

Sales & Service:



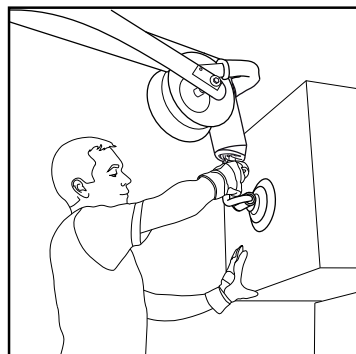
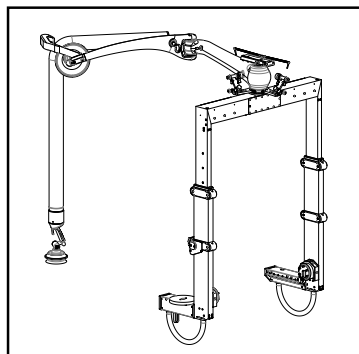
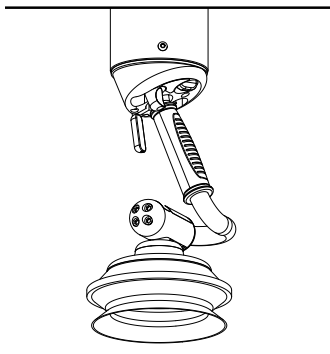
9200 GALE ROAD
WHITE LAKE, MI 48386

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Vaculex ParceLift™

Instructions for Use



Original instructions 131128ENG

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Serial number

Information plate containing product and serial number for vacuum lifter can be found on the control handle.

Information plate containing product and serial number for frame and jib crane can be found on the inside left of the "Upper frame".

Symbol explanation



Warning!



Important information



Setup and adjustments



Check the equipment

1. INTRODUCTION

Vaculex ParceLift™ is a Swedish invention based on vacuum technology. The lifting aid is specially designed for the express parcel handling type of business. Please contact your local distributor for more detailed information. Vaculex AB's goal is to make your lifting work easier, with an emphasis on efficiency, ergonomics and safety, but also by being at your service to provide rapid troubleshooting via authorized distributors and our support organization.

The user manual contains a description of safety rules, operation, maintenance and troubleshooting. Custom made versions of Vaculex ParceLift™ are not covered. Information about these products is provided by your distributor. The equipment supplied must only be used for lifting the objects for which it is intended, as described in the quotation and order acknowledgement. If you want to use the lifting unit for other objects, please contact your distributor.

The peripheral equipment in which Vaculex ParceLift™ is installed is not described in this manual. Please refer to a separate description of each product.

Vaculex AB constantly endeavours to develop and improve the design and construction of our lifting units. For this reason, we reserve the right to change the design and specifications without prior notice.

All information in the user manual was approved for publication at the time it was written, but is provided with reservation for any typographical errors.

Vaculex AB



The design or construction of the vacuum tube lifter may under no circumstances be modified without permission from the manufacturer. Always use original accessories/spare parts. Unauthorized modifications and/or non-approved accessories/spare parts can cause serious personal injury during lifting.

2. SAFETY

WARNING!

Operator

- ❗ Vaculex Parcelift™ must only be used by personnel who have read and been able to understand the contents of this manual.
- ⚠ Never use Vaculex Parcelift™ when you are under the influence of drugs or alcohol.

Protective equipment

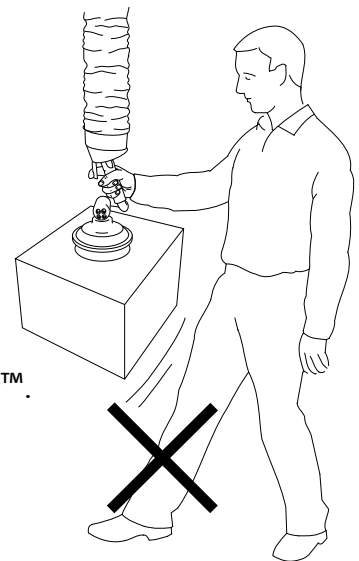
- ⚠ Use protective shoes.

Loads





- ⚠ Never handle heavier loads than the equipment is designed for.
- ❗ Only use Vaculex Parcelift™ to handle loads which are so strong that there is no risk they could fall apart when lifted.
- ⚠ Never attach the suction cup on surfaces with loose components such as address labels.
- ⚠ Never attach the suction cup on a surface so slippery that there is a risk the load can slide off the suction cup.
- ⚠ Be particularly careful when using Vaculex Parcelift™ to handle sharp objects.
- ⚠ Never use Vaculex Parcelift™ to handle loads containing hazardous or explosive contents, without first ensuring that the procedure is risk-free.

Operation











- ⚠ Never attach the suction cup on a moving or stationary conveyor belt.
- ⚠ Never attach the suction cup on walls, floor or other solid objects beside the intended parking station.
- ⚠ When extracting the telescopic conveyor in and out, the control unit must be placed in the intended parking space to ensure no damage is inflicted to the Vaculex Parcelift™.
- ❗ Loaded Vaculex Parcelift™ must be operated in such a way that a falling load would not risk any damage to persons, objects or load.



...SAFETY

-  Never release a lifted load if risk for damage to persons, objects or load.
-  Never attach the suction cup on a person or an animal.
-  Never leave a hanging load unattended.
-  Never attempt to manipulate Vaculex Parcelift™ with a force in the hoisting motion.

IMPORTANT INFORMATION

-  Read the entire manual and get to know the equipment before it is taken into service.
-  Operate Vaculex Parcelift™ control handle gently to avoid jerky movements when lifting.
-  The equipment must be switched off during service and cleaning.
-  Handle the vacuum pump carefully since it is sensitive to impacts and jolts.
-  Never operate the vacuum pump without the air filter in place.
-  Never operate the vacuum pump if parts of the interior are missing or removed.
-  Never operate the vacuum pump without protective motor switch.
-  Never use Vaculex Parcelift™ if not all service hatches are mounted.
-  Do not touch the vacuum pump in operation due to hot surfaces.
-  Bypassing or manipulating any safety equipment is prohibited.

Make sure that delivered equipment corresponds to the bill of delivery. If anything should be missing, contact your distributor. By reading this manual before operation, technical problems can be avoided.

From a safety point of view it is necessary that you have good knowledge of the equipment before operation.

3. EC DECLARATION OF INCORPORATION

A separate document "EC declaration of conformity of the machinery" will be issued by the company responsible for the installation of this product.

DECLARATION OF INCORPORATION OF PARTLY COMPLETED MACHINERY

**Manufacturer**

Business name: Vaculex AB
Address: Aminogatan 20, 413 22 Mölndal, Sweden

Person authorized to compile the technical file

Name: Anders Lundin
Business name: Vaculex AB
Address: Aminogatan 20, 413 22 Mölndal, Sweden

declare that the partly completed machinery

Description

Type of product: Vacuumlifter

Identification

Product name:	Liftunit No:	Pump unit No:	Product No:
Vaculex TPH	XXX	XXX	TPH100XXXVXXC
Product name:	OH system No:		
Vaculex ACF	XXX		

only meet the following basic requirements of Directive 2006/42/EC:
1.1.1-1.1.3; 1.1.5-1.1.7; 1.2.1;1.2.2; 1.3-1.5; 1.6.1;1.6.2; 1.6.4-1.7.3; 4

Relevant technical documentation is compiled according to 2006/42/EC, Annex VII, Part B.

Vaculex undertakes to transmit, in response to a reasoned request by the national authorities, relevant information on the partly completed machinery. This undertaking shall be without prejudice to the intellectual property rights of the manufacturer of the partly completed machinery.
The information will be provided by e-mail.

The partly completed machinery must not be put into service until the final machinery into which it is to be incorporated has been declared in conformity with the provisions of directive 2006/42/EC.

Place
Mölndal

Date
2013-04-29

Person empowered to sign

A handwritten signature in black ink, appearing to read 'Ronny Holmsten', written over a horizontal line.

Ronny Holmsten

4. PRODUCT DESCRIPTION...

Product identification - the exact configuration of your Vaculex Parcelift™ can be determined by inspecting the identification labels on the frame and on the control unit.

Frame configuration type A

Parcelift Crane and Frame Product Numbers for Configuration A									
ACF	XXXX	X	X	X	X	X	X	X	X
Articulated Jib Crane AC, mounted on Frame F									
0860	(A)								
Width of telescopic conveyor outer section, mm									
0860	(A)								
Frame Configuration Type									
0906	(A)								
Crane Arm Configuration Type									
1060	(A)								
Crane Arm position when parked									
1106	(A)								
Electric System									
1260	(A)								
Elevating Drive Transmission									
1306	(A)								
Control Program Type									
A									
Attachments Type									
R									
Sensor Box Type									
L									
Parking Type									
B									
Auxiliary Options									
D									
Frame and Attachments for outer section width 860 mm. Extra slim version									
Frame and Attachments for outer section width 906 mm.									
Frame and Attachments for outer section width 1060 mm.									
Frame and Attachments for outer section width 1106 mm.									
Frame and Attachments for outer section width 1260 mm.									
Frame and Attachments for outer section width 1306 mm.									
Frame Configuration Type A									
Right (R) Arm Crane Configuration									
Left (L) Arm Crane Configuration									
Crane Arm is always in a forward position when parked									
Crane Arm can optionally be parked in a position where it is kept away from the front of the telescopic conveyor									
Electric System Type D.									
Elevating Drive Transmission Type A									
Control Program Type X. can be configured for Standard installation (A). Hydraulic elevation (B) or Dock House (C).									
Sensor Box Type C									
Parking D200 Type A									
Parking D200 Offset Magnetic Type B. Can be used when space on either side of the telescopic conveyor is limited.									
Parking D200 Magnetic Type C									
Parking D200 Offset Magnetic Type D									
Lighting LED PL with bracket 24VDC/2.5A 3600 Lumen cpl.									
Heater 9.1kW 400VAC, 3phase N PE 13.4A cpl.									
UL Control Panel									
Standard									
Option									

*(A) = (Only available with frame config A)

...PRODUCT DESCRIPTION...

Frame configuration type B

Parcelift Crane and Frame Product Numbers for Configuration B												
ACF	XXXX	X	X	X	X	-	X	X	X	X	-	X
Articulated Jib Crane AC, mounted on Frame F												Standard
950	(B)	X	X	X	X	X	X	X	X	X	X	Option
Width of telescopic conveyor outer section, mm												
1150	(B)	X	X	X	X	X	X	X	X	X	X	
1350	(B)	X	X	X	X	X	X	X	X	X	X	
B	R	X	X	X	X	X	X	X	X	X	X	
L	F	X	X	X	X	X	X	X	X	X	X	
B	E	X	X	X	X	X	X	X	X	X	X	
A	0	X	X	X	X	X	X	X	X	X	X	
C	D	X	X	X	X	X	X	X	X	X	X	
L	H	X	X	X	X	X	X	X	X	X	X	
UL	OA	X	X	X	X	X	X	X	X	X	X	
EE		X	X	X	X	X	X	X	X	X	X	
Frame and Attachments for outer section width 950 mm.												
Frame and Attachments for outer section width 1150 mm.												
Frame and Attachments for outer section width 1350 mm.												
Frame Configuration Type B (For Installation on new CBE version of Callan Belt Conveyor)												
Right (R) Arm Crane Configuration												
Left (L) Arm Crane Configuration												
Crane Arm is always in a forward position when parked												
Crane Arm can optionally be parked in a position where it is kept away from the front of the telescopic conveyor												
Electric System Type E.												
Elevating Drive Transmission Type A												
No Control Program, extem PLC controls the PL.												
Sensor Box Type C												
Parking D200 Magnetic Type C												
Parking 275x167 Magnetic Type D												
Lighting LED PL with bracket 24VDC/2.5A 3600 Lumen cpl.												
Heater 9.1kW 400VAC, 3phase N PE 13.4A cpl.												
UL Control Panel												
OA Parking when taken out of active use.												
EE Encoder Elevating Transmission.												

*(B) = (Only available with frame config B)

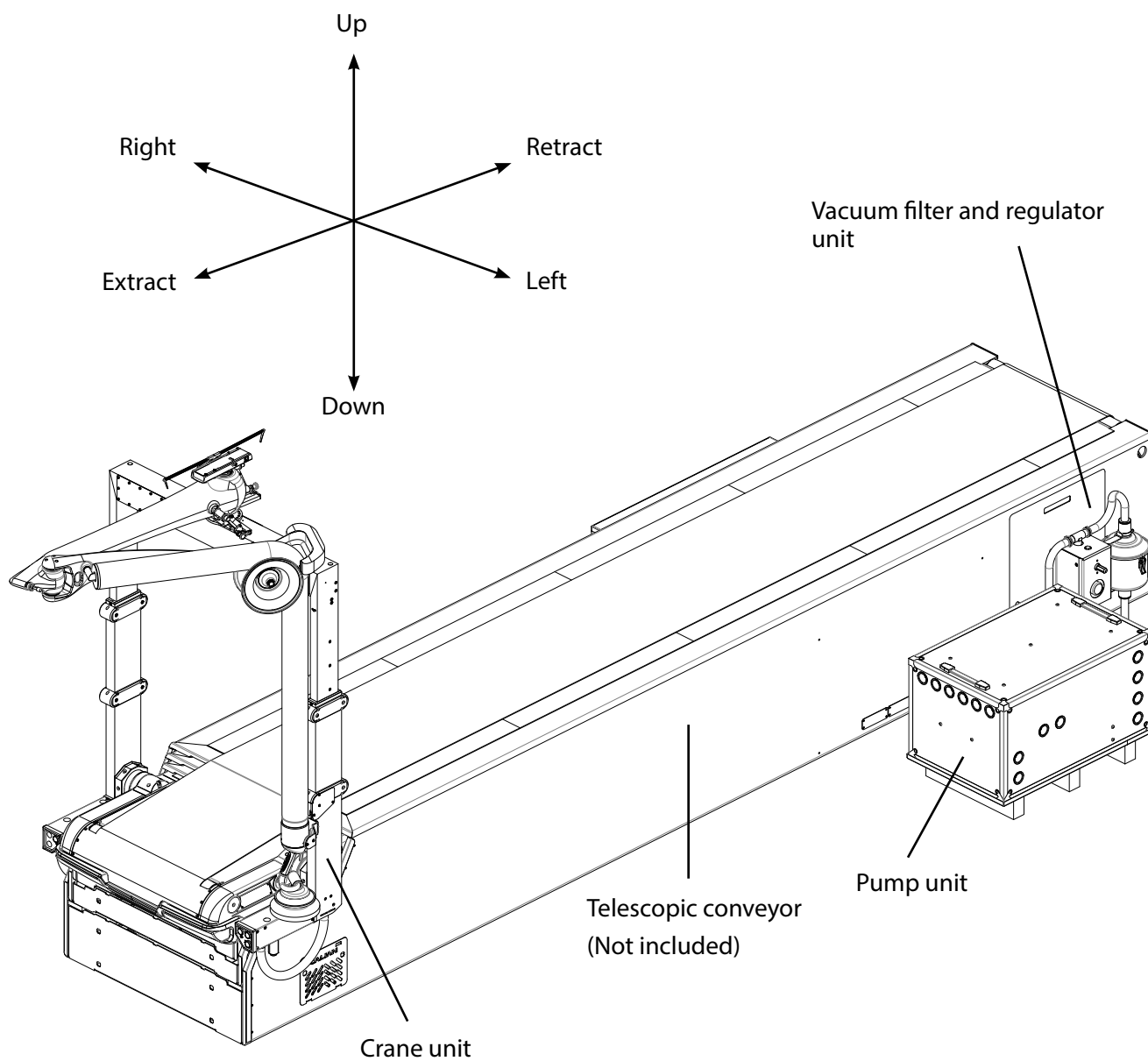
...PRODUCT DESCRIPTION...

Vacuum Lifter and Pump Unit

Parcelift Vacuumlifter and Pump Unit, product no:									
Vacuum lifter, type TP	Horizontal configuration	Lifttube diameter	Pump unit 902	Vacuumregulator and Vacuum filter	NA	NA	Voltage code	Auxiliary Options	
TP	H	100	902	V	0	0	C		S
							C	Voltage 400V 50Hz	S
							F	Voltage 460V 60Hz	O
							I	Universal Joint	O
							Z	TP-ML adaptor	O
							UL	UL Listed Motor (Only 460V)	O

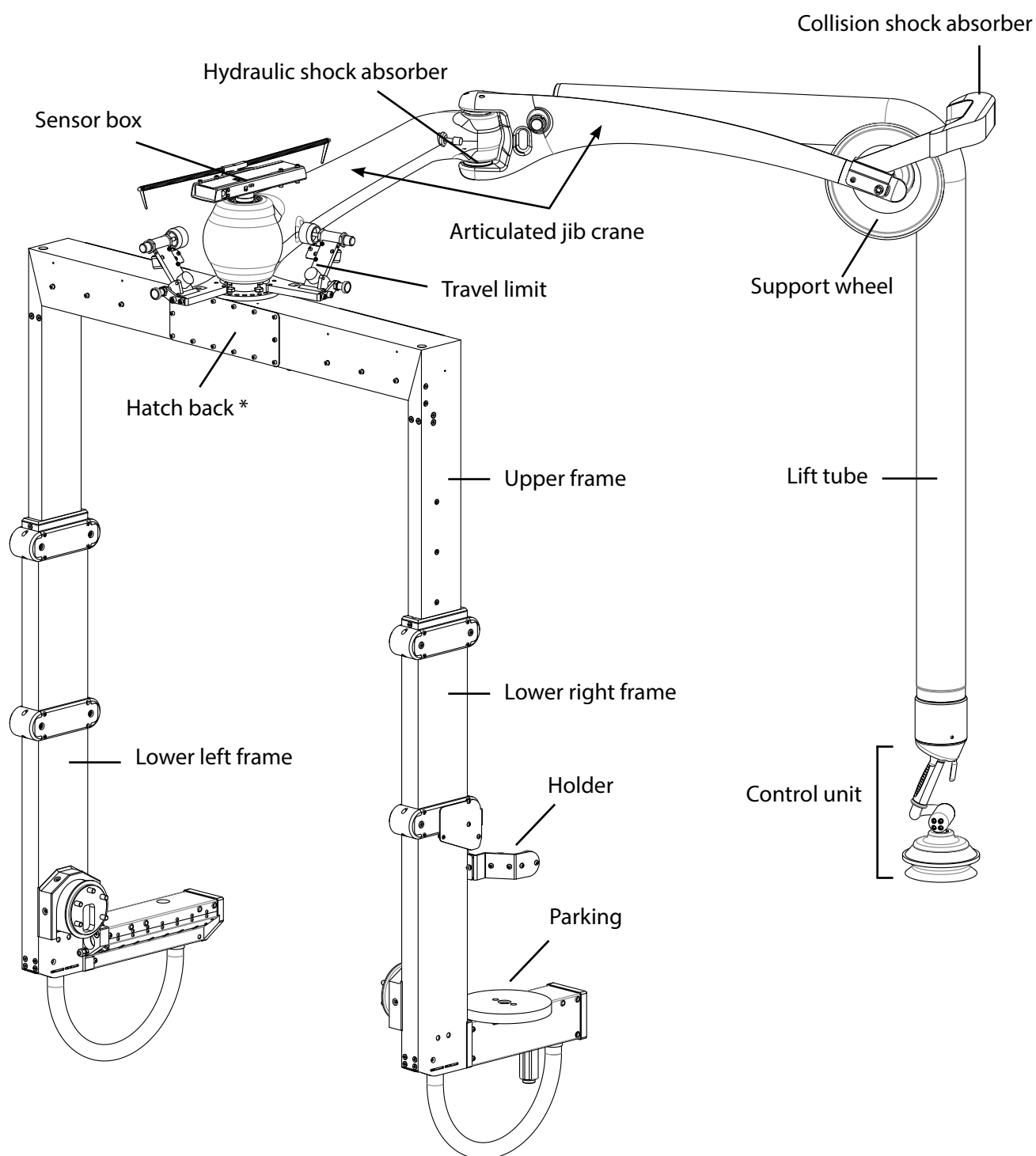
...PRODUCT DESCRIPTION...

Vaculex ParcelLift™ attached to a telescopic conveyor



...PRODUCT DESCRIPTION...

Vaculex ParcelLift™ Crane Unit



* On the front of the upper frame you will also find "hatch front left" and "hatch front right".

** On the lower left frame you will also find "hatch lower left".

...PRODUCT DESCRIPTION...

TECHNICAL SPECIFICATIONS

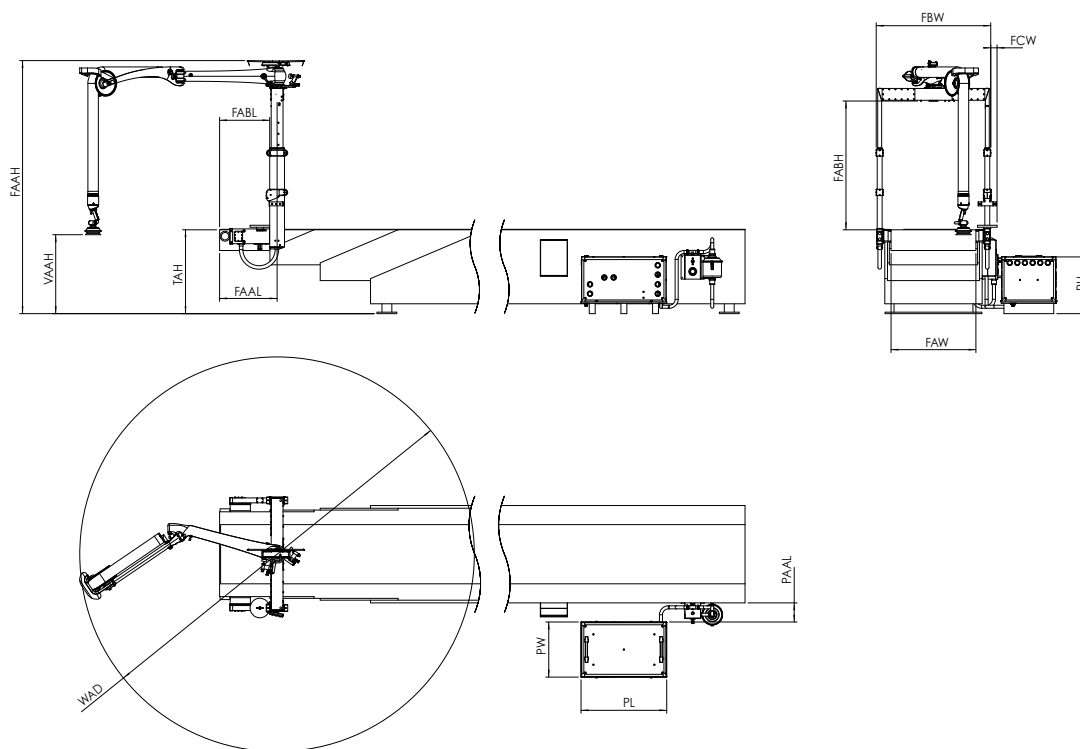
Vaculex ParceLift Crane, Frame and Lifting Unit

Recommended max load	40 kg
Safety Factor (attachment force/lifting force)	Min 2.3
Suction foot dimension*	Ø150 mm
Crane weight	8.8 kg
Lifter weight	5.8 kg
Total weight	79 kg
Sound level 1 m from control handle	54.58 dBA

Vaculex ParceLift Pump Unit

Power	2.4 kW 50 Hz/3.0 kW 60 Hz
Voltage	190-255/330-440 V at 50 Hz 190-290/330-500 V at 60 Hz
Pump Unit weight	107 kg
Sound level 1 m from Pump Unit	63 dBA

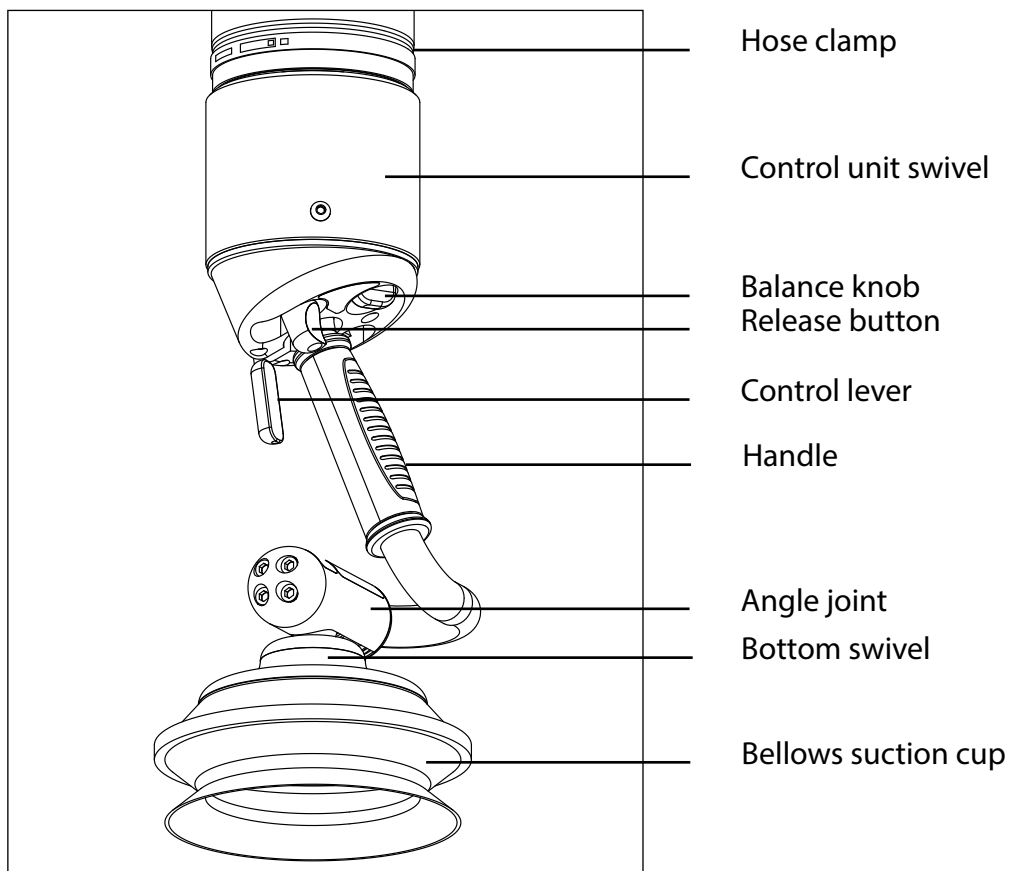
* There are several types of suction feet



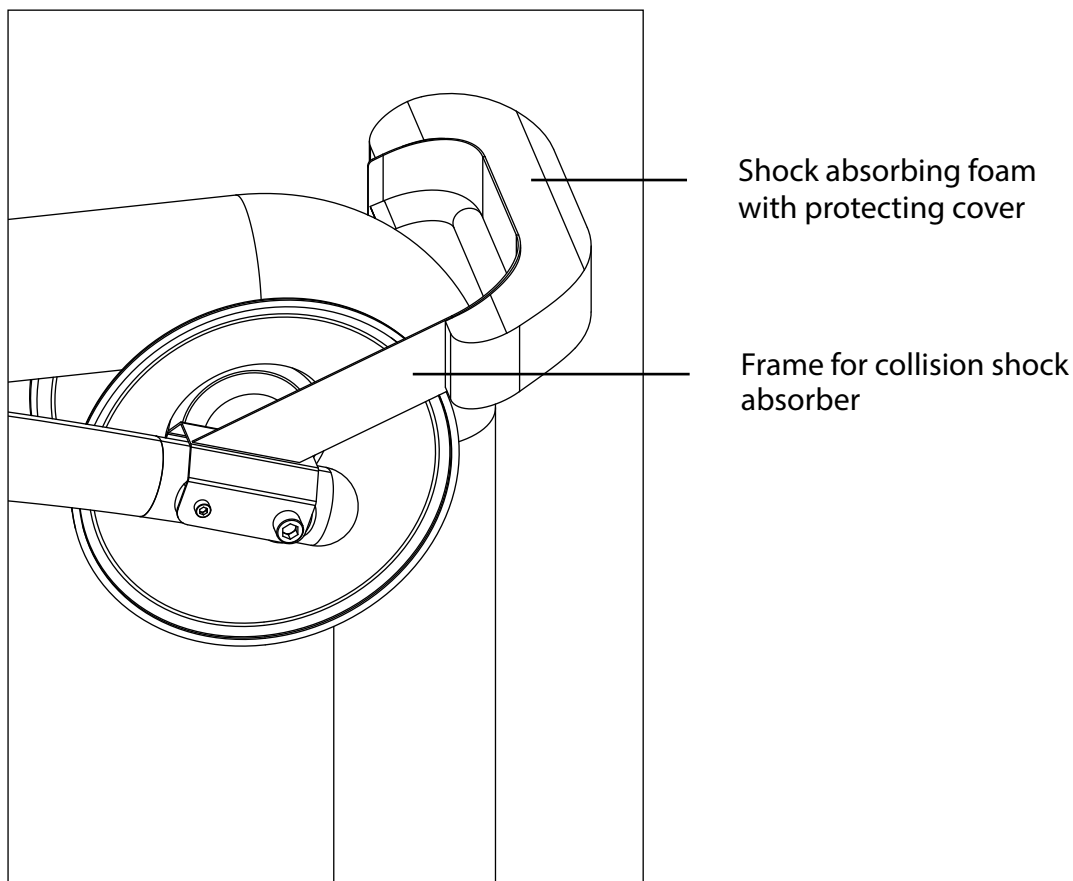
Dimension (mm)	WAD	FAW	FBW	FCW	VAAH	TAH	FAAH	FABH	FAAL	FABL	PL	PW	PH	PAAL
Model														
ACF0860 XXX-XXX-XXX	4000	860	1161	56	Max: 1860 Stroke: 1630	800	Max: 2515 Min: 2043	Max: 1308 Min: 836	601	528	879	560	575	Min: 300
ACF0906 XXX-XXX-XXX		906	1227											
ACF0950 XXX-XXX-XXX		950	1227											
ACF1060 XXX-XXX-XXX		1060	1427											
ACF1106 XXX-XXX-XXX		1106	1427											
ACF1150 XXX-XXX-XXX		1150	1427											
ACF1260 XXX-XXX-XXX		1260	1627											
ACF1306 XXX-XXX-XXX		1306	1627											
ACF1350 XXX-XXX-XXX		1350	1627											

...PRODUCT DESCRIPTION...

CONTROL UNIT

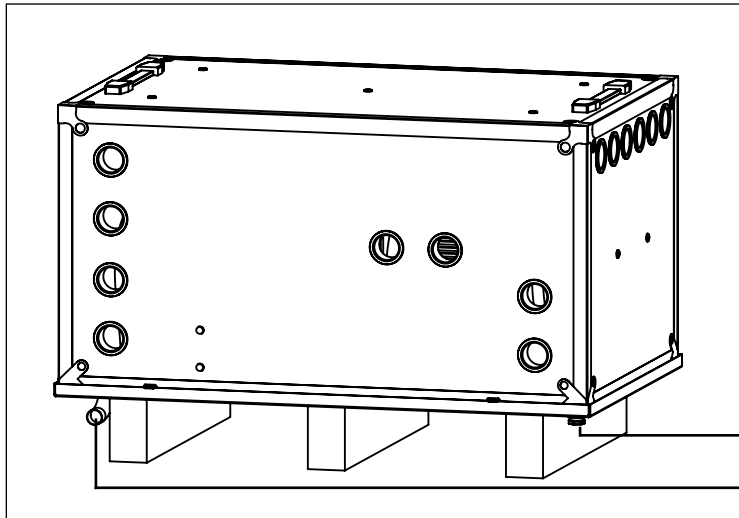


COLLISION SHOCK ABSORBER



...PRODUCT DESCRIPTION...

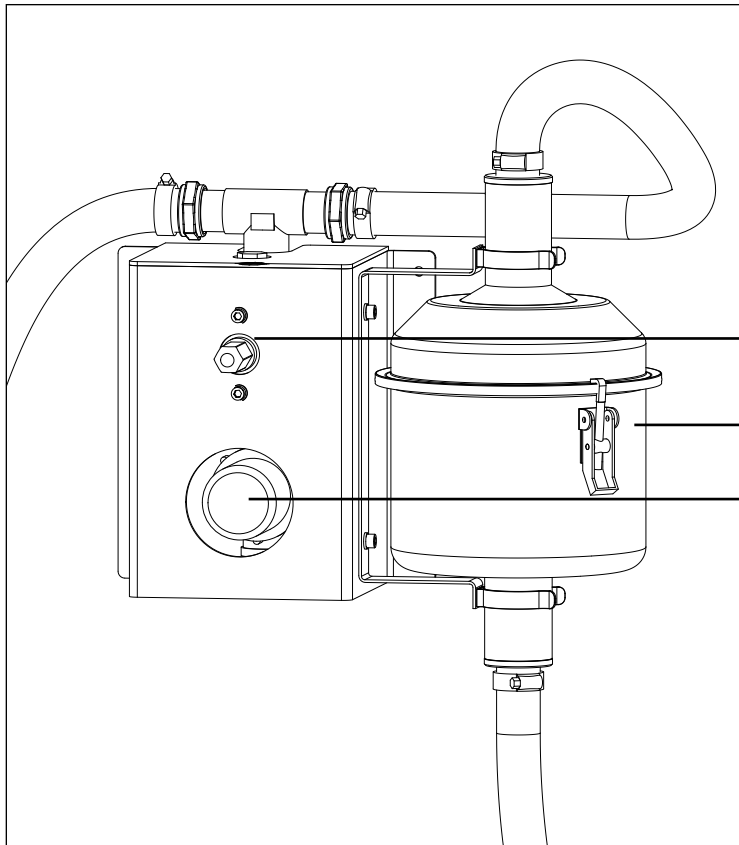
PUMP UNIT



Conduit entry

Vacuum inlet

VACUUM FILTER AND REGULATOR UNIT



Vacuum regulator

Vacuum filter

Filter for vacuum regulator

...PRODUCT DESCRIPTION...

SENSOR BOX

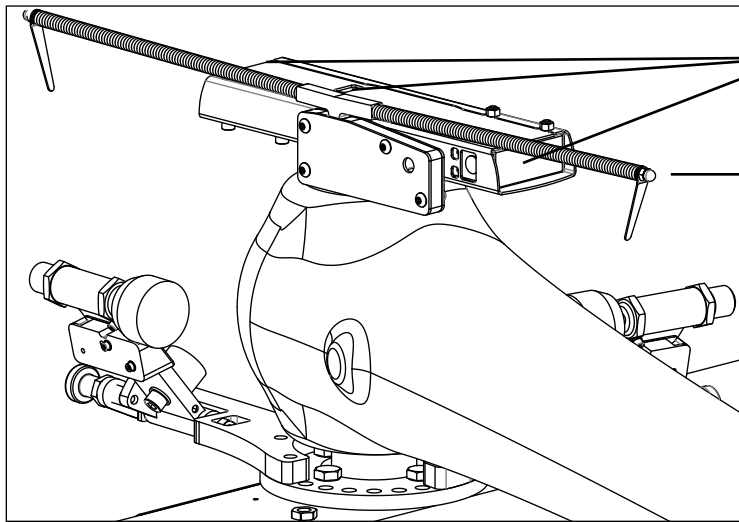
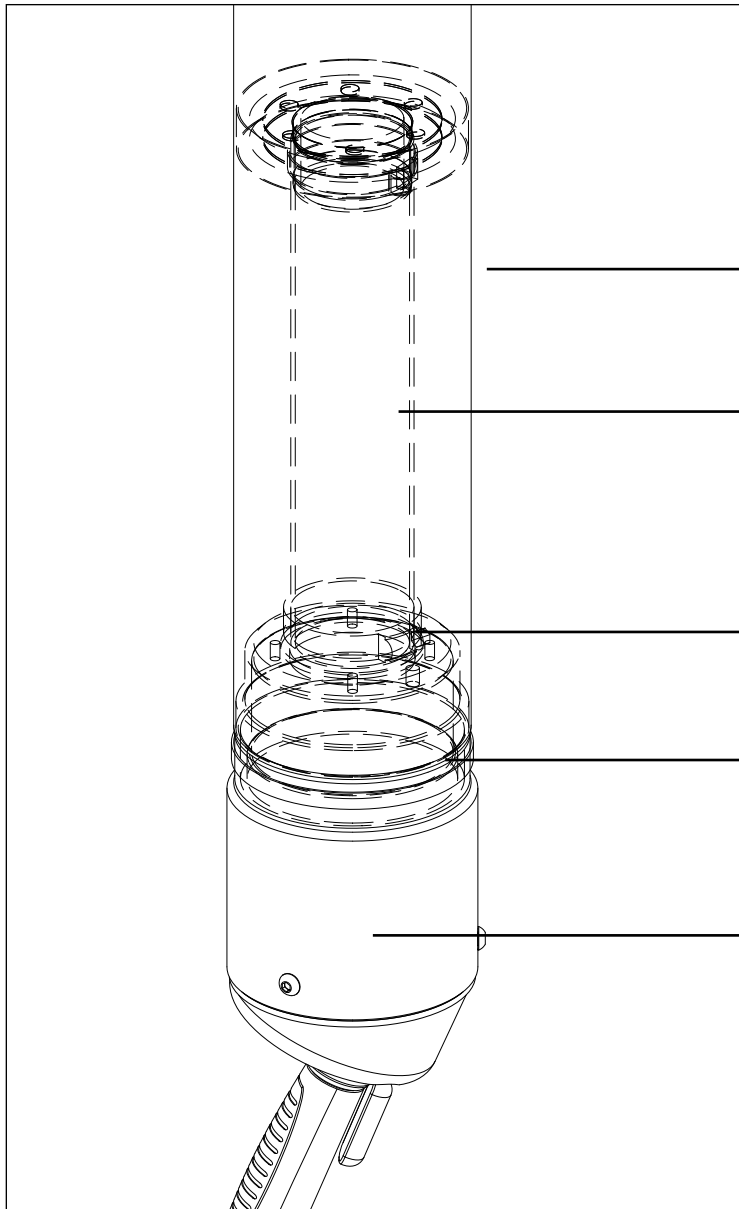


Photo cells

Sensor backup

VACUUM FILTER AND REGULATOR UNIT



Lift tube

Lift tube vacuum hose
(hidden inside lift tube)

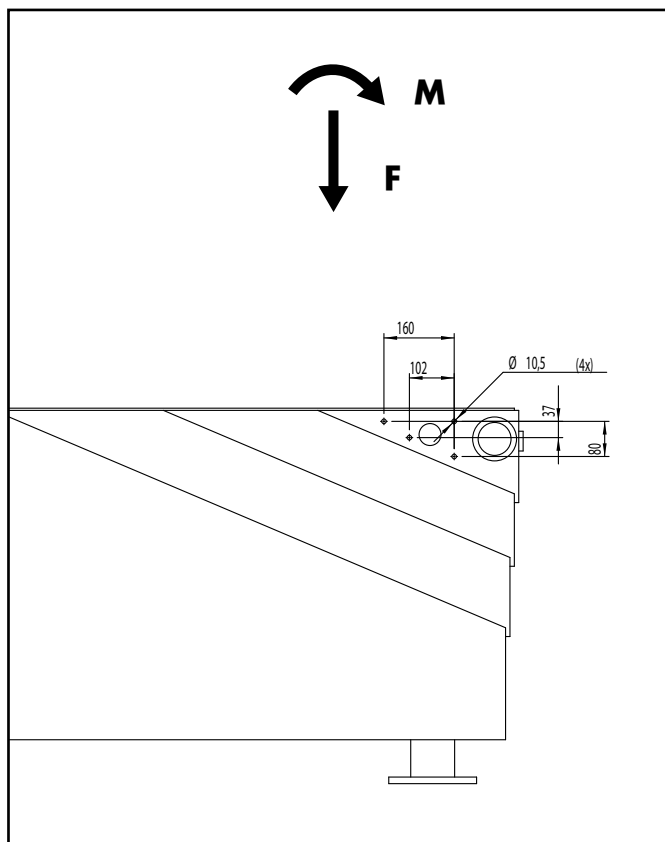
Hose clamp
(hidden inside lift tube)

Hose clamp

Control unit swivel

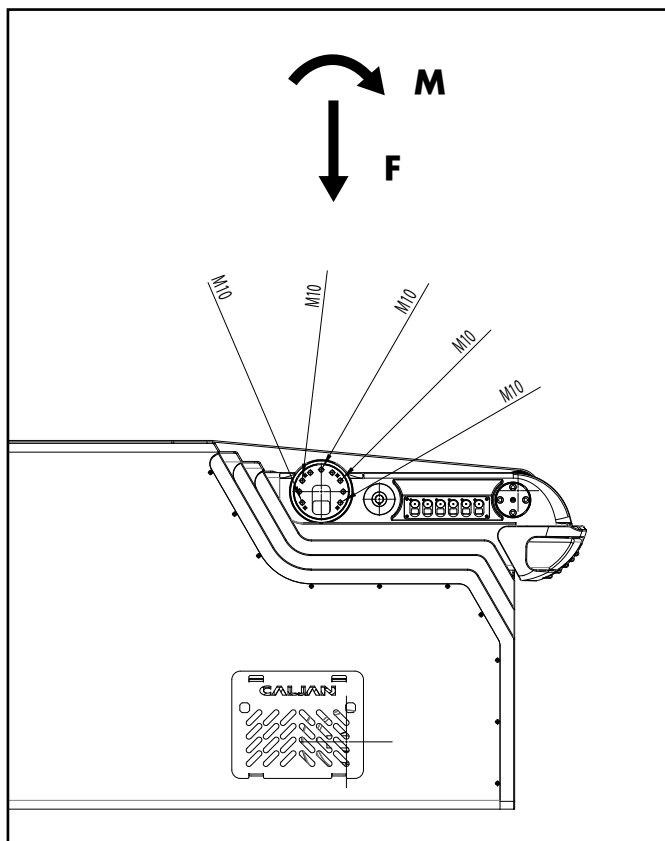
...PRODUCT DESCRIPTION

FORCES ACTING ON THE SUPPORTS



Frame configuration type A

$F = \text{Max } 1140 \text{ N}, -200 \text{ Nm} < M < 550 \text{ Nm}$

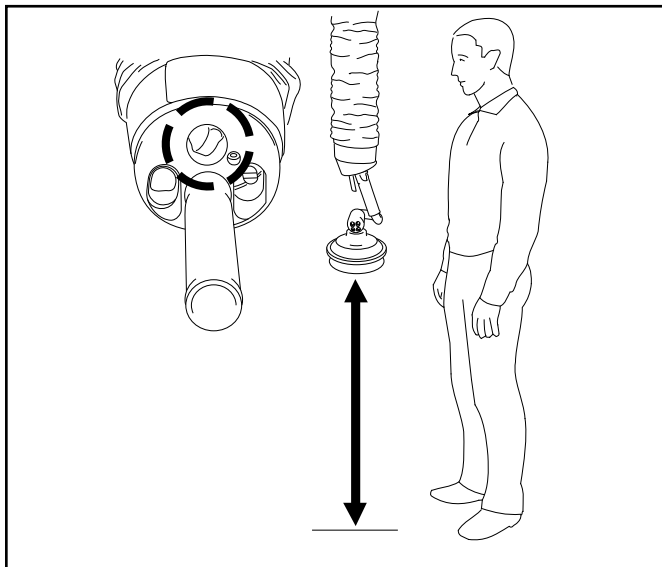


Frame configuration type B

$F = \text{max } 1170 \text{ N}, 0 \text{ Nm} < M < 550 \text{ Nm}$

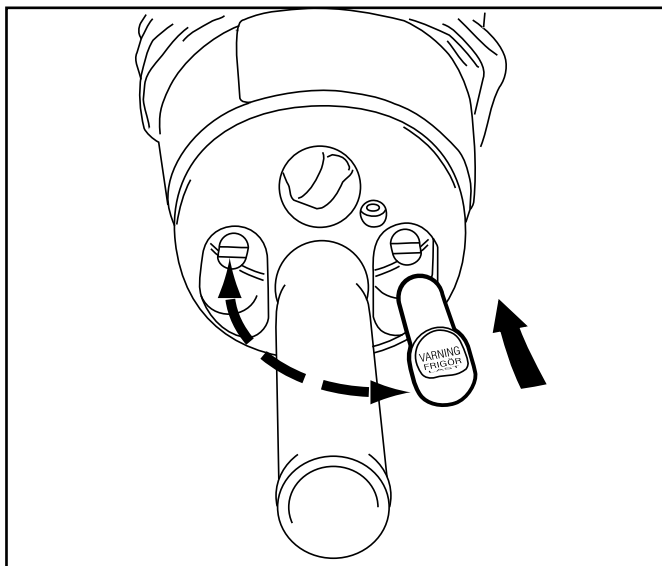
4. OPERATION

ADJUSTMENTS



Adjustment of the balancing level with no load

Balancing level with no load is adjusted with the balancing knob, please refer to the illustration.

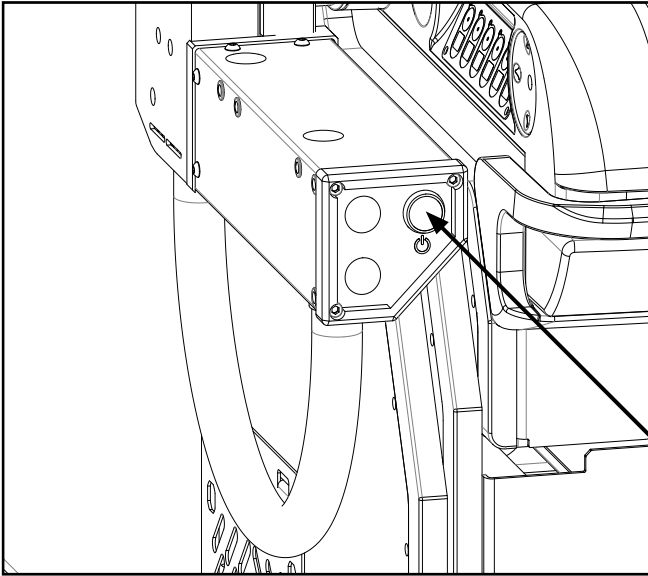


Adaptation for right handed or left handed persons

- Undo the release button from its anchorage and press it back on the right or left side of the handle.

...OPERATION...

USAGE



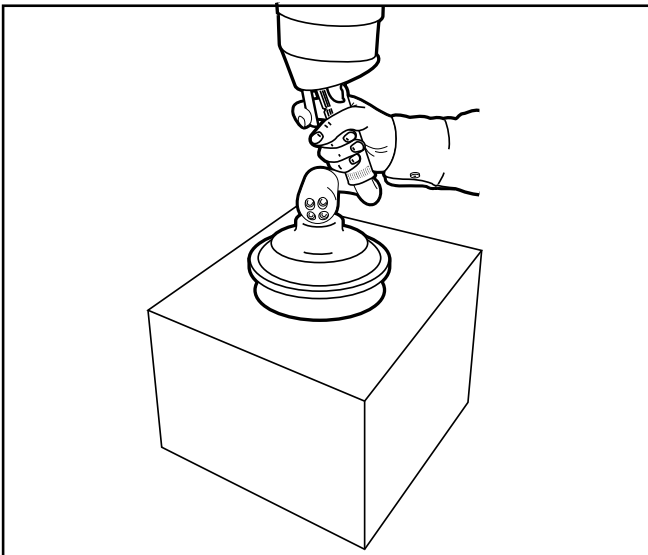
Starting of the vacuum pump

Depending on how the Parcelift™ is installed, the vacuum pump can be started in different ways. Either on a button on the frame (frame configuration B) or on a button on the electric cabinet, or if requested, automatically when extraction of the telescopic conveyor starts.

The company that made the installation of your Parcelift™ will provide detailed information for your equipment.

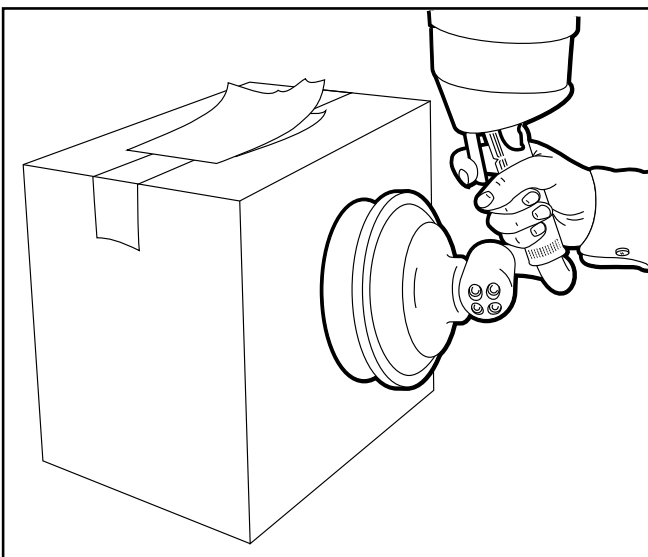
Start and stop

GRIPPING THE LOAD



Gripping the load from above

- Completely depress the operating handle, put the suction cup on the load to be lifted. Release the handle fully or partly to lift the load.

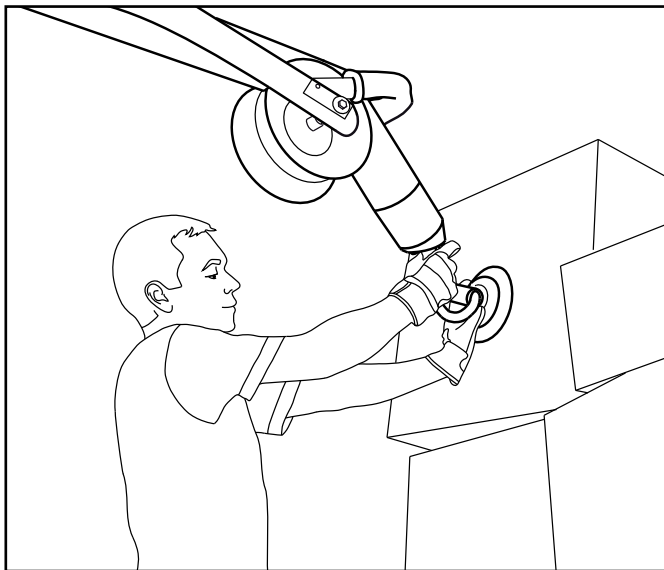


Gripping the load from the side

- Angle the suction cup forwards when the load is to be lifted from the side.
- ⚠ Do not lift on surfaces which contain loose objects. These objects could be sucked into the suction cup and make the load fall off!
- ⚠ Only lift loads which are so strong that there is no risk they could fall apart when lifted.
- ① Use the facility of lifting from the side when the top does not have a suitable, grippable surface.

... OPERATION...

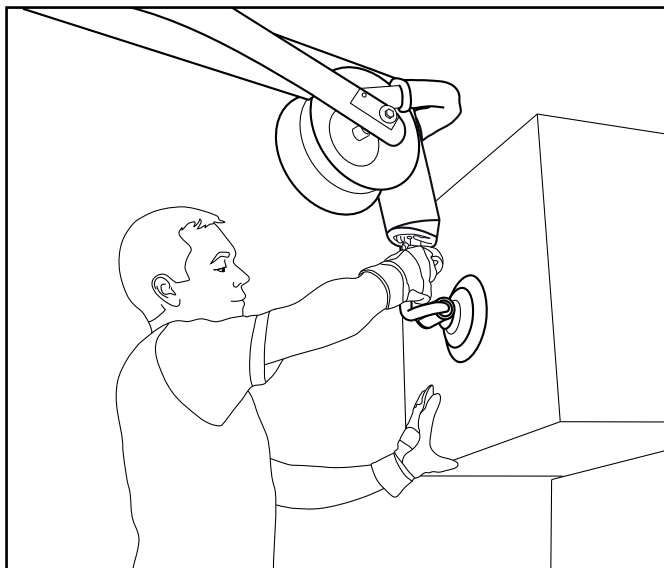
GRIPPING THE LOAD



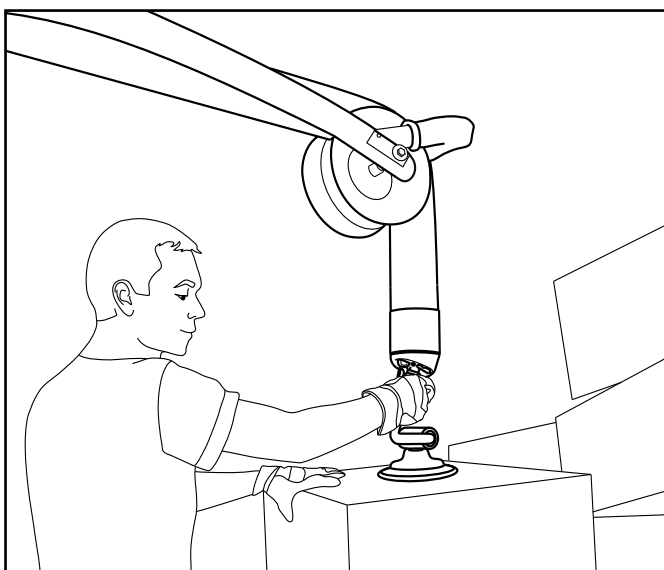
Gripping load in high places

- Angle the suction cup forwards and attach the side of the load.

⚠ Do not grip loads in high places if you are not sure that you can control the tilt with your own force, or if you are not sure that the load can be carried by the suction cup. Recommended maximum weight of load in high places is 10 kg.



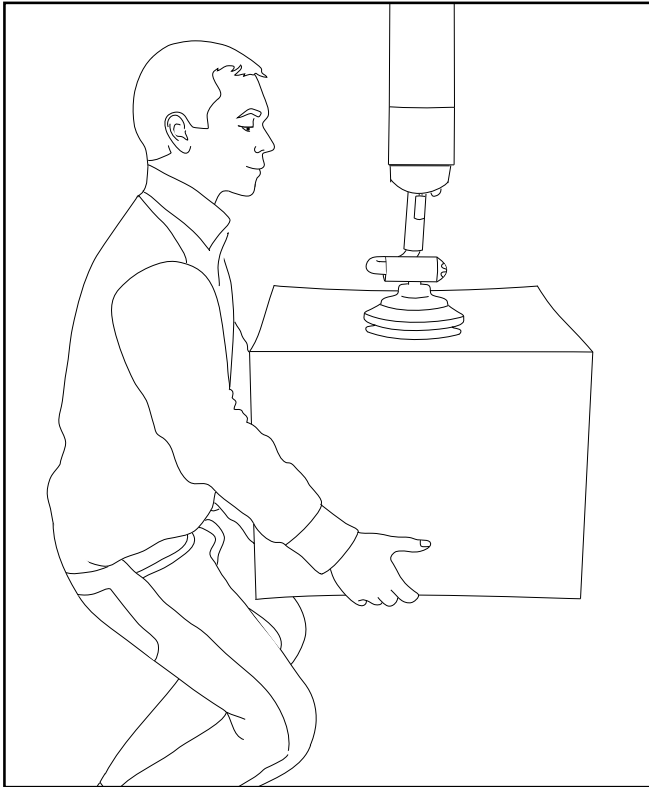
- To control the tilt of the load when pulled out, place one hand on the lower part of the load. Pull the load out.



- The load tilts and hangs freely under the suction cup.

...OPERATION...

MANUAL LIFTING OF LOADS WITH SUPPORT FROM VACULEX PARCELIFT™

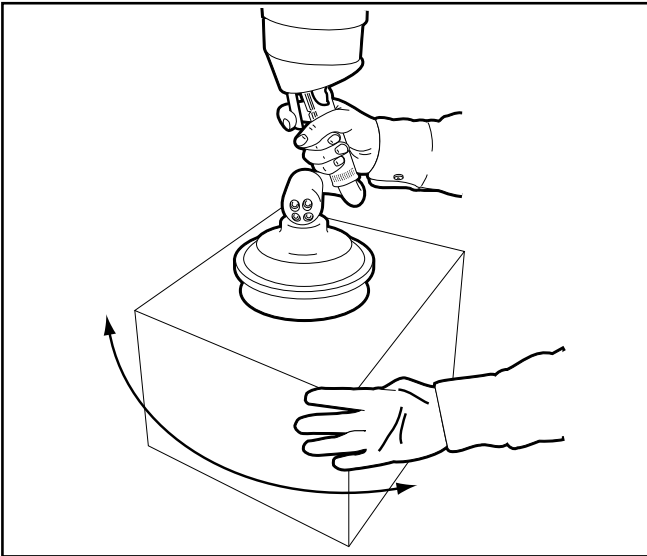


Vaculex Parcelift™ can be used to support manual lifting.

- ⚠ Never apply manual lifting force on the control unit, this might cause the load to drop suddenly. Force must be applied directly on to the load.

...OPERATION...

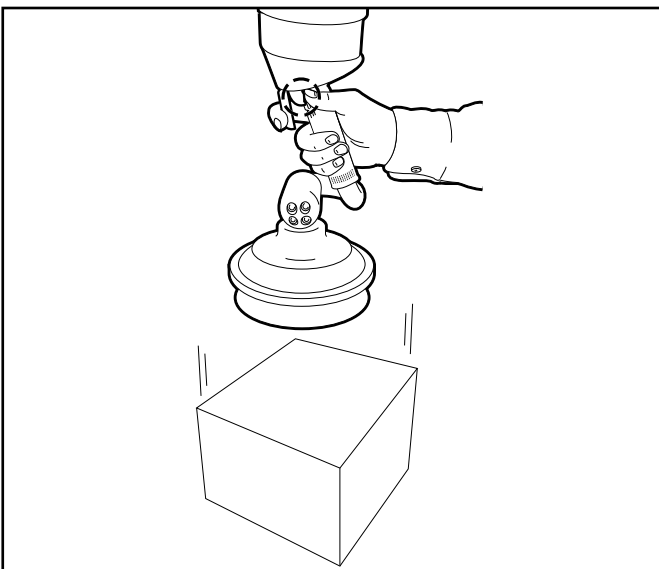
ROTATING THE LOAD



Rotate

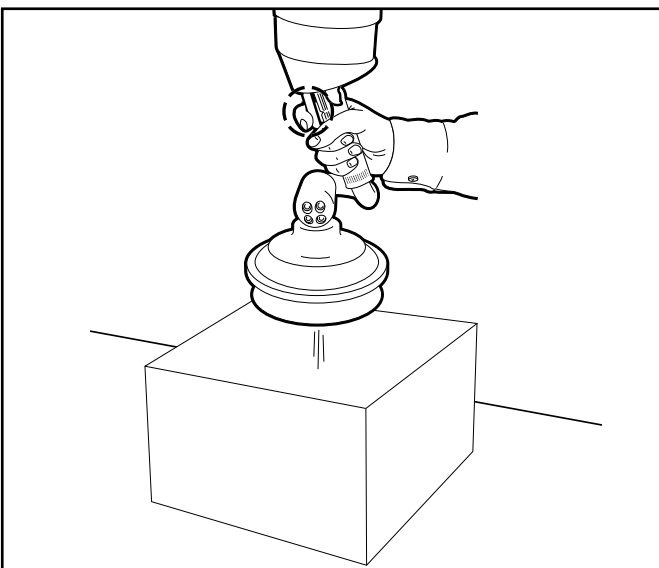
- The entire control unit with load can be rotated.
 - The load can be rotated freely even when the control unit is held stationary.
- ① The facility of rotating the load even when the control unit is held stationary can be useful when the load needs to be twisted into a confined space.

RELEASING THE LOAD



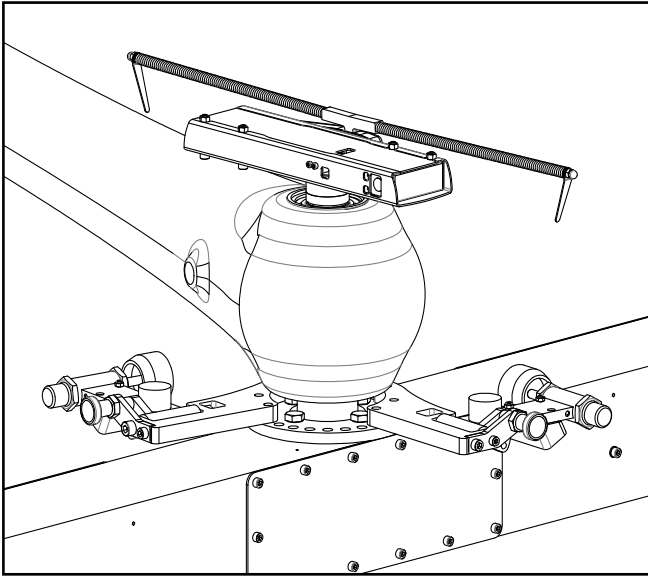
Release button

- Depress the release button and the load will be released and can fall freely.
- ⚠ Only use the release button when you have made sure that a freely falling load can not lead to personal injury.
- ⚠ Only use the release button when there is no danger that the load could be damaged by a free fall.
- ① The release button can be used when the load is to be released into a deep bin.
- ① It can be necessary to use the release button to release very light loads.



...OPERATION...

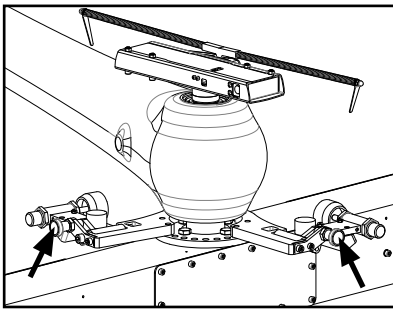
TRAVEL LIMIT



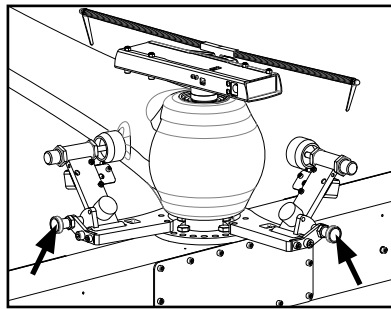
Possibility to work without travel limit on the articulated jib crane.

- Pull out the adjustment knob and angle the travel limit downwards to its lower position. Lock the travel limit by releasing the adjustment knob.

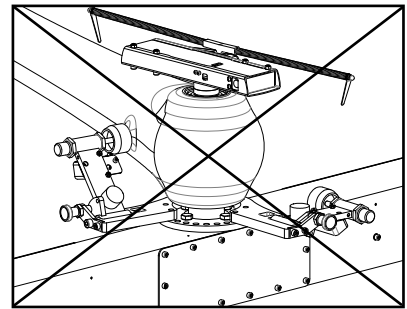
⚠ Inactivation of the travel limit is allowed only when Vaculex Parcelift™ is not used inside trucks, containers etc.



1. Lowered position
Lock position!



2. Raised position
Lock position!



3. Incorrect position!

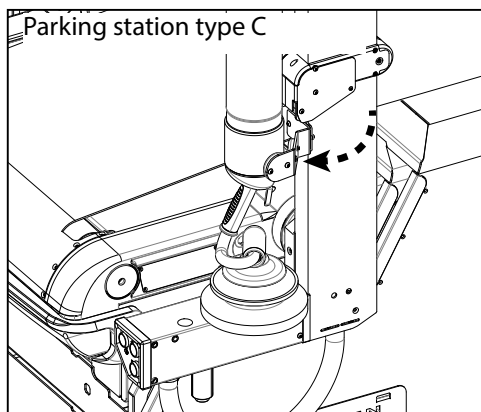
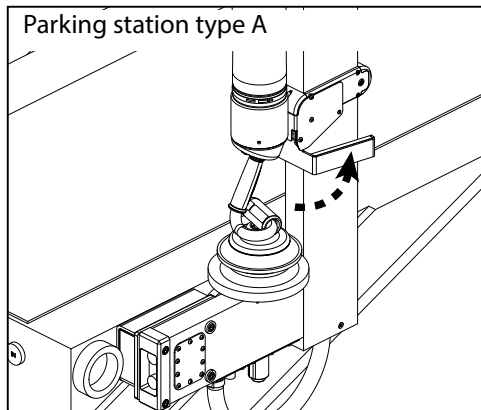
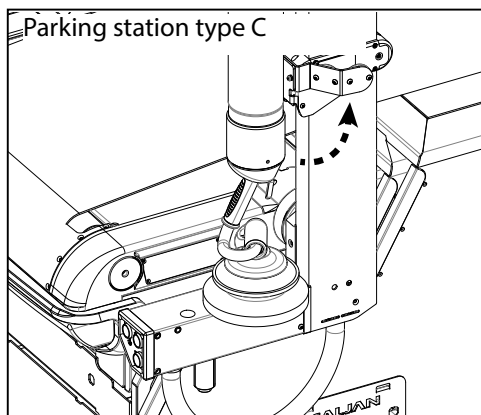
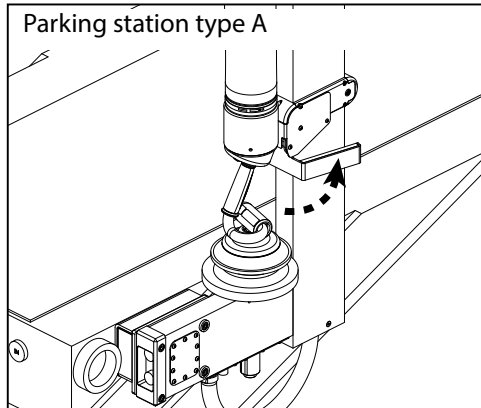


It is very important that both travel limits are set in the same position at the same time to avoid damage to the articulated jib crane.

- Lowered position (see picture) - only for work in terminal
- Raised position (see picture) - for work in container or terminal
- Incorrect position (see picture) - will cause damage to the articulated jib crane

...OPERATION...

PARKING OF THE CONTROL UNIT



Temporary parking for the control unit when Vaculex Parcelift™ is not used.

Parking of the control unit when the pump is in operation. Lower the holder if raised and place the control unit in the parking station.

⚠ The vacuum pump must be powered at all times during temporary parking of the control unit. Shutting down pump when in temporary parking may cause crane arm to make a sudden move when turning pump back on.

Permanent parking of the control unit when Vaculex Parcelift™ will not be used frequently.

Parking of the control unit when the pump is shut down or when the pump is to be shut down.

- Raise the holder and place the control unit in the parking station.

⚠ If the control unit is not placed in the parking space when not used, there is a risk of damaging the equipment.

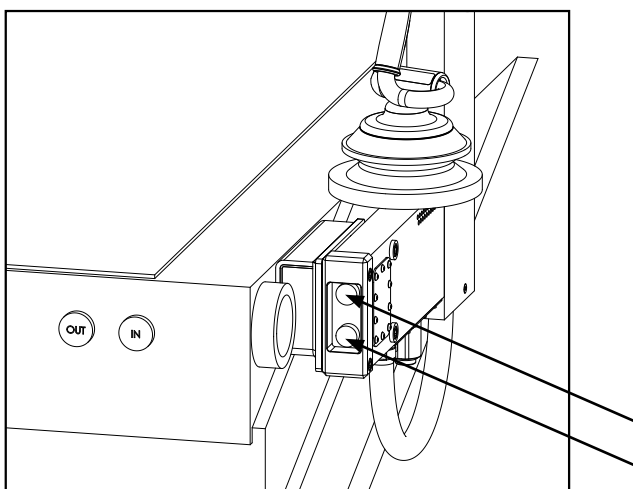
...OPERATION...

AUTOMATIC HEIGHT ADJUSTMENT

When the telescopic conveyor belt is pushed in or out of trucks, containers etc, Vaculex ParcelLift™ automatically adjusts proper working height.

The automatic height adjustment system is controlled by positioning sensors inside the telescopic conveyor along with sensors that detects ceiling heights, doors etc. Bypassing or manipulating this equipment is prohibited, this may cause serious damage to person and Vaculex ParcelLift™.

MANUAL ADJUSTING OF HEIGHT OF THE FRAME CONFIGURATION A



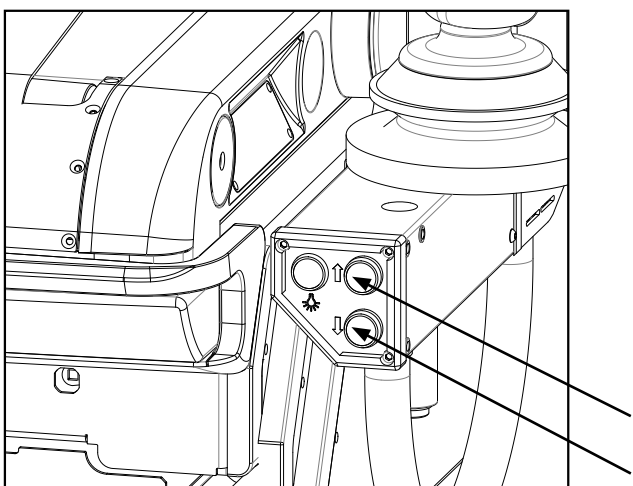
By pressing “Lower crane” or “Raise crane”, the crane can be adjusted manually. This adjustment is temporary.

The automatic height adjustment system is re-activated as soon as the telescopic conveyor is extracted or retracted.

⚠ When the crane has been lowered, there is a risk that the operator might collide with parts of the articulated jib crane if not attentive.

Raise crane
Lower crane

MANUAL ADJUSTING OF HEIGHT OF THE FRAME CONFIGURATION B



By pressing “Lower crane” or “Raise crane”, the crane can be adjusted manually. This adjustment is temporary.

The automatic height adjustment system is re-activated as soon as the telescopic conveyor is extracted or retracted.

⚠ When the crane has been lowered, there is a risk that the operator might collide with parts of the articulated jib crane if not attentive.

Raise crane
Lower crane




Circuits are electrified even in stand-by mode. Main power switch is located in control cabinet.


...OPERATION...


IMPORTANT INFORMATION

(Only valid for frame configuration type A). Corresponding information for frame configuration type B will be provided by the company that makes the installation of the Parcelift™.


 ***In case of danger press “Emergency Stop” button in the front of the conveyor or on control cabinet to cut system power.***

 In case of emergency, the frame can be manually adjusted. Detach “Hatch front left” and press the “A” button on the PLC to switch to full manual control.

 ***Pressing the “A” button will disconnect all automatic safety features and must be reset by pressing the “A” button once again before Vaculex Parcelift™ is taken back into operation.***

 Remove outer plastic plugs on top of “Upper frame”. Attach enclosed “Emergency crank” to visible shaft inside the frame. Wind the crank clockwise to lower frame, counter clockwise to raise frame.

If operator forget to open gate as the conveyor belt (hereinafter called “CB”) extracts by Parameter 2* (see page 27), Vaculex Parcelift™ will lower itself to its lowest position since it cannot find a clear passage height through the gate. To restore a high frame position, open gate, retract CB to its inner position (Parameter 1*), let the frame elevate and restart extraction of CB.

 To terminate an automatic elevation of Vaculex Parcelift™, press the “Lower crane” button. To restore system after terminated action, push “Extract” or “Retract” button or extract or retract to nearest Parameter* depending in which Zone* Vaculex Parcelift™ is present.

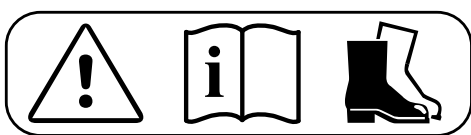
...OPERATION...

IMPORTANT INFORMATION

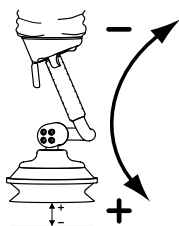
- i** If operator experience problems with Vaculex ParceLift™, contact your company's technician. For technical support, contact your distributor of Vaculex ParceLift™.

SYMBOL EXPLANATION

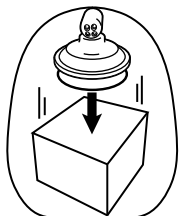
Symbols on the control unit



- Warning!
- Read the manual before operation
- Wear protective shoes



Balancing Vaculex ParceLift™ without load. See page 12 for more information.



Release the load before reaching solid support.

...OPERATION

EXTRACTING CB

Parameter 1: CB inner position

Zone A: Manual up and down elevation possible

Parameter 2: Front photo cell sensor signal read to PLC, CB stops and extraction is locked. VPL lowers to clear passage height; when clear passage height is reached CB extraction is unlocked
Automatic and manual up elevation is locked

Zone B: Manual down elevation possible only, once frame is lowered telescope to parameter 2 or 3 to raise frame

Parameter 3: Automatic and manual up elevation is unlocked

Zone C: Automatic adjustment to highest possible elevation using top photo cell sensor when releasing extraction control
Manual up and down elevation possible

Parameter 4: Automatic and manual up elevation is locked

Zone D: Manual down elevation possible only, once frame is lowered telescope to parameter 4 or 5 to raise frame

Parameter 5: Automatic and manual up elevation is unlocked

Zone E: Automatic adjustment to highest possible elevation using top photo cell sensor when releasing extraction control
Manual up and down elevation possible

Parameter 6: Spare parameter

RETRACTING CB

Parameter 6: Spare parameter

Zone E: Automatic adjustment to highest possible elevation using top photo cell sensor when releasing retraction control
Manual up and down elevation possible

Parameter 5: The PLC get signal to lower frame for a preset time interval without stopping CB retraction
Automatic and manual up elevation is locked

Zone D: Automatic lowering for a preset time interval, will complete even if retraction is aborted
Manual down elevation possible only, once frame is lowered telescope to parameter 4 or 5 to raise frame

Parameter 4: Automatic and manual up elevation is unlocked

Zone C: Automatic adjustment to highest possible elevation using top photo cell sensor when releasing extraction control
Manual up and down elevation possible

Parameter 3: Rear photo cell sensor signal read to PLC, CB stops and retraction is locked, VPL lowers to clear passage height; when clear passage height is reached CB retraction is unlocked
Automatic and manual up elevation is locked

Zone B: Automatic adjustment to clear passage height using rear photo cell sensor when retracting CB; when obstacle is detected CB stops and retraction is locked, when clear passage height is reached CB retraction is unlocked
Manual down elevation possible only

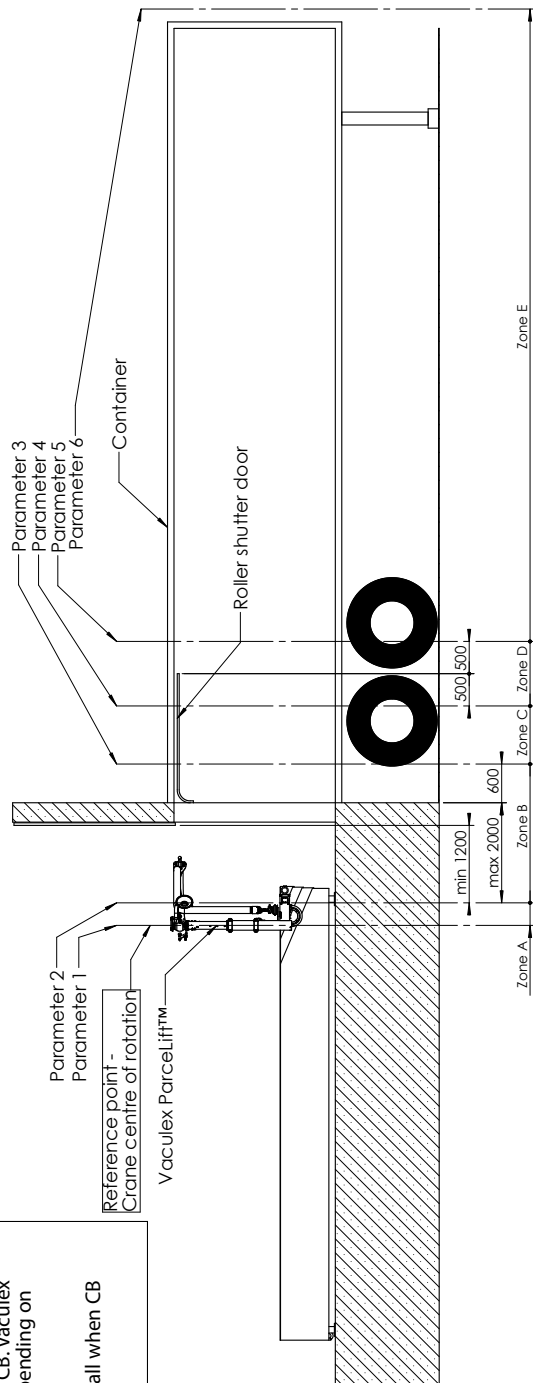
Parameter 2: Releases lock for manual elevation up

Zone A: Manual up and down elevation possible

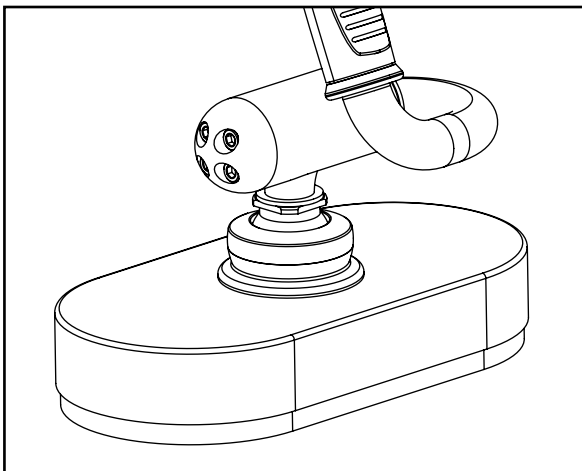
Parameter 1: CB inner position, VPL automatically elevates to top position when reaching parameter 1

⚠ Automatic safety features do not correspond to the above in case of activated front collision protection on CB. Vaculex ParcelLift™ will take adequate safety actions depending on the situation.

⚠ Automatic safety features do not correspond at all when CB is extracted from the control cabinet.

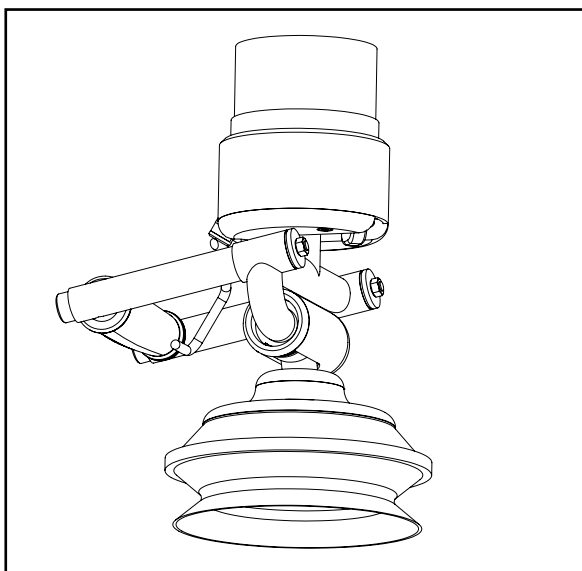


6. OPTIONAL EQUIPMENT



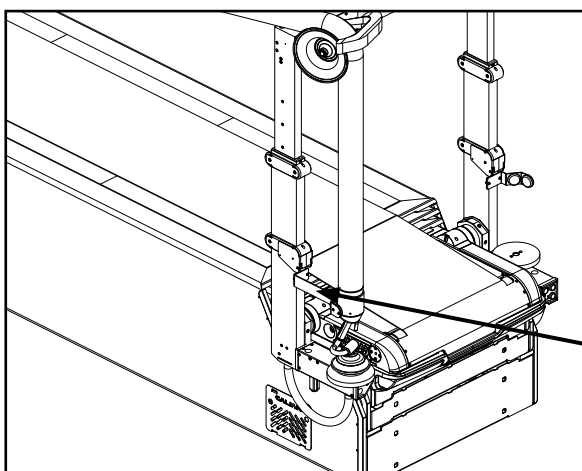
Suction foot 100325 for handling of sacks and baggage

The ParcelLift can optionally be equipped with a suction foot suitable for handling sacks and most types of baggage including bags and backpacks.



Control unit TPH-LB

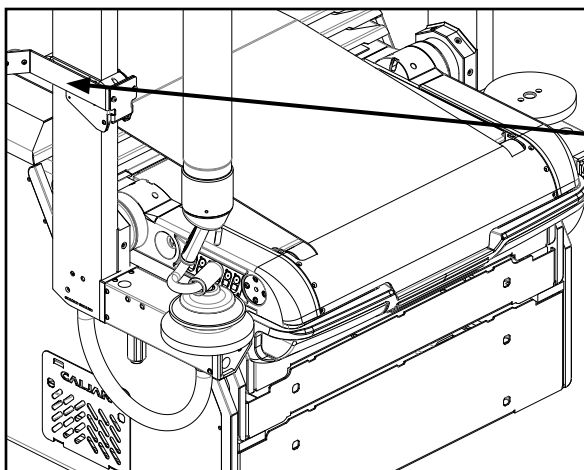
In cases where the standard TPH lift unit is not possible to use due to space limitations a low built version TPH-LB is available. The TPH-LB adds 150 mm lifting height compared to the standard TPH.



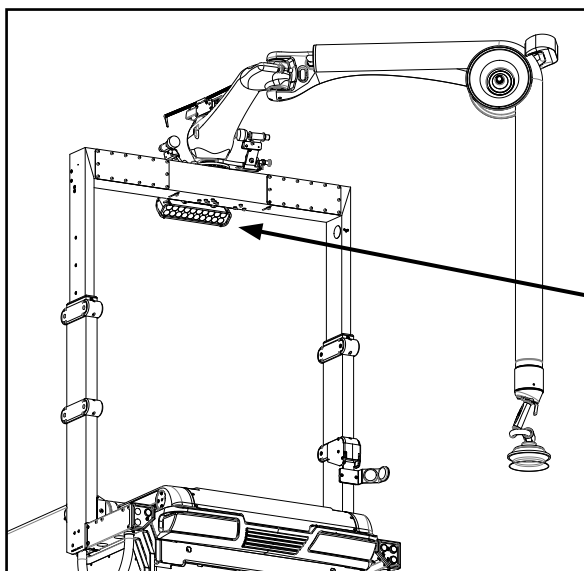
Optional second parking station

An optional second parking station can be used to minimize the space needed between the telescopic conveyor and the loading dock door when the telescopic conveyor is fully retracted.

...OPTIONAL EQUIPMENT...



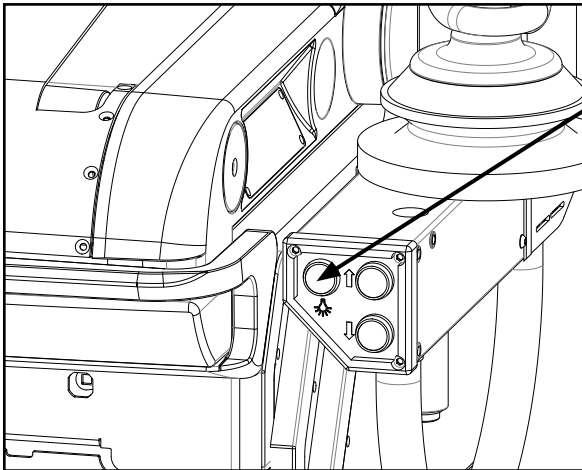
The parking holder can be folded away to not influence on the working space.



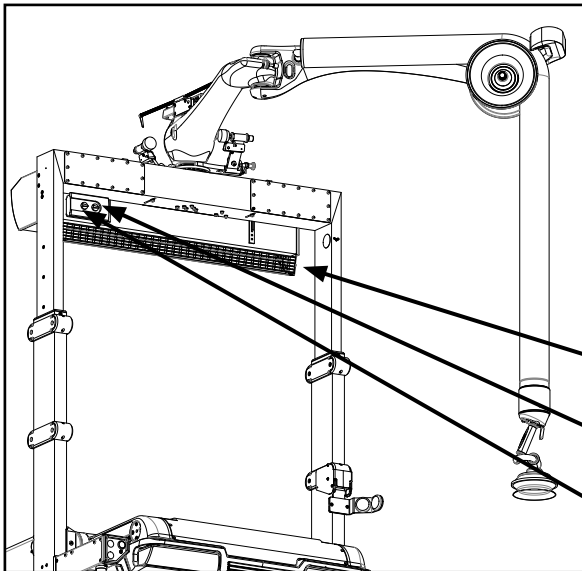
Lighting

The Parcelift™ can be equipped with optional lighting to improve the working environment. The lighting emits 3600 Lumen. The ingress protection rating of the lighting is IP 67.

...OPTIONAL EQUIPMENT



Lighting on/off switch



Heater

The ParcelLift™ can optionally be equipped with a heater. The heater can be set to 3 different fan speeds and 3 different levels of heating including only fan with no heat. Maximum power is 9.1 kW.



Heater

Fan speed

Heat level

7. MAINTENANCE

The maintenance instructions must be observed if the equipment is to function safely and not impair the lifting ability. If any fault is discovered in the equipment, this must be attended to at once before the Vaculex ParcelLift™ is taken into operation again.

-  Main power must be switched off during service work.
-  Only use Vaculex ParcelLift™ original spare parts during maintenance and repair work.

Component/ System	Action	Frequency				Note
		Daily	Weekly	Every 3 months	Yearly	
Vacuum filter	Inspect. If clogged, clean with compressed air. Change filter if damaged or not possible to clean.	x	x	x	x	Daily, only in very dusty and dirty environments
Non return valve	Test function. Follow instruction "Test run non return valve". Contact your distributor if the non return valve is not working.		x	x	x	
Bellows suction cup	Inspect. Change bellows suction cup if damaged or worn out.		x	x	x	
Support wheel	Inspect. Change support wheel if damaged or worn out.		x	x	x	
Lift tube	Inspect. Change lift tube if damaged or worn out.		x	x	x	
Collision shock absorber	Inspect. Change collision shock absorber and protection cover if worn out.		x	x	x	
Hydraulic shock absorber	Test functionality. Change hydraulic shock absorber if the ability to absorb shock is poor or the absorbers are damaged.			x	x	
Photo cells	Clean photo cell lenses.		x	x	x	
Articulated jib crane	Inspect. Contact your distributor if the articulated jib crane is damaged.			x	x	
Frame	Inspect frame and also perform a simple test by applying a down force by hand on the outer ends on top of the "Upper frame". If frame is damaged or you experience a non-rigidity in the test, contact your distributor.			x	x	
Vacuum hose	Inspect. Listen for leakage and check that the vacuum hose is not pinched. Change vacuum hose if damaged.			x	x	
Cable hose	Inspect. Contact your distributor if the cable hose is damaged.			x	x	
Vacuum regulator filter	Clean filter with compressed air from the inside. Change filter if damaged.			x	x	
Synchronous drive belts	Inspect. Contact your distributor if the synchronous drive belts are damaged.				x	
Vacuum pump - Vanes	Inspect. Follow instruction "Vacuum pump maintenance", change vanes if the width is less than 26 mm.					Every 3000 operating hour
Vacuum pump - Outlet filter	Inspect. Follow instruction "Vacuum pump maintenance", change outlet filter if damaged.					Every 3000 operating hour
Vacuum pump - Inlet filter	Inspect. Follow instruction "Vacuum pump maintenance", change inlet filter if damaged.					Every 3000 operating hour
Automation	Perform a full cycle test, compare with sheet for Parameters and Zones				x	
Vacuum system	Perform a test lift with a 40 kg air-tight load				x	

...MAINTENANCE...

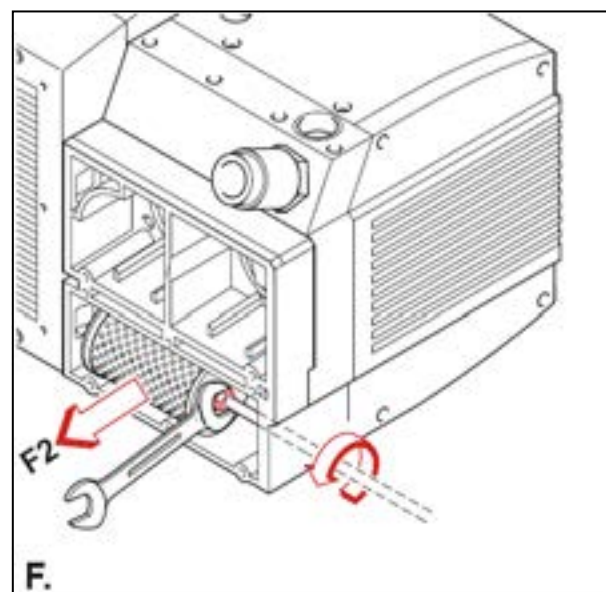
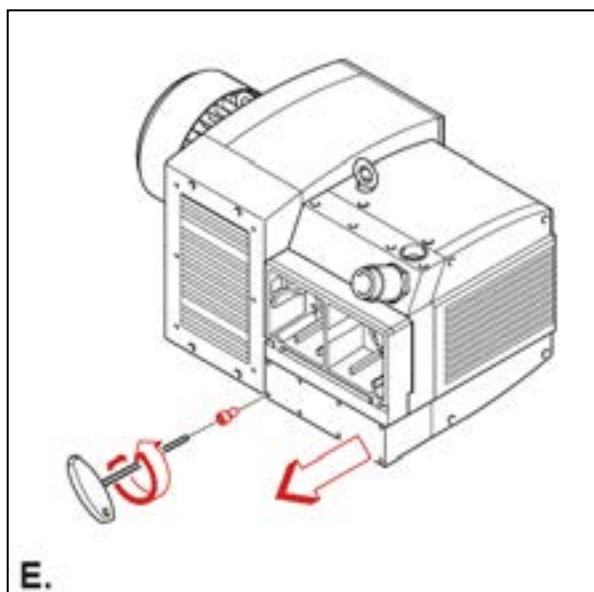
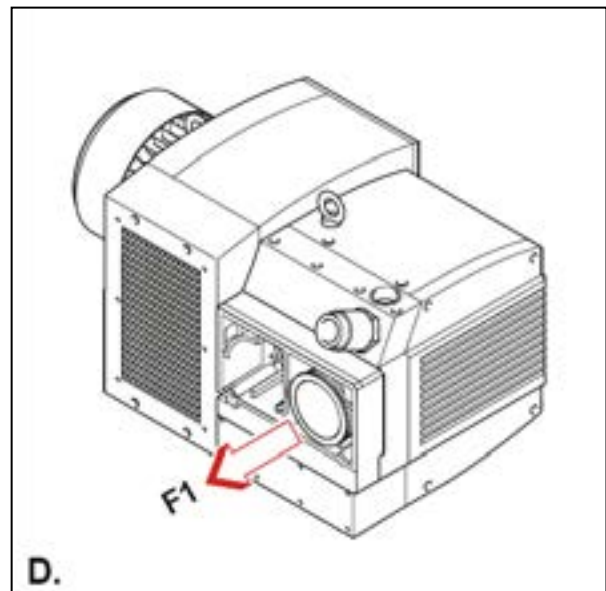
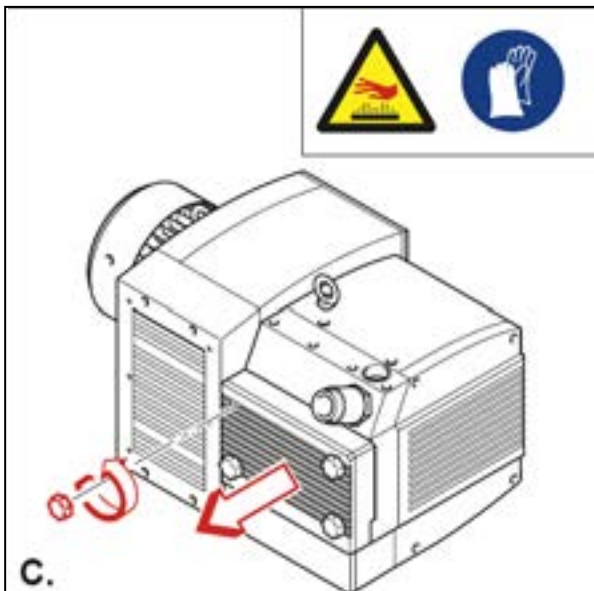
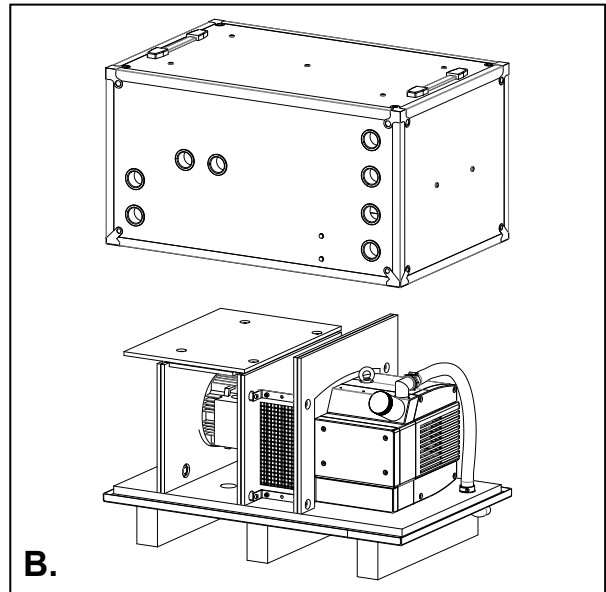
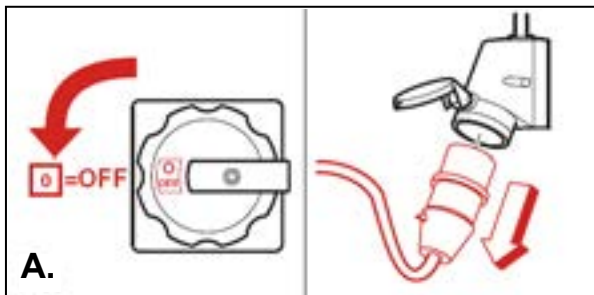
Test of non return valve

- Test to see that a power failure does not lead to a rapidly sinking load.
 - Start the vacuum pump.
 - Lift a load with a fully air-tight surface, weighing about 5 kg, and leave it hanging.
 - Switch off the vacuum pump. The load should now sink to the floor.

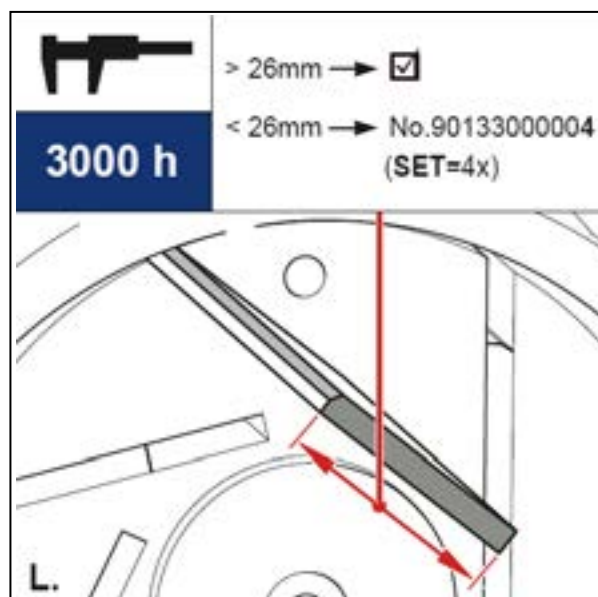
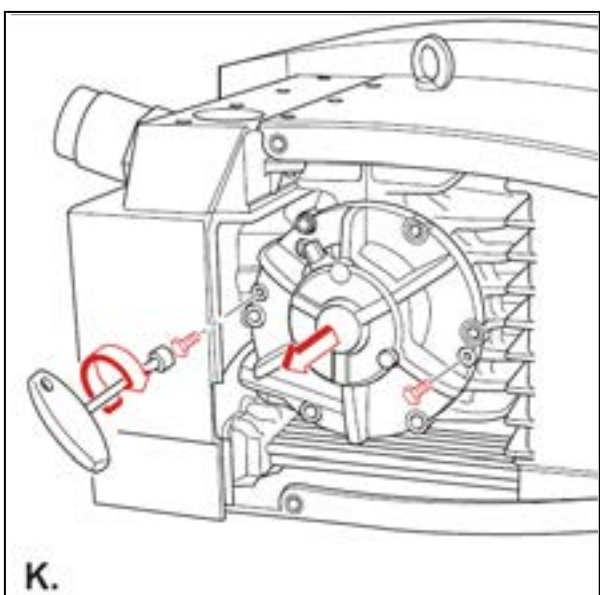
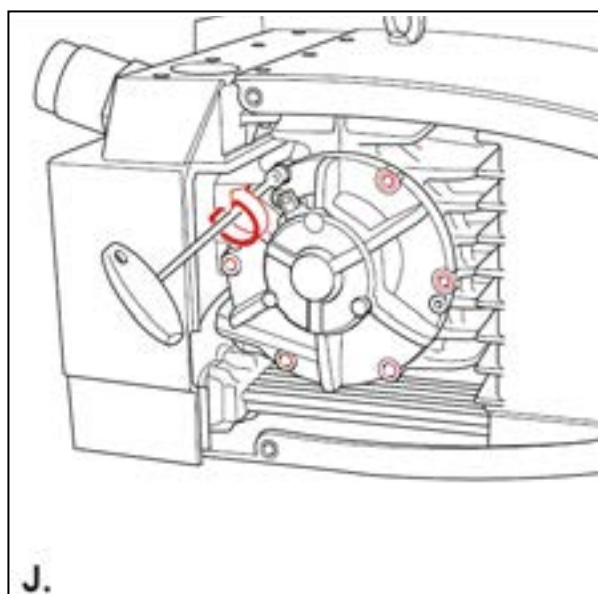
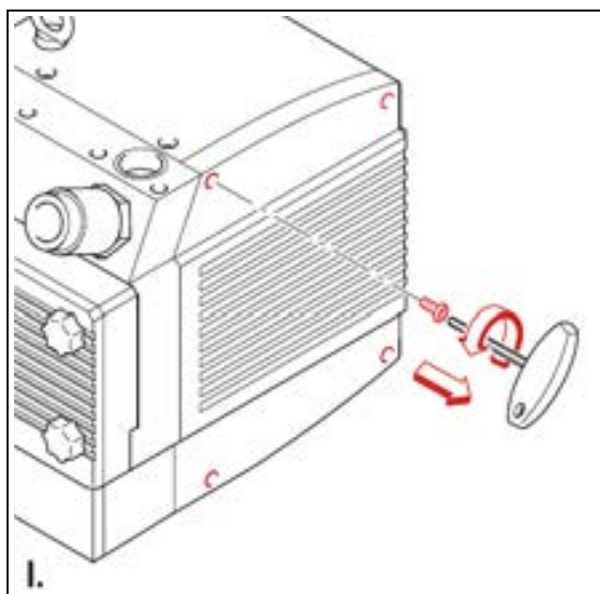
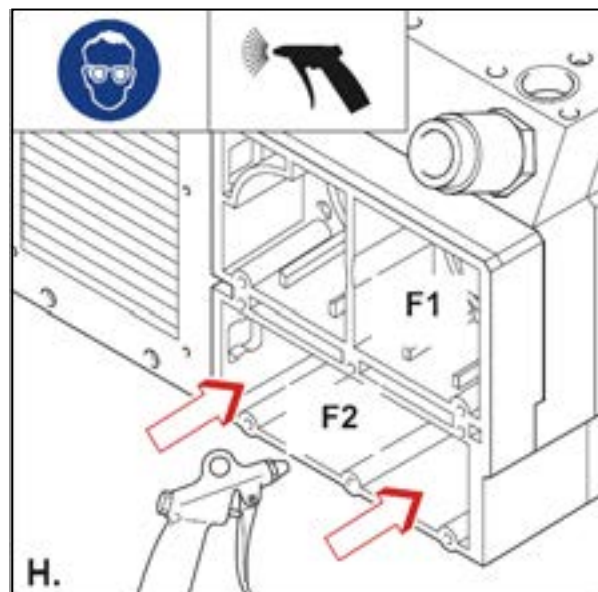
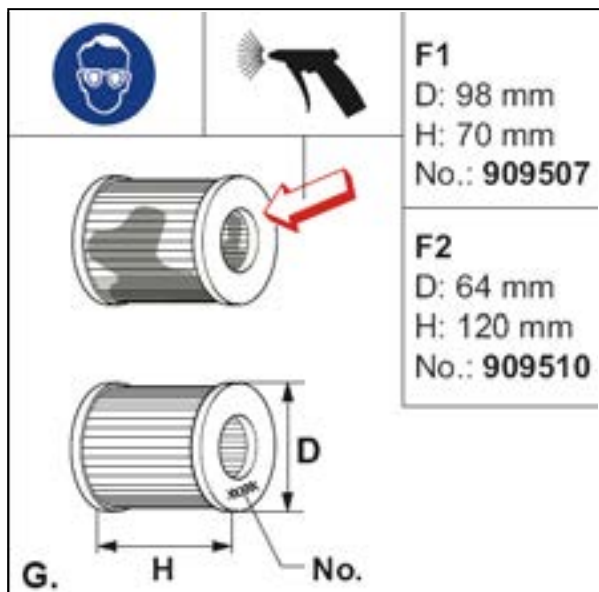
If the load sinks rapidly, the Vaculex ParcelLift™ must not be used until the fault has been rectified. Contact your distributor.

...MAINTENANCE OF VACUUM PUMP...

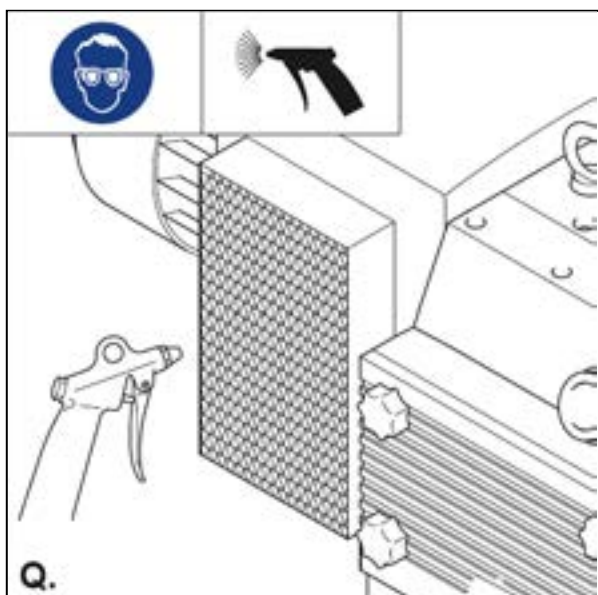
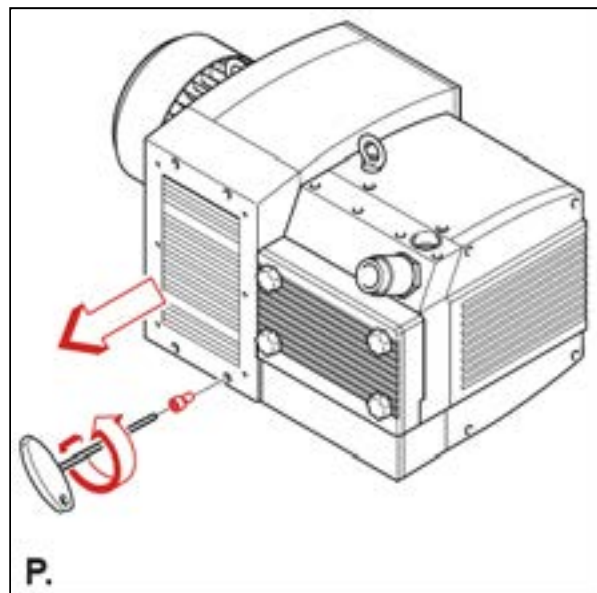
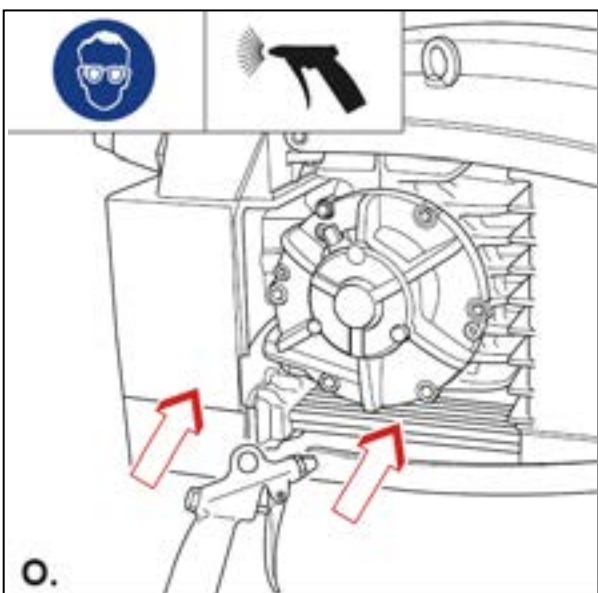
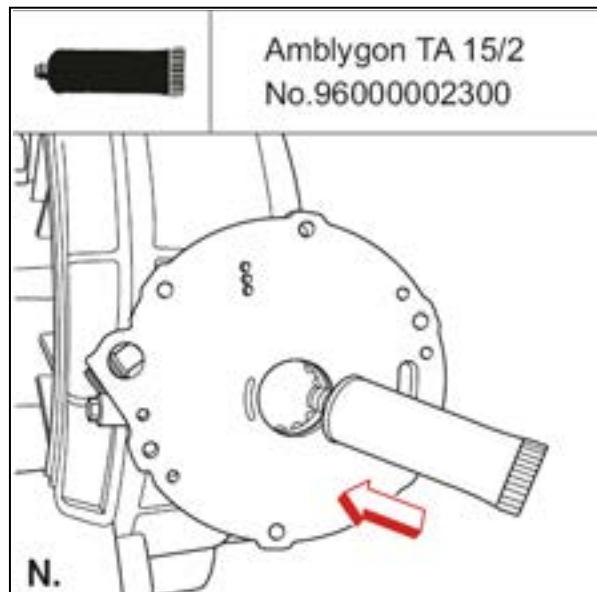
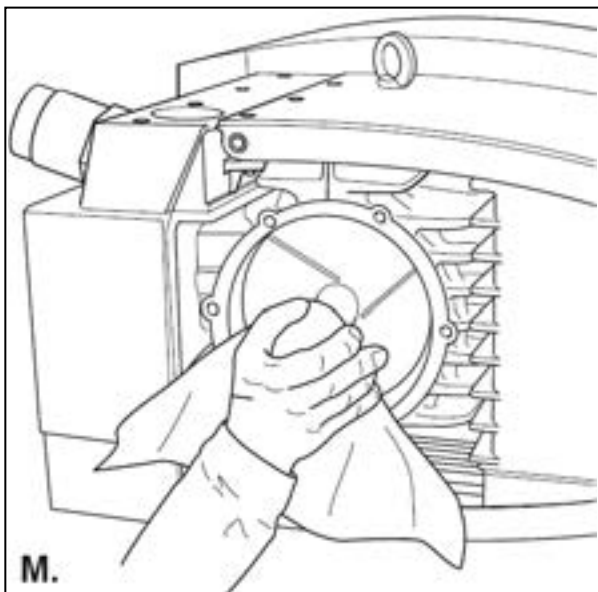
Maintenance of vacuum pump



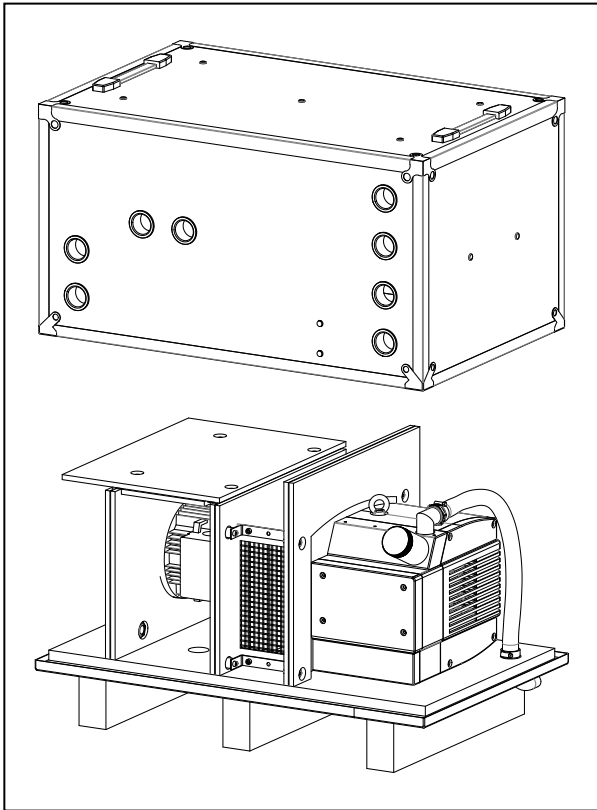
...MAINTENANCE OF VACUUM PUMP...



...MAINTENANCE OF VACUUM PUMP...



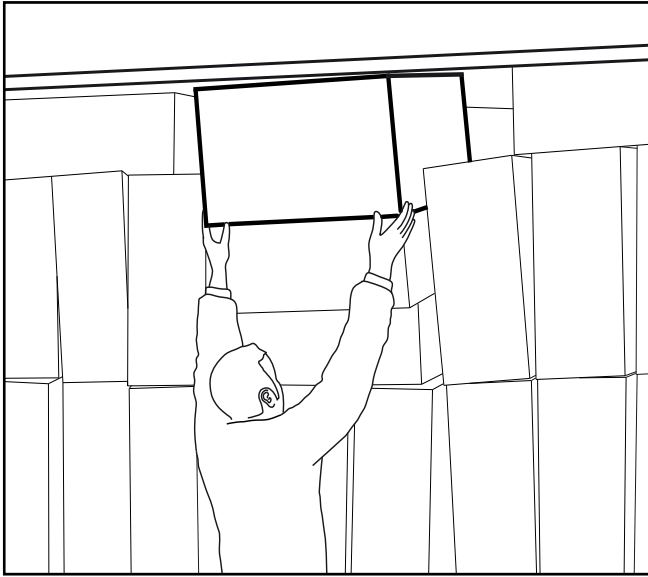
...MAINTENANCE OF VACUUM PUMP



⚠ The interior of the vacuum pump must be positioned correctly. Missing, faulty positioned or damaged interior will rapidly destroy the vacuum pump.

8. TROUBLESHOOTING

IF TRUCK IS FULLY LOADED



Enabling photo cell sensor to detect container opening


- Make free space by removing top middle parcel. This will enable the front photo cell to detect the container opening.

The load is not lifted or is lifted more slowly than normal





- 👁 Is the air filter clogged?
 - 🔧 Shake the filter off and clean it with compressed air. Change the filter if damaged.
- 👁 Is the filter unit lid correctly installed?
 - 🔧 Tension the lid correctly.
- 👁 Is there any leakage in the installation? Attach the suction cup to an air-tight, flat board. Listen for leakage along the vacuum hose, couplings, air filter, top swivel, lift tube, control unit and suction cup.
 - 🔧 Seal leaks or change components which leak.
- 👁 Is there any rubbish inside the suction cup?
 - 🔧 Remove the rubbish out of the suction cup.
- 👁 Is the vacuum hose pinched anywhere?
 - 🔧 Seal the leakages or change the vacuum hose.
- 👁 Do the test to see if a power cut makes the load sink rapidly.
(Please refer to "Test run the non return valve")

If nothing of the above solved the problem, contact your distributor.


...TROUBLESHOOTING...

-  If the load is not lifted, this could be because no vacuum is generated in the lift tube and/or suction foot. The reason for this is commonly leakage in the load or the lifting unit.

The load is lifted very slowly at first, but the speed increases as the lift height increases




-  Leakage in the lift tube
-  Change the lift tube.
-  Leakage in the vacuum hose?
-  Seal the leakages or change the vacuum hose.

The load is not lowered slowly during the power cut test





-  Please refer to "Test run of non return valve".

Contact your distributor.

It is not possible to set the balancing level without load to its desired position

-  Unscrew the control unit from the control unit swivel.
-  Check that no rubbish has got stuck in the balance valve.
-  Remove the rubbish.

The vacuum pump does not start




-  Check if the motor shield is active or if a fuse has blown.
-  Contact the person responsible for your electrical installation or your distributor.
-  Check if the vanes in the pump are damaged.
-  Contact the person responsible for your electrical installation or your distributor.

...TROUBLESHOOTING





Bad noise in the vacuum pump

Contact your distributor.





The vacuum pump becomes unusually warm

-  Check that no parts in the interior of the sound reduction box are missing or damaged.
-  Replace damaged parts or assemble parts.
-  Check that the ventilation outlets on the sound reduction box are not covered and that there is 30 cm of free space around the box.

The frame is not adjusted automatically

-  Are the photocell lenses clogged?
-  Clean the photocell lenses.
-  Is there voltage feed in the control system?
-  Dismount the left front service hatch and check that the text "Automatic" is lit on the PLCs display. If the text "Automatic" is not lit, contact an electrician for providing voltage feed to the equipment.

The telescopic conveyor does not extract or retract as described on page 27 in chapter 5, Operation

-  Is the sensor backup actuated?
-  Use the buttons for manual height adjustment on the ParcelLift™ and the buttons/joystick for extract/retract on the telescopic conveyor to make the frame move away from the obstacle that actuates the sensor backup.
-  Are any of the travel limits actuated?
-  Move the crane arm away from the travel limits.

If nothing of the above solved the problem, contact your distributor.

9. REMARKS

Serial numbers for this unit:

Vacuumlifter: _____

Frame and jib crane: _____

Vacuumpump: _____

Serial-/Project number telescopic conveyor: _____

PLC Program

<i>Program name</i>	<i>Revision</i>	<i>Date</i>	<i>Name</i>

PLC Parameters set

<i>Issue</i>	<i>0</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>
Parameter 1						
Parameter 2						
Parameter 3						
Parameter 4						
Parameter 5						
Parameter 6						
Date						
Name						

...REMARKS

Other remarks:[illegible]

Authorized distributor:

BARNES & ASSOCIATES
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