Part L Northern Ireland  
   Part J Ireland

The Control of Pollution (Oil) Regulations:

B.S. 7671: Requirements for Electrical Regulations

Safety Document 635: The Electricity at Work Regulations.

Safety, Health and Welfare at Work Act for Ireland, England, Wales and Scotland.

## LOCATION

When choosing a location for this appliance you must have the following:

- A. Sufficient room for installation and servicing.
- B. Adequate clearance to combustibles (see section Clearance to Combustibles).
- C. A satisfactory flue system (See Flue Systems).
- D. Fixed fuel supply line and shut off valve (See Fuel Supply).
- E. Adequate air supply to support combustion (See Ventilation & Combustion Air Requirements).
- F. Proper fused power point (See Electrical Supply).
- G. Allow for adequate air circulation around stove.
- H. Solid floor or base of non-combustible material which is capable of supporting the total weight of the stove. (See Hearth Construction).
- I. Position in the area to be heated - central locations are usually best.
- J. Avoid installing the stove near door ways, windows, walkways and areas with air stream passing through.

**NOTE:** When passing through walls or ceilings with the flue system:

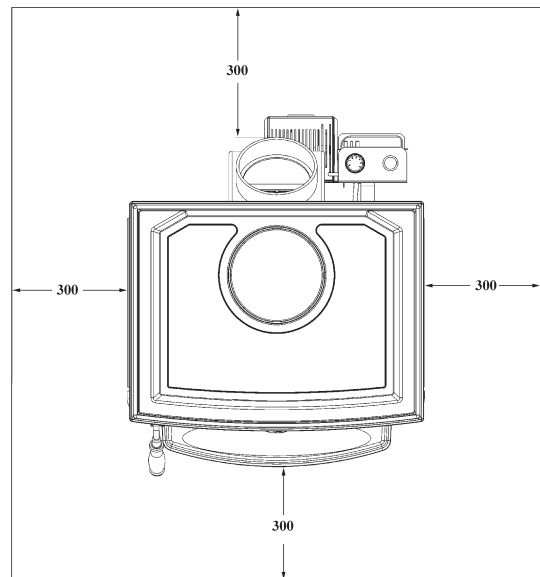
- K. Always check for obstructions for example electrical fittings, wiring, ducting, plumbing and fixed furnishings.

## HEARTH CONSTRUCTION

When a non-combustible floor surface is not available then the cooker must be placed on other insulating material. We recommend a slab of precast concrete 40mm (1½) inches deep. If other insulating material is being used, the dimensions of the slab of this insulating material must afford similar protection. This hearth must extend 300mm (12 inches) to either side of the appliances and 300mm (12 inches) to the front.

**Note:** The hearth must be level, stable and capable of supporting the stove.

Fig.1



## ELECTRICAL SUPPLY

All wiring external to the appliance must conform to the current B.S. 7671 (UK) B.S.7462 Safety Document 635: ETC Part 1 Section 5.4.6 & The Electricity at Work Regulations.

The stove requires a 220 V - 240 V 50Hz supply. Connection of the appliance and any system controls to the mains supply must be through a moulded on plug top which is fitted to the appliance in accordance with EN 60335 and Consumer Protection S.I. 1994 No. 1768 Plug and Sockets (Safety) Regulations 1998.

**NOTE:** Always install in accordance with current local wiring regulations.

**WARNING: THIS SUPPLY MUST BE EARTHED** (Refer to B.S. 7430: Code of Practice for Earthing).

**IMPORTANT:** The appliance plug must be accessible and so, must not be obstructed and close to the stove. To isolate the stove, completely unplug from the mains socket. Persons in charge of this stove should be aware of this socket outlet position.

## FUEL SUPPLY / INSTALLATION

### OIL STORAGE TANKS:

Oil storage tanks made of steel and all connecting equipment (e.g. filling pipes, and vent pipes) should comply with B.S. 799 Part 5. Galvanised steel must not be used. Polyethylene (Plastic) tanks should comply with OFTEC standard OFS T100 and or equivalent. Oil should never be stored in translucent plastic containers.

In order to enable sediment and water to be removed from steel tanks a drain valve must be fitted.

An isolating valve should be fitted at the tank outlet, in an accessible position so that the oil supply to the appliance can be shut off if required. This isolating valve must be of a type suitable for use with oil. (see Fig.2)

Oil storage tank support must be carried out in accordance with the tank manufacturers recommendations. Tanks should be located in the most un-obstructive position possible having taken safety, filling, maintenance and the need, to provide a head of oil for the burner into consideration.

## FUELS

**USE ONLY 28 SECOND VISCOSITY KEROSENE FUEL OIL TO B.S. 2869 PART 2 CLASS C2 OR EQUIVALENT.**

### FUEL SUPPLY LINE

The oil supply line from the oil storage tank to the appliance should be of an approved and suitable pipe with a minimum internal diameter of 8mm (5/16") and connected to the oil control valve.

Oil supply pipes are normally run in annealed copper tube complying to EN 1057, it can be obtained in coil or half hard form for use with bending machines. This pipe can also be obtained with protective plastic sheathing applied. Fittings for copper pipe should be compression of the flared manipulative type to B.S. 864: Part 2 1983. Steel pipes complying with B.S. 1387: 1985, if used, must be protected from corrosion. Galvanised pipe and fittings must not be used.

Screwed joints must only be made with taper threads complying to B.S. 1740 : Part 1 1971.

Jointing materials must be of types intended for use with oil fuel. Special petroleum resisting compounds and PTFE tape are suitable. External pipes should preferably be run with a continuous rise towards the direction of flow, so that air can be vented off. It is important to avoid high points which could cause air

locks. Exposed lengths of oil supply pipe must be properly supported by purpose made clips securely fixed in place. Metal clips formed so as to hold the pipe on to a saddle are preferred. Consideration should be given to avoiding routes which expose the pipe to severe chilling which could cause freezing of the oil. Where pipes are buried, they must be protected from accidental damage. The use of joints underground should be avoided if at all possible. If joints have to be fitted in pipes laid below ground, access to them must be provided.

An oil filter (5 - 10 micron) and a stop valve must be fitted to the fuel feed line and located near the supply tank and facilities should be provided to enable it to be serviced without draining down the oil supply system. (See Fig. 2).

At the point where the oil line enters the building, the oil line must be fitted with an approved remote acting fire valve which meets the requirements of B.S. 5410 : Part 1, fitted with the appropriate length of capillary. The temperature rating limit should be 90°C. The heat sensing phial of the fire valve must be fitted to the clip provided at the back of the stove. It is absolutely essential that the fire valve is located externally and is as close as possible to the appliance. For existing installations where the oil supply is built into the structure internally, the remote acting fire valve should be fitted where the oil supply line is first exposed internally. This type of layout is not recommended for new installations.

Fig.2

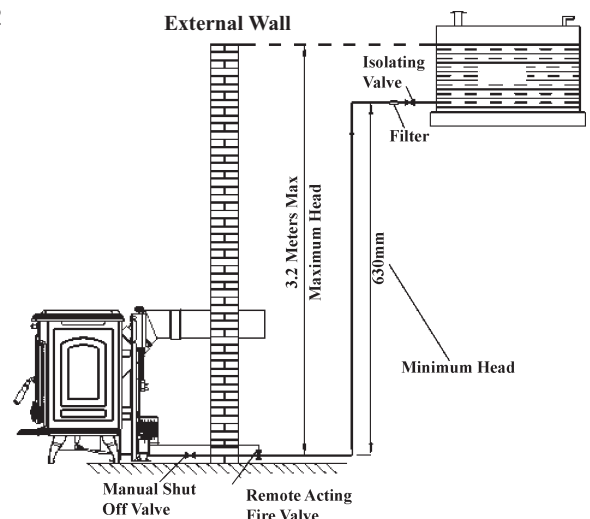
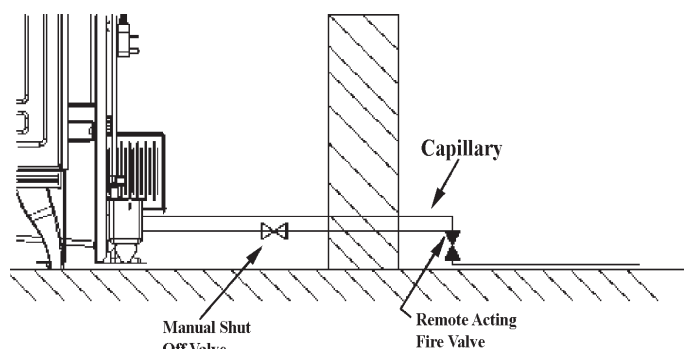


Fig.3



These requirements are in accordance with the following relevant sections of BS 5410: Part 1 O.F.S. A105 Oil Stove Standard. The Building Regulations for Scotland, Ireland, Northern Ireland, England & Wales.

**NOTE:** Fuel to the appliance should be gravity fed only.

If there are other oil fired appliances connected to the oil storage tank especially appliances with oil pumps e.g. oil fired boilers or range cookers, it is recommended that a separate oil supply line is taken from the oil tank to the stove. The separate oil supply line to the stove will avoid the possibility of the pumped appliance taking oil from the stove burner and control valve. A suitable shut off valve should be fitted near the stove and be accessible at all times.

**CLEARANCES TO COMBUSTIBLE MATERIAL**

Fig.4

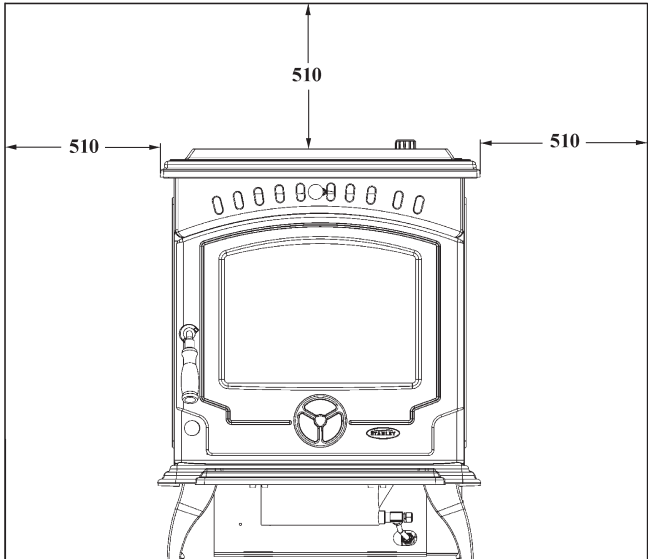


Fig.5

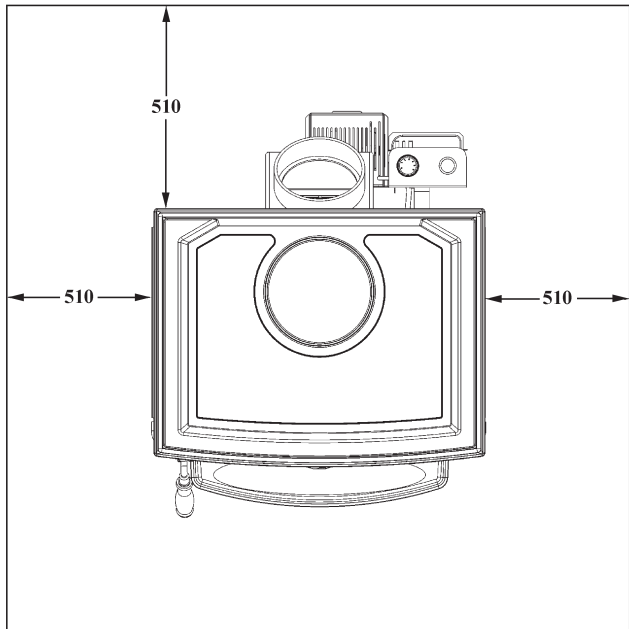
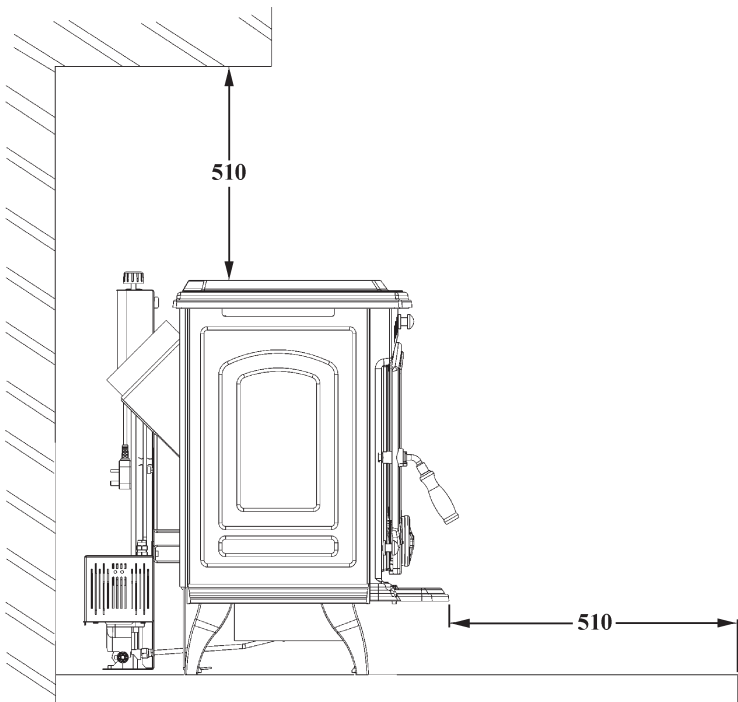


Fig.6



**Clearances to Combustible material**

- From Sides - 510mm
- From Top - 510mm
- From Rear - 510mm
- From Front - 510mm

**CLEARANCES TO NON-COMBUSTIBLE MATERIAL**

Fig.7

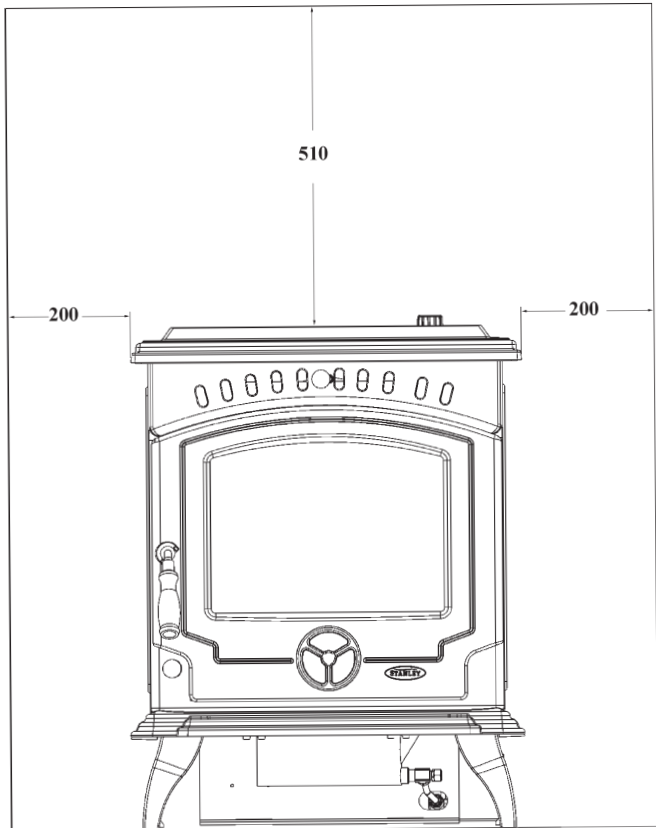




Fig.8

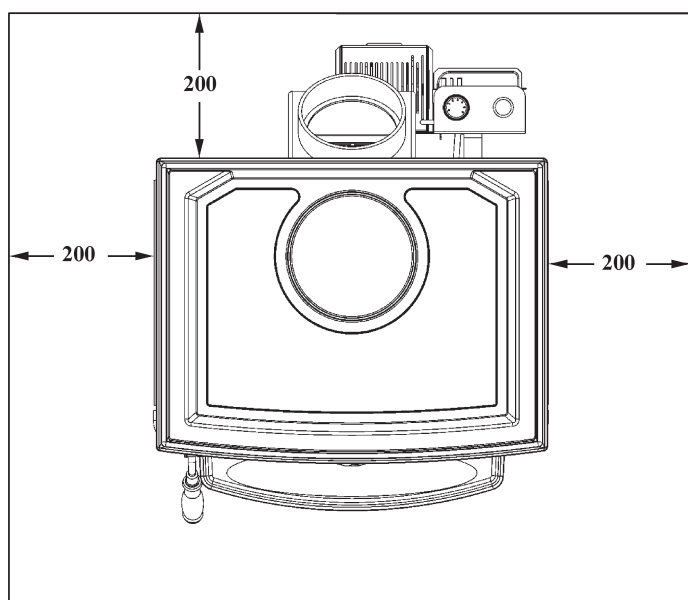
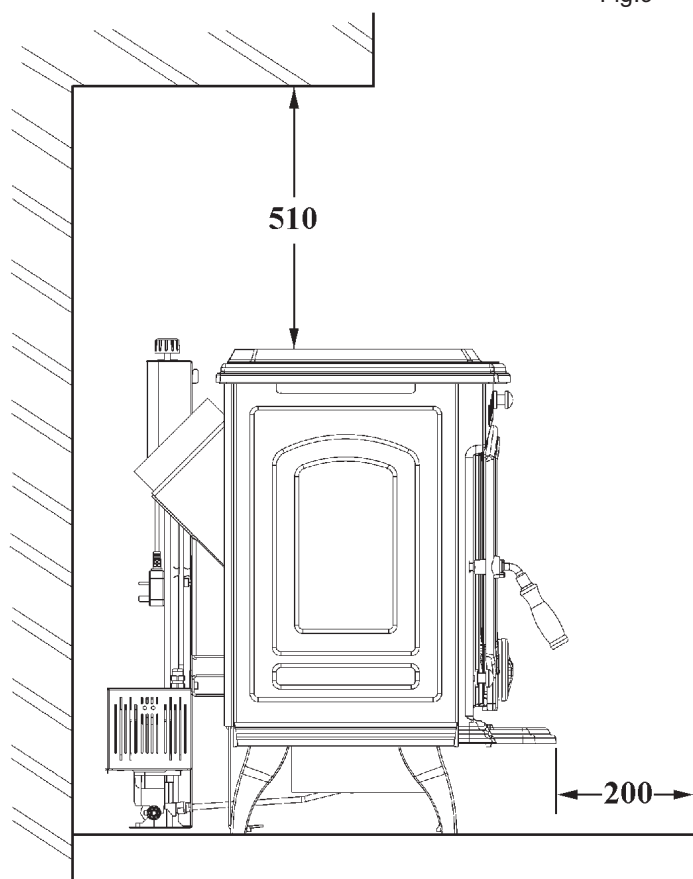


Fig.9



### Clearances to Non Combustibles

From Sides - 200mm  
 From Top - 510mm  
 From Rear - 200mm  
 From Front - 200mm

## IMPORTANT

NEVER OBSTRUCT FREE AIR CIRCULATION AROUND SIDES, BACK, TOP, UNDERNEATH, AND FRONT OF STOVE, EVEN IF IT IS INSTALLED AGAINST NON-COMBUSTIBLE WALLS.

NEVER BUILD STOVE INTO FIREPLACES ETC..IF AIR FLOW IS RESTRICTED AROUND THE STOVE, THE REMOTE ACTING FIRE VALVE PHIAL WILL OVER-HEAT AND SHUT OFF THE OIL SUPPLY. THE OIL CONTROL AND THE IGNITION SYSTEMS WILL OVERHEAT.

## THE FLUE

**NOTE:** It is imperative that all the requirements regarding the flue system and ventilation are adhered to when installing the stove, as failure to do so could result in loss in performance of the stove.

**WARNING:** Only operate this appliance if connected to a properly installed flue system.

This stove must be connected to a 125mm (5") diameter flue system. It must be a continuous duct from the stove spigot to a point 600mm above the roof top. The draught generated within the flue is dependent on the setting of the oil control valve, the control valve must be at any particular setting for 15 minutes for the draught to stabilise.

**NOTE:** Do not connect to a flue serving another appliance.

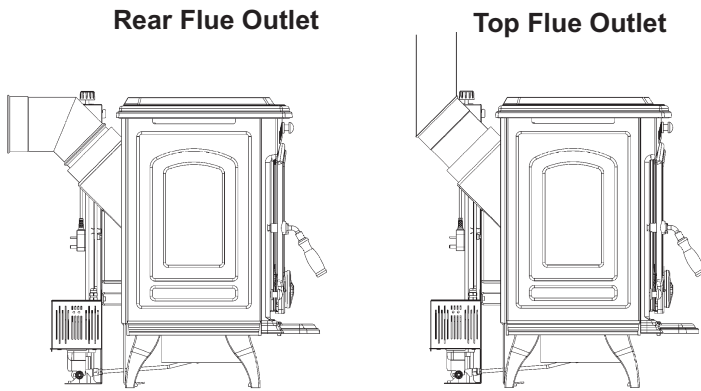
SETTING	DRAUGHT
1	8 - 10 Pa
2	9 - 11 Pa
3	10 - 12 Pa
4	10 - 12 Pa
5	10 - 12 Pa
6	10 - 12 Pa

## TOP FLUE OUTLET/REAR OUTLET

The stove has a flue spigot angle at 45° to the vertical and horizontal. A 45° bend can be used to orientate the flue either vertically or horizontally. See Fig.10.

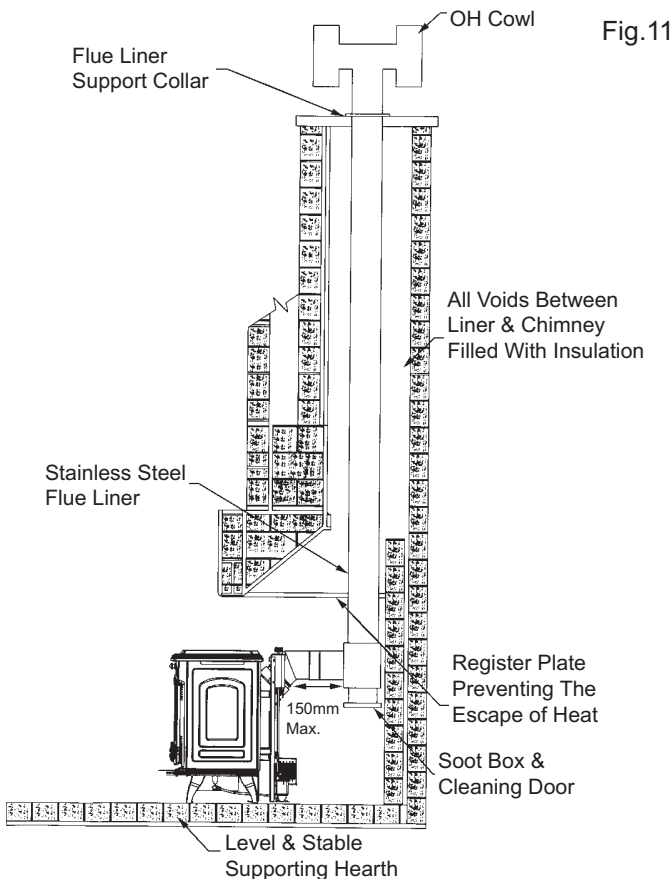


Fig.10



## USE OF INTERNAL FLUES OR CHIMNEYS

When connecting the stove to an existing chimney or internal flue the flue system must adhere to all the following requirements (See Fig.11):



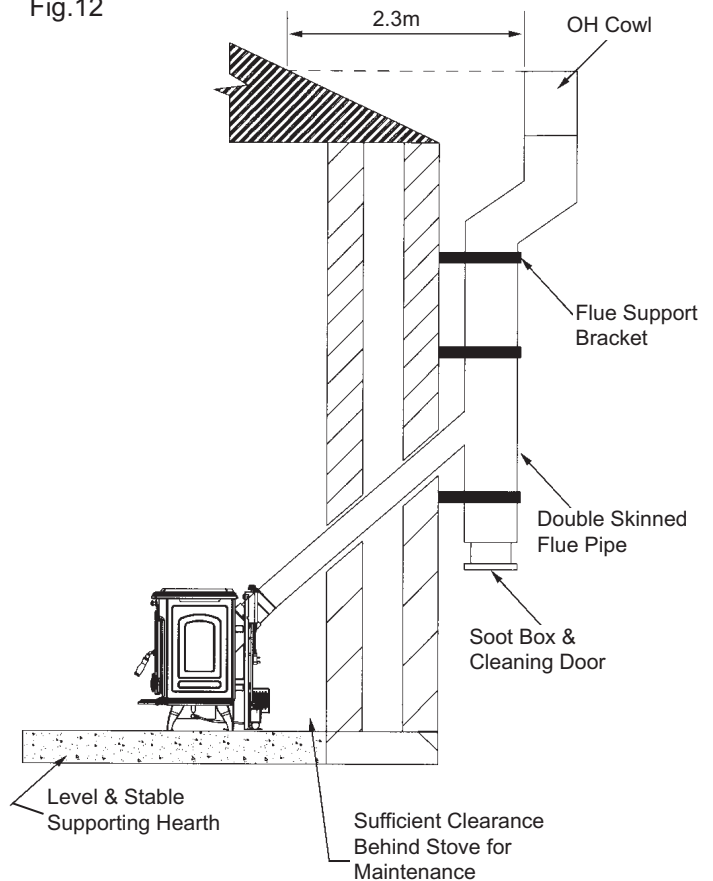
1. The horizontal flue section exiting the stove must not exceed 150mm (6").
2. A soot collection box should be fitted below the lowest point of the flue system, so as to prevent the build-up of soot from inhibiting the flow of the flue gas products from the stove. The collection box should be fitted with a cleaning door that is accessible behind the stove during servicing.

3. The flue liner should be of 125mm (5") diameter rigid or flexible (preferably rigid) stainless steel class 1 or class 2 flue liner that complies with B.S. 4543 Part 1 & 3).
4. The flue should be secured at the top and bottom of the chimney using support collar and sealed using closure clamping plates.
5. Any gap between the flue liner and chimney should be filled with insulation or flue lagging.
6. A suitable flue terminal such as an OH cowl, should be fitted to the flue liner and the exit from the chimney pot.

## USE OF EXTERNAL FLUES

When connecting the stove to an external flue, the flue system must adhere to the following requirements (See Fig.12):

Fig.12



1. The horizontal flue section exiting the stove must not exceed 150mm (6").
2. A soot collection box should be fitted below the lowest point of the flue system, so as to prevent the build up of soot from inhibiting the flow of flue gas products from the stove. The collection box should be fitted with a cleaning door that is accessible at all times.

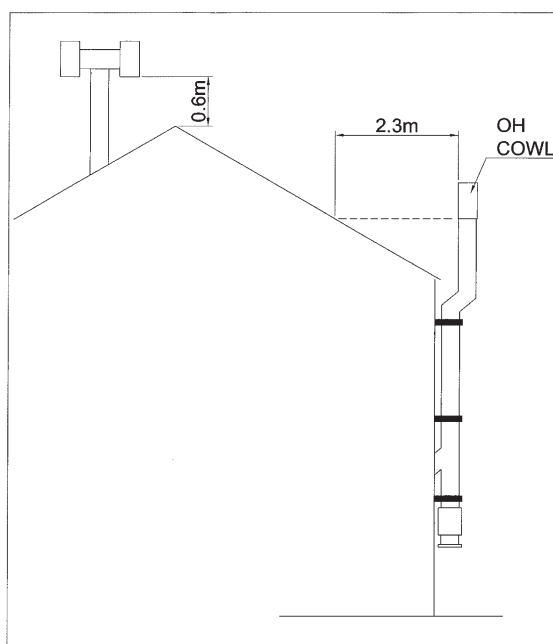
3. The flue pipe should be of 125mm (5") diameter rigid insulated stainless steel pipe, that conforms to B.S. 4543 and B.S. 5410.
4. The flue pipe should be clamped to the outside wall at intervals not greater than 1 meter with the top clamp at the highest possible fixing point underneath the roof.
5. Two 135° bend flue sections must be used to clear the roof.
6. A suitable flue terminal, such as an OH cowl, should be fitted to the flue termination point.

## FLUE TERMINATION HEIGHT

The flue termination must be high enough (4.6 metres / 15 feet minimum height) to allow the flue gases to vent into clear air, away from turbulence that may be caused by roof structures, other chimney stacks, trees etc.

Fig.13 shows the positions for the flue terminations for both internal and external flues (as per the Building Regulations). For an internal flue or chimney, the termination point should be not less than 600mm higher than the highest point of the roof or where the termination point is greater than 600mm from the highest point of the roof, it must not be less than 1 meter above the roof.

Fig.13

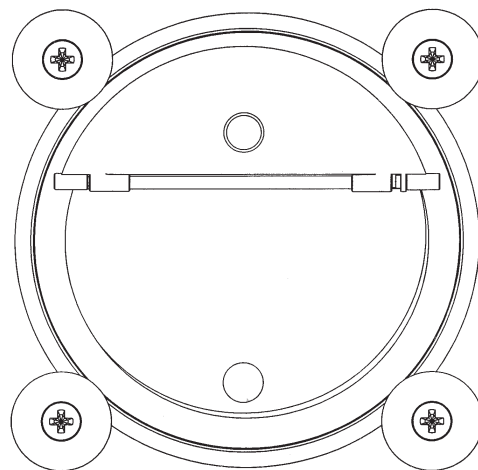


For external flues, the termination point must be positioned such that its adjacent point on the roof is not less than 2300mm from it.

## FLUE STABILISER

The stove is fitted with a flue stabiliser (See Fig.11), which will help to ensure a stable draught is maintained through the stove when the flue is subjected to a varying flue draught. It works by opening to provide an additional air supply to the flue whenever the flue's negative pressure reaches its upper limit and so prevents the negative pressure in the stove rising above its optimum level. The flue stabiliser should be adjusted to give a maximum draught to 12 pascals.

Fig.14



**NOTE:** The flue stabiliser must have access to an adequate air supply at all times.

## VENTILATION & COMBUSTION AIR REQUIREMENTS

It is imperative that there is sufficient air supply to support proper combustion. The air supply to the stove must comply with B.S. 5410: Part 1 and the relevant sections of the OFTEC Technical Book No.3.

If there is an air extraction fan/s, tumble dryer or any other air using appliance fitted in the room or adjacent rooms to where this stove is installed, additional air vents must be provided to prevent the performance of the stove being affected when the fan/s are running at their maximum setting with all external doors and windows closed.

We recommend that air supply to extract fan/s be located where it can serve the fan/s, without the air supply passing through the area where the appliance is installed.

The room containing the stove should have a permanent ventilation opening of free area at least 550mm<sup>2</sup> for each kW of rated output above 5 kW, but in no case less than 6,500mm<sup>2</sup>.

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

The effective 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. The air vents must be satisfactorily fire proofed as per Building Regulations. Joints between air vents and outside walls should be sealed to prevent the ingress of moisture. Existing air vents should be of correct size and unobstructed for the appliance in use. Air vents in internal walls should not communicate with 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.

## INSTALLATION ASSEMBLY

1. Remove all the packaging from the stove.
2. Position the stove in its final location. Refer to Sections 5, 6, 7, 8 & 13 to ensure that all the requirements have been met.
3. Attach the ashtray to the front of the stove (See Fig.15).

Fig.15

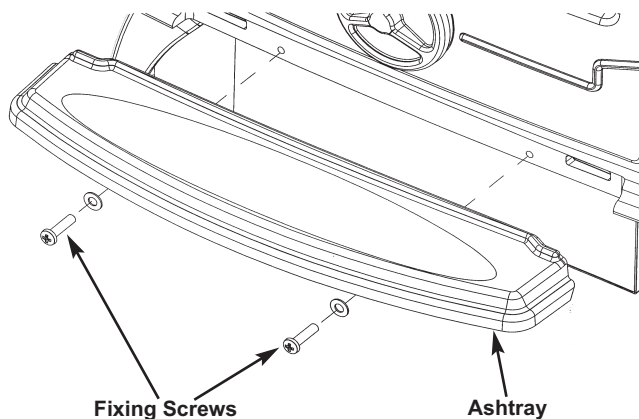
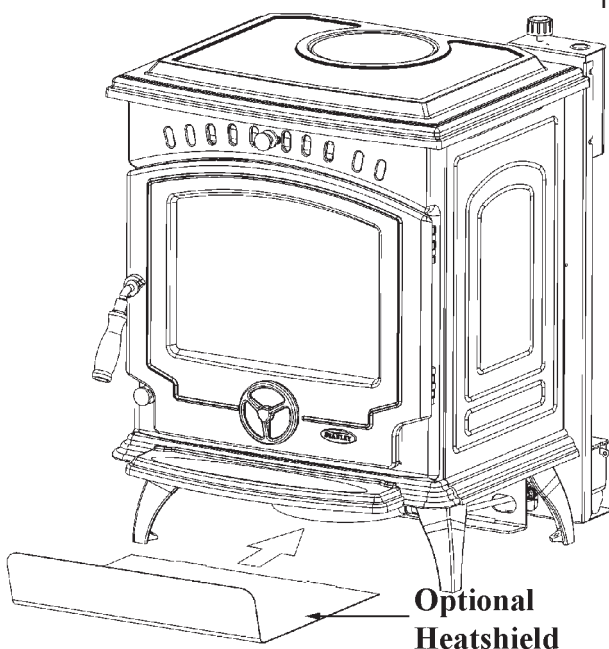
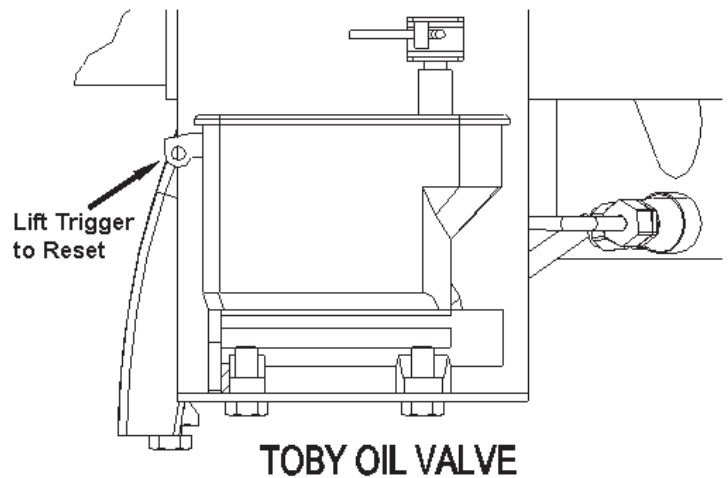


Fig.16



If you choose to purchase the optional heat-shield, Insert it underneath the stove aligning the tabs on the back of the heatshield with the slots on the bottom back panel. See Fig16.

Fig.17



4. Level the stove in all directions using the leveling screws on the stove legs.
5. Connect the fuel line to the oil control valve and reset the control valve trigger as shown in Fig.17.
6. Check all joints on the fuel line for leaks upon completion of the installation.
7. Connect and seal the flue to the flue spigot.
8. Connect the electrical supply to the stove using the mains lead supplied.

## FIRE LOG SETUP

1. Place log A with curved edge in front of the burn pot so that the curve in the log is aligned with the curve in the burn pot. The log should not overhang the edge of burn pot.
2. Place Log B, across the rear of the burn pot as shown, it should be overhanging the rear of the pot by approx 25mm.
3. Place log C and D to rest upon logs A and B as shown, ensuring neither are directly over the centre of the burn pot, they should be off a little to each side, as if placed in the centre they could lead to soot formation when the burner is operating at settings 5 & 6. See Figs 18 & 18A.

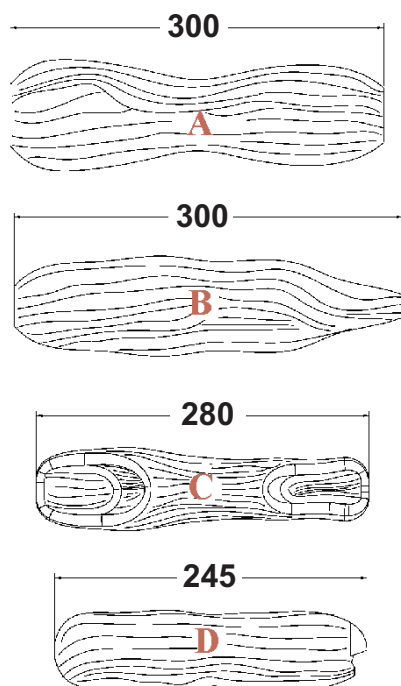


Fig.18

Fig.19

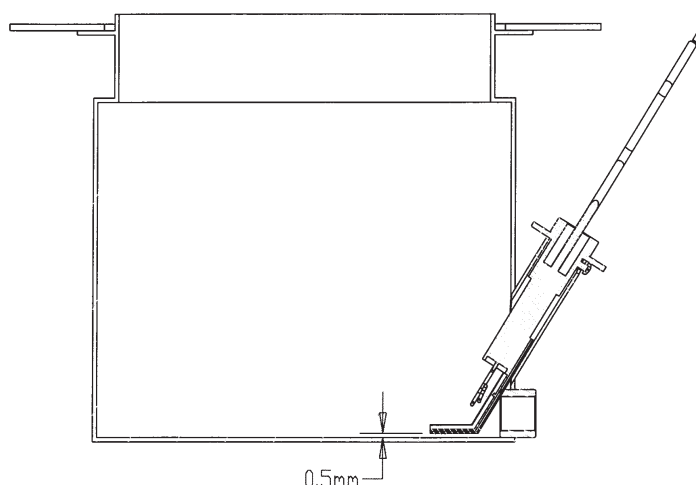
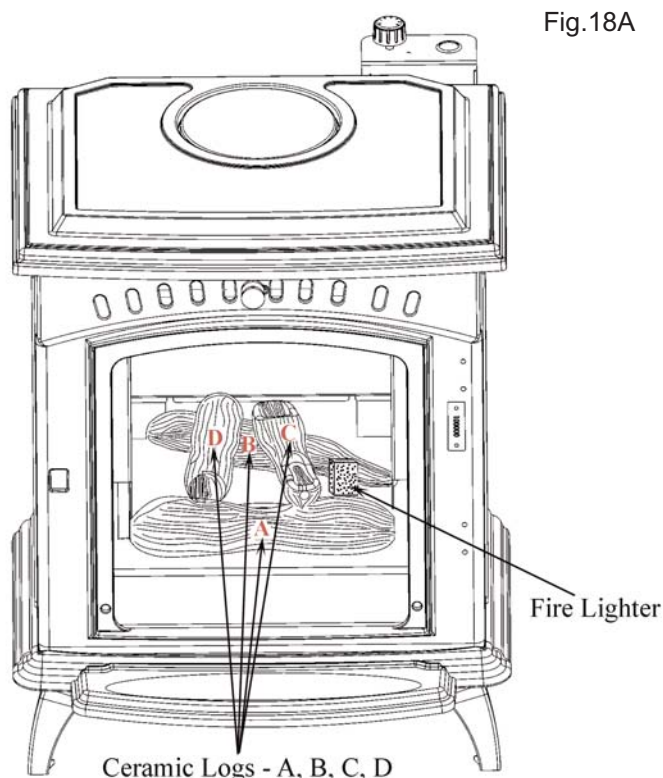


Fig.18A

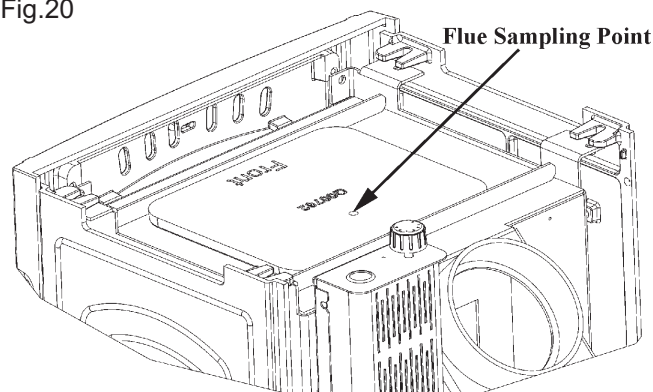


## COMMISSIONING

1. Level the stove in all directions using the leveling bolts on the stove legs.
2. Remove the flame deflector ring and the flame spreader from the burner and check that the ignition probe is within approximately 0.5mm of the burner base (See Fig.19). Replace the catalyser and the flame spreader.

3. Check the control valve rating, see section on Control Valve Rating below.
4. When the stove reaches its normal operating temperature (i.e. at maximum setting), adjust the draught regulator until the desired flame pattern is achieved.
5. Using the flue sampling point (See Fig.19), check that the Bacharach smoke number is not greater than 2. (Hob is removed to access the flue sampling point).

Fig.20



## CONTROL VALVE RATING

**NOTE: GREAT CARE SHOULD BE TAKEN TO ENSURE THE ACCURACY OF THE FLOW RATE IS CORRECT, AS IT GREATLY AFFECTS THE STOVE'S PERFORMANCE.**

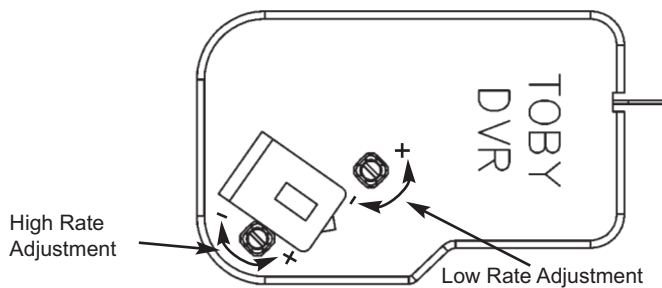
### Apparatus Required:

- Collection Vessel
- Stopwatch
- Graduated Cylinder (capable of measuring 150ml & graduated to the nearest ml)
- Small Flat Screwdriver

1. Remove the inlet pipe from the burner.

2. Place the collection vessel beneath the inlet pipe to catch the oil. Turn the control valve to 6 and start the stopwatch when the first drop of oil falls into the vessel.
3. Measure the oil flow for 5 minutes (Consult the Technical Data section for the correct rate).
4. Turn the control valve to 1 and repeat the above procedure.
5. If either of the above input rates are not correct, the control valve can be adjusted to give the required rate (see Fig.21). They should only require slight adjustment and the measurement procedure described in 2, 3 & 4 above should be followed to check each adjustment.
6. When the required input rate is achieved, reassemble the compression fitting ensuring that there are no leaks and that the burner is level.

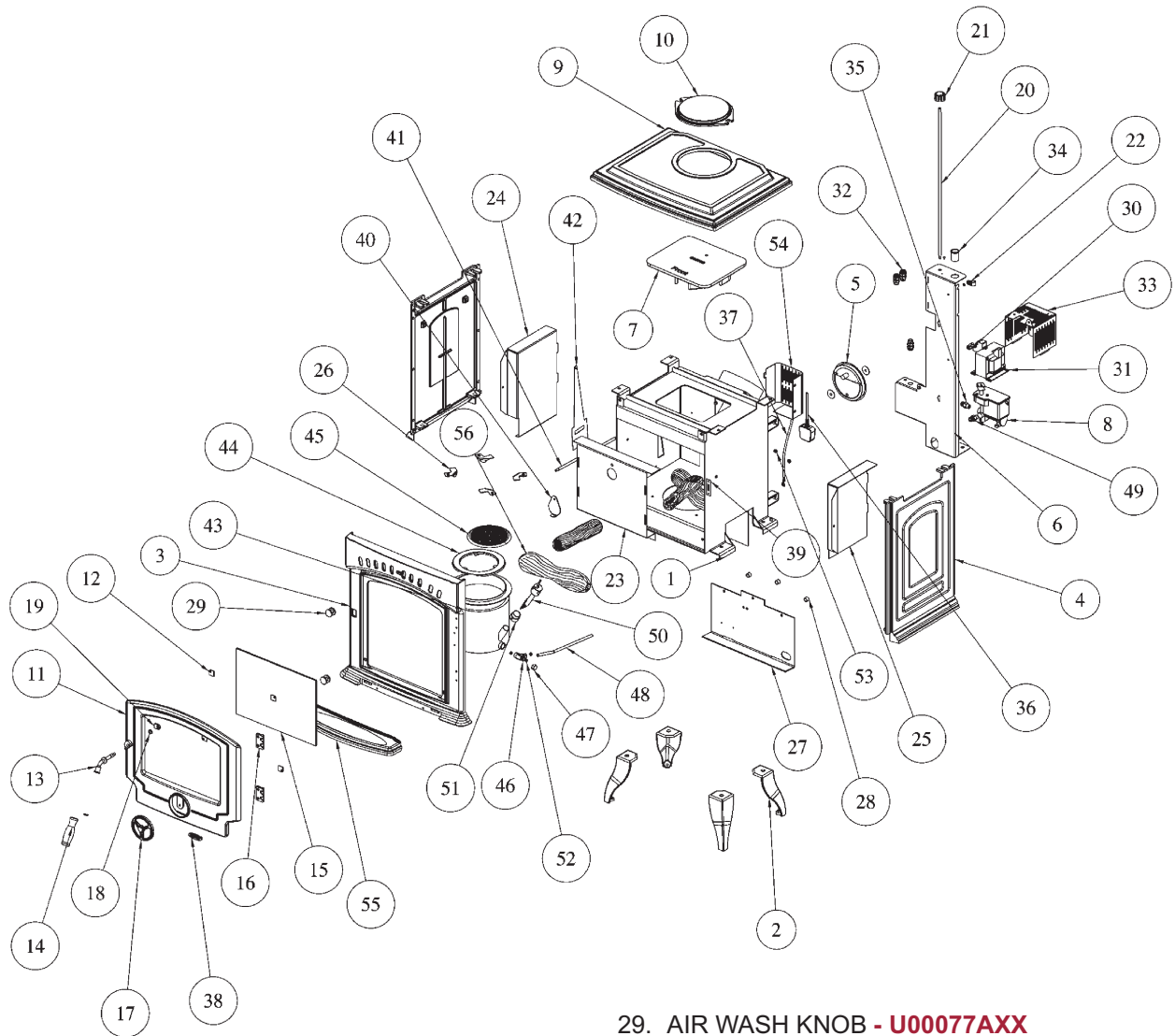
Fig.21



**NOTE: It is imperative that the stove is not rated above the maximum flow rate as to do so will raise the operating temperature of the stove which could damage the control equipment or the stove itself.**



## TARA EXPLODED VIEW



- |  |   |
|--|---|
| 1. COMBUSTION CHAMBER - <b>F01087AXX</b>         | 29. AIR WASH KNOB - <b>U00077AXX</b>                    |
| 2. LEG (LONG) - <b>B00007BZZ</b>                 | 30. TERRY CLIP - <b>W00921AXX</b>                       |
| 3. FRONT PANEL - <b>B00257JXX</b>                | 31. ISOLATING TRANSFORMER - <b>G00506AXX</b>            |
| 4. SIDE PANEL - <b>B00211BZZ</b>                 | 32. STRAIN RELIEF CABLE GLAND - <b>V00961AXX</b>        |
| 5. 5" DRAFT REGULATOR - <b>F00553AXX</b>         | 33. TRANSFORMER COVER - <b>F01134AXX</b>                |
| 6. CONTROL BRACKET ASSY - <b>F01088AXX</b>       | 34. ILLUMINATED PUSH SWITCH - <b>G00504AXX</b>          |
| 7. VENT CASTING - <b>Q00762AXX</b>               | 35. FITTING STRAIGHT 1/4" BSP X 10MM - <b>W00908AXX</b> |
| 8. TOBY OIL VALVE - <b>V00569AXX</b>             | 36. MOULDED PLUG - <b>G00047AXX</b>                     |
| 9. HOB - <b>B00209AZZ</b>                        | 37. WIRE LOOM - <b>G00505AXX</b>                        |
| 10. HOB BLANKING PLATE - <b>B00210AZZ</b>        | 38. BADGE - <b>V00730BXX</b>                            |
| 11. FRONT DOOR - <b>B00258CZZ</b>                | 39. SERIAL NUMBER PLATE - <b>N00234BXX</b>              |
| 12. DOOR GLASS CLIP - <b>F00003AXX</b>           | 40. COVER - <b>F01197AXX</b>                            |
| 13. DOOR HANDLE AXLE - <b>V00022BXX</b>          | 41. PULL CONTROL ROD - <b>V01023AXX</b>                 |
| 14. DOOR HANDLE (LONG) - <b>U00009AXX</b>        | 42. EXCESS AIR DAMPER - <b>F01315AXX</b>                |
| 15. GLASS WINDOW - <b>T00009BXX</b>              | 43. 8" BURN POT - <b>D00358AXX</b>                      |
| 16. HINGE - <b>U00153AXX</b>                     | 44. FLAME SPREADER - <b>D00356AXX</b>                   |
| 17. SPIN VALVE - <b>B00012AXX</b>                | 45. FLAME DEFLECTOR RING - <b>D00461AXX</b>             |
| 18. SPACER - <b>V00489AXX</b>                    | 46. SCRUBBER - <b>V00473BXX</b>                         |
| 19. DOOR LATCH - <b>V00023AXX</b>                | 47. M12 X 1MM CAP - <b>V00977AXX</b>                    |
| 20. CONTROL ROD - <b>V01001AXX</b>               | 48. OIL FEED PIPE - <b>V01003AXX</b>                    |
| 21. CONTROL KNOB - <b>U00086AXX</b>              | 49. FITTING STRAIGHT 1/4" BSP 8MM - <b>W00906AXX</b>    |
| 22. P-CLIP (RS543-361) - <b>V00111AXX</b>        | 50. IGNITION PROBE C/W LEADS - <b>G00450AXX</b>         |
| 23. INTERNAL BACK BAFFLE ASSY - <b>F01091AXX</b> | 51. ADAPTOR - <b>V00864AXX</b>                          |
| 24. INTERNAL LH BRACKET - <b>F01092AXX</b>       | 52. 9MM OD WASHER - <b>V00978AXX</b>                    |
| 25. INTERNAL RH BAFFLE - <b>F01093AXX</b>        | 53. OPEN GROMMET - <b>V01035AXX</b>                     |
| 26. HOLD BRACKET - <b>F01142AXX</b>              | 54. COVER - <b>F01089AXX</b>                            |
| 27. BOTTOM SHIELD SUPPORT BKT - <b>F01095AXX</b> | 55. ASHTRAY FRONT - <b>B00259AZZ</b>                    |
| 28. SPACER - <b>V00033AXX</b>                    | 56. CERAMIC LOGS - <b>V01044AXX</b>                     |

## STOVE OPERATION INSTRUCTIONS

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

### B.S. 5410 Part 1 Oil Installations

The Building Regulations:   Part J England, Wales.  
  Part F Section III Scotland  
  Part L Northern Ireland  
  Part J Ireland

### The Control of Pollution (Oil) Regulations:

B.S. 7671: Requirements for Electrical Regulations

Safety Document 635: The Electricity at Work Regulations.

Safety, Health and Welfare at Work Act for Ireland, England, Wales and Scotland.

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.

Keep combustible materials and soft furnishings well away from the stove. See Clearance to Combustibles section.

### WARNING:

**Unauthorised modification of the stove will void the product warranty. Do not tamper with the settings on the oil valve or draught regulator, only replacement parts recommended by the manufacturer should be fitted to this stove.**

## FUELS

**USE ONLY 28 SECOND VISCOSITY KEROSENE FUEL OIL TO B.S. 2869 PART 2 CLASS C2 OR EQUIVALENT.**

## VENTILATION REQUIREMENTS

If there is an air extraction fan/s, tumble dryer or any other air using appliance fitted in the room or adjacent rooms to where this stove is installed, additional air vents must be provided to prevent the performance of the stove being affected when the fan/s are running at their maximum setting with all external doors and windows closed. All vents must be kept clear and free of any blockages.

We recommend that air supply to extract fan/s be located where it can serve the fan/s, without the air supply passing through the area where the appliance is installed.

**NOTE: THE STOVE MUST BE COMMISSIONED BY AN AUTHORISED STANLEY SERVICE AGENT PRIOR TO THE FIRST OPERATION.**

## FLUE DRAUGHT

Flue draught is the upward movement of air / flue gases within the chimney/flue. Flue draught/ buoyancy can occur naturally in a dwelling due to the differential between internal air density and atmospheric air density, it is increased where the chimney is heated by the flue gases emitted from a stove. As the air within the chimney is heated it expands and becomes lighter, the flue draught effect comes from the lighter air rising. Where a wind blows across a flue terminal it should also induce a draught in the chimney. In some circumstances where the internal temperature is close to external temperature and wind speed is very low, natural draught may not be present.

Where a natural flue draught is not present prior to lighting, it will be necessary to prime the flue as the initial energy generated within the burner may not be sufficient to overcome the resistance within the flue, which would lead to the fire using up the available oxygen within the stove and then the flames would extinguish after a short period.

## PRIMING THE FLUE

Open the door of the stove, place a firelighter on the right hand side under the vent as indicated in figure below. Ignite the firelighter and close the door. Wait a period of 10- 15 minutes before lighting the stove. See Fig 18A.

## LIGHTING THE STOVE

Before commencing the lighting procedure there should not be any oil in the burn pot. Do not relight a burner that is hot, i.e. has been lighting within the last three hours.

Remove any soot deposit on the glass with a soft dry cloth when the glass is cold, minor deposits on the

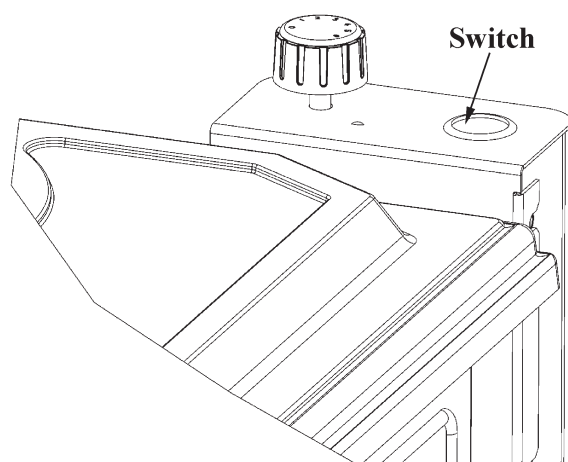


glass may only become evident when the flame is viewed through the glass.

In certain circumstances it may be necessary to prime the flue see previous sections on “flue draught” and” priming the flue”.

Turn the oil control valve to setting 2, press and hold the ignition button for a duration of 90 seconds. Within the 90 seconds a small flame should appear in the base of the burn pot where the kerosene enters. After the 90 seconds if there is no flame present turn the control valve to the off position, leave the stove for 10 minutes to evacuate vapours within the combustion chamber and attempt the lighting process only once more. When the flame is established for 10 minutes on setting no 2 the control lever can be adjusted to setting no 4 . The flame should be allowed to stabilise at setting no 4 for another 10 minutes prior to adjusting the control to setting No.6 ( Max). When the control setting is adjusted a period of stabilisation is required for the flue draught, adjusting the control too fast can lead to a situation where the fuel proportion in relation to air is much too high leading to poor combustion and a sooty flame.

Fig.22



## TURNING THE STOVE OFF

When the control knob is turned to 0 from any position, the oil feed to the stove is closed and the stove goes out.

**NOTE: DO NOT RELIGHT THE STOVE WHEN IT IS HOT.**

## POWER FAILURE

A break in the electrical supply while the stove is lighting will have no effect on the stove. However an electrical supply is necessary for lighting the stove.

## SERVICING

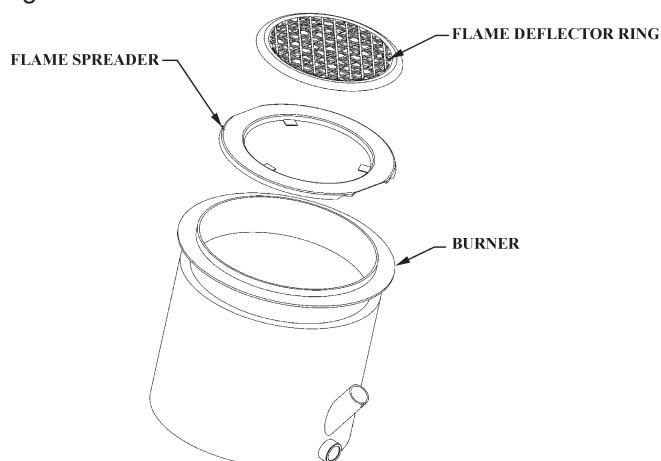
**NOTE: ALL WORK SHOULD BE CARRIED OUT WHEN THE STOVE IS COOL AND THE OIL SUPPLY IS TURNED OFF.**

## USER SERVICING

Every two or three months (depending on use):

1. Remove the flame spreader and the catalyser. Clean out all carbon deposits in the burner and on the catalyser (See Fig. 23).
2. Clean the internals of the burner compartment using a damp cloth.
3. Clean any marks or stains on the viewing glass.
4. Replace the flame spreader and catalyser. (Flame spreader should be fitted with concave side facing down).

Fig.23



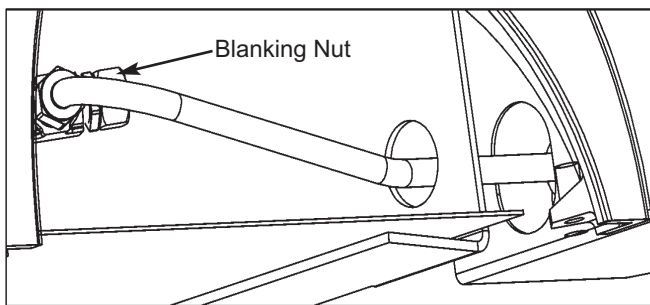
## ANNUAL SERVICING

**Note:** Annual servicing of the stove should only be undertaken by a fully trained and competent person.

1. Isolate the electrical supply to the stove and ensure that the control valve is at setting O.
2. Clean the inlet pipe as follows:
  - A. Remove the blanking nut and find a suitable rod/screwdriver which can be inserted into the feed pipe. See Fig.24.
  - B. Rotate the rod through 360° whilst pushing it in and out, take care not to push it in too far so that it hits the ignition probe.
  - C. Refit the blanking nut taking care to replace the sealing washers.

3. Clean the filter in the control valve if necessary.
4. Check the flue for soot and clean if necessary. Check all flue joints seals and reseal if required.
5. Check for oil leaks at all fittings.
6. Light the stove (checking the ignition system). Check that the flue stabiliser is operating correctly and that the flame pattern is acceptable.

Fig.24



## FIRE SAFETY

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

1. Install a smoke detector in the room.
2. A conveniently located class A fire extinguisher to contend with small fires resulting from burning embers.
3. A practical evacuation plan.
4. A plan to deal with a chimney fire as follows:-
  - (a) Notify the fire department.
  - (b) Prepare occupants for immediate evacuation.
  - (c) Turn off the stove and the oil supply.
  - (d) While awaiting the fire department watch for ignition to adjacent combustibles from overheated flue pipe or from embers or sparks from the chimney.

## WARNING:

Properly installed, operated and maintained this stove will not emit fumes into the dwelling.

Persistent fume emission is potentially dangerous and must not be tolerated. If fume emission does persist, then the following immediate action should be taken:

- (a) Turn off the stove
- (b) Open doors and windows to ventilate room and then leave the premises.

- (c) Check for flue or chimney blockage and clean if required.
- (d) Do not attempt to relight the fire until the cause of the fume emission has been identified and corrected. If necessary seek expert advice.

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

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.

If the stove does not work properly during certain adverse weather conditions, switch the stove off. Have the installation inspected by your local service engineer who will make recommendation on how to minimise the effect of adverse weather conditions on the stove.

The flue draught stabiliser located on the back of the stove is set by the engineer during commissioning of the appliance. The user should not adjust the draught stabiliser as it will effect the performance of the stove.

## CO ALARM

Waterford Stanley recommend the fitting of a CO Alarm in the same room as the appliance. 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. Shut off the appliance.
2. Open Doors and windows to ventilate the room and then leave the premises.

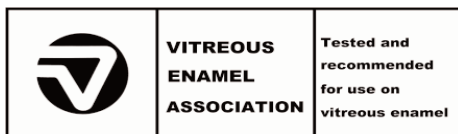
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## VITREOUS ENAMEL CLEANING

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

If the 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.



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

## FAULT FINDING

If the stove exhibits any of the following conditions, call your commissioning engineer.

SYMPTOM	POSSIBLE CAUSES	REMEDY
Stove will not light	No electrical supply to the stove	Check Plug Top Fuse or connector block fuse.
	No Oil in tank	Fill Tank
	Manual or fire valves off	Open or reset valves. Check for cause of over temperature if necessary.
	Control valve trigger down (off)	Reset trigger.
	Thermal fuse in transformer blown	Replace transformer.
	Oil feed line filter blocked	Free oil filter
	Fuel line air locked	Bleed fuel line
Excessive flame noise	Incorrect chimney draught	Check joint seals, increase height of chimney adjust draught regulator
	Incorrect fuel input rate	Check fuel input rates, adjust if necessary
Dirty or Unstable flame	Incorrect flue draught	Check joint seals, increase height of chimney, adjust draught regulator
	Incorrect fuel input rate	Check fuel input rates, adjust if necessary
	Down draughting	Fit suitable cowl
	Incorrect fuel bed set-up	Adjust coal positions
Door glass sooting up excessively	Incorrect flue draught	Check joint seals, increase height of chimney, adjust draught regulator
	Poor door seal	Replace door seal
	Fuel input rate too high	Check fuel input rates, adjust if necessary



## STANLEY OIL STOVE WARRANTY

### CONDITIONS OF WARRANTY

Your Stanley Oil Stove is guaranteed against any part that fails (under normal operating conditions) within twelve months from the date of installation of the appliance. If the unit is not installed within six months of date of purchase, the warranty will commence six months from the date of purchase. The warranty is given only to the original consumer/purchaser only and is non-transferable. The appliance must be installed by a suitable qualified person and installed as per the requirements of the manual. Failure to comply with the installation requirements will void your warranty. Waterford Stanley reserve the right to replace any part due to manufacturing defect that fails within the warranty period under the terms of the warranty. All Oil appliances must be commissioned by an authorised Stanley Engineer to validate your warranty and same should be booked with the Waterford Stanley Service Department no later than 2 weeks after the installation has been completed. The unit must be used for normal domestic purposes only and in accordance with manufacturer's operation instructions.

**NOTE: THE STOVE MUST NOT BE OPERATED UNTIL THE COMMISSIONING HAS BEEN COMPLETED.**

### LIMITS OF LIABILITY

The warranty does not cover:

- \* Special, incidental or consequential damages, injury to persons or Property, or any other consequential loss.
- \* Any issue with caused by negligence, misuse, abuse or circumstances beyond Waterford Stanley's control.
- \* Any issue with wear and tear, modification, alteration, or servicing by anyone other than an authorized service engineer.
- \* Installation and operational related problems such as draught related issues external to the cooker, inadequate venting or ventilation, excessive flue offsets, negative air pressure caused by insufficient burning of improper fuel.
- \* Damage caused to the unit while in transit.
- \* Enamel discolouration due to over firing, enamel damage caused by impact, damage to baffles caused by over firing and fading of surface finish on casting.
- \* Rust on cast iron parts unless reported prior to unit being installed.
- \* Aesthetic damage, rust & missing parts on units purchased off display.

Note: Adequate clearance must be maintained around the appliance to ensure the ease of part removal in the possible event of their damage/failure. Waterford Stanley are not responsible for any costs incurred in the removal of items installed in the vicinity of the appliance that have to be moved to facilitate a part replacement.

All warranty claims must be reported to the Waterford Stanley Service Department and must be submitted with the product serial number (located on the front casting), date of purchase, proof of purchase (if requested) and details of the specific nature of the problem.

**Manufactured by**  
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