

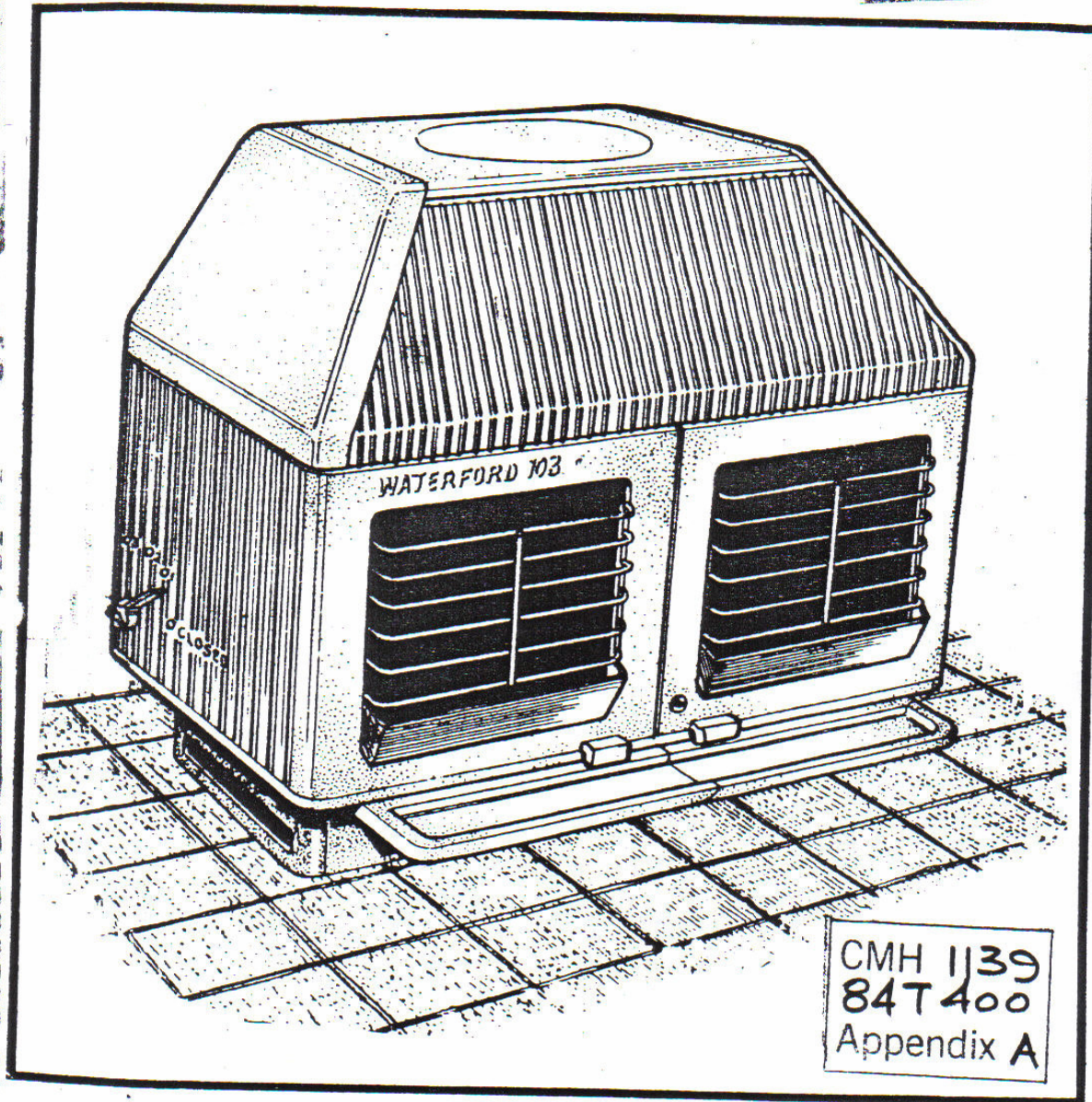
# **WATERFORD**

103 WOOD BURNING  
FIREPLACE STOVE

RECEIVED

SEP 24 1986

UND. LAB. of CAN.



**Pre-Installation Assembly  
Installation & Operating Instructions**



MASONRY, CONSTRUCTED IN ACCORDANCE WITH NFPA 211 CODE.

### IMNEY TYPE CANADA ONLY

stove must be connected to an Underwriters' Laboratories of Canada Labelled Factory Built 650° mney, installed in accordance with the manufacturer's instructions or a Lined Masonry mney, constructed in accordance with the National Building Code.

### IMNEY SIZE

chimney must have a cross-sectional area of at least 3.58 sq. mm (50 sq. inches) or a diameter of at least 203mm (8"). It is best to connect to a chimney of same size, because connection to a larger size results in reduced flue draught. NEVER CONNECT TO SMALLER CHIMNEY.

The socket of the Flue Outlet Collar is an integral part of the Unit, designed to take an 203mm (8") diam. flue pipe. The flue pipe must be located and secured with screws or rivets through the fixing holes provided in the Flue Outlet Collar socket.

### FLUE WALL STOVE PIPE MUST NOT PENETRATE COMBUSTIBLE WALLS OR CEILINGS.

The Connection entering a masonry chimney should not extend further than the inner face of the flue and must be properly sealed with Stove/Furnace Cement. Provision for flue inspection should be made as close as possible to this connection. Flue Connector should not be connected to serving an open fire unless that fireplace is fully installed.

For safety, and to avoid drafts, avoid locations close to the heater. Be sure to fasten the chimney connectors properly and also to the flue outlet of the stove through the holes provided. Use at least two screws for

each joint. Be sure the joints are tight and fully secured.

### LOCATION:

There are several conditions in selecting a location for your Waterford 103. They are:

- 1) Distance from safe chimney (See "Chimneys").
2. Position in area to be heated — central locations are usually best.
3. Allowance for proper clearances from combustible materials.

### FLOOR PROTECTION:

When installing this heater on a combustible floor, a floor protector, consisting of a layer of non-combustible material at least 9mm thick or 6mm thick covered with sheet metal is required to cover the area under the heater and extending to at least 458mm at the front and 203mm to the sides and rear.

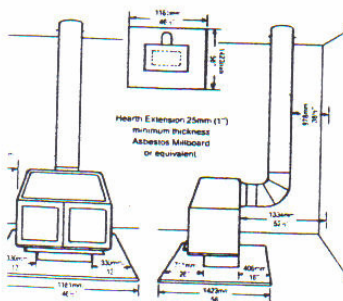
### CHIMNEY CONNECTORS:

The chimney connector is a fluepipe used to connect the Waterford 103 to an approved chimney described above. The flue connector must be made of Corrosion Resistant Steel, 24 Gauge or heavier ('black' or 'blued' or equivalent treated steel).

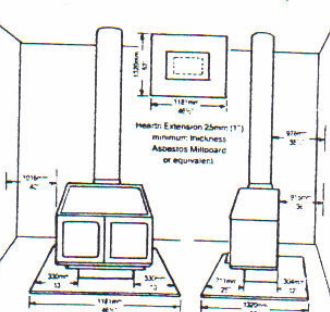
### CLEARANCES:

The Waterford 103 must be installed with minimum clearances, as specified in the following instructions.

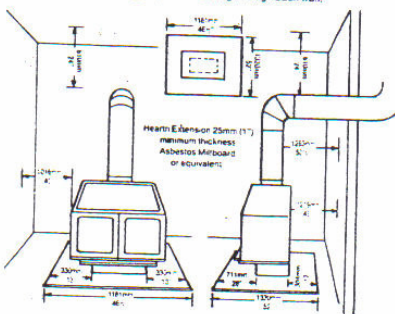
Installation No. 1: Elbowing from back of Stove through roof



Installation No. 2: Straight up to Factory-built Chimney



Installation No. 3: Straight up and elbowing through back wall





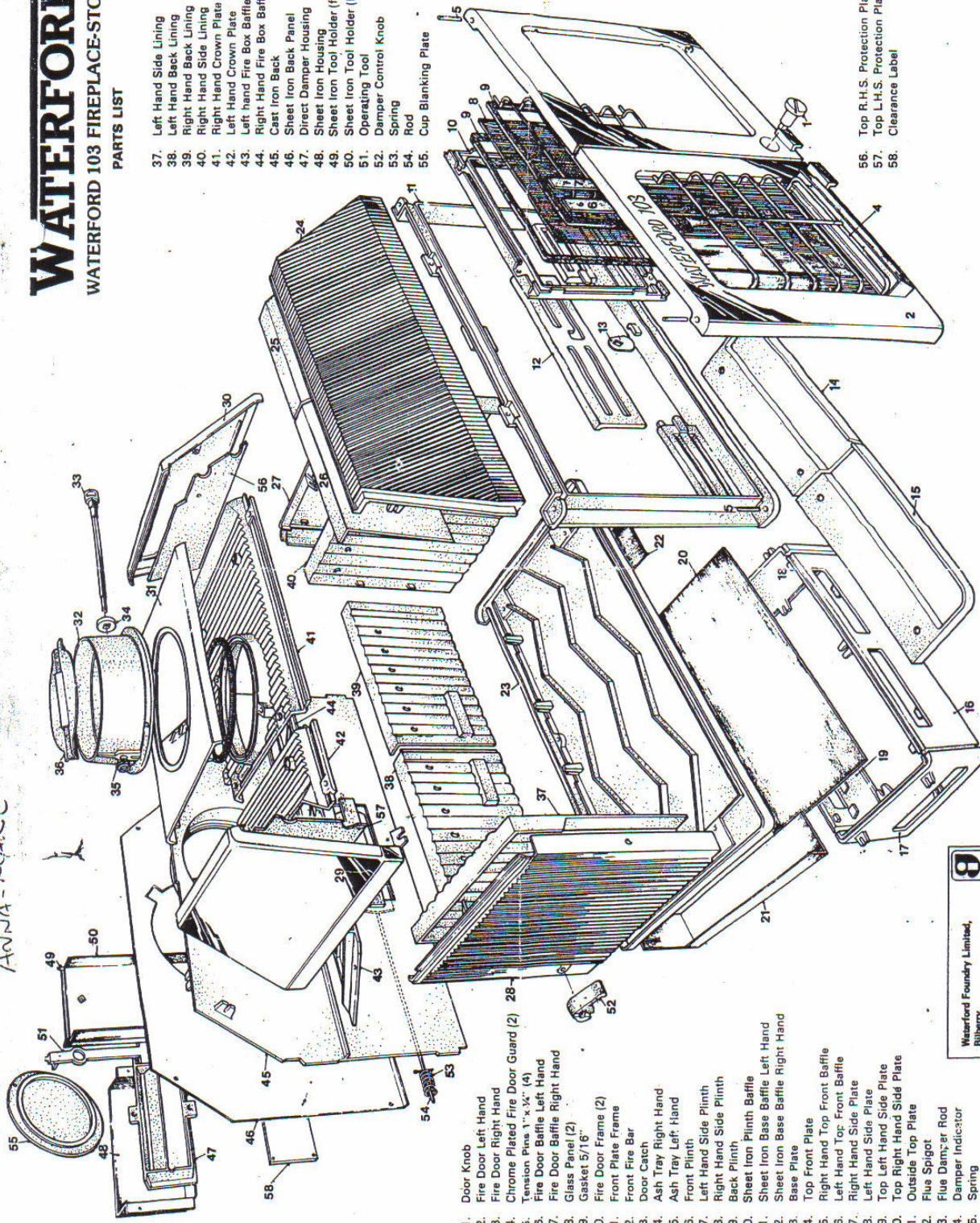
# WATERFORD

## WATERFORD 103 FIREPLACE-STOVE

### PARTS LIST

37. Left Hand Side Lining
38. Left Hand Back Lining
39. Right Hand Back Lining
40. Right Hand Side Lining
41. Right Hand Crown Plate
42. Left Hand Crown Plate
43. Left Hand Fire Box Baffle
44. Right Hand Fire Box Baffle
45. Cast Iron Back
46. Sheet Iron Back Panel
47. Direct Damper Housing
48. Sheet Iron Housing
49. Sheet Iron Tool Holder (front)
50. Sheet Iron Tool Holder (back)
51. Operating Tool
52. Damper Control Knob
53. Spring
54. Rod
55. Cup Blanking Plate

56. Top R.H.S. Protection Plate
57. Top L.H.S. Protection Plate
58. Clearance Label



1. Door Knob
2. Fire Door Left Hand
3. Fire Door Right Hand
4. Chrome Plated Fire Door Guard (2)
5. Tension Pins 1" x 1/2" (4)
6. Fire Door Baffle Left Hand
7. Fire Door Baffle Right Hand
8. Glass Panel (2)
9. Gasket 5/16"
10. Fire Door Frame (2)
11. Front Plate Frame
12. Front Fire Bar
13. Door Catch
14. Ash Tray Right Hand
15. Ash Tray Left Hand
16. Front Plinth
17. Left Hand Side Plinth
18. Right Hand Side Plinth
19. Back Plinth
20. Sheet Iron Plinth Baffle
21. Sheet Iron Base Baffle Left Hand
22. Sheet Iron Base Baffle Right Hand
23. Base Plate
24. Top Front Plate
25. Right Hand Top Front Baffle
26. Left Hand Top Front Baffle
27. Right Hand Side Plate
28. Left Hand Side Plate
29. Top Left Hand Side Plate
30. Top Right Hand Side Plate
31. Outside Top Plate
32. Flue Spigot
33. Flue Dampener Rod
34. Damper Indicator
35. Spring
36. Flue Damper

Waterford Foundry Limited,  
Bilberry,  
Waterford.  
Tel: (051) 75911. Telex: 80763

Note: The manufacturer reserves the right to modify the design, change materials or construction without notice in the interests of improvement.



**EP No. 1:**

Back the unit. Open the Fire Doors and remove the tipped contents from the Firebox. Place the Jiffy Bag contents to one side.

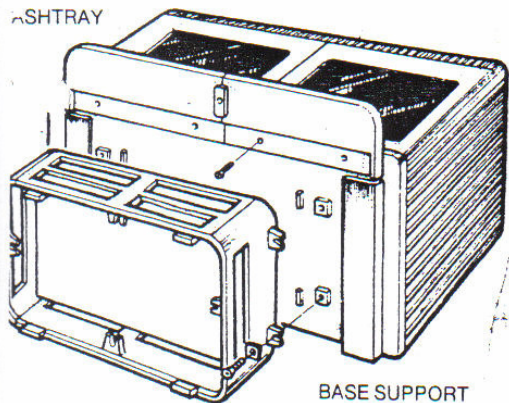
**EP No. 2:**

the Sove on its back. Place the assembled base port over the lugs on the base. Secure the base port to the base with 25mm x 5.4mm (1" x 1/4") Tagon Head Bolts and 6.4mm (1/4") square washers.

**p No. 3:**

ich the Ashtray to the Base Plate using 20mm x 1m (3/4" x 1/2") RH Screws.

ASHTRAY



BASE SUPPORT

**P No. 4:**

efully raise the Unit upright.

**P No. 5:**

1.5kg (25 lb.) bag of high grade refractory is plied with the unit. Mix it well, adding just enough er \* obtain a fairly moist consistency. DO NOT KEI, WET!!

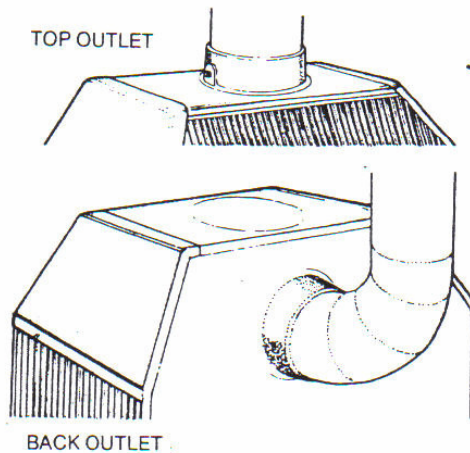
Using an appropriate tool, apply the cement over the base of Firebox, making sure that the base is covered evenly. Allow the cement to dry for 48 hours before using the Unit.

**STEP No. 6:**

Fitting the Flue Outlet Collar: The Flue Outlet Collar may be used for flue connection from the top or the back of the Unit by interchanging it with the Flue Blanking Plate. Make sure, when using the Back Outlet, that the Damper operating lever faces upwards. Secure the Flue Outlet Collar to the Unit using two 20mm x 6.4mm (3/4" x 1/4") c.s. screws.

**NOTE:**

Holes are provided in the Flue Outlet Collar to locate and secure Flue Connectors.



The Stove is now ready for installation. Follow the Installation Instructions exactly.

## INSTALLATION

### INSTALLATION INSTRUCTIONS — GENERAL

#### BUILDING CODES:

sult the Local Building Code in all cases as to icular requirements concerning the Installation of place-Stoves. The Waterford 103 Wood Burning place-Stove is intended to be installed in ordance with National Fire Protection Association dards for Chimneys. Fireplaces and Vents, NFPA -1977.

Fireplace-Stove has been tested and listed by erwriters Laboratories Inc. and carries the U.L. el. All building codes which recognise the value of U.L. Listing will accept applications for and rove installations of this product.

allation Instructions must be followed exactly.

#### CHIMNEYS:

The Waterford 103 is a Wood Burning Fireplace-Stove and must be connected to a Chimney of the proper type and size.

#### CHIMNEY TYPE:

The CHIMNEY must be a Residential Type (sometimes called "CLASS A" or "All Fuel") designed for use with ANY FUEL.

**Note:** Connection to type "B" Gas Vents, approved for connection to a certain gas burning appliance only, will result in a fire!

The Residential Type Chimney must be:

- FACTORY-BUILT U.L. Listed Residential Type and Building Heating Appliance Chimney (ANSI/UL 103) and acceptable to the local building code, or



## OPERATING INSTRUCTIONS

BEFORE LIGHTING YOUR WATFORD 103 ALLOW THE REFRACTORY TO SET AT LEAST 48 HOURS TO PREVENT CRACKING. THE FIRST FEW FIRES SHOULD BE RELATIVELY SMALL TO PERMIT THE REFRACTORY TO CURE WELL, AND TO "SEASON" THE STOVE.

### CAUTION:

NEVER USE GASOLINE, GASOLINE-TYPE LANTERN FUEL, KEROSENE, CHARCOAL, LIGHTER FLUID, OR SIMILAR LIQUIDS TO START OR 'FRESHEN UP' A FIRE. KEEP ALL SUCH LIQUIDS WELL AWAY FROM THE HEATER WHILE IT IS IN USE. DO NOT USE A GRATE OR ELEVATE THE FIRE. BUILD WOOD FIRE DIRECTLY ON THE REFRACTORY HEARTH.

### CHIMNEY DAMPER:

The Chimney Damper is an integral part of the Flue Outlet Collar. Its function is to control the chimney draught and so reduce heat loss up the chimney. The chimney damper is operated by the Fire Tool provided and it has three settings: Fully Open, Half Open, and Fully Closed. (See Illustrations) (1).

When this damper is in the fully closed position, a free area is allowed so as not to close the flue completely. The control and setting of this depends on available chimney draught.

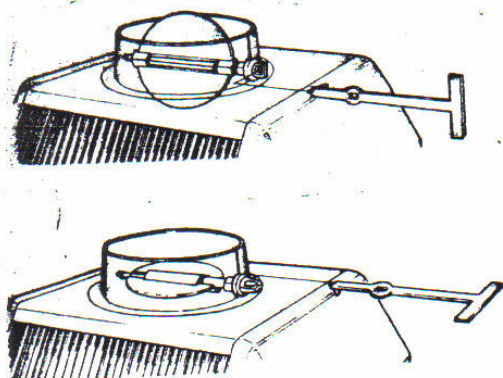


ILLUSTRATION NO. 1

### AIR INLET DAMPER:

The air inlet damper controls the primary air for combustion and so controls the rate of burning. This damper is operated by the Fire Tool provided. (See Illustrations) (2).

The setting of the damper depends on the rate of burning required. Practice will soon show how turning down affects burning rate. Secondary combustion air is also controlled by the air inlet damper. This air is channelled behind the cast iron firecheeks.

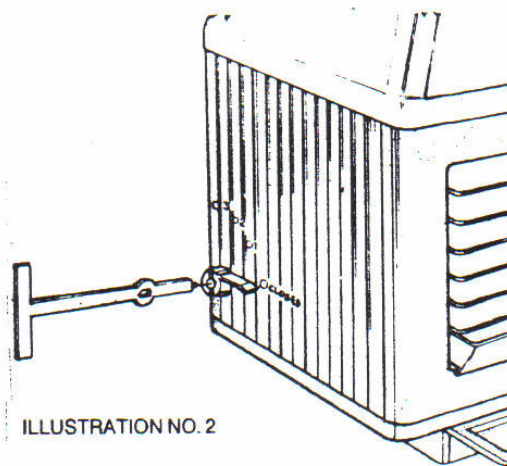
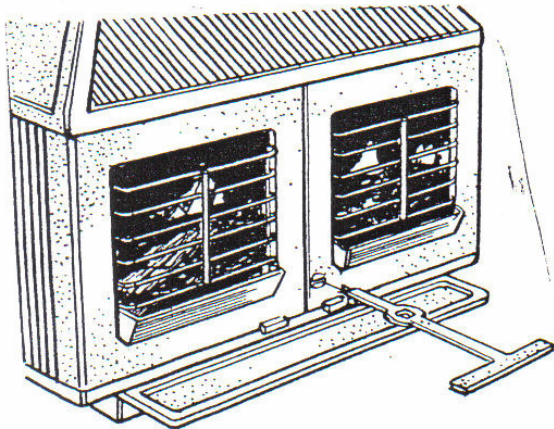
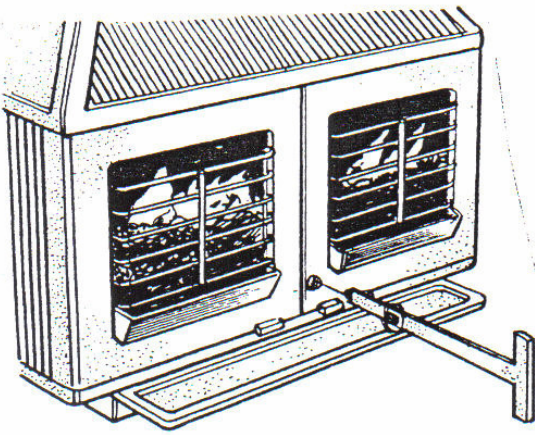


ILLUSTRATION NO. 2

1. Lay a few crumpled sheets of paper on the hearth, then a few small sticks or kindling to get the fire started. Open the fire doors and light the paper. Close the doors and open the draught control ALL THE WAY. The fire will catch the kindling quickly, after which full size logs may be placed on top. After the logs have caught, adjust the draught control to suit the heat requirements.
2. The logs will burn slowly towards the rear of the fire chamber and the rate of burning is adjustable at all times by means of the draught control. The more draught (wider opening) the faster the burning. Do not overfire the stove. (If the stove or chimney connector glows, you are overfiring the stove).  
OPERATE STOVE ONLY WITH FUELLING DOORS CLOSED.
3. Once they are well lighted, the logs need little attention. It is recommended that the draught be reduced (smaller opening) after the logs are well lighted as they will require little draught to maintain combustion. You will soon learn the best ways and means of using the fireplace-stove in order to attain maximum efficiency.
4. Keep all combustible materials at least three feet away from the stove and connector pipes. Never dry clothing on or over the fireplace-stove or within three feet of it.
5. Disposal of Ashes: Ashes should be placed in a metal container with a tight fitting lid. The closed container of ashes should be placed on a non-combustible floor or the ground well away from all combustible materials, pending final disposal. If the ashes are disposed of by burial in soil or otherwise locally dispersed, they should be retained in the





closed container until all cinders have thoroughly cooled.

6. Creosote formation and need for removal: When wood is burned slowly, it produces tar and other organic vapours, which combine with expelled moisture to form Creosote. The Creosote vapours condense in the relatively cool chimney flue of a

slow-burning fire. As a result, Creosote residue accumulates on the flue lining. When ignited this Creosote makes an extremely hot fire.

### FIRE SAFETY

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

1. The installation of smoke detectors.
2. A conveniently located Class A fire extinguisher to contend with small fires resulting from burning embers.
3. A practiced evacuation plan.
4. A plan to deal with a chimney fire as follows

#### In the event of a chimney fire

- (a) Notify the fire department.
- (b) Prepare occupants for immediate evacuation.
- (c) Close all openings into the stove.
- (d) While awaiting fire department watch for ignition of adjacent combustibles from over-heated stove pipe or hot embers or sparks from the chimney.

The Chimney Connector and chimney should be inspected at least twice monthly during the heating season to determine if Creosote build-up has occurred. If Creosote has accumulated it should be removed to reduce the risk of a chimney fire.

Inspect the chimney connector frequently. Tap the connector with your finger when the pipe is cool. If you hear a dull echo, the pipe may need cleaning. Disassemble the chimney connector and clean the sections. Replace corroded pipe sections.

### MAINTENANCE:

To ensure that your Fireplace Stove will operate safely and with maximum efficiency for years, the entire installation must be properly maintained. During periods of use, the Stove, Chimney Connectors, Joints and the Main Flue itself must be kept clean and in good working condition.

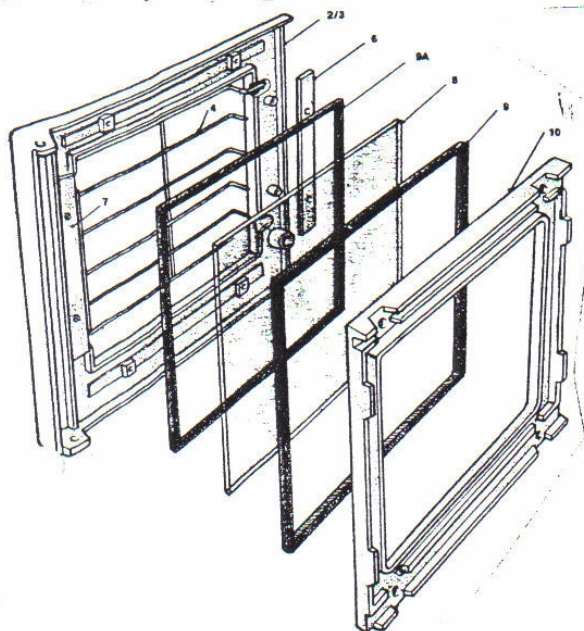
## GLASS

### 1. How to Clean:

The glass will clean itself when there is sufficient heat generated by the burning fuel. It is advisable to fully charge the fire with seasoned timber and by opening the air inlet, bring the fire up to a high burning condition, this burns off any moisture in the timber which causes darkening of the glass. Close the damper to the required level and the glass will remain clean for the rest of the burning period.

**WARNING: DO NOT OPERATE THE STOVE WITH BROKEN GLASS.**

### 2. How to Replace Glass:



- (a) Open the doors, Items 2 and 3, and remove the 4 fixing screws from the fire door frame, Item 10, and lift it away.
- (b) Remove the broken glass, Item 8, from the door and remove the gasket, Item 9, from the glass, and fit it to the new glass, Item 8.  
**N.B.:** If the gaskets, 9 and 9A, are damaged use new ones.
- (c) Check that the fire door guard, Item 4, and fire door buffers, Items 6 and 7, are in place, then fit the new glass and replace the fire door frame and tighten the set screws.

**WARNING: USE ONLY CERAMIC GLASS 5mm THICK. SUBSTITUTIONS ARE HAZARDOUS.**

For further information on using your Wood Heater safely, obtain a copy of the National Fire Protection Association Publication, "Using Coal and Wood Stoves Safely" NPFA HS-8-1974. The address is:

National Fire Protection Association,  
470, Atlantic Avenue,  
Boston, MA 02210,  
U.S.A.

ENJOY, BUT ENJOY SAFELY!!!

# **WATERFORD**

Waterford Foundry Export Ltd.

Bilberry,  
Waterford,  
Ireland.

Telephone: 051-75911  
Telex: 80763

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