

Nederman

Instruction Manual

FilterCart
FilterCart Advanced



Original instruction manual

EN INSTRUCTION MANUAL

FilterCart Advanced

FilterCart Advanced

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Declaration of conformity

We, AB Ph. Nederman & Co., declare under our sole responsibility that the Nederman product: FilterCart Advanced (Part No. **, and stated versions of **) to which this declaration relates, is in conformity with all the relevant provisions of the following directives and standards:

Directives

2006/42/EC, 2014/30/EC, 2011/65/EU.

Standards

EN 60204-1, EN ISO 12100:2010, EN 61000-3-3, EN 61000-6-2, EN 61000-6-4.

The name and signature at the end of this document is the person responsible for both the declaration of conformity and the technical file.

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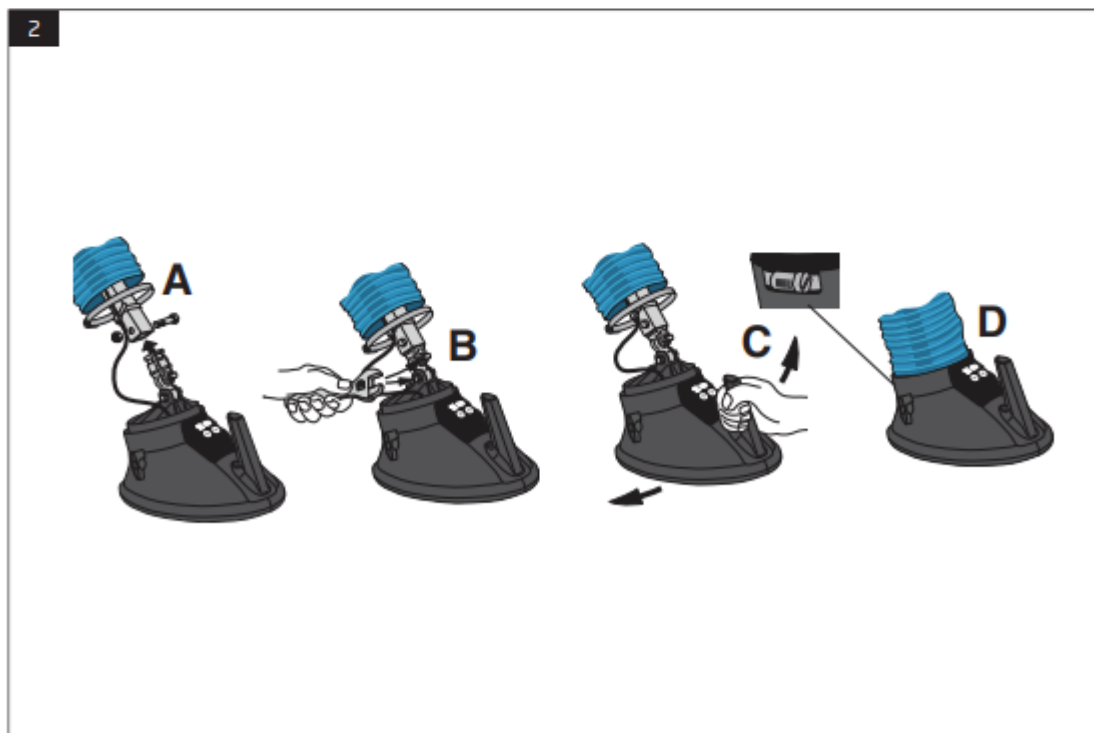
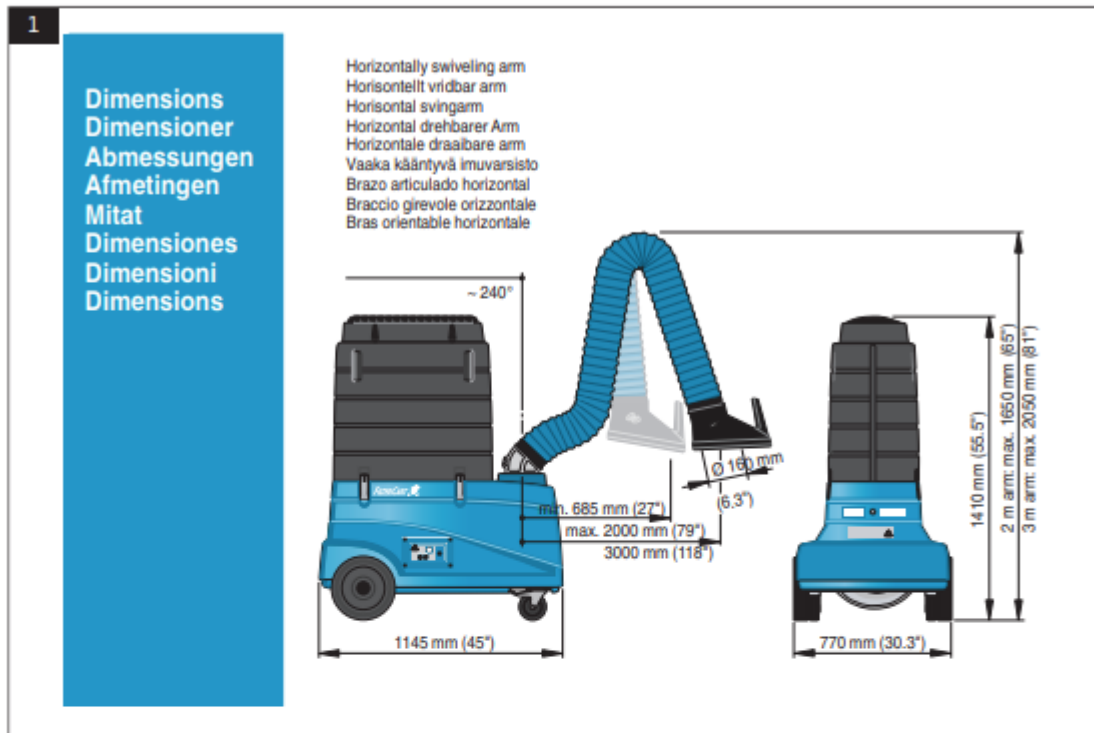
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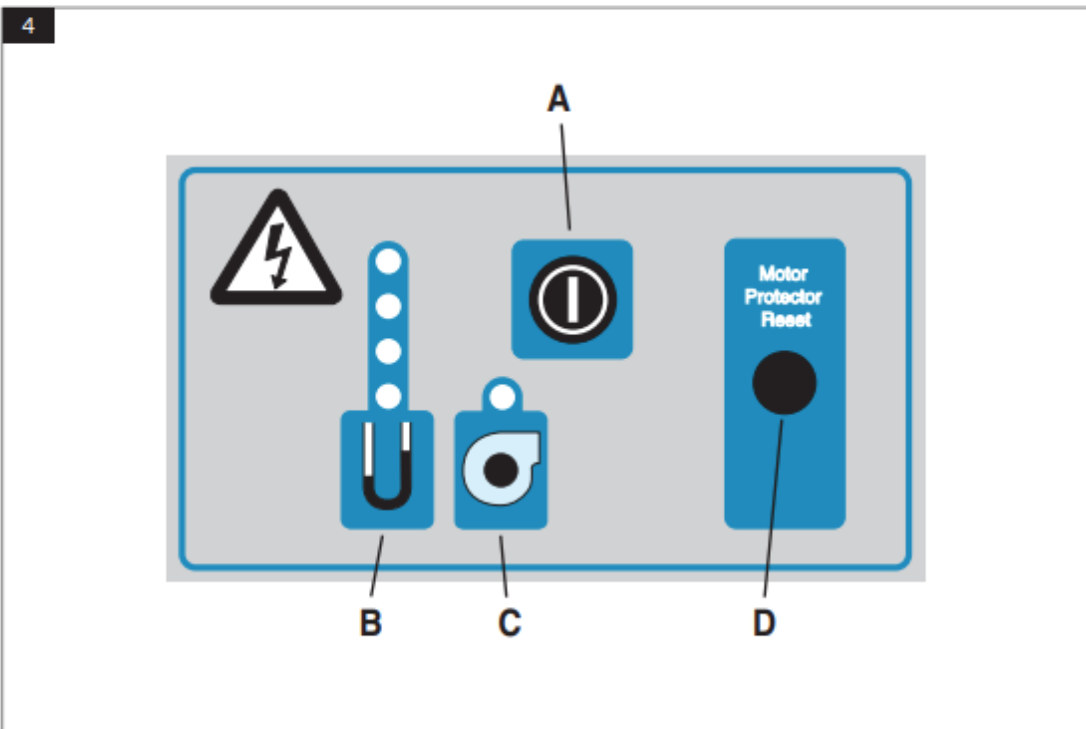
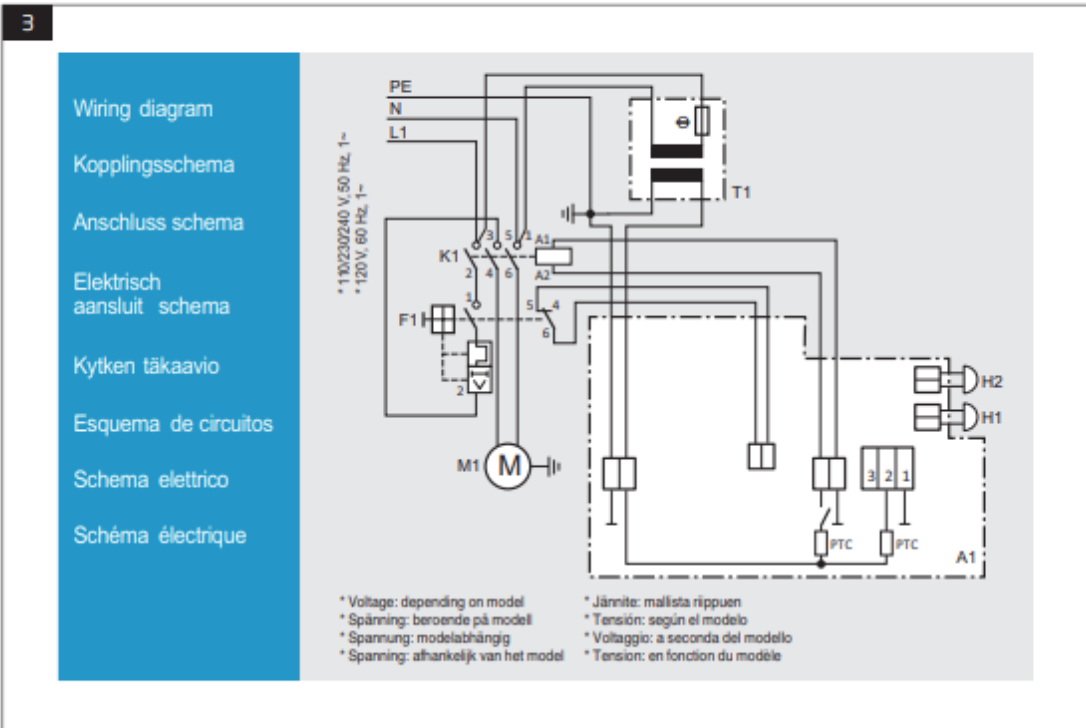


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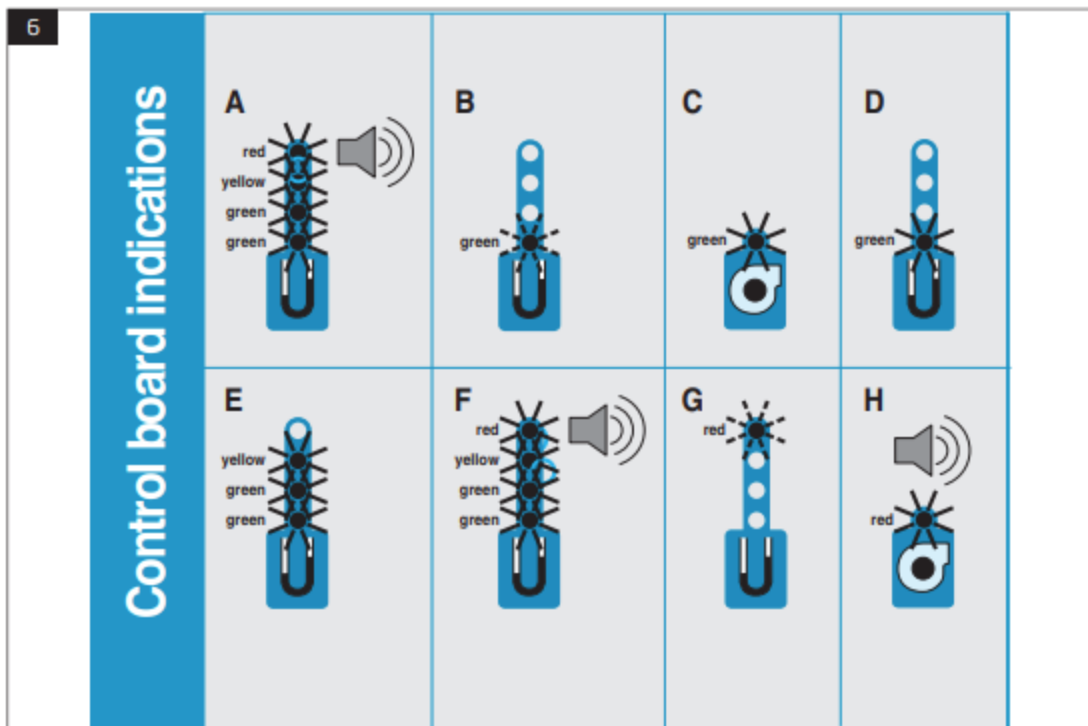
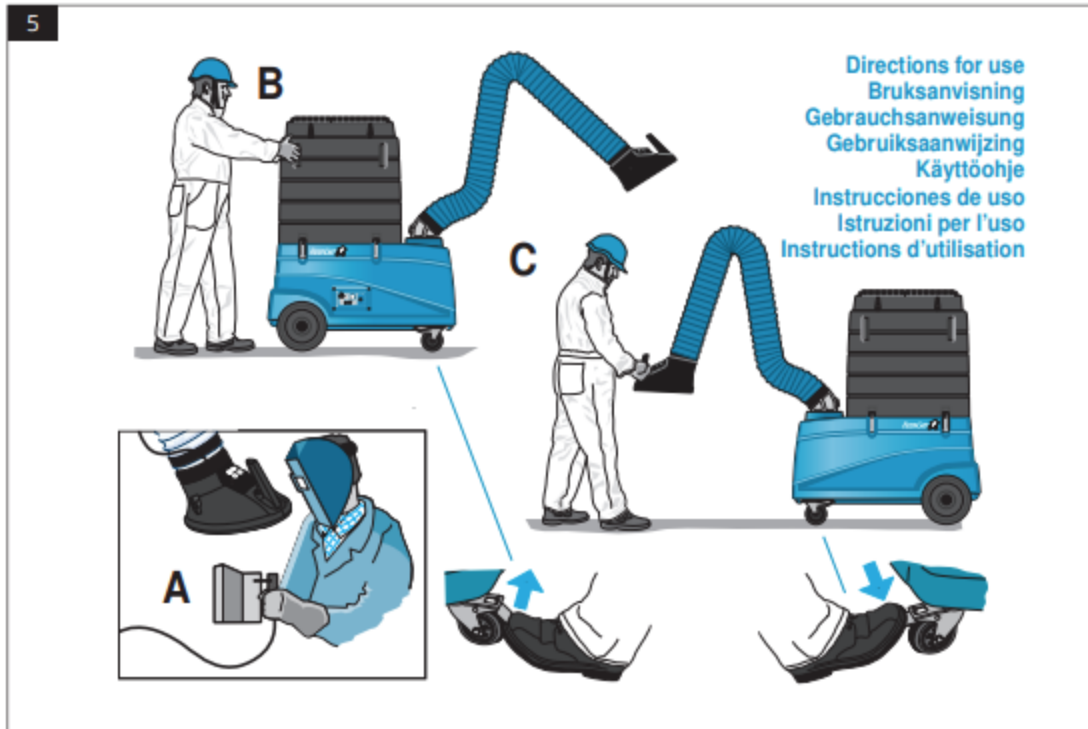
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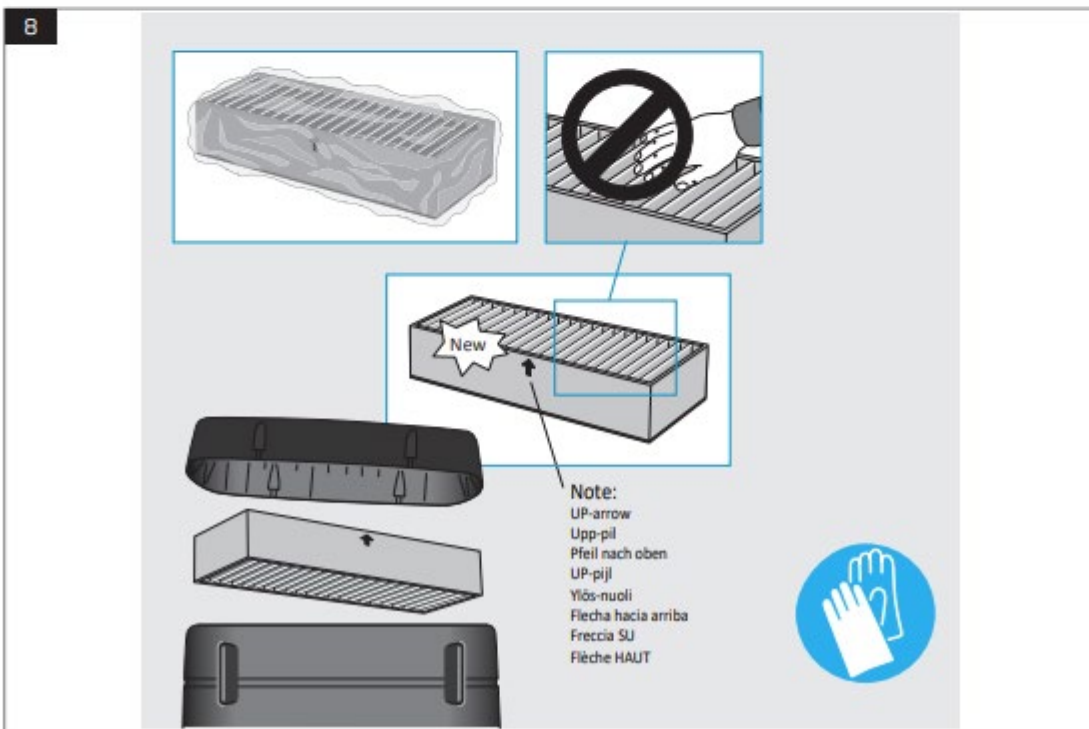
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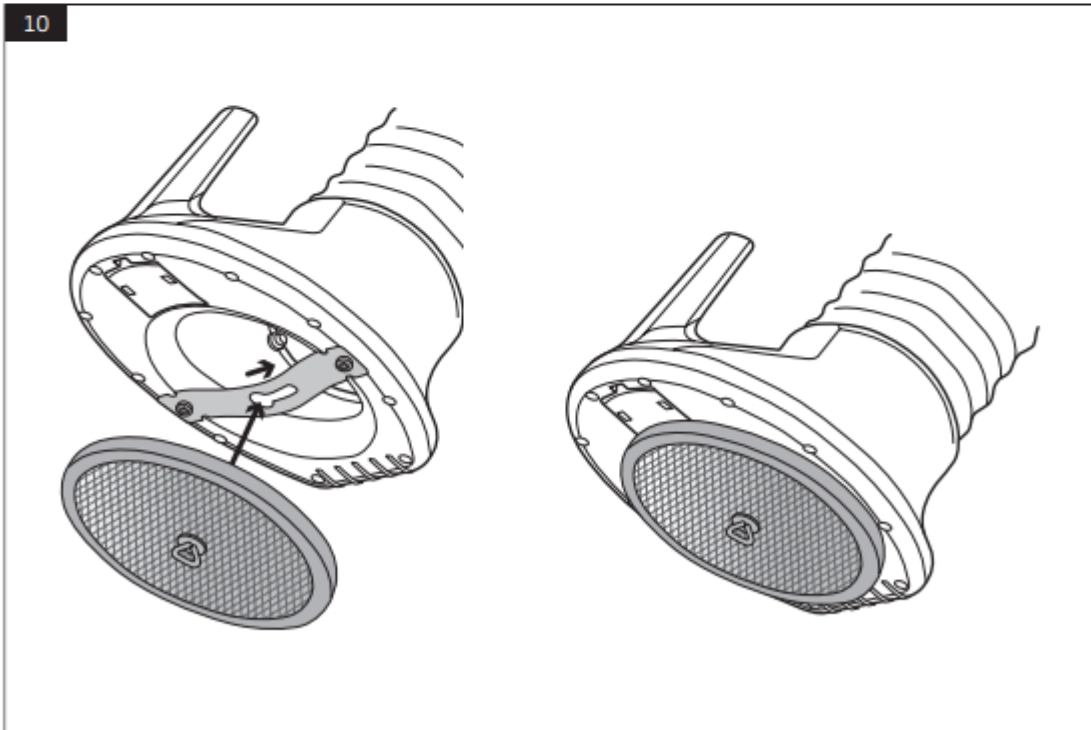
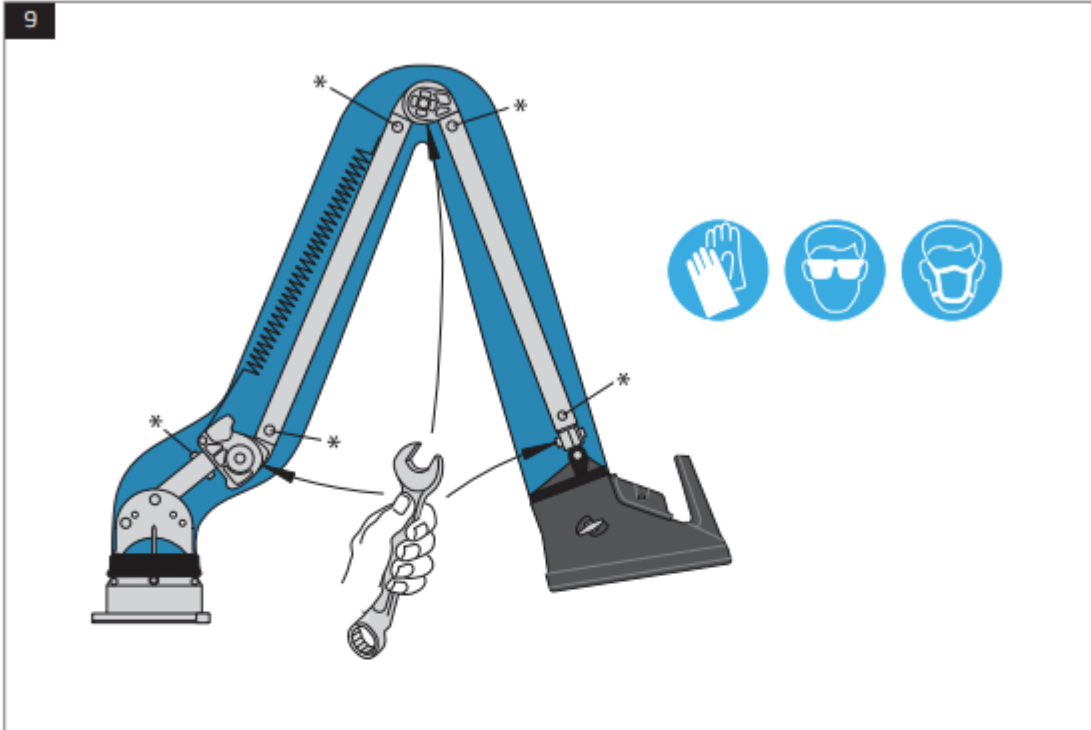
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1 Preface

Thank you for using a Nederman product!

The Nederman Group is a world-leading supplier and developer of products and solutions for the environmental technology sector. Our innovative products will filter, clean and recycle in the most demanding of environments. Nederman's products and solutions will help you improve your productivity, reduce costs and also reduce the impact on the environment from industrial processes.




Read all product documentation and the product identification plate carefully before installation, use, and service of this product. Replace documentation immediately if lost. Nederman reserves the right, without previous notice, to modify and improve its products including documentation.

This product is designed to meet the requirements of relevant EC directives. To maintain this status, all installation, maintenance, and repair is to be done by qualified personnel using only Nederman original spare parts and accessories. Contact the nearest authorized distributor or Nederman for advice on technical service and obtaining spare parts. If there are any damaged or missing parts when the product is delivered, notify the carrier and the local Nederman representative immediately.


2 Safety


2.1 Classification of important information

This document contains important information that is presented either as a warning, caution or note, according to the following examples:

-  **WARNING! Risk of personal injury**
Warnings indicate a potential hazard to the health and safety of personnel, and how that hazard may be avoided.
-  **CAUTION! Risk of equipment damage**
Cautions indicate a potential hazard to the product but not to personnel, and how that hazard may be avoided.
-  Notes contain other information that is important for personnel.

2.2 General safety instructions


-  **WARNING! Work safety regulations. Risk of personal injury, fire or explosion.**
 - In case of fire, smoke from FilterCart Advanced may contain hazardous substances such as burning polycarbonate, Pvc, polyethylene, etc. Also, depending on the material being separated, there may be hazardous smoke from the separated dust.
 - The product must not be used in an environment with the danger of explosion or for dust or gases in explosive concentrations.
 - If the product has been used for dust applications it must not be used for welding fumes or grinding dust.
 - Check that no sparks or other objects that can cause fire are sucked into the arm. For welding applications generating a high amount of sparks, spark protection (accessory) must be mounted in the hood to reduce the risk of fire. See [Figure 10](#).
 - The product must not be used for extracting toxic substances (except welding fume).
 - The product must not be used without filter cartridge and casing.
 - The product must not be used in closed rooms without general ventilation.

-  **WARNING! Risk of personal injury**
Only properly trained personnel are allowed to use this product.

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4 Fitting the Fume Extractor hood

The Fume Extractor arm is already fitted. The hood must be fitted according to [Figure 2](#). Adjust the links so that the hood easily can be positioned.

 X: Cable with loop.

5 Wiring diagram

See [Figure 3](#).

- M1: Fan motor, 0.75 kW.
- A1: Circuit card.
- T1: Transformer, 24 V secondary.
- K1: Relay, fan.
- F1: Overload protector relay.
- H1: Alarm signal, 2.9 kHz.
- H2: Alarm signal, 2.9 kHz.

6 Initial operation

See [Figure 4](#).

- 1 Ensure the FilterCart Advanced has not been damaged during transport.
- 2 Check that the mains voltage is the same as on the sign plate.
- 3 Connect the connection cable with plug to the mains. The light emission diodes at B indicate fixed light and an alarm signal sounds for a short time. The light diode at C indicates blinking green light (stand by).
- 4 Start the FilterCart Advanced with the switch A.
The light emission at C indicates fixed green light: The fan operates.

6.1 Overload protector

See [Figure 4](#). The FilterCart Advanced is equipped with an overload protector which means that the power will disconnect automatically if the fan motor is overloaded.

- C: Red light emission light indicates: disconnected power and released overload protector.
- D: Button for re-setting the overload protector.

7 Directions for use

See [Figure 5](#). The FilterCart Advanced is only intended for indoor use and is designed for extraction and filtration of welding fumes. It must not be used for the extraction of fluids. The hood of the extraction arm is to be positioned as close to the pollution source as possible, see [Figure 5](#), item A. The FilterCart Advanced is to be moved from behind according to item B and with the wheels unlocked. The extraction arm is to be positioned with the wheels locked according to item C.

8 The control board indications


See [Figure 6](#).

- 1 When the mains plug is connected the light emission diodes indicate fixed light and an alarm signal sounds a short time.
- 2 The light emission diode indicates blinking green light: The FilterCart Advanced has been connected to the mains (stand by).
- 3 As the FilterCart Advanced has been started the light emission diode indicates fixed green light. The fan is in operation.
- 4 The FilterCart Advanced is ready for use and after a while, the light emission diode indicates fixed green light. After use for a certain time, the air flow will be reduced through the extraction arm and the pressure drop will increase, which will result in having to change the filter cartridge.
- 5 The light emission diodes indicate fixed light: The pressure drop has increased. Pre-warning for changing the filter cartridge.
- 6 The light emission diodes indicate fixed light and after about 30s an intermittent alarm signal starts. Change the filter cartridge. If you want to finish the work in progress before the filter cartridge is changed, the alarm signal can be stopped by pushing once on the start button. The alarm signal activates after about 10 minutes. Pushing twice on the start button makes a fan stop. As an alternative, the fan can be stopped with the switch on the Fume Extractor hood.
- 7 The light emission diode indicates blinking red light = alarm memory. The FilterCart Advanced has been stopped after the alarm start (according to above), for example at work shifts. The filter cartridge has to be changed.
- 8 The light emission diode indicates fixed red light and an intermittent alarm signal starts. The overload protector has been released. Examine the reason and reset the overload protector by pushing the "Motor Protector Reset"- button.

9 Changing the filter cartridge

See [Figure 7](#). The filter cartridge is disposable and is to be thrown away after use. The life span of the filter cartridge varies greatly depending on how the FilterCart Advanced is used and how much and what type of pollutants are collected.

Regularly check the light-emitting diodes on the pressure drop symbol on the control board to know when to change the filter cartridge, see [Chapter 8 The control board indications](#). Always check that the hoses for the extraction arm and the fan inlet are undamaged before it is decided to replace the filter cartridge.

 **WARNING! Risk of personal injury**
Use necessary personal safety equipment when replacing the filter cartridges.

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Change the filter cartridge in the following way:

- 1 Disconnect the mains connection cable.
- 2 Unlock the eccentric locks and remove the filter casing.
- 3 Use the plastic bag which comes with the new filter cartridge and pull it over the used cartridge. Fold the plastic bag under the cartridge.
- 4 Use a duster to wipe off the filter cartridge contact surfaces in the FilterCart Advanced. Put the duster in the plastic bag with the filter cartridge and close the bag with the band supplied.
- 5 Handle the used filter cartridge according to the relevant regulations for the substances that have been collected.
- 6 Check that the pressure drop hose (from the control board) not is damaged and is fitted properly.
- 7 Check that the new filter cartridge is not damaged. Also, check that the seal fitted on the underside of the cartridge is not damaged. Then fit the cartridge on the FilterCart Advanced.
- 8 Refit the filter casing. Make sure the eccentric locks tighten the filter casing properly.
 - A. Increasing the locking power.
 - B. Decreasing the locking power.

10 Changing the HEPA-filter (accessory)

See [Figure 8](#). If the FilterCart Advanced has been supplied with a HEPA-filter, this is to be changed at the same time as the main filter cartridge is changed.

WARNING! Risk of personal injury
Use necessary personal safety equipment when changing the HEPA-filter.

Change the HEPA-filter cartridge in the following way:

- 1 Disconnect the mains connection cable.
- 2 Unscrew the top cover.
- 3 Remove the used HEPA-filter and put it in the plastic bag which comes with the new HEPA filter. Close the plastic bag with the band supplied.
- 4 Handle the used HEPA-filter according to the relevant regulations for the substances that have been collected.
- 5 Check that the new HEPA-filter not is damaged. Note that the filter surface must not be touched. Handle the HEPA-filter very carefully and fit it in the FilterCart Advanced. Ensure it is fitted in the correct position and that the seal is downwards. Check that the seal not is damaged. Note the UP-arrows.
- 6 Refit the top cover. Fasten it securely.

11 Maintenance

See [Figure 9](#). Maintenance is recommended at least once a year.



WARNING! Risk of personal injury

- Disconnect the mains connection cable before starting any maintenance work.
- Use the necessary personal safety equipment.
- FilterCart Advanced needs to be cleaned before any disassembly.
- FilterCart Advanced must only be disassembled in a well-ventilated room.
- Use proper equipment, such as a vacuum cleaner to clean FilterCart Advanced.
- The area where maintenance is done must be properly cleaned after work is complete.

Do as follows:

- Change the filter cartridge (and optional HEPA-filter) if necessary, see [Chapter 9 Changing the filter cartridge](#)
- Check that the Fume Extractor hose is not damaged. If necessary change the hose.
- Check that the hose to the fan inlet is not damaged. If necessary change the hose.
- Check that no objects have been caught on the guard net on the fan inlet.
- Check that the pressure drop hose (from the control board) not is damaged and is fitted properly.
- If necessary, adjust the Fume Extractor links.
- If necessary, tighten the arm profile bolts, see the * symbols in [Figure 9](#).
- Check that the mains connection cable and the fan motor cable are not worn out or damaged.
- Check that the eccentric locks tighten the filter casing properly. Adjust the eccentric locks if necessary. See [Chapter 9 Changing the filter cartridge](#).

12 Spare Parts



CAUTION! Risk of equipment damage

Use only Nederman original spare parts and accessories.

Contact your nearest authorized distributor or Nederman for advice on technical service or if you require help with spare parts. See also www.nederman.com.

12.1 Ordering spare parts

When ordering spare parts always state the following:

- The part number and control number (see the product identification plate).
- Detail number and name of the spare part (see www.nederman.com).
- Quantity of the parts required.

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13 Accessories

- HEPA-filter H13, 7.5 m² high-efficiency final filter, class H13. (Part no. 12374016)
- Spark protection, for mounting in the hood. To reduce the risk of fire. (Part no. 10551335)

14 Recycling

The product has been designed for component materials to be recycled. Its different material types must be handled according to relevant local regulations. Contact the distributor or Nederman if uncertainties arise when scrapping the product at the end of its service life.

