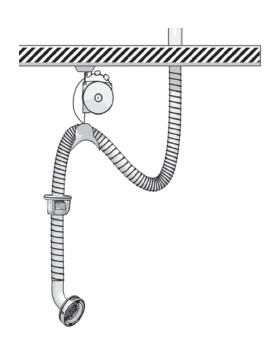


# **SBT-Magnetic**

Sliding Balancer Track - TÜV-SÜD- Magnetic Grabber®

### **PRODUCT USER MANUAL**

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Thank you for buying a Plymovent product. Before you unpack and put it into operation please read this product manual carefully, and follow the instructions.

This manual should be handed over and kept by the service department after the installation.

#### I. IMPORTANT SAFETY INSTRUCTIONS

Please read these instructions before installing the Sliding Balancer Track (hereafter called SBT) system. This will help you obtain the full benefit from the exhaust removal system you have selected.

- A. Read the Product user manual and Safety Instructions carefully. Failure to follow these instructions could cause a malfunction in the system or unsatisfactory performance.
- B. Follow a regular service and maintenance schedule for efficient operation.

#### **PREFACE**

#### Using this manual

This manual is intended to be used as a work of reference for professional, well trained and authorized persons / user's to be able to safely install, use, maintain and repair the product mentioned on the cover of this document.

#### Pictograms and symbols

The following pictograms and symbols are used in this manual:



#### **ATTENTION**

A remark with additional information for the user. A remark brings possible problems to the user's attention.



#### **CAUTION!**

Procedures, if not carried out with the necessary caution, could damage the product, the workshop or the environment.



#### **WARNING!**

Procedures which, if not carried out with the necessary caution, may damage the product or cause serious personal injury.



#### WARNING!

Denotes risk of electric shock.



#### WARNING!

Important warning to prevent fire.

#### Service and technical support

For information about specific adjustments, maintenance or repair jobs which are not dealt with in this manual, please contact the supplier of the product. He / she will always be willing to help you.

Make sure you have the following specifications at hand: -The SBT Magnetic product user manual

#### 2. INTRODUCTION

#### I.I Identification of the product

The SBT system is made up out of various different parts which together form the SBT-Exhaust Removal System. All these individual parts can be traced back to this product user manual

#### 3. PRODUCT DESCRIPTION

The SBT system consists of a number of parts of which the Plymovent yellow and black extraction hose assembly is most visible to the user.

The extraction hose has a Safety Disconnect Coupling built in, this to protect the system against misuse. The hose is positioned in the Saddle which connects to the balancer. The balancer is connected to the aluminium track via a special trolley. This enables the trolley to move inside the aluminium profile which is positioned above and next to the tailpipe side of the vehicle.

The aluminium profile is designed to a three (3) section principle of which two (2) sections have open areas, one on the underside and one on the overside. The overside open area is used for positioning the support legs, duct and exhaust hose connector and the release valve. The underside open area is used for positioning the end stops and for the sliding the trolley.

#### Method of use:

An automatic, magnetic controlled exhaust gas extraction system, specially designed for fire and rescue vehicles with low level, side exhaust pipes. The system is used to remove the poisonous petrol and diesel gas fumes direct at the emission source, the exhaust pipe.

When the vehicle is on its way out of the station, the extraction hose, connected to the exhaust by a special device called a Grabber® to the tailpipe connector moves along with the vehicle.

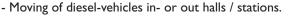
Poisonous diesel gasses pass from the Grabber®, up the extraction hose and into the ducting and extraction fan before escaping to the atmosphere.

As the vehicles drive out through the doors, the trolley moves to the end of the track, There the balancer locking cable restricts the balancer to unwind pulling the Grabber® from the tailpipe connector allowing it to disconnect.

On the return of the vehicle to the station, The Grabber® is easily re-connected to the exhaust pipe. At the same time the fan automatically starts up and the vehicle continues to its standard park position.

#### WARNING!

The use of exhaust removal hose is allowed for:



- Short time maintenance work of diesel-vehicles, but only if the engine is running on the minimum rpm.
- The vehicle must leave and enter the station with a modified speed in order to avoid damage to the system and possible injury to people.

\_\_\_\_\_MAN\_MAG\_SBT\_TUV\_SUD\_180517/I\_EN

#### 4. SAFETY

#### **G**eneral

The manufacturer does not accept any liability for damage to the product or personal injury caused by ignoring of the safety instructions in this manual, or by negligence during installation, use, maintenance, and repair of the product mentioned on the cover of this document and any corresponding accessories.

Specific working conditions or used accessories may require additional safety instructions. Immediately contact your supplier if you detect a potential danger when using the product. The user of the product is always fully responsible for observing the local safety instructions and regulations. Please observe all applicable safety instructions and regulations.

#### User manual

- Everyone working on or with the product, must be familiar
  with the contents of this manual and must strictly observe
  the instructions herein. The management should instruct
  the personnel in accordance with the manual and observe
  all instructions and directions given.
- · Never change the order of the steps to perform.
- Always keep the manual with or near the product.

#### Pictograms and instructions on the product (if present)

- The pictograms, warning and instructions attached to the product are part of the safety features. They must not be covered or removed and must be present and legible during the entire life of the product.
- Immediately replace or repair damaged or illegible pictograms, warnings and instructions.

#### Users

- The use of this product is exclusively reserved to authorized, trained and qualified users. Temporary personnel and personnel in training can only use the product under supervision.
- Use common sense. Stay alert and keep your attention to your work. Do not use the product when you are under the influence of drugs, alcohol or medicine.
- The product is not designed to be installed or operated by persons with limited physical, sensory or mental issues and / or limited knowledge of the system, the trained person is responsible to supervise the operation and give possible directions.
- Be aware that no person is within a range of I (one) meter besides the vehicle when it leaves the station, and no persons are allowed in the station entrance, to avoid injury.
- The system is not to be played with.

#### Intended use (I)

The product has been designed as an exhaust removal system using the Grabber® coupling system. Using the product for other purposes is considered contrary to its intended use. The manufacturer accepts no liability for any damages or injury resulting from such use. The product has been built in accordance with state-of-the-art standards and recognized safety regulations. Only use this product when in technical perfect condition in accordance with its intended use and the instructions explained in the user manual.

#### WARNING



Do not attempt installation of this system unless you are familiar with the necessary tools, equipment, utility connections and potential hazards. Installation should be performed only by a qualified service provider. Failure to do so could result in reduced performance of the unit, serious personal injury or death.

#### WARNING

PRODUCT MAY CONTAIN SHARP EDGES Use care when servicing and installing the system. Failure to do so could result in minor personal injury.

#### **Technical specifications**

The specifications given in this manual must not be altered. If the hose is damaged please contact you supplier for service. When the Magnetic Grabber® or the tailpipe connector are damaged please contact you supplier for service.

#### **Modifications**

Modifications of (parts of) the system / product is not allowed.

#### **Product combinations**

When the product is used in combination with other products or machines the safety instructions in this manual will remain valid as well as the safety instructions in the manuals of the other combined products.

(1) The "intended use" in accordance with EN 12100-1 is the use of he technical product in accordance with the manufacturers description including its statements in the sales brochure. In case of doubt, this is of use, which can naturally be derived from the design, construction and operation of the product. Intended use also includes compliance with the instructions in the manual.



#### WARNING!

FIRE HAZARD! Never use the product for: Extraction i.e. filtering of sigaretes sigars, oil rags or any other burning particles, objects or acids.



#### CAUTION!

Please apply and use the pre-described and normal personal protection devivices during installation and during service of the system in order to avoid injuries. This also applies to the persons who enter the work area during installation or service activities.



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#### Installation

- The installation of the products should only be performed by trained and authorised persons. For other persons and to be trained persons the products should only be handled under supervision of a responsible and authorised person when installing.
- Please use appropriate lifting materials and equipment when working in an area over 2m / 6.5 feet.
- Please ensure that, on the side of the vehicle were the system is installed, no persons are present in an area of I (one) meter under and / or around the SBT system and /or between the vehicle and the entry / exit door when the vehicle exits the building. This way possible injuries can be avoided by a possible backwards motion of the Grabber® in the direction of the station and park position.
- Never install the product in front of entries, exits or passage ways which are to be used by emergecy services.
- Check before installation if the structure of the wall / roof is stabile enough to hold the components which are to be attached to it.
- Use common sense. Stay alert and keep your attention to your work. Do not use the product when you are under the influence of drugs, alcohol or medicine.
- Air, which might contain health hazardous components, such as chrome, Nickel, Beryllium, Cadmium, Lead etc. should never be recycled. This type of air must always be removed from the working area.

#### Use

- Inspect the product and check for damages. Verify the functioning of the safety features.
- Check the working area. Please keep unauthorised persons away from the working area.
- · Protect the product against water and humidity.
- Make sure the room is always sufficiently ventilated; this applies especially to confined spaces.
- Make sure that the workshop, in the vicinity of the product, contains sufficient approved fire extinguishers if any electronics, such as control boxes, are used.
- The user of the product always has full responsibility for the correct execution of the safety guidelines and instructions. These are all the safety guidelines and instructions which apply to the use of the system.

#### Service, maintenance and repairs

- Observe the maintenance intervals given in this manual.
   Overdue maintenance can lead to high costs for repair and revisions and can render the guarantee null and void.
- Always use tools, materials, lubricants and service techniques which have been approved by the manufacturer.
   Never use worn tools and do not leave any tools in or on the product.
- Safety features which have been removed for service, maintenance or repairs, must be put back immediately after finishing these jobs and it must be checked that they still function properly.
- Please ensure that no vehicle enters or exits the station during the service, maintenance and repair activities.
- Please use appropriate lifing materials and equipment when working in an area over 2m / 6.5 feet.

#### **Tools**

These tools are needed to install the Plymovent System:

- Power drill
- Battery operated power drill
- Alllen key set
- Phillips srewdriver set
- Measuring tape

Please note that additional tools and machines may be needed depending on the installation situation (installation height, space available etc).

#### 5. CE DECLARATION

#### CE declaration of conformity for machinery

"We, Plymovent Exhaust Extraction GmbH, Redcarstraße 36, 53842 Troisdorf, Germany, herewith declare, on our own responsibility, that the product(s):

- Sliding Balancer Track system SBTM

is/are in conformity with the following harmonized standard(s) and/or other such normative documents and amendments, if any:

DIN 31000:2011 DIN EN ISO12100:2011 AfPS GS 2014:01 PAK

Troisdorf, 30-03-2017

C. P. Janssen

Product Manager Exhaust Extraction

# $\bigwedge$

#### ATTENTION!

After shutting down the ventillation system wait minimal 10 seconds before handeling the system and products when performing service, maintenance and / or repairs.

# <u>^</u>

#### ATTENTION!

Service, Maintenance and Repairactivities shall only be performed (in line with TRGS 554) by authorized, trained and qualified personnel taking into account the applicable working practices and safety regulations.

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#### 6. **AREA OF USE**

The SBT system is designed to be used in Fire- and Rescue Stations where there is one (1) vehicle parked behind the entry / exit door.

The SBT is designed to handle exhaust gas temperatures of +150°C / 302F (short time +170°C / 338F). USA hose is 400°F continuous and 500°F intermittent.

Do not bend over in the direction of the tailpipe when positioning the Grabber® to the vehicle. Exhaust gasses can enter the breathing zone of the user.

The SBT System is designed to operate under standard vehicle performance conditions. Re-generation is not considered to be a standard vehicle performance condition.

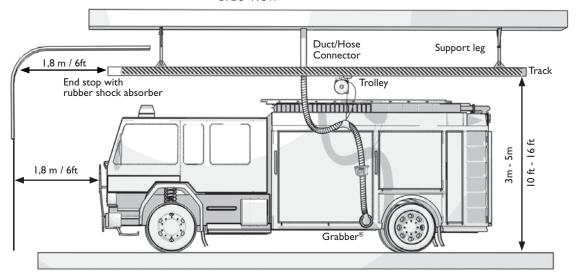
**ATTENTION** 



#### **WARNING!**

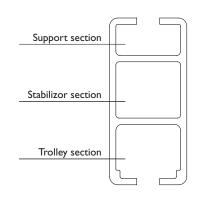
Do not put hands or other body parts in the Grabber®.

#### Side view



#### Track section

# Overview max 0.5m / 20"

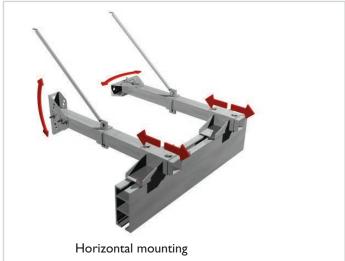


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7. DELIVERY

The track is delivered in parts together with a product manual. Fan, fan control device need to be added individually depending on application.





The SBT, in all different versions, is built out of a few standard components which will be described in this section.

#### Support leg

The aluminium support leg is used for both vertical and horizontal mounting. The standard length is 5790 mm / 19 feet and it has to be cut to proper lengths during installation.

The dimension of the support leg is 50x50x2,5 mm / 2x2x0.1 inch



#### **Side brace**

There are three different lengths available:

- 500 mm / 20 inch
- 750 mm / 30 inch
- -1800 mm / 70 inch

The brace can be mounted separately or in pairs using the same brackets.



Prod. No. SBT-SB-S, 500mm Art. Nr. 8140-1011 Prod. No. SBT-SB-M, 750mm Art. Nr. 8141-1011 Prod. No. SBT-SB-L, 1800mm Art. Nr. 8142-1011

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7. DELIVERY

#### Side brace clamp kit

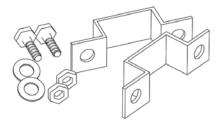
The kit includes two aluminium brackets for one or two side braces.



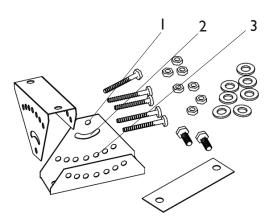
The two brackets are exactly the same. They can also be used if the roof is angled and they can be mounted in both directions. Maximum angle is 30 degrees.

In order to fasten the bracket to the support leg three through holes have to be drilled. Start by drilling hole "I" and "2".

Then adjust the bracket to an exact position and fix it by drilling a third hole "3", using the most centrered hole from the top row.



Prod. No. SBT-SBCK Art.No. 8130-1011

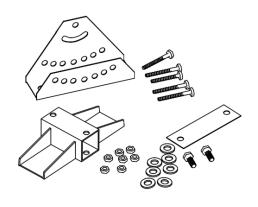


Prod. No. SBT-MKV Art. No. 8150-1011

#### Adjustable mounting kit (horizontal)

The bracket that shall be used against the wall is the same as for the vertical kit (see above) but on the track side there is a new bracket which is adjusable in relation to the support leg.

When the bracket is fixed in the right position two through holes in the support legs two holes are drilled through the support leg using the bracket as a template.

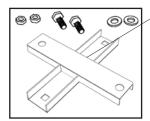


Prod. No. SBT-MKH Art. No 8160-1011

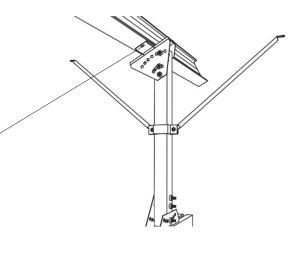
**DELIVERY** 

### Universal mounting cross

The cross can be used if the wall or roof is angled but the only available beam is going in the "wrong" direction for the standard bracket. The position of the cross is between the bracket and the wall.

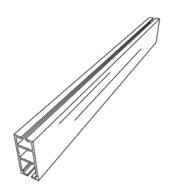


Prod. No. SBT-UMC Art. No 8170-1011



#### **SBT Track**

The SBT track is delivered in 2 lengths: SBT-Track 5790mm / 19 feet SBT-Track 2895mm / 9.5 feet



Prod. No SBT-TRACK Art. No. 8332-1011 Prod. No. SBT-TRACK-1/2 Art. No. 8331-1011

#### Hose kit

There are 6 hose kits available:	Prod. No.	Art. No.
- Hose temp.resistance +150°C.	SBTM-HK-100-6-75	88215-1011
- Hose diameter is 100 mm / 4"	SBTM-HK-100-6-100	88220-1011
- Length 6m / 19.6 feet or 10m / 33 feet	SBTM-HK-100-6-125	88225-1011
- Magnetic Grabber® 75mm / 3" - 100mm / 4"- 125mm/ 5"	SBTM-HK-100-10-75	88230-1011
	SBTM-HK-100-10-100	88235-1011
The different hose packages which contain the following parts:	SBTM-HK-100-10-125	88240-1011

- Transition parts
- Exhaust removal hose (+150°C / 302 F)
- USA hose is  $400^{\circ}F$  continuous and  $500^{\circ}F$  intermittent.
- Hose saddle
- Safety disconnect handle
- Magnetic Grabber® nozzle
- Magnetic Grabber  $\! \mathbb{R} \!$  connector





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7. DELIVERY

#### **Splicing sleeve**

If the track is longer than 5790 mm / 19 ft a splicing sleeve must be used.

#### **Common material**

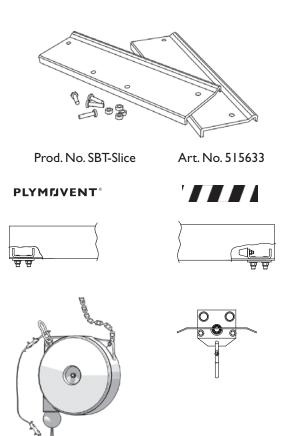
Common materials that are always included are gathered under product no "SBT-KIT Magnetic".

Material included in the kit are:

- Release valve
- End stop
- Security tape marking
- Trolley
- Balancer BR-300

(optional balancer BR-200 Art. Nr. 90120-1011)

- Balancer locking cable



Prod. No. SBT-KIT Magnetic

Art. No. 88175-1011

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Mounting instructions;

- I. Determine the installation height of the rail (measured from the bottom of the rail).
- 2. Determine the recommended distance from the rubber end stop to the door in the "installation table".
- 3. Determine the recommended balancer locking cable (BLC) length in the "installation table".
- 4. After installation, fine tune the BLC and / or the rubber end stop if the disconnection point is not 10" from the door.

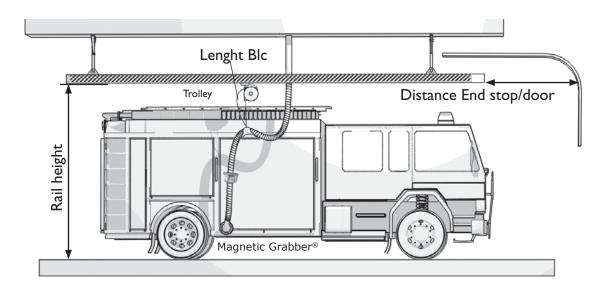
If a disconnection point closer to the door is preferred, the position of the end stop can be changed.

Installation table:

Rail height			Distance End	stop / door	Lenght Blc	
Feet	m		Feet	m	Inch	cm
		min	5,0	1,5	23,8	60,5
10	3	Recomended	5,5	1,7	26,9	68,4
		max	6,0	1,8	30,4	77,2

Rail height			Distance End	stop / door	Length Blc	
Feet	m		Feet	m	Inch	cm
		min	6,0	1,8	23,9	60,8
13	4	Recomended	6,5	2,0	26,7	67,9
		max	7,0	2,1	29,7	75,4

Rail height			Distance End	stop / door	Length Blc	
Feet	m		Feet	m	Inch	cm
		min	7,0	2,1	24,4	61,9
16	5	Recomended	7,5	2,3	26,9	68,4
		max	8,0	2,4	29,6	75,2



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#### **BACK-IN MEASUREMENT PROCEDURE**

Please determine the position of:

- Exhaust pipe
- 2. Door
- 3. Distance Gate / Exit door vs the exhaust pipe
- Determine the location of the exhaust pipe (1) on the vehicle; which side of the vehicle it is positioned on i.e. were does the exhaust exit the vehicle and what diameter does the exhaust pipe have?

Check if exhaust pipe modification is necessary, see: "Exhaust pipe modification procedure in this Product User manual".

2) Measure the height and width of the door(2).

Check what type of gate:

- Slidegate
- Overhead gate
- Other type

Check at what height the track can be installed. The height should be in line with the specifications indicated in this manual in order to ensure correct product performance.

3) Measure the distance between the gate and the exhaust pipe (3), this is the required length of the SBT-track. Check before installation that this is the minimum required length of the SBT in a vehicle back-in application situation.

The recommended distance from the end of the track to the door(s) can be found in the table on page 10.



#### WARNING

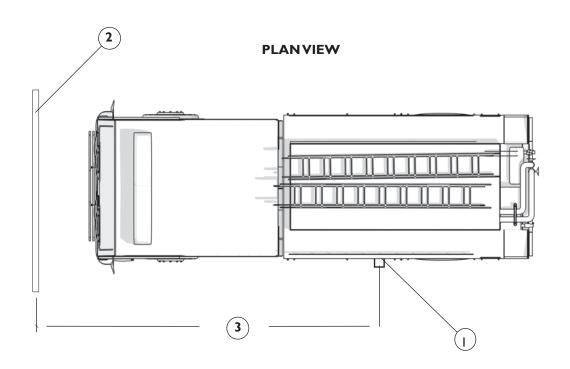
#### PRODUCT MAY CONTAIN SHARP EDGES

Use care when installing and servicing the products. Failure to do so could result in minor personal injury.



#### **CAUTION**

Be sure to order the right Grabber® dimension. If a incorrect version is used on the tailpipe, the system could be damaged (too small Grabber®) or will disfunction (exhaust gasses can enter the premises)



#### **DRIVE-THROUGH MEASUREMENT PROCEDURE**

Please determine the position of:

- I. Exhaust pipe.
- 2.1 Entrance door.
- 2.2 Exit door.
- 3. Distance between Entrance door / Exit door.
- Determine the location of the exhaust pipe (1) on the vehicle; which side of the vehicle it is positioned on. i.e. were does the exhaust exit the vehicle and what diameter does the exhaust pipe have.

#### 2.1) and 2.2)

Determine the gate height and width.

Check what type of gate:

- Slidegate
- Overhead gate
- Other type

Check at what height the SBT-track can be installed.

3) Measure the distance between the door and the exhaust pipe (3), this is the required minimal length of the SBT-track. Check before installation that this is the minimum required length of the SBT in a vehicle back-in application.

The recommended distance from the end of the track to the door(s) can be found in the table on page 10.

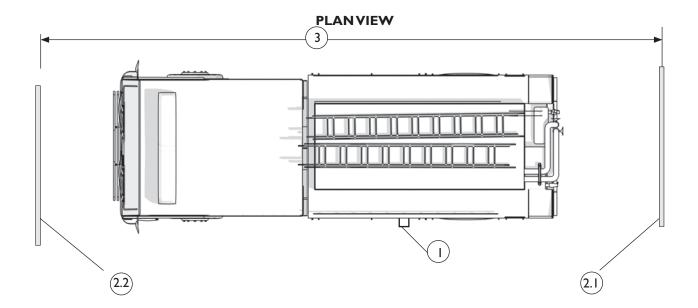
#### WARNING

PRODUCT MAY CONTAIN SHARP EDGES
Use care when servicing unit. Failure to do so could result in minor personal injury.

## CAUTION



Be sure to order the right Grabber® dimension. If a incorrect version is used on the tailpipe, the system could be damaged (too small Grabber®) or will disfunction (exhaust gasses can enter the premises)



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#### SBT-TRACK LOCATION PROCEDURE

- I. SBT-Profile
- 2. Exhaust pipe
- 3. Door
- 4. Height of track
- 5. Distance to vehicle
- 6. Distance track to door

The SBT-track (1) is mounted at a height (4) between 3 m / 10 ft and 5m / 16 ft over the floor on the side where the vehicles exhaust pipe (2) is situated.

The track is often mounted immediately under a sectional door (3) with a clear height from the track to the door of 100 mm / 4" to 150 mm / 6".

The SBT-track is placed max 500 mm / 20" (5) from the truck-side of the vehicle. The distance between the hanging hose and the vehicle should be between 35 cm / 14" and 45 cm / 18"

The recommended distance from the end of the track to the door(s) (6) can be found in the table on page 10.

### **ELEVATION VIEW**

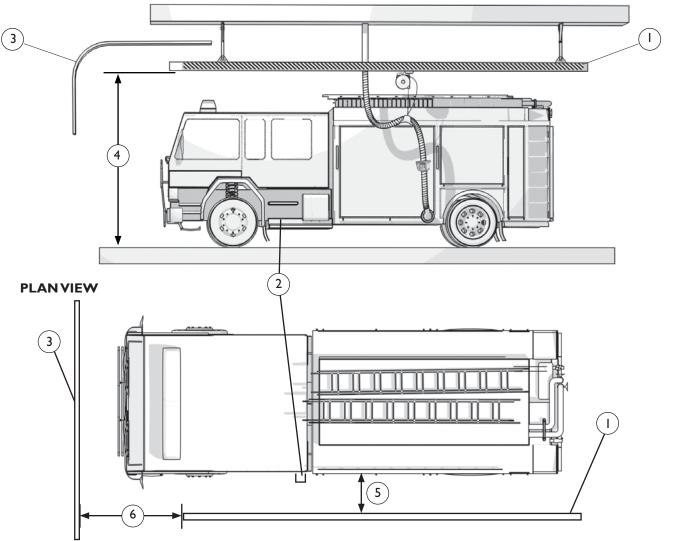


#### WARNING

PRODUCT MAY CONTAIN SHARP EDGES

Use care when servicing unit.

Failure to do so could result in minor personal injury.



#### **VERTICAL SUPPORT LOCATION**

- I. Front support:
- 2. Rear support:
- 3. Additional support(s)
- I) The position of the front support (I) is determined first.

The door is the initial point for the location of this. A open door requires a margin of 50 mm / 2" for the support. Next to this the distance from the front support to the start of the profile should be not larger then 1,5 m / 5 feet. If this is not possible please use a wall mounting bracket to attach the front solidly.

- 2) The rear support (2) is placed approximately 1000 mm / 40" from the rear of the SBT-profile.
- Depending on the lenght of the SBT track additional supports have to be mounted. The normal distance between the supports is approximately 3 meter / 10 feet.

#### WARNING

PRODUCT MAY CONTAIN SHARP EDGES
Use care when servicing unit. Failure to do so could result in minor personal injury.



#### ATTENTION!

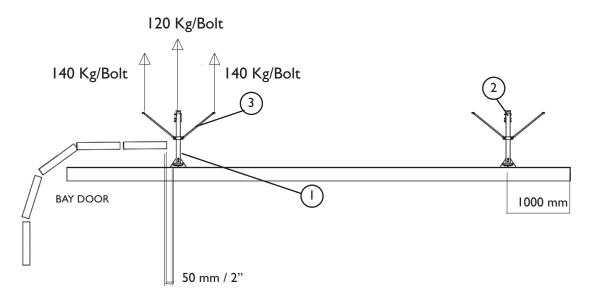
See side view for minimum load capacity on the fixing bolts.



#### CAUTION

Before lifting the rail be sure that, the trolley is fixed in its place, using both end stops. This to avoid injury when trolley moves if the rail is uneven lifted.

#### **SIDE VIEW**



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#### WALL SUPPORT LOCATION PROCEDURE

- I. SBT-track
- 2. Support leg
- 3. Additional Brace
- I) The position of the SBT track (I) is determined first. Please see to it that the profile is positioned within the gap of the open door. The door is the initial point for the location of this.
- 2) The support leg (2) is then measured versus the mounting position at the wall.
- 3) Depending on the lenght of the SBT track additional supports have to be mounted. The distance from the first installation bracket to the front and respectively the end of the rail should be minimal 1,5m / 5 feet.

#### Hose location

The distance between the side of the truck (tailpipe) and the SBT hose should be between  $35\,\mathrm{cm}$  / 14" and  $45\,\mathrm{cm}$  / 18"

Note: because of the offset to the riser bracket, the distance measurement shall be taken from the edge of the vehicle to the center of the riser bracket (not the track)

#### WARNING

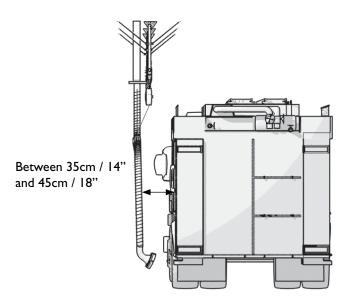
#### PRODUCT MAY CONTAIN SHARP EDGES

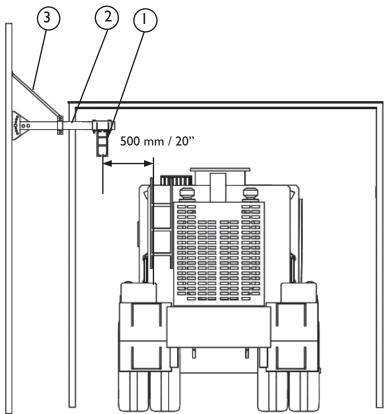
Use care when servicing unit. Failure to do so could result in minor personal injury.



#### **CAUTION**

Before lifting the rail be sure that, the trolley is fixed in its place, using both end stops. This to avoid injury when trolley moves if the rail is uneven lifted.





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#### HOSE CONNECTION BACK-IN LOCATION PROCEDURE

- I. SBT-Profile
- 2. Hose connection / connector
- 3. Distance from the door to exhaust pipe
- 4. Exit door
- 5. Exhaust pipe
- 6. Half the distance from exit door to exhaust pipe
- 7. Distance to hose connection is 600mm / 2' to 1200mm / 4'
- a) The hose connection (2) is positioned according to what side of the vehicle the exhaust pipe (5) is positioned on.
- b) The hose connection (2) is mounted on the SBT-track on the opposite side of the vehicle.
- c) The hose connection / connector (2) is placed at the point: calculated as followed:
  - Distance Exit door to exhaust pipe (3), divided by half (6), plus 500mm / 20 inch (7)

This is the position of the hose connection / connector (2) relative to the exit door. (4)

NOTE! It is important to have a margin on the hose length when driving in backwards please take this into account!

#### WARNING

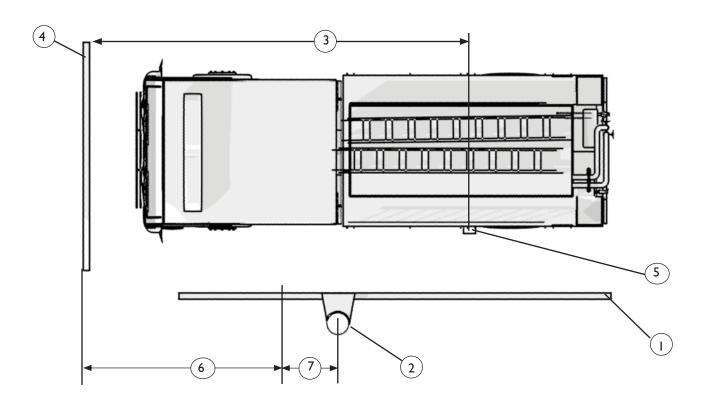
PRODUCT MAY CONTAIN SHARP EDGES
Use care when servicing unit. Failure to do so could result in minor personal injury.

# <u>^</u>

### CAUTION

Before lifting the rail be sure that, the trolley is fixed in its place, using both end stops. This to avoid injury when trolley moves if the rail is uneven lifted.

#### **PLAN VIEW**



## HOSE CONNECTION DRIVE-THROUGH LOCATION PROCEDURE

- I. SBT-track
- 2. Hose connection
- 3. Distance entrance gate-exit gate
- 4. Entrance gate
- 5. Exit gate
- 6. Exhaust pipe
- a) The hose connection (2) is positioned according to what side of the vehicle the exhaust pipe (6) is positioned on.
- b) The hose connection (2) is mounted on the SBT-track on the opposite side of the vehicle.
- c) At a drive-through station the hose connection (2) shall be positioned on the SBT-track (1) at the half distance, between entrance gate (4) and exit gate (5).

#### WARNING

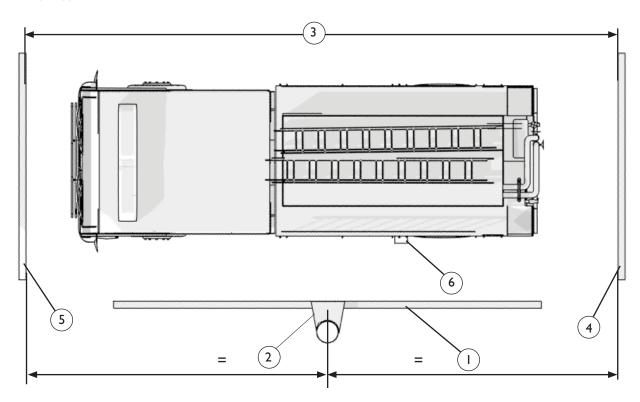
PRODUCT MAY CONTAIN SHARP EDGES
Use care when servicing unit. Failure to do so could result in minor personal injury.

# A

#### CAUTION

Before lifting the rail be sure that, the trolley is fixed in its place, using both end stops. This to avoid injury when trolley moves if the rail is uneven lifted.

#### **PLAN VIEW**



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#### **INSTALLATION** 8.

#### SUSPENSION MOUNTING PROCEDURE

- ١. SBT-profile
- 2. Support leg
- 3. Mounting clamp
- 4. Carriage bolts M10x30 with washers and locking nuts
- 5. Bolts M10x70 with washers and locking nuts
- **Brackets** 6.
- Upper Bracket 7.
- a) The support legs (2) are cut to proper lengths.

Pitch in the SBT Track & the position of the SBT stop.

It is our recommendation to pitch the track forward toward the exit door (5 cm - 2" over every 3m-10ft) to minimize any affect where the hose may carry down the track once released.

It is our recommendation to position the stop in the same location as a pneumatic system. (remember, the track will be approx. one foot shorter than a pneumatic system). The stop shall be used as your release point adjustment.

- b) The mounting clamp (3) with two M10x30 bolts (4) for the suspensions are inserted in the profile (1). Please observe you insert these into the correct side of the profile. Insert the Disconnect vallve bracket (8) between the first and second suspension leg.
- c) The mounting clamp for the hose/pipe bracket, see "Hose connection mounting procedure" in this product user manual, is inserted in the profile.

### WARNING



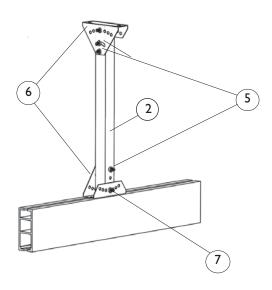
PRODUCT MAY CONTAIN SHARP EDGES Use care when servicing unit. Failure to do so could result in minor personal injury.

**CAUTION** 

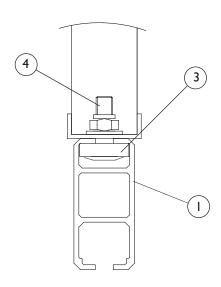
Before lifting the rail be sure that, the trolley is fixed in its place, using both end stops. This to avoid injury when trolley moves if the rail is uneven lifted.

- d) Drill two holes,in the support leg (2), one for the upper and one for the lower bracket (6). Mount the Brackets (6) to the support leg (2), the upper bracket can be adjusted by up to 30 degrees if needed.
- e) When the complete track (I) is adjusted correclty fix the brackets by drilling a second and a third hole through the brackets (5) into the support legs (2). Use the pre-drilled holes in the brackets (6) and fix tightly using the most centered holes.

#### **SIDE VIEW**



#### **BACK VIEW**



MAN\_MAG\_SBT\_TUV\_SUD\_180517/1\_EN

#### SUPPORT LEG MOUNTING PROCEDURE

- I. SBT-Profile
- 2. Side brace
- 3. Longitudinal brace
- 4. Bolts M10x20 and locking nuts
- a) Both side braces (2) are mounted on the same bracket.
- b) Longitudinal brace (3) is mounted in a separate bracket

Use M10x20 and locking nut (4), check that the support is vertical before the bolts are fastened.

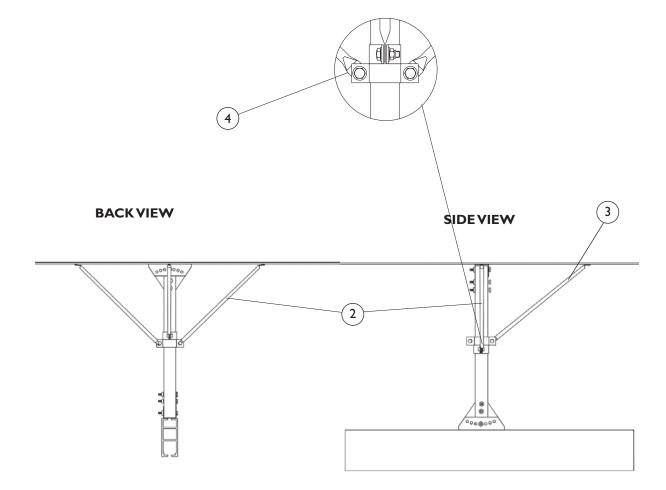
#### WARNING

PRODUCT MAY CONTAIN SHARP EDGES
Use care when servicing unit. Failure to do so could result in minor personal injury.

# B

#### CAUTION

Before lifting the rail be sure that, the trolley is fixed in its place, using both end stops. This to avoid injury when trolley moves if the rail is uneven lifted.



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#### WALL SUPPORT MOUNTING PROCEDURE

- I. SBT-Profile
- 2. Horizontal wall support
- 3. Mounting clamp
- 4. Carriage bolts M10x30 with washers and locking
- Nuts M10 with clamp for adjustment of height and side to side.
- a) Cut the Horizontal wall support(2) to the correct length and follow the same steps as indicated in the suspension mounting procedure for installing the wall brackets.
- b) Fix the mounting clamp (3) with two M10x30 bolts (4) to the SBT-Profile (1). Also insert the mounting clamp for the hose bracket (see hose connection mounting procedure). Next to this insert the disconnect valve bracket (6) between the first and second suspension leg.
- c) Profile(1) with mounting clamps (3) and supports (2) are mounted together with washers and locking nuts M10.
- c) The nuts (5) are loosened to adjust the track vertical and horizontal.

#### WARNING

PRODUCT MAY CONTAIN SHARP EDGES
Use care when servicing unit. Failure to do so could result in minor personal injury.

# <u>^</u>

#### **CAUTION**

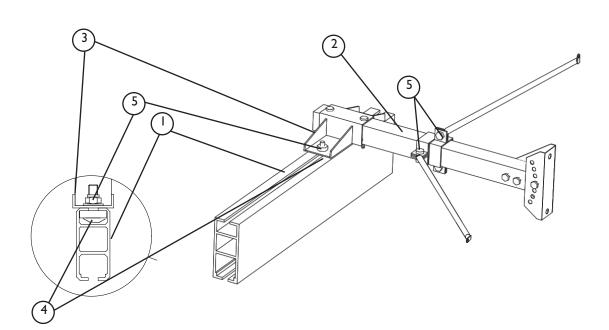
Before lifting the rail be sure that, the trolley is fixed in its place, using both end stops. This to avoid injury when trolley moves if the rail is uneven lifted.

Pitch in the SBT Track & the position of the SBT stop.

It is our recommendation to pitch the track forward toward the exit door (5 cm - 2" over every 3m-10ft) to minimize any affect where the hose may carry down the track once released.

It is our recommendation to position the stop in the same location as a pneumatic system. (remember, the track will be approx. one foot shorter than a pneumatic system). The stop shall be used as your release point adjustment.

### BACK VIEW SIDE VIEW



#### **HOSE CONNECTION MOUNTING PROCEDURE**

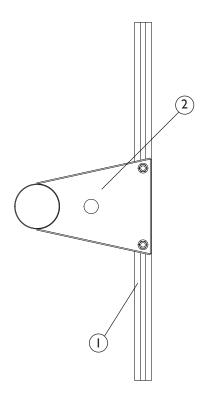
- I. SBT-Profile
- 2. Hose connection
- 3. Mounting clamp
- Carriage bolts M10x30 with washers and locking nuts
- a) The mounting clamp (3) with two M10x30 bolts (4) for the hose connection are inserted in the profile (1) together with the mounting clamps for the support legs, see "support legs mounting procedure" in this product user manual.
- b) The hose connection (2) is tightened in place with washers and locking nuts. Please note the hose connection should be opposite the vehicle position of the rail.



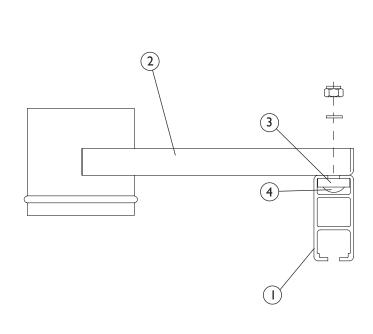
#### WARNING

PRODUCT MAY CONTAIN SHARP EDGES
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### **PLANVIEW**



#### **ELEVATION VIEW**



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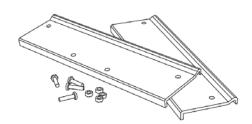
#### TRACK SPLICE ATTACHMENT PROCEDURE

- I. SBT-track
- 2. Splicing sleeves
- 3. Bolts M6\*50 and locking nuts
- a) The track splicing sleeves (2) shall be fixed in position on each side of the SBT-track (1) with a clamp.
- b) Be sure you have the SBT-track (I) in equal length covered by the splicing sleeve (2).
- c) Check that you have the splicing sleeves in equal position.
- d) Drill 6mm holes through the SBT-track using the pre-drilled track splicing sleeve holes.
- e) Assemble the splicing sleeve with the four bolts M6\*50 and the locking nuts (3).



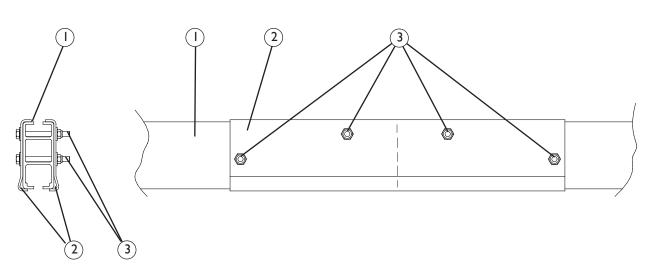
#### WARNING

PRODUCT MAY CONTAIN SHARP EDGES
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#### **ELEVATION VIEW**

#### **SIDE VIEW**



#### TAPE/LABEL APPLICATION PROCEDURE

- I. SBT-track
- 2. Hazard tape
- 3. Plymovent sticker
- a) The SBT-track (I) can be taped hanging in the support legs, but is easiest taped before installation.
- b) Clean the SBT-track with a cloth and solvent before putting on tape and stickers.
- c) The SBT-track shall be taped with supplied hazard tape (2) on both sides.

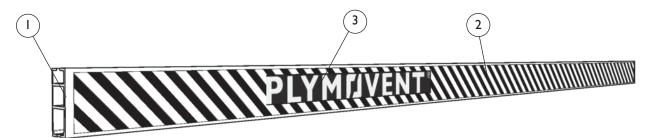
The supplied Plymovent stickers (3) are applied on both sides of the SBT-track (1), on the hazard tape (2), 600mm / 24" from exit end.

# PRODUCT MAY (

PRODUCT MAY CONTAIN SHARP EDGES
Use care when servicing unit. Failure to do so could result in minor personal injury.

WARNING

#### **SIDE VIEW**

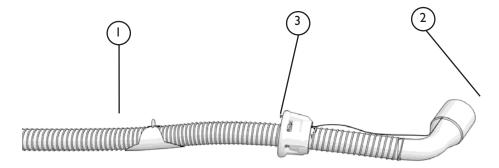


#### **HOSE ALIGNMENT PROCEDURE**

- I. SBT hose:
- 2. Magnetic Grabber® nozzle:
- 3. Hose saddle:

The exhaust hose assembly shall be aligned at installation as follows:

- I. The exhaust hose assembly is straightened out on the floor with the Magnetic Grabber® pointing upwards against the door and facing upwards.
- Reposition if nessecary and align the Magnetic Grabber®
   and the hose saddle (3) in the show position.
- After hose alignment mount the hose (I) on the hose connection with the Magnetic Grabber® pointing upwards against the door.



#### **BALANCER/SADDLE MOUNTING PROCEDURE**

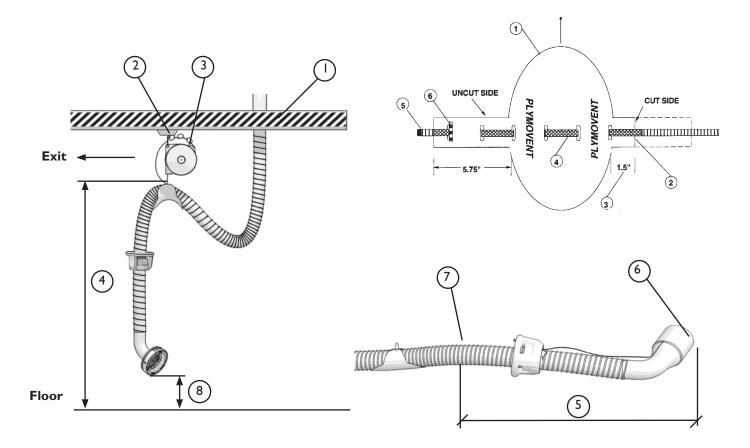
- I. SBT-profile
- 2. Trolley
- Balancer with safety chain and Balancer locking cable.
- 4. Measurement, safety chain to floor minus 250mm
- 5. Measurement, saddle to Grabber® nozzle
- 6. Grabber® nozzle
- 7. Saddle ring
- 8. Grabber® nozzle height over floor
- a) The trolley (2) is slided in to the SBT-profile (1).
- b) The balancer (3) is hung in the forward/lower suspension hole with the wire towards the door, and the safety chain facing towards the back of the parking area. Please see balancer instructions for the correct settings of the balancer.
- c) The Balancer locking cable is connected between the hose saddle and the trolley.
- d) Measure the distance between the safety chain and the floor and subtract 250mm (4).



#### WARNING

PRODUCT MAY CONTAIN SHARP EDGES
Use care when servicing unit. Failure to do so could result in minor personal injury.

- e) This measurement is used to determine the measurement (5) from the Grabber® opening to the saddle ring (7).
- f) The saddle is to be aligned according to: "Hose alignment procedure" please see chapter Trimming Procedure of this Product User Manual.
- g) The height (8) of the Grabber® nozzle should be 25cm / 10" 30cm / 12" from finished floor.



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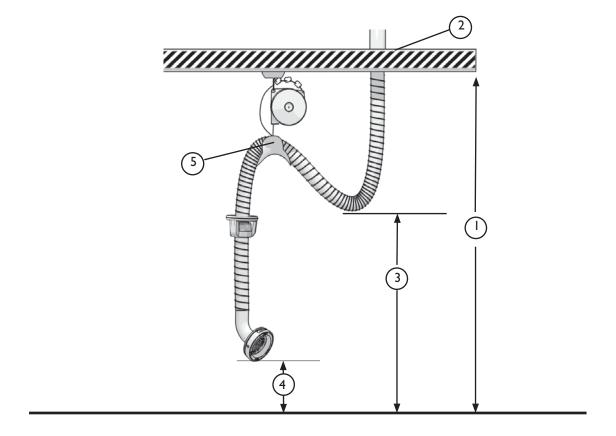
#### **HOSE/Grabber® INSTALLATION PROCEDURE**

- SBT-track height over floor (minimum 3500mm / 11,5 ft)
- 2. Hose connection
- 3. Hose loop height
- 4. Grabber® nozzle height over floor
- Hose saddle
- a) The SBT-track height (1) is a major factor in determining the hose loop height (3)
- b) The hose connection (2) location also affects the loop height
- c) Hose loop height (3) should not be less than 2,0m / 6,5ft not to be in the way of fire personnel
- d) The hose saddle (5) should be placed in about half the distance between the Grabber® nozzle and hose connection
- e) The distance between the floor and the Grabber® nozzle (4) should be 25cm / 10" 30cm / 12" from finished floor



#### WARNING

PRODUCT MAY CONTAIN SHARP EDGES
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#### **PC-500 PRESSURE SWITCH INSTALLATION PROCEDURE**

- ١. PC-500 pressure switch
- 2. Drilling machine with 10mm / 0.4" drillbit
- 3. Measurement from ducting/hose approx. I00mm / 4"
- a) Drill a hole in the ducting using a drilling machine (2) above the riser bracket.
- b) Mount the pressure switch (I) by screwing it into the ductwork.
- c) Turn as long as to the moment that the sensor is tight and both connection points are upwards.
- d) Connect the electric wires with the supplied connection tags. Or connect the PC-500 pressure switches to the wireless transmitters.

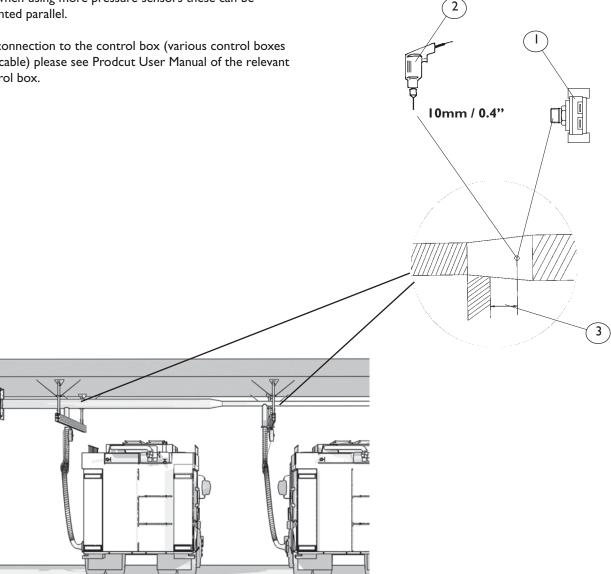
Tip: when using more pressure sensors these can be mounted parallel.

e) For connection to the control box (various control boxes applicable) please see Prodcut User Manual of the relevant control box.



#### WARNING

PRODUCT MAY CONTAIN SHARP EDGES Use care when servicing unit. Failure to do so could result in minor personal injury.



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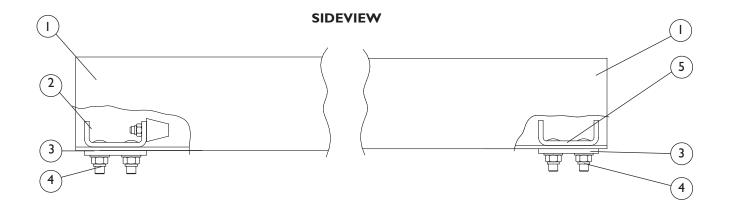
#### **END STOP ATTACHMENT/LOCATION PROCEDURE**

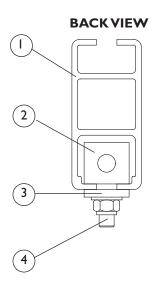
- I. SBT-track
- 2. End stop with rubber shock absorber
- 3. Mounting clamp
- 4. Carriage bolts M8 with washers and locking nuts
- 5. Endstop
- a) Endstop with rubber shock absorber (2) is mounted at the exit end of the SBT-track (1).
- b) The end stop with rubber shock absorber (2) is pushed in the SBT-track (1) with the mounting clamp (3) on the underside of the track, and then the locking nuts on the carriagebolts (4) are tightened. Make sure the locking nuts are tightly fastened
- c) The endstop without shock absorber (5) is mounted the same way at entrance/parking end of the SBT-track.

The end stop is used to determine the release point of the Magnetic Grabber  $^{\tiny{\textcircled{\tiny{0}}}}$ . For additional information please see chapter 8.

#### WARNING

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#### **INSTALLATION TAILPIPE CONNECTOR**

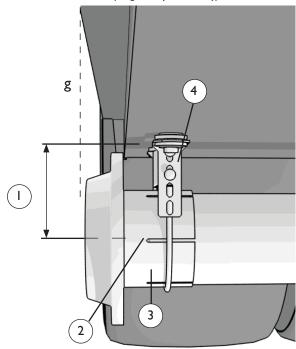
- ١. Distance exhaust pipe-truck body
- 2. Exhaust pipe end
- 3. Tailpipe adapter/connector
- 4. Tailpipe bracket
- a) The distance between the middle point of the exhaust pipe and the body of the vehicle (I) must be at least:
- 75mm / 3" in all directions when using a 75mm / 3"
- 100mm / 4" in all directions when using a 100mm / 4" system
- 125mm / 5" in all directions, when using a 125mm / 5" system

This is checked before the tailpipe connector is attached.

- b) The exhaust pipe end (2) must be cut in a 90° angle and all sharp edges must be grinded off.
- c) The Tailpipe adapter/connector (3) is positioned on the exhaust pipe. When attached the minimum space between the tailpipe connector and the body of the vehicle should now be at least 15 mm / 0.6" from the top and both sides of the tailpipe adaptor.
- d) The exhaust pipe clamp (4) must be positioned within 500mm /20" from the exhaust pipe end (2). If not, the optional tailpipe bracket must be installed. (see: option: installing the tailpipe brackets)
- e) The exhaust pipe must be in a 90° angle to the truck body with a max inclination of 5°.

#### **TRUCK BODY**

(image for explanation only)



#### WARNING



#### PRODUCT MAY CONTAIN SHARP EDGES

Use care when servicing unit. Failure to do so could result in minor personal injury.

#### **ATTENTION**

Please ensure that the position of the tailpipe connector is in line with EN 1846-2 which indicates the minimal distance from tailpipe connector to the road surface (differs per type of vehicle).

- f) The distance between the exhaust pipe and the wheel must be minimum 300mm /12".
- g) The tailpipe adapter shall be installed flush with the body of the vehicle in accordance to NFPA1500. And be in line with EN-1846-2 regarding minimal clearance to the road.

#### **EXHAUST PIPE MODIFICATION PROCEDURE:**

#### OPTION: INSTALLING THE TAILPIPE REDUCER.

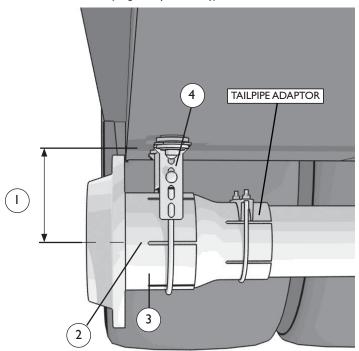
In case you want to install a 125mm / 5" connector and the vehicle uses a 4"(100mm) tailpipe you will have to install the tailpipe adaptor, the tailpipe adaptor is a part that adapts the 4"(100mm) tailpipe into a 5"(125mm) tailpipe to which the next part, the tailpipe connector can be installed.

The tailpipe adaptor is positioned over the existing tailpipe and fixed using a 4" (100mm) tailpipe clamp which is included with the part. Product number: Please see your FIRE Price list for the correct product number.

#### OPTION: INSTALLING THE TAILPIPE BRACKET

In order to ensure the tailpipe adaptor and/or tailpipe connector is mounted firmly to the vehicle chassis it's recommended to use the tailpipe bracket . It has to be judged per vehicle and installation if this bracket is not needed.

**TRUCK BODY** 



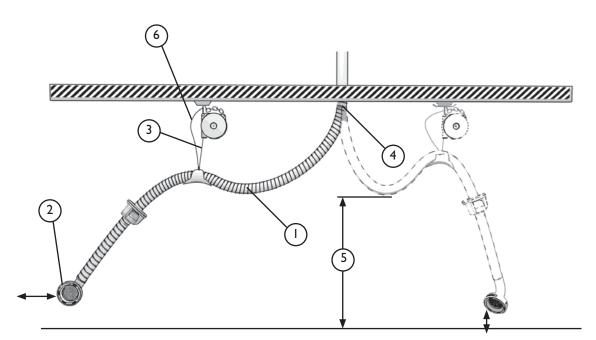
MAN\_MAG\_SBT\_TUV\_SUD\_180517/1\_EN

#### THE HOSE

- I. SBT-hose assembly:
- 2. Magnetic Grabber® nozzle:
- 3. 20"-40"/ 0,5-1m of wire out of balancer:
- 4. Hose connection:
- 5. Hose loop height:
- 6. Balancer locking cable.
- a) The SBT- hose assembly (1) is mounted/trimmed up with the Magnetic Grabber® nozzle (2) at the gate about 25cm / 10" 30cm / 12" off the finished floor.
- b) At correct length of the exhaust hose, 0,5-1 m /20"-40" of wire should be out of the balancer (3) when the Magnetic Grabber® is at disconnect point.
  - Ideally 15cm / 6"of the balancer cable should be exposed when the Magnetic Grabber® nozzle is connected to the vehicle.
  - The balancer locking cable (6) should be under tension.
- c) The exhaust hose is cut to length with a knife and a wire cutter if the length needs to be shortened.
- d) The hose loop height (5) should not be less than 2000mm /6,5 ft, not to be in the way of fire personnel.

#### INSTALLING THE BALANCER LOCKING CABLE

- Extract the Magnetic Grabber® nozzle up to 10" +/- 2" / 25cm +/-5cm from the door and 20"/0.5m from the ground (tailpipe height).
- b. Measure the shortest distance between the two snap-hooks of the balancer.
- c. Adjust the balancer locking cable to the measured distance.
- d. Install the balancer locking cable between the two snap-hooks.
- e. The Balancer locking cable (6) should be under tension when the Magnetic Grabber® nozzle (2) reaches its disconnect point, hereby pulling the Magnetic Grabber® nozzle from the tailpipe connector.



Magnetic Grabber<sup>™</sup> at disconnect position 20cm / 8" - 30cm / 12" from the door opening

Magnetic Grabber® connected to vehicle 25cm / 10" - 30cm / 12" from finished floor

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# 9. MOUNTING INSTRUCTION - TRIMMING PROCEDURE

# <u>^!\</u>

#### WARNING

The Balancer is delivered under tension. Be carefull unwinding this balancer.

#### **BALANCER SETTING PROCEDURE**

- I. Balancer
- 2. Balancer locking cable (BLC)
- 3. Balancer safety chain

The balancer is factory delivered at a pre-tension. In order to make sure the balancer is functioning optimally please follow the following procedure:

a. After every component of the system is installed, the balancer pre-tension must be adjusted to its final setting. Increase or decrease the spring tension until the rubber stop loosely hits the balancer housing.

b.Add two more "quarter-clicks" to ensure full retraction of the balancer cable and hosedrop.

It's possible the balancer tension needs to be fine-tuned after the total system is installed and a test run is done. Ideally, I5cm / 6" of the Balancer cable should be exposed when the MG nozzle is connected the vehicle.

#### Problem:

The Magnetic Grabber® nozzle hits the ground after disconnection.

#### Solution:

Increase the balancer tension with I "quarter-click".

#### Problem

The "swing-back" of the hosedrop after disconnection is too extreme.

#### Solution:

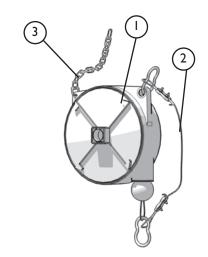
Decrease the balancer tension with one "quarter-click".

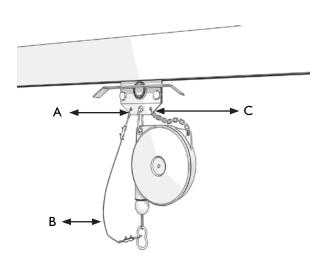
#### INSTALLING THE BALANCER LOCKING CABLE

The BLC's primary function is to control the point of disconnection. As

the hose reaches it's maximum length the BLC will bottom out, in turn pulling the MG nozzle from the moving vehicle.

a. Extract the Magnetic Grabber® nozzle up to 10" +/- 2" / 25cm +/-5cm from the door and 20"/0.5m from the ground (tailpipe height).





b. Measure the shortest distance between the two snap-hooks of the balancer.

c. Adjust the balancer locking cable to the measured distance.
d. Install the balancer locking cable between the two
snap-hooks.

Please see page 9 for detailed measurements and advices.

#### SAFETY CHAIN

It is imperative that the safety chain is mounted securely to the trolley/crab (C).

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#### SAFETY DISCONNECT HANDLE

#### **Function:**

This safety coupling opens in case of missue of the system or failure of the disconnection and can allways be re-used.

#### **Delivery:**

The safety disconnect coupling is delivered complete assembled with a preset springload. The standard setting on delivery gives you a release force at 450N and a re-connection force of 150N



#### **WARNING!**

After the Safety Disconnect has released please check if all spring blocks in the product are free of damage and functioning correctly. Any damaged parts should be replaced and the correct functioning should be verified. If not functioning correctly the Safety disconnect can potentially cause damage to person or property.



Image: safety disconnect handle magnetic.

### MOUNTING INSTRUCTION - TRIMMING PROCEDURE

#### TAILPIPE MODIFICATION OPTIONS

#### Introduction

In some cases it might me necessary to divert the exhaust flow from the tailpipe to the side of the vehicle. The Magnetic Grabber<sup>®</sup> connector can then be installed to this modification.

In order to ensure this is done right please consult the manufacturer of the vehicle. In order to modify a tailpipe it might be necessary to combine a number of options.

The example to the right you can see the tailpipe in combination with a tailpipe reducer pack, a 45° bend, and a tailpipe support bracket. This to support a correct and steady installation of the Magnetic Grabber® connector





Image: possible tailpipe configuration

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#### TAILPIPE MODIFICATION OPTIONS

#### Tailpipe adaptor

The tailpipe adaptor is used when an exhaust tailpipe needs to be converted from 100mm / 4"to 125mm / 5".

Article number Description 90365-1011 MG-TA 100-125

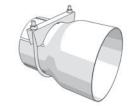


Image: Tailpipe adaptor

### Tailpipe support bracket The tailpipe support bracket

The tailpipe support bracket can be used for various dimension exhaust tailpipes and is there to fix the tailpipe securely to the body / chassis of the vehicle.

Article number Description
90375-1011 MG-TSB 75-100
90370-1011 MG-TSB 100-125



Image: Tailpipe support bracket

#### Oval modification kit

Various taipipes have an oval shape or limited space to connect the Magnetic Grabber® tailpipe connector. For these vehicles we have the Oval modification kit.

Article number Description 90385-1011 MG-OMK



Image: Oval modification kit

#### Tailpipe reducer packs

The tailpipe reducer pack enables vehicles with different tailpipe sizes to connect to the Plymovent Magnetic Grabber® tailpipe connector. This product can be used in combination with the Magnetic Grabber® tailpipe bends as well as direct onto the Magnetic Grabber® Tailpipe connector.

The tailpipe reducer pack allows a wide range of exhaust pipes to connect to the Plymovent system.



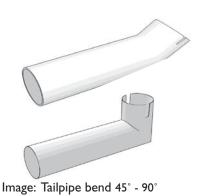
Image: Tailpipe reducer pack

Article number 90383-75-50 Tailpipe reducer pack 75mm - 50mm
90383-75-60 Tailpipe reducer pack 75mm - 60mm
90383-100-80 Tailpipe reducer pack 100mm - 80mm
90383-100-90 Tailpipe reducer pack 100mm - 90mm

#### Tailpipe bend

The Magnetic Grabber® tailpipe bend allows for a modification of the existing tailpipe. It connects to the original tailpipe using the tailpipe clamp and should direct the exhaust flow to the to the side of the vehicle were the Magnetic Grabber® connector is positioned to it. If needed the tailpipe bend can also be fastened using the Magnetic Grabber® tailpipe bracket.

Article number	Description
90384-76-45	Tailpipe bend 45°, 76mm / 45°/ 3"
90384-102-45	Tailpipe bend 45°, 102mm / 45° / 4"
90384-76-90	Tailpipe bend 90°, 76mm / 90° / 3"
90384-102-90	Tailpipe bend 90°, 102mm / 90° / 4"



#### 10.

#### **USER- AND MAINTENANCE INSTRUCTIONS**

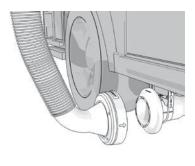
#### **OPERATING THE MAGNETIC GRABBER®**

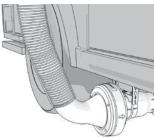
#### Connecting the Magnetic Grabber®

When a vehicle returns to its bay the Magnetic Grabber® nozzle can easily be attached to the tailpipe adaptor/connector.

The Magnetic Grabber® nozzle must be placed straight onto the tailpipe adapter/connector, but to connect it is easiest to first attache the top of the Magnetic Grabber® and then press down on the safety disconnect in order to attache the lower part of the Magnetic Grabber®.

The conical design of the connection surface ensures safe and easy positioning.





#### Disconnecting the Magnetic Grabber®

#### a) Automatic disconnect

The Magnetic Grabber® nozzle will disconnect automatically when the vehicle exits the bay.

#### b) Manual disconnect

To manually disconnect the Magnetic Grabber® nozzle; hold the safety disconnect with two hands and push it downwards.

# TOOLS NEEDED FOR INSTALLING THE MAGNETIC GRABBER®

#### Magnetic Grabber® nozzle

- Slotted screwdriver – size:  $7 \times 1.3$  (mm) -  $0.3 \times 0.05$  (inch) or (Socket) Wrench – size: 8 (mm) – 5/16 (inch)

#### Tailpipe adapter/connector

- (Socket) Wrench – size: 13 (mm) - 1/2 (inch)

#### Tailpipe bracket

- (Socket) Wrench size: 10 (mm) 3/8 (inch)
- (Socket) Wrench size: 16 (mm) 5/8 (inch)
- (Socket) Wrench size: 17 (mm)

#### **CLEANING INSTRUCTIONS**

To ensure your system operates in the optimal manner the product needs to be cleaned regularly.

- a) Make sure you keep the connection surface of the tailpipe adaptor clean of soot and other contaminations.
- b) Using a damp clothes (rubbing alcohol, degreaser, etc) wipe the connection surface of the Magnetic Grabber®. Best results if using something that evaporates.
- d) Using a damp clothes wipe the entire vertical face/sealed flange of the Tailpipe adapter. Diesel soot build-up will occur when idling or driving at slow speeds.

Keeping these two components clean will ensure a good magnetic connection at all times.

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#### 10. USER- AND MAINTENANCE INSTRUCTIONS

#### Inspection and maintenance:

Inspection/maintenance shall be done according to following scedule:

0-500 turn-outs/year every 16th week 500-1500 turn-outs/year every 12th week 1500-3000 turn-outs/year every 8th week 3000 + turn-outs/year every 4th week

- I. Check if the magnets on the Magnetic Grabber® are all in place and clean.
- 2. Check if the Tailpipe Adaptor is clean and no obstructions are there which can prevent the magnets from positioning themselves on the product.
- 3. Remove the hose assembly from the balancer and check the hose for any defects.
- 4) Check if the saddle, and Magnetic Grabber® are still fixed tightly to the hose.
- 5) The safety disconnect coupling should be disassembled and cleaned.
- 6) The hose assembly should be aligned prior to mounting see "Alignement/mounting of hose assemby" in the mounting instructions.
- 4. Check the attachment and the the cable on the balancer.
- 5. Spring tension must be adjusted when required. see instruction.
- 6. Check the trolley if it runs smoothly through the profile and correct stop at the end-stops.

#### ATTENTION!

 Service and maintenance only to be done by qualified and trained persons (in EU according to TRGS 554.



- b. Use sufficient climbing gear and safety guards when working on a higher level than 2.0 meter.
- c. Only carry out service and maintenance when the system is fully disconnected from mains.
- d. Be sure no vehicle can enter the station/bay when carrying out service/maintenance.

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#### 11.

### **CLEANING AND FAQ**

#### **HOSE PACKAGE**

Clean with water and a soap-solution.

# <u>^!</u>

#### **ATTENTION**

Do not use solvents to clean the system.

#### **OTHER COMPONENTS**

Use compressed air to blow equipment clean.

#### **SBT-RAIL AND SUSPENSIONS**

Clean with water and a soap-solution

You observe that	Why ?	What to do ?
The Grabber® does not connect tightly to the tailpipe connector.	The magnets in the Grabber® cannot make a clear connection.	Clean the Tailpipe connector from any soot or dirt.
The Magnetic Grabber® is dragging over the floor.	I.The balancer cable doesn't retract.     2.The hose drop is too long.	I. Increase the balancer pre-tension (see page 22)     2. Disconnect the saddle and reposition the hose.
The Grabber® is transported out of the Station too far.	I.The BLC is too long 2.The end stop is located too close to the door.	Shorten the BLC     Reposition the end stop.
The swing-back of the hose drop after disconnection is too extreme.	<ul><li>I.The balancer pre-tension is too strong.</li><li>2.The BLC is too long.</li><li>3.The distance between the vehicle and the standard hose position is not correct.</li><li>4.The end stop is located too far from the door.</li></ul>	Decrease the balancer pre-tension.     Shorten the BLC.     Make sure the vehicle and rail are rightly positioned. (page 12)     Reposition the end stop and BLC.
The Grabber® disconnects prematurely.	I.The BLC is too short  2.The end stop is located too far from or too close to the door.  3.The distance between the vehicle and the standard hose position is not correct.  4.Too much friction between the trolley and the rail.	I. lengthen the BLC.  2. Reposition the end stop.  3. Make sure the vehicle and rail are rightly positioned. (page 12)  4. Clean the inside of the rubber lips and/or install a aluminum trolley. (only STR)
The hose drop swings back into the station too far after disconnection (only SBT)	<ul><li>I.The balancer pre-tension is too strong.</li><li>2.The BLC is too long.</li><li>3.The end stop is located too far from the door.</li></ul>	Decrease the balancer pre-tension.     Shorten the BLC.     Reposition the end stop.     Place the track under an angle (see page 18)

#### 2. DISPOSAL

The level of Service and Maintenance on the Plymovent systems is relatively low. The Service and Maintenance department of Plymovent consists of well trained personnel who can offer you a Service and Maintenance contract which ensures your system will function for many years to come.

When dismantling the system please ensure to follow the similar safety precautions as mentioned in this manual for installation.

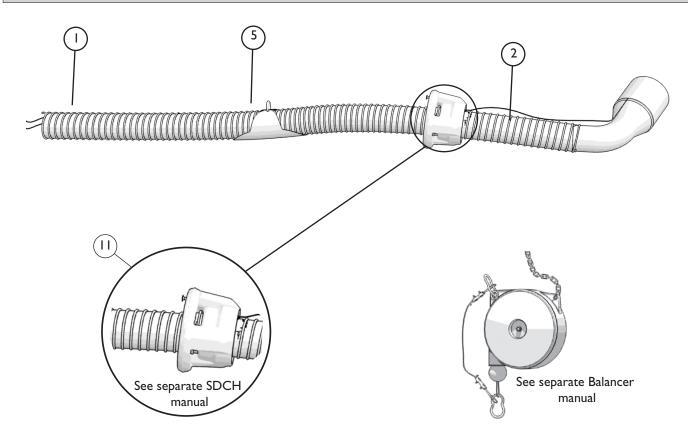
Dismantling must be done contrary to the installation instructions.

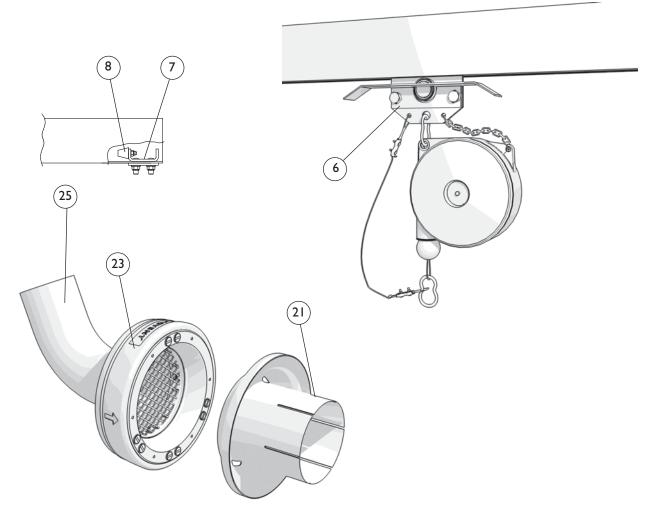
#### Disposal

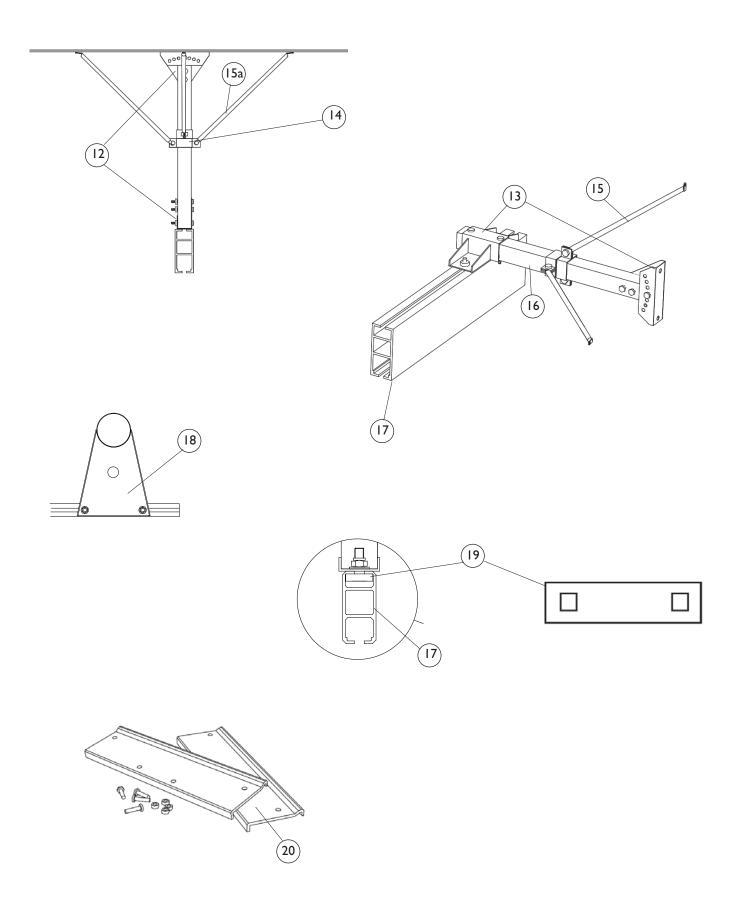
Cardboard packaging
 Aluminium profile
 Hose
 Grabber® Nozzle
 Recycle
 Rest waste
 Rest waste

Dismount loose parts before the rail is dismounted.

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PLYMIJVENT®	SPARE PARTS LIST	BSAB No: T3.1 Ser. No: SBT / RR Date: Dec -10
SBTP	© Copyright: All right reserved. All information within this printed matter may over, copied, xeroxed or translated into another language, in any form or any permission from PlymoVent AB. PlymoVent AB reserves the right to make des	means without written

	Produkt No:	Decription	
Α	All models	All models of SBTP	
В	SBTP-6-100-160		
С	SBTP-6-100-120		
D	SBTP-6-100-100		
Ε	SBTP-6-125-160		
F	SBTP-9-100-160		
G	SBTP-9-100-120		
Н	SBTP-9-125-160		
		Models with vertical support legs	
J		Models with horizontal support legs	

#### Abreviations

X = Order as requiered, state requiered length.

Pos	Art. No:	Α	В	С	D	Ε	F	G	Н	ı	J	Description	Note
1	987990-Z		1	1	1							Exhaust hose Ø100 L=6M	
	988451-Z					1						Exhaust hose Ø125 L=6M	
	988006-Z						1	1				Exhaust hose Ø100L=10M	
	988469-Z								1			Exhaust hose Ø125 L=10M	
2	987 842		1	1	1		1	1				Exhaust hose Ø100L=0,6M	
	988 576								1			Exhaust hose Ø125 L=0,6M	
3	4-1417		1				1					Grabber bend 100/160	
	4-1416			1				1				Grabber bend 100/120	
	4-1415				1							Grabber bend 100/100	
	4-1418								1			Grabber bend 125/160	
4	991 299		1			1	1		1			Grabber Bladder 160	
	991 125			1				1				Grabber Bladder 120	
	991 109				1							Grabber Bladder 100	
5	512 616		1	1	1		1	1				Hose Saddle Ø 100	
	512 624					1			1			Hose Saddle Ø 125	
6	985 887	Χ										Compressed air hose White Ø 6mm	
7	985 895	Χ										Compressed air hose Yellow Ø 6mm	
8	985 960	Χ										Compressed air hose Ø 8mm	
9	961 458		1	1	1		1	1				Hose Clamp Ø100	
	961 490					1			1			Hose Clamp Ø125	
10	961 474		1			1	1		1			Clamp Grabber 160	
	961 458			1	1			1				Clamp Grabber 120/100	
11	905 550	1										SDCH 100mm/ 4" Includes the MFD valve.	
	905 555	1										SDCH 125mm/ 5" Includes the MFD valve.	
15	993 329	1										MDF-Valve	
16	516 740	1										MDF-Valve compl.with fittings	
17	516 856	1										MDF-Valve bracket	
18	993 881	1										MDF-Safety disc.fittings	
19	993329-Z	1										MDF-Knob	
20	516 476	1										Trolley compl.	
21	994 137	1										Release valve with fittings	
22	516 980	1										Release valve with fittings and bracket	
23	993 998	1										Regulator compl. with fittings and manometer	
24	994 012	1										Manometer	
25	969 691	1										Endstop with rubber shock absorber	

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**Product Service** 

### CERTIFICATE

No. Z1 16 01 87462 001

Holder of Certificate: Plymovent Exhaust Extraction GmbH

> Redcarstr. 36 53842 Troisdorf **GERMANY**

Production

87462

Facility(ies):

**Certification Mark:** 



Product:

**Exhaust suction system** 

Model(s):

exhaust suction system with pneumatic Grabber®

SBTP / STRP

exhaust suction system with magnetic Grabber®

SBTM / STRM

Parameters:

SBTP / STRP SBTM / STRM supply pressure: 6 - 8 bar

max. permissible pressure on Grabber: disconnecting force

1 bar

of the safety coupling: max. permissible exhaust temperature:

ca. 450N ca. 450N

hose diameter: hose length:

150 °C 150 °C ca. 100mm ca. 100mm or 125mm or 125mm 6m 6m or 10m

pneumatic Grabber® nozzle Diameter:

120mm or 160mm

75mm, 100mm or 125mm

Tested according to:

DIN 31000:2011

magnetic Grabber® nozzle Diameter:

DIN EN ISO 12100:2011

The product was tested on a voluntary basis and complies with the essential requirements. The certification mark shown above can be affixed on the product. It is not permitted to alter the certification mark in any way. In addition the certification holder must not transfer the certificate to third parties. See also notes overleaf.

Test report no.:

713037924

Valid until:

2021-01-11

Date, 2016-01-18

(Edgar Harnisch)

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TÜV®

A1 / 04.11