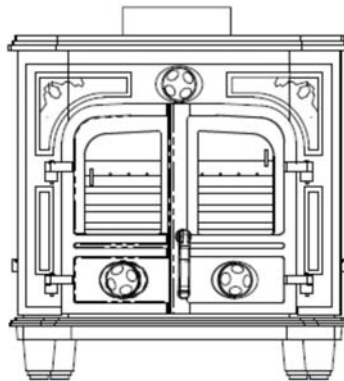




## INSTALLATION AND OPERATING INSTRUCTIONS



# HERCULES

These Instructions Cover the:  
**12, 20 & 30 RANGE OF MULTI-FUEL STOVES**

Revision: GB07c

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**Thank you** for choosing a **Hercules** cast iron multi-fuel stove.

Please take time to read this manual and follow the guidelines on how to install and operate your new stove. This will help you to enjoy, for many years to come, safe and cost effective use of your stove. The term 'multi-fuel' means that the stove is capable of burning a variety of solid fuels, for example, wood logs, coal, Phurnacite, peat and various pre-formed briquettes or a combination of these fuels. The specially designed multi-fuel grate inside your stove allows a flow of air through the base of the fire that is necessary when burning coal, or a hot ash bed to be supported when burning wood. See the section on 'Operation' for more details.

**Please note that it is a requirement under the Broseley Fires Ltd's warranty system that the installation of the stove is carried out by a Competent Person registered with a Government approved Competent Persons Scheme. HETAS Ltd operate such a Scheme and a listing of their Registered Competent Persons can be found on their website at [www.hetas.co.uk](http://www.hetas.co.uk).**

## INSTALLATION - ALL MODELS

- **The stove must be installed and commissioned by a fully qualified, registered engineer.** A "Declaration of Completion Certificate" must be obtained for the installation and retained by the end user. Failure to comply with these requirements may void the warranty.
- **The stove must be stood on a level hearth constructed of an incombustible material** such as stone, brick, quarry tile or slate etc and project at least 300mm in front and 225mm on each side of the stove.
- **The stove must have sealed connections** from the Top Plate flue outlet through a flue pipe of 200mm diameter and appropriate length into a chimney. (In most situations 175mm diameter flue pipe will not be suitable for chimneys less than 7.5m high, and must be used in conjunction the 'reducer ring' supplied with the stove as a standard part).
- **The sealed connection** can be achieved by passing the flue pipe from the Top Plate flue outlet through a closure plate that seals off the fireplace opening vertically or the base of the chimney horizontally (the plate must be made of rigid fireproof material and for durability stainless steel sheet is recommended) or directly into a pre-lined chimney.  
All joints at stove and flue connections must be made airtight with ceramic rope of appropriate diameter using fire cement only to point-up and finish. Glass-fibre rope may be used for joints in other locations.
  - **If the flue pipe is connected to a vertical closure plate** the outlet end must terminate not less than 100mm from the back wall of the chimney.
  - **If the flue pipe is connected to a horizontal closure plate** the outlet end must project a minimum of 50mm above the plate with steep haunching in sand/cement mortar and skimmed with fireclay cement, to prevent soot deposits building-up within the chimney on top of the closure plate. (If the closure plate is large and haunching impracticable, an access panel must be fitted in the closure plate or the chimney-breast above the closure plate level from which soot deposits can be removed - particular attention must be given to the fixing and sealing detail of the closure plate within the chimney construction to achieve airtight construction at this location).
  - **If the flue pipe is connected directly into a pre-lined chimney** the outlet end must project a minimum of 75mm into the lining. The internal diameter of the lining should be 25mm or less than the external diameter of the flue pipe.

Access for chimney sweeping can be achieved from within the stove by removal of the baffle plate. The baffle plate can be removed by raising either the right-hand or left-hand edge to the underside of the Top Plate and lowering the opposite handed edge into the fire chamber space where there is sufficient room to rotate and remove it through the front of the stove. Alternatively, a section of flue pipe incorporating an access door can be used.

## INSTALLATION - BOILER MODELS ONLY

- **All boiler models** are fitted with four water pipe connection bosses each with a 1.5 inch BSP female tapping located on the outside rear face of the wrap-round boiler.
- **The primary circuit supply** to the hot water cylinder must be 28mm diameter pipe with the 'flow' pipe rising vertically from one of the top connection bosses to ensure good convectional flow and permit all air to evacuate the boiler. If horizontal pipe runs are essential air bleed valves must be incorporated where air locks are prone to occur. The hot water cylinder must be of the 'indirect' type (where the domestic hot water tap supply remains separate from the water circulating through the boiler and radiators - if standard radiators and hot water cylinder are already installed this will normally be an 'indirect' system but the fitter or plumber will be able to confirm the type of system installed). It is strongly recommended that a pipe mounted thermostat is fitted to the 'primary return' pipe, close to the stove location but shielded from the direct heat of the stove or, alternatively, a surface mounted thermostat fitted directly to the hot water cylinder. The thermostat should be set to switch the water pump 'ON' when the water temperature reaches approximately 55 degrees C (a safe temperature for domestic hot water tap supply). The thermostat will ensure that the hot water cylinder will have priority to the supply of heat from the boiler, this is particularly important when the fire in the stove has been damped down for overnight burning.
- **The secondary circuit supply** to the radiators must have pipe diameter sizes appropriate to the system design for a solid fuel appliance. Pipe sizes will depend on length, height of pipe runs and number and sizes of radiators and their sequence on the circuit.

## ASSEMBLY

### For top outlet flue assembly

Place the Top Plate casting on the hearth and use a plumb line to determine the centre point for the flue alignment from the opening in the closure plate to the flue outlet opening of the Top Plate. Mark the position of the four corners of the Top Plate with a piece of chalk (these correspond exactly with the four corners of the Base Plate casting).

- **Place the Base Plate over the chalk marks**

Use the chalk marks as the 'template' to accurately position the Base Plate (the use of the four Base Cups is optional but when used ensure these are squarely seated and accurately located under the Base Plate). Check the Base Plate with a spirit level and if necessary adjust the height by turning the cups.

From this stage onwards the final position of the stove assembly is set.

- **Fit the Non-Boiler/Boiler Unit**

Place the Non-Boiler/Boiler Unit onto the Base Plate and ensure that the bottom edges are properly located onto the rebated Rope Seal that runs around the four sides of the Base Plate.

It is convenient at this stage to use a 'gun' applicator of fire cement to form a horizontal 'fillet seal' at the internal junction between the Non-Boiler/Boiler Unit and the Base Plate.

It may also be advantageous to fit the plumbing elbows and the first lengths of pipe to the Boiler Unit before locating on the Base Plate close to the rear wall of the fireplace opening within which the stove is to be located.

Ensure that the 'flow' and 'return' pipes to the primary and secondary circuits respectively, are fitted 'diagonally-opposed' for efficient water circulation within the Boiler Unit.

- **Fit the Front Plate**

Offer the vertically recessed rope seals to the leading edges of the Non-Boiler/Boiler Unit (the top edge of the Top Plate should be about 50mm above the top edge of the Non-Boiler/Boiler Unit) and allow the Front Plate to slide down until the catches engage with the pins located on the Non-Boiler/Boiler Unit.

To ensure that the Front Plate has been securely located place a woodblock on the top edge of the Front Plate and apply a sharp tap with a lump hammer to the woodblock.

## **WARNING !!!**

**DO NOT HIT THE CASTING DIRECTLY - IF THE FRONT PLATE IS STILL NOT SECURE CHECK THE LOCATION AND SEATING OF THE FRONT PLATE AND LOCATION OF THE CATCHES AND PINS - THIS IS A SIMPLE AND STRAIGHT FORWARD OPERATION AND EXCESSIVE FORCE MUST NOT BE USED.**

The Front Plate will be easier to handle if the Doors are taken off by removing the Fixing Pins which can be tapped out from underneath the Hinge Blocks.

It is convenient at this stage to use a 'gun' applicator of fire cement to form a vertical 'fillet seal' at the internal junctions between the leading vertical edges of the Non-Boiler/Boiler Unit and the Front Plate and a horizontal 'fillet seal' at the internal junction of the Base Plate and the Front Plate.

### ■ **Fit the Fire Chamber Steel Plate Panels (Non-Boiler Models only)**

The Fire Chamber Panels are fitted by locating the top edge behind the down standing face of the top retaining rail, lifting and dropping so that the bottom edge is located behind the upstanding face of the bottom retaining rail.

Note on fitting:

The panel with the large cut-out fits around the afterburner.

The panel with a cut ledge fits along the rear on the left side.

The narrow panel fits along the rear.

The other two panels (smaller than the rest) fit left and right.

### ■ **Fit the Baffle Plate**

Place the Baffle Plate on the supporting brackets. The bracket on the baffle faces the base of the stove.

### ■ **Fit the Fire Grates**

Place the two half Fire Grates on the supporting ledges (**ribbed face underside**).

### ■ **Fit the Fret Rails**

Place the first Fret Rail with the flat ash deflector bar between the back face of the Front Plate and the steel Retaining Plates.

Place the second and third Fret Rails on top of the first Fret Rail

The notched ends of the Fret Rails face inwards and are loose fitting.

### ■ **Fit the two Ash Pans**

Place the Ash Pans side-by-side in the ash-pan compartment below the Grates.

### ■ **Fit the Top Plate**

Place the Top Plate onto the stove body and check that it is centrally located and seated onto the wide recessed rope seal. The Top Plate relies upon self-weight to seal (do not use fire cement to seal).

**To dismantle the stove, follow the above sequence in reverse.**

## **IMPORTANT NOTICE !!!**

**It is essential that the chimney is of sound construction and swept clean before fitting the stove.**

**IF IN DOUBT - CHECK IT OUT (Contact a Flue Specialist or Experienced Chimney Sweep)**

## OPERATION

### IMPORTANT NOTICE !!!

On the first occasion that a fire is lit in the stove, it must only be controlled to run at a 'moderate' temperature to allow the large cast iron panels to 'cure' through three daily cycles of even heating and cooling.

This simple precaution will significantly reduce the risk of excessive 'distortion' and possibly 'cracked' panels.

To maintain a clear view of the fire, always adjust the Top Spinner to allow sufficient down draught to prevent soot and tar deposits on the internal surfaces of the glass panels. See additional note on how to 'clean the glass' in the **Maintenance and Safety** section.

#### ■ **Setting and Lighting the Fire (General)**

Open the Bottom Spinners fully, use paper and small pieces of wood, topped with small pieces of solid fuel, light the paper and close the doors. Add larger pieces of fuel then close the doors again. When the fire is well alight use the Spinners to control the rate of burning.

#### ■ **Maintaining the Fire (Day-time Cycle)**

**Coal Burning:** To start, fully open the Bottom Spinners and the Top Spinner by about one quarter; when the fire is well alight use the Bottom Spinners to control the rate of burning, close down the Top Spinner to 'trickle' ventilation but sufficient to prevent 'smoke' and 'tar' staining deposits forming on the glass panels of the doors.

**Wood Burning:** To start, fully open the Bottom Spinners and the Top Spinner; when the fire is well alight use the Top Spinner to control the rate of burning, close down the Bottom Spinners to 'trickle' ventilation.

**If the fire is 'smoky' - Coal and Wood:** (This is usual in the early stages of combustion). Open the Afterburner Control (Tertiary Air) by rotating the cover plate, located externally on the right-hand side of the stove towards the rear. When the temperature in the Fire Chamber is high enough (usually about ten to fifteen minutes after lighting) the 'smoky' fumes (volatile gases) will ignite in the secondary airflow entering the Fire Chamber through the Afterburner Control (Tertiary Air) tube (located on and about half-way up the rear wall of the Fire Chamber). When the fire is burning 'clean' (very little or no 'visible' smoke) the Afterburner Control (Tertiary Air) may be shut off or used as an additional source of 'controlled' top ventilation if wood burning.

#### ■ **Maintaining the Fire (Night-time Cycle)**

**Coal Burning:** Ensure that the grates are clear of excessive ash. Open the Bottom Spinners fully and allow sufficient time for a 'sound' hot bed of embers to be formed. Fully load the fire chamber with fresh dry fuel. Close the Top and Bottom Spinners to 'trickle' ventilation. Leave the Afterburner Control (Tertiary Air) fully open.

**Wood Burning:** Do not clear the grates of ash. Open the Top and Bottom Spinners fully and allow sufficient time for a 'sound' hot bed of embers to be formed. Fully load the fire chamber with fresh dry fuel. Close the Top and Bottom Spinners to 'trickle' ventilation. Leave the Afterburner Control (Tertiary Air) half open.

#### ■ **In the Morning (Re-Establishing the Fire)**

**Coal Burning:** Open the Bottom Spinners fully. Riddle the fire effectively to clear the overnight ash deposits and allow sufficient time for a 'sound' hot bed of embers to be formed. Open the doors and fully load the fire chamber with fresh dry fuel and then close the doors to establish the Day-time Cycle.

**Wood Burning:** Do not clear the grates of ash. Open the Top Spinner fully and it may be helpful to leave the doors partly open for a short time, fully load the fire chamber with fresh dry fuel and close the doors to establish the Day-time Cycle.

#### ■ **Operating Tool**

Use the 'U' shaped end to lift the Ash Pans and turn the door handle. Use the 'V' shaped end to turn the Spinners and operate the Riddling Mechanism located externally at low level, about halfway back, on both sides of the stove casing.

## FUEL

### ■ COAL (or Coal Derivative produced for Domestic Use)

Use unrestricted, but check Local Authority Regulations which may require the use of 'smokeless fuels'. Seek the advice of your local Coal Merchant on choice of fuel.

#### **WARNING !!!**

#### **DO NOT USE 'PETRO-COKE.**

This 'coal derivative' burns at very high temperatures and is both dangerous and unsuitable for domestic use.

**USE OF 'PETRO-COKE' WILL INVALIDATE ANY FORM OF WARRANTY OFFERED BY THE MANUFACTURER.**

### ■ WOOD

Use only dry well seasoned wood. (max 20% moisture content) Generally, wood should be 'seasoned' for at least one year before burning.

'Hard' woods burn longer than 'soft' woods. Wood has a lower calorific value than coal derivatives. These will require a longer curing period.

## MAINTENANCE AND SAFETY

### ■ Empty the Ash Pans regularly

Never allow the ash level to build-up to the underside of the Grates. This will prevent under-draught ventilation, reduce efficiency and create 'hot spots' in the Grates causing heat distortion and cracking requiring premature replacement of the Grates.

### ■ Clean the Baffle Plate

Check regularly to ensure that the top of the Baffle Plate does not accumulate soot deposits (about once each month but experience will determine the required frequency).

### ■ Clean the Glass

Use a proprietary cleaner and follow the manufacturers' instructions.

### ■ Hot Surfaces

Use a fireguard to prevent small children from touching hot surfaces and do not leave combustible materials close to the stove. Never store items on top of the stove when not lit.

**PLEASE REMEMBER THAT YOUR HEATING NEEDS, HOUSE DESIGN, LAYOUT OF PIPEWORK, LIVING STYLE AND LOCAL AUTHORITY REGULATIONS MAY BE DIFFERENT TO OTHER FAMILIES IN THEIR HOMES. SO, IT IS VERY IMPORTANT THAT YOU RECEIVE GOOD QUALITY ADVICE FROM YOUR LOCAL RETAILER AND INSTALLER ABOUT WHICH HERCULES STOVE TO BUY AND HOW IT SHOULD BE INSTALLED TO SATISFY THE REQUIREMENTS FOR YOUR HOME.**

**PLEASE KEEP A RECORD OF YOUR LOCAL CONTACTS FOR FUTURE REFERENCE JUST IN CASE YOU DO HAVE A PROBLEM OR REQUIRE A MAINTENANCE SERVICE BECAUSE THESE PEOPLE ARE IN THE BEST POSITION TO HELP YOU.**

**PLEASE REMEMBER THAT BROSELEY FIRES LTD IS THE MANUFACTURER OF YOUR STOVE AND NOT IN A POSITION TO GIVE ADVICE ON THE DESIGN, INSTALLATION AND OPERATION OF SPACE HEATING, CENTRAL HEATING AND DOMESTIC HOT WATER SUPPLY SYSTEMS IN YOUR HOME. HOWEVER, WE ARE VERY PLEASED TO ACCEPT TELEPHONE CALLS ABOUT ANY QUERIES RELATING TO THE DESIGN, TECHNICAL SPECIFICATION AND CONSTRUCTION OF THE HERCULES RANGE OF MULTI-FUEL STOVES.**

## ANNUAL SERVICE RECORD

INSTALLATION DATE OF APPLIANCE: \_\_\_\_\_

***1ST YEAR SERVICE completion date:*** \_\_\_\_\_

SERVICE ENGINEER: \_\_\_\_\_ . . REG. No. \_\_\_\_\_

COMPANY NAME: \_\_\_\_\_ .

COMPANY ADDRESS: \_\_\_\_\_ .

\_\_\_\_\_

\_\_\_\_\_

POSTCODE: \_\_\_\_\_

CONTACT NUMBER \_\_\_\_\_

***2ND YEAR SERVICE completion date:*** \_\_\_\_\_

SERVICE ENGINEER: \_\_\_\_\_ . . REG. No. \_\_\_\_\_

COMPANY NAME: \_\_\_\_\_ .

COMPANY ADDRESS: \_\_\_\_\_ .

\_\_\_\_\_

\_\_\_\_\_

POSTCODE: \_\_\_\_\_

***3RD YEAR SERVICE completion date:*** \_\_\_\_\_

SERVICE ENGINEER: \_\_\_\_\_ . . REG. No. \_\_\_\_\_

COMPANY NAME: \_\_\_\_\_ .

COMPANY ADDRESS: \_\_\_\_\_ .

\_\_\_\_\_

\_\_\_\_\_

POSTCODE: \_\_\_\_\_

***4TH YEAR SERVICE completion date:*** \_\_\_\_\_

SERVICE ENGINEER: \_\_\_\_\_ . . REG. No. \_\_\_\_\_

COMPANY NAME: \_\_\_\_\_ .

COMPANY ADDRESS: \_\_\_\_\_ .

\_\_\_\_\_

\_\_\_\_\_

POSTCODE: \_\_\_\_\_

***5TH YEAR SERVICE completion date:*** \_\_\_\_\_

SERVICE ENGINEER: \_\_\_\_\_ . . REG. No. \_\_\_\_\_

COMPANY NAME: \_\_\_\_\_ .

COMPANY ADDRESS: \_\_\_\_\_ .

\_\_\_\_\_

\_\_\_\_\_

POSTCODE: \_\_\_\_\_

***6TH YEAR SERVICE completion date:*** \_\_\_\_\_

SERVICE ENGINEER: \_\_\_\_\_ . . REG. No. \_\_\_\_\_

COMPANY NAME: \_\_\_\_\_ .

COMPANY ADDRESS: \_\_\_\_\_ .

\_\_\_\_\_

\_\_\_\_\_

POSTCODE: \_\_\_\_\_

## LIMITED WARRANTY

This appliance must be installed and commissioned by a fully qualified, registered engineer. A "Declaration of completion Certificate" must be obtained for the installation and retained by the end user. Failure to comply with these requirements may void your warranty.

You, as the end user, have a contract by law with the supplier / dealer from whom you purchased the product. That dealer then has the same contract with the manufacturer or wholesaler and these have a contract with their suppliers.

### ALL CLAIMS MUST FOLLOW THIS PROCEDURE.

Thank you for choosing a Product from **Broseley Fires Ltd.** This warranty gives you specific legal rights. The statutory rights of the consumer are not affected by the warranty, or the consumers' rights against the dealer arising from their sales / purchase contract.

#### The manufacturers' warranty:

Your Product will be free from defective parts, material, and workmanship at the time of its original purchase for a period of one (1) year. This Warranty will become active as of one month from the date of delivery.

This warranty does not cover any failure of the unit due to normal wear and tear, misuse, abuse, accident, illegal modification, illegal installation or repair, damage resulting from improper use or failure to maintain the product. Variations in color and texture are a natural characteristic of cast iron products. Colour changes may result from exposure to light and other elements which are a part of the aging process. These material variations and changes are not covered by this warranty.

If during the warranty period, this Product fails to operate under normal use and service, due to defects in material and / or workmanship, Broseley Fires will either repair or replace the product. The repaired or replaced product shall be warranted for the remaining period of the original warranty + the time taken to days from the date of repair, whichever is longer.

Repair or replacement may involve the use of functionally equivalent reconditioned units. Replaced parts or components will become the property of Broseley Fires.

Should you wish to claim under the warranty, please contact the supplier / dealer from whom you purchased the appliance. Do not claim directly to Broseley Fires, as they are unable to process any direct claim from an end user.

Product design and any specifications are subject to change without notice. This is due to our continuous product development and improvement. The buyer will not be entitled to request free upgrades to the new design or compensation for previously purchased products or any products on order.

- This Warranty covers all Broseley Fires costs within the Warranty period.

If the appliance remains uninstalled for a period greater than six months from date of delivery the Warranty will become active six months from the date of original invoice to the distributor.

IN NO EVENT SHALL BROSELEY FIRES BE LIABLE FOR INCIDENTAL OR CONCEQUENTIAL DAMAGES OF ANY NATURE WHATSOEVER, INCLUDING BUT NOT LIMITED TO LOST PROFITS OR COMMERCIAL LOSS, TO THE FULL EXTENT THOSE DAMAGES CAN BE DISCLAIMED BY LAW. (if applicable)

#### NON - COVERAGE OF THE GUARANTEE

The consumable items within the product are not covered by the warranty, nor is the glass

If the end-user's claim should not be covered by this guarantee, the end-user shall be liable for costs incurred by Broseley Fires such as callout and inspection costs for examination of the product, transportation costs of the product as well as any other relevant costs.

If, after having been informed about the non-coverage of the guarantee, the end-user wants to have the repairs done, the end-user shall additionally pay for any spare parts used and for the labour and transportation costs incurred. If repairs are carried out under this guarantee, the remaining guarantee period for the product shall be extended by the period of time that has elapsed since the complaint was officially logged with Broseley Fires until the repairs have been completed

A COPY OF OUR FULL TERMS AND CONDITIONS IS AVAILABLE ON REQUEST.

\*\* End-user means the natural or legal person who owns the product and who has not acquired it with a view to reselling or installing it in the course of business