

4" Fume Extraction Arm

USER'S MANUAL

GRAPHIC SYMBOLS



important information



3D file or preview available



you will need tools, sub parts, accessories



keep away from source of high temperature



warnings, important notes



use respiratory protective equipment



protect from noise or eye damage



switch off before proceeding

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GENERAL INFORMATION

This instruction manual contains 4" standard and stainless steel fume extraction arms use and maintenance information. Users should become acquainted with the contents of this publication to learn about unit construction, principles of operation and means of its safe use. Manufacturer is not responsible for any consequences arising from the use of the product against its intended purpose. Manufacturer reserves the right to make changes to improve performance and operational properties of the product in the future without prior notice.

PRODUCT APPLICATION

The 4" fume extraction arms are designed for capture of airborne pollutants at source. Thanks to the use of fume extraction arms, air pollutants can be captured before they enter the operator's breathing zone. Self-locking external joints with flexible hoses and grab handles around the hood make the arm operation easy and simple. Standard construction of 4" arms allow impurities to be captured at process of soldering, welding, cutting, polishing or painting. Stainless steel fume arms are designed for extraction and purification of air from the dry dust in food, chemical and pharmaceutical industry (excluding corrosive, chemically aggressive, explosive and flammable gaseous mixtures).

OBJECTIONS



Manufacturer does not recommend use of the unit for:

- work in an explosive environment and collection of explosive substances or gases
- work in welding and grinding processes (sparks generated during these processes and falling on the device will cause corrosion) - applies to stainless steel arms
- extraction of hot gases (more than 80°C/176°F continuously)
- sucking cigarettes, oiled tissues and other burning particles or objects
- suction of liquid substances, oils, oil mist
- sticky liquids



- Store in dry and airy rooms.
- Protect against possibility of shifting during transport.



Manufacturer does not recommend use of the device for extraction of air from chemically aggressive dusts. Do not direct sparks generated in the grinding process directly into the arm nozzle. Consult the manufacturer's representative if your application requires an alternative configuration or an extraction arm made of stainless steel.

EQUIPMENT ARRIVAL

Upon arrival the user needs to thoroughly inspect the equipment for damage caused by the shipping carrier. In there is damage, the user needs to immediately contact us. Transport of the fume arms on a pallet can be done with a manually lifted forklift or a self-propelled lift truck. As a precaution please note "Subject to Inspection" on the bill of lading from the freight carrier, so any damage that is discovered can be reimbursed by the freight carrier.

The user should make sure that the items listed below were included with the device set:

- User's manual,
- set of bolts and nuts

In the case of lack of any listed items, please contact the dealer.

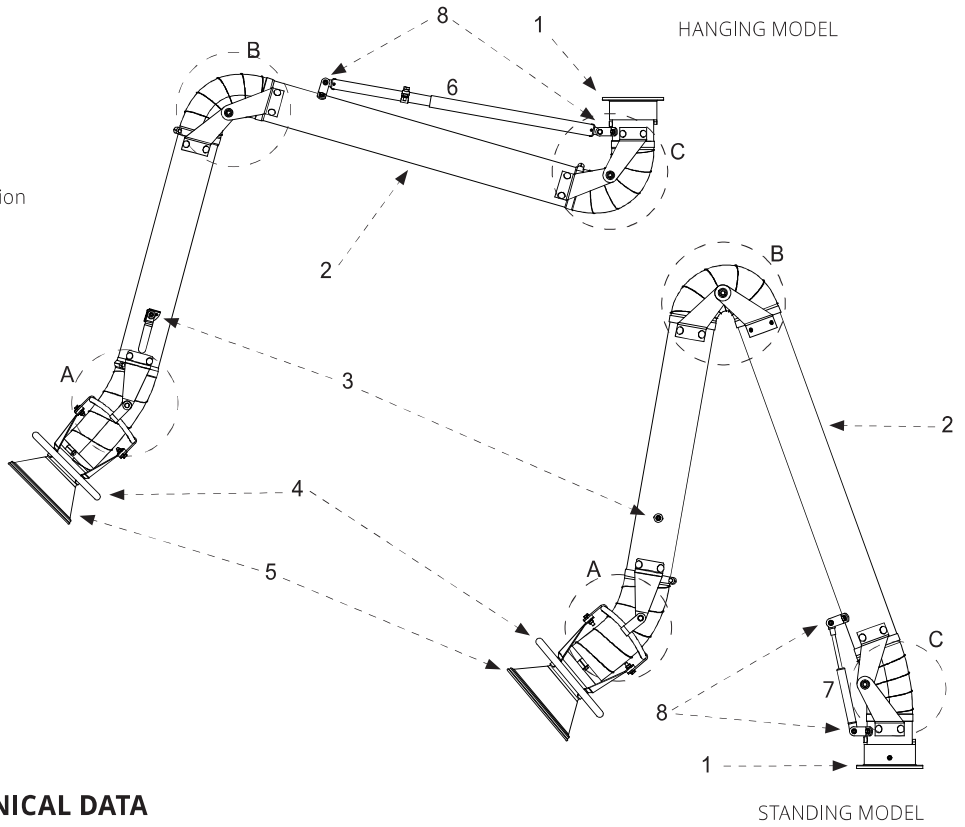


If the package or device is damaged upon delivery the user needs to immediately contact the dealer and draw up a protocol with a representative of the shipping company (many shipping companies consider acceptance of the shipment to be sufficient to avoid liability for damage caused during shipping).

CONSTRUCTION

1. Rotating Swivel
2. Swivel Tube
3. Hood tube with airflow damper
4. Grab handle around the hood
5. Fume arm hood
6. Telescopic spring – hanging version
7. Strut spring – standing version
8. Spring mounting bracket

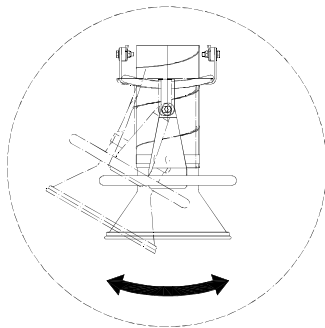
- A. Hood joint
B. Middle joint
C. Swivel joint



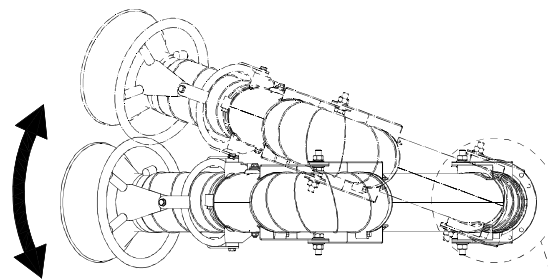
DIMENSIONS AND TECHNICAL DATA

- Max. work temperature
- Nominal airflow
- Recommended maximum working pressure

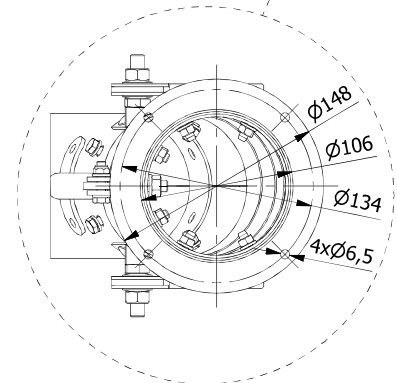
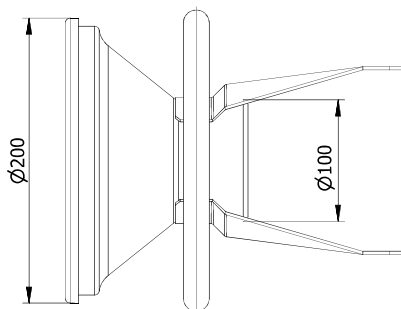
176°F
206-323 CFM
3" W.G.



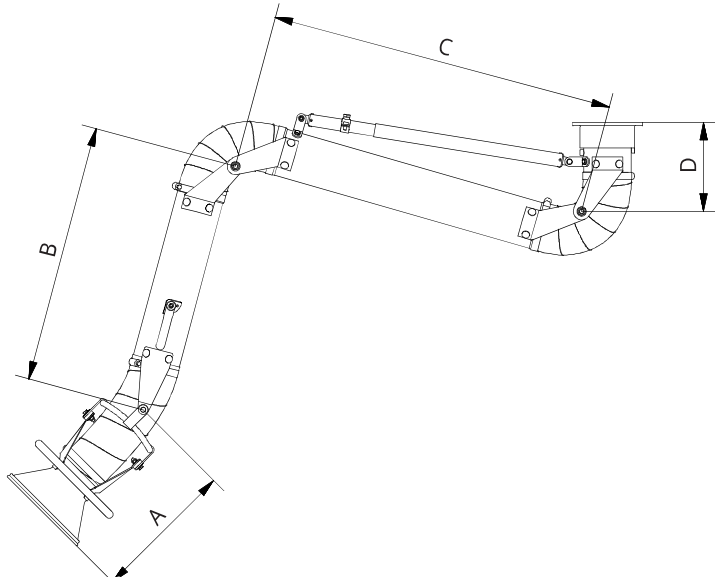
HOOD



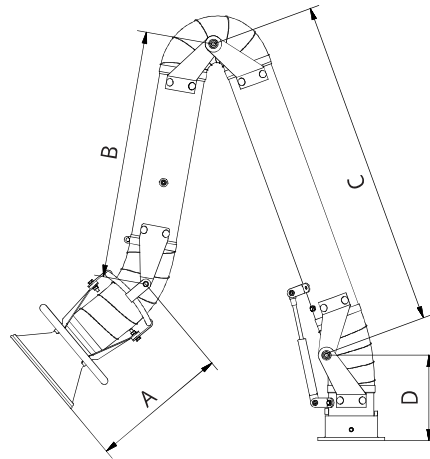
ROTATING SWIVEL



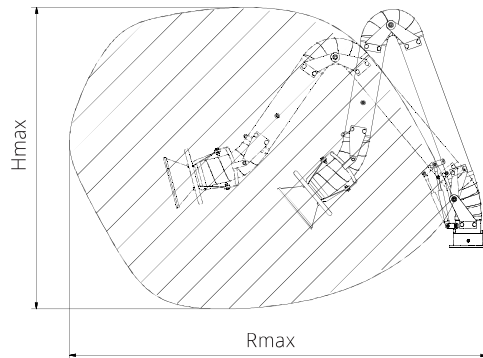
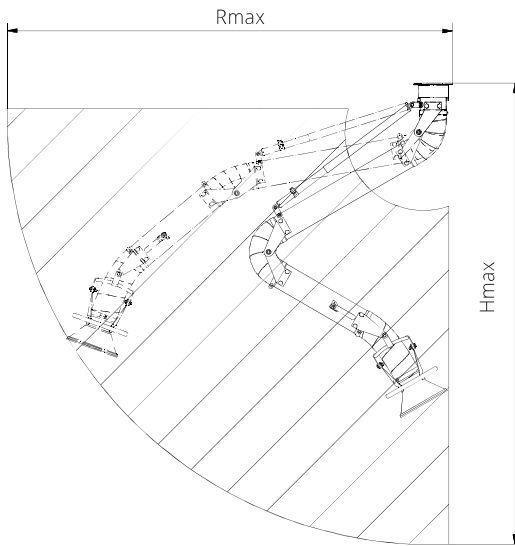
HANGING MODEL



STANDING MODEL



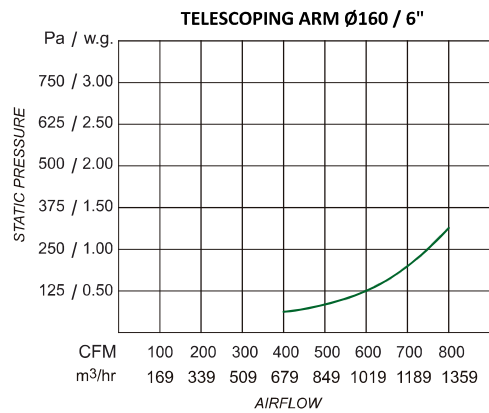
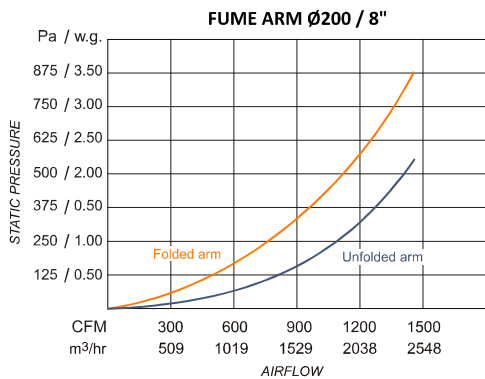
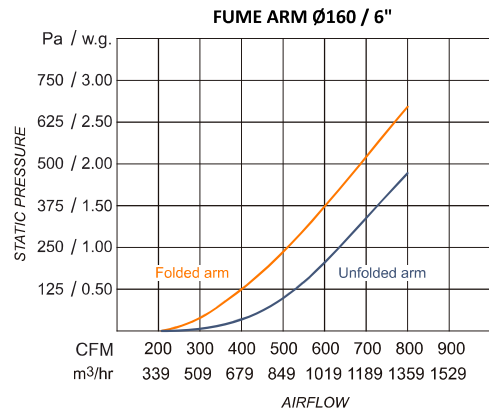
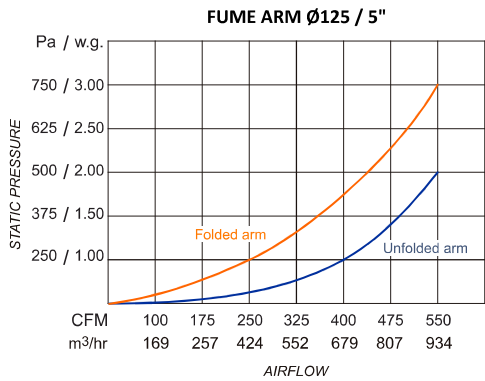
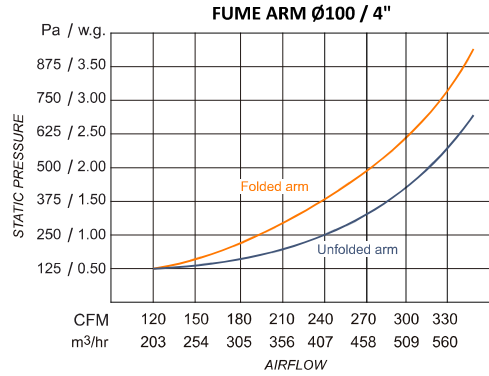
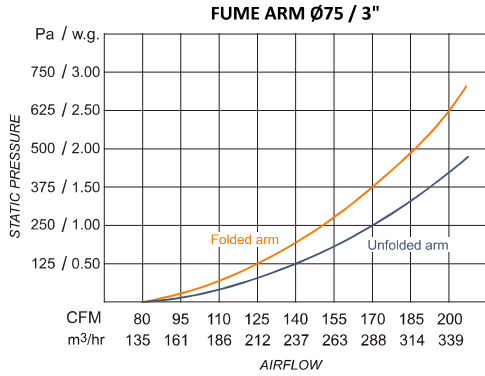
WORKING RANGE OF THE FUME ARM



Model	Arm's reach [ft.]	A [in]	B [in]	C [in]	D [in]	Weight [lb]	(Rmax) [in]	(Hmax) [in]
1015	5	11.9"	21.5"	28.8"	7.4"	20	67.3"	69.7"
1020	7	11.9"	29.4"	36.7"	7.4"	22	83.2"	85.6"
1025	8	11.9"	37.3"	44.5"	7.4"	24	98.8"	101.1"
1015P	5	11.9"	21.5"	28.8"	7.4"	20	67.3"	69.7"
1020P	7	11.9"	29.4"	36.7"	7.4"	21	82.9"	77.8"
1025P	8	11.9"	37.3"	44.5"	7.4"	22	98.8"	94"

* Standing models names end with letter P.

ARMS STATIC PRESSURE AND AIRFLOW PER DIAMETER

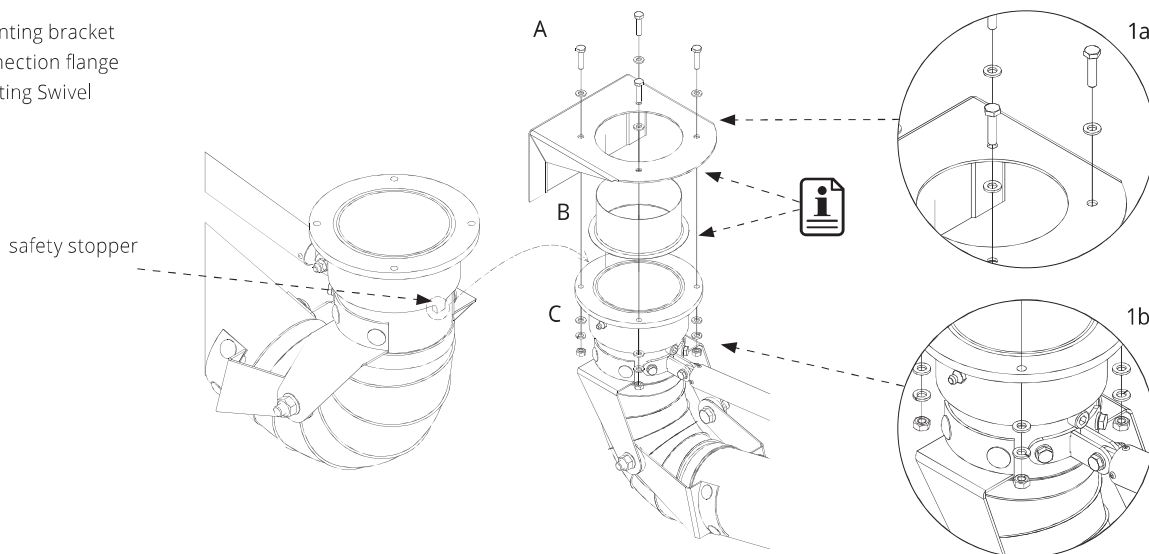


ARM INSTALLATION

Fume extraction arms are delivered completely assembled and ready for installation. 4" fume extraction arms are equipped with a safety stop that sets the blind spot within range of arm operation. The arm should be installed with stopper facing the back side of the fume arm (e.g. a wall). The following illustrations show how to install hanging or standing models.

HANGING MODEL

- A. Mounting bracket
- B. Connection flange
- C. Rotating Swivel



Available additional elements for the hanging version:

STANDARD:

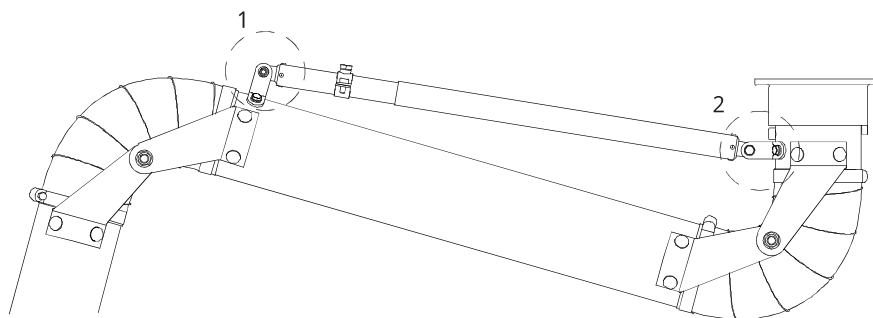
- mounting bracket part number 212418
- connection flange part number 222030

STAINLESS STEEL:

- mounting bracket part number 212536-SS304
- connection flange part number 222049



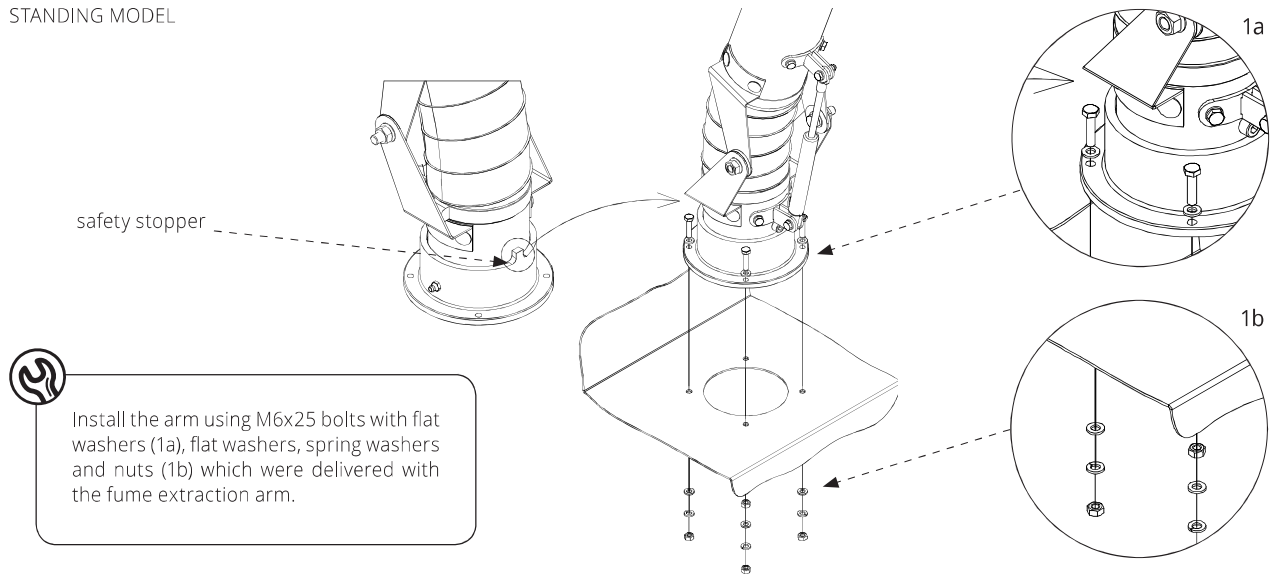
Install the arm using M6x25 bolts with flat washers (1a), flat washers, spring washers and nuts (1b) which were delivered with the fume extraction arm.



In the hanging version, before installation you need to:

- set the swivel joint at 45 degrees angle
- shorter end of the spring screw to the hook at the joint (1)
- longer end of the spring screw to the hook at the rotating swivel (2)

STANDING MODEL



Install the arm using M6x25 bolts with flat washers (1a), flat washers, spring washers and nuts (1b) which were delivered with the fume extraction arm.

SELF-SUPPORTING ARM REGULATION

Correctly adjusted arms remain in place after set in position. Use metric wrenches size 17 mm to adjust the middle joint (B) and a swivel joint (C). Hood joint (A) adjust with metric wrench size 13 mm. Perform adjustments by tightening or loosening the self-locking nuts at each joint. The joints should be adjusted evenly on both sides of the device.

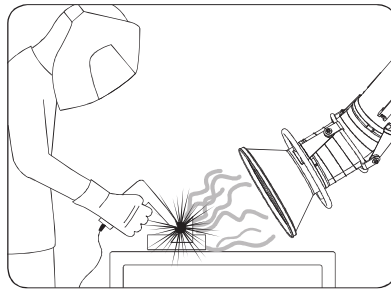
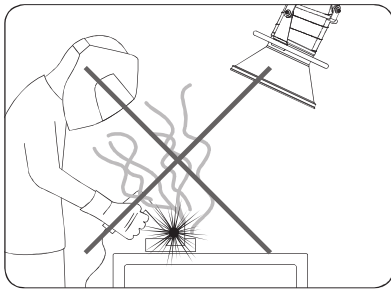


Do not move the arm beyond the perceptible resistance.
Do not push standing arm models outside the vertical axis of rotation swivel.

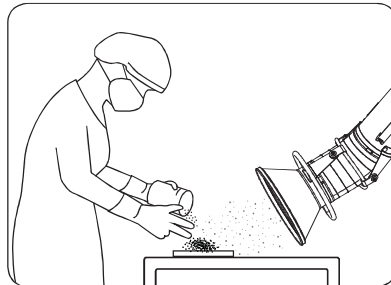
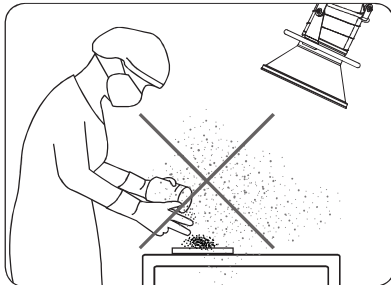
POSITIONING THE HOOD

Due to the limited range of effective operation of the hood (rapid decrease in speed of catching with a change in the distance) is required to set the inlet in the immediate area of smoke emission.

STANDARD VERSION



STAINLESS STEEL VERSION:



Many industrial applications involve extremely high pollution loads that can settle inside the extraction arm.

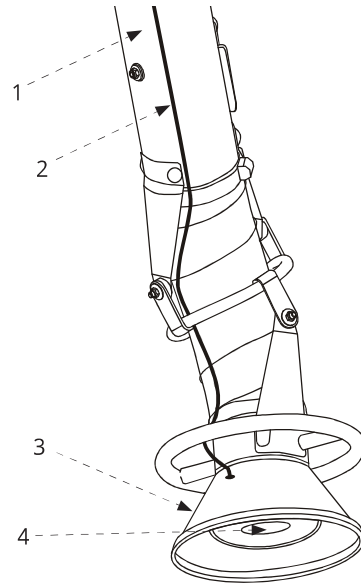
LIGHT KIT (OPTION)

Standard extraction arms can have the hood additionally equipped with a LED light kit option. This option further increases performance and an operator's comfort.

1. Standard fume arm
2. Wire
3. Hood
4. LED light socket



- 4" fume arm can be additionally equipped with:
- MOD L light kit: 8m of cable with one switch for light.
 - A set of grounding cables.



MAINTENANCE

DAILY	MONTHLY	YEARLY
Check the overall condition of the device including self-locking properties and the condition of the hoses.	Lubricate the rotating swivel with neutral to aluminum machine grease.	Remove the hoses and clean the inside of the arm.
The manufacturer recommends to adjust the frequency of inspections of the arm, especially when the use of the arm is associated with a significant amount of captured pollutants.		

TROUBLESHOOTING

SYMPTOMS	POSSIBLE REASONS	PROCEDURE
Arm doesn't stay in position.	Loose joints.	Adjust joints evenly on each side.
Resistance during the rotation of arm.	Lack of lubrication in rotating swivel.	Inject grease through the grease fitting on rotating swivel.
Low air flow.	Closed damper.	Open the damper.
	Blockage inside the arm.	Take off the hose on joints, inspect the inside of the arm and clean it.
	Elastic hose not properly mounted.	Take off the hoses, put them back on and secure tightly with clamps.
	Damaged hose.	Replace the hose.

Authorized representative