

Built-In Extractor

Installation, Operation and Maintenance Instructions

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1. INTRODUCTION

During the cooking process, there will be heat, vapours and fumes produced. Your *FM900 built in extractor* has been designed to complement your kitchen both in looks and performance in order to create a good environment for creative cooking and is ideal for applications where a conventional cooker hood is neither suitable nor desirable, for example, in an inglenook chimney or kitchen furniture above the hob.

2. IMPORTANT INFORMATION

The exhaust air must not be discharged into a flue which is used for exhausting fumes from appliances supplied with energy other than electricity e.g. oil or gas-fired central heating boilers, gas-fired water heaters, etc.

Requirements of the relevant authorities concerning the discharge of exhaust air must be complied with.

Pay particular attention to fire risk when frying. To minimise the risk of fire, all instructions relating to cleaning the grease filters and removing grease deposits must be adhered to.

Do not flambé under the extractor.

WARNING

Proper care must be taken to ensure that the negative pressures caused by high performance extraction systems do not adversely affect the safe operation of certain types of fuel-burning appliances (gas, oil or solid fuel), including those installed in the kitchen and possibly also those installed in other parts of the house.

Where such fuel-burning appliances are installed, adequate ventilation MUST be provided in the room of installation, located and sized such that the negative pressure in the room created by the extractor does not exceed 4Pa.

In case of doubt, do not operate the extractor and fuelburning appliance(s) simultaneously and consult an appropriate (for the fuel type) expert for advice.

ELECTRICAL SAFETY

This appliance requires an earth connection.

Ensure that the supply voltage corresponds to that marked on the rating label inside the extractor.

The extractor must be isolated from the electrical supply before carrying out any cleaning or maintenance operations.

The minimum clearance between the top of the hob or cooker and the bottom of the extractor should be within the following range (unless a greater distance is specified by your cooking appliance or furniture manufacturer):

hob-to-extractor minimum clearance distances:

450mm above electric hobs and cookers 650mm above gas hobs and cookers 760mm above wok burners, griddles, barbeques.

• hob-to-extractor clearance (max recommended): 900mm

The minimum distance between the hob and the bottom of the extractor is essential for safety reasons and to prevent overheating of the extractor and its components.

The maximum distance between the hob and the bottom of the extractor is required to ensure that the extractor collects the cooking fumes and odours efficiently.

Please also note that a 90° bend in 150mm flexible ducting will require 215mm minimum headroom to give a smooth radius with no kinking.

You are advised to install measures designed to reduce the incidence of cold draughts entering the property via any ductwork.

 For extractors with internal fans this should, at the very least, consist of an external duct termination with integrated non-return flaps (e.g. gravity shutter wall grille/louvre).

3. EXTRACTION PERFORMANCE

The primary influence on the overall performance of the extractor is the design of the ducting which takes the exhaust air from the extractor to the outside. The duct route should be a prime consideration during the initial stages of the kitchen design (We do not recommend recirculating air back into the kitchen, however, recirculating versions or conversion kits are available if absolutely necessary).

Please note the following:

- Easy access to the duct route during installation is important. Lack of access may require the "blind" fitting of flexible ducting, with increased risk of unseen kinks and impaired efficiency.
- The extractor is provided with a spigot suitable for connecting 150mm diameter ducting.
- Note: the cross-sectional area of 150mm diameter ducting is the minimum area consistent with efficient extraction. Reducing the duct size seriously reduces performance.
- The most efficient configuration is to duct straight through an outside wall so try to position the cooker against an outside wall when designing your kitchen.
- Well installed, correctly sized rigid round ducting, or an
 equivalent flat channel system will usually perform best,
 with round semi-rigid (like flue liner) being a very good
 alternative. Flexible (foil or plastic film) ducting is
 economical but its use should be minimised as it gives the
 worst performance and should only be used for very short
 duct runs or initial connection and should be pulled taut to
 prevent significant losses in extraction efficiency.
- For maximum efficiency, ducting should be kept as short and as straight as possible. Bends in the duct will degrade performance so the number of bends in a duct run should be kept to a minimum and be gradual and smooth to prevent turbulence. Avoid kinks in flexible ducting, pulling it

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taut over straight runs to ensure that the internal surface is as smooth as possible.

 If using rigid ducting we recommend that the initial duct connection to the extractor spigot is made using semi-rigid round ducting to allow for any positioning errors and easy disconnection in the event of maintenance.

4. INSTALLATION

The FM range of built in extractors are designed to slot into a cut-out/opening made in a horizontal soffit panel (usually the underside of kitchen furniture or inglenooks/chimney arrangements).

 A panel thickness of at least 15mm must be provided into which an opening can be made and the unit fixed.

4.1. Prepare Opening

Prepare an opening where the extractor is to be installed. Detailed dimensioned drawings showing the extractor layout can be found in Section 8 "General Arrangements Drawing" to help you with this.

4.2. Duct Installation

Make holes, as necessary, in the walls or ceiling to take the ducting from the extractor exhaust spigot location to the outside.

Note: A 175mm diameter hole is suitable for both ducting and any electrical cables (such as power or remote fan cables) to pass through.

Depending upon your installation you may need to run the ducting before or after the extractor is in place, however, all holes must be made in advance to avoid debris entering the appliance.

The duct route length should be kept as short as possible with as few bends as possible (see Section 3).

If terminating on an outside wall a suitable weather louvre should be fitted. A variety of ducting components and complete kits are available to suit most installations.

For roof or chimney duct terminations please contact *Aga Rangemaster* or seek alternative specialist advice.

· Recirculating Models

We do not recommend recirculating air installations and they should be avoided wherever possible (see section 3).

If your extractor has been adapted for recirculation (not the standard configuration) then adequate provision must be made for exhausted air to return into the kitchen (at least equivalent to 125mm diameter round duct) - e.g. ducted out through the top of the cabinet. Failure to do so may cause the unit to overheat and fail and will invalidate your warranty.

4.3. Electrical Installation

ELECTRICAL HAZARD DISCONNECT ELECTRICAL SUPPLY BEFORE PROCEEDING FURTHER

The extractor is a stationary appliance designed to be connected by fixed wiring to the electrical supply. A competent electrical technician must perform the electrical installation.

The hood must be fed from a 230Vac single phase electrical supply using a switched spur fitted with a 3A fuse. The spur should be located adjacent to the hood/cooker so that the supply can be disconnected from the hood using the switch. The means of disconnection from the supply must have a

minimum contact separation of 3mm in all poles. Alternatively, a means of disconnection in the fixed wiring according to the relevant wiring rules must be fitted.

For your convenience you may wish to terminate the electrical supply from the switched, fused spur with a standard UK 3 pin 240V socket positioned close to the extractors intended location.

The extractor can then be fitted with a standard 240V 3 pin plug so that it can be plugged in to the switched supply by the appliance installer.

Should you wish to wire the appliance directly into the switched, fused spur then a supply cord for connecting the spur to the extractor is included. The mains supply is connected to the free end of this cord as follows:

INCOMING SUPPLY CORD CONNECTIONS		
Core	Core Colour	
Live	Brown	
Neutral	Blue	
Protective Earth	Green/Yellow	

4.4. Connecting the Ducting

Terminate the ducting where it exits the building. If using a wall mount weather louvre secure the ducting to the louvre spigot and attach the louvre to the wall. Ensure that the air fins are directed downwards. If you are fitting an alternative termination ensure that the ducting is secure.

If using expanding foam make sure that any flexible ducting is supported internally to prevent it crushing where foamed.

Pull flexible ducting back along its route such that it is as smooth as possible. Position the extractor face down and as close to the opening as is practical and cut off excess before connecting the ducting to the extractor exhaust spigot using plastic tie straps or a suitable alternative (e.g. jubilee clip) - do not use duct tape as the sole means of connection.

Note: The FM900 has integral non-return flaps as part of the spigot assembly to reduce air blowing back into the unit from outside. Take care not to obstruct these flaps when connecting flexible ducting. The flaps are designed to supplement the provisions you make in your ductwork to prevent draughts. You may remove these flaps if you are concerned they will catch on your ductwork provided that other measures to control draughts have been installed.

Check that the duct has not been flattened or kinked.

4.5. Fixing the Extractor in Position

- Fixing the extractor safely into position requires two people so do not start if assistance is unavailable.
- Remove the grease filters as described in Section 6 to prevent damage whilst manoeuvring the product.
- Fixing holes are located in the extractor fixing flange see Section 8 "General Arrangements Drawing". The extractor is held securely in place by screws into the soffit panel through these holes.
- Check that the electrical supply chord has been connected, that power is switched off and that the ducting is securely fastened to the spigot.
- Push the extractor up through the prepared opening and mark the positions of the fixing holes.

Take care not to crush or introduce undesirable bends/kinks in the ducting when pushing the extractor into place.

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- Because the fixing holes are close to the edge of the soffit cut-out it is recommended that pilot holes are drilled for the fixing screws.
- Secure the extractor in place using the screws supplied or suitable alternatives for your panel and cut-out arrangement.
- One person should hold the unit in place whilst pilot holes and screws are installed by an assistant – do not attempt this on your own.

Note: Consider whether it is possible to build in provisions for accessing the ducting with the unit in place - this may simplify installation because ducting can be connected when the unit is in position and will enable easier straightening of duct, inspection and removal of the unit in the event of future service.

 Should you wish to remove the extractor then you will require two people to safely undertake this work.

The removal process is the reverse of installation.

One person should hold the unit and prevent it falling whilst an assistant removes the screws securing it in place.

Once the screws are removed both people can carefully lower the appliance from the opening, taking care not to damage the extractor or ducting in the process.

Tip: You may wish to positioned a platform on the hob (such as a cardboard box) to place the extractor onto because the connected ducting may not be long enough to reach the work surface below.

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5. OPERATING INSTRUCTIONS

Switch on the power at the fused spur.

5.1. Pushbutton Control Functions.

The extractor has 6 push-buttons which illuminate when selected.

Their functions are described below:



LIGHTS



FAN ON



FAN ON



FAN ON





ON/OFF SPEED 1

FAN OFF (Immediate)

SPEED 2 SPEED 3

FAN ON SPEED 4

After 10 Minutes to clear fumes

The extractor controller will automatically switch off the appliance if there has been no operator action for 4

After 30 hours accumulated running GREASE FILTER CLEANING will be signalled by all 6 indicators flashing. Reset by pressing Push-button FAN OFF (delay).

6. MAINTENANCE

Regular maintenance is essential to ensure good performance and long-life.

CAUTION

To minimise the risk of fire, all instructions relating to cleaning the grease filters and removing grease deposits must be adhered to.

To clean the stainless steel surfaces of the extractor use warm water and washing up liquid or a suitable proprietary Stainless Steel Cleaner and Polish.

Glass surfaces should be cleaned with a suitable glass cleaning agent.

- Do not use abrasive cleaning materials or products.
- Do not bleach based cleaning materials or products.

Clean the grease filters in a dishwasher or by handwashing in hot water and detergent. Wash the filters at least every 2 months - sooner if the extractor is used extensively.

To maintain the immaculate appearance of the extractor, and to minimise fire risk, ensure that grease deposits on the extractor surfaces are kept to a minimum by regular cleaning.

6.1. Removing the Grease Filters

The clip in grease filters have an integrated sprung latch mechanism.

Release the latch by pulling the lever and remove the filter.

Filters are replaced by locating the fixed tabs opposite the lever catch into corresponding slots in the extractor base and then pushing the filter into position with the

latch held open. Once the filter is in position release the lever, allowing the latch to engage.

6.2. Replacing Light Bulbs

Replacement lamps must be of the same type and rating as those factory fitted.

The FM900 extractor is fitted with 12V 20W G4 halogen capsule lamps.

Remove the frosted glass lens by carefully prising off the lens retention ring (Fig 1), taking care to support the glass so that it does not fall. (a flat screwdriver or similar can be used to prise off the ring - take care not to scratch the chrome bezel)

Grasp the lamp and carefully pull it sideways away from and out of its connection block.

Insert replacement lamp.

Place the frosted lens with smooth face facing downwards (the face you will see) into retention ring, offer the ring up and align the ring clips with the corresponding innermost slots in the chrome bezel and push the ring back into place - this is easiest if one clip is inserted with the ring at a slight angle (so that you can see it has located properly) and then pushing up to engage the remaining two clips.

Lens Clip Slot Retention Ring Clip Slot Ring Clip

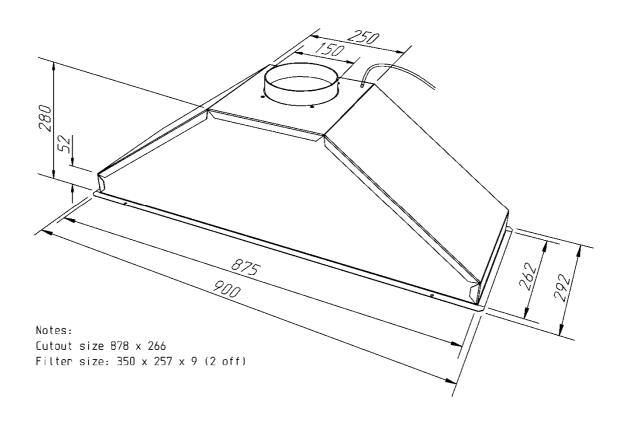
Fig.1 20W G4 Halogen Light Assembly

7. Specifications

FM900 Built-In Extraction Canopy		
Airflow, nominal in free air	1,000 m ³ /hr	
Fan spigot diameter	150mm	
Width	900mm	
Depth	292mm	
Height	280mm	
Supply Voltage:	230V~ 50Hz	
Power input: Fan	250W	
Lighting: 12V 20W G4 Halogen lamp (Per Lamp):	12V, 20W	
Light Quantity	2	
Total power:	290W	
Protective Fuse Sizes for Electrical Supply	3A	

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8. GENERAL ARRANGEMENT DRAWING



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