

Dovre 500 MFR/MFF Cast Iron Multifuel Stoves



INSTALLATION INSTRUCTIONS

TO BE LEFT WITH CUSTOMER

Dovre 500MFR/500MFF Cast Iron Stove Installation and Operating Manual

Before commencing with the installation it is important that these instructions are read and fully understood.

When installing the model Dovre 500MFF, follow the installation and operating instructions for the MFR with the following exceptions:

1 PAGE 1, ASSEMBLY SECTION 5

Ignore this instruction which applies only to the model Dovre 500 MFR

2 DIAGRAM Fig 5

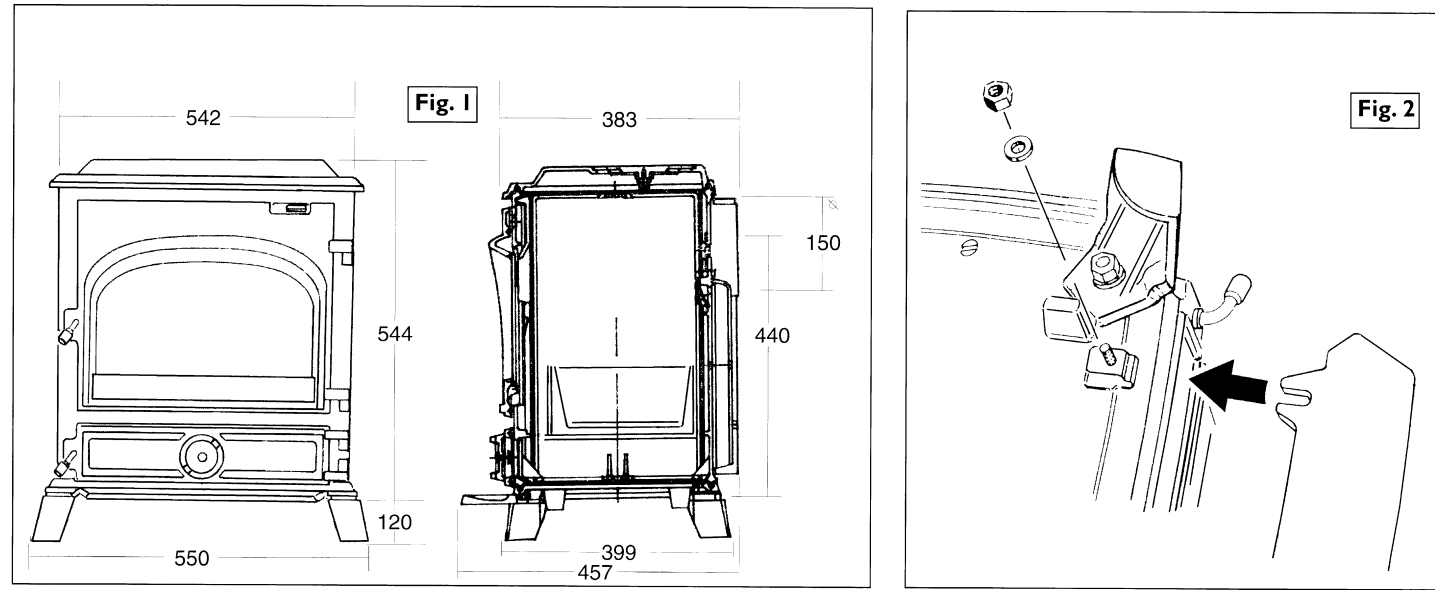
Ignore this diagram which refers to the grate system incorporated in the model 500MFR

3 DIAGRAM fig 6

The sketch illustrates the riddling rod which is not applicable to the 500MFF

4 PAGE 5, ASH REMOVAL - SECTION 3

The Dovre MFF is not equipped with a riddling grate mechanism and therefore ashes must be removed from the grate using a conventional poker.



NOTE: The Dovre 500MFF is the same in all aspects as the 500MFR except for the grate system. The 500MFF is fitted with a one piece cast iron grate suitable to use with wood or smokeless solid fuel. The 500MFF does not incorporate a riddling grate system.

The 500 MFR is a specially designed stove for burning wood and most smokeless fuels. It is essential that when wood is used, it is well-seasoned (min 2 years) and has a maximum moisture content of 20%. If unseasoned wood is used, heat outputs will not be obtained and serious damage will occur in the chimney and flueways.

The dimensions of your new stove are illustrated in fig. 1. Be careful to ensure that your fireplace is going to accept the appliance and that you have allowed for 30cm of hearth space in front of the stove.

REGULATIONS

It is important that the Installation is carried out in compliance with current Building Regulations.

1 ASSEMBLY

As the Dovre 500MFR is constructed from heavy cast iron, it is advisable for two people to assemble and position the appliance.

1. Open the stove door and remove all loose parts within.
2. Lay the stove on its back and fit the 4 legs and front ash lip. See fig.2.
3. Fit the circular cast iron flue collar. This can be fitted in one of two positions (see fig.3). For a top flue connection, attach the circular cast iron collar to the

aperture located at the top of the appliance, using the nuts, bolts and washers supplied. Use a small amount of fire cement to ensure an air tight seal before fixing. For a rear flue connection, adopt the same procedure using the rear aperture. Fit the cast iron circular cover plate to the unused aperture again using a small amount of fire cement as a seal. The cover plate is attached using the fixing bar and nuts and bolts supplied.

4. Carefully position the stove on the hearth.
5. Fit the solid fuel grate, cradle and riddling arm. See fig.5 page 3

2 INSTALLATION

HEARTH REQUIREMENT

The positioning of the appliance and the size and type of hearth are governed by Building Regulations for Class 1 appliances. The Building Regulations state that the hearth must extend at least 30cms to the front of the appliance and 15cms to the sides. If in doubt, expert advice should be sought from your local Building Inspector.

3 CONNECTION TO CHIMNEY

If an existing masonry chimney is installed, the appliance should be connected to the chimney using 150mm diameter 316 grade 1mm stainless steel, cast iron or good quality vitreous enamel flue pipe. It is important to ensure that the connection to the chimney is carried out in such a way that any soot particles are allowed to fall unhindered back into the appliance or flue T-section. See fig.4.

4 ACCESS FOR SWEEPING CHIMNEY

The chimney should be checked and swept at least once a year and it is important to allow provision for gaining access to the chimney. On masonry chimneys, a standard soot door, obtainable from your Dovre dealer, can be used. On other factory made chimneys, it is important to ensure an access cleaning door is provided. It is advisable to ensure that the connecting flue pipe to the chimney has an access door fitted. An access door close to the appliance will also facilitate the use of a chimney vacuum cleaner to ensure clean appliance maintenance.

5 THE CHIMNEY

The chimney must be in good condition and free from cracks and blockages. If the existing chimney is unlined, it is advisable to install a flue liner suitable for use with Class 1 appliances, with an internal diameter between 150mm and 200mm. Your Dovre dealer can advise further on this subject.

The chimney is responsible for ensuring that flue gases and smoke are taken away from the appliance.

IF THE APPLIANCE EMITS SMOKE INTO YOUR ROOM, IT IS NOT THE FAULT OF THE APPLIANCE. THERE WILL EITHER BE A STRUCTURAL FAULT OR DESIGN FAULT IN THE CHIMNEY OR LACK OF VENTILATION IN THE ROOM.

If an existing chimney is not available, it is possible to install a prefabricated factory chimney system. Your Dovre dealer will provide further information.

It is important to ensure that the chimney structure and design comply with Current Building Regulations for Class 1 appliances.

THE MINIMUM DRAUGHT REQUIREMENT FOR THE DOVRE 500MFR IS .06" WATER GAUGE.

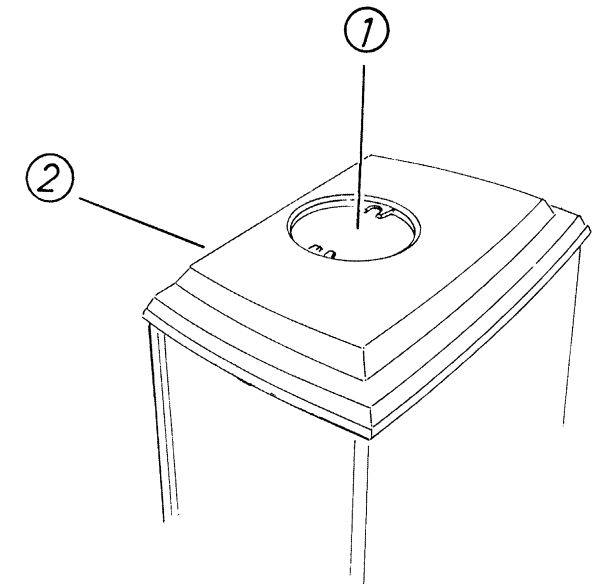
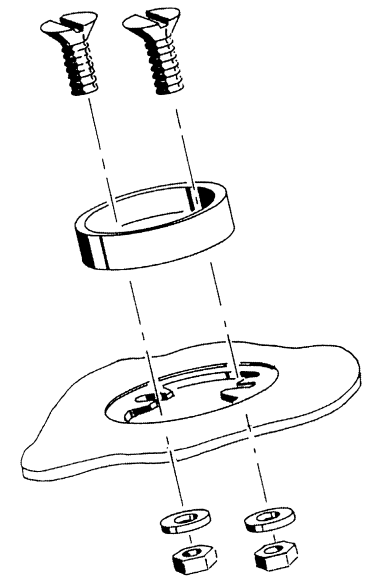


Fig. 3

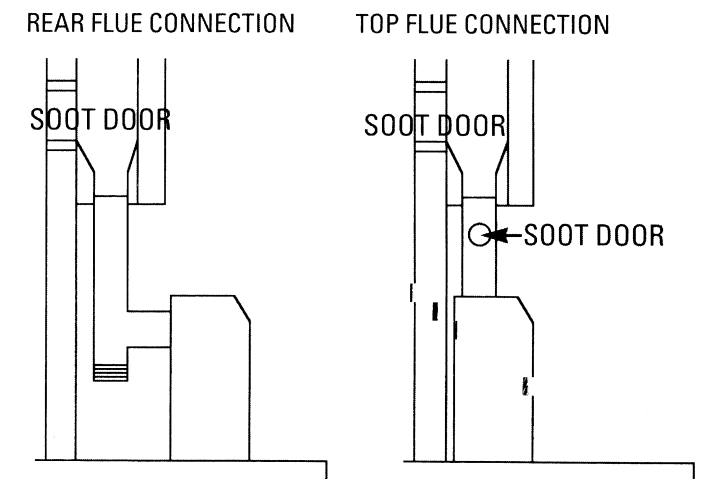


Fig. 4

5 THE CHIMNEY (Continued)

Too much draught will cause excessive heat outputs and fuel consumption. Inadequate draught may cause smoke emission to the room and poor combustion resulting in a build up of tar and creosote deposits on the glass, inside walls of the appliance and the chimney.

6 OPERATION

The most important factor for avoiding problems with any stove is to prevent the formation of tar and creosote build up.

IF UNSEASONED WOOD IS USED YOUR APPLIANCE MAY NOT FUNCTION CORRECTLY

HOW TAR IS FORMED

A build up of tar within the stove and/or chimney is caused by burning wood and very low temperatures i.e. burnt slowly. The condition is much worse if the wood is not seasoned properly and contains a high moisture content. If the fire is burned at low temperature, the chimney will be cold. Cold chimneys do not work and difficulty occurs with the cold chimney trying to expel the flue gases and smoke. As a result the gases condense on the walls of the chimney and appliance and become creosote or tar.

Creosote build up is dangerous and most chimney fires are caused as a result.

IT IS ESSENTIAL TO USE WELL-SEASONED WOOD OR QUALITY SMOKELESS FUEL AT ALL TIMES.

7 LIGHTING THE STOVE

Woodburning

Ensure that both the air control wheel and top secondary air control lever are in the fully open position. See fig 6. Lay a few firelighters (or old newspaper) on the base of the stove. Light the fire and close the door. For the first few minutes, it is advisable not to close the door completely. Leave the door 1 or 2cms from the fully closed position until the fire is blazing brightly, then close the door fully. It is important to heat up the chimney quickly, so ensure that a good hot fire bed is established before adding further fuel.

Smokeless Fuel

Carry out the same procedure as above but do not open the top secondary air control lever. When burning smokeless fuel, this lever should always be in the closed position.

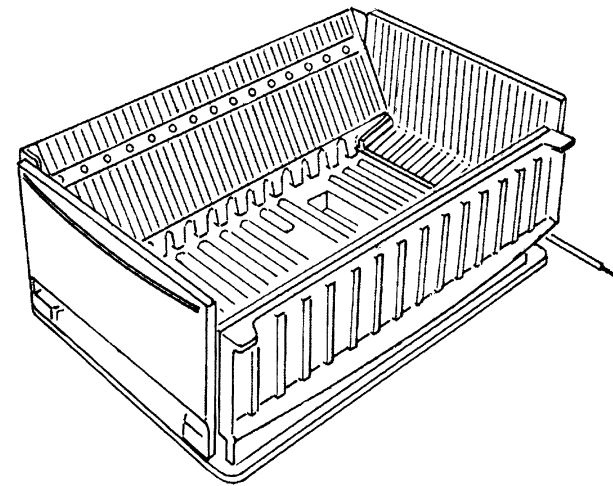


Fig. 5

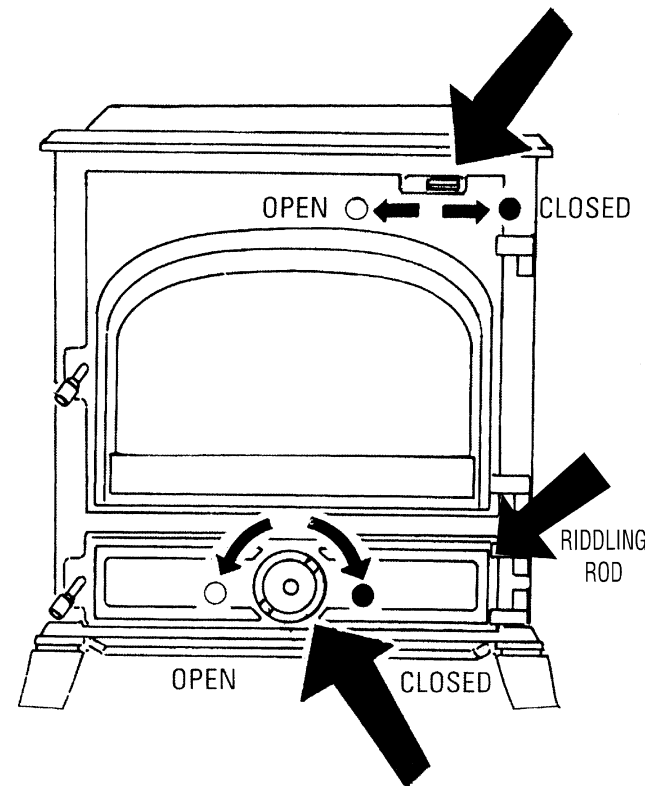


Fig. 6

8 ADDING FUEL

Your wood should ideally be 35 to 38cms in length with a diameter of between 5 and 10 cms.

It is good practice, before adding fuel, to separate the ashes from the hot wood embers. To do this, use a fireplace scraper tool to push the ashes to the rear of the stove close to the air inlet. This will help to ensure a faster response with the combustion. When adding fuel, load two or three logs of the dimensions given above, close the door and fully open the lower top air controls, see fig 6.

9 ADJUSTING HEAT OUTPUT

Once the fire has been well established, you can reduce the burning rate by closing the bottom air control wheel (fig. 6). Start by closing the wheel a little at a time. With experience, you will soon find the best positions most suited to your own installation. The top secondary lever should be left in the open position for woodburning except when overnight burning is required. The air settings will vary on different installations, depending on the type of wood being used and the draught the chimney is able to produce.

When using solid fuel, once a hot bed is established, load small quantities of fuel at a time. Use a coal hod and fireplace shovel for convenience in loading. To control the heat output in your Dovre 500MFR, adjust the bottom air spinning wheel to the required setting. THE TOP AIR INLET SHOULD BE IN THE CLOSED POSITION WHEN BURNING SMOKELESS FUELS.

During the first few hours of use, your stove may give off an unpleasant odour as the high temperature paint is cured. This is normal, so don't be alarmed as the condition only occurs during the first period of use.

10 ASH REMOVAL

When removing the ashes from a hot fire bed, try to ensure that some of the hot embers remain in the stove as this will facilitate re-lighting.

NEVER LET THE ASHPAN OVERFILL.

There should always be a good air space between the top of the ashpan and the underside of the grate. Failure to do this will cause premature deterioration of the grate and will make it difficult to empty the ashpan. Your Dovre 500MFR is equipped with a special grate mechanism which allows ashes to be riddled into the ashpan whilst the stove door is closed. The riddling control lever is situated on the right hand side of the front of the stove above the ashpit door. Gently move the lever backwards and forwards to clear the grate of ash.

To remove the ashpan, see fig 7, open the ashpit door and carefully remove the ashpan using the handle tool provided. Ashes must be disposed of carefully and it is a good idea to purchase an ash carrying box for this purpose. Your Dovre

dealer will normally be able to supply a suitable ashpan carrier box. After replacing the empty ashpan in the ashpit compartment, ensure the ashpit door is fully closed.

11 MANAGING YOUR WOOD SUPPLIES

If you are buying wood from a log merchant, try to ensure that the wood has been seasoned for at least 2 years. 3 years is even better. The wood should preferably be cut to lengths of 35 to 38cms and split to a width of between 5 and 10cms. Store your wood under cover to protect from rain but ideally the wood should be stored in a place where the wind will be allowed to freely ventilate the stack.

Try to obtain hardwoods such as oak, elm, beech or ash. These woods will provide more calorific value per cubic meter than softwoods.

12 TYPES OF SUITABLE SOLID FUEL

Almost all types of smokeless fuels can be used on your 500MFR.

However, avoid the use of petroleum coke. Anthracite medium or large nuts is an excellent fuel for good heat output but it is somewhat difficult to get started.

NEVER USE HOUSE COAL (BITUMINOUS COAL) ON THE DOVRE 500MFR

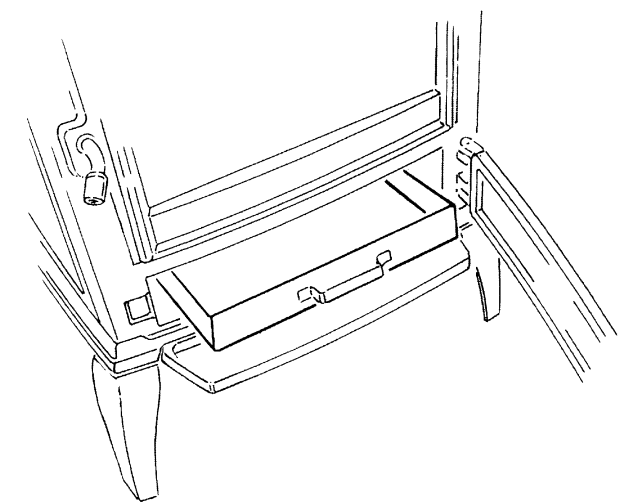


Fig. 7

13 CLEANING AND MAINTENANCE

DOOR GASKETS

The fibre door gaskets around the inside edge of the doors provide an air tight seal. Check these regularly and remove any ash or wood particles gently with a soft brush. Replace the gaskets once a year.

STOVE BODY

To clean, use a soft brush. The stove body can be repainted or touched up by using Dovre high temperature resistant stove paint.

GLASS

You may notice a build up of deposits on your glass,

particularly if the stove has been used for long periods at low temperatures. A hot brisk fire will normally cure this problem, but if the problem persists, check the quality of your wood and / or chimney. It is always recommended to fire your stove hard after an overnight burn. From time to time, the glass can be cleaned using Dovre CERACLEAN glass cleaner. Never use water or abrasive pads to clean the glass especially whilst the glass is hot.

ANNUAL MAINTENANCE

At the end of the heating season, thoroughly clean the inside of the stove and adjoining flue pipe. Arrange for your chimney sweep to inspect and clean the chimney.

14 TROUBLE SHOOTING

SMOKE EMISSION

If smoking occurs when the stove door is opened, it is a sign that the flue draught is inadequate. Mostly, this condition is caused by burning unseasoned wood and it usually indicates that the combustion temperature is too low. To overcome a weak draught, ensure your wood is dry and build a hot fire, leaving both air controls in the fully open position. If the problem persists, arrange for your chimney to be expertly checked for design and construction faults. In some instances, down draught conditions will exist and it may be necessary to fit an anti down draught device to the top of the chimney.

FIRE DOES NOT BURN FOR LONG PERIODS

Wood can contain a number of variable factors related to species, weight, age and moisture content. It is therefore difficult to be precise with regards to the length of burn

time.

If it is thought that the fuel is burning too quickly, check the following: -This is usually caused by either:-

- ❖ **Is the diameter of the logs too small**
- ❖ **If softwoods are used, change to using hardwoods**
- ❖ **Is the chimney draught excessive. If so, fit a draught stabiliser**
- ❖ **Are the door and glass seals in good condition. If these are worn, replace with new seals.**

Always try to avoid running your stove for long periods of time with the air controls closed. This point is particularly important if the wood is not well seasoned. Failure to do so, will cause the glass, stove walls and chimney to become soiled with tar deposits.



Ten Year Warranty

If the castings on this appliance should prove to be defective within ten years of the purchase date, the faulty castings will be replaced free of charge, subject to the following conditions.

1. The purchaser shall complete the registration section below and return it within seven days of purchase. Failure to return the registration could result in delays in processing any claims.
2. The appliance shall have been installed in compliance with the installation instructions.
3. The appliance shall not have been used for the burning of unseasoned wood.
4. This warranty only applies to the appliance body castings and does not include renewable components including grates, ashpans, glass, seals and baffle plates.
5. This warranty does not cover site visits and any claims should be notified to your dealer.

This warranty does not affect the Statutory Rights of Consumer Purchasers

Please complete and return this section within seven days of purchase to:
Dovre Castings Ltd., Weston Works, Weston Lane, Tyseley, Birmingham B11 3RP

Name:

Address:.....

Telephone Number:

Model:

Date of Purchase:

Dealer:.....





Unit 1, Weston Works, Weston Lane, Tyseley, Birmingham B11 3RP.

Tel: 0121 706 7600. Fax: 0121 706 9182.

E-mail: enquiries@dovre.co.uk

Web site: www.dovre.co.uk