

Instruction and Operation Manual

Extraction Arms

NEX

D & DX

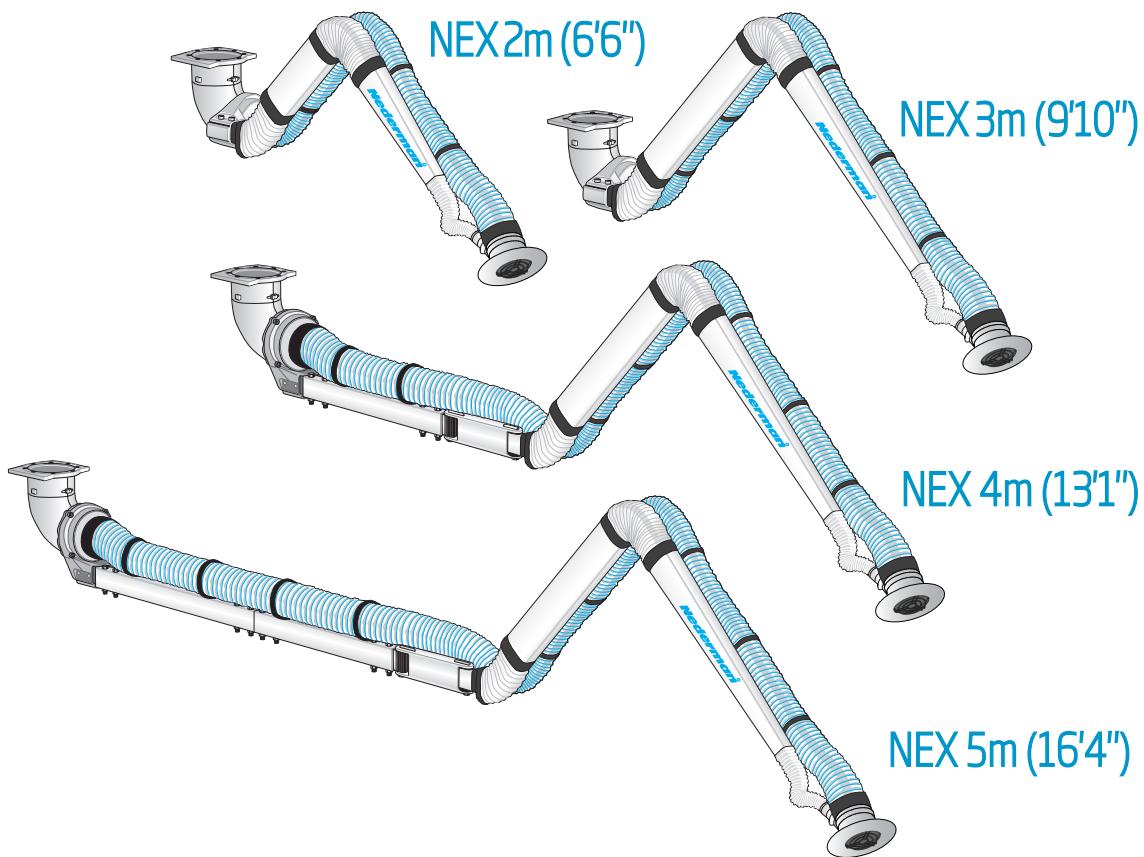




Table of Contents

Declaration of Conformity	4
Installation Figures	5
1 Preface	14
2 Hazard Notices	14
3 Description	14
3.1 Technical data	15
4 Installation	15
4.1 90 ⁰ bend in hanging or standing position	15
4.2 Mounting	16
4.2.1 Rotary stop	16
4.3 Grounding	16
5 Operation	17
6 Service and Cleaning	17
6.1 Internal cleaning of hood, hose and 90 ⁰ bend	17
6.2 Internal cleaning, arm system	18
6.3 Regular maintenance	18
6.4 Adjusting the links	18
7 Spare Parts	19
8 Recycling	19

Declaration of Conformity

Declaration of Conformity

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

NEX D/DX (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.

Standards

EN ISO 12100, EN 13463-1, EN 13463-5, EN 1127-1.

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

AB Ph. Nederman & Co.
PO. Box 602
SE-251 06 Helsingborg
Sweden



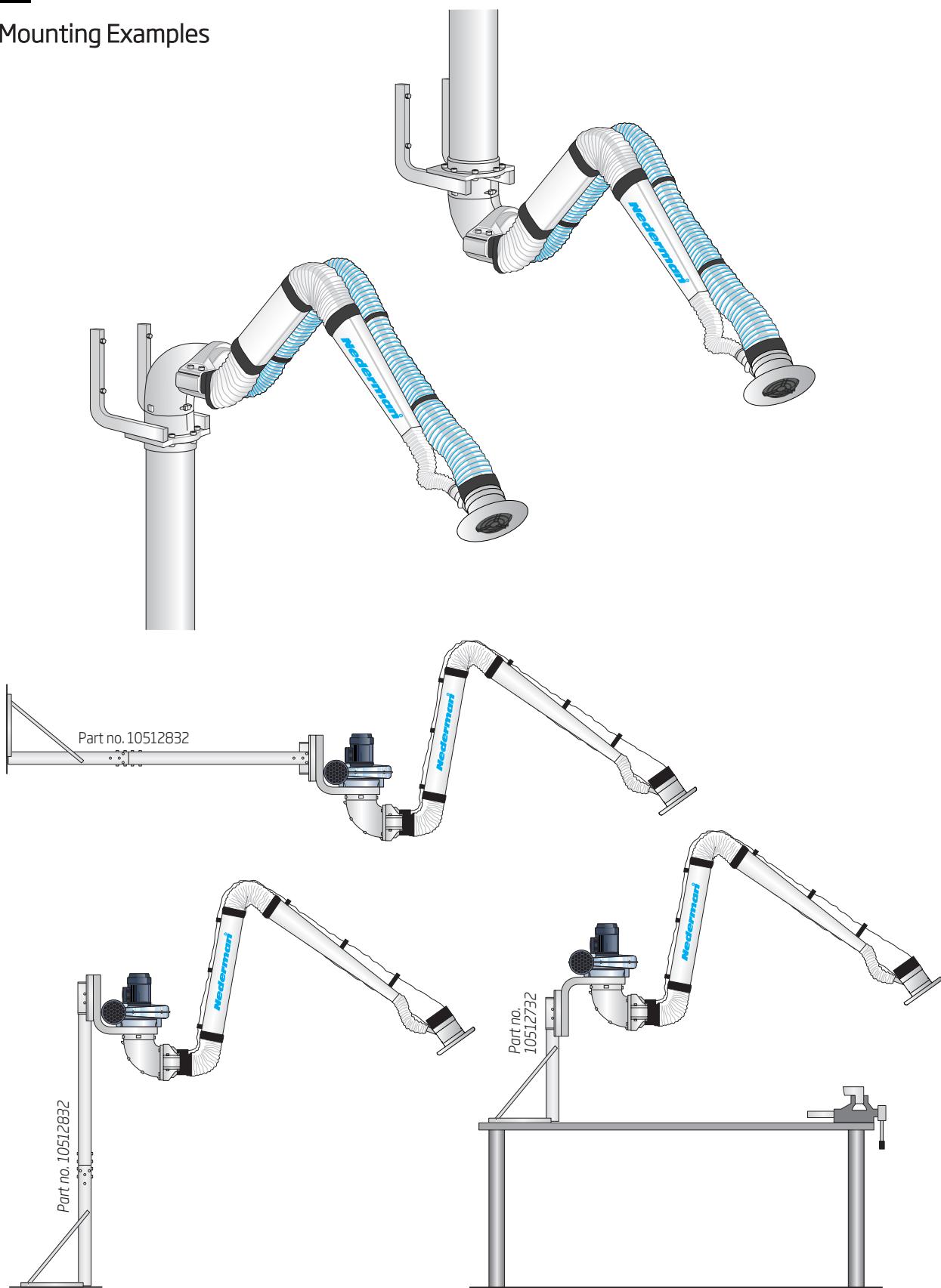
Dorinel Lapadat
Head of Product Centre
2017-05-23



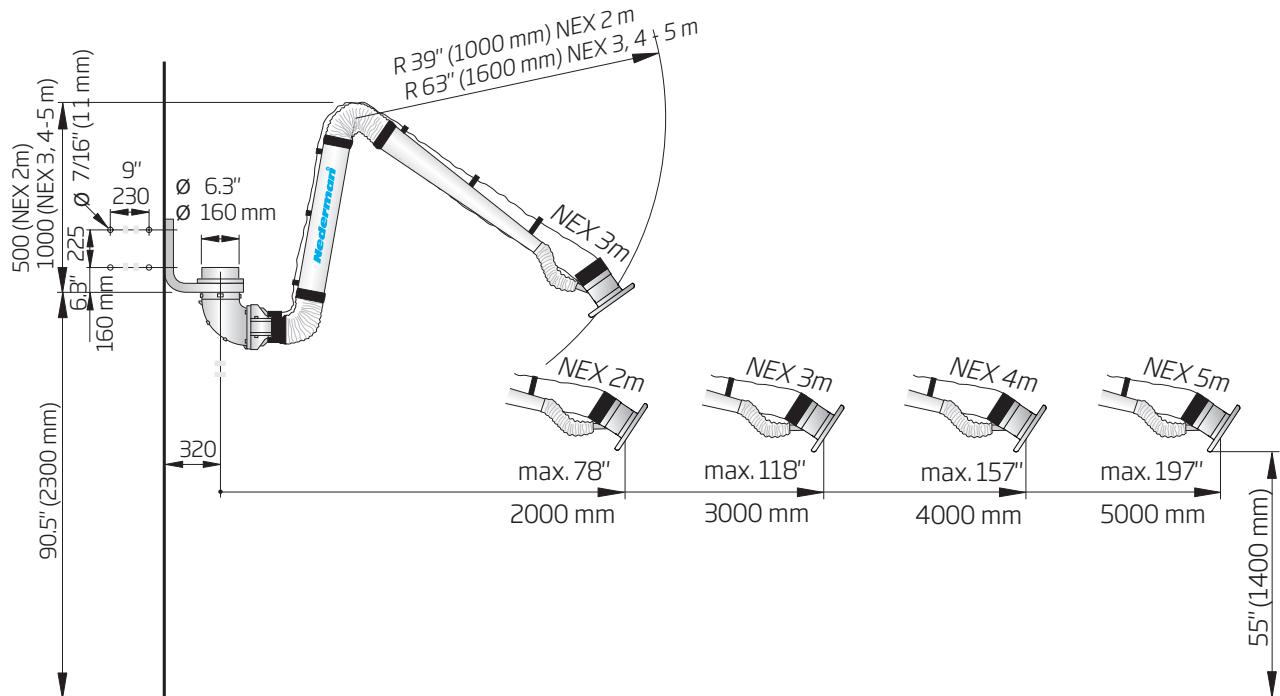
Installation Figures

1

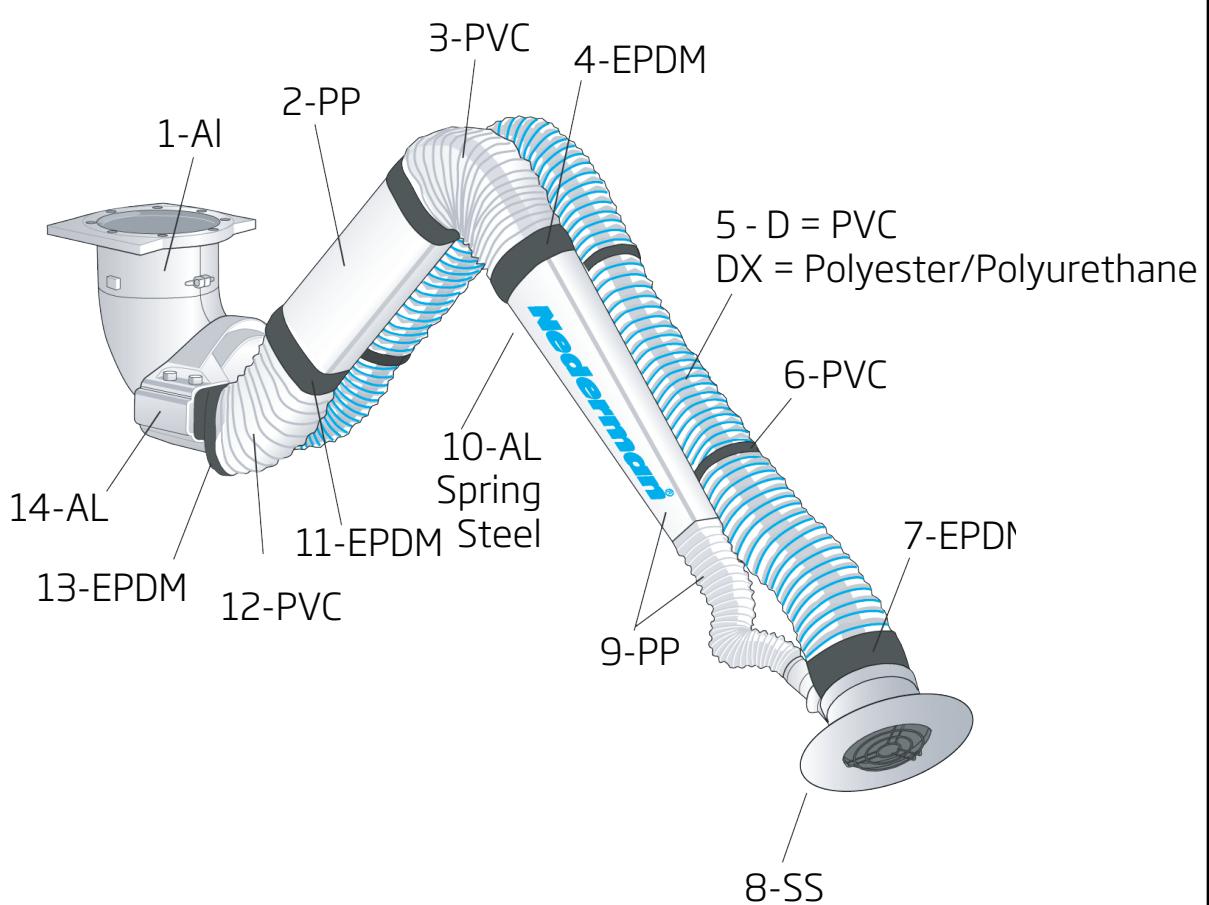
Mounting Examples



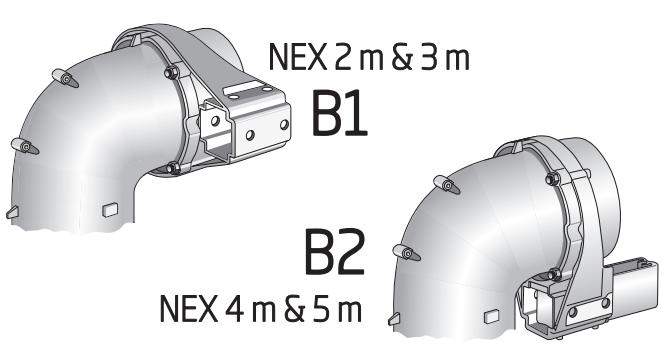
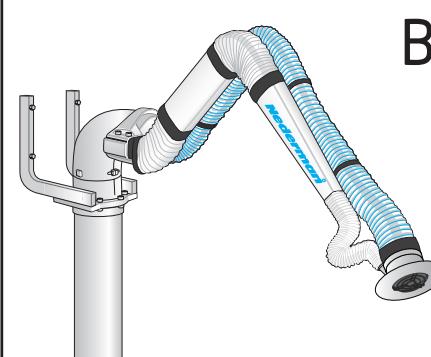
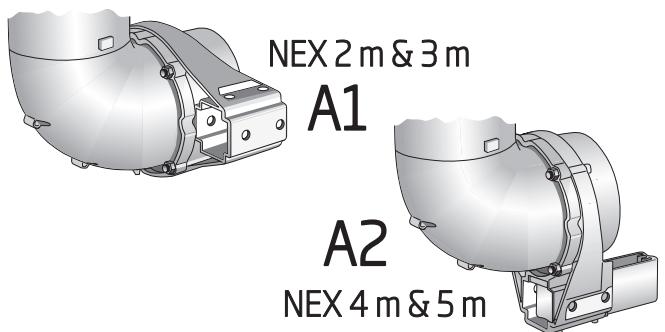
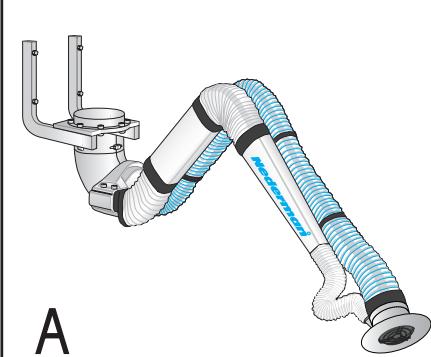
2



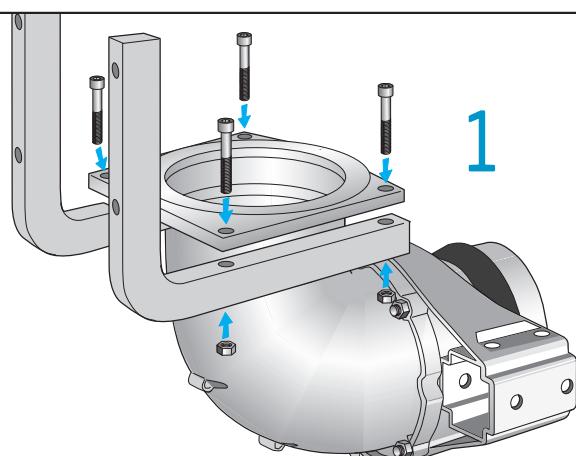
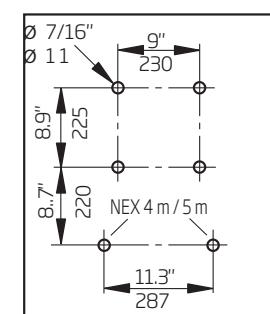
3



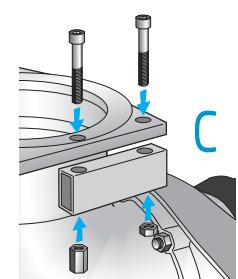
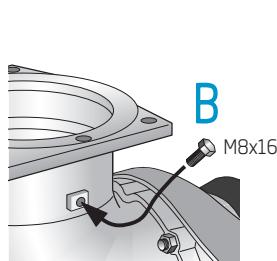
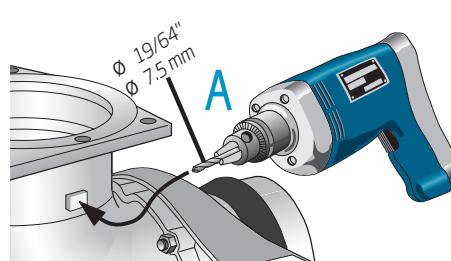
4

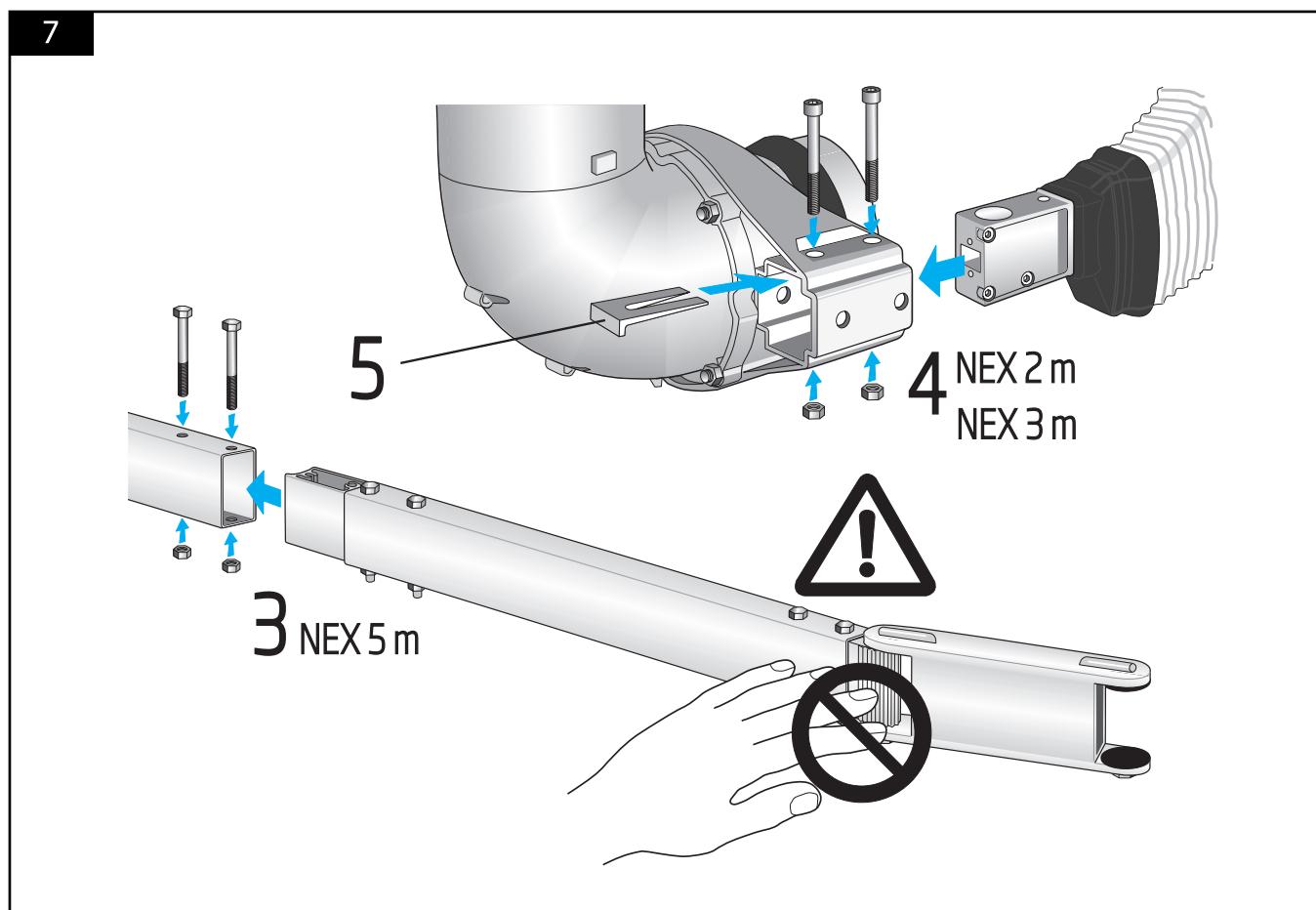
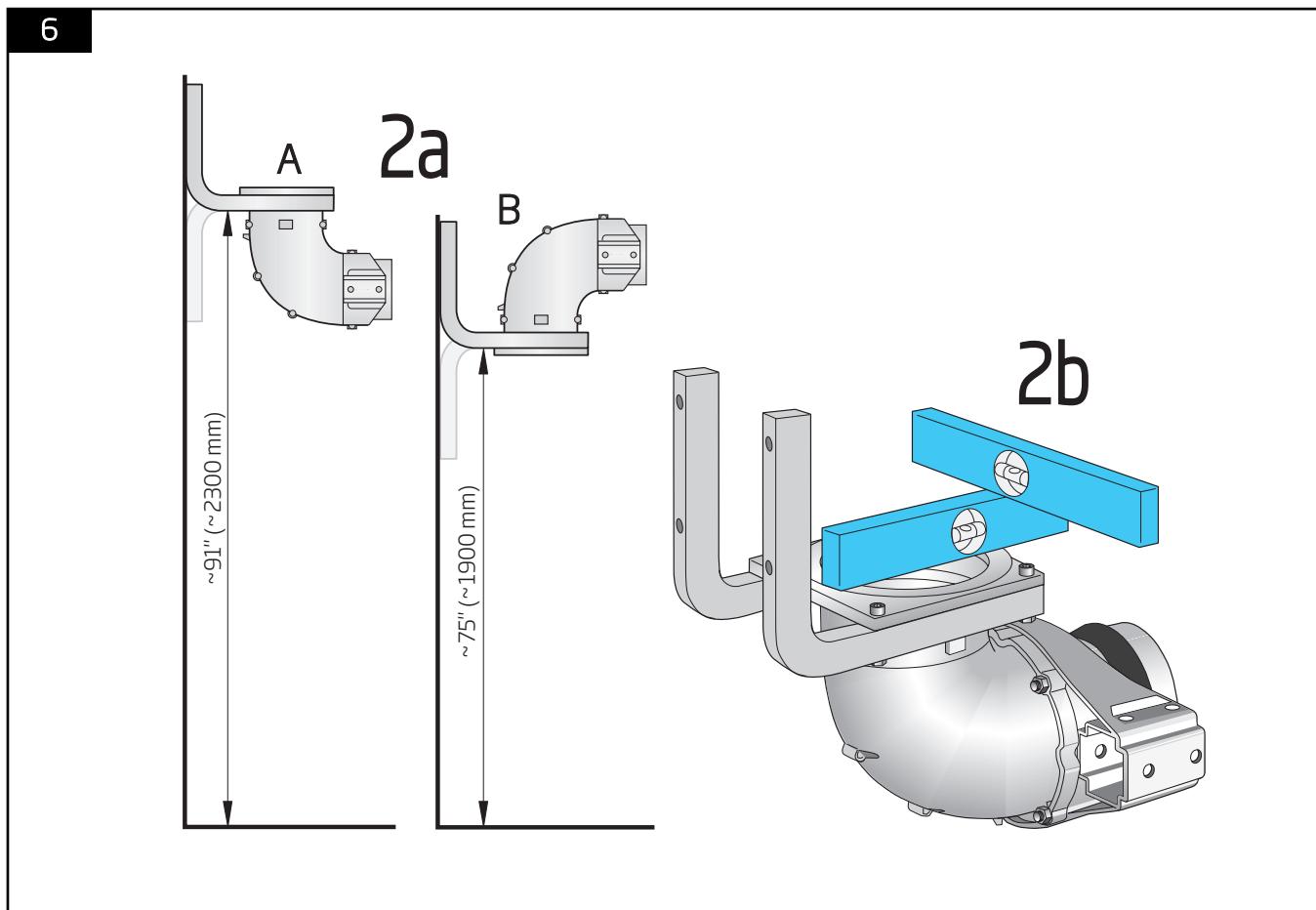


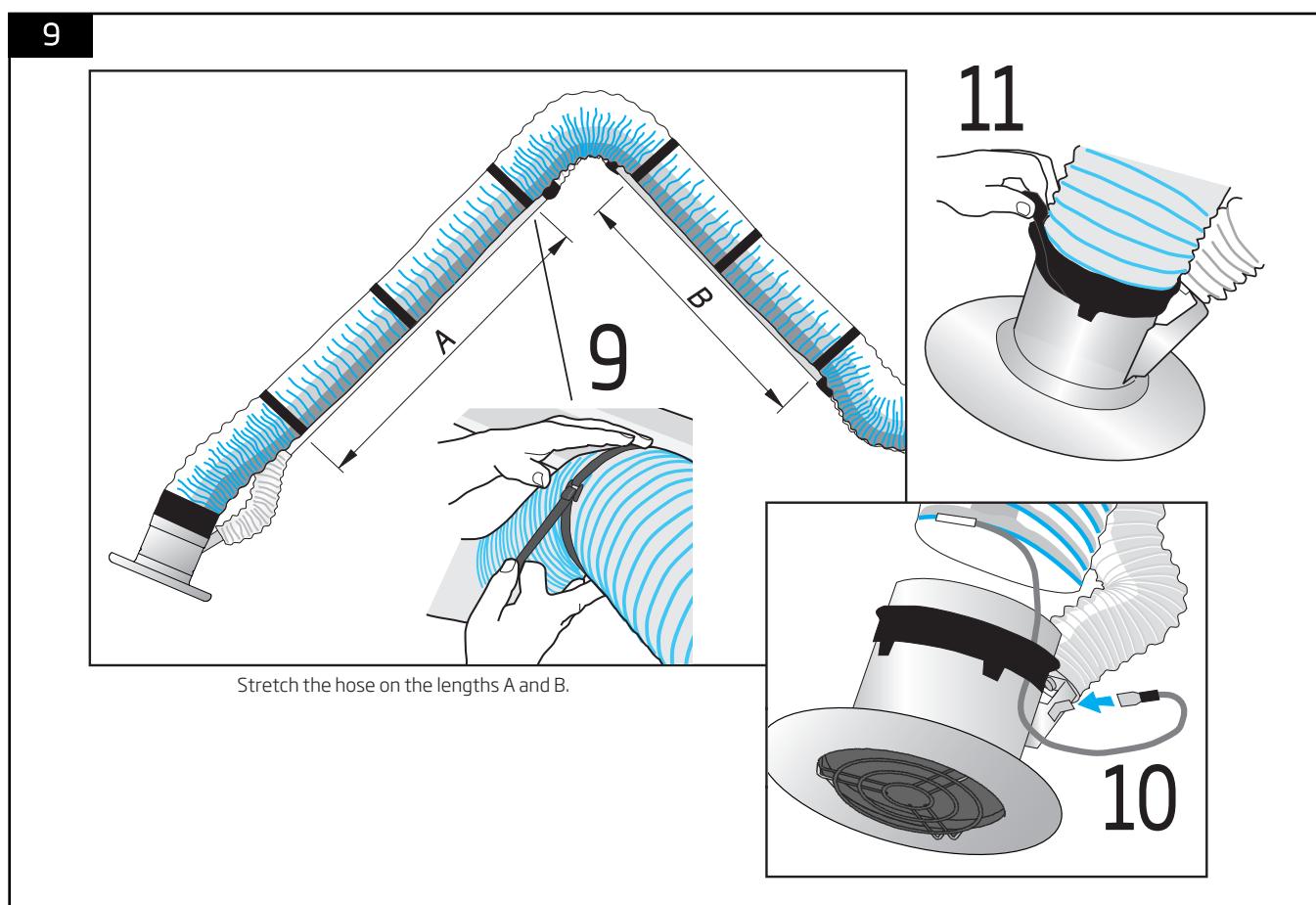
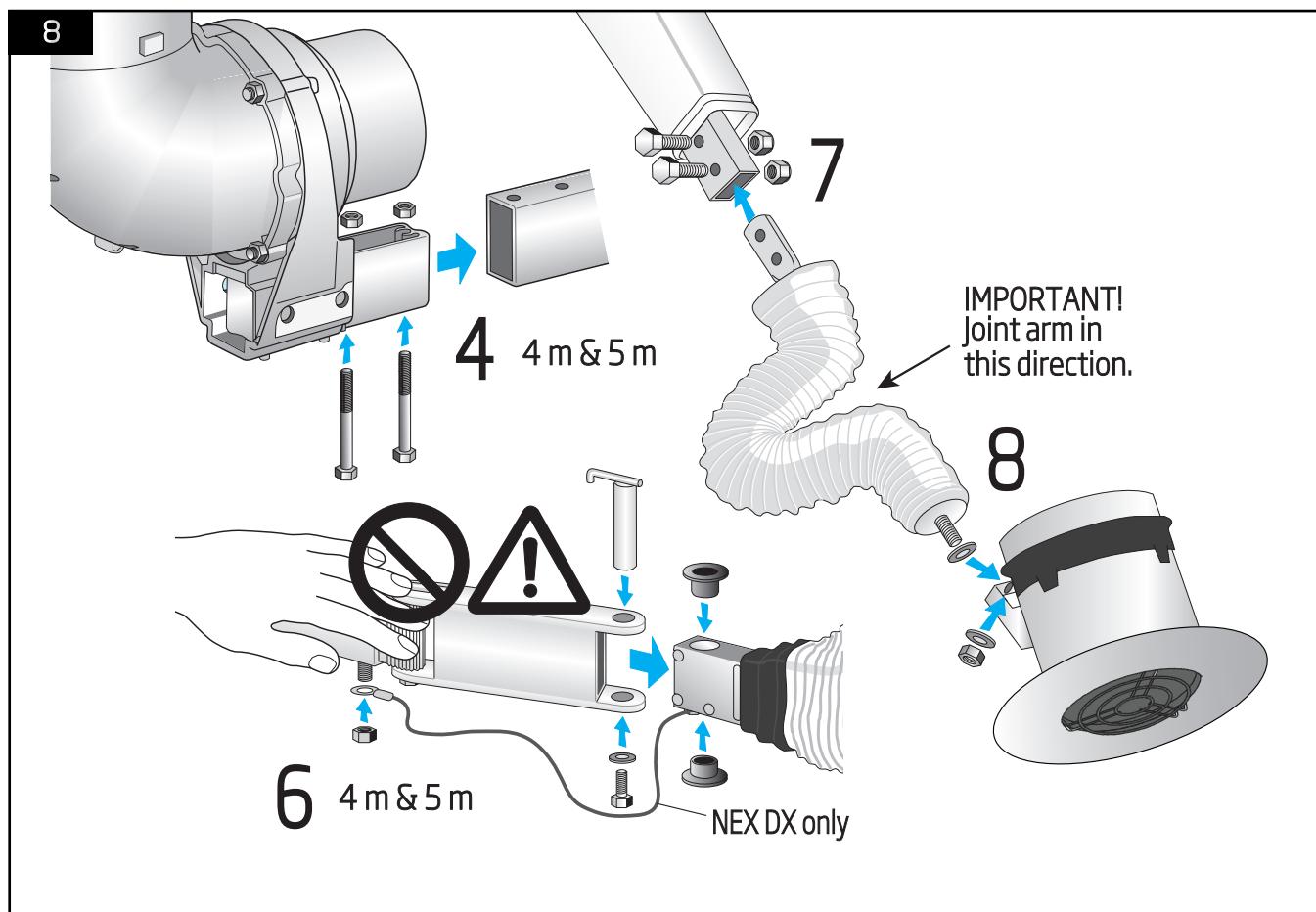
5



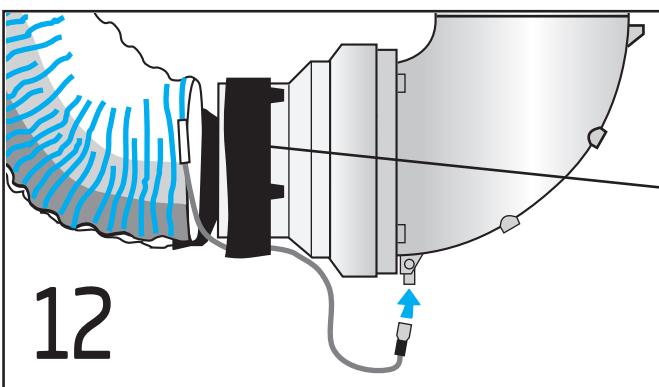
Rotary stop







10



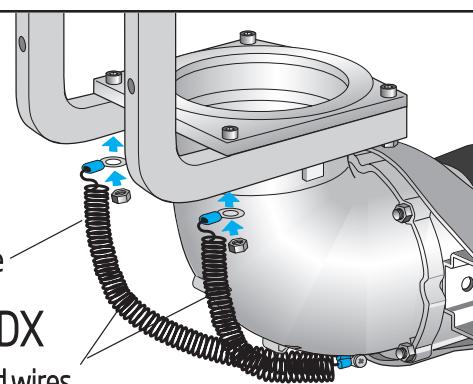
12

13

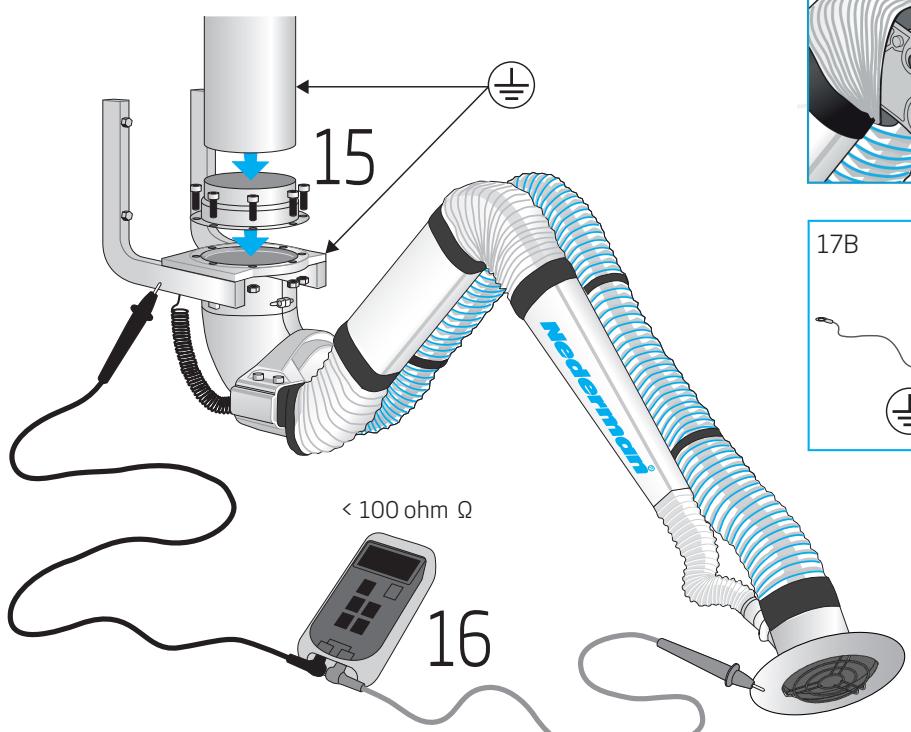


14

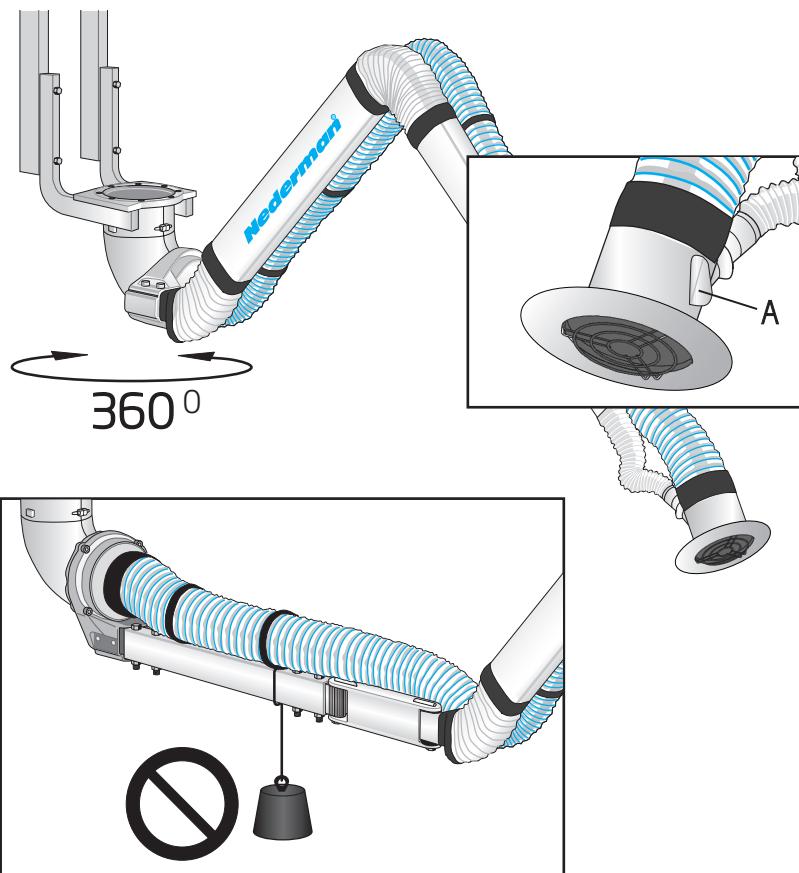
NEX D
1 ground wire
NEX DX
2 ground wires



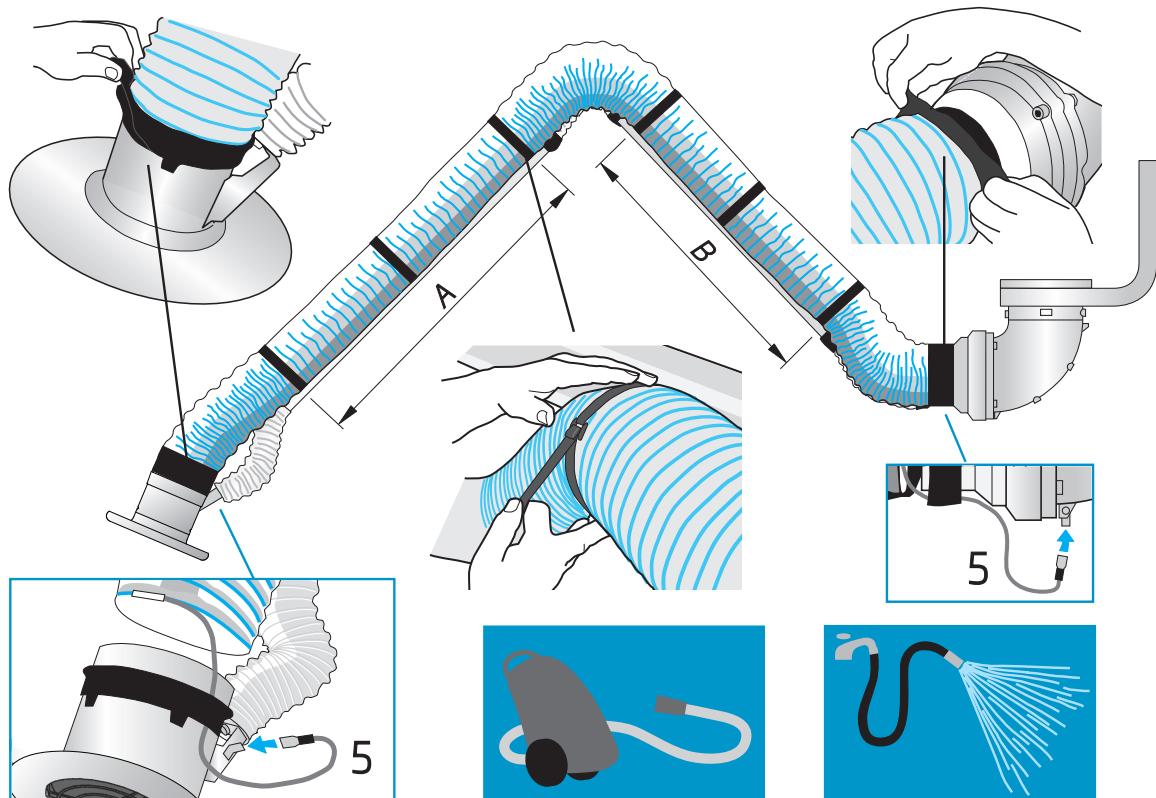
11



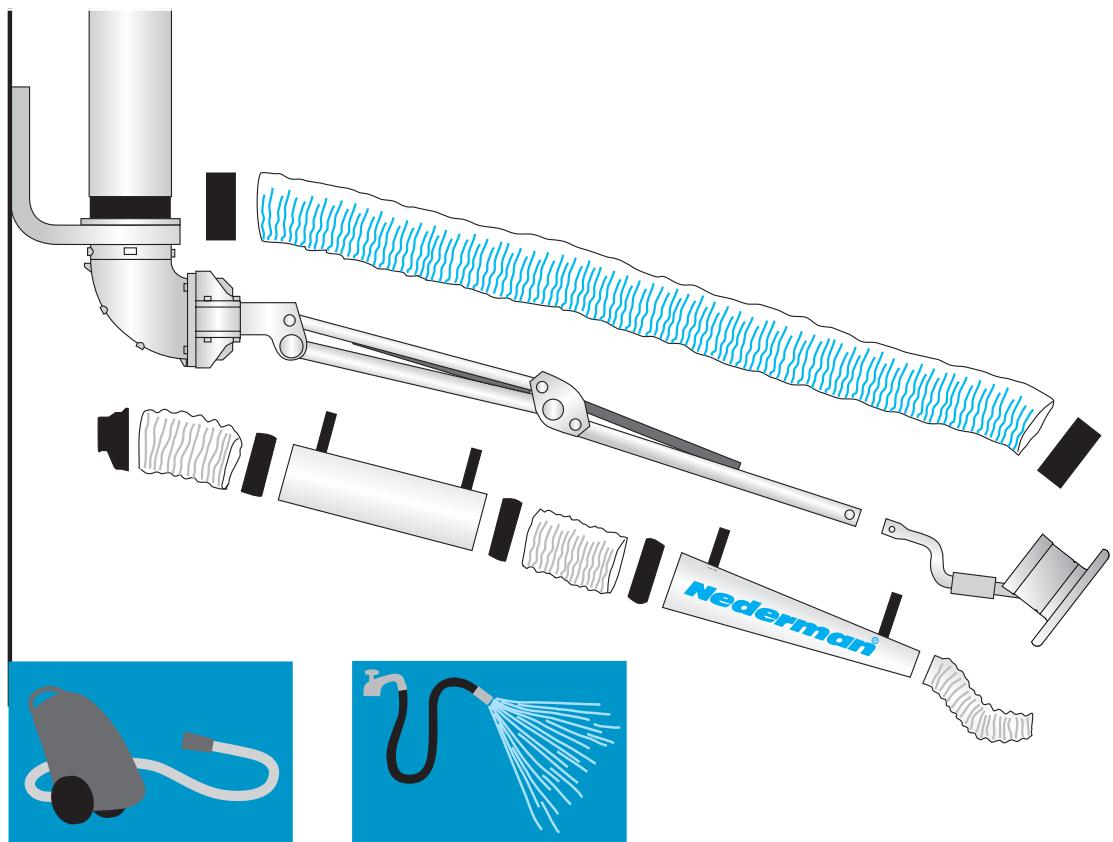
12



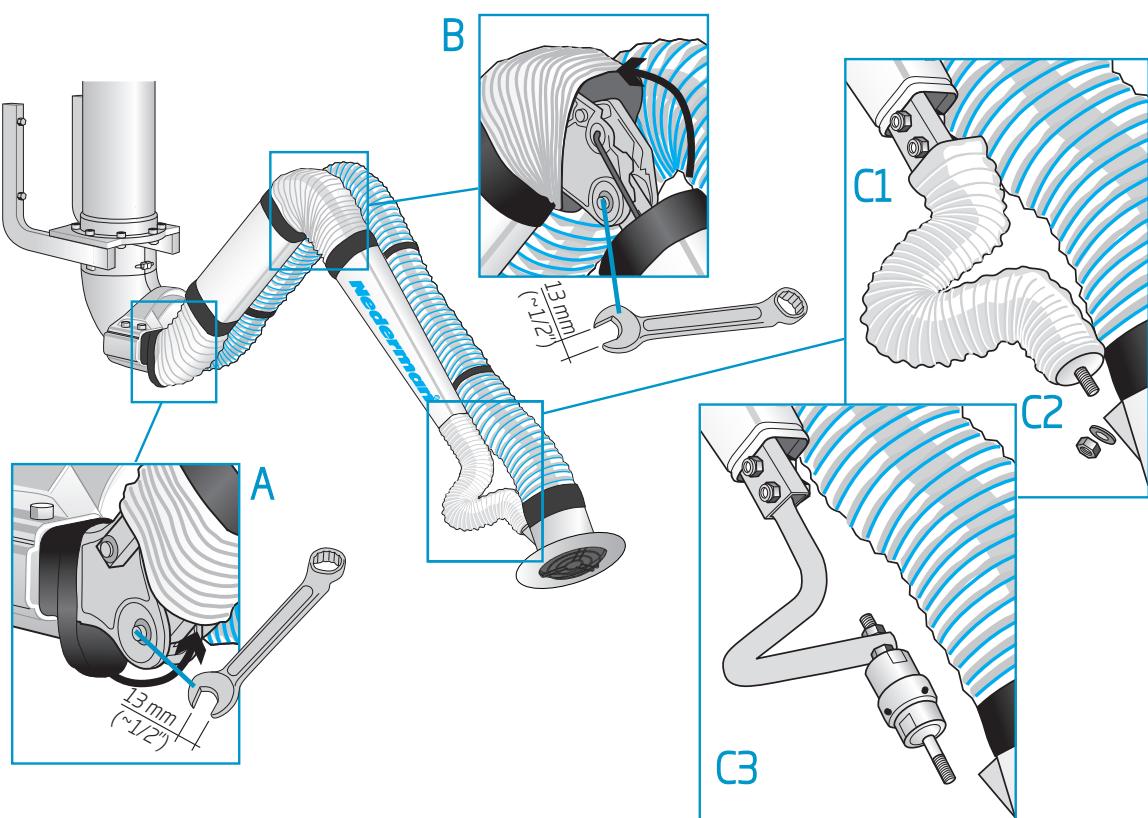
13



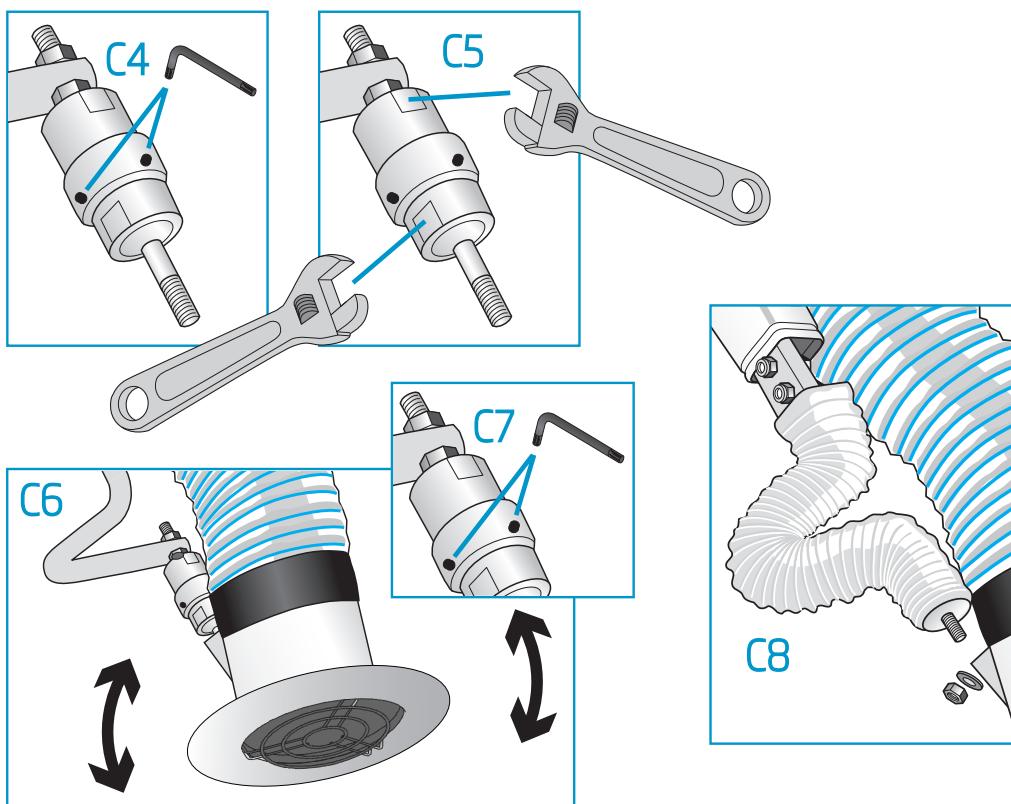
14



15



16



1 Preface

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

All installation, maintenance and repair should be completed by qualified personnel using only original spare parts. 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 Hazard Notices

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

WARNING! Indicates a potential hazard to the health and safety of personnel and how that hazard may be avoided.

CAUTION! Indicates a potential hazard to the product (not to personnel) and how that hazard may be avoided.

NOTE! Contains other relevant/important information.

3 Description

The NEX D/DX is designed to be used in environments where the atmosphere could be explosive as a result of mixing air with dust. NEX D is equipped with a grounded ventilation hose made of FDA approved ingredients. NEX DX has a double ground wire and antistatic ventilation hose that prevents static electricity and sparks. Both products are suitable for industries where hygiene is a top priority.



WARNING! Risk of Explosion

The NEX-arm must not be used for extracting dust/air-mixtures with:

* MIE < 3 mJ for NEX DX/D (*MIE = Minimum Ignition Energy)



CAUTION! NEX D/DX must not be used for extracting dust that could affect or interact with the materials used in the NEX D/DX, see Figure 3 and see list below.

NEX D/DX contains the following materials of construction (see Figure 3)

Aluminum

PP (Polypropylene)

PVC

EPDM

Stainless steel

Arm system: Aluminium and spring steel

NEX D: PVC

NEX DX: Polyester/Polyurethane

3.1 Technical data

Table 3-1: Technical data

Noise level*:	54-81 dB(A)
Weight:	
• NEX D/DX 2m	37.5 lbs. (17 kg)
• NEX D/DX 3m	46.3 lbs. (21 kg)
• NEX D/DX 4m	61.7 lbs. (28 kg)
• NEX D/DX 5m	70.5 lbs. (32 kg)
Hose Diameter	Ø 6.3" (160 mm)
Max Airflow**	1000 cfm (1700 m ³ /hr)
Recommended temperature use	Maximum 158 °F (70 °C)
Zone, dust***:	
• NEX DX	21, 22 ***
• NEX D	22 ***

* Measured according to ISO 11201.

** Also apply to local directions.

*** For use in respective zones according to ATEX-work directive 1999/92/EEC.

4 Installation

4.1 90°-bend in hanging or standing position

The NEX D/DX arm is recommended to be mounted according to Figure 4, item A with 900 bend in hanging position.

The NEX D/DX arm can also be mounted according to item B, with the 90°-bend in standing position. However, the arm holder must then be revolved 180°. Revolve the arm holder in the following way:

1. Loosen the four screws fitting the arm holder to the 90°-bend.
2. Move the arm holder approximately 17 mm away from the 90°-bend.
3. Revolve the arm holder 180°.
4. Move the arm holder back towards the 90°-bend.
5. Fasten the four screws.

4.2 Mounting

See Figures 5-11. The extraction arm can be mounted on wall or ceiling together with a wall bracket. Ensure that the surface, on which to mount the arm, is level and use the wall bracket to mark the holes.

Use anchor bolts and nuts suitable for the wall material. The bolts must each stand a torque force of minimum 1200 N (2m), 1900 N (3m), 3200 N (4m), 4500 N (5m). Use a level and make sure that the extraction arm is fitted in a horizontal position.

Check that proper measurements have been taken to avoid all types of electrical stray currents to and/or from the piping system and electrical wiring.

NOTE! Make sure the housing is properly grounded. See figure 11 and section 4.3 Earth control measurement

4.2.1 Rotary Stop

Should only be fitted when the arm is mounted in a 360° rotating position, see Figure 5.

4.3 Grounding

Check for proper earth connection, after both main installation and regular maintenance, as follows:

- NEX D has one ground wire. Measure according to Figure 11 item 16.
- NEX DX has both the hose and the arm system are grounded. Measure according to Figure 11 item 16 and the following sequence:
 - 1) Remove and isolate the ground wire of the hose (see Figure 13, item 5) from the connector.
 - 2) Check ground continuity according to Figure 11 item 16.
 - 3) Reattach the ground wire, see Figure 13 item 5.
 - 4) Remove and isolate the ground wire of the arm, see Figure 11 item 17A and 17B.
 - 5) Check ground continuity according to Figure 11 item 16.
 - 6) Reattach the ground wire, see Figure 11 item 17A and 17B.

5 Operation



WARNING! Ignition risk for some dust or solvents.

- Do not collect material that is caustic, explosive, highly flammable, chemically unstable, spontaneously ignitable, or which can release sparks.
- Check that no objects that can cause a spark or fire are sucked in to the arm, or impact against the hood.
- Avoid mixing dust from different processes, for example service

See Figure 12. The extractor arm can easily be positioned at any point within its working area. It can be rotated 180° when wall mounted and 360° when ceiling mounted. For best capture, the hood should be positioned as near the fume or dust generating process as possible. The hood (on some models) is equipped with a damper which can be adjusted with a lever.

Max air flow: 1000 cfm (1700 m³/hr). Also check local directions.

Always check that the airflow is sufficient in the hood before work begins.
Insufficient airflow depends on:

- The fan impeller rotating in the wrong direction.
- Hood, hose or 90°-bend are blocked.
- Filter cartridges are blocked.

6 Service and Cleaning

Treat NEX D/DX as a part of other machinery and clean it according to the cleaning procedure plan. Clean and check it periodically according to the instructions in sections 6.1 to 6.4.



WARNING! Risk of personal injury.

- Use a dust filter mask and other necessary PPE safety equipment when cleaning the NEX D/DX.
- There is a squeeze/crush risk at the horizontal link on 4m and 5m models.

The NEX D/DX can be dry or wet cleaned:

- **Drycleaning:** Vacuum & wipe the components externally and internally if necessary.
- **Wetcleaning:** Use a detergent solution that will not damage the product. See section 3 for materials of construction. Follow advice from the manufacturer of the detergent solution regarding dosage and washing method. Rinse with clean water using low pressure and hot water 100-100 °F

Avoid directly rinsing sleeves, joints and so on. Let the NEX-arm dry before it is used

6.1 Internal cleaning of hood, hose and 90°-bend

1. Detach hood and hose.
2. Carry out dry or wet cleaning according to instructions in section 6 above.
3. Let the components dry.
4. Re-fit the components. Stretch the hose along the lengths A and B.
5. Connect the hose spiral to ground, see Figure 13. Make sure the NEX D/DX is properly grounded. See figure 11 and section 4.3 Grounding.

6.2 Internal cleaning, arm system

Internal cleaning is recommended approximately once a year, see Figure 14.

1. Hold the arm straight at a slight angle.
2. Detach hose, arm covers and bellows but not the arm system, see Figure 13.
3. Carry out dry or wet cleaning according to instructions in section 6 - Service and cleaning.
4. Let the components dry.
5. Re-fit the components. (Hose: see Figure 13.)
6. Make sure the NEX D/DX is properly grounded. See figure 11 and section 4.3 - Grounding.

6.3 Regular Maintenance

Regular maintenance is recommended at least once a year.

1. Check that the NEX arm is grounded, see Figure 11.
2. Check that the hose is intact. If necessary, change the hose.
3. Check the mounting of the arm on wall or ceiling.
4. Remove all the arm covers and bellows, see Figure 14. Adjust the links if necessary. Check the function of the spring and spring holder.
5. Check that the suction capacity in the hood is sufficient.

6.4 Adjusting the links

Adjusting links is recommended at least once a year, see Figures 15 & 16.



WARNING! Risk of personal injury.

Use necessary safety equipment.

- A. Adjust the inner link.
- B. Adjust the knee link.
- C1. Loosen the below.
- C2. Unscrew the ball joint from the hood.
- C3. Remove the below.
- C4. Loosen the two socket head cap screws.
- C5. Tighten the ball joint using two adjustable spanners
- C6. Remount the ball joint at the hood and test the hood movement. If necessary tighten the ball joint more.
- C7. Tighten the two socket head cap screws.
- C8. Unscrew the ball joint from the hood. Refit the bellow. Fasten the bellow at the outer arm cover. Fasten the ball joint at the hood.
- D. Make sure the NEX D/DX is properly grounded. See figure 11 and section 4.3 - Grounding.

7 Spare parts

Installation, repair and maintenance work is to be carried out by qualified personnel using only original Nederman spare parts. Contact your nearest authorized distributor or Nederman for advice on technical service.

Ordering spare parts

- Part number and control number (see name plate)
- Name of the spare part (see www.nederman.com).
- Quantity of the parts required.

8 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.

Nederman

The Nederman Group is one of the World's leading suppliers of products and solutions within the environmental technology sector focusing on industrial air filtration and recycling. These products and solutions reduce the environmental impact of industrial production and create safe and clean working environments while boosting production efficiency.

The group's offering covers the design stage through installation, commissioning and servicing with subsidiaries in 29 countries and agents and distributors in over 30 countries.

Nederman is ISO 9001 and 14001 certified and develops and produces in its own manufacturing and assembly facilities in Europe, North America and Asia.

Nederman Service Capabilities

Nederman has certified service partners trained extensively in servicing our machinery. Make sure to choose a certified technician to service your Nederman equipment as they have the correct tools and knowledge to solve any machinery issues and improve its performance. Be sure to ask if your technician is certified by Nederman.

Our services for dust collection systems are customized to your particular needs. We work with you to understand your needs, then develop a program to meet your specific needs. Our services include: (*not all services available in all locations*)

- Bag Change-outs
- Bag Selection Recommendations
- Collector Re-builds
- Dye Testing for Leakage
- Electrical Tests - Current, Voltage
- Emergency Call-outs
- Filter Media Analysis
- Mechanical Survey and Repair
- Multi-year Contracts
- New Collector Start-up Service
- On-going Technical Support
- Preventative Maintenance Programs
- Repair and Replace Gauges/Timers/Valves
- Stack Emission Testing
- Training Programs
- Troubleshooting / Auditing
- Velocity, Pressure and Temperature Tests
- Written Service Report

Customer Service and Technical Support

Nederman Corporation USA
 4404-A Chesapeake Drive
 Charlotte, NC 28216
 336-821-0800

www.nederman.com