

**Nederman**

IMPROVING YOUR WORKSPACE

# FilterCart

W 3 200 V 3~



**INSTRUCTION MANUAL**

**EXTRACTION & FILTER SYSTEMS**

No. 144029(01)  
2010-08-23

## Foreword

To guarantee a correct function and a minimal service, it is important to read and understand the information in this instruction manual. The manual contains important work safety regulations and warning directions which have to be read and followed.

This product is designed to meet the requirements of the relevant directives. To maintain this status all installation, repair and maintenance work must be carried out by qualified personnel using only original spare parts. Contact your nearest authorised dealer for advice on technical service or if you require spare parts.

## Technical data



600 – 1050 m<sup>3</sup>/h



main filter: > 99 % average weight filtration efficiency  
HEPA filter: > 99,97 % DOP 0,3 μm



main filter: A = 35 m<sup>2</sup>  
HEPA filter: A = 7,5 m<sup>2</sup>



200 V  
50/60 Hz, 3~  
0,9kW (1.2 hp), fan motor



m = 71 kg with 2 m arm  
m = 73 kg with 3 m arm



Welding fume, class W3 (prEN ISO 15012-1)  
non alloy steel to high alloy steel with nickel and chromium > 30 % (also pay attention to local regulations)



Spotlight: 20 W, 24 V



24 V secondary



Max. 40 °C ambient  
Max. 60 °C airflow



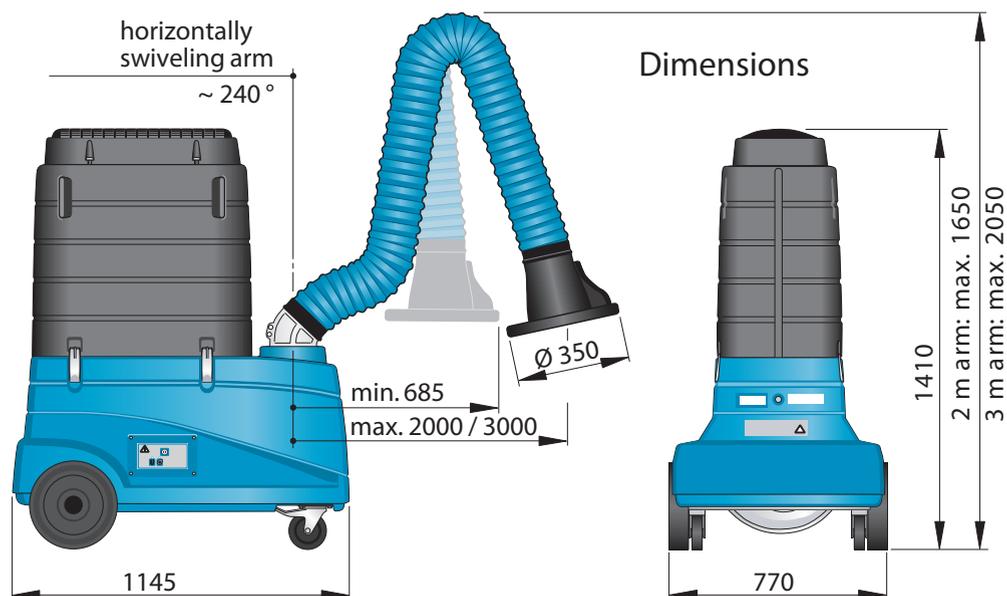
73 dB(A) measured according to ISO 11204



90 weight-% without filter cartridge

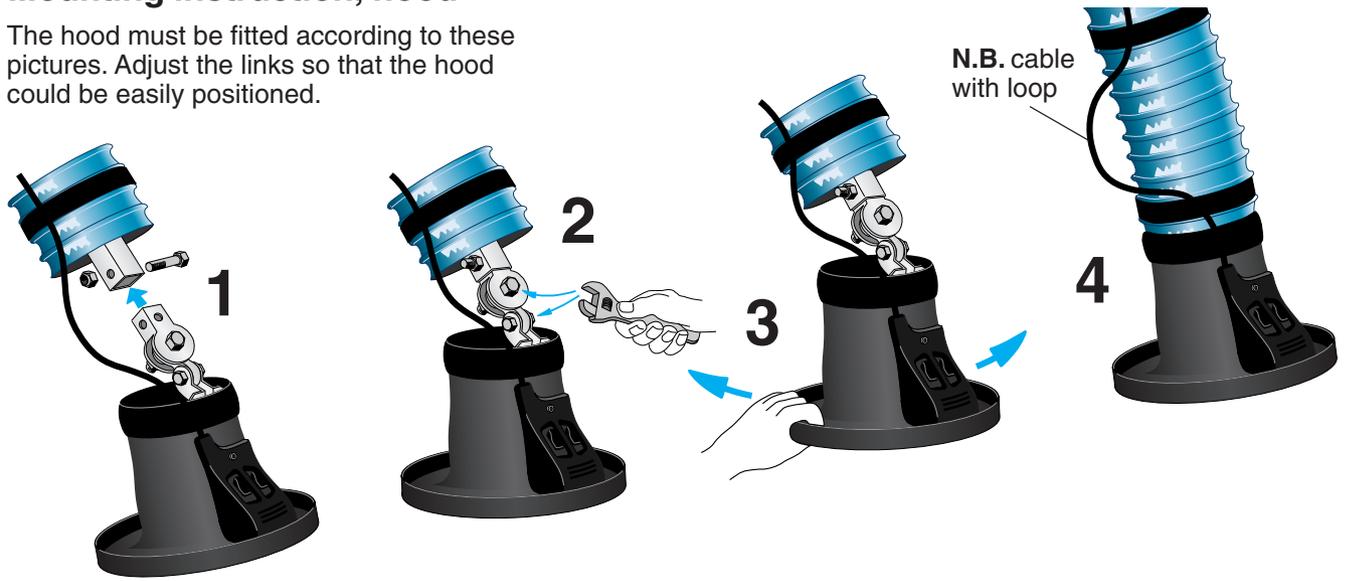


Alarm signal: 2,9 kHz



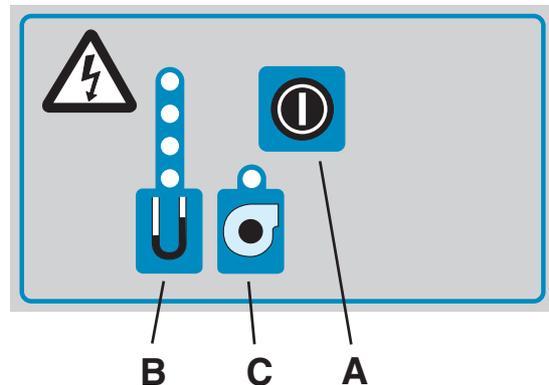
## Mounting instruction, hood

The hood must be fitted according to these pictures. Adjust the links so that the hood could be easily positioned.



## Initial operation

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



### Important!

If the fan does not start, the phase-sequence relay has released. The light emission diode at **C** indicates red light and an alarm signal starts. Alternate 2 phases in the connection cable plug.

## Overload protector

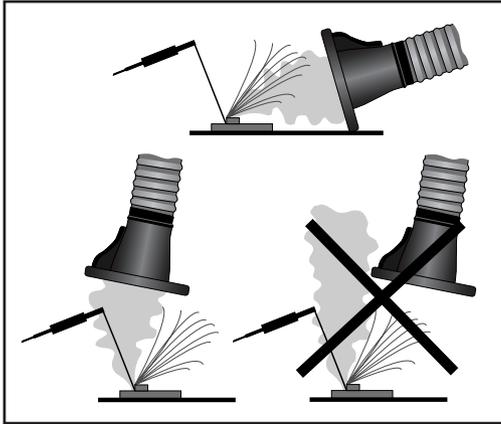
The FilterCart is equipped with an overload protector which means that the power will disconnect automatically if the fan motor should be overloaded. **C**. Red light emission light indicates: disconnected power and released overload protector. The overload protector will re-set automatically.

## Spare parts

See [www.nederman.com](http://www.nederman.com) / spare parts.  
When ordering always state part no. and control no. (see type label of the product).

## Directions for use

The FilterCart is only intended for indoor use and is designed for extraction and filtration of dust or welding fumes, class W3. It must not be used for extraction of fluids.

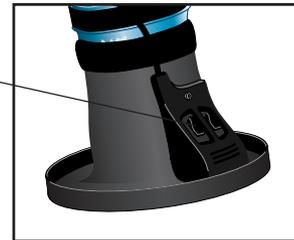


The hood should be positioned as close to the pollution source as possible.

## WORK SAFETY REGULATIONS

### Risk of personal injury, fire or explosion.

- The FilterCart must not be used in an environment with danger of explosion or for dust or gases in explosive concentrations.
- If the FilterCart has been used for dust applications it must not be used for welding fumes or grinding dust.
- The FilterCart must not be used for extracting toxic substances (except welding fumes).
- The FilterCart must not be used without filter cartridge and casing.
- The FilterCart must not be used in closed rooms without general ventilation.

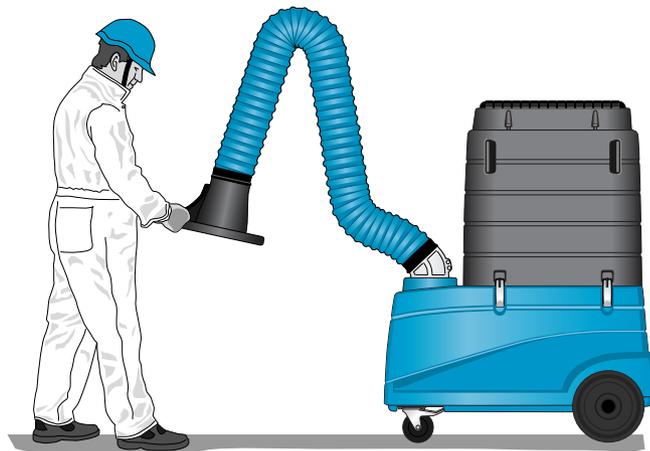
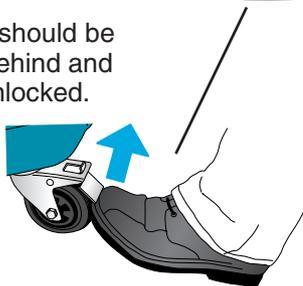


Switches for fan and spotlight

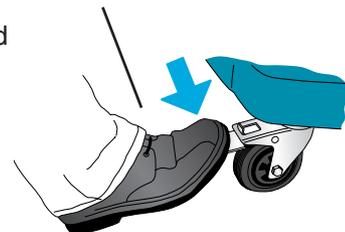
The hood is provided with an efficient spotlight.



The Filtercart should be moved from behind and with wheels unlocked.



The extraction arm should be positioned with the wheels locked.



### The control board indications

**A.** When the mains plug is connected the light emission diodes indicate fixed light and an alarm signal sounds a short time.

**B.** The light emission diode indicates blinking green light: The FilterCart has been connected to the mains (stand by).

**C.** As the FilterCart has been started the light emission diode indicates fixed green light. The fan is in operation.

**D.** The FilterCart is ready for use and after a while the light emission diode indicates fixed green light. After use for a certain time, the airflow will be reduced through the extraction arm and the pressure drop will increase, which will result in having to change the filter cartridge.

**E.** The light emission diodes indicate fixed light: The pressure drop has increased. Pre-warning for changing the filter cartridge.

**F.** The light emission diodes indicate fixed light and after about 30 s an intermittent alarm signal starts. **Change the filter cartridge.**

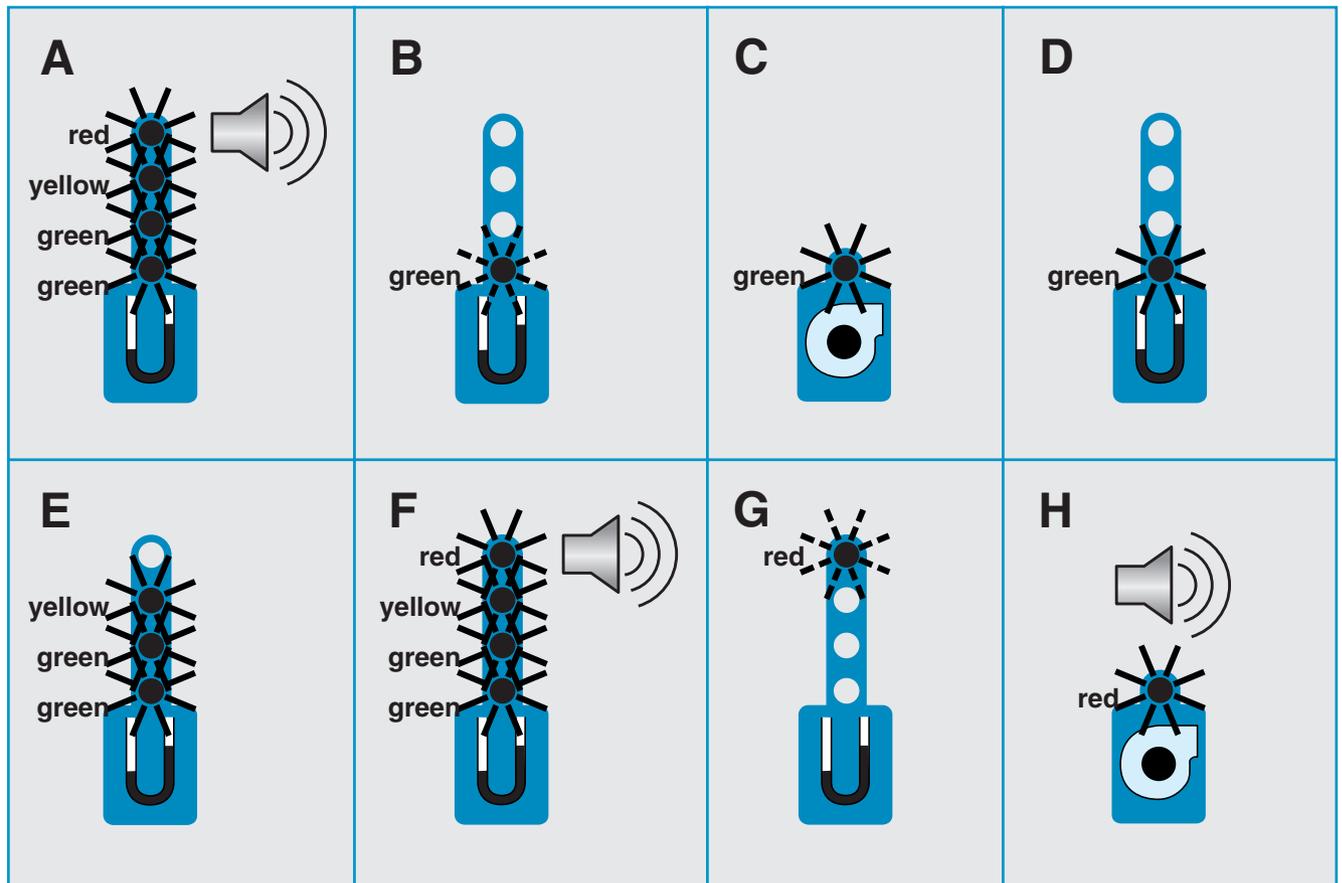
If you want to finish the work in progress before the filter cartridge is changed, the alarm signal can be stopped by pushing **once** on the start button. The alarm signal activates after about 10 minutes.

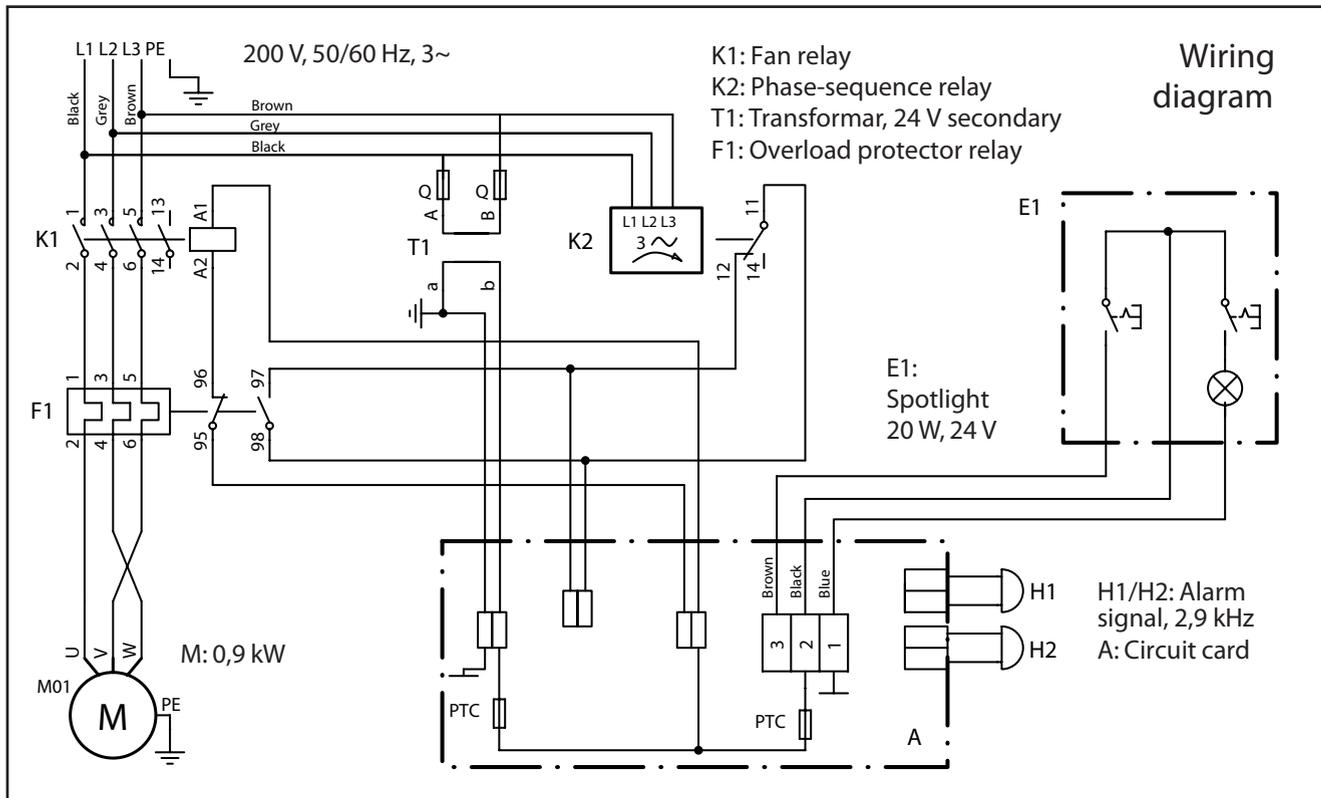
Pushing **twice** on the start button makes a fan stop. As an alternative the fan can be stopped with the switch on the fume extractor hood.

**G.** The light emission diode indicates blinking red light = alarm memory. The FilterCart has been stopped after the alarm start (according to above), for example at work shifts. The filter cartridge has to be changed.

**H.** 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.**

### Control board indications





## Changing the filter cartridge

The filter cartridge is disposable and should be thrown-away after use. The life of the filter cartridge varies greatly depending on how the FilterCart 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 page 5). Always check that the hoses for the extraction arm and the fan inlet not are damaged before it is decided to replace the filter cartridge.

Use necessary personal safety equipment when replacing the filter cartridges.



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. 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.
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



## Changing the HEPA filter

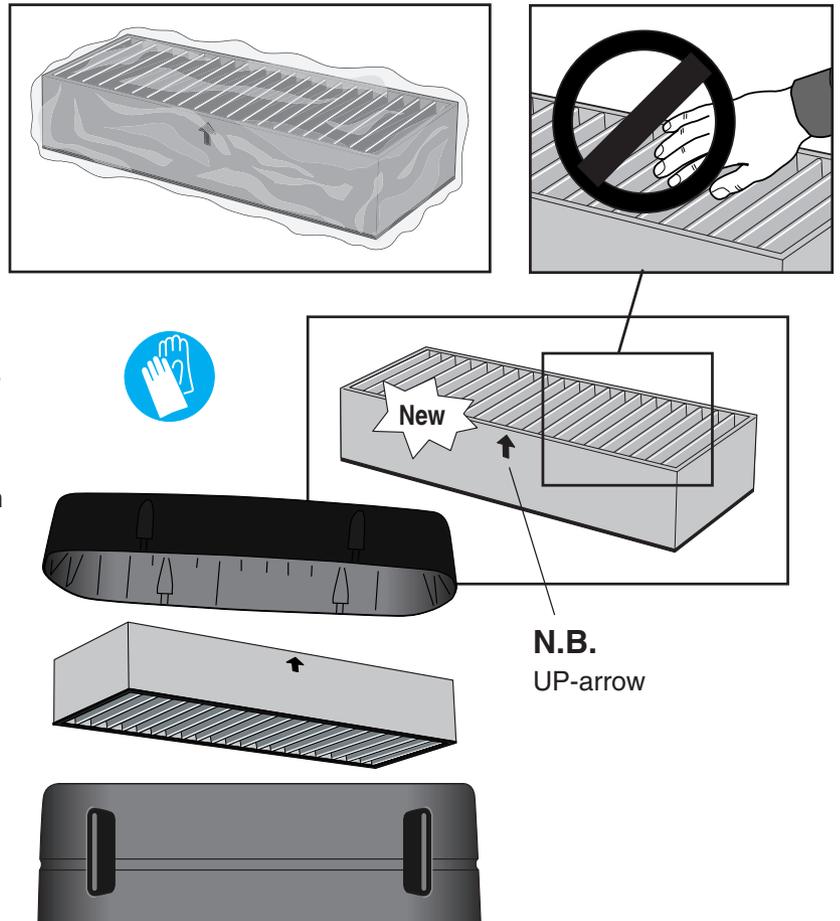
(accessory)

If the FilterCart has been supplied with a HEPA filter, this should be changed at the same time as the main filter cartridge is changed.

**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. **It should be noted that the filter surface must not be touched.** Handle the HEPA filter very carefully and fit it in the FilterCart. 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.



## Maintenance

Is recommended at least once a year.

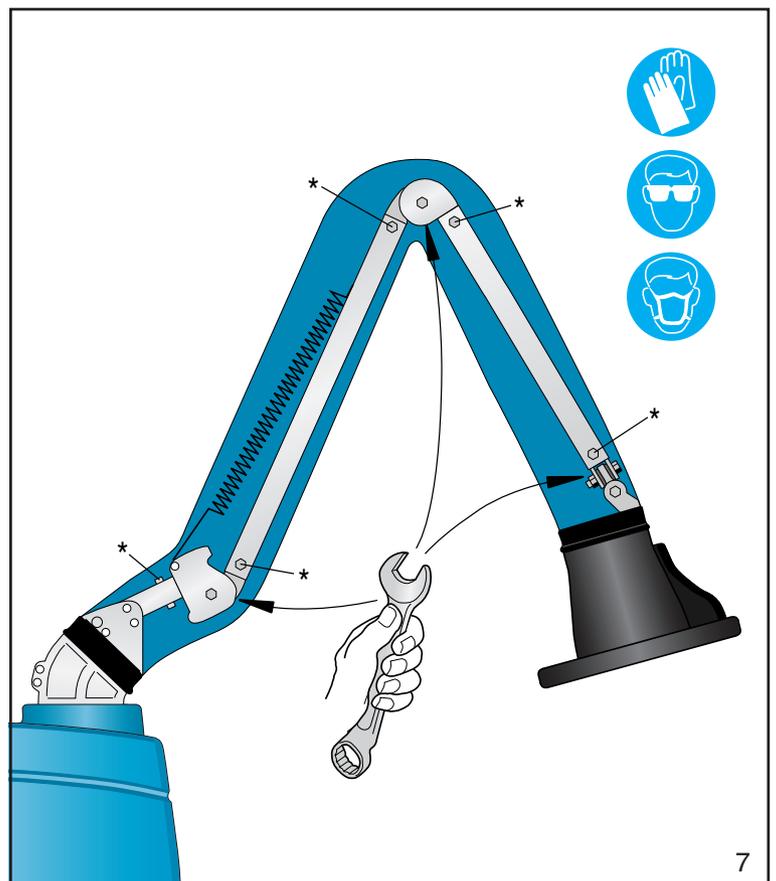
### WARNING!

**Risk for personal injuries!**



- Disconnect the mains connection cable before starting any maintenance work.
- Use necessary personal safety equipment.

- Change the filter cartridge (and optional HEPA-filter) if necessary.
- Check the airflow capacity of the FilterCart.
- 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\*.
- Check that the mains connection cable and the fan motor cable are not worn or damaged.
- Check that the eccentric locks tighten the filter casing properly. Adjust the eccentric locks if necessary.



## Declaration of conformity

We, AB Ph. Nederman & Co., declare under our sole responsibility that the Nederman product:

- **FilterBox Kit W3** with accessories to which this declaration relates, are in conformity with the following:

### Directives

2006/42/EC, 2004/108/EC, 2006/95/EC

### Standards

EN 60204-1, EN ISO 12100-1, EN ISO 12100-2, EN ISO 15012-1, EN 61000-3-3, EN 61000-6-2, EN 61000-6-4

### For W3 products:

The products are approved by *BGIA - Institut für Arbeitsschutz der Deutschen Gesetzlichen Unfallversicherung (0905033)*.

BGIA

53757 Sankt Augustin

Germany

The product manager, Per Larsson Ferm, is responsible for the technical documentation.

### AB Ph. Nederman & Co.

P.O. Box 602

SE-251 06 Helsingborg

Sweden



A handwritten signature in black ink, appearing to read 'Per Larsson Ferm'.

Per Larsson Ferm , Product Manager

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