

Jøtul F 163i

Jøtul F 163i
Revision 1.0

Installation & Operating Instructions



Keep these instructions for future reference

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1. Installation

THE INSTALLATION INSTRUCTIONS IN THIS MANUAL APPLY TO THE JØTUL F 163i WOOD HEATER MODEL.

IT HAS BEEN TESTED FOR EMISSIONS AND EFFICIENCY AND COMPLY ACCORDING TO AS/NZS 4012:2014 & AS/NZS 4013:2014.

Most building regulatory authorities in Australia require any wood heater installation to comply with Installation Standard AS/NZS 2918. Different states and councils may have varying regulations. Check local building regulations before installing the appliance.

All Jøtul wood heaters have been tested to ensure they will meet the appropriate safety standard requirements if the instructions in this manual are followed. As the safety and emissions performance can be affected by altering the appliance, no modifications are allowed without written permission from the manufacturer.

WE RECOMMEND THAT THE INSTALLATION OF YOUR JØTUL WOOD HEATER BE CARRIED OUT BY A QUALIFIED INSTALLER.

WARNING: THE APPLIANCE AND FLUE-SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH AS/NZS 2918 AND THE APPROPRIATE REQUIREMENTS OF THE RELEVANT BUILDING CODE OR CODES.

WARNING: APPLIANCES INSTALLED IN ACCORDANCE WITH THIS STANDARD SHALL COMPLY WITH THE REQUIREMENTS OF AS/NZS 4013 WHERE REQUIRED BY THE REGULATORY AUTHORITY, I.E. THE APPLIANCE SHALL BE IDENTIFIABLE BY A COMPLIANCE PLATE WITH THE MARKING 'TESTED TO AS/NZS 4013'.

ANY MODIFICATION OF THE APPLIANCE THAT HAS NOT BEEN APPROVED IN WRITING BY THE TESTING AUTHORITY IS CONSIDERED TO BE IN BREACH OF THE APPROVAL GRANTED FOR COMPLIANCE WITH AS/NZS 4013.

CAUTION: MIXING OF APPLIANCE OR FLUE-SYSTEM COMPONENTS FROM DIFFERENT SOURCES OR MODIFYING THE DIMENSIONAL SPECIFICATION OF COMPONENTS MAY RESULT IN HAZARDOUS CONDITIONS. WHERE SUCH ACTION IS CONSIDERED, THE MANUFACTURER SHOULD BE CONSULTED IN THE FIRST INSTANCE.

CAUTION: CRACKED AND BROKEN COMPONENTS, e.g. GLASS PANELS OR CERAMIC TILES, MAY RENDER THE INSTALLATION UNSAFE.

1.1. Technical data

Technical data according to AS/NZS 4012 & 4013

Max average heat output:	8 kW
Overall average efficiency:	65%
Efficiency on Low setting:	70%
Particulate emissions:	1.5 g/kg
Operational mode:	Intermittent

Intermittent combustion is here taken to mean normal use of a fireplace, meaning that each fire should burn down to embers before new firewood is added.

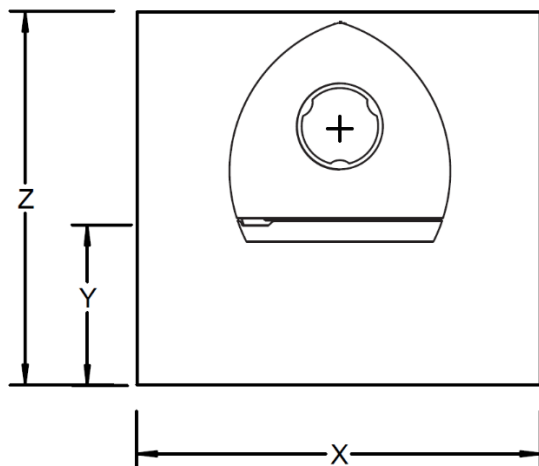
1.2. Floor Protector

Unless the heater will be standing on a non-combustible floor such as a concrete slab with slate or tiles, it will be necessary to provide a floor protector (hearth) to install on.

The floor protector must extend at least from the back of the heater, up to a specified distance in front of the door opening and not less than 200mm either side of the firebox door opening. The table and drawing below show the MINIMUM dimensions (mm) required for the floor protector. It may be desirable, for example aesthetic reasons, for the floor protector to be larger than these minimum dimensions.

The floor protector must not be less than 5mm thick with a thermal conductivity not greater than 0.33 W/m²K, or an equivalent.

Hearth	Thickness	X	Y	Z
Cement Sheet or equivalent	5	730	300	750



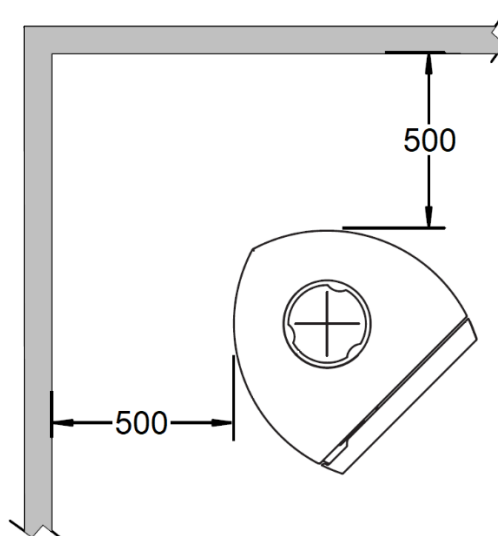
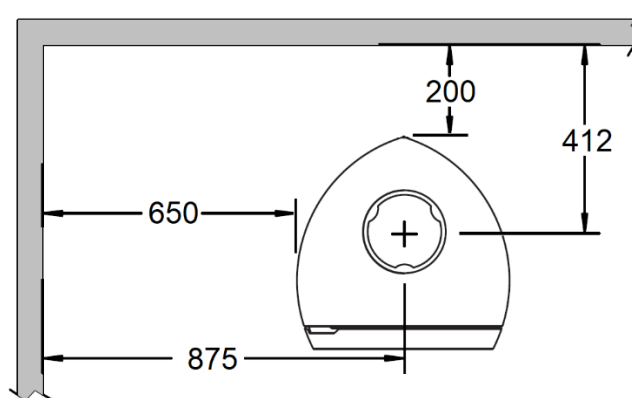
1.3. Positioning the heater

First, review the necessary clearances to combustible surfaces (mm) specified in the table and drawings below before considering where to position the heater. The clearances are only valid if installed with a rear flue shield as referred to in section 'Installing the Flue'.

Check the practicability of installing the flue system in relation to any obstructing roof beams before positioning the heater.

If the heater is being installed adjacent to a non-combustible wall, then the installation must be in accordance with AS/NZS 2918.

Flue Shield	Rear	Side	Corner
900mm Rear Flue Shield	200	650	500



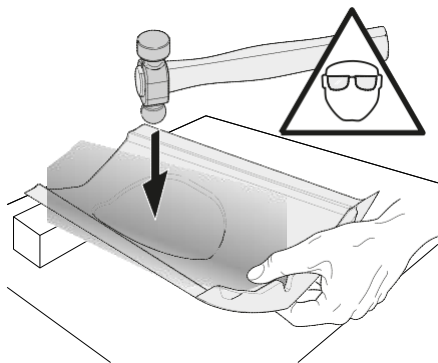
1.4. Air supply

The outside air connection may be fitted directly to the product through:

- Through a flexible supply hose from the outside or chimney (only if the chimney has its own duct for external air) and to the product's outside air connector.

Fig. 2a, through an outside wall

Important! The knockout for the outside air connection must be removed from the inside. Use safety goggles.



Tip: It is a great advantage if the rear leg is dismantled before removing the knockout.

- 1) Lay the product carefully down on its side. You can put the cardboard packaging on the floor to protect it from scratches, etc.
- 2) Remove the rear leg.
- 3) Use a heavy mallet and strike hard in the middle of the knockout.

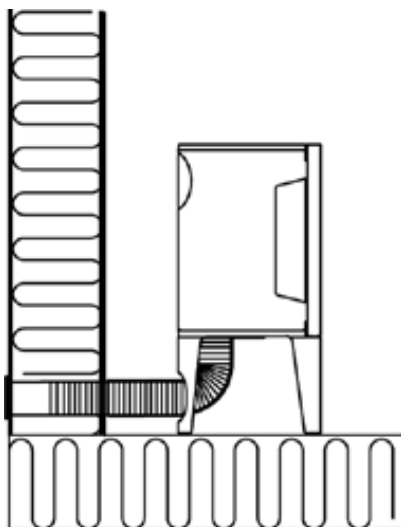


Fig. 2b, through the floor and ground plate

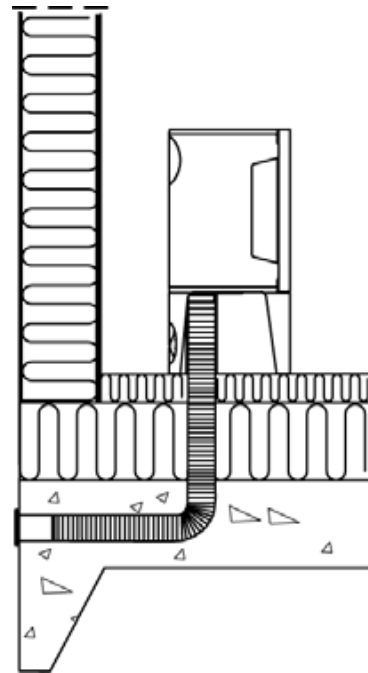


Fig. 2c, through the floor and basement

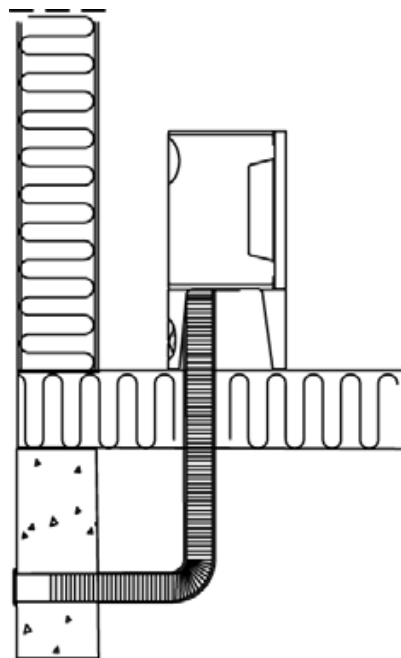
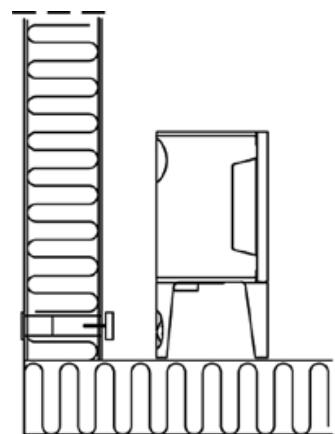


Fig. 2d, indirectly through an outside wall



1.5. Installing the flue

The flue system used when installing the heater MUST comply with the current installation standard AS/NZS 2918.

Full instructions on the installation of the flue will be supplied with the flue kit. These MUST be followed closely, including the minimum exit height from the top of the floor protector being not less than 4.6m, and the minimum exit height above the roof line of roof ridge as detailed in the flue kit instructions.

If installed adjacent to a combustible surface, a rear flue shield with a minimum length of 900mm extending from the top of the heater upwards, and not less than 20mm off from the rear of the active flue must be fitted.

If the draft is insufficient or periodic down drafting occurs and the heater smokes or only burns slowly, extending the flue or fitting a specialized cowl will usually resolve the issue.

1.6. Assembly prior to installation

NB: Check that the fireplace is undamaged before installation begins.

NB: The product is heavy! Ensure you have help when positioning and installing it. Make sure the product does not topple over.

NB: Do not place anything on the top plate of the stove as this could cause permanent damage to the paint.

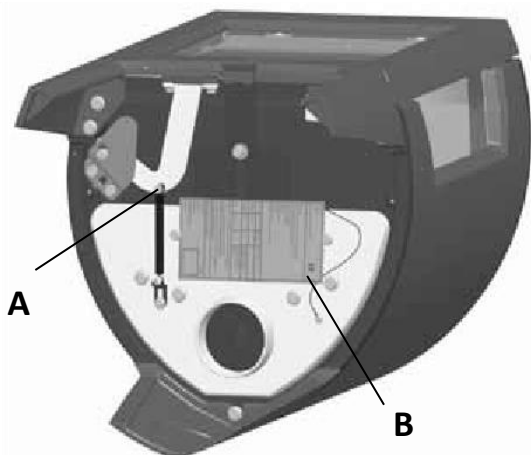
NB: Read the Installation and Operating instructions carefully before installing the fireplace!

1.7. Self-closing door mechanism

The appliance is delivered with a self-closing door mechanism. If wanted this can be removed.

- 1) Unscrew the screw and nut (A in the figure)
- 2) Unhook and remove the spring

Fig. 3

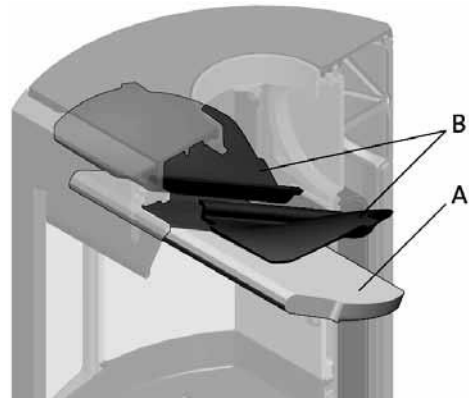


1.8. Fitting the flue pipe with the rear outlet

The product is supplied from the factory with the smoke outlet fitted for the top outlet.

NB! Proceed as follows for installation with a rear outlet and in accordance with AS/NZS 2918 with respect to safety clearances to combustible materials:

Fig. 4



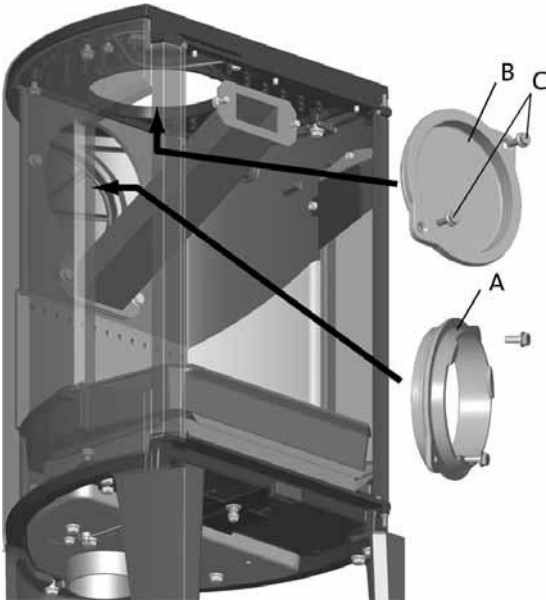
- 1) Lift the baffle (Fig. 4 A) up carefully.
- 2) Remove one of the vermiculite side burn plates by lifting them up a little and then out. (Be aware if using tools, that vermiculite plates may be damaged by rough handling).
- 3) Remove the baffle.
- 4) Remove the other vermiculite side burn plate.

Fig 5.



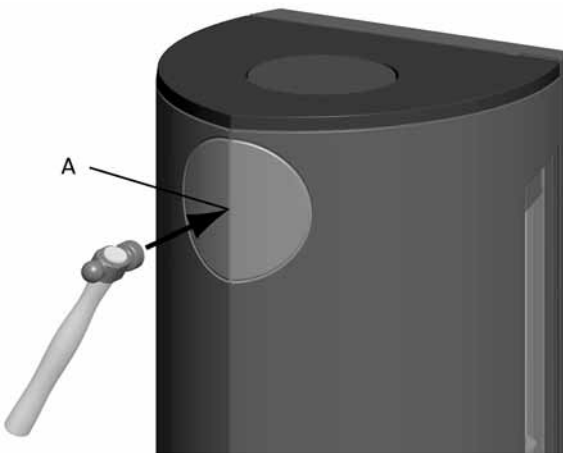
- 5) Unscrew the screws (fig. 5 A) and remove the smoke outlet (fig. 5 B) from the top outlet from the inside of the burn chamber.

Fig. 6a



- 6) Unscrew the screws (fig. 6a C) and remove the cover (fig. 6a B) from the rear outlet from the inside of the burn chamber.

Fig. 6b



- 7) Knock out the removable cover plates (fig. 6b A).
8) Attach the smoke outlet (fig. 6a A) on the inside of the burn chamber where the cover was.
9) Install the cover (fig. 6a B) where the smoke outlet was.
10) Refit the baffle plate (fig. 4 A).

2. Operating

WARNING: ANY MODIFICATION OF THE APPLIANCE THAT HAS NOT BEEN APPROVED IN WRITING BY THE TESTING AUTHORITY IS CONSIDERED AS BREACHING AS/NZS 4013.

WARNING: DO NOT USE FLAMMABLE LIQUIDS OR AEROSOLS TO START OR REKINDLE THE FIRE.

WARNING: DO NOT USE FLAMMABLE LIQUIDS OR AEROSOLS IN THE VICINITY OF THIS APPLIANCE WHEN IT IS OPERATING.

WARNING: DO NOT STORE FUEL WITHIN HEATER INSTALLATION CLEARANCES.

WARNING: WHEN OPERATING THIS APPLIANCE AS AN OPEN FIRE USE A FIRE SCREEN.

WARNING: OPEN AIR CONTROL (AND DAMPER WHEN FITTED) BEFORE OPENING FIRING DOOR.

CAUTION: THIS APPLIANCE SHOULD NOT BE OPERATED WITH A CRACKED GLASS.

CAUTION: THIS APPLIANCE SHOULD BE MAINTAINED AND OPERATED AT ALL TIMES IN ACCORDANCE WITH THESE INSTRUCTIONS.

CAUTION: THE USE OF SOME TYPES OF PRESERVATIVE-TREATED WOOD AS A FUEL CAN BE HAZARDOUS.

2.1. Safety

There is a certain element of danger every time you use your fireplace. The following instructions must be followed:

- The minimum safety distances when installing and using the fireplace must be maintained.
- Ensure that furniture and other flammable materials are not too close to the fireplace. Flammable materials should not be placed within 900 mm of the fireplace.
- Allow the fire to burn out. Never extinguish the flames with water.
- The fireplace becomes hot when lit and may cause burns if touched.
- Only remove ash when the fireplace is cold. Ash can contain hot embers and should therefore be placed in a non-flammable container.
- Ash should be placed outdoors or be emptied in a place where it will not present a potential fire hazard.

In case of flue/chimney fire:

- 1) Close all air controls.
- 2) Keep the firebox door closed.
- 3) Call the fire service.
- 4) Do not use the appliance after a flue fire until an accredited installer has assessed the cause and any resultant damage.

2.2. Air supply

Warning! Please ensure that there is adequate air supply from the outdoors to the room in which the fireplace is to be installed.

An inadequate air supply could cause smoke gas to escape into the room. This is very dangerous! Symptoms of this include smoky smell, drowsiness, nausea and feeling ill.

Ensure that air vents in the room where the fireplace is located are not blocked.

Avoid using mechanical fan vents in a room with a fireplace. This may cause negative pressure and draw poisonous gasses into the room.

2.3. Using the fireplace for the first time

When the fireplace is used for the first time, it may emit an irritating smell as the paint dries. The smell is non-toxic, but the room should be thoroughly ventilated. Let the fire burn with a high draught until all traces of the gas have disappeared and no smoke or odours can be detected.

2.4. Wood quality

By good quality firewood we mean logs of, for example, red gum, sugar gum, blue gum.

Good quality wood should be dried so that the water content is not greater than 20%. To achieve this, the wood should be chopped at the latest in late winter or early spring. It should be cut and stacked so that air circulates around it. The stacks must be protected to avoid absorbing excessive rainwater. The logs should be placed under cover in autumn for use during the winter season.

Consequences of using damp wood may include:

- Appearance of soot/tar on the glass, in the fireplace and in the chimney.
- Fireplace will give less heat.
- Risk of chimney fire because of accumulation of soot in the fireplace, flue pipe and chimney.
- The wood is difficult to light, and the fire can die.

Be especially careful never to lay a fire using any of the following materials:

- Household waste, plastic bags, etc.
- Painted or impregnated wood (highly toxic).
- Chipboard or laminated boards.
- Driftwood (seawater).

This may harm the product and pollute the atmosphere.

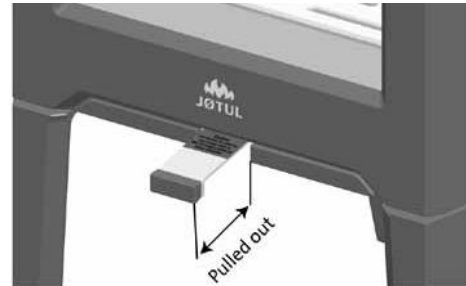
Never use combustible liquids such as petrol, kerosene, alcohol or similar to start the fire. This may cause harm to both yourself and the product.

2.5. Control of functions

When the product is set up, always check the control functions. These shall move easily and function satisfactorily.

Ignition

Fig. 7a



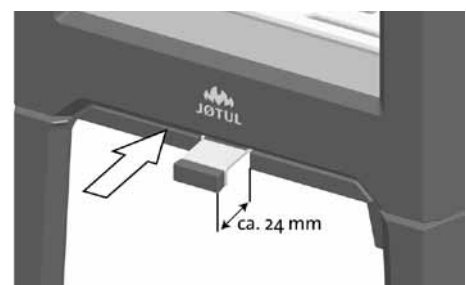
- Open the ignition vent and air vent by pulling the handle all the way out. (Use a glove or something similar to protect your hand in case the handles are hot.)



- Place two logs at the bottom of the burn chamber and pile the kindling in layers.
- Finally, place a medium-sized log on the top of the pile.
- Place 2 or 3 briquettes or kindling sticks under the top layer of kindling and light the fire.

Heating

Fig. 7b



- Leave the ignition-/air vent 40 mm (fig. 7 B) open when the wood has caught fire properly and is burning well.
- Close the door.
- You can then regulate the rate of combustion to give the heat you want by adjusting the air vent.
- Check that the afterburning (secondary combustion) starts. This is best indicated by yellow, flickering flames in front of the holes under the baffle.

2.6. Adding firewood

- Each load should burn down to embers before new firewood is added.
- Open the door slightly and allow the negative pressure to level out prior to opening the door completely.
- Add the wood and make sure that the air vent is fully open for a few minutes until the wood has caught fire.
- To gain efficiency and minimal emissions the wood should be placed in a front to back orientation inside the firebox.
- Close the air vent once the wood has properly ignited and is burning well.

2.7. Danger of overheating

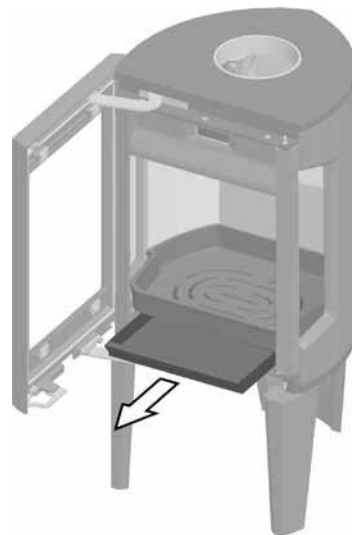
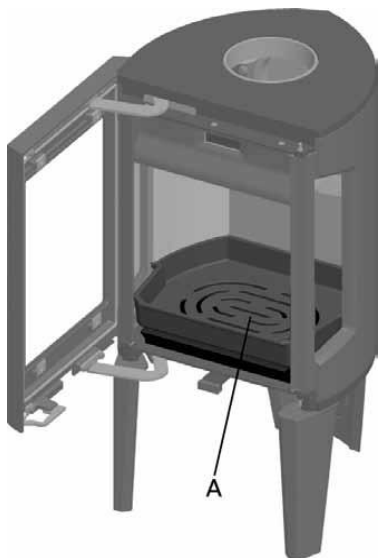
The fireplace must never be used in a manner that causes overheating. Overheating occurs when there is too much fuel and/or too much air so that too much heat develops. A sure sign of overheating is when parts of the fireplace glow red. If this happens, reduce the air vent opening immediately.

Seek professional advice if you suspect that the chimney is not drawing properly (too much/too little draught). For further information, see 'Installing the flue'.

2.8. Ash removal

The Jotul F 163 has an ash pan which makes it easy to remove the ash.

Fig. 8



- 1) Scrape the ash through the grate (fig. 8A) in the base plate and into the ash pan. Use a glove to grab the handle on the ash pan.
- 2) Make sure that the ash pan doesn't fill up so high that it keeps ash from coming through the grate into the pan.

3. Maintenance

3.1. Cleaning the glass

The product is equipped with an air wash for the glass. Air is sucked in through the air vent on the top of the product and down along the inside of the glass.

However, some soot will always stick to the glass, but the quantity will depend on the local draught conditions and adjustment of the air vent. Most of the soot layer will normally be burned off when the air vent is opened all the way and a fire is burning briskly in the fireplace.

For normal cleaning, moisten a paper towel with warm water and add some ash from the burn chamber. Rub it over the glass and then clean the glass with clean water. Dry well. If it is necessary to clean the glass more thoroughly we recommend using a glass cleaner (follow the instructions on the bottle).

3.2. Cleaning and soot removal

Soot deposits may build up on the internal surfaces of the fireplace during use. Soot is a good insulator and will therefore reduce the fireplace's heat output. If soot deposits accumulate when using the product, they can easily be removed by using a soot remover.

In order to prevent a water and tar layer from forming in the fireplace, you should regularly allow the fire to burn hot in order to remove the layer. An annual internal cleaning is necessary to get the best heating effect from your product. It is a good idea to do this when cleaning the chimney and flue pipes.

3.3. Cleaning the Flue

Check inside of flue prior to each season for any build-up of creosote (wood tar).

To check the flue:

- 1) Remove the baffle.
- 2) Hold a small mirror on an angle below the flue, with a torch shining towards it, and look for black creosote build-up. It is normal to see a fine black powdery layer, but if built up layers of creosote can be seen, the flue requires cleaning.
- 3) If no cleaning is required, re-fit the baffle.

To clean the flue:

- 1) A flue cleaning brush can be purchased from most wood heater retail outlets or large hardware stores. Alternatively, hire a flue cleaning service to do the job for you (it's a dirty job).
- 2) With the baffle plate removed, tie a rope to one end of the brush, and drop the rope down the flue (from outside on top of the roof).
- 3) Grab the end of the rope from inside the firebox and pull the brush down through the flue.
- 4) Check the inside of the flue with the mirror and torch.
- 5) Repeat cleaning process if necessary.
- 6) Once the flue is clean, remove any excess creosote from the firebox.
- 7) Replace the baffle.

Only pull brush downwards through flue, as pulling upwards may separate the flue sections at their joins.

3.4. Inspection of the fireplace

Jøtul recommends that you carefully inspect your fireplace yourself after it has been swept/cleaned. Check all visible surfaces for cracks. Also check that all joints are sealed and that the gaskets are in the correct position. Any gaskets showing signs of wear or deformation must be replaced.

Thoroughly clean the gasket grooves, apply ceramic glue (available from your local Jøtul dealer) and press the gasket well into place. The joint will dry quickly.

3.5. Exterior maintenance

Painted products may change colour after several years' usage. The surface should be cleaned and brushed free of any loose particles before new paint is applied.

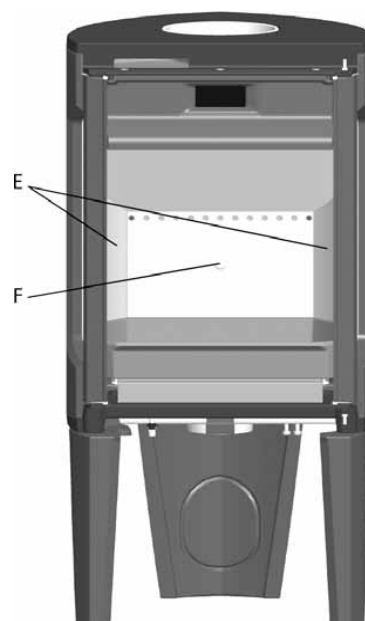
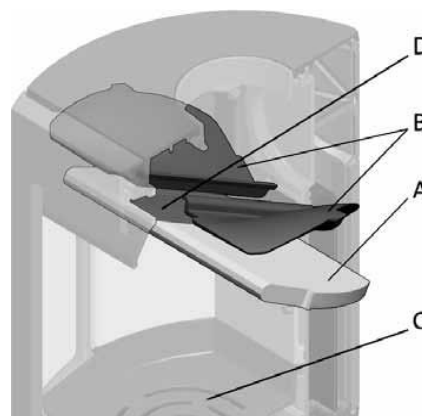
Enamelled products must only be cleaned with a clean, dry cloth. Do not use water and soap. Any stains can be removed with a cleaning fluid (oven cleaner etc.).

4. Servicing

Warning! Any unauthorised changes to the product are illegal! Only original spare parts may be used!

4.1. Changing the vermiculite baffle & burn plates & inner bottom grate

Fig. 9



- 1) Lift the baffle (Fig. 9 A) up carefully.
- 2) Remove one of the side vermiculite burn plates (Fig. 9 E) by lifting them up a little and then out. (Be aware if using tools, that vermiculite plates may be damaged by rough handling).
- 3) Remove the vermiculite baffle.
- 4) Remove the other vermiculite side burn plate.
- 5) Unscrew the M8x25 mm screw on the rear steel burn plate (Fig. 9F) and remove the burn plate.
- 6) Then lift up and remove the inner bottom grate (Fig. 9 C).

Follow the same procedure for installation, but in the opposite sequence.

5. Troubleshooting

5.1. Poor draught

Check the length of the chimney and that it complies with national laws and regulations. Make sure that there is not anything preventing the smoke gasses from escaping: branches, trees, etc.

Upon suspicion of excessive/poor draught in the chimney, seek professional help for measurement and adjustment.

5.2. The fire extinguishes after a while

- Make sure that the firewood is sufficiently dry.
- Find out whether there is negative pressure in the house, close mechanical fans and open a window close to the fireplace.
- Check that the air vent is open.
- Check that the flue outlet is not clogged by soot.

5.3. Unusual amount of soot on glass

Some soot will always stick to the glass, but the quantity depends on:

- Moisture in the fuel.
- The local draught conditions.
- Air vent opening.

Most of the soot will normally burn off when the air vent is opened all the way and a fire is burning briskly in the fireplace. See section 'Cleaning the glass'.

6. Manufacturer/Distributor

Manufactured by:

Jøtul AS

N-1602 Fredrikstad

Norway

Distributed by:

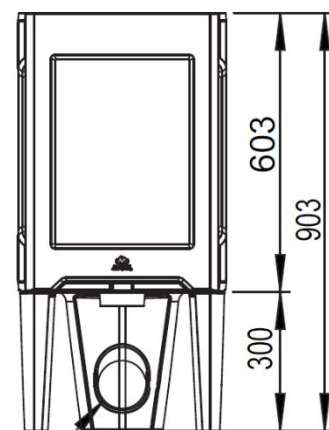
Glen Dimplex Australia

5-7 Duncan Road

Dry Creek SA 5094

Telephone: +61 8 8349 8332

7. Dimensions



Hole in wall for external air
Ø 100 mm

