



Leave these instructions with the user for service and maintenance use.

## AEROPLUS 12V Heat Recovery Unit with Automatic Humidity Control Installation Instructions

Publication No. ZZ 823/2  
March 1999

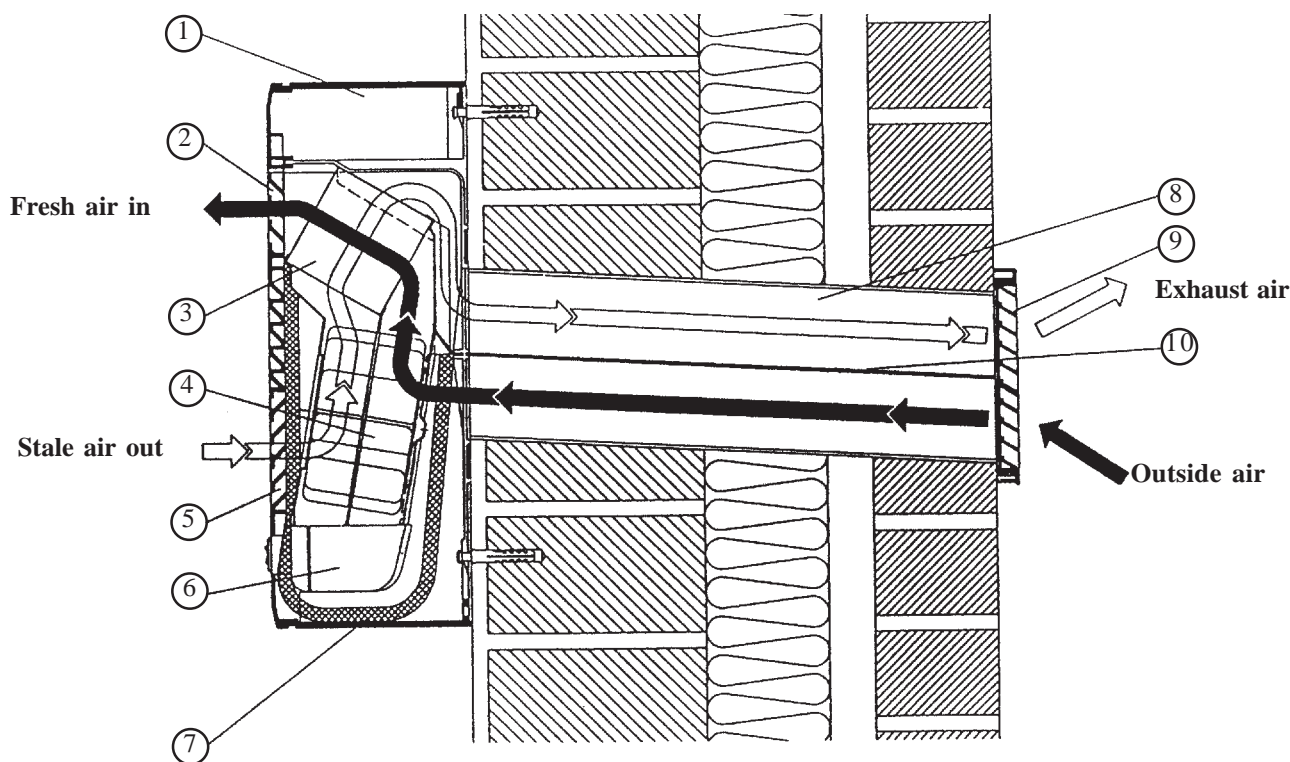
Before commencing any part of this installation, READ ALL INSTRUCTIONS CAREFULLY and ensure that the electrical supply meets the required specification indicated on the rating plate of the appliance.

### 1. GENERAL DESCRIPTION

- 1.1 The AEROPLUS 12V is a ventilation unit which reduces the humidity of the room atmosphere, at the same time recovering heat from the stale air extracted from the room in order to warm the fresh air introduced into the room. AEROPLUS 12V will operate automatically to predetermined humidity and temperature levels.

### 2. TECHNICAL DESCRIPTION

- 2.1 The fan extracts stale moist air to the outside via the heat exchanger. An equal volume of fresh air is directed into the room via the adjustable nozzles. The incoming fresh air, which is drawn through the lower half of the split duct and filtered within the unit to remove dust and pollen, is tempered by the heat from the outgoing air within the heat exchanger. The stale air passes via the filter and out via the upper half of the split duct. A bypass ensures that there is no condensate developed within the appliance, whilst the lower water content of the incoming fresh air ensures that humidity within the room is reduced.



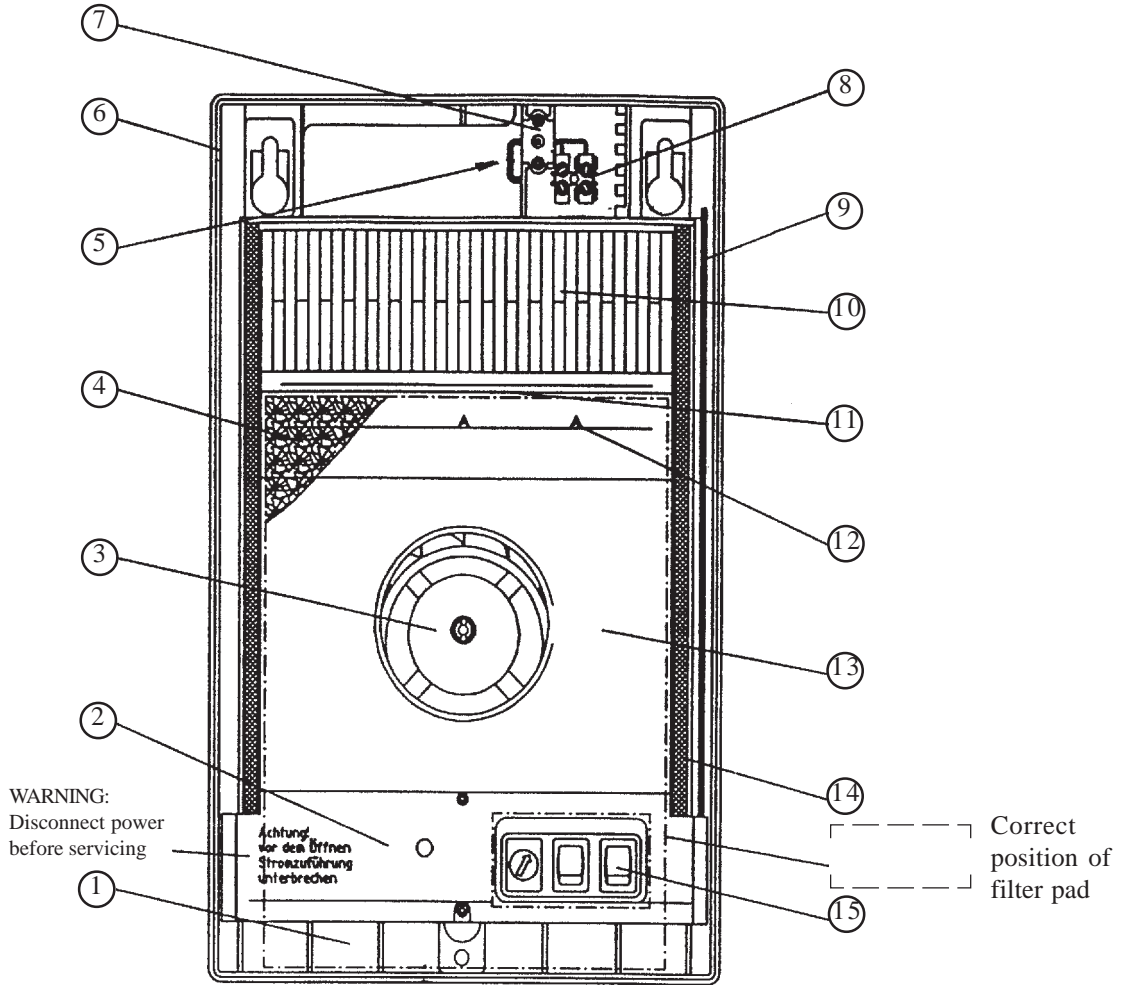
1	Cabinet	6	Control module
2	Adjustable nozzles	7	Filter pad
3	Heat exchanger	8	Split pipe
4	Centrifugal fan	9	Weather grille
5	Front cover	10	Central divider

Fig. 1  
Aeroplus 12V system

3.

**TECHNICAL DATA**

<b>Weight</b>	2.3kg.
<b>Power supply</b>	
<b>Primary</b>	230V, 50Hz.
<b>Secondary</b>	12V DC.
<b>Max Temperature</b>	60°C ambient.
<b>Method of protection</b>	Transformer-Indoor Appliance IP20 ex DIN40050.
<b>Dimensions</b>	350mm (h) x 220mm (w) x 130mm (d).
<b>Power consumption</b>	8W min. (15m <sup>3</sup> /h). 12W min. (30m <sup>3</sup> /h).
<b>Moisture removal</b>	2.5kg to 8kg per 24 hours.
<b>Noise</b>	29dB(A) at 1m, (15m <sup>3</sup> /h flow rate).
<b>Air movement</b>	15-30m <sup>3</sup> /h (input and extract).
<b>Filter type</b>	EU2.



- |   |                       |    |                          |
|---|-----------------------|----|--------------------------|
| 1 | Filter slot           | 8  | Terminal block           |
| 2 | Control module        | 9  | SELV 12V cable           |
| 3 | Centrifugal fan       | 10 | Heat exchanger           |
| 4 | Filter pad            | 11 | Upper edge of filter pad |
| 5 | Transformer (at rear) | 12 | Filter pad fixing claw   |
| 6 | Cabinet               | 13 | Fan housing              |
| 7 | Cable clamp           | 14 | Side seal                |
|   |                       | 15 | Controls                 |

**Fig. 2**  
**Aeroplus 12 Heat Recovery unit**

#### INSTALLATION

4.

- 4.1 Decide where the appliance is to be fitted, ensuring that it is as high as possible on an outside wall, and clear of all obstructions such as curtains, etc.
- 4.2 Vertically align the drilling template (provided), and mark the position of the 120mm diameter hole, and the 3 wall fixing holes, ensuring that the single wall fixing hole is at the bottom.
- 4.3 Referring to Fig. 4, drill or cut a 120mm diameter hole sloping down towards the outside, and the 3 x 8mm diameter wall fixing holes.
- 4.4 If the Split pipe is fitted with 2 riveted lugs, remove these 2 lugs by carefully drilling out the 2 pop rivets.
- 4.5 Fit the Weather Grille to the split tube, such that the horizontal divider locates across the three lugs on the grille (refer to Fig. 5 below).  
**Note:** The brown substance on the Weather Grille central lug is a self gripping adhesive and is not to be removed.
- 4.6 Mark and cut the split tube such that it fits flush with the inside wall surface, and ensure that the central divider is also flush with the wall. Fit the split tube and Weather Grille into the wall and seal with silicone sealant (not provided).
- 4.7 Insert the plugs (provided) into the 3 wall fixing holes, and insert the 3 screws (provided) such that the screw heads protrude by approximately 8mm from the wall.
- 4.8 Prepare the appliance cabinet to accept the electrical connection if necessary.
- 4.9 Fit the Aeroplus 12V to the wall by locating the keyhole slots in the rear face over the 3 wall fixing screws.  
**Note:** The appliance may be permanently secured to the wall by fitting an additional screw through the hole immediately beneath the lower keyhole slot.

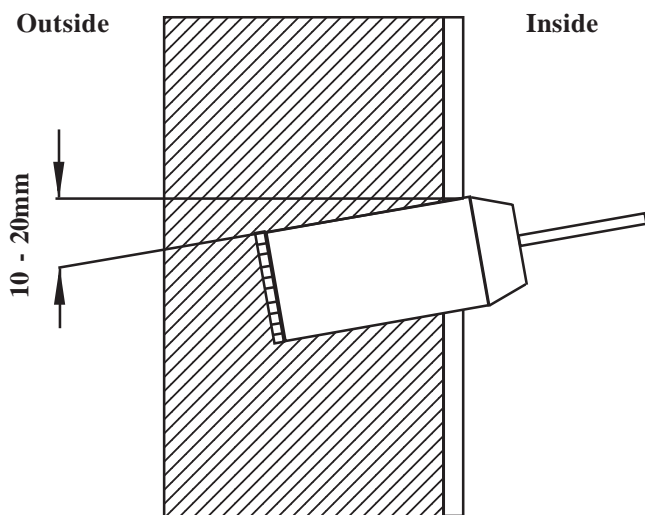


Fig. 4

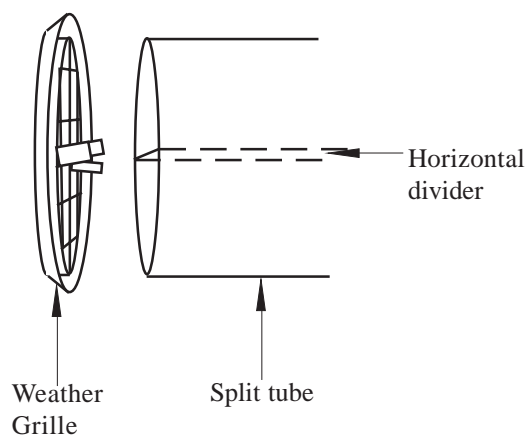


Fig. 5

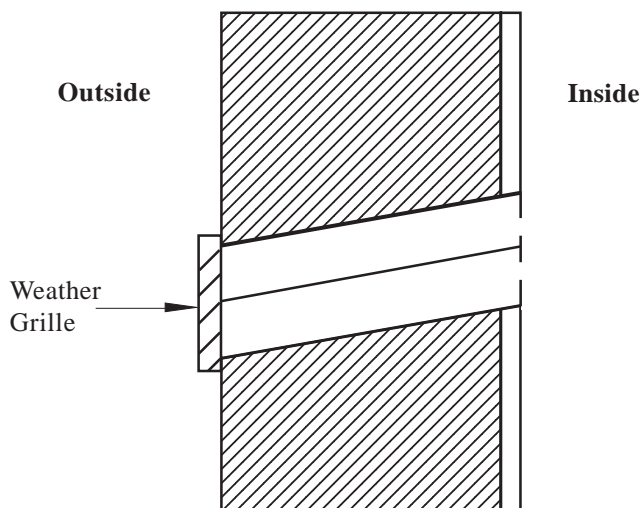


Fig. 6

## 5. ELECTRICAL

- 5.1 Power should be shall be connected to the unit via a double pole switched, fused spur, rated 5A to BS 1362. Installation and connections shall be in accordance with the current edition of I.E.E Regulations (current edition) BS 7671.
- 5.2 **In rooms other than bathrooms and toilets:**
- 5.2.1 The mains supply cable to the appliance is routed through a suitable aperture in the appliance cabinet, and connected to the terminal block as follows:
- BROWN** conductor to **BROWN** terminal.
  - BLUE** conductor to **BLUE** terminal.
- 5.3 **In bathrooms and toilets:**
- 5.3.1 The mains transformer must be mounted outside the room, and a SELV 12V supply taken from the transformer to the appliance. The transformer is located directly behind the terminal block.
- 5.3.2 Disconnect the lead to the control module, and working from the rear of the unit, prise out the wedge plate which secures the transformer into the unit, and discard the wedge plate. Remove the transformer from the appliance.
- 5.3.3 Mount the transformer by enclosing or clamping it in a suitable location, and in accordance with I.E.E. Regulations (current edition) sections 411 and 412. Extend the SELV 12V cable by cutting and inserting a suitable length of similar flexible cable (not provided), and routing the cable to reconnect with the control module.
- IMPORTANT: The transformer MUST NOT BE REWORKED in any way.**

## 6. MAINTENANCE

**IMPORTANT: Always ensure that the electrical supply to the appliance is switched off before carrying out any maintenance or servicing tasks.**

- 6.1 Depending upon the degree of air pollution within the room, the filter screen should be checked on a monthly basis, and cleaned or exchanged if necessary. The filter screen may be brushed or vacuum cleaned, but should NOT BE WASHED.
- 6.2 **Front cover removal:** Carefully depress the 2 small rectangular recesses on either side of the front cover using a screw driver, or similar item to release the front cover, and then remove the cover. Refitment is by positioning the front cover over the unit and then pressing home until the 4 tabs are located.
- 6.3 **Filter removal:** Remove the front cover and withdraw the filter from the front of the unit. To replace the filter, first feed the filter into the slot below the control module until the aperture in the filter is aligned with controls. The 3 upper pad fixing claws retain the filter in position.
- 6.4 **Centrifugal Fan removal:**
- 6.4.1 Remove the front cover.
- 6.4.2 Withdraw the cable from the slot on the right hand side of the unit and disconnect the 2 pin plug and socket.
- 6.4.3 Lift the fan assembly from below and remove the assembly consisting of the Heat Exchanger, fan housing, Control module and fan.  
This is a complete assembly which can not be further dismantled. Refitment or replacement is in reverse order.

## 7. CLEANING

- 7.1 If necessary, the appliance cabinet may be cleaned using a mild soap solution.  
DO NOT allow water to enter the cabinet.  
DO NOT use abrasive cleaners or strong alkalis, (scouring powder, scouring pads or bleach).

## 8. TRANSFER OF OWNERSHIP

- 8.1 In the event of this appliance being sold or transferred to another user, THESE INSTRUCTIONS MUST be supplied.

**Johnson and Starley prides itself on its ability to supply spare parts quickly and efficiently. If your service engineer indicates a problem in obtaining a spare part, advise him to contact Johnson and Starley Spares Department at the address below.**

**Telephone: 01604 762881**

**Fax : 01604 767408**

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