

HOME VENTILATION WITH HEAT RECOVERY

# Dismantling ventilation units from the M-WRG-II series at the end of the product life cycle



DISMANTLING INSTRUCTIONS

Part no. 744016EN Week 07/2024 EN



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# 1 Introduction

## 1.1 Notes on these dismantling instructions



These instructions contain important information that should be followed when dismantling ventilation units from the M-WRG-II series at the end of the product life cycle.

- ▶ Read all the instructions carefully before dismantling the ventilation unit to avoid possible risks and mistakes.

### **WARNING**

- ▶ Follow ALL danger and warning instructions and notes on precautionary measures.
- ▶ Read section “2 Safety instructions” on page 4 carefully.

## 1.2 Description

These instructions describe the dismantling of ventilation units from the M-WRG-II series at the end of the product life cycle.

## 1.3 Target group

These dismantling instructions are aimed at two different target groups:

- The activities described in section “4.1 Detach electrical connections and uninstall the ventilation unit” on page 5 must only be carried out by specialised personnel with the following qualifications:
  - Training in the installation and commissioning of electrical devices
  - Training in electrical hazards and the local safety requirements
  - Knowledge of the relevant standards and directives
  - Knowledge and observance of this document and all the safety instructions
- No special prior knowledge is needed for all other activities excluding those specified in section 4.1.

## 1.4 Environmentally-friendly disposal

Avoiding waste from electrical and electronic devices makes a significant contribution to environmental protection and the better use of resources. Recycling and other ways of reusing such waste also reduce the amount of waste that needs to be taken away.

- ▶ You should dispose of the product in accordance with your applicable national regulations.



## 1.5 Revision index

Edition	Manual	Date
2 <sup>nd</sup> edition	Dismantling of ventilation units from the M-WRG-II series at the end of the product life cycle	Week 07/2024 EN

## 1.6 Explanation of the symbols used

- ▶ This symbol indicates an action to be taken.
- This symbol indicates a list.

# 2 Safety instructions

These instructions contain notes that you must follow for your own personal safety and to avoid injury and damage to property. They are highlighted by warning triangles and are shown as follows according to the level of danger.

## 2.1 Hazard classification

### **DANGER**

The signal word designates a hazard with a **high** degree of risk which, if it is not avoided, will result in death or severe injury.

### **WARNING**

The signal word designates a hazard with a **medium** degree of risk which, if it is not avoided, will result in death or severe injury.

### **CAUTION**

The signal word designates a hazard with a **low** degree of risk which, if it is not avoided, could result in minor or moderate injury.

### **NOTICE**

A note as used in this manual contains important information about the product or about a part of the manual to which particular attention should be paid.

## 2.2 Notes on dismantling the ventilation units

Ventilation units from the M-WRG-II series must only be dismantled if the following conditions are fulfilled:

- The electrical connections on the ventilation unit have been disconnected by a qualified electrician.
- The ventilation unit has been removed from its original installation location making it easily accessible for dismantling.
- The ventilation unit has been placed on a suitable work surface for dismantling.

### 3 Tools and equipment required

- Set of cross-head screwdrivers
- Set of slotted screwdrivers
- Torx screwdriver TX10
- Torx screwdriver TX20

### 4 Dismantling the ventilation unit

#### 4.1 Detach electrical connections and uninstall the ventilation unit

**⚠ DANGER**

**Potentially fatal voltages**

- Only qualified electricians may work on the electrical installation.
- The VDE regulations or any special safety regulations applicable in your country apply to the electrical installation work.
- ▶ Before starting to uninstall, disconnect the mains cable and the control cable (if used) on all poles from the main power supply.
- ▶ Observe the five safety rules (DIN VDE 0105-100, EN 50110-1) for working on electrical systems:
  - Disconnect from mains (all-pole disconnection of a system from live parts)
  - Secure against reconnection
  - Check that the system is voltage-free
  - Earth and short-circuit
  - Cover or block off access to adjacent live parts
- ▶ Detach the electrical connections from the ventilation unit.
- ▶ Uninstall the ventilation unit from its installation location.
- ▶ Place the ventilation unit on a suitable work surface for the rest of the dismantling work.

#### 4.2 Remove the unit cover

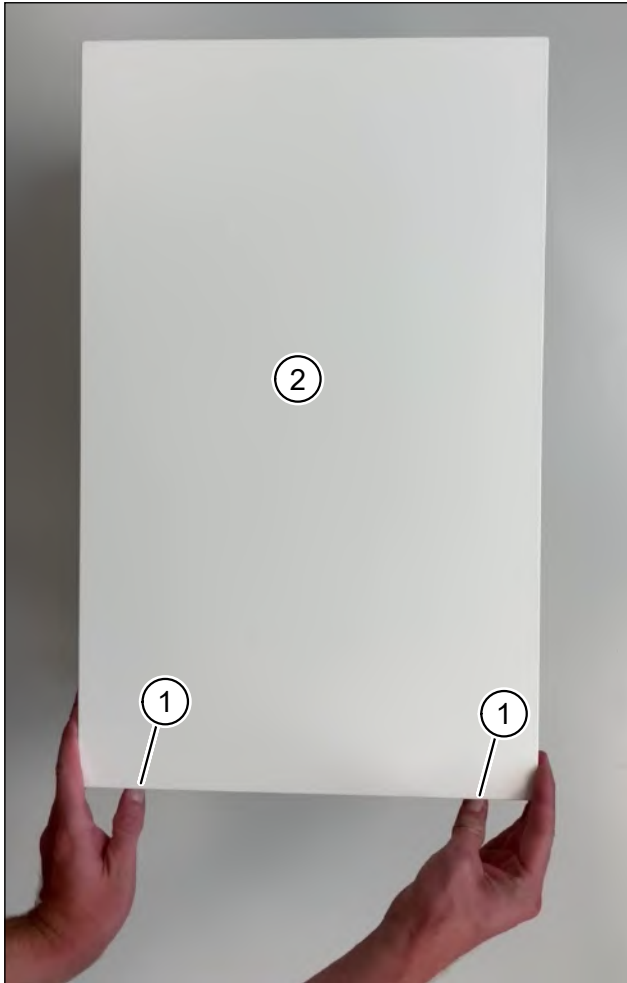


Fig. 1: Remove the unit cover from the ventilation unit

- ▶ Using both thumbs, press the two latches (item 1 in Fig. 1) on the bottom of the ventilation unit. The unit cover (item 2 in Fig. 1) will come away.
- ▶ At the same time, push your index fingers into the gap between the unit cover and housing, and lift the unit cover up and away from the housing.
- ▶ Pull away the black insulation on the back of the unit cover.

#### 4.3 Remove the air filters

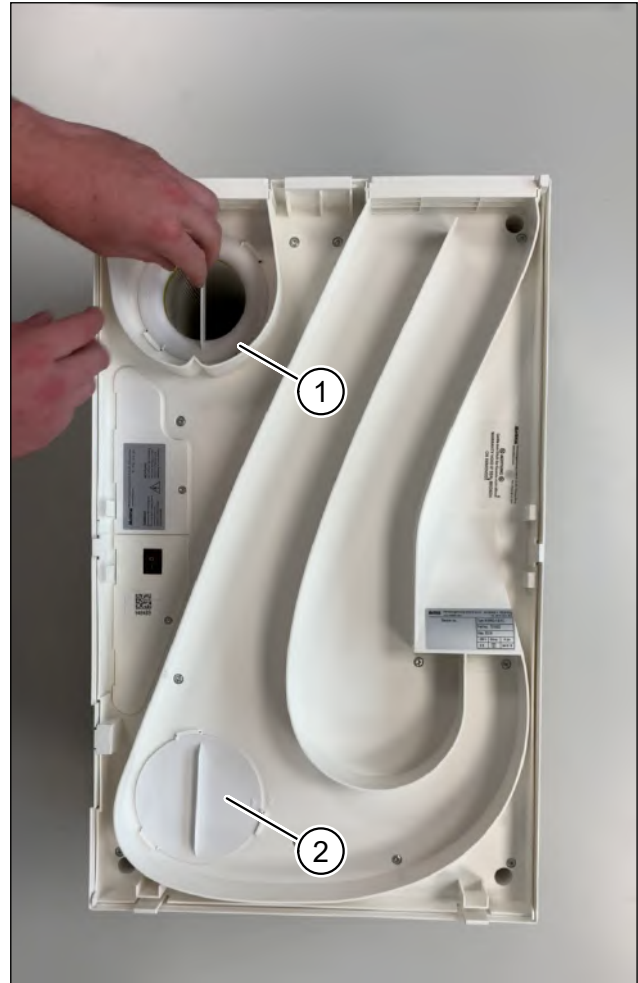


Fig. 2: Remove the air filters

- ▶ Using the hand grip, turn the filter ring (item 1 in Fig. 2) anti-clockwise until the filter ring is released from the retainers.
- ▶ Pull the filter ring together with the extract air filter out of the ventilation unit.
- ▶ Using the hand grip, turn the filter cover (item 2 in Fig. 2) anti-clockwise until the filter cover is released from the retainers.
- ▶ Pull the filter cover together with the outdoor air filter out of the ventilation unit.

#### 4.4 Remove the electronics compartment covers and intermediate plate

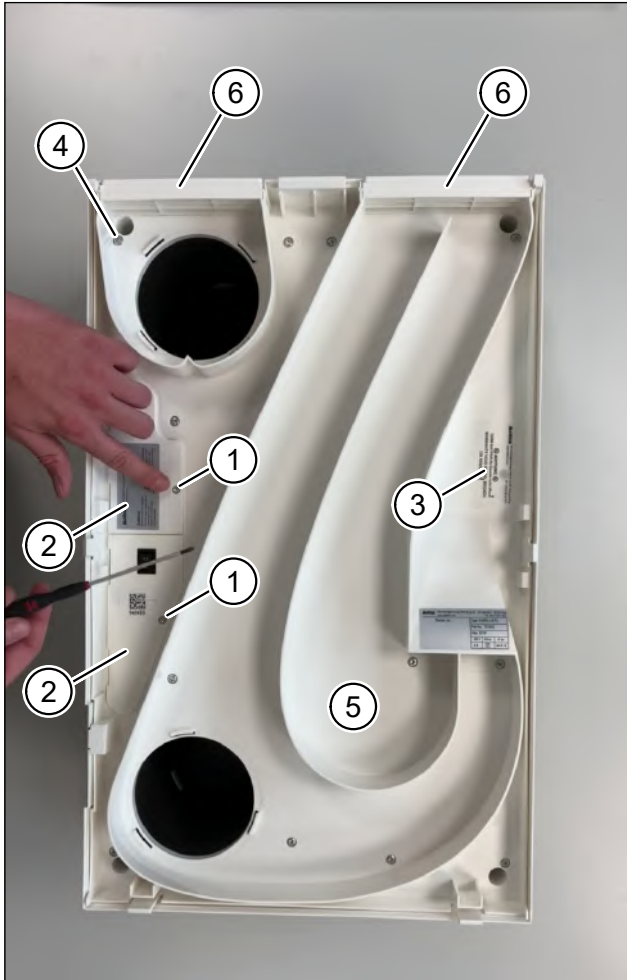


Fig. 3: Remove the electronics compartment covers and intermediate plate

- ▶ Use the Torx screwdriver TX10 to loosen the two screws (item 1 in Fig. 3) on the electronics compartment covers.
- ▶ Lift the two electronics compartment covers (item 2 in Fig. 3) away.
- ▶ On the electronics compartment cover with the On/Off switch, detach the connecting cable from the PCB in the ventilation unit.
- ▶ Remove the seal (item 3 in Fig. 3) with a slotted screwdriver.
- ▶ Use the Torx screwdriver TX20 to loosen the 13 screws (item 4 in Fig. 3) on the intermediate plate.

- ▶ Lift up the intermediate plate (item 5 in Fig. 3) with the two air grilles (item 6 in Fig. 3).
- ▶ Remove the intermediate plate seal on the back of the intermediate plate.

#### 4.5 Remove the heat exchanger

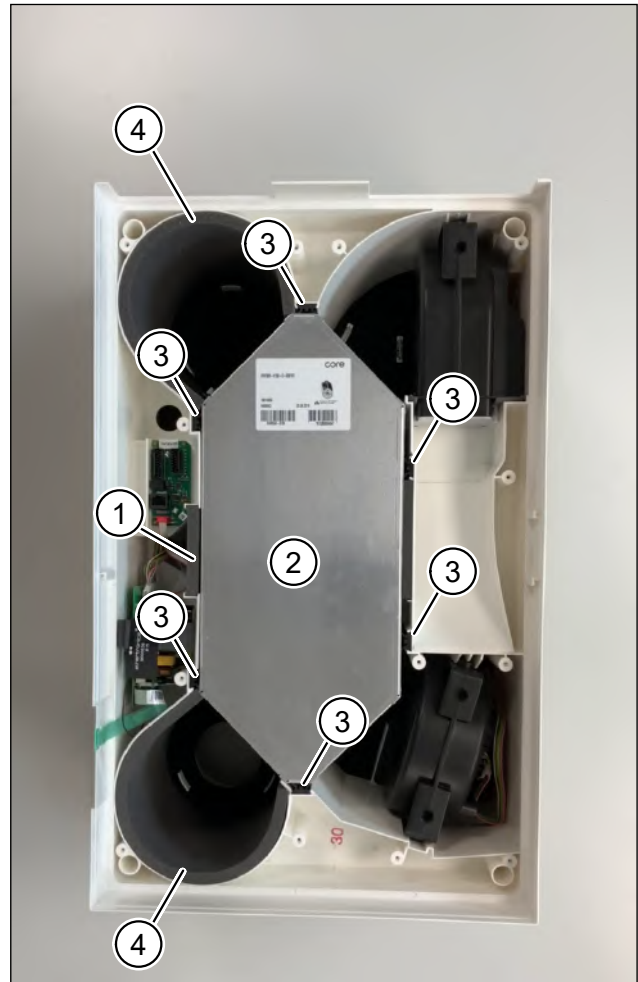


Fig. 4: Remove the heat exchanger

- ▶ Remove the seal (item 1 in Fig. 4) from the electronics compartment.
- ▶ Lift out the heat exchanger (item 2 in Fig. 4).
- ▶ Remove the 6 sealing profiles (item 3 in Fig. 4).
- ▶ Remove the filter channel insulation pieces (item 4 in Fig. 4) on the extract air and supply air sides.



#### 4.6 Remove the exhaust air and supply air fans

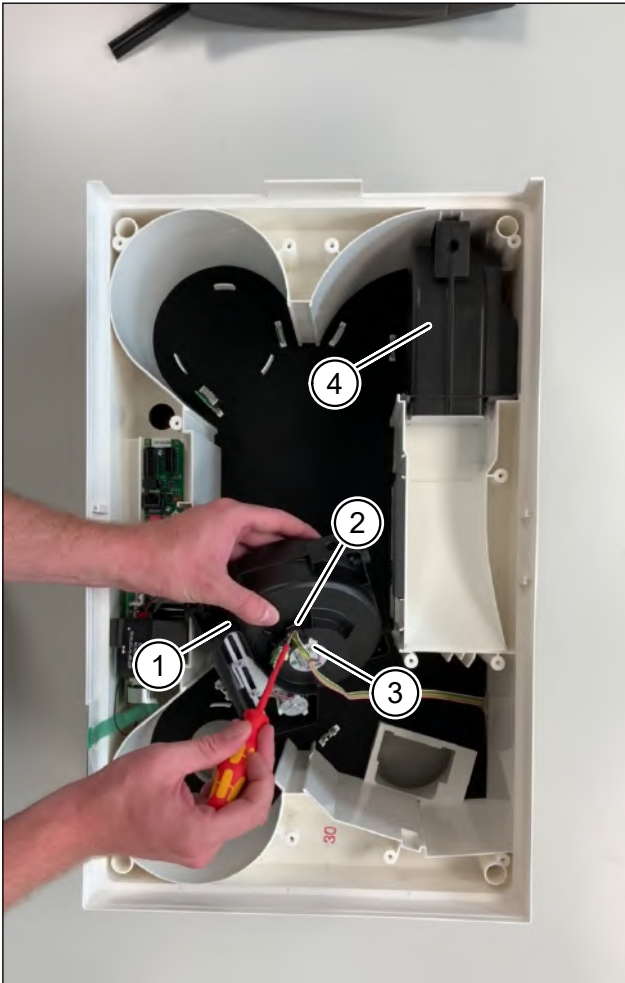


Fig. 5: Remove the exhaust air and supply air fans

- ▶ Pull the exhaust air fan (item 1 in Fig. 5) up and out.
- ▶ Remove the black retaining clip (item 2 in Fig. 5) from the exhaust air fan with a slotted screwdriver.
- ▶ Detach the two plug connectors (item 3 in Fig. 5) from the exhaust air fan.
- ▶ Remove the exhaust air fan.
- ▶ Repeat the process for the supply air fan (item 4 in Fig. 5).

#### 4.7 Remove the sensors

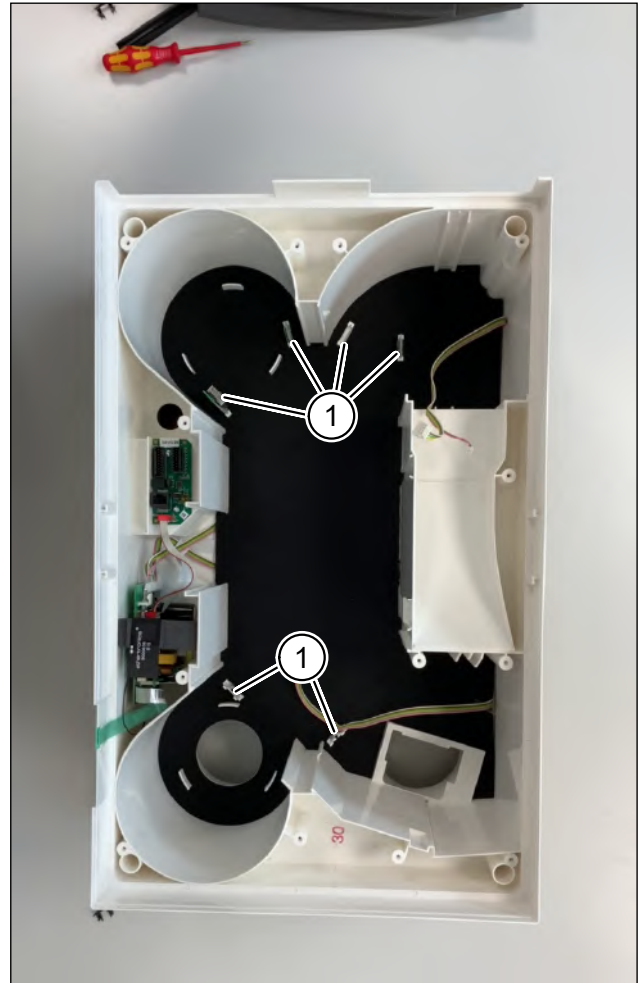


Fig. 6: Remove the sensors

- ▶ Remove the sensors (item 1 in Fig. 6) from the holders.
- ▶ Detach the sensors from the ribbon cables.

#### NOTICE

The number of installed sensors will depend on the type of ventilation unit.



#### 4.8 Remove the interface and control PCBs

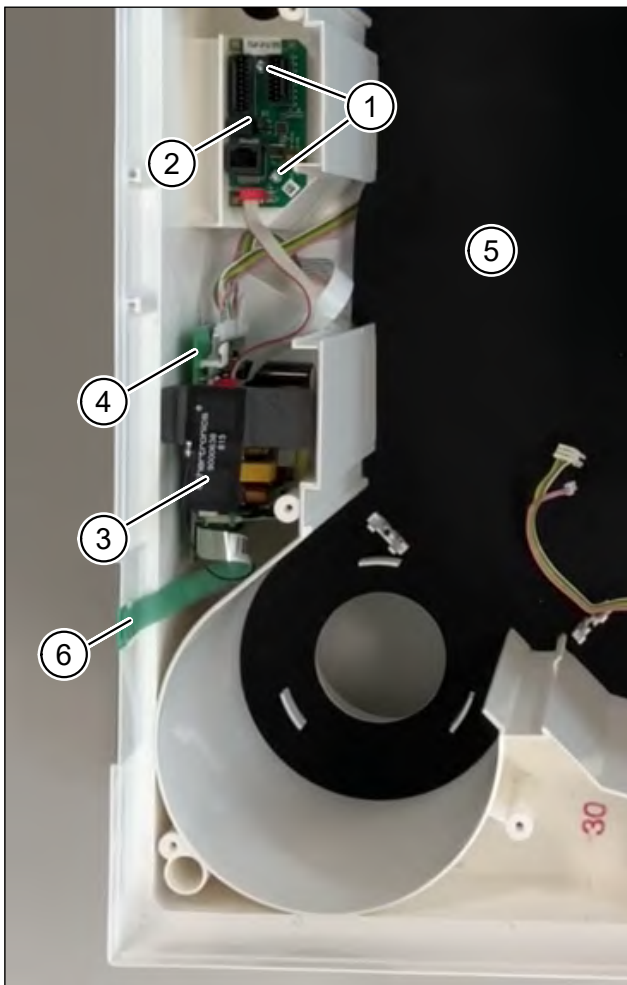


Fig. 7: Remove the interface and control PCBs

- ▶ Loosen the two Torx screws TX10 (item 1 in Fig. 7) on the interface PCB (item 2 in Fig. 7).
- ▶ Take out the interface PCB and detach the connecting cable.
- ▶ Lift the antenna holder (item 3 in Fig. 7) with the film antenna and control PCB (item 4 in Fig. 7) up and out.
- ▶ Detach all the plug-in connections from the control PCB.
- ▶ Remove the black housing internal seal (item 5 in Fig. 7) that fully covers the base of the housing.
- ▶ Detach the membrane keypad (item 6 in Fig. 7) on the side of the housing.

#### 4.9 Remove the distributor PCB

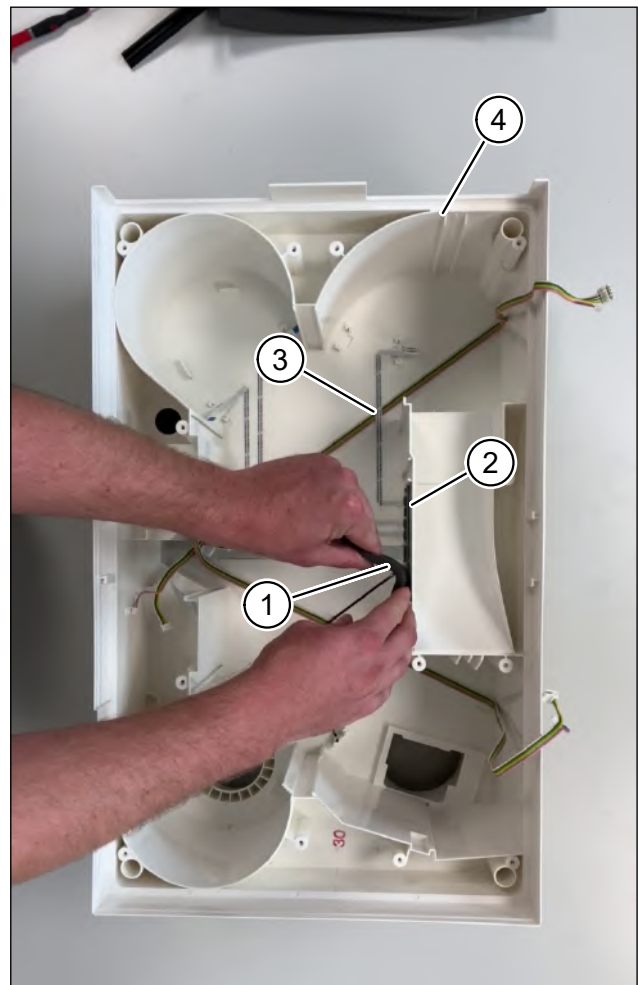


Fig. 8: Remove the distributor PCB

- ▶ Remove the holder (item 1 in Fig. 8) over the distributor PCB.
- ▶ Detach the plug-in connections from the distributor PCB (item 2 in Fig. 8).
- ▶ Use a screwdriver to lift up the distributor PCB.
- ▶ Remove all cables and wires (item 3 in Fig. 8) from the housing (item 4 in Fig. 8).

#### 4.10 Remove insulation and seals from the housing back panel



Fig. 9: Remove insulation and seals from the housing back panel

- ▶ Turn the ventilation unit so that the back panel points up.
- ▶ Detach the two sealing rings (item 1 in Fig. 9) from the air spigots.
- ▶ Detach the black insulation (item 2 in Fig. 9) from the housing back panel.

#### 4.11 Detach switch from electronics compartment cover

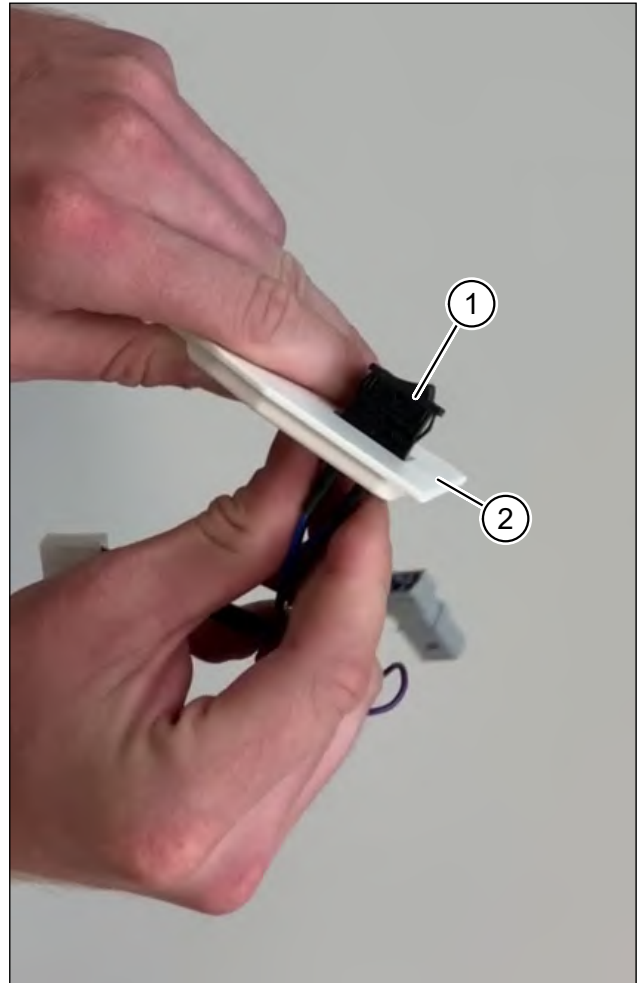


Fig. 10: Detach switch from electronics compartment cover

- ▶ Press the two retaining tabs together on the back of the mains switch (item 1 in Fig. 10).
- ▶ Slide the switch with the cable harness forward out of the electronics compartment cover (item 2 in Fig. 10).

#### 4.12 Remove flap motors for air flaps

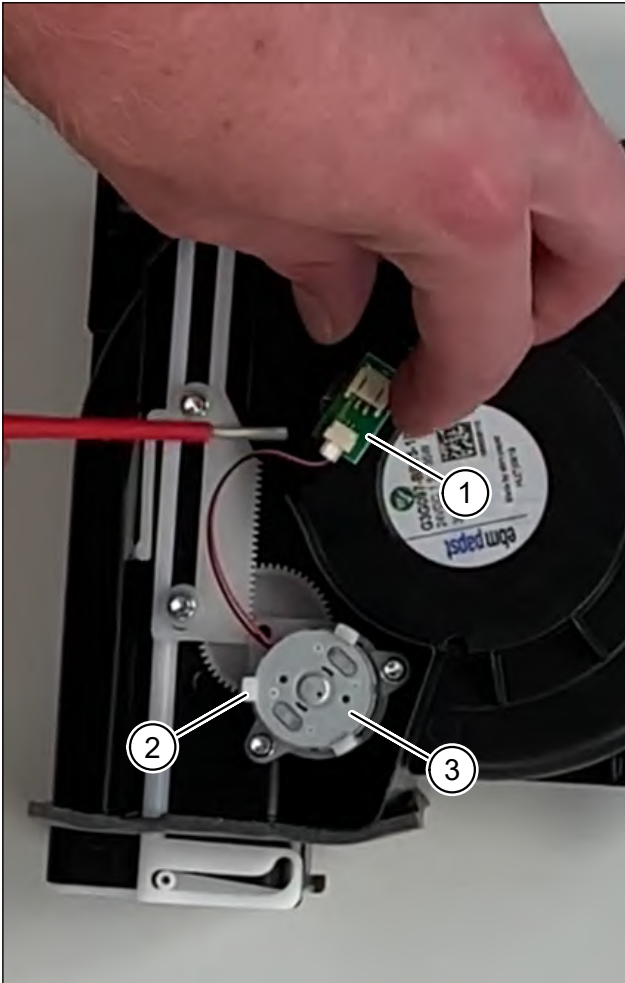


Fig. 11: Remove flap motors for air flaps

- ▶ Use a screwdriver to lift the connection PCB (item 1 in Fig. 11) for the flap motor off the removed supply air and exhaust air fan.
- ▶ Push the retaining clips (item 2 in Fig. 11) for the flap motor outwards and pull the flap motor (item 3 in Fig. 11) off the removed supply air and exhaust air fan.

#### 4.13 Disposal of the components

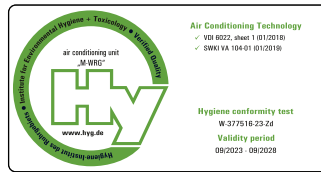
- ▶ Dispose of the components separated in the previous steps. There is a list of materials in Table 1 on page 12.

## 5 Material list

Component	Material	Item in fig.
Air grille	ABS	Item 6 in Fig. 3
Electronics compartment covers	ABS	Item 2 in Fig. 3
Housing	ABS	Item 4 in Fig. 8
Intermediate plate	ABS	Item 5 in Fig. 3
Unit cover	ABS	Item 2 in Fig. 1
Extract air filter	ABS / filter medium	Item 1 in Fig. 2
Outdoor air filter	ABS / filter medium	Item 2 in Fig. 2
Heat exchanger	Aluminium/plastic	Item 2 in Fig. 4
Intermediate plate seal	Cellular rubber EPDM	Item 5 in Fig. 3
Sealing profiles	Elastomers	Item 3 in Fig. 4
Sealing rings on air spigots	Elastomers	Item 1 in Fig. 9
Cables	Electrical component	–
Connection PCB for flap motor	Electrical component	Item 1 in Fig. 11
Control PCB	Electrical component	Item 4 in Fig. 7
Distributor PCB	Electrical component	Item 2 in Fig. 8
Exhaust air fan	Electrical component	Item 1 in Fig. 5
Flap motor	Electrical component	Item 3 in Fig. 11
Interface PCB	Electrical component	Item 2 in Fig. 7
Mains switch	Electrical component	Item 1 in Fig. 10
Membrane touch pad	Electrical component	Item 6 in Fig. 7
Ribbon cables	Electrical component	–
Sensors	Electrical component	Item 1 in Fig. 6
Supply air fan	Electrical component	Item 4 in Fig. 5
Housing internal seal	EPDM	Item 5 in Fig. 7
Holder over distributor PCB	PE foam	Item 1 in Fig. 8
Insulation on housing back panel	PE foam	Item 2 in Fig. 9
Seal in the electronics compartment	PE foam	Item 1 in Fig. 4
Antenna holder with film antenna	PE foam / electrical component	Item 3 in Fig. 7
Filter cover	PS	Item 2 in Fig. 2
Filter ring	PS	Item 1 in Fig. 2
Insulation on back of the unit cover	PU foam	Item 2 in Fig. 1
Filter channel insulation pieces for extract air/supply air	PU/PE foam	Item 4 in Fig. 4
Screws	Steel	–

Table 1: Material list for the components installed in the M-WRG-II ventilation unit





We have checked the content of this publication for conformity with the product described in it. There may nevertheless still be differences, so we cannot guarantee complete accuracy.

The information in this publication is regularly checked and any necessary corrections are made in subsequent editions.

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