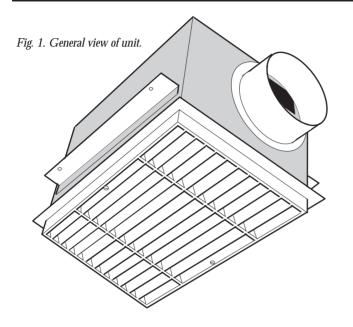


## F1C Ceiling Recessed Kitchen Extract Fan



### Introduction

The NuAire F1C Kitchen extract fan is designed to be installed in the area to be ventilated. The unit is specifically designed for recess mounting into a ceiling structure.

Inlet is through a flame retardant foam grease filter (optional aluminium), located behind the front ABS grille cover of the unit. The filter can be easily removed for cleaning. Air is extracted at a rate of 67 litres/sec (67 or 40 on two speed units). This is 'free air' performance, it should be noted that when the unit is connected to ducting, the performance will be reduced. Typical resistances of ducting etc can be found in the NuAire Domestic Products Brochure Leaflet Number 670607.

Exhaust air is discharged through a 125mm dia. spigot on the side of the unit. A gravity operated outlet shutter is supplied and should be fitted to prevent backdraughts.

The motor has sealed for life, self lubricating bearings and 'Heatseeker' thermal overload protection. The blower assembly and all electrical components are mounted on a removable back plate to simplify installation and/or maintenance.

## **Control options**

Single speed via remote switch. Simple ON/OFF operation. Switch by others. **(Unit coded F1C).** 

Two speed via remote switch LOW/HIGH/ON/OFF operation. Switch supplied (Unit coded F1C-2S).

Single speed with integral humidistat and electronic control module, for remote switching. Switch by others.

#### (Unit coded F1CH).

This optional humidity control continuously monitors the relative humidity (RH) within the kitchen. The point at which the fan operates can be adjusted to suit the individual installation. At any time the unit can be manually over-ridden using

# Installation and Maintenance

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Leaflet 670613

APRIL 1998

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the remote switch. When triggered, the integral sensor operates the fan until the RH returns to below its set point.

## Installation

#### NOTE:

The F1C Kitchen Extract unit is NOT designed for siting immediately above a cooker. Excessive heat may cause distortion of the inlet grille. NuAire Cooker Hoods and KU fans are available for such applications.

## **BEFORE COMMENCING WORK ISOLATE THE ELECTRICAL SUPPLY.**

For installation purposes the unit is fitted with adjustable side mounting brackets. The adjustment provided allows the installer to mount the unit with its inlet face flush with the ceiling. After removing the grille assembly and filter, the fan blower, mounted on a plate held by 4 screws, can be easily removed to allow access for mounting bracket adjustment and installation of the case.

## NOTE: Before removing the blower mark the positions of the electrical wires from the motor.

With the blower removed the case can be installed as follows:-Carefully prepare an aperture in the ceiling 272mm x 230mm. Arrange a suitable mounting (see fig.2). Lower the case into the aperture from above and fix the correct bracket position on the case side ensuring the inlet face flush with the underside of the ceiling.

The ductwork can now be connected and the shutter fitted. Feed the supply cable through the cable entry leaving approximately 100mm of cable inside the unit. Connect the supply cable to the internal terminal block (refer to wiring diagram in the electrical section)

#### INSTALLATION continued.....

#### Note: If an electronic control module is fitted, this must be unplugged to gain access to the terminal block.

When the supply wiring is completed, the electronic control module (if fitted) can be replaced and the fan blower assembly refitted making sure the motor wires are correctly

located. Working from inside the room, replace the filter and the grille assembly.

Test run the unit.

Note: Models with Humidistat option may 'run on' for the duration of the timer sequence following initial start up.

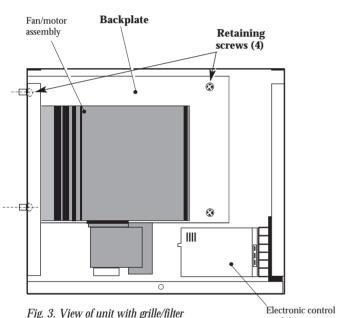
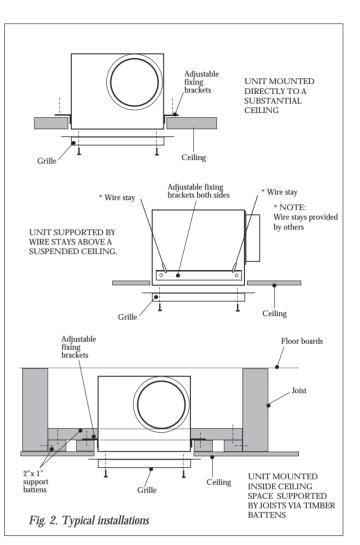


Fig. 3. View of unit with grille/filter removed showing backplate retaining screws.



25



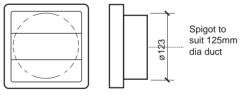
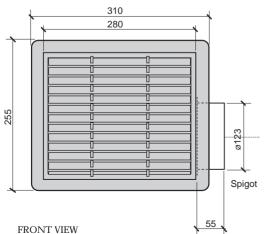
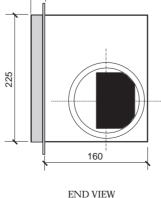


Fig. 4b. Outlet Shutter, anti-backdraught (supplied with unit).





**Dimensions** 

265

REAR VIEW

### Adjusting the Humidistat

**(For units supplied with integral Humidistat option).** ISOLATE THE UNIT BEFORE CARRYING OUT ADJUSTMENTS.

By adjusting the humidity set point it is possible to adjust the humidity level at which the fan operates (see fig. 5).

Remove the front grille/filter, locate the electronic control module situated to the right of the fan/ motor assembly

Use a small screwdriver to turn the adjuster, clockwise to sense a higher humidity level or anti-clockwise for a lower level.

When initially running an F1C unit with the humidistat option the humidity adjustment control should be set to maximum (fully clockwise). Start the fan and after approximately 30 minutes the fan will switch off. Adjust the set point downwards (by turning the control anti-clockwise until the desired level is achieved. The fan will cut in when the selected humidity level is reached.

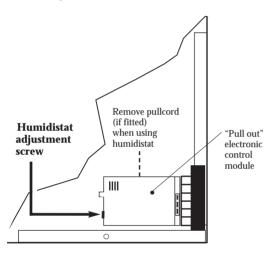


Fig. 5. Humidistat adjusting screw.

#### NOTE:

When installing the F1CH unit for remote switching it is important that IF A PULLCORD IS FITTED IT SHOULD BE REMOVED.

Before removing the pullcord switch the fan on via the pullcord and leave the pullcord switch in this 'ON' position

**Disconnect the electrical supply.** 

Remove the grille / filter and cut the pullcord approx 30mm below the electronic module, taking care not to operate the switch.

**Replace the grille / filter.** 

#### Maintenance

#### Isolation

ENSURE THAT THE UNIT IS TOTALLY ISOLATED FROM THE ELECTRICAL SUPPLY. SWITCH OFF AT THE MAIN JUNCTION BOX AND ALSO REMOVE THE RELEVANT FUSE.

#### Every 3 months \*

It is inevitable that some dust, fluff etc. will pass through the filter which, if ignored, will build up internally on the motor and impeller, shortening the life of the unit, and in severe cases leading to overheating of the motor. Consequently, it is strongly recommended that all units are inspected and cleaned at least every three months. To clean the filter, remove it from the unit by removing the grille front. Wash the filter in tepid water adding a little mild detergent. Shake out excess water and allow to dry naturally. Replace when dry.

#### Every 6 months \*

At all times take care not to damage, distort or disturb the balance of the impeller. Remove the cover grille/filter as detailed earlier. If fitted, withdraw the electronic control module. Disconnect the electrical wires from the terminal block. Remove the 4 screws retaining the backplate and withdraw the fan / backplate assembly. Inspect all parts.

Using a brush or dry cloth clean the assembly. Lightly brush away dust and dirt from the fan motor and impeller. If stubborn debris persists, carefully remove with a suitable blade or scraper. Refit the fan / backplate assembly, reconnect the wiring and refit the filter / grille. Switch on supply and test run unit.

#### Warranty

The F1C Kitchen Extract unit is guaranteed for 24 months from purchase on parts and labour. If fitted the plastic electronic control module is a sealed component. Breaking the seal will invalidate the guarantee.

#### \*Note

In dust free conditions and with light useage the unit maintenance times may be extended.

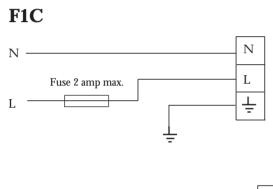
# **Installation and Maintenance** F1C KITCHEN EXTRACT FAN

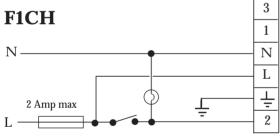
## **Electrical**

	Low Speed	High Speed
Input Power	58 Watts	86 Watts
Full Load Running Current	.5 Amps	.7 Amps
Starting Current	.71 Amps	.71 Amps

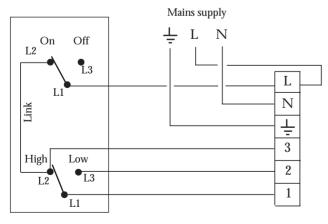
Spares		
ITEM	PART No.	
Foam Filter (all units).	040536	
Aluminium Filter (optional).	040539	
Grille (all units).	040537	
Blower (all units).	771249	
Resistor (F1C2S only).	160355	
Capacitor (F1C2S only).	660379	
Humidity Module (F1CH only).	770980	
125mm Outlet Shutter White (Std)	PVC506WH	
125mm Outlet Shutter Brown (Optional)	PVC506BR	

## Wiring diagrams





## F1C-2S



Two gang, two way switch (supplied).

### Service

As a manufacturer NuAire provides you with factory trained Service Engineers.

Our Engineers are supported by a comprehensive range of spare parts 'off the shelf'.

If you are an industrial or commercial user, you may be interested in details of NuAire's regular maintenance Service Contracts. This is a worthwhile service that helps you get the most from our products.

Our Service Department will be happy to give you more information.

Please telephone: 0222 858313

Technical or commercial considerations may, from time to time, make it necessary to alter the design, performance and dimensions of equipment and the right is reserved to make such changes without prior notice.



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