



Approved  
for use in  
Smoke  
Control  
Areas

Eco  
Design  
Ready

High  
Efficiency

Cleanburn

External  
Air Supply

Modern  
Design

MODEL : - CARRON REVOLUTION 8  
Document REV – Version 2  
Dated 21<sup>st</sup> May 2024

# INSTALLATION AND OPERATION MANUAL

# IMPORTANT INFORMATION

BEFORE LIGHTING THE APPLIANCE, PLEASE READ THESE INSTRUCTIONS THOROUGHLY.

Installation of this appliance must either be completed by a registered HETAS installer or inspected by local authority building control if carried out by a non-registered installer.

A list of HETAS registered installers is available at [www.hetas.co.uk](http://www.hetas.co.uk)

- ✓ The installation of this appliance must comply with current building regulations/local regulations including those referring to national and European standards and in reference to BS 8303, Code of Practice for installation of domestic heating and cooking appliances burning solid mineral fuel.
- ✓ This appliance has been designed for intermittent operation.
- ✓ Regularly clean and inspect the appliance to ensure the airways are free from obstruction.
- ✓ The chimney must be swept annually.
- ✓ Take care when manoeuvring the appliance as it is very heavy. Mechanical aids should be used whenever possible.
- ✗ If the appliance becomes damaged, do not continue to use until repaired.
- ✗ Only genuine Carron spare parts must be used. Failure to do so may result in damage to the appliance/property and the warranty will be invalid.
- ✗ Unless authorised by Carron, this appliance must not be modified in anyway.
- ✗ Do not use this appliance as an incinerator.
- ✗ The appliance must not be installed in a room with an extractor fan operating.

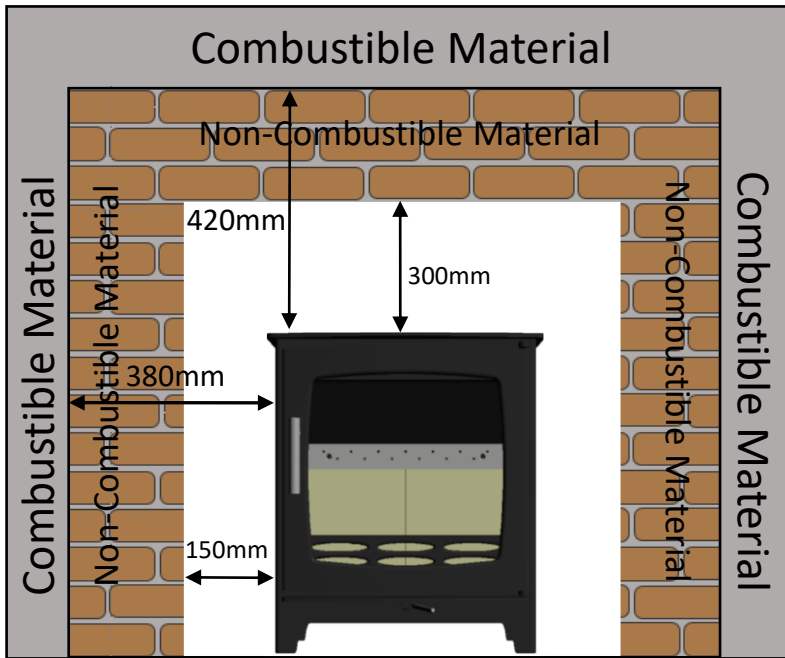
## **The Clean Air Act 1993 and Smoke Control Areas**

Under the Clean Air Act local authorities may declare the whole or part of the district of the authority to be a smoke control area. It is an offence to emit smoke from a chimney of a building, from a furnace or from any fixed boiler if located in a designated smoke control area. It is also an offence to acquire an "unauthorised fuel" for use within a smoke control area unless it is used in an "exempt" appliance ("exempted" from the controls which generally apply in the smoke control area).

In England appliances are exempted by publication on a list by the Secretary of State in accordance with changes made to sections 20 and 21 of the Clean Air Act 1993 by section 15 of the Deregulation Act 2015. In Scotland appliances are exempted by publication on a list by Scottish Ministers under section 50 of the Regulatory Reform (Scotland) Act 2014. Similarly, In Northern Ireland appliances are exempted by publication on a list by the Department of Agriculture, Environment and Rural Affairs under Section 16 of the Environmental Better regulation Act (Northern Ireland) 2016. In Wales appliances are exempted by regulations made by Welsh Ministers.

Further information on the requirements of the Clean Air Act can be found here: <https://www.gov.uk/smoke-control-area-rules> Your local authority is responsible for implementing the Clean Air Act 1993 including designation and supervision of smoke control areas and you can contact them for details of Clean Air Act requirements. The Carron Revolution 5kw Stove has been recommended as suitable for use in smoke control areas when burning wood.

# INSTALLATION INSTRUCTIONS



**Failure to adhere to these clearance will invalidate the warranty and could damage your appliance/property.**

## Hearth Requirements

Place the stove on a solid non-combustible hearth extending 300mm at the front of the stove, 150mm either side of the stove and 50mm at the rear. The hearth must have a thickness of at least 12mm. The maximum hearth temperature attained during testing was 69.3°C (Refer to document J of the UK Building Regulations). Ensure that the floor has sufficient load bearing capacity. Fit a load bearing plate if necessary.

## Flue Requirements

To ensure that your chimney meets the required specifications it must: -

- ✓ be at least 5 metres high - have no bends sharper than 45 degrees
- ✓ be swept clear of any obstructions by a qualified chimney sweep
- ✓ terminate at least 1 metre above any roof ridge
- ✓ have an internal cross-section of between 0.018m<sup>2</sup> and 0.14m<sup>2</sup>
- ✓ be free from sources of leakage
- ✓ be connected only to the one appliance i.e. not a shared flue system
- ✓ be well insulated, or have a wall thickness of at least 100mm
- ✓ Refer to the current issue of British Standards BS EN 15287-1:2007 design, installation and commissioning of chimneys.

## Installation Clearances

### **Minimum clearance to combustibles**

Above the appliance - 420mm  
Each Side of the appliance – 380mm (level with stove front)  
Each Side of the appliance – 480mm (projected side wall)  
Rear of the appliance – 420mm

### **Minimum clearance to non-combustibles**

Above the appliance - 300mm  
Each Side of the appliance – 150mm  
Rear of the appliance – 150mm (this can be reduced to 50mm if the wall thickness is greater than 200mm)

**Ensure there is a permanent air entry in accordance with the guidelines given in Approved Document J of The Building Regulations. Opening or openings with a total free area of at least 550mm<sup>2</sup> per kW of appliance rated output above 5kW, ie: 2kW x 550 mm<sup>2</sup> =1100 mm<sup>2</sup>**

# INSTALLATION INSTRUCTIONS

## Health and Safety Precautions

Special care must be taken when installing the stove such that the requirements of the Health and Safety at Work Act are met.

**Handling** - Adequate facilities must be available for loading, unloading and site handling.

**Fire Cement** - Some types of fire cement are caustic and should not be allowed to come into contact with the skin. In case of contact wash immediately with plenty of water.

**Asbestos** - This stove contains no asbestos. If there is a possibility of disturbing any asbestos in the course of installation then please seek specialist guidance and use appropriate protective equipment.

**Metal Parts** - When installing or servicing this stove care should be taken to avoid the possibility of personal injury.

## Installer must check the appliance operates correctly

- ✓ All parts are fitted correctly and guidance to the consumer given.
- ✓ Soundness of all seals/joints
- ✓ Flue functions correctly and that all products of combustion are vented to atmosphere through the chimney terminal.

## CO Alarms

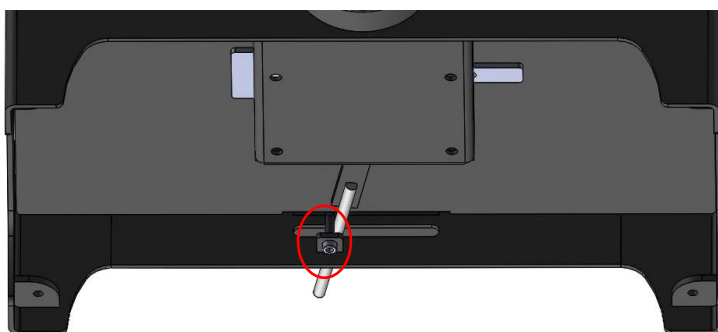
In accordance with building regulations, a Carbon Monoxide Alarm, conforming to BS EN 50292:2002 must be fitted in the same room whenever a new or replacement wood/solid fuel or biomass appliance is installed in a dwelling.

The alarm must be installed in accordance with the alarm manufacturers instructions and is not to be considered as an alternative to the appliance being installed correctly and subsequent regular maintenance of the appliance and associated flue system.

## Non-Smoke Control Areas

The Carron Revolution 8 has been factory fitted with an air stop to prevent full closure of the air controls.

If the appliance is to be used in a non-smoke exempt area, you can remove the restriction bolt which is located on the air control guide as pictured below. This must never be removed in a Smoke Exempt Area.



# OPERATING INSTRUCTIONS

## Recommended Fuels

- ✓ **Hardwood logs:** such as ash, oak and beech which have been cut for at least 12 months with a maximum moisture content of 20% and stored under shelter.
- ✓ **Maximum log length:** 300mm length with a maximum depth of 125mm.

## Prohibited Fuels

- ✗ **Green wood:** i.e. wood which is less than 12 months old with a moisture content of above 20%
- ✗ **Recovered wood:** i.e. pallets, fencing panel, railway sleepers etc. These will have been impregnated with wood preservatives which can cause issues with the flue and possibly overheat the appliance.
- ✗ **Liquid fuels.**
- ✗ **Peat based Fuels**
- ✗ **Household waste:** Burning this can produce harmful fumes.
- ✗ **solid mineral fuels**

## Initial Firing of the appliance

Please note that the first fire you light in your stove should be small, and be operated with the air inlet set as low as possible – the air control should be set in the left position to achieve this.

During this initial firing it is normal to experience fumes and a light haze from the appliance as the paint cures during which you must ensure the room is well ventilated.

## Normal Operation (after initial firing)

To establish clean burning, it is important to get the appliance hot as quickly as possible. This can be achieved with the following ignition regime:-

- I. Set the air control to the maximum setting by moving the air control to the right.
- II. Light a double-handful of kindling with a couple of firelighters, with the door 5-10mm open. After 3 minutes a hot fuel bed will have been established, then add two small sized logs (each about half the size of a "standard" 9 inch log).
- III. Let these burn well for another 3 minutes , with the door still open 5-10mm.

**Refuelling your stove** - in order to maintain clean burning, after refuelling air control needs to be open for 5 minutes afterwards.

## Over Firing

Do not run the stove with the air control fully open for prolonged periods. This may result in over firing and cause damage to the appliance invalidating your warranty

**Do not leave the stove unattended during lighting. After the ignition procedure is complete, the stove must not be operated with the door open**

# OPERATING INSTRUCTIONS

## **Refuelling on to a low fire bed**

If there is insufficient burning material in the firebed to light a new fuel charge, excessive smoke emission can occur. Refuelling must be carried out onto a sufficient quantity of glowing embers and ash that the new fuel charge will ignite in a reasonable period. If there are too few embers in the fire bed, add suitable kindling to prevent excessive smoke

## **Fuel overloading**

The maximum amount of fuel specified in this manual should not be exceeded, overloading can cause excess smoke.

## **Operation with door left open**

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.

## **Dampers left open**

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

## **Prolonged Shutdown period**

If the stove is to be left unused for a prolonged period of time then it should be given a thorough clean to remove ash and unburned fuel residues. To enable a good flow of air through the appliance to reduce condensation and subsequent damage, leave the air controls fully open. It is important that the flue connection, any appliance baffles or throat plates and the chimney are swept prior to lighting up after a prolonged shutdown period.

**Aerosol sprays** - Do not use an aerosol spray on or near the stove when it is alight.

**Use of operating tools** - Always use the operating tools provided when handling parts likely to be hot when the stove is in use.

# OPERATING INSTRUCTIONS AND WARRANTY

## Ash Removal

Wood burns most efficiently on a bed of ashes allowing you to get the best results from your wood burning stove. However, the ash, should not be allowed to build up excessively (no more the 25mm in depth) on the stove base.

When the appliance is cool, the ash should be swept from the appliance taking care not to damage the lining of the stove. Sharp pointed pokers must not be used.

Ashes can remain hot for a long period after the fire has extinguished, care must be take when disposing of these and ensuring they are completely cooled.

## Chimney Fire

In the unlikely event of a chimney fire,

- ✓ If safe to do so, ensure the stove door is closed
- ✓ If safe to do so, close the air control.
- ✓ Evacuate the property immediately and call the fire brigade.
- ✗ Do not attempt to extinguish your stove.
- ✗ Do not use the appliance until the chimney/flue has been inspected by a qualified person and any faults found have been rectified.

Persistent fume emission should not occur if the product is properly installed and operated. However, should this happen, take immediate action as follows:-

- ✓ Ventilate the room
- ✓ Extinguish the fire
- ✓ Check the chimney/flue for blockages and clean if required
- ✓ Seek expert advice if necessary.

**Caution - The stove and flue pipe will become extremely hot during use; take care especially when children or the infirm are present. Do not store flammable materials near to the stove. Any combustible furnishings must be at least 800mm away.**

## Warranty

Carron Stoves are supplied with a 5 year stove body warranty. This warranty does not cover items considered consumables, these items include door glass, fire bricks, fire rope. The use of incorrect fuels and misuse would invalidate this warranty.

Installation of this appliance must either be completed by a registered HETAS installer or inspected by local authority building control if carried out by a non-registered installer. Proof of compliance with the above would be required in the event of a warranty claim.

# MAINTENANCE INSTRUCTIONS AND SPARE PARTS

## Maintenance

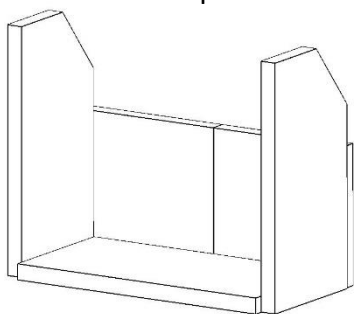
Maintaining your appliance will help ensure you have many years of trouble-free use. Regular checks of the following items is recommended: -

### **NOTE ALL MAINTENANCE TO BE CARRIED OUT WHEN THE APPLIANCE IS COLD**

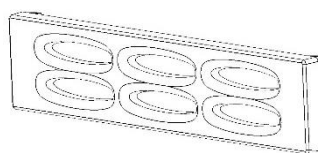
- ✓ Removal of baffle plate and clear any soot build up.
  - ✓ Check condition of the firebricks, if these have just have hairline fractures they do not require replacement. They will need to be replaced if larger cracks develop exposing the appliance body or the fire brick material begins to crumble.
  - ✓ Using a suitable stove glass cleaner, remove any discolouration from the appliance glass.
  - ✓ Inspection of the rope seal on both the appliance door and the door glass to ensure this has not deteriorated or moved.
  - ✓ Flue to be swept annually by a competent person, if in doubt contact a professional chimney sweep.
  - ✓ The stove is finished using a high temperature resistant coating which would normally last for many years. Should the need arise to refinish/refresh your appliance, this can be done using a high temperature stove paint such as 'Hotspot'.
  - ✓ If the appliance has not had regular use, the appliance and flue system should be checked to ensure it is free from blockages prior to use.
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- ✗ Do not use abrasive cleaners on the stove glass as you can damage the specialist coating.
  - ✗ 'Crazing' in the coating of the glass can take place if incorrect fuels are used, if this occurs replace the glass.

## Spares

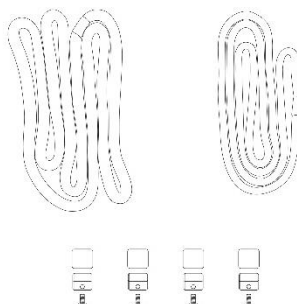
CNE009 – Replacement firebrick set



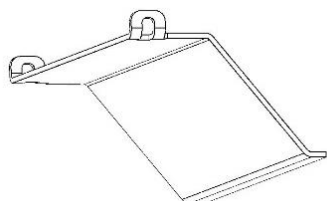
CNE011 – Replacement log retainer



CNE012 – Replacement Door/Glass Rope and Fixings



CNE010 – Replacement baffle plate



HRG010 – Replacement Door Glass

# MAINTENANCE INSTRUCTIONS

## Chimney sweeping

Removal of baffle plate to allow the chimney to be swept through the appliance as shown below



1. Open stove door



2. Remove left hand firebrick.



3. Remove right hand firebrick.



Firebrick correctly located on pin



4. Lift baffle plate off left pin and slide left.



5. Lift baffle plate off right pin and slide down

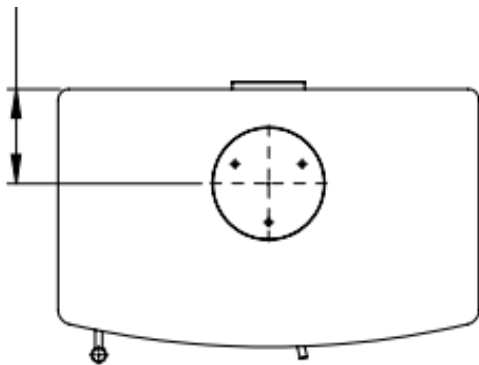
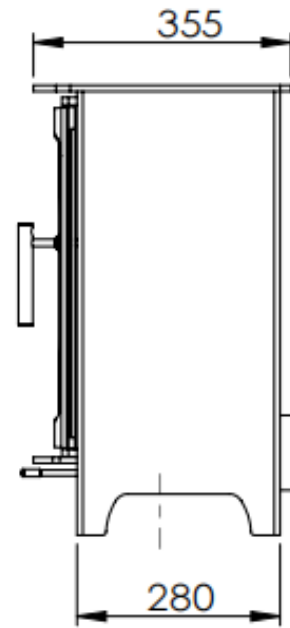
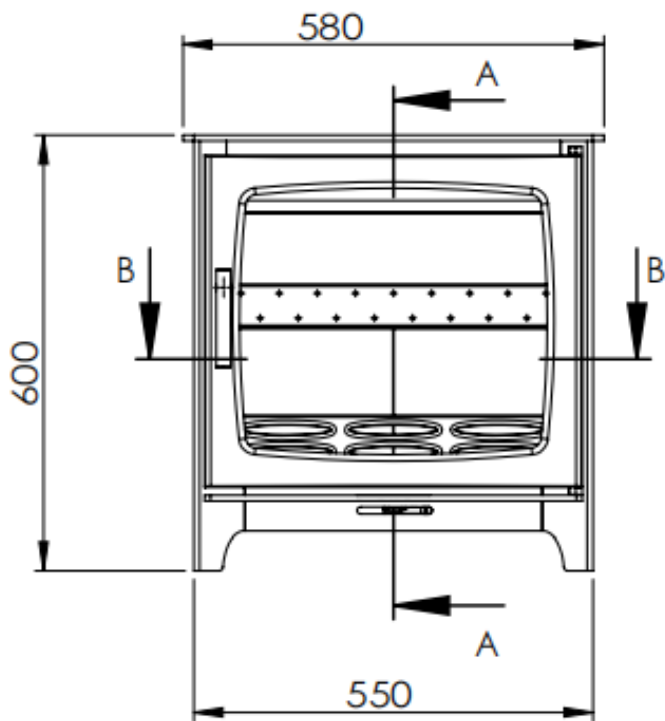


6. Remove baffle through door opening at 45° to reveal access to flue for sweeping.

To reinstate the baffle, follow these steps in reverse order.

We recommend the use of wire centered sweeps brushes fitted with a guide wheel only.

# SPECIFICATIONS



Description	Value
Particulate emissions @ 13% O <sub>2</sub> (mg/m <sup>3</sup> )	20
OGC @ 13% O <sub>2</sub> (mg/m <sup>3</sup> )	42
NO <sub>x</sub> @ 13% O <sub>2</sub> (mg/m <sup>3</sup> )	74
Energy Class	A
Energy Index	103
Seasonal Efficiency	67.7%

Carron Revolution 8kw	
Flue Diameter	125mm (5")
Flue Location	Top or Rear
Fuel	Wood
Nominal Output	8kw
Total Efficiency	77.7%
Mean flue gas temperature	321°C
Flue Draft Required	12Pa
Flue Mass Gas Flow	6.1g/s
Mean CO emission (at 13 % O <sub>2</sub> )	0.06%
Maximum Hearth Temperature	Less than 100°C
Weight	85kgs
Maximum Log Size	300mm Length 125mm Width
Construction	Steel Body & Cast Iron Door

# SPECIFICATIONS

## Product Fiche



Commission Delegated Regulation (EU) 2015/1186  
Energy Labelling of Local Space Heaters

Manufacturer Name:	Carron Stoves
Model Name:	Carron Revolution 8
Energy Efficiency Class:	A
Energy Index	103.0
Nominal Heat Output to Room	8.0
Net Efficiency:	77.7

Comments/Installation/Handover Instruction:

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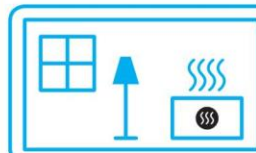
## ENERGY

Carron Stoves

Carron Revolution 8



A



8  
kW

2015/1186



## Environmental Protection



Recycle unwanted materials instead of disposing of them as waste. All unwanted accessories and packaging should be sorted and taken to a recycling centre for disposal in a manner which is compatible with the environment.

A full list of metal and stove recycling centres near you can be found on the British Metal Recycling Association web site. <https://www.recyclemetals.org/>

Email [sales@carronheating.co.uk](mailto:sales@carronheating.co.uk)  
Tel – 01400 263319

Spares available at : - [www.carronspares.co.uk](http://www.carronspares.co.uk)