

# Dean Stoves

Dean Forge Fabrication Ltd. Dean Prior, Buckfastleigh, Devon TQ11 0LS

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## Operating Instructions For The Dean Forge Dartmoor Inset Stove

**All stoves meet the essential type test requirement BS EN13229:2001 + A1:2003 +A 2:2004**

### **Safety Note**

**Warning-** The external parts of the appliance will get very hot to the touch and due care will be needed when operating.

All stoves before being operated must be checked that the installation complies to all local, national and European standards.

Before the stove is first used or when fitting other appliances into the room, please check that adequate air vents are in place to cover the requirements of such appliances.

**Extractor fans** when operating in the same room or space as the appliance may cause problems.

### **Wood & Suitable fuels**

**Dry wood, 18% moisture content or below must be used or the stove and flue will tar up and the door won't stay clean.**

Wood is best seasoned by splitting it into a log and drying it out for 2 years in a covered area so the air can pass. Peat can also be used but must be dry.

**When used as a Multi Fuel use only fuels recommended for enclosed appliances.**

**Please Note:** Appliances should not be used as general incinerators or with non-recommended fuels. **At no time** should liquid accelerants I.e: Paraffin, Petrol, BBQ lighting liquid Etc be used.

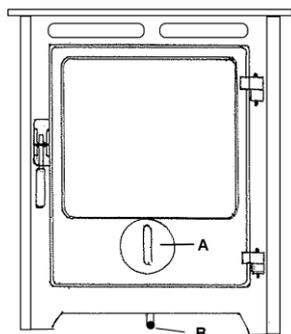
The chimney needs to be swept at least once a year.

## **Door Operation & controls**

The door handle can become very hot so use the glove provided. A tool is provided to control the spin wheel and air wash lever.

## **Controlling the stove**

**Diagram A:**



**Primary air control (A)** on front of door.

**Secondary air control (B)** below the ash shelf

The primary air control (A) is a spin wheel on the door. This control is used for lighting the fire or boosting the fire. This is also the main control when burning Solid Fuel.

The secondary air wash control lever (B) situated under the ash catch lip controls the preheated air wash when burning wood once the fire in the stove is established. This lever should be used to control the fire.

Control (B) works as follows:

Fully in for maximum air flow into the stove and fully out for airflow to be shutdown.

The stove is at its maximum efficiency when the lever is approximately half way.

## **Lighting The Stove with Wood**

Lay a fire of sticks and paper. Firelighters can also be used. Check the secondary air lever is fully open and the primary air spinner partially open. Light the fire and as the fire catches the paper you may then fully open the primary air vent.

When the fire has fully established and the logs are burning well shut the primary air vent on the door and control the fire with the secondary air wash lever B (if you are unable to sustain the fire with secondary control it is very likely that your logs have a high moisture content).

For longer periods of burning fill the firebox with wood and make sure the primary air vents are closed and the secondary air control is out fully.

Please Note: For long periods of burning you will need to use seasoned hard wood. Longer periods of burning may cause the door glass to blacken, but this can be cleared when you get the fire back up to temperature and providing the secondary air control is slightly open this will then stay clear.

When loading the fire be careful not to leave logs projecting over the log retainer as you may crack the glass when closing the door.

When the stove is in use in the winter season we suggest 25mm (1") of ash is left in the bottom after cleaning as a wood fire burns more efficiently on a bed of ash.

Remove the ash by using a small shovel. Shovel the ash into a **non-flammable container**, or we suggest using an ash clean attachment which can be plugged into your vacuum cleaner.

## **Lighting The Stove With Solid Fuel**

Lay a fire of sticks and paper, establish the fire and then add the appropriate smokeless fuel and use the primary air control as the main control. If using a mixture of wood and coal, balance the primary and secondary control to achieve the desired fire.

When using solid fuel in this stove you must only use fuels recommended for enclosed appliances, Oil derivative fuels must not be used as this will shorten the life of the grate.

The Ash pan will need emptying once a day.

When using solid fuel the stove will work best using the primary air control. It is unlikely you will need to use the secondary air control which will only need to be opened slightly to keep the glass clear. With suitable adjustment of the primary air control, a bed of smokeless fuel charged to the level of the fuel retainer should burn well for about 1.5 - 2 hours before the need to riddle the fire.

In the summer or when the stove is not being used for a long period of time, clear all the ash out and leave primary and secondary air vents open to prevent condensation.

### **Please Note:**

When lighting the stove for the first time the paint on the stove will cure and give off a metallic smell. It is advisable to ventilate the room i.e. open the windows. This will subside after the stove has been burning hot for at least 2 hours.

The appliances have been assessed and are suitable for intermittent burning.

Operation with the door open can cause excess smoke. The appliance must not be operated with the appliance door left open except as directed in the instructions.

## **Pre-Season Check:**

The chimney needs to be swept at least once a year.

The chimney must be checked for blockages before lighting i.e.: bird's nests

This is probably the time to have the chimney swept before the beginning of the seasons.

Before lighting at the beginning of the season or after prolonged shutdown periods, check the door seals are in good condition; the steel insulating plates/fire bricks are in good condition and baffle plate is in position.

If the stove has been used for a long period of time we suggest the chimney be swept twice a year.

## **Notes**

### **Down draughts**

In adverse weather conditions down draughting may occur and will make the stove smoke, shut the stove down.

If this occurs on a regular basis call in your engineer.

It is possible a chimney cowl will cure the problem.

### **Air vents**

Check periodically that the exterior ventilation grill is clear.

### **Servicing**

Servicing needs to be carried out by a competent engineer on a regular basis.

No unauthorised modifications of the appliance should be carried out.

Use only replacement parts recommended by the manufacturer.

### **Refuelling**

Doors should always be closed in between refuelling to prevent fumes and spillage from the firebox.

### **Faultfinding**

If the stove emits fumes. Ninety per cent of the time this will be caused by a blocked or restricted flue. It is also worth checking the external air vent.

It is possible that the baffle plate has dislodged itself from the stove.

If the stove does not perform properly this could be due to unseasoned wood or too much ash in the firebox.

In the case of the stove malfunctioning shut all vents, open the windows and let the residual fuel in stove burn out.

## **In the event of a chimney fire**

- Call the fire brigade
- Raise the alarm to let others in the house know
- Close down all the air controls of the stove, but be careful they could be very hot
- Move furniture, rugs and other objects away from the stove
- Check the chimney breast in other rooms for signs of excessive heat and move objects away if necessary
- At all times consider the safety of yourself and others in taking the above action



This stove must always be fitted with a liner. The baffle plate can be removed to facilitate cleaning through the stove.

**Insulating around the body of the stove on installation will help prevent heat loss into the fabric of the chimney and heat loss up the chimney. By doing this more heat will convect into the room.**

## **Hearth, Surround and Register Plate**

The stove must stand on non-flammable material at least 12mm thick (1/2"). The hearth must extend at least 225mm in front of the firebox and 150mm to the sides.

The stove is designed to fit into a non combustible chimney opening, If a combustible mantel piece is to be fitted to the fireplace it should be 250mm above the top of the stove and 250mm at the sides these are minimum distances.

The appliance must be installed on a floor with an adequate low bearing capacity.

If the construction doesn't meet the existing prerequisite the floor must be reinforced and a load distributing plate could be fitted.

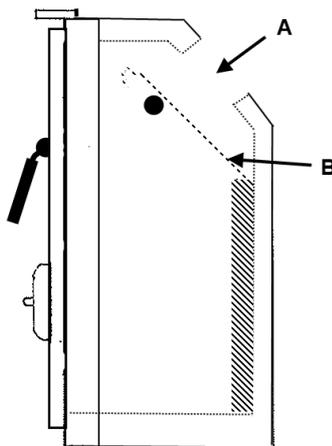
## **Flue Connection and Outlet**

Dartmoor Inset stove is flued from its angled top outlet

Dartmoor Inset model requires a 150mm 6" Flue after the initial length of flue.

Diagram of flue outlet

- A- Outlet 125mm (5")
- B- Baffle Plate



## **Table of mean flue temperatures with closed doors**

| <b>Stove Type</b>                        | <b>Flue gas temp down stream of spigot, closed doors.</b> |
|--|---|
| <b>Dartmoor Inset Wood Burning</b>       | 226C  |
| <b>Dartmoor Inset Solid Fuel (Ancit)</b> | 220C  |

## **Flue Gas Mass Flow**

| <b>Stove Types</b>                       | <b>Flue gas mass flow (gs)</b> |
|--|--------------------------------|
| <b>Dartmoor Inset Wood Burning</b>       | 4.6                            |
| <b>Dartmoor Inset Solid Fuel (Ancit)</b> | 5.7                            |

## **Pre – Lighting Check and Commissioning**

Check all Building Regulations have been adhered to.

The baffle plate is in the right position.

A smoke test has been done to check the chimney is clear.

## **Data Plate**

All stoves are numbered and performance marked on a data plate which is found on a swinging arm located at the base of the stove.

## **Air Vent**

Very air tight properties designed with air permeability less than or equal to 5.0 m<sup>3</sup>/ (h.m<sup>2</sup>) per hour, an air vent will need to be fitted for all kilowatts.

When installing an air vent you must take account air needed for any other appliances already installed in the same room.

Always refer to current building regulation when installing a stove.

**Please Note:** Extractor fans when operating in the same room or space as the appliance may cause problems.

Air vent inlet grills must not be inadvertently blocked.

Air vents must not be fitted in positions where they can be inadvertently covered up.

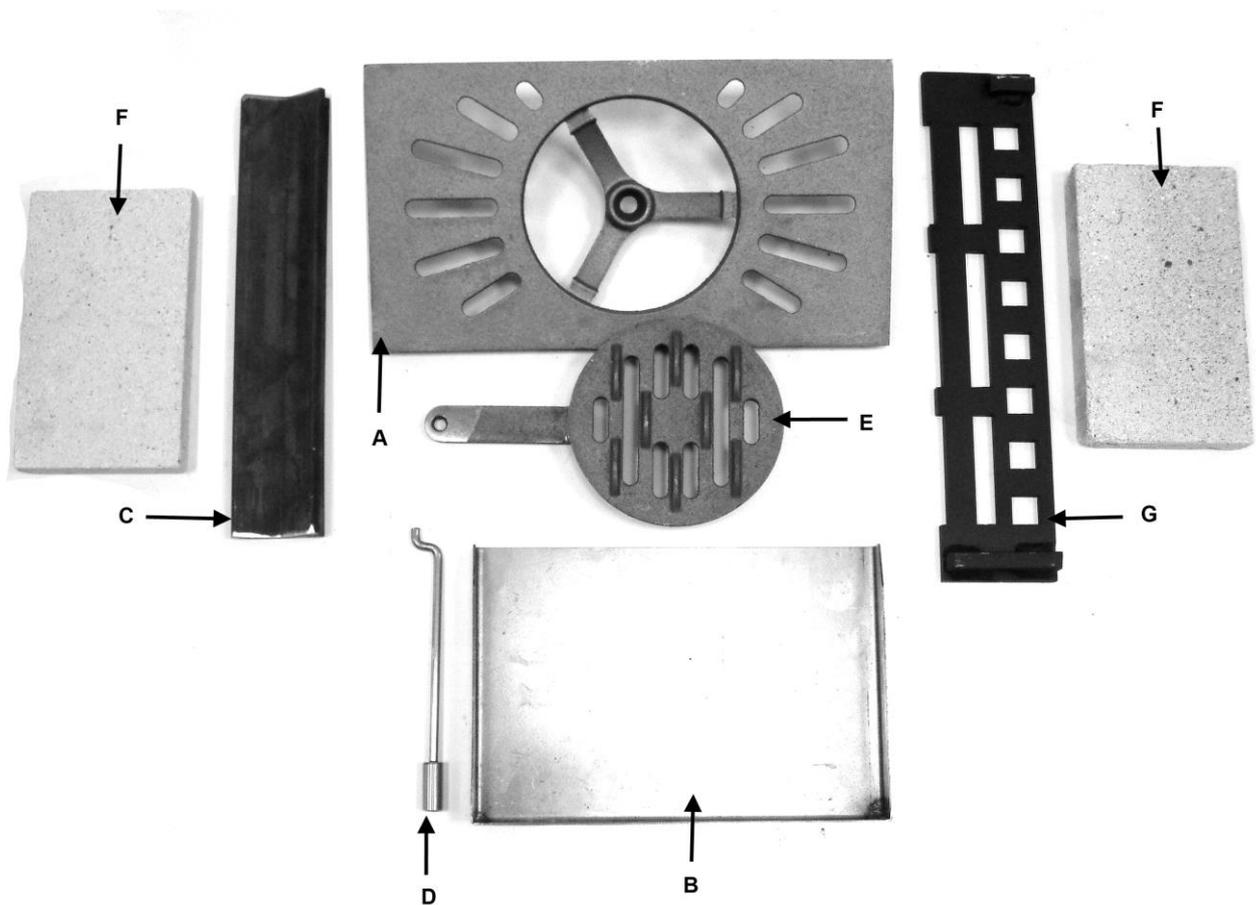
As from the 1<sup>st</sup> October 2010 a compliant Carbon Monoxide Alarm must be fitted

## Unpacking Stove

The baffle plate will need to be positioned as per diagram. Check position of bricks. Secondary air control knob will be inside the stove and will need screwing on and comes with a gauntlet and fire cement.

### Fitting of M/F kit for Dean Forge Dartmoor Inset

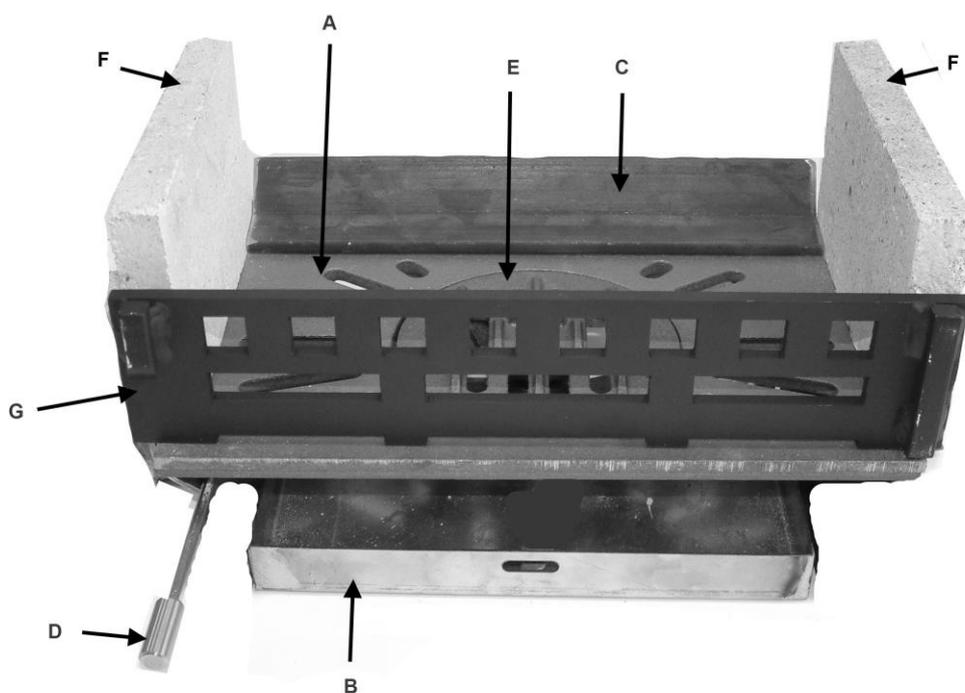
#### Dean Forge Dartmoor Inset Multi Fuel Parts



**This M/F kit consists of six parts plus two firebricks**

- A. Main Grate
- B. Ash pan
- C. Back fuel guide
- D. Riddling rod & knob
- E. Riddling Grate
- F. Fire Bricks
- G. Fuel Retainer

### Dean Forge Dartmoor 5 Multi Fuel kit Assembled



#### To fit:

Open the door and remove the log retainer (on older models), ash retainer and the bolt on the left hand side on the front of the stove near the bottom.

Place the main grate (A) into the stove with the leg to the rear of the stove and the front resting in the slots each side at the front of the stove. Fit the two side bricks (F) to each side of the main grate (A) with the top of the brick placed under the side angles welded each side of the stove. Fit the back fuel guide (C), this fills the gap between the back of the stove and the main grate (A) make sure the bracket on the underside sits against the very back edge of the main grate.

Insert the riddling rod (D) from the inside and screw the knob back on.

Fit riddling grate (E) by first fitting over the riddling rod as you place the riddling grate in the centre of the main grate.

Refit the log retainer (G) remembering the lugs face towards the front of the stove. Leave out the ash retainer that was supplied with the stove.

Slide the ash pan (B) under the main grate (A)

Note: The Multi tool supplied with the stove is also used to remove the ash pan.

## EC Declaration Of Conformity

The Undersigned, representing the following:

Manufacturer

**Dean Forge Ltd**

Dean Prior, Buckfastleigh, Devon, TQ11 0LS

Herewith declare that the products:

| <b>Description</b> | <b>Product Code</b>         |
|--------------------|-----------------------------|
| Dartmoor 5         | STDFDA5, STDFFOH<br>STDFFOL |
| Dartmoor W5        | STDFDAW5, STDFHU            |
| Dartmoor 6         | STDFDA6                     |
| Dartmoor 8         | STDFDA8                     |
| Dartmoor 5 Inset   | STDFDA5I                    |

### **Description of product:**

Dartmoor wood and multifuel heating stove product range.

Steel bodied stove fitted with cast iron doors. Supplied in various sizes to give a range of heat output options.

Are in conformity with the provisions of the following EC Directive (S) when installed in accordance with the installation instructions in the product documentation:

98/106/EEC- 305/2011 Construction Products Directive

And the standards referenced below have been applied:

EN 13240: 2001 + Amendment A2: 2004 & inset BS EN13229:2001 + A1: 2003 + A2: 2004

Provisions to which the product conforms:

| Product: Roomheater fired by solid fuel as covered under the scope of the standards listed.<br>Intended use: Space heating in residential building. |  |             |
|---|--|-------------|
| Characteristic  | Performance  | Report      |
| Fire Safety   | Satisfies  |             |
| Emission of combustible products and Thermal output/Efficiency  | Dartmoor 5 Inset- STDFDA5I<br>Co @ 13% O <sub>2</sub> Wood 0.35% Ancit 0.40%<br>5Kw @ 83.3% Wood – 4.7Kw @ 73.2% Ancit         | 6700/1      |
|   | Dartmoor 5- STDFDA5/ STDFFOH/ STDFFOL<br>Co @ 13% O <sub>2</sub> Wood 0.38% Ancit 0.40%<br>5Kw @ 81.9% Wood -5Kw @ 70.7% Ancit | 6931-1      |
|   | Dartmoor W5- STDFDAW/ STDFHU<br>co@ 13% O <sub>2</sub> Wood 0.38% Ancit 0.46%<br>5Kw @ 80.6% Wood -5Kw @ 76.0% Ancit           | 60020/4- SE |
|   | Dartmoor 6- STDFDA6<br>Co @ 13% O <sub>2</sub> Wood 0.38% Ancit 0.46%<br>6Kw @ 77.8% Wood - 6Kw @ 73.6% Ancit                  | 60020-3     |
|   | Dartmoor 8- STDFDA8<br>Co@ 13% O <sub>2</sub> Wood 0.17% Ancit 0.18%<br>8Kw @ 74.9% Wood – 73.6% Ancit                         | 60020/1     |
| Release of dangerous substances   | None   |             |
| Surface temperature   | Satisfies  |             |
| Mechanical resistance (to carry a chimney/flue)   | Maximum weight to be supported 30Kg  |             |

Test laboratory: 0692

Name: M.P Chew

Signature:



Position: Technical Director (s)

Date: 24<sup>th</sup> September 2012

**Product Fiche according to Commission Delegated Regulation  
(EU)2015/1187**

**Energy Labelling of Local Space Heaters**

|                                   |                |
|-----------------------------------|----------------|
| Supplier's Name                   | Dean Stoves    |
| Model                             | Dartmoor Inset |
| Energy Efficiency Class           | A+             |
| Nominal Heat Output to Room (kW)  | 5.0            |
| Nominal Heat Output to Water (kW) | n/a            |
| Seasonal Space Efficiency (%)     | 70.3           |
| Net Efficiency (%)                | 80.3           |

## **THE DEAN FORGE FABRICATION LTD STOVES GUARANTEE**

Dean Forge Fabrication Ltd offers a five year guarantee which covers the main body of the stove for manufacturing defects.

In the event of any failure we will replace any defective part free of charge, labour cost excluded.

This guarantee is invalid if the stove is not assembled, installed or operated as per these instructions or properly maintained or does not comply with current building regulations and any regional legislation in force at the time.

Dean Forge Fabrication Ltd does not guarantee the onsite assembly, installation or operation of the stove. Please seek advice from your supplier / installer for any relevant guarantees applicable to the installation.

Dean Forge Fabrication Ltd will not be held liable for any consequential or incidental loss, damage or injury, however caused.

Claims under this guarantee should be first made through your retailer.

This guarantee is only applicable in the UK.

Nothing in this guarantee shall effect your statutory rights.

### **Exclusions**

The following consumable parts are not covered by this guarantee:-

Fire grate, log retainer, baffle plate, fire bricks, glass panels and door seals.

Paint is also excluded from the guarantee as it will eventually deteriorate due to the normal working of the stove.

Your assistance is requested by filling in and returning the product Registration and Guarantee Form. This will help maintain our records and assist us in identifying your stove in the unlikely event of any problem occurring and also when you need to order any spare parts.



**Dean Forge Fabrication Ltd  
Dean Prior  
Buckfastleigh  
Devon  
TQ11 0LS**

**PRODUCT REGISTRATION**

**Name** .....

**Address** .....

.....

.....**Phone Number:** .....

**Suppliers Details:**

**Name** .....

**Address** .....

.....

.....**Phone Number:** .....

**Installers Details:**

**Name** .....

**Address** .....

.....

.....**Phone Number:** .....

**Date of Purchase:** ..... **Date of Installation:**.....

**Stove Serial No:** ..... **Model** .....