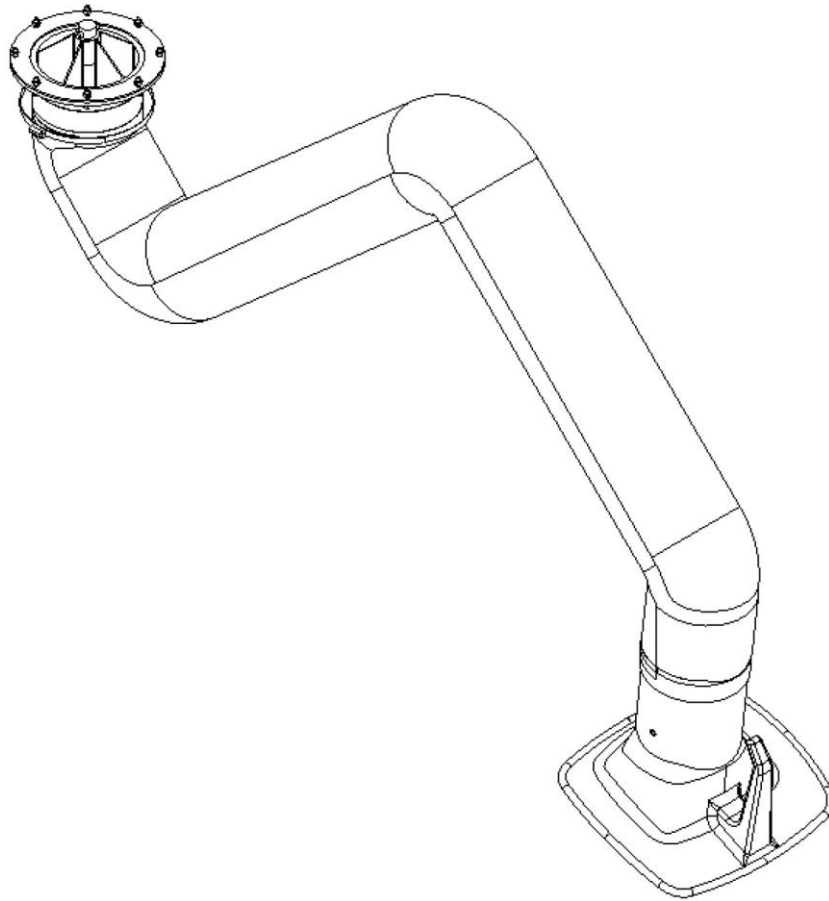




EN – Operating Manual Extraction Arm 2-4 m

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1 General

1.1 Introduction

This manual is an essential aid for the proper and safe operation of the product.

These operating instructions contain important information to ensure safe, proper and efficient operation of the product. Observing these instructions helps avoiding danger, reducing repair costs and downtimes and increasing the reliability and service life of the product. The operating instructions must be kept available at all times and have to be read and applied by every person who is assigned to work on or with the product.

These include amongst others:

- the operation and troubleshooting during operation
- the maintenance (care, maintenance, repair)
- the transport
- the assembly
- the disposal

Technical modifications and errors expected.

1.2 References to copyright and industrial property rights

These operating instructions are to be kept confidential and made accessible only to authorised persons. Disclosure to third parties is only permitted with the prior written consent of the manufacturer KEMPER GmbH.

All documents are protected under the Copyright Act. Any form of disclosure, reproduction, or partial use, as well as the communication of its content, is prohibited without express written permission.

Violations will be prosecuted under criminal law and will incur liability for any resulting damages.

Industrial property rights such as patents, trademarks, or designs are exclusively held by the manufacturer.

1.3 Notes for the operating company

The operating instructions are an essential part of the product.

The operating company must ensure that the operating personnel is aware of the contents of this manual.

Based on national regulations for accident prevention and environmental protection, the operating instructions are to be supplemented by the operating company's own operating instructions, including information on regulatory and reporting requirements to meet specific operating requirements, such as work organisation, work flow and staff employed. In

addition to the operating instructions and the relevant obligatory regulations for accident prevention applicable in the country of use, it is also imperative to comply with the recognised technical rules for safe and professional handling.

Without prior consent from the manufacturer, the operating company may not carry out any changes, conversions or additions to the product which may impair safety. Spare parts used must comply with the manufacturer's specified technical requirements. This is always the case with original replacement parts.

Only use trained and instructed staff for the operation, maintenance, repair and transport of the product. Clearly define for staff who is responsible for operation, maintenance and transport.

2 Safety

2.1 General information

The product is designed and built according to state-of-the-art technology and the recognised safety rules and regulations. When operating the product, technical hazards for the operator or impairment of the product as well as other property may occur, if:

- it is not operated by trained or instructed personnel
- it is not used for the purpose intended and/or
- it is improperly maintained

2.2 Information on signs and symbols

⚠ DANGER

This symbol in conjunction with the signal word "Danger" indicates imminent danger. Non-adherence of the safety note leads to death or serious injuries.

⚠ WARNING

The symbol in conjunction with the signal word "Warning" indicates a potentially dangerous situation. Non-adherence to the safety notice may lead to death or serious injuries.

⚠ CAUTION

The symbol in conjunction with the signal word "Caution" indicates a potentially dangerous situation. Non-adherence of the safety note may lead to slight or negligible injuries.

May also be used for warnings against property damage.

NOTE

The general information is simple additional information which does not warn about personal injury or property damage.

1. Enumerations of action steps are marked as numbers with a dot, where the order is important.
- Bullet points indicate lists of parts in a legend or instructions for which the sequence is unimportant

2.3 Markings/signs to be affixed by the operating company

The operating company is obliged to post further markings and signs on the product and the surrounding area if necessary.

Such markings and signs might be related, for example, to the requirement for wearing personal protective equipment.

2.4 Safety instructions for operating staff

Before use, the operator of the product must be instructed through information, instructions and training on the handling of the product and the materials and aids to be used.

The product system may only be used in technically perfect condition, for its intended purpose, in full awareness of the safety aspects and potential dangers and in accordance with these instructions. All errors, especially those that may affect safety, must be removed immediately.

Every person who is charged with commissioning, operation or maintenance must have fully read and understood these operating instructions. This specifically applies to staff who only operate the product occasionally.

The operating instructions must always be within reach of the product.

We accept no liability for any damages or injuries caused by failure to observe these operating instructions.

The relevant accident prevention regulations and other generally recognised safety and occupational health regulations must be observed.

The responsibilities for the various activities included in maintenance and repair must be clearly defined and adhered to. Only then will human error - especially in dangerous situations - be avoided.

The operating company is to enforce wearing of personal protective equipment by operating and maintenance staff. These include in particular safety shoes, safety glasses and gloves.

Do not wear loose, long hair, loose clothing or jewellery. In theory, there is a risk of getting caught on something, or being pulled in or dragged along by moving parts.

If there are any safety-related changes to the product, immediately halt the process, secure it and report the occurrence to the relevant authority/person!

Work on the product may only be carried out by reliable, trained staff. Observe the minimum legal age.

Staff who require training, teaching or instructing or staff who undergo a general apprenticeship may only operate the product under the supervision of an experienced member of staff.

2.5 Safety instructions for maintenance/troubleshooting

Service and maintenance doors must be freely accessible at all times.

Setting up, maintenance and repair work and troubleshooting must only be performed when the product is switched off.

Always tighten bolt connections that have been loosened during repair work. If specified, tighten the relevant bolts with a torque wrench.

In particular, protect connections and screw connections from dirt or care products at the beginning of maintenance/repair/care

The time frames for periodic testing/inspections stipulated or specified in the operating instructions must be observed.

Before disassembling, mark the parts that belong together.

2.6 Notes regarding special types of hazard

⚠ DANGER

Danger of electric shock!

Any work on the electrical equipment of the product must only be performed by a qualified electrician or by operating personnel under the direction and supervision of a qualified electrician in accordance with electronic regulations.

Before opening the product, pull the plug, if available, and secure it against accidental switch-on.

For faults with the product's electrical energy supply, immediately switch the product off at the on/off switch and if available, also pull the plug.

Use only original fuses with the prescribed amperage.

Electrical components, on which inspection, maintenance and repair work must be carried out, must be disconnected from the power supply. Secure equipment that has been used for disconnection against unintentional or automatic reconnection. Firstly check that no voltage is present in activated, electrical components, then isolate adjacent components under voltage. When making repairs, ensure that constructive characteristics are not altered in a way that reduces safety.

Check cables regularly for damage and replace if necessary.



CAUTION: Automatically Operated Device –
To Reduce The Risk Of Injury Disconnect From
Power Supply Before Servicing.

WARNING: To Reduce The Risk Of Electric Shock,
Do Not Expose to Water or Rain.

ATTENTION: Appareil fonctionnant automatiquement
– afin de réduire les risques de blessure, débrancher
l'alimentation électrique de procéder à l'entretien.

AVERTISSEMENT: Pour réduire le risque de choc
électrique, ne pas exposer à l'eau ou à la pluie.

⚠ WARNING

Health hazards caused by welding fume particles

Do not inhale welding dust / smoke! Serious injury to the lungs and respiratory tract is possible!

Sweat smoke contains substances that can cause cancer!

Skin contact with cutting and welding fumes etc. can cause skin irritation in sensitive persons!

Repair and maintenance work on the product may only be carried out by trained and authorised personnel while complying with the safety rules and the applicable accident prevention regulations.

To avoid contact with and inhalation of the dust particles, wear disposable overalls, protective goggles, gloves and a suitable Class FFP2 respiratory protection filter mask in accordance with EN 149.

The release of hazardous dust particles during repair and maintenance is to be avoided to ensure that persons not charged with the task are not affected.

⚠ CAUTION

Health hazard due to noise!

The product can produce noise, please refer to information in the technical data. In connection with other machines and/or local conditions, a higher noise level can occur at the operation site of the product. In this case, the operating company is obliged to provide the operating personnel with the appropriate protective equipment.

3 Product information

3.1 Functional description

The product is used to extract welding fumes that are generated when welding metallic materials.

For effective detection, the product must be manually guided close to the source of welding fumes.

The product is freely movable within its reach and can be comfortably moved into any position. The internal parallelogram support linkage with spring support ensures that every position is permanently maintained.

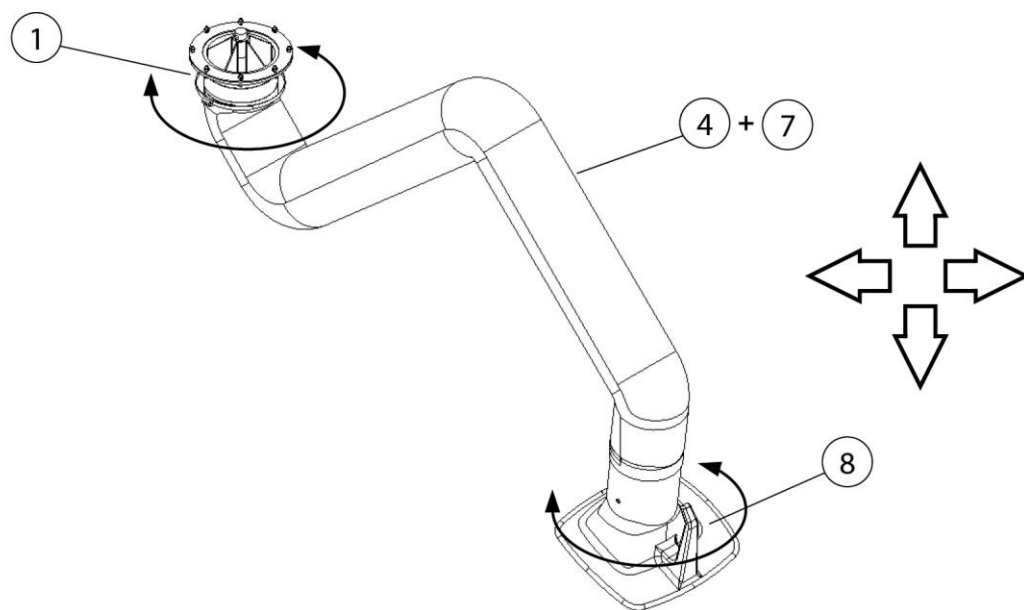


Fig. 1: Extraction arm – functional description

Pos.	Description	Pos.	Description
1	Slewing ring	8	Extraction hood
4 + 7	Extraction hose + mounting frame		

Tab. 1: Extraction arm – functional description

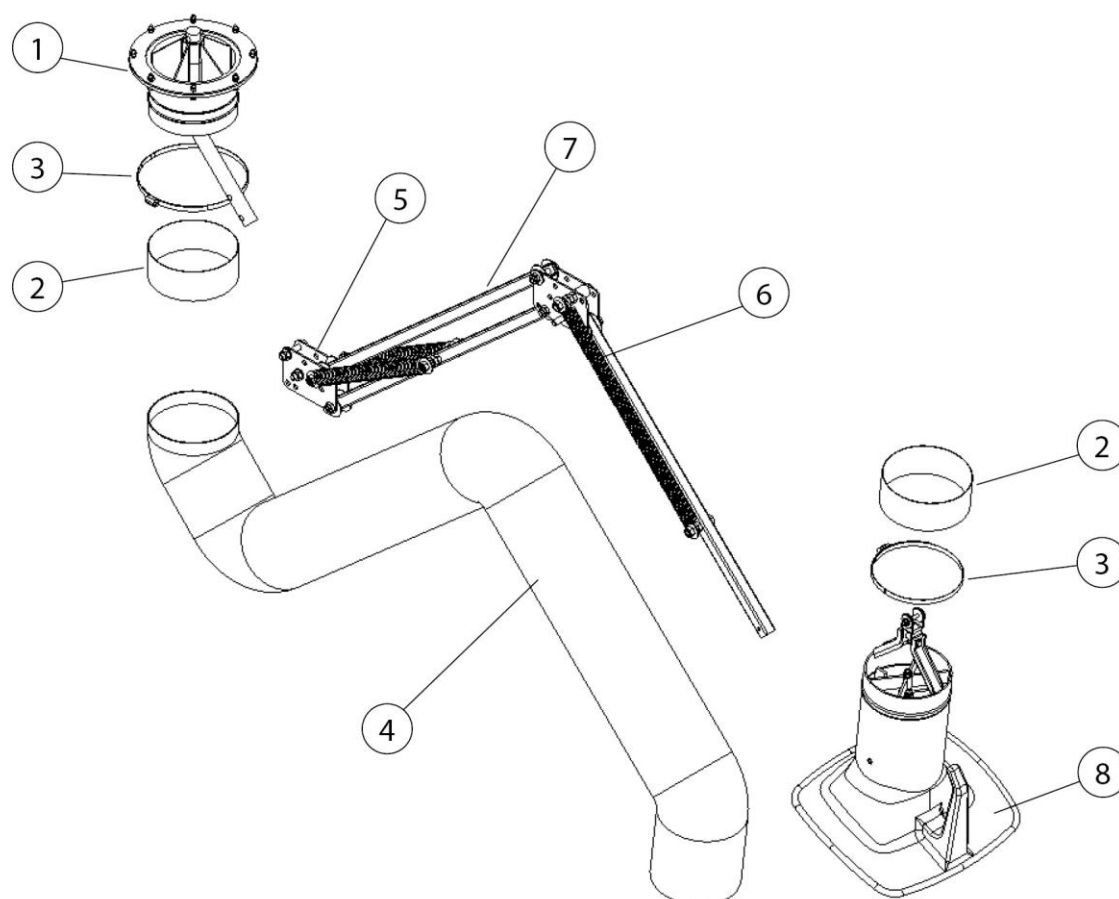


Fig. 2: Extraction arm – functional description

Pos.	Description	Pos.	Description
1	Slewing ring	5	Hinge sheet
2	Rubber sleeve (2 x)	6	Coil spring
3	Hose clamp (2 x)	7	Square tube - mounting frame
4	Suction tube	8	Extraction hood

Tab. 2: Positions on the product

3.2 Lighting (Optional)

The product can optionally be equipped with a further illuminated extraction hood.

NOTE

The product's illuminated extraction hood is not sufficient for workplace lighting alone.

3.3 Intended use

The product is designed to extract welding fumes generated during E-welding from their point of origin. In general, the product can be used for all work processes in which welding fumes are released. However, it is important to ensure that no "sparks" are drawn into the product from, e.g. a grinding process.

The product must not be used in an explosive atmosphere and not for the extraction of an explosive atmosphere.

The product is not suitable for the extraction of acid or caustic vapors.

The technical data includes the dimensions and further details for the product which have to be observed.

NOTE

The information in the chapter Technical data must be observed and strictly adhered to.

Intended use also includes the observation of the instructions and information on

- safety
- operation and control
- maintenance and servicing

contained in this manual.

Any other use or use going beyond this is considered improper use. The company operating the product is solely responsible for any damage resulting from it. This also applies to unauthorised modifications to the product.

3.4 Reasonably foreseeable misuse

No reasonable, foreseeable misuse is possible that could lead to dangerous situations with personal injury when working with the product whilst adhering to its intended use.

The operation of the product in industrial areas that do not comply with the requirements for explosion protection is not permissible.

Furthermore, the operation is prohibited for:

1. Processes that are not in the intended use list and in which the extracted air is:

- is mixed with sparks, e.g. from grinding processes, which due to their size and quantity might lead to damage to the filter media or even to a fire;
 - mixed with liquids and the resulting contamination of the air flow with vapours containing aerosols and oils;
 - mixed with highly flammable, combustible dust and/or with substances that can form explosive mixtures or atmospheres;
 - is mixed with other aggressive or abrasive dust that could damage the product and the filter elements employed;
 - is mixed with organic, toxic substances or a proportion of substances that are released when cutting the material.
2. Outdoor locations where the product is exposed to weather conditions because the product must only be installed in closed buildings.
If there is an outdoor variant of the product available, this may be installed outside. Please note that additional accessories may be required for the outdoor installation.

3.5 Markings and signs on the product

Various markings and signs are affixed to the product. If these are damaged or removed, please replace them immediately with new ones in the same location.

The operating company is obliged to post further markings and signs on the product and the surrounding area if necessary.

Such notes and signs might be related, for example, to the requirement for wearing personal protective equipment.

In the country of use, additional required safety instructions and pictograms can be provided by the manufacturer in accordance with applicable law.

3.6 Residual Risk

Even when all safety rules are observed, when operating the product a residual risk remains, as described below.

All persons working on and with the product must be aware of these residual risks and follow the instructions that prevent these residual risks from causing accidents or damages.

⚠ WARNING

Danger of serious injury to the lungs and respiratory tract – always wear respiratory protection, Class FFP2 or higher.

Skin contact with welding fumes, etc. can cause skin irritation in susceptible individuals – wear protective clothing.

During setup and preparation work, it may be necessary to dismantle on-site safety devices. This creates various residual risks and potential hazards that the operating personnel must be aware of.

The welding process may only be performed if the product has been set to match the extraction of welding fumes.

4 Transport and Storage

4.1 Transport

⚠ DANGER

Life-threatening crushing possible when loading and transporting the product!

Improper lifting and transporting may cause the pallet (if present) to tilt and fall!

- Never stand under suspended loads.
- Observe the permissible loads of the transport and lifting aids.
- Observe the applicable accident prevention and occupational safety regulations.

For transporting products with a pallet, use a suitable pallet truck or forklift. The weight of the product can be found on the name plate.

4.2 Storage

The product must be stored in its original packaging at an ambient temperature of 20 °C to +50 °C in a dry and clean place. The packaging must not be loaded by other objects.

The storage duration is not critical for all products.

5 Assembly

Instructions for safe installation of the product.

NOTE

The operating company of the product may only assign specialists to carry out the independent assembly.

- Only specialist trained personnel may carry out the assembly.
 - At least two people are needed to assemble the product.
 - Only use suitable transport and lifting equipment.
 - It must be ensured that the assembly location provides sufficient load-bearing capacity.
 - Only use suitable fixing material.
 - The fixing material must be selected according to local conditions.
 - The product must not obstruct anyone in their working area.
-

DANGER

Falling parts may cause life-threatening injuries!

Tipping or falling loads lead to severe to fatal injuries.

- Never step under suspended loads.
 - Always remain outside the danger zone.
 - Observe the total weight, attachment points and centre of gravity of the load.
 - Observe the transport instructions and symbols on the transported goods.
-

WARNING

Incorrect connections may cause serious injuries!

Please note the necessary safeguards and only have the product connected by trained specialists.

WARNING

Risk of crushing due to pretensioned coil springs and joints

The pretensioned coil springs and moving joints constitute a crushing and entrapment hazard for hands and fingers during assembly.

- Before starting the assembly ensure that the arm is not under tension.
-

-
- Do not move hands and fingers into the area of the joints and coil springs.
 - Wear suitable protective gloves and protective clothing.
 - Only activate or tension the spring force after completely attaching the components.
 - Secure the extraction arm against unintentional movement during assembly.
-

NOTE

The operating company of the product may only commission instructed personnel to independently assemble the product if they are well-versed in this task.

Two people are needed to assemble the product.

NOTE

For assembly of the available attachments, please follow the instructions provided.

NOTE

Extraction hood with lighting (optional)

If an extraction hood with lighting is mounted on the product, the chapter Mounting the extraction hood with lighting must be observed in parallel!

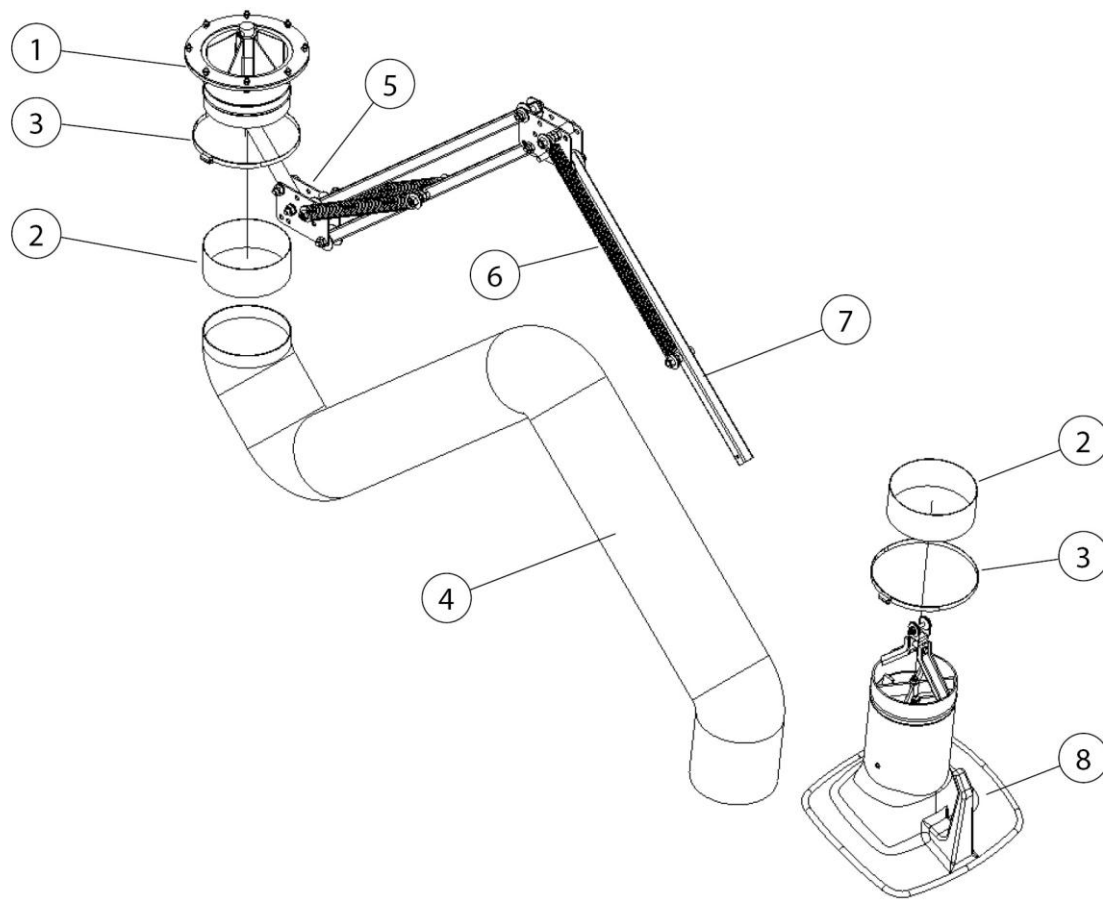


Fig. 3: Extraction arm

Pos.	Description	Pos.	Description
1	Slewing ring	5	Hinge sheet
2	Rubber sleeve (2 x)	6	Coil spring
3	Hose clamp (2 x)	7	Square tube - mounting frame
4	Suction tube	8	Extraction hood

Tab. 3: Positions on the product

5.1 Mounting on wall mount bracket or cantilever arm

Pay attention to the torques at the installation site:

Extraction arm length	Torque on the wall mount bracket
2.0 m [78.7 inch]	450 Nm [331.9 ft-lb]
3.0 m [118.1 inch]	700 Nm [516.3 ft-lb]
4.0 m [157.8 inch]	1,000 Nm [737.6 ft-lb]

Tab. 4: Torque

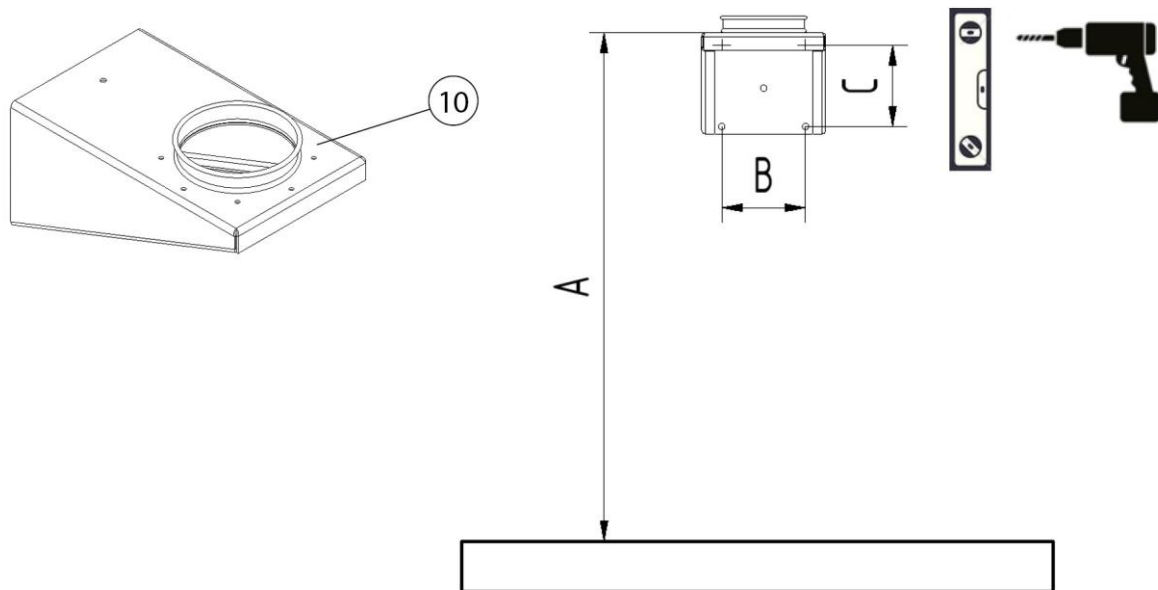


Fig. 4: Drilling pattern

Letter	Dimension	Letter	Dimension
A	2300 mm [90.55 inch]	C	165 mm [6.50 inch]
B	165 mm [6.50 inch]		

Tab. 5: Drilling pattern - dimensions

The wall mount bracket is mounted as follows:

1. Align the wall mount bracket (Pos. 10) according to the drilling diagram using a spirit level and mark and drill the drill holes.
2. Fix the wall mount bracket with suitable mounting material.

NOTE

Tensile forces of up to 2,800 N (approx. 280 kg) [approx. 717 lbs] per fixing bolt occur at the upper fixing bolts of the wall mount bracket.

⚠ WARNING

Falls and falling components can cause serious injuries.
Incorrect handling can cause components to fall.

Only use standard ladders, e.g. working platforms.

Never stand under suspended loads.

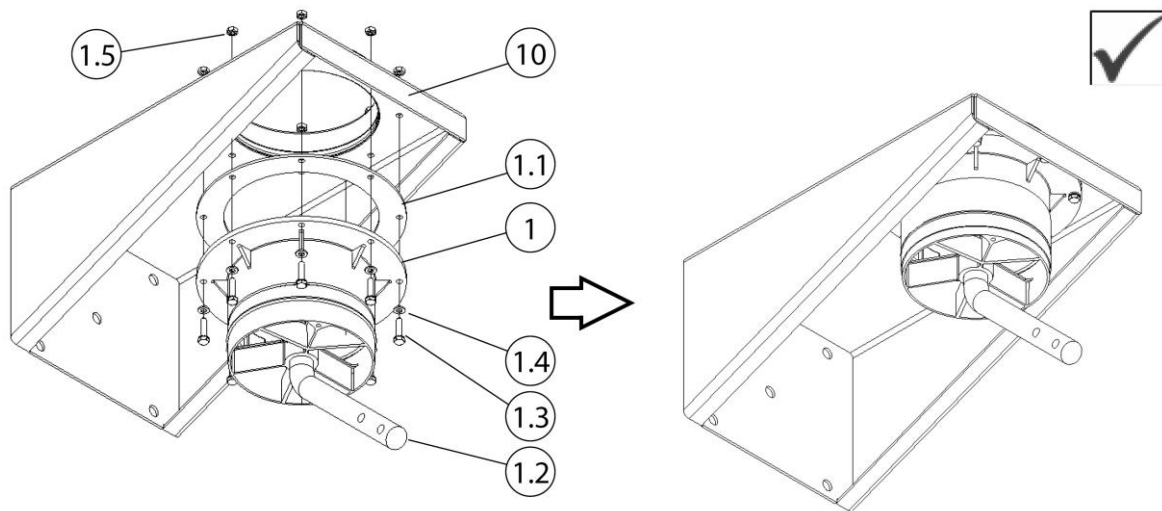


Fig. 5: Mounting the slewing ring

Pos.	Description	Pos.	Description
1	Wall mount bracket	1.4	Washer M6
1.1	Flange seal	1.5	Hexagon nut M6
1.2	Round steel	10	Wall mount bracket
1.3	Screw M6 x 40mm (8 x)		

Tab. 6: Mounting the slewing ring

- Place the flange seal (Pos. 1.1) on the slewing ring (Pos. 1).
- Screw the slewing ring (Pos. 1) + flange seal (Pos 1.1) under the wall mount bracket (Pos. 10) For this purpose, use the enclosed fixing material (Pos. 1.3 + 1.4 + 1.5).

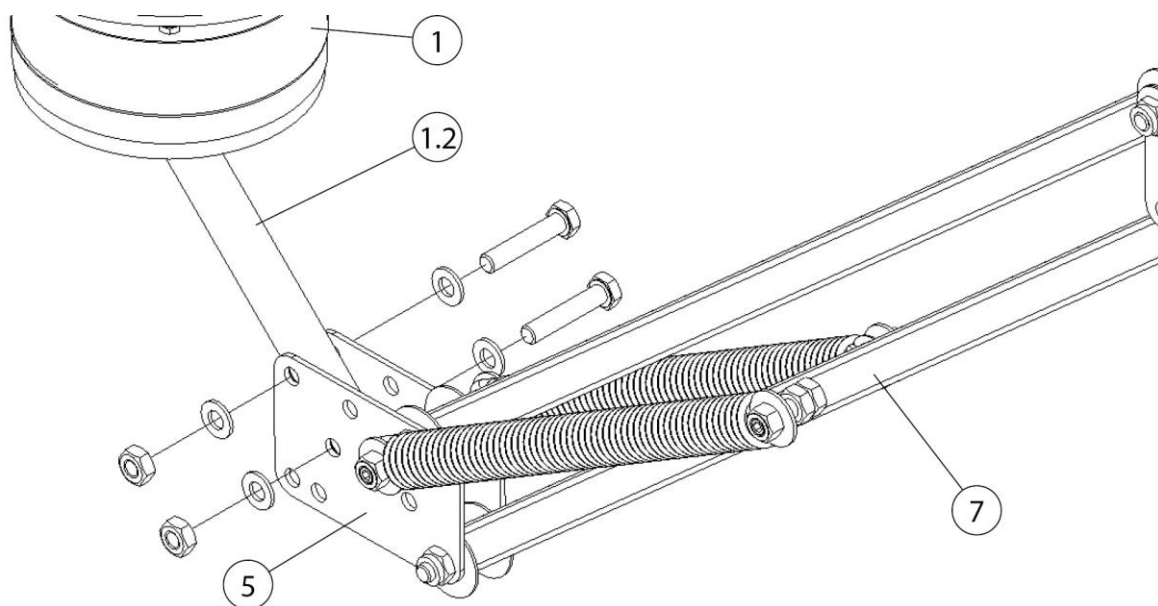


Fig. 6: Mounting the mounting frame

Pos.	Description	Pos.	Description
1	Slewing ring	5	Hinge sheet
1.2	Round steel	7	Mounting frame – square tube

Tab. 7: Mounting the mounting frame

5. Screw the support frame (Pos. 7) in folded position with the joint plate (Pos. 5) to the round steel (Pos. 1.2). Use the enclosed fixing material for this purpose.
6. Continued in chapter "Continuation of all assembly types".

NOTE

For extraction arms in rigid metal tube version: Shorten the rear piece of hose to 900 mm [35.4 inch].

5.2 Assembly on a mobile filter unit

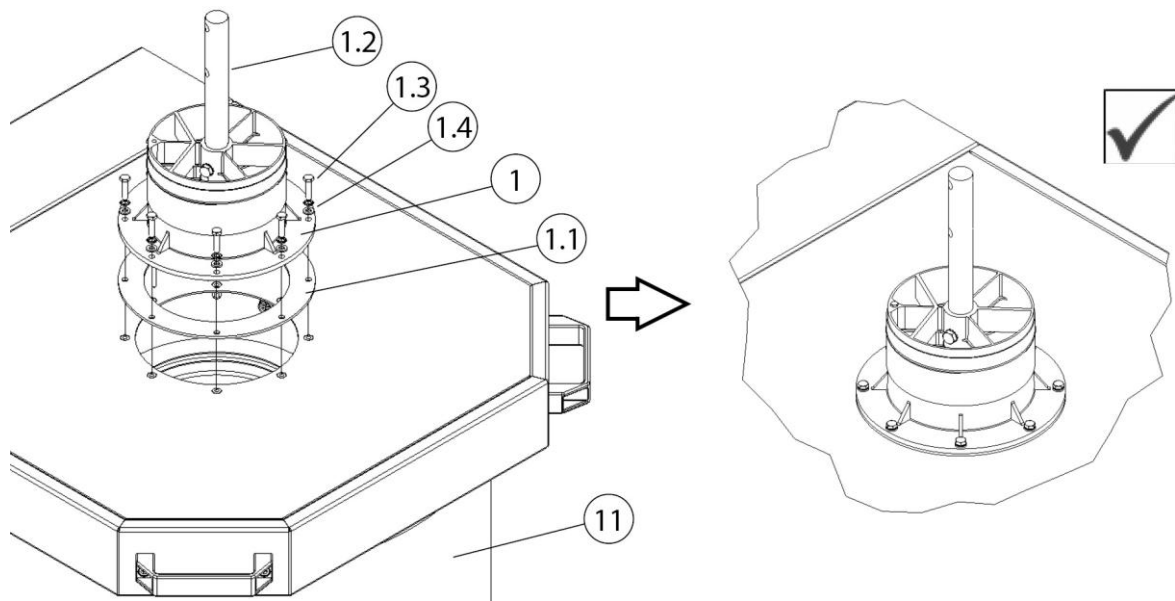


Fig. 7: Assembly on a mobile filter unit

Pos.	Description	Pos.	Description
1	Slewing ring	1.3	Screw (M6 x 25 mm)
1.1	Flange seal	1.4	Washers
1.2	Round steel	11	Mobile filter unit

Tab. 8: Assembly on a mobile filter unit

1. Place the flange seal (Pos. 1.1) on the intake opening of the mobile filter unit (Pos. 11).

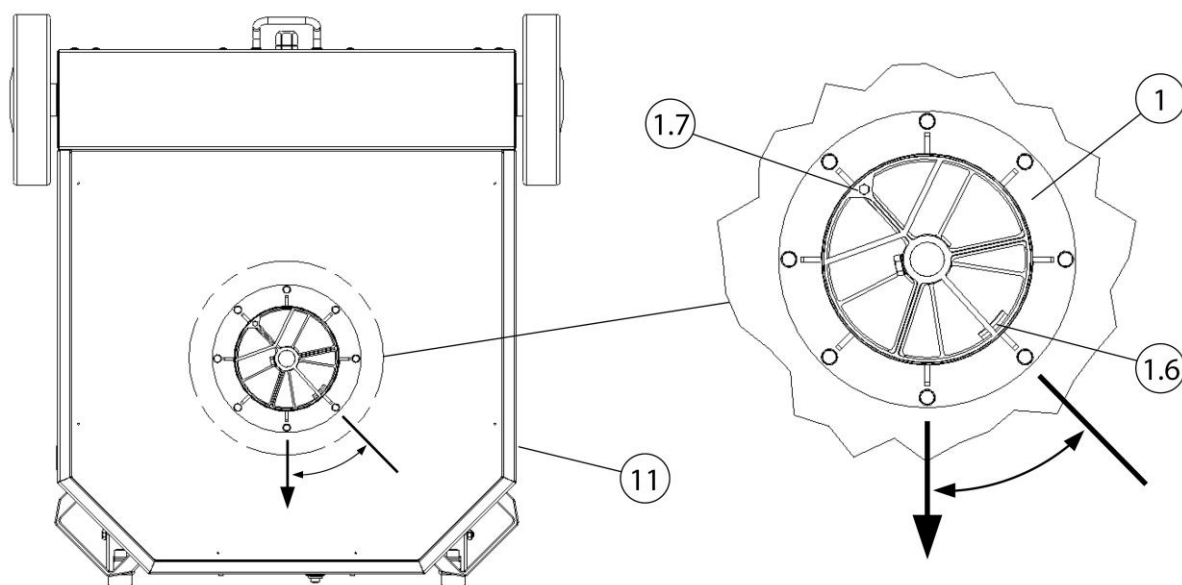


Fig. 8: Aligning the slewing ring

Pos.	Description	Pos.	Description
1	Slewing ring	1.7	Rotary stop – screw (M6 x 40mm) (scope of supply only for extraction hood with lighting)
1.6	Rotary stop - slewing ring	11	Mobile filter unit

Tab. 9: Aligning the slewing ring

- Place the slewing ring (Pos. 1) on the flange seal (Pos. 1.1). When positioning, pay attention to the rotary stop in the slewing ring (Pos. 1.6).

NOTE

Rotary stop – extraction hood with lighting

If an extraction hood with lighting is mounted on the product, it is necessary to limit the rotation of the slewing ring.

- Screw the slewing ring (Pos. 1) to the cover plate of the mobile filter unit (Pos. 11). For this purpose, use the enclosed fixing material (Pos. 1.3 + 1.4).

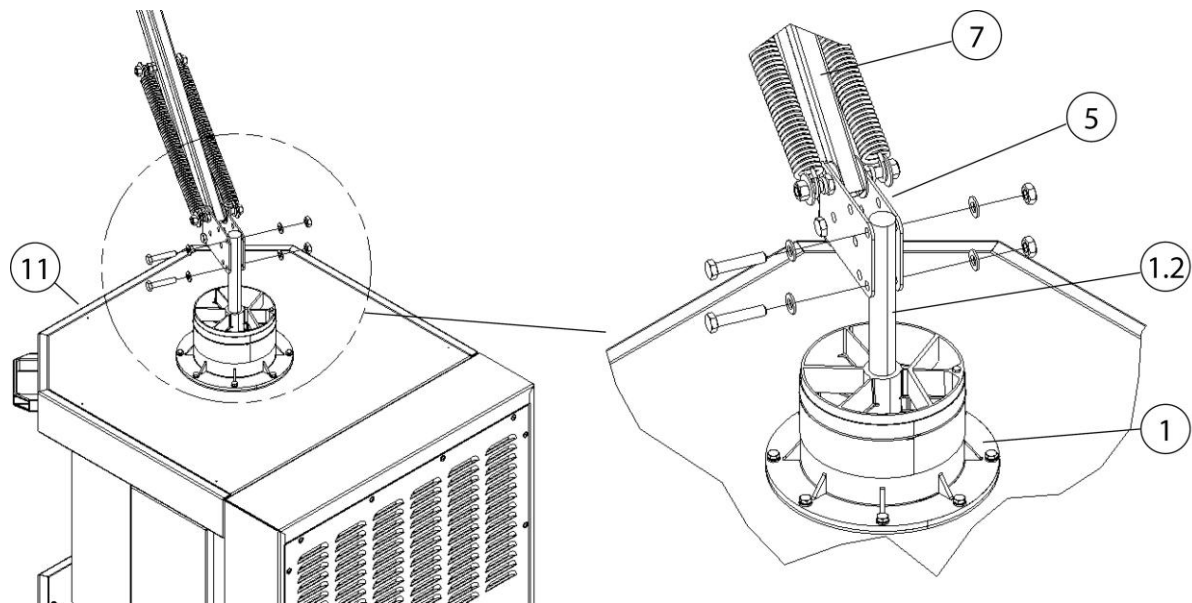


Fig. 9: Mounting the mounting frame

Pos.	Description	Pos.	Description
1	Slewing ring	7	Mounting frame - square pipe
1.2	Round steel	11	Mobile filter unit
5	Hinge sheet		

Tab. 10: Mounting the mounting frame

4. Screw the support frame (Pos. 7) in folded position with the joint plate (Pos. 5) to the round steel (Pos. 1.2). Use the enclosed fixing material for this purpose.
5. Continued in chapter "Continuation of all assembly types".

NOTE

For extraction arms in rigid metal tube version: Shorten the rear piece of hose to 650 mm [25.6 inch].

5.3 Mounting under stationary filter unit

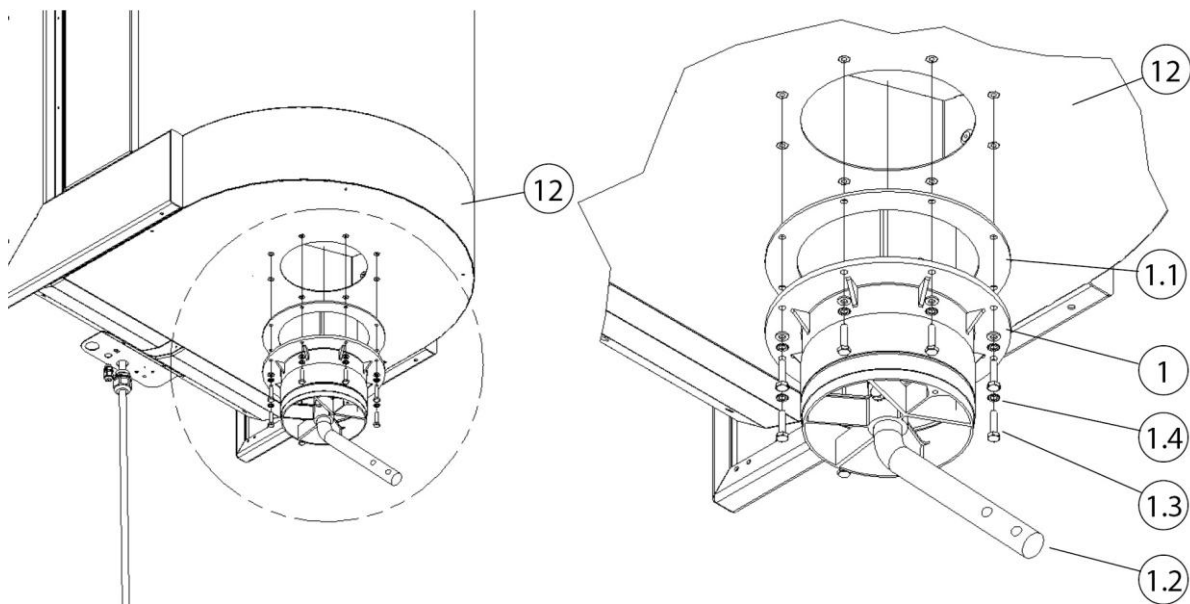


Fig. 10: Mounting under stationary filter unit

Pos.	Description	Pos.	Description
1	Slewing ring	1.3	Screw (M6 x 25 mm)
1.1	Flange seal	1.4	Washer
1.2	Round steel	12	Stationary filter unit

Tab. 11: Mounting under stationary filter unit

1. Place the flange seal (Pos. 1.1) on the slewing ring (Pos. 1).
2. Screw the slewing ring (Pos. 1) + flange seal (Pos. 1.1) under the stationary filter unit (Pos. 12) For this purpose, use the enclosed fixing material (Pos. 1.3 + 1.4).

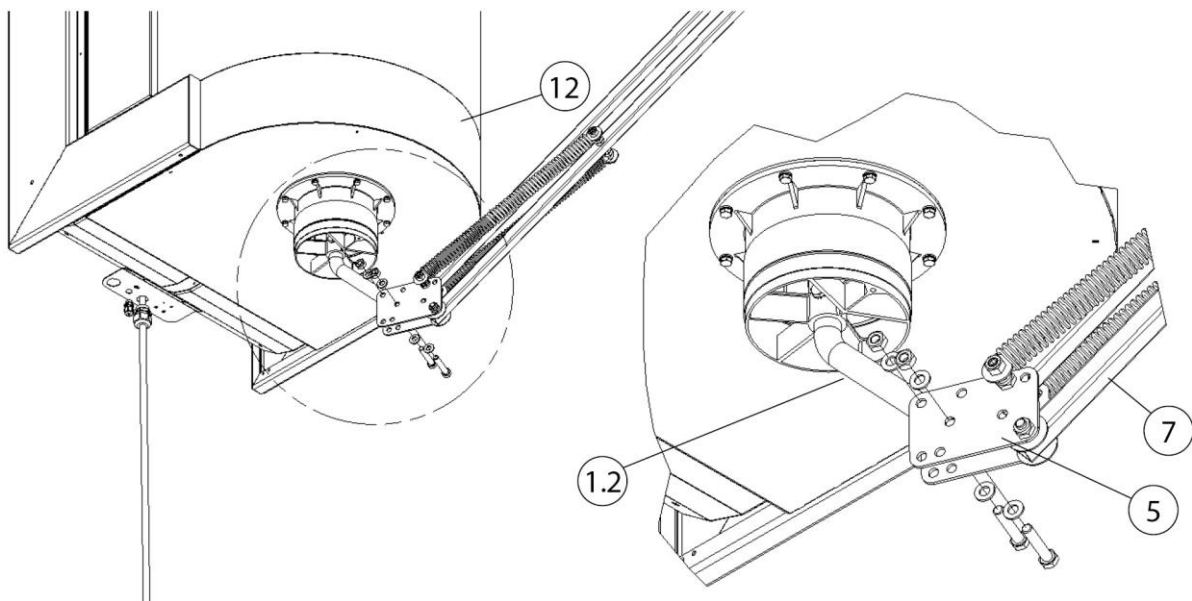


Fig. 11: Mounting the mounting frame

Pos.	Description	Pos.	Description
1.2	Round steel	7	Mounting frame - square pipe
5	Hinge sheet	12	Stationary filter unit

Tab. 12: Mounting the mounting frame

3. Screw the support frame (Pos. 7) in folded position with the joint plate (Pos. 5) to the round steel (Pos. 1.2). Use the enclosed fixing material for this purpose.
4. Continued in chapter "Continuation of all assembly types".

5.4 Continuation of all Mounting Methods

⚠ CAUTION

Risk of injury due to coiled springs.
Carefully unfold the mounting frame.

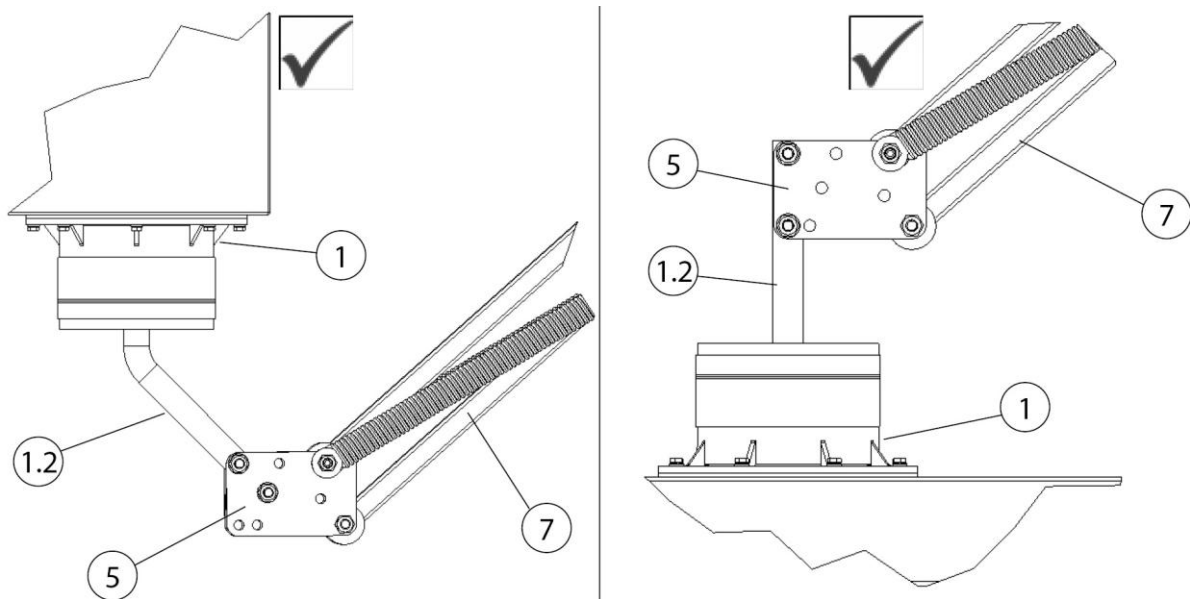


Fig. 12: Continuation of the assembly

Pos.	Description	Pos.	Description
1	Slewing ring	5	Hinge sheet
1.2	Round steel	7	Mounting frame - square pipe

Tab. 13: Continuation of the assembly

After assembling the slewing ring (Pos. 1) and carrying frame (Pos. 7) continue the assembly as follows:

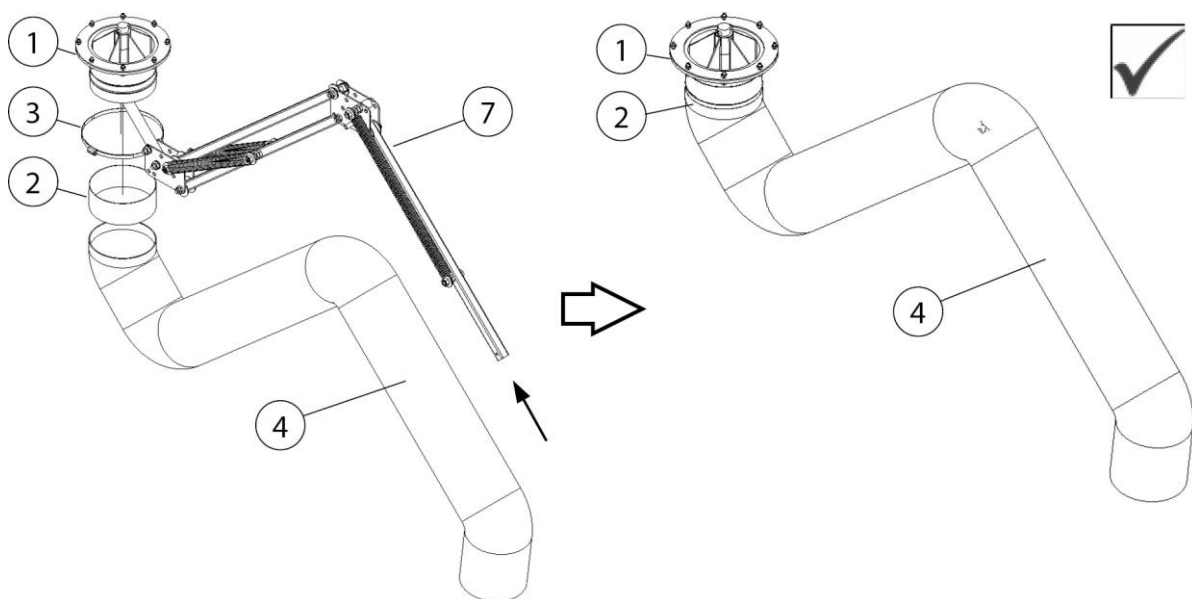


Fig. 13: Support frame/extraction arm

Pos.	Description	Pos.	Description
1	Slewing ring	4	Suction tube
2	Rubber sleeve	7	Mounting frame - square pipe
3	Hose clamp		

Tab. 14: Support frame/extraction arm

1. Slide a rubber sleeve (Pos. 2) and hose clamp (Pos. 3) over the support frame (Pos. 7) up to the slewing ring (Pos. 1).
2. Remove the yellow safety sticker and safety tape from the mounting frame (Pos. 7).
3. Carefully unfold the carrying frame (Pos. 7).
4. Pull the extraction hose (Pos. 4) over the carrying frame (Pos. 7) to the slewing ring (Pos. 1).

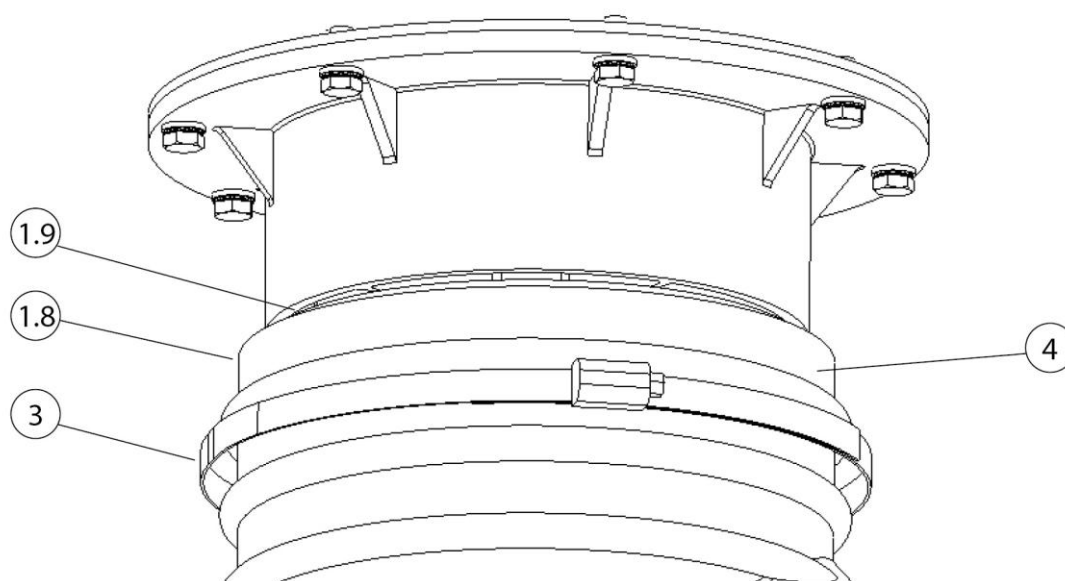


Fig. 14: Fixing the extraction hose to the slewing ring

Pos.	Description	Pos.	Description
1.8	Rotatable pipe section - slewing ring	3	Hose clamp
1.9	Revolving joint	4	Suction tube

Tab. 15: Fixing the extraction hose to the slewing ring

5. Push the rear end of the hose over the swivel pipe of the slewing ring (Pos. 1.8) and fix it with the hose clamp (Pos. 3).
6. Then cover the revolving joint (Pos. 1.9) with the rubber sleeve (Pos. 2) and the hose clamp (Pos. 3).

Mounting the extraction hood

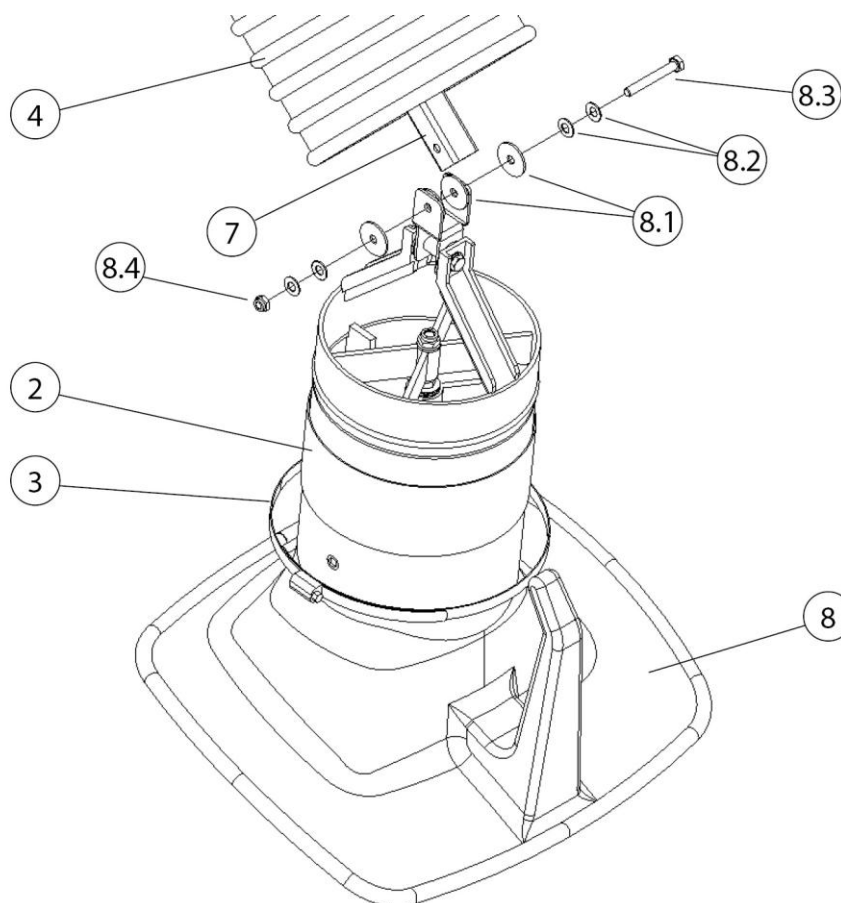


Fig. 15: Mounting the extraction hood

Pos.	Description	Pos.	Description
2	Rubber sleeve	8.1	Brake disc (4 x)
3	Hose clamp	8.2	Plate spring (4 x)
4	Suction tube	8.3	Hexagon screw
7	Mounting frame - square pipe	8.4	Hexagon nut
8	Extraction hood		

Tab. 16: Mounting the extraction hood

7. Push the rubber sleeve (Pos. 2) + hose clamp (Pos. 3) over the pipe socket of the extraction hood.
8. Attach the extraction hood (Pos. 8) to the end piece of the support frame (Pos. 7). For this purpose, use the fixing material (Pos. 8.1– 8.4).

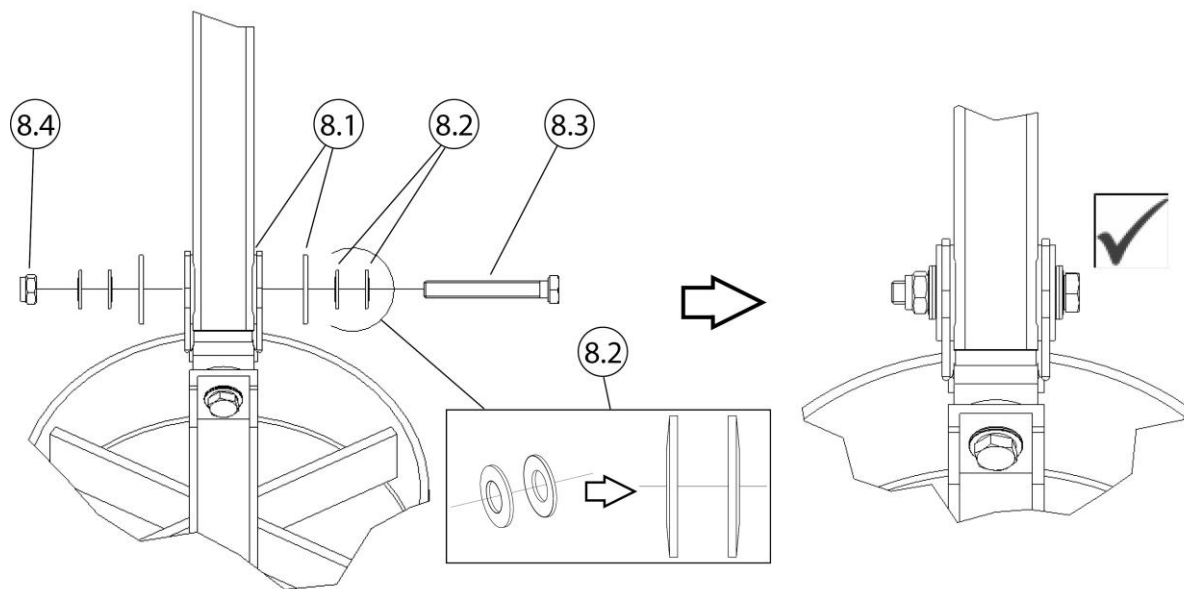


Fig. 16: Mounting the extraction hood

9. When bolting, make sure that the brake discs (Pos. 8.1) and the disc springs (Pos. 8.2) are positioned correctly!
10. Tighten the hexagon screw (Pos. 8.3) + hexagon nut (Pos. 8.4) just tight enough that the extraction hood maintains each position just unsupported.

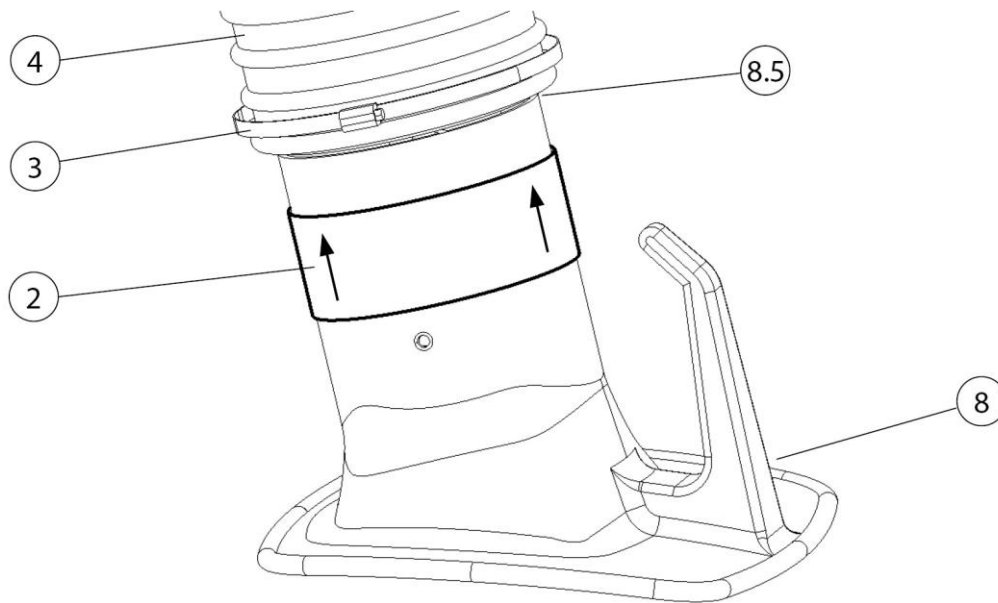


Fig. 17: Fixing the extraction hose to the extraction hood

Pos.	Description	Pos.	Description
2	Rubber sleeve	8	Extraction hood
3	Hose clamp	8.5	Revolving joint
4	Suction tube		

Tab. 17: Fixing the extraction hose to the extraction hood

11. Pull the end of the hose (Pos. 4) over the connection piece of the extraction hood (Pos. 8) as shown in the illustration and fix it with the hose clamp (Pos. 3).
12. Then cover the hose clamp (Pos. 3) and the revolving joint (Pos. 8.5) with the rubber sleeve (Pos. 2).

NOTE

The ease of the joint is preset at the factory. If readjustment is still necessary, then only use the screws in the joint points with plate springs. When properly adjusted, the position of the extraction arm is held almost exclusively by the force of the spiral springs.

5.5 Mounting the extraction hood with lighting - optional

The following chapters describe the assembly and cable routing of the extraction hood with lighting.

NOTE

Before starting installation, check the existing product variant to determine the cable routing. See next chapters.

5.5.1 Cable routing and connection in the filter unit

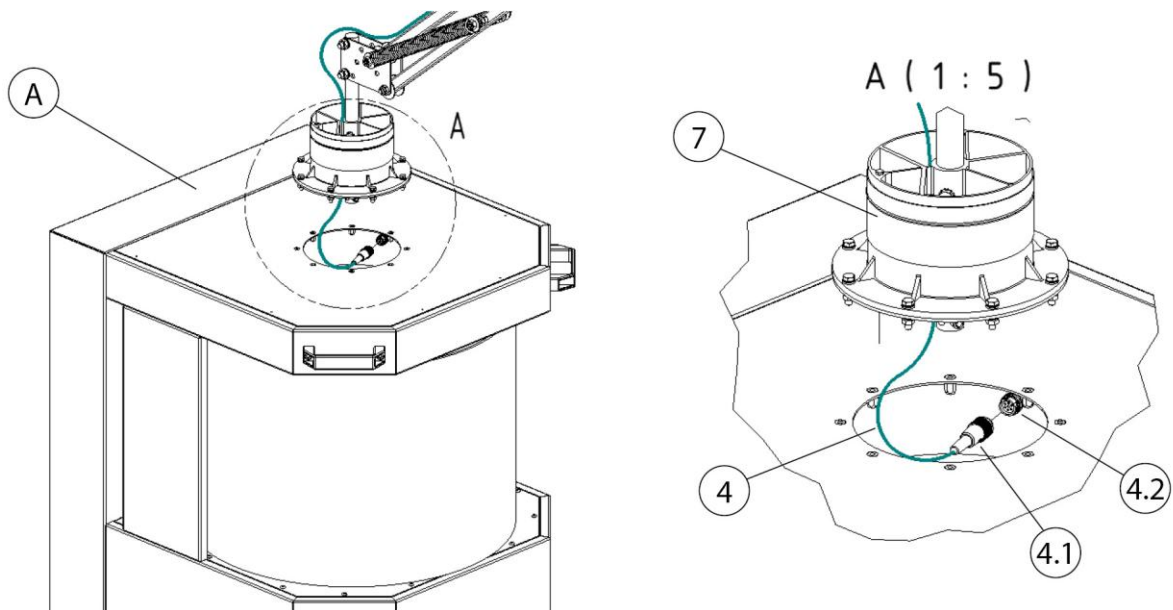


Fig. 18: Connection – mobile filter unit

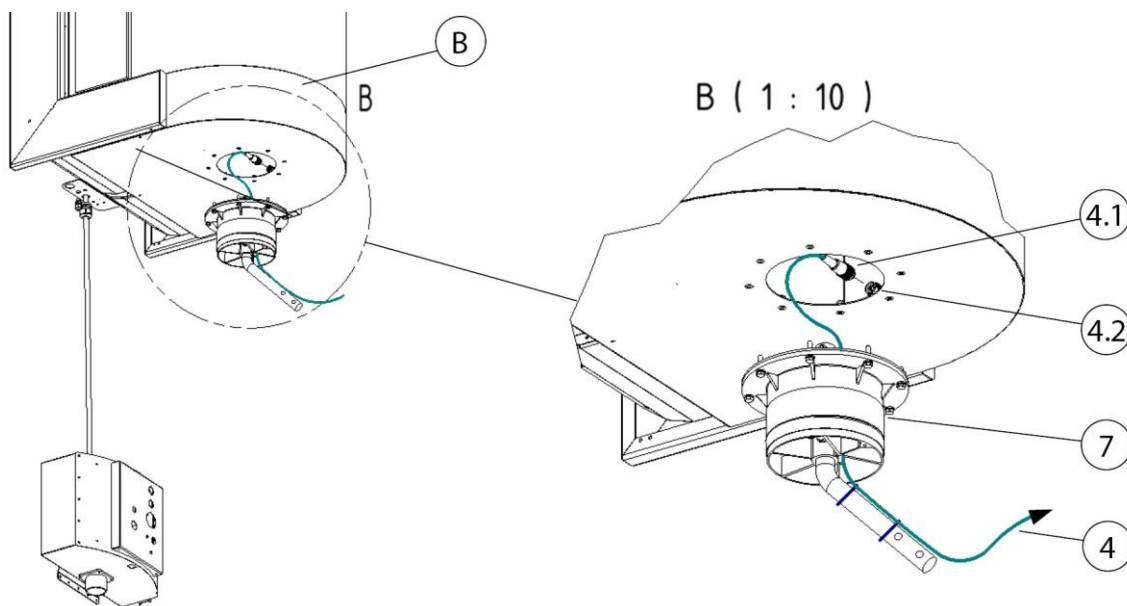


Fig. 19: Connection – stationary filter unit

Pos.	Description	Pos.	Description
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A	Mobile filter unit	4.1	Connector plug 4-pole
B	Stationary filter unit	4.2	Connection socket 4-pin
4	Connection cable 20 metres [787.4 inch]	7	Slewing ring - extraction arm

Tab. 18: Positions on the product

1. Connect the connection cable (Pos. 4) to the unit. To do this, insert the connector plug (Pos. 4.1.) into the connection socket (Pos. 4.2).
2. Pull the connecting cable through the slewing ring.
3. For further steps see chapter: Cable routing + connection of the extraction hood with lighting.

5.5.2 Cable routing and connection - Control Box/Transformer Box

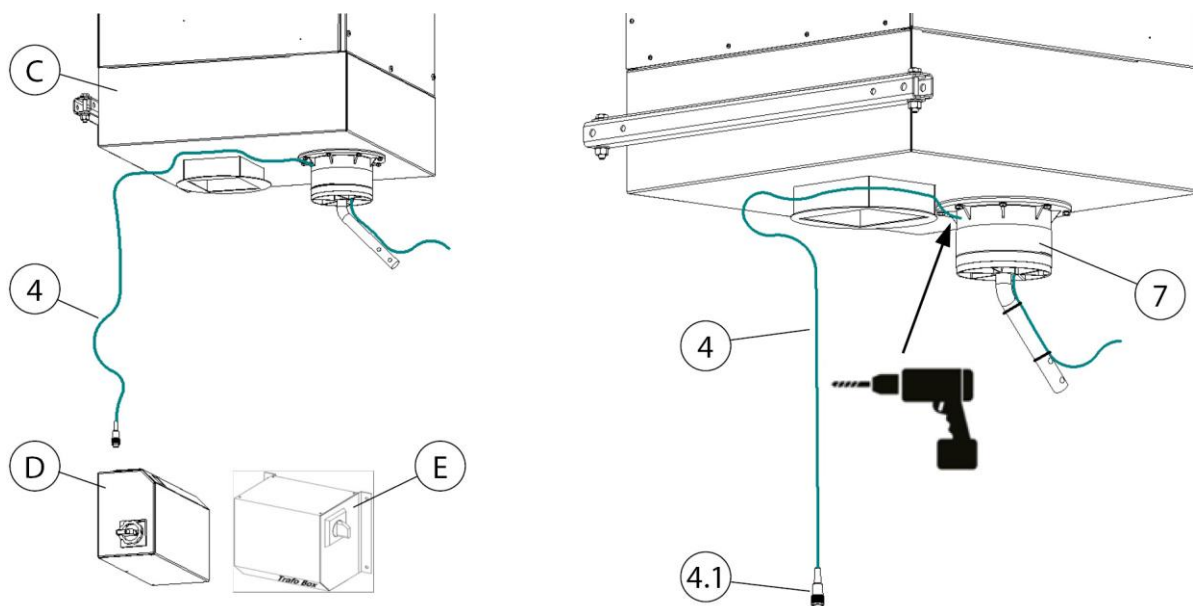


Fig. 20: Cable laying – stationary unit

Pos.	Description	Pos.	Description
C	Stationary filter unit	4	Connection cable 20 metres [787.4 inch]
D	Control box	4.1	Connector plug 4-pole
E	Transformer box	7	Slewing ring - extraction arm

Tab. 19: Positions on the product

1. Connect the connection cable (Pos. 4) to the control box (Pos. D) or transformer box (Pos. E). To do this, insert the connector plug (Pos. 4.1.) into the connection socket provided.
2. Lay the connection cable (Pos. 4) to the stationary filter unit (Pos. C).
3. Drill a Ø 8 mm [Ø 0.31 inch] hole at the back of the slewing ring.
4. Pull the connecting cable through the slewing ring.
5. For further steps see chapter: Cable routing + connection of the extraction hood with lighting + retrofit control box transformer.

5.5.3 Cable routing – Extraction hood + lighting (optional)

NOTE

For assembly of the available attachments, please follow the instructions provided.

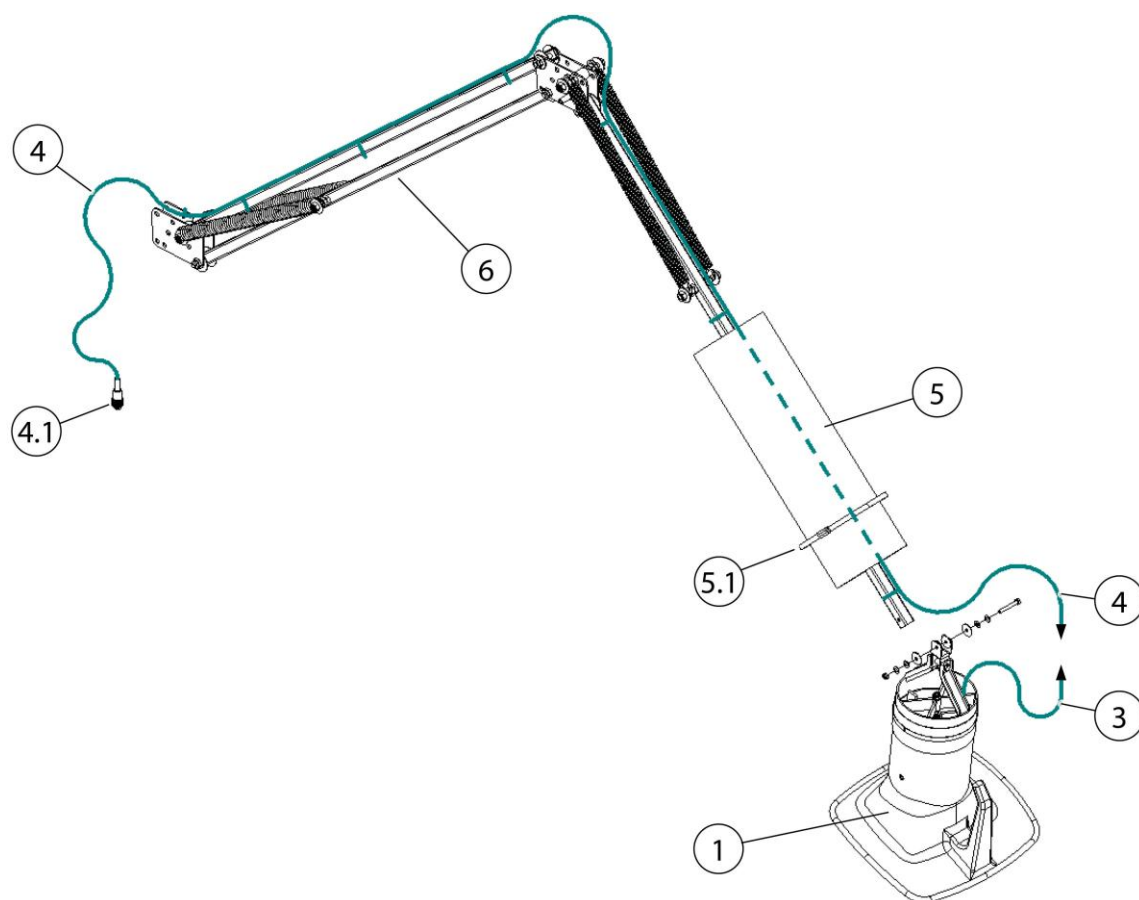


Fig. 21: Cable routing - Extraction arm 2-4 metres

Pos.	Description	Pos.	Description
1	Extraction hood	4.1	Connector plug 4-pole
3	Connection cable - extraction hood	5	Suction tube
3.1	Crimp connector	5.1	Hose clamp
4	Connection cable 20 metres [787.4 inch]	6	Mounting frame

Table 20: Positions on the product

1. Loosen the extraction hose (Pos. 5). To do this, loosen the hose clamp (Pos. 5.1).
2. Fasten the extraction hood with lighting (Pos. 1) on the support frame (Pos. 6). Use the enclosed mounting material for this purpose.
3. Lay the connection cable (Pos. 4) along the support frame (Pos. 6), through the extraction hose to the extraction hood and fix it with the cable ties provided.

NOTE

Damage to the connection cable due to tensile stress or crushing!

When laying, make sure that the connection cable is not subjected to tension or crushing in the joint areas.

Leave sufficient length when laying the cable!

4. Connect the connection cable (Pos. 4) to the connection cable of the extraction hood (Pos. 3). To do this, shorten the connection cable (Pos. 4), strip the insulation and connect it to the crimp connectors (Pos. 3.1) with the same numbers.
5. Attach the rear end of the hose (Pos. 5) to the slewing ring. Use the enclosed hose clamp (Pos. 5.1) for fixing.
6. Attach the other end of the extraction hose (Pos. 5) to the extraction hood (Pos. 1). Use the enclosed hose clamp (Pos. 5.1) for fixing.
7. Fix the extraction hose (Pos. 5) using the hose clamps (Pos. 5.1).

6 Use

Every person who deals with use, maintenance and repair of the product must have thoroughly read these operating instructions as well as the instructions for any attachment and accessory products and have understood them.

6.1 Qualification of the operating personnel

The operating company of the product may only commission persons to use the product independently if they are well-versed in this task.

Those familiar with this task includes those who have been instructed appropriately in the task and know the operating instructions as well as the operational issues in question.

The product should only be used by trained or instructed personnel. This is the only way to ensure safety and hazard awareness of all personnel during work.

6.2 Positioning the extraction hood

The extraction arm or extraction hood is designed in such a way that it can be adjusted and moved easily by hand. Once it has been positioned, the extraction hood maintains its set position of its own accord. Furthermore, both the extraction hood and the arm can be pivoted through 360° so that almost any position can be set. It is important that the extraction hood is always positioned properly in order to achieve adequate capture of the welding fumes. The correct position is shown on the following image.

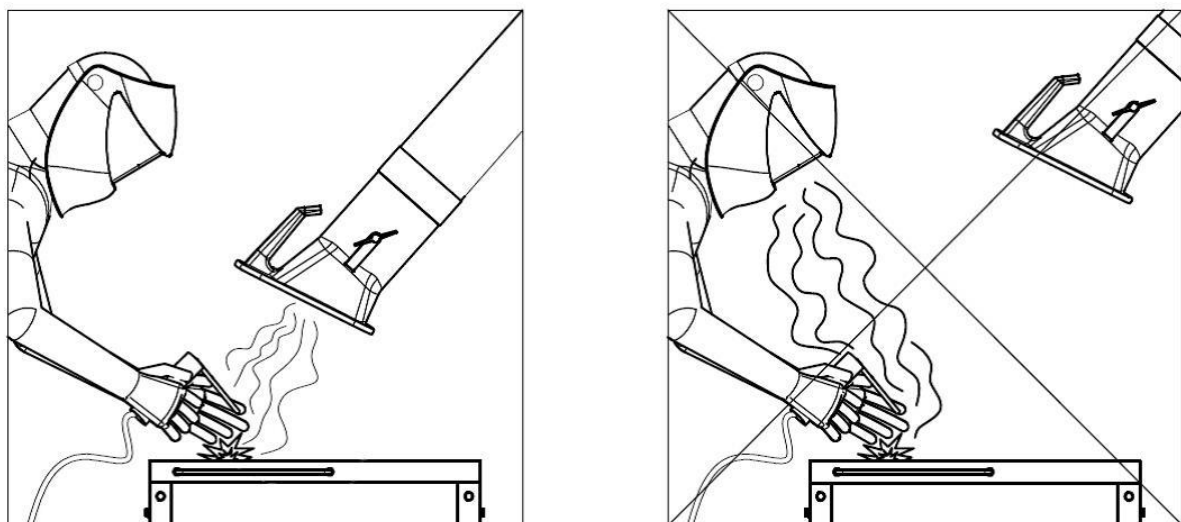


Fig. 22: Positioning the extraction hood

- Position the extraction arm so that the extraction hood is located approx. 25 cm diagonally above the weld.
- The extraction hood must be positioned so that it safely captures the welding fumes, taking into account the movement of welding fumes caused by the heat and the extraction range.
- Always move the extraction hood with respect to the weld position as you advance.

⚠ WARNING

An incorrectly positioned extraction hood or too low an extraction capacity do not ensure that air containing hazardous substances is captured adequately by the extraction hood. This means hazardous substances can enter the area where the operating personnel breathes and cause severe damage to health.

7 Maintenance

The instructions in this chapter are intended as minimum requirements. Depending on the operating conditions, further instructions may be required to keep the product in optimal condition.

The maintenance and repair work described in this chapter must only be performed by specially trained repair personnel of the operating company.

Spare parts used must comply with the manufacturer's specified technical requirements.

This is guaranteed if original spare parts are used.

The safe and environmentally friendly disposal of operating materials and replacement parts must be ensured.

The safety instructions in these operating instructions must be observed during maintenance work.

7.1 Care

The care of the product is essentially limited to cleaning all surfaces of the product and – if present – checking the filter inserts.

The warning notices listed in the chapter "Safety notes for maintenance and fault removal" must be observed.

NOTE

The product may not be cleaned with compressed air. This may result in dust and/or dirt particles getting into the ambient air.

Proper care helps to maintain the product in a continuous functional state.

For optimum care and cleaning of the powder-coated surfaces, the following must be observed:

- Thoroughly clean the product monthly or as needed.
- Clean the exterior areas of the product with a suitable industrial vacuum cleaner of dust classification H or with damp soft cloths/industrial cotton wool.
- For stubborn dirt, use commercially available household cleaners. Avoid vigorous rubbing.
- Do not use any abrasive agents that scratch.
- Do not use any acidic or strongly alkaline cleaning agents.
- Do not use organic solvents containing esters, ketones, alcohols, hydrocarbons or similar.

7.2 Maintenance

Regular inspection and servicing have a positive effect on the reliable functioning of the product and should be done at least once a month.

Please observe the listed warning notices for maintenance listed in chapter “safety”.

⚠ WARNING

Warning of serious personal injury hazard

In the event of misconduct, there is a danger of serious bodily injury, e.g. crushing damage, fingers or hands tearing off due to uncontrolled movements of individual machine elements.

Repair and maintenance work on the product may only be carried out by trained and authorised personnel while complying with the safety rules and the applicable accident prevention regulations.

Maintenance and repair work and troubleshooting must be performed only when the plant is switched off.

7.3 Emergency measures

In case of fire of the product or its detection elements, the following steps should be taken if necessary:

1. Disconnect the product from the mains! If present; pull out mains plug; set main switch to 0-position; disconnect supply fuses.
2. If present, disconnect the compressed air supply.
3. Fight fire with a commercially available dry powder extinguisher.
4. Notify local fire brigade if necessary.

⚠ WARNING

Do not open products with maintenance door. Flash flame formation!

In the event of a fire, do not touch the product under any circumstances without proper protective gloves. Risk of burns!

8 Disposal

⚠ WARNING

Skin contact with welding fumes, etc. can cause skin irritation in susceptible individuals.

Disassembly work on the product may only be carried out by trained and authorised personnel while complying with the safety rules and the applicable accident prevention regulations.

Serious injury to the lungs and respiratory tract is possible!

In order to avoid contact with and inhalation of dust particles, use protective clothing, gloves and a blower respirator system.

The release of hazardous dust particles must be avoided during dismantling work so that persons in the vicinity are not harmed.

⚠ CAUTION

All work on and with the product must comply with the legal obligations for waste avoidance and proper recycling/disposal.

8.1 Plastics

Plastics, if present, must be sorted as far as possible. Plastics must be disposed of in compliance with the legal requirements.

8.2 Metals

Metals, if present, must be separated and disposed of.
Disposal must be carried out by an authorised company.

8.3 Filter elements

Filter elements, if present, must be disposed of in compliance with the legal requirements.

9 Annex

9.1 EU Declaration of Incorporation

Designation:	Add-on product
Series:	Extraction arm 2-4m
Type:	79002, 79003, 79004 (possibly different article numbers for other product variants)
Machine ID:	See name plate in front section of this operating manual The product has been developed, designed and manufactured as partly completed machinery in accordance with EC directives 2006/42/EC – Machinery Directive
Company:	At the sole responsibility of KEMPER GmbH Von-Siemens-Str. 20, D-48691 Vreden The partly completed machinery must not be put into service until it has been established that the machinery into which the partly completed machinery is to be incorporated complies with the 2006/42/EC Machinery Directive.

The following harmonised standards are used:

EN ISO 12100:2010 Safety of machinery - General principles for design

EN ISO 13857:2019 Safety of machinery - Safety distances

EN ISO 13854:2019 Safety of machinery - Minimum gaps

A complete list of standards, directives and specifications applied is available from the manufacturer. The operating manual belonging to the product is available.

Authorised representative:

Kemper GmbH, Von-Siemens-Str. 20, 48691 Vreden, Germany

The aforementioned person is authorised to compile the technical documentation in accordance with Annex VII of Directive 2006/42/EC.

Vreden, 23.01.2026

Place, date



B. KEMPER

CEO

Identification of the signatory

9.2 UKCA Declaration of Installation

Designation: Installation products
 Series: Extraction arm 2-4m
 Type: **79002, 79003, 79004** (possibly different article numbers for other product variants)
 Machine ID: See name plate in front section of this operating manual
 This product is developed, designed and manufactured in accordance with the UKCA directives
 Supply of Machinery (safety) Regulations 2008

Company: At the sole responsibility of
KEMPER GmbH
 Von-Siemens-Str. 20, D-48691 Vreden

The following designated standards and technical specifications have been applied:

BS EN ISO 12100:2010 Safety of machinery - General principles for design
 BS EN ISO 13857:2019 Safety of machinery - Safety distances
 BS EN ISO 13854:2019 Safety of machinery

A complete list of standards, directives and specifications applied is available from the manufacturer. The operating manual belonging to the product is available.
 Additional information:

UK Authorised Representative:
 United Kingdom KEMPER (U.K.) Ltd.
 Venture Court, 2 Debdale Road, Wellingborough, Northamptonshire NN8 5AA
 The above-mentioned person is authorized to compile the technical documentation in Schedule 2 of the Supply of Machinery (Safety) Regulations 2008.

Vreden, 23.01.2026

Place, date

B. Kemper



CEO

Identification of the signatory

9.3 Technical data

Description m [ft]	Diameter mm [in]	Weight kg [lbs]	Approx. noise level at 1000 m³/h [CFM]
Extraction arm 2.0 [7]	Ø 150 [5.9]	16 [36]	64 dB(A)
Extraction arm 3.0 [10]	Ø 150 [5.9]	19 [42]	64 dB(A)
Extraction arm 4.0 [13]	Ø 150 [5.9]	22 [49]	64 dB(A)

Tab. 21: Technical data

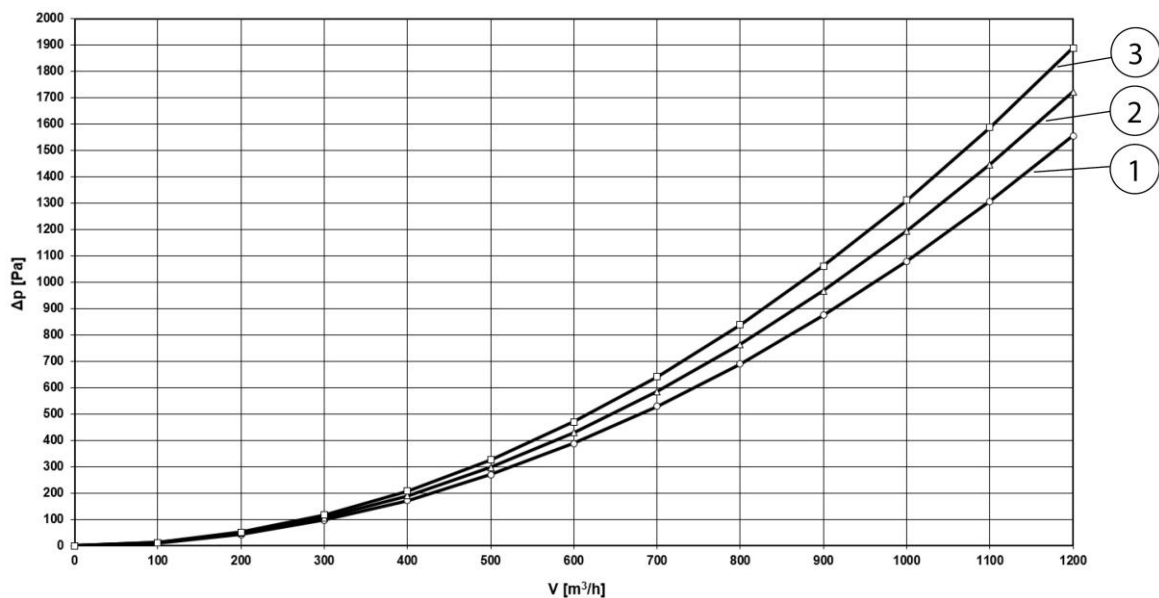


Fig. 23: Pressure Loss Diagram

Pos.	Description	Pos.	Description
1	Extraction arm 2.0 m [7 ft]	3	Extraction arm 4.0 m [13 ft]
2	Extraction arm 3.0 m [10 ft]		

Tab. 22: Pressure Loss Diagram

The pressure loss diagram shows approximate values in a normal working position of the extraction arm, which deviate from the diagram values in practice depending on the positioning of the extraction arm.

9.4 Spare parts and accessories

Description	Article No.
Replacement hose for extraction arm 2.0 m, Ø 150 mm	1140348
Replacement hose for extraction arm 3.0 m, Ø 150 mm	1140349
Replacement hose for extraction arm 4.0 m, Ø 150 mm	1140350
Set of replacement hoses (pack of 3) incl. rubber band cover tape for extraction arms in pipe design	7910340
Set of HT hoses (pack of 3) incl. rubber cover band, high temperature design up to + 310°C for extraction arms in pipe design	7910310

Tab. 23: Hoses

Replacement hoods for extraction arms and telescope arms incl. swivel joint and fixings.

Description	Article No.
Extraction hood without workplace lighting	7910300
Extraction hood with workplace lighting	79103040
Protective mesh for extraction hood	1270091
Slewing ring for mobile products	7910302
Slewing ring for wall mount bracket	7900302
Slewing ring for wall units	7905301

Tab. 24: Extraction hoods and slewing rings

Description	Article No.
2.0 m mounting frame, flexible hose version	7910201
3.0 m mounting frame, flexible hose version	7910301
4.0 m mounting frame, flexible hose version	7910401
2.0 m mounting frame, rigid metal tube version	7960201
3.0 m mounting frame, rigid metal tube version	7960301
4.0 m mounting frame, rigid metal tube version	7960401
Set of brake discs	1380021

Tab. 25: Supporting frame

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