

VILLAVENT[®] Combi

VILLAVENT

COMBI

USER INSTRUCTIONS

BAILEBU LTD

V I L L A V E N T C O M B I
V E N T I L A T I O N A N D H E A T R E C O V E R Y S Y S T E M

DESCRIPTION OF OPERATION

The heart of the Villavent Combi system is a ventilating and heat exchange unit specifically designed for efficiency of operation, and which is attenuated for quiet operation. The unit is positioned in the loft, and is connected by ducting to exhaust louvres from the bathrooms and WC, from the kitchen via the cookerhood, and to inlet diffusers in the living room and bedrooms.

Movement of air within the building is as follows:

Fresh air is taken directly to the heat exchanger from either a ventilated loft space, or via ducting connected to a ventilating grill on the outside wall. Inside the unit the fresh air is filtered before passing through the heat exchanger. The warmed fresh air is then transferred through ducting and inlet diffusers into the living rooms. From the living rooms the fresh air flows through the adjoining rooms to the kitchen, bathroom, and WC. The pressure difference will replace the warm stale air which is drawn up into the heat exchanger where heat is extracted prior to the air being exhausted to atmosphere.

The Villavent Combi system has an isolating switch located just below the front panel of the cookerhood. The amount of both fresh and exhaust air is controlled in parallel by means of a variable speed control, which can be set to provide the exact ventilation rate required. This control is located on the front panel of the kitchen hood.

The installation is designed to operate continuously. With the speed control set to minimum, a small amount of air is circulated giving a 'basic ventilation' condition. With the control set to maximum, 'forced ventilation' occurs, which is necessary when the cooker hob is in use, or when using the bath or shower.

The kitchen hood has a retractable tempered glass shield which should be positioned in the extended position during periods of cooking. With the exhaust damper closed the system is designed to allow a small throughput of air to ensure basic ventilation in the kitchen. When cooking the exhaust damper should be open.

For illumination over the working area, the kitchen hood is provided with a non-reflecting recessed light (max size 40w).

To facilitate changing the light bulb the fitting hinges down for easy access.

During the winter season it may be necessary to raise the temperature of the inlet air in order for it to match room temperature and thus to avoid cold draughts. The system is equipped with a 1200w heating element controlled by a thermostat positioned in the heat exchange unit. There is an isolating

switch for the heater circuit adjacent to the main isolating switch below the front panel of the cooker hood.

MAINTENANCE

Kitchen Hood

The filters in the hood must be cleaned regularly, preferably once every month, to ensure maximum efficiency. Wash with hot soapy water in the sink, or in the dishwasher. The glass shield should be wiped with a damp cloth.

To change the lamp, simply pull down the hinged socket.

Summer Block

If a summer block is supplied this replaces the heat exchange block for summer time operations. To change simply withdraw the block from its guide tracks and replace with the alternative block.

Summer/Winter By-pass

If this facility is provided set to summer position when the ambient temperature air is required, ie when fitting the summer block, and to winter position when replacing the heat exchange block.

Ventilation Apparatus

The Villavent Combi ventilation and heat exchange apparatus should be checked at regular intervals in order to obtain the optimum heat exchange transfer and aircomfort. The heat exchange block should be removed for cleaning at least once a year, and the filters on the fresh air side and exhaust side 2-3 times per year.

By opening the cover the filters and heat exchange block can be pulled out on their guide tracks. The exchange block should be cleaned by hosing with luke-warm water. The filters should be cleaned in the same manner as those in the kitchen hood.

General

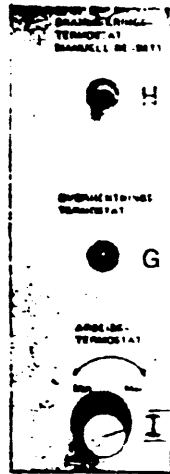
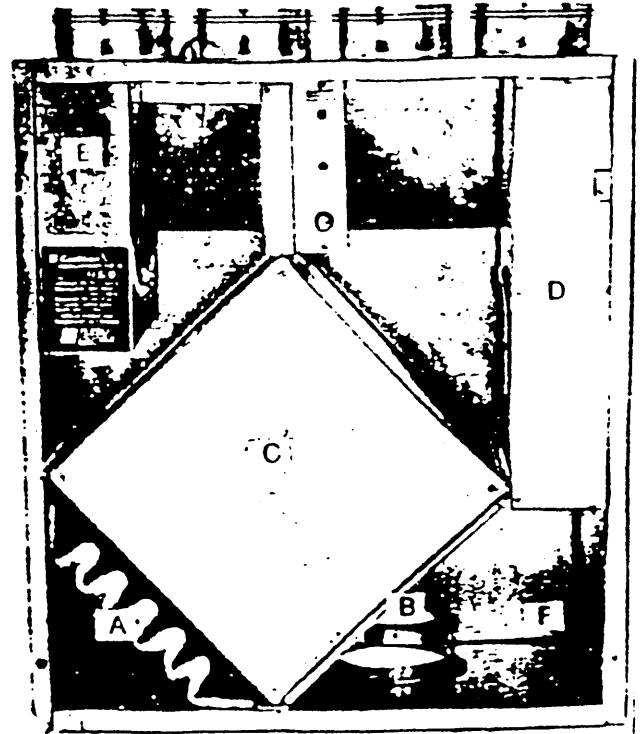
With regard to the remainder of components in the installation, these require no regular maintenance. The fan motors are fitted with bearings that are lubricated for life. The fan units may be removed and cleaned with a damp cloth. However, care must be taken to ensure that no water comes into contact with the motor or other electrical parts.

Check periodically that all ducting is securely attached to the unit, and to the kitchen hood.

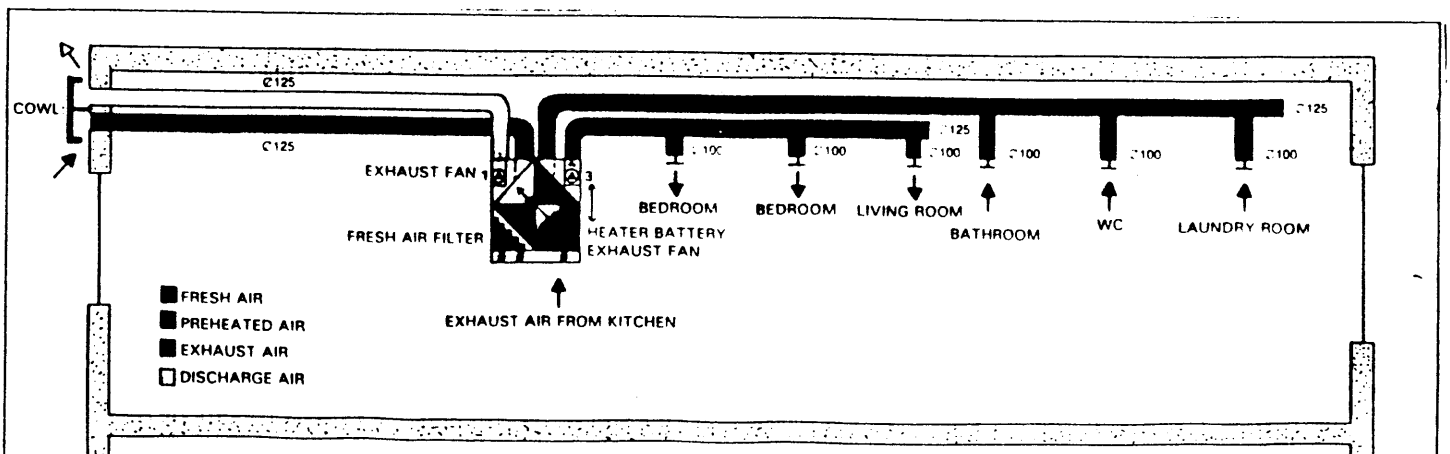
NB Ensure that the unit is completely isolated from the electrical supply before removing cover or carrying out any maintenance operation.

MAIN COMPONENTS

- A - Fresh air filter
- B - Exhaust air filter
- C - Heat exchanger
- D - Fresh air fan and 1200w heating element
- E - Exhaust fan
- F - Exhaust chamber
- G - Overheat thermostat
- H - Fire thermostat
- I - Air temperature thermostat



PRINCIPLES OF OPERATION



The exhaust fan (1) removes stale air from the wet rooms and the kitchen, through the heat exchanger (2) and out of the house. The inlet fan (3) draws the fresh outside air through an effective fresh air filter (4) through the heat exchanger (2) where the air is heated. An electrical heater can, if required, warm the fresh air before it is distributed to the living rooms and bedrooms.

The fresh warmed air is distributed to the living rooms and bedrooms. From here it passes to the wet rooms and kitchen, where the stale air is being drawn out of the house.