

# Enervent Pinion

Ventilation unit operation and maintenance instructions



**enervent**

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## READ FIRST

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This instruction manual is intended for all users of the Enervent ventilation units. Only qualified persons may install the equipment described in this manual, according to the manufacturer's instructions and the local laws and regulations. Unless the instructions provided in this manual are followed, the warranty for the equipment becomes void and personal and material damages may be result.

The equipment described in this manual may not be used by persons (including children) with reduced physical, sensory or mental capacity or without sufficient experience or knowledge, unless a person responsible for their safety is supervising and counselling in the use of the equipment.

## PURPOSE OF USE

The purpose of the unit is to improve the quality of indoor air and its primary function is ventilation.

The unit is also used for the recovery of heat energy from the extract air. In addition, depending on the model and accessories the unit can be used for cooling the supply air in summer. It can also be used for regulating the moisture and carbon dioxide levels of indoor air.

# SAFETY

# TYPE PLATE

## General

### DANGER

Always check before opening the service hatch that the supply voltage of the equipment is switched off.

### WARNING

In case of malfunction, always find out the reason for the malfunction before starting the unit again.

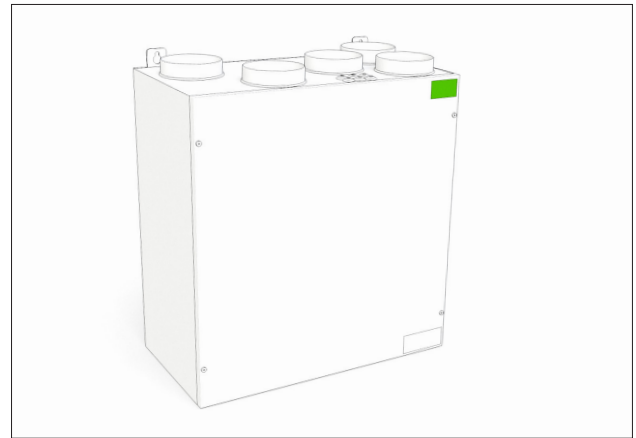
### WARNING




Wait for two (2) minutes after switching off the unit power before you commence with the maintenance. Although the power is switched off, the fans continue running and the after-heating coil stays hot for a while.

## Electrical safety

### DANGER

Only an authorised electrician may perform any actions in the electrical box.

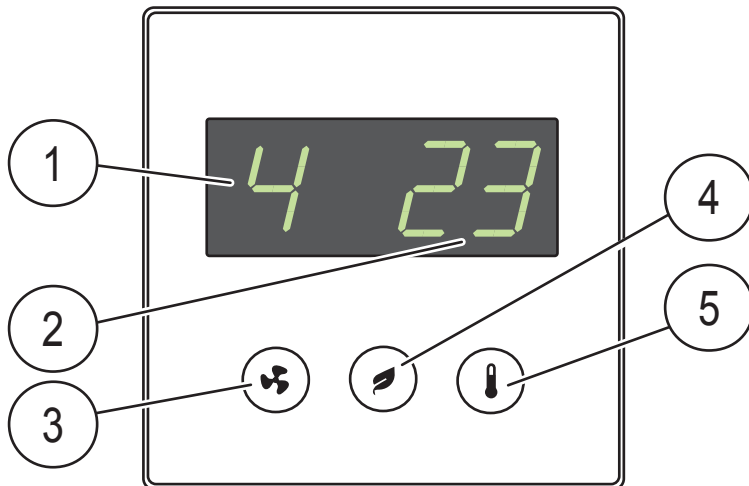


<b>enervent</b> <i>ilmanvaihtolaite ventilation unit</i>
TYYPPI/TYPE:
W/ V/ HZ / A:
SRJ. NRO/SERIAL NO:
<a href="http://www.enervent.com">www.enervent.com</a> IP 20   

Should you need any technical support, refer to the equipment type and serial number in the type plate.

# USE OF THE VENTILATION UNIT

When the ventilation system has been carefully designed and installed, any actions from the users are seldom needed. The user can just relax and enjoy good ventilation.



Button/display	Description
Mode display	Current operation mode
Temperature display	Target temperature of the supply air
Mode button	Selection of the operation mode (browsing of the parameters)
Eco button	Selection of Eco mode (browsing of the parameters)
Temperature button	Selection of the target temperature of the supply air

## NOTE:

Some functions of the control panel are for installation or maintenance purposes only.

## The eWind control panel

*The eWind control panel*

- |                                |                                       |                       |
|--------------------------------|---------------------------------------|-----------------------|
| 1. <i>Mode (in basic view)</i> | 2. <i>Temperature (in basic view)</i> | 3. <i>Mode button</i> |
| 4. <i>Eco button</i>           | 5. <i>Temperature button</i>          |                       |

## Daily use of the ventilation

The ventilation is adjusted with an easy-to-use control panel, the operation of which is based on actual situations of use. Operation modes based on these situations cover all the ventilation needs of your home. When you change the operation mode, the operation of the ventilation unit is changed accordingly. The installer of the unit adjusts the settings for each operation mode when installing the ventilation unit.

The control panel is usually in standby mode where the display is dimmed. You can activate the panel by pressing any button.


## Operation modes

- 1 = Away (when you are not at home)
- 2 = Home (when you are at home)
- 3 = Home (when you are at home, boosted ventilation)
- 4 = Boosted (when the ventilation needs to be boosted more)
- F-PL = Fireplace mode (when lighting a fire in the fireplace)
- HEAt = Heating on/heating off
- Eco = Energy-saving ventilation
- PdC = Hood mode

## Away mode (1)

You can reduce ventilation when you are going to be away for an extended period of time, e.g., due to a trip.

To select:

- 1 Go to mode 1 by pressing button .
- The ventilation system will enter the selected mode.


### NOTE:

You can select Away mode by using an external switch as well (if installed).

## Home mode (2)

When you are at home, the ventilation unit functions normally in Home mode.


To select:

- 1 Go to mode 2 by pressing button .
- The ventilation system will enter the selected mode.

## Home mode, boosted ventilation (3)

When you need more efficient ventilation, you can increase the airflow.


To select:

- 1 Go to mode 3 by pressing button .
- The ventilation system will enter the selected mode.

## Boosted mode (4)

When you have visitors, the ventilation level of the mode designed for everyday use may not be sufficient. This may be the case, for example, when several people are having a sauna.

To select:


- 1 Go to mode 4 by pressing button .
- The ventilation system will enter the selected mode. There is a time limit in Boosted mode. The passing of time is displayed on the screen by alternating bars after the number of the mode.

### NOTE:

If Boosted mode is controlled by pressing an external button, the mode will remain on as long as the button is activated. When the button is released, Boosted mode will remain on for the duration set in the system. The factory setting is 2 hours.

## To change the supply air temperature

The target temperature of the supply air (displayed on the screen) is set when installing the system. You can adjust the temperature on the scale 15...22 °C. To adjust:

- 1 Go to the desired target temperature by pressing button .
- The system adjusts the efficiency of the heat recovery or the effect of the after-heating/cooling accordingly.

## Fireplace mode

The Fireplace mode may be useful when you light a fire in the fireplace.


To select:

### WARNING

Fireplace mode is designed for use only when lighting a fire in the fireplace – not to be used as the source of replacement air when using the fireplace.


### TIP

Unnecessary use of Fireplace mode causes unnecessary waste of energy.

- 1 Press button  for 3 seconds. Text **on** will be displayed for a short period of time and then followed by **F-PL**.

---

To go back to Home mode:

- 1 Press button  for 3 seconds. The text **oFF** will be displayed for a short period of time. Next, the display will return to the basic view.
- 

#### NOTE:

The default duration of Fireplace mode is 10 minutes and you can select it at most two times per day. When the time has elapsed, the system will return to the previous mode.

You can select Fireplace mode by using a separate Fireplace button as well (if installed).


If a cooker hood has been connected to the unit, the fireplace mode will not be available.

### Hood mode


In Hood mode, the unit will boost ventilation and remove cooking smells from the cooker more efficiently. When the cooker hood has been connected to the unit and the hood boosting has been activated from the hood, the text "PdC" will be displayed on the screen. When this mode is selected, the unit's mode cannot be changed by using the eWind control panel.

### Heating mode

In Heating mode the supply air is heated by using the integrated heater. To select:

- 1 Press button  for 3 seconds. The text **HEAt** will be displayed for a short period of time. Next, the display will return to the standard view.
- 

To go back to Home mode:

- 1 Press button  for 3 seconds. The texts **HEAt** and **oFF** will be displayed for a short period of time. Next, the display will return to the standard view.
- 

#### NOTE:


The heater does not heat the supply air when the outside temperature exceeds +25 °C.

### Eco mode


When you select Eco mode in the ventilation system, the system will save energy by making minor adjustments in the set temperature and airflow values. In Eco mode, the system does not react to changes in temperature as quickly as in the normal mode. It will first examine which way the temperature is going before it starts to heat or cool the supply air.

This green operation mode will not significantly reduce comfort, but it will reduce costs.

To select:

- 1 Press button . The text **ECO** and **on** will be displayed for a short period of time. Next, the display will return to the basic view. The ventilation system will enter the selected mode.
- 

To go back to Home mode:

- 1 Press button . The texts **ECO** and **oFF** will be displayed for a short period of time. Next, the display will return to the basic view.
- 

#### NOTE:

The selected Eco mode will be switched off when the outside temperature exceeds +25 °C and it will be switched back on when the outside temperature falls below +25 °C.



# EFFICIENT USE OF THE VENTILATION

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A correctly designed and used ventilation system reduces costs and saves energy. In addition, it promotes the health of both the living environment and the residents.

- Always use the ventilation system according to the plan drawn up for your home – around the year.
- Clean or replace the filters when the system advises you to do so and vacuum-clean the interior of the unit regularly.
- Open the lid of the ventilation unit and take a look inside the unit regularly, e.g. once a month.
- Dust or other impurities in the air may accumulate in the equipment. Dirt blocks the filters and adheres to the heat exchanger and weakens the efficiency of ventilation.
- Use special modes, such as Fireplace mode, only when necessary.
- The unnecessary use of special modes increases energy consumption.
- Instead of or in addition to adjusting the ventilation system, you can improve living comfort by using traditional methods:
- Keep the curtains and windows closed on hot days in order to keep out the heat of the sun. Dress more warmly on cold days. This will help you to save a lot of energy.
- Use only spare parts approved by Enervent.
- Use original filters only. They have been designed to ensure the best possible performance of your ventilation system.
- Use **Eco** mode in order to save energy and reduce costs, without compromising the quality of indoor air.

## Use of the ventilation during the cold season

### CAUTION

Reducing ventilation may cause serious damage to the structures of your house.

Do not reduce ventilation or switch it off when the outdoor temperature drops. Instead of decreasing, the costs may increase. Your ventilation system is the result of a professional system designer. Changes in the outside temperature have been taken into consideration in designing the system and the unit. If there are no changes in your daily routines, no adjustments are required in the ventilation system.

If you reduce airflow in cold weather, ice may form inside the ventilation unit. The risk is especially high in extremely cold weather and when the indoor air humidity is high (the shower is used frequently and large amounts of laundry are dried).

If the structure of the ventilation system needs to be updated, contact the designer of the system.

## ADDITIONAL FUNCTIONS




### Service reminder display

The purpose of the service reminder is to remind the user when the service interval has elapsed. The maintenance interval is 4 or 6 months depending on the model.

When the service interval has elapsed, the text **FILS** will be displayed on the screen.

#### Time for next service

Checking:

- 1 Simultaneously press buttons  and  once.
  - 2 Browse to the parameter n13 by pressing button .
- The time remaining until the next service is displayed in days.

### Set-up display

The set-up display is designed for professional use only. It displays the current settings in the ventilation system and enables changing the settings.


#### CAUTION

Changing the settings is only allowed for an authorised person who has received sufficient training in using the ventilation system.

## ADJUSTMENTS

### Supply air is too warm

If the air coming from the ventilation system is too warm:

1. Go to a lower supply air target temperature by pressing button . The temperature value on the panel will change and the ventilation system will be adjusted according to the set target temperature.


#### NOTE:

The system uses all of its devices in order to reach the required temperature. Missing devices, such as a cooling coil, may cause a higher temperature than the one you selected.

Using Eco mode maximises heat recovery in warmer weather as well. However, it may also cause the supply air to be too warm. In this case, switch off Eco mode.

### Supply air is too cold

If the air coming from the ventilation system is too cold:

Go to a higher supply air target temperature by pressing the  button. The temperature value on the panel will change and the ventilation system will be adjusted according to the set target temperature.

#### NOTE:

The system uses all of its devices in order to reach the required temperature. Missing devices, such as an after-heating coil, may cause a lower temperature than the one you selected.

Insufficient maintenance: Cold supply air can be caused by, for example, a blocked filter or the heat recovery's worn-out drive belt.

See also the following section: Heating mode, on page 8

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## Ventilation is not sufficient

If the ventilation is not sufficient:

1. Check that the filters are clean and that they do not need to be replaced.
  - If the filters are dirty, replace them according to the instructions provided in the section **"Filters" on page 12**.
2. Check that no changes have occurred in the need for ventilation after the design and installation of the system.
  - If changes have occurred in the number of people living in your household or in your routines, the ventilation system may need to be updated. Contact the designer of your ventilation system.

## Ventilation is noisy

Although our ventilation units are fairly quiet, they are never totally silent. If the ventilation system has been designed and installed correctly (no devices are placed close to the bedroom and soundproof doors and silencers are used), disturbance caused by ventilation can be reduced to a minimum.

If the ventilation is unusually noisy:

1. Check that the filters are clean and that they do not need to be replaced.
2. If the filters are dirty, replace them according to the instructions provided in the section **"Filters" on page 12**.
3. Check that the fans are clean and that they do not require cleaning.
4. If the fans are dirty, clean them as instructed in the maintenance instructions.
5. Check that the automated humidity boosting for removing moisture is not on.
6. Open the Information display and browse to the parameter n1. If the parameter is visible, the humidity boosting is on.

### NOTE:

If the automatic humidity boosting is always on, the humidity may be too high. Contact the designer of your ventilation system.

## Indoor air is too humid

In addition to feeling the humidity, you may also identify a too high moisture content by listening to the sound caused by the ventilation. If the automatic humidity boosting is always on, the humidity may be too high and thus the ventilation system is trying to return the humidity to the correct level.

If the indoor air is too humid:

1. Check that the filters are clean and that they do not need to be replaced.
  - If the filters are dirty, replace them according to the instructions provided in the section **"Filters" on page 12**.
2. Check that no changes have occurred in the need for ventilation after the design and installation of the system.

### NOTE:

If changes have occurred in the number of people living in your household and/or using the shower or sauna, the ventilation system may need to be updated. Contact the designer of your ventilation system.

## Ventilation does not work

If the ventilation does not work:

1. Check that the unit is connected to the electricity supply.
2. Check that the fuse has not tripped in the electricity distribution board.

If all these matters are ok and the ventilation still does not work, contact maintenance.

# MAINTENANCE

The unit requires very little maintenance. The required maintenance usually includes the following tasks:

- replacing the filters
- cleaning the heat exchanger (in connection with cleaning the ventilation ducts)
- cleaning the fans (in connection with cleaning the ventilation ducts)
- checking the condensation water discharge pipe.

## DANGER

Before commencing with maintenance, switch the power supply off by removing the plug from the socket outlet. Wait for two (2) minutes before you commence the maintenance. Although the power supply of the unit has been switched off, the fans continue running and the electric heater will be hot for a while.

The equipment includes moving parts (e.g., fans and the motor and belt of the rotating heat exchanger) which wear out in use. Due to normal wear these parts must be replaced during the life span of the equipment. The normal service life of the wearing parts is determined by the operational conditions and time of use and thus no normal maintenance interval can be specified for the wearing parts.

## Service reminder

The control panel will advise the user to conduct the regular maintenance. The service reminder **FILS** appears on the control panel display when the end of the maintenance interval has been reached.

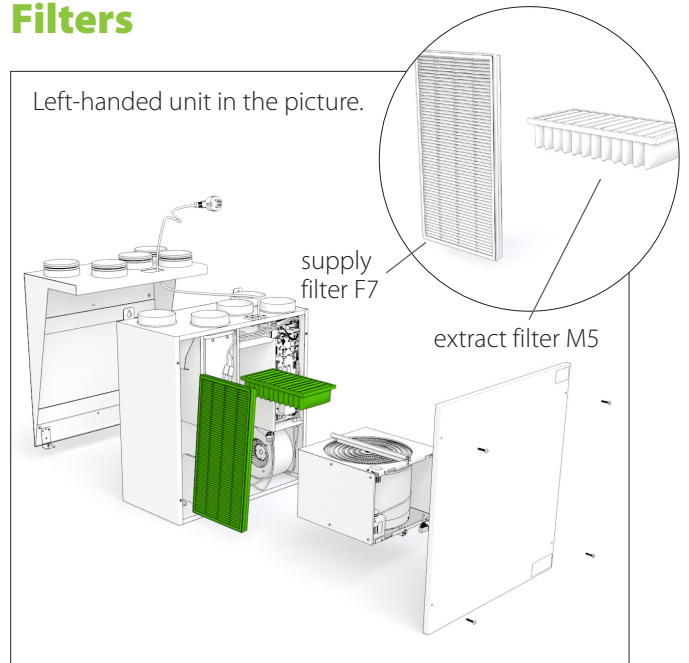
Acknowledge the service reminder by pressing any key on the eWind panel for 5 seconds.

## FOR YOUR INFORMATION

In connection with conducting maintenance on any part of the equipment, always check the wear and cleanliness of other parts as well.

Watch the maintenance instruction video in our Help Center on our website at [www.enervent.com](http://www.enervent.com).

## Filters



M5 and F7 cassette filters are used in the ventilation unit.

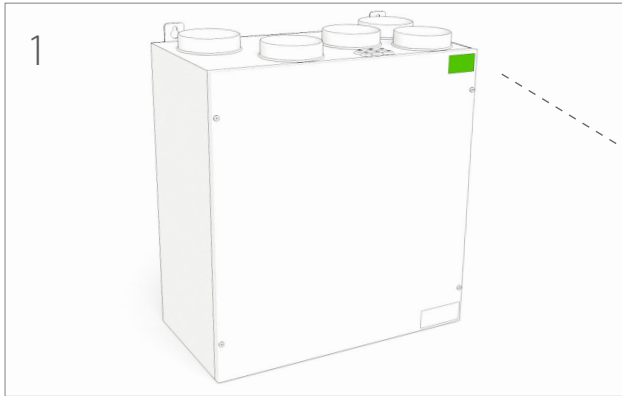
The maximum recommended maintenance interval of the cassette filter is 4 months.



Cassette filters can be cleaned by using compressed air which extends the maintenance interval at the maximum to six (6) months.

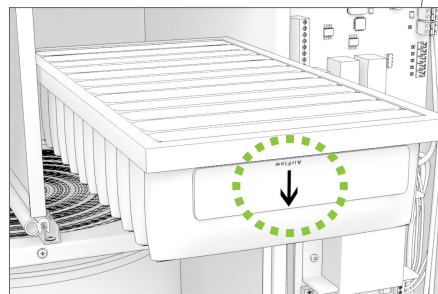
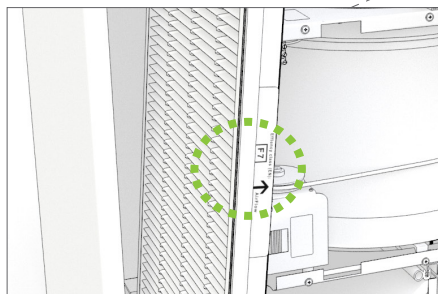
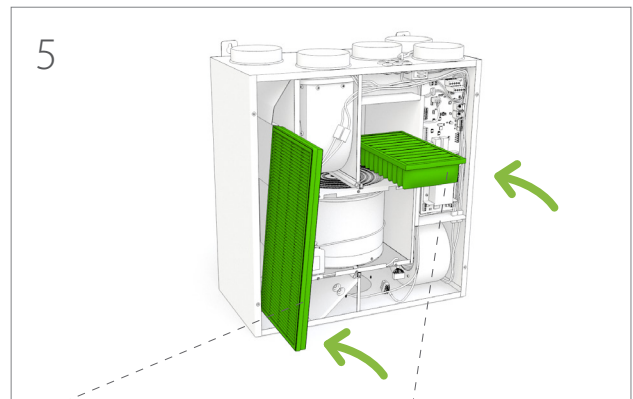
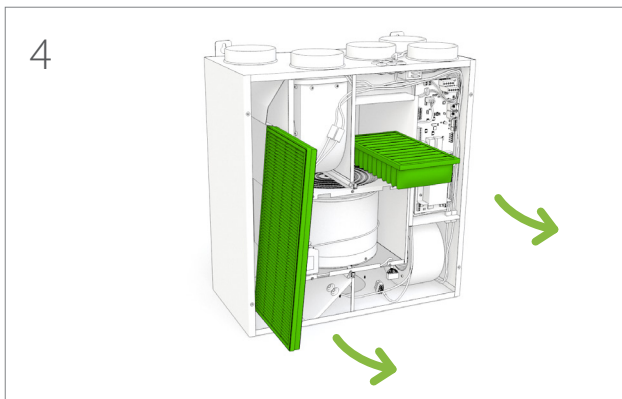
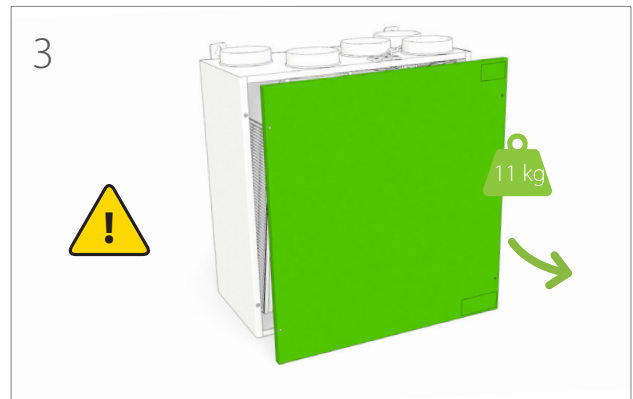
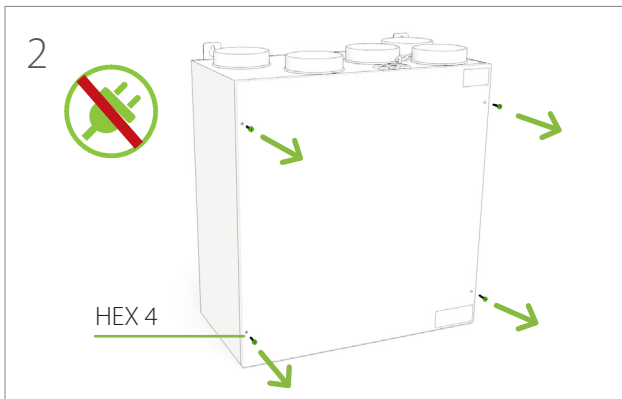
## FOR YOUR INFORMATION

The compressed air used must be dry and oil-free.

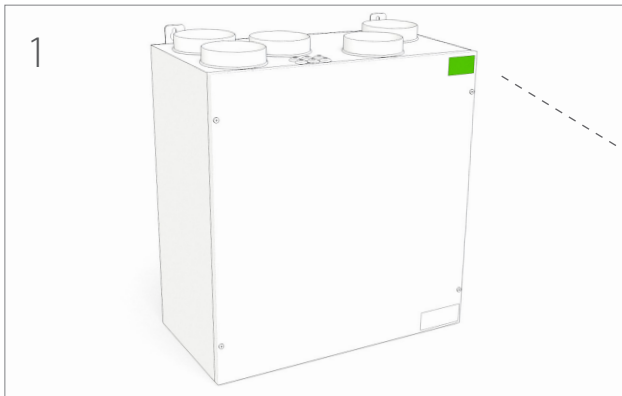
## Replacing filters, left-handed model






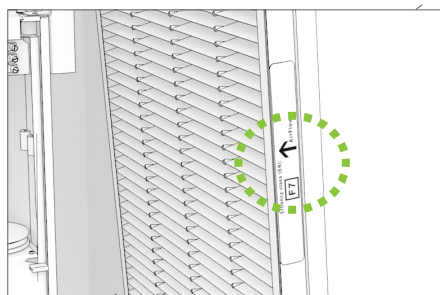
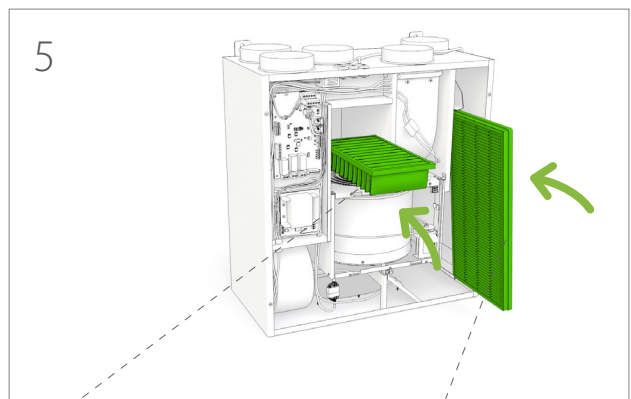
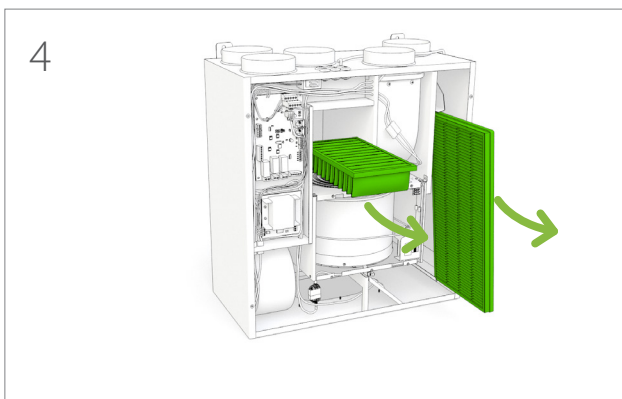
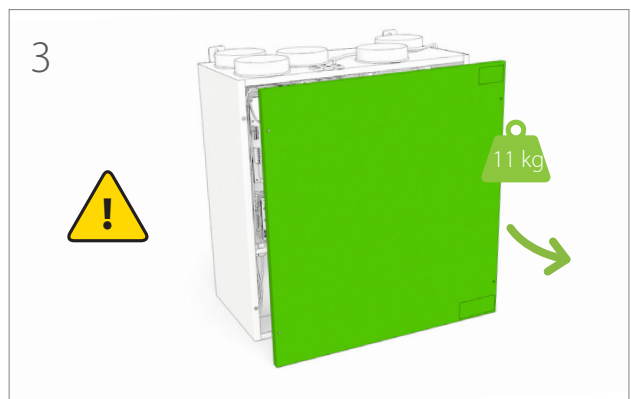
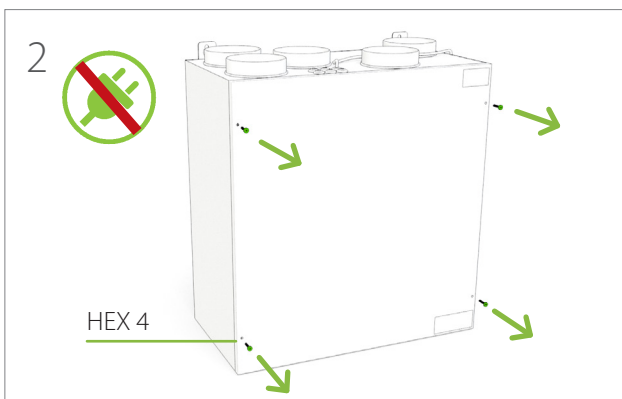
<b>enervent</b> ilmanvaihtolaite ventilation unit	
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SRJ. NRO/SERIAL NO:	
www.enervent.com	IP 20   



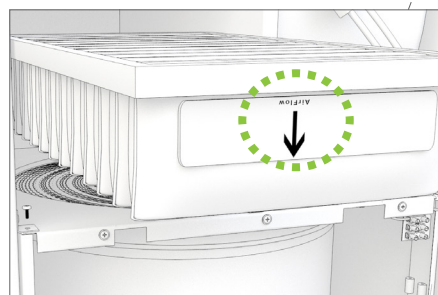
## Replacing filters, right-handed model



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W/ V/ HZ / A:	
SRJ. NRO/SERIAL NO:	
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F7

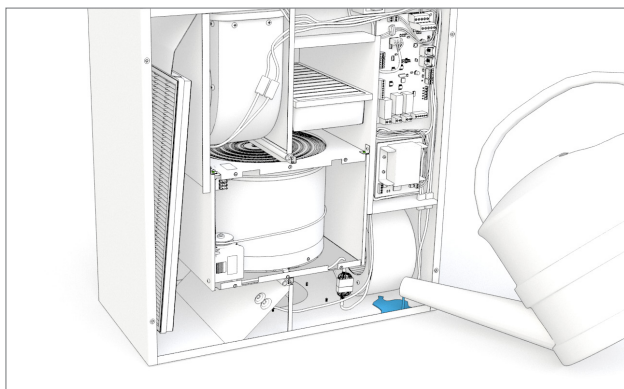


M5

## ADDING WATER TO THE WATER TRAP (REMOVAL OF THE CONDENSATION WATER)

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### Left-handed model



### Right-handed model



# TROUBLESHOOTING

Alarm	Description	Alarm limit	Symptoms	Possible cause	Measure	Notes
FILS	Service reminder.	4 or 6 months		<b>It is time for regular maintenance.</b>	<p>Replace the filters.</p> <p>Inspect the ventilation unit.</p> <p>Clean as necessary.</p> <p>See if there are any damages visible.</p>	Acknowledge by pressing any button for 5 seconds.
AL2	The supply air is cold after the rotating heat exchanger.	+5 °C	Cold supply air.	<p><b>The heat exchanger does not rotate:</b></p> <ul style="list-style-type: none"> <li>• The drive belt is damaged.</li> <li>• The drive belt skids.</li> <li>• The heat exchanger motor is damaged.</li> </ul>	<p>If the drive belt is damaged, take the spare belt into use and clean the outer surface of the heat exchanger. Have the new belt and the motor of the heat exchanger replaced by a maintenance company authorised by the manufacturer.</p>	<p>The ventilation unit switches to malfunction mode and the fans operate with minimum power.</p> <p>The alarm is automatically reset when the fault is cleared.</p>

Other fault codes (Err, ---, oFFE, AL1, AL3, AL4, AL5, AL6, AL7, AL8): Please contact an authorised maintenance company (refer to [https://www.enervent.com/contact-information/?\\_ga=2.164480572.2024853575.1507015364-2052970745.1506576827](https://www.enervent.com/contact-information/?_ga=2.164480572.2024853575.1507015364-2052970745.1506576827))









## User's quick guide

<p>Acknowledge the FILS service reminder by pressing any key on the eWind control panel for 5 seconds.</p>	<p>Press the Mode button for 3 seconds. The text "on" will be displayed for a short period of time and then followed by "F-PL".</p> <p>F-PL will not be in use if a cooker hood is connected to the equipment.</p>	