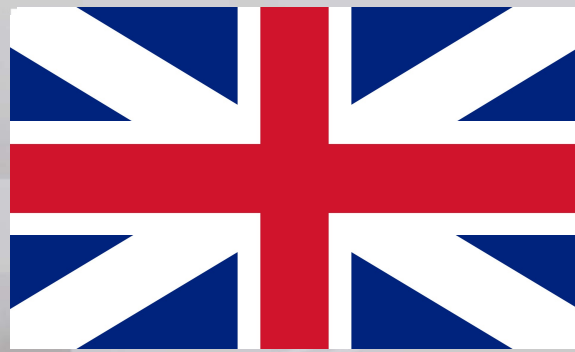




**ATH-Heinl**

# OPERATING INSTRUCTIONS

**ATH Single Lift 35M**




4500 kg



## Contents

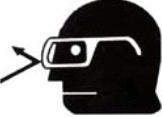
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## 1.0 INTRODUCTION

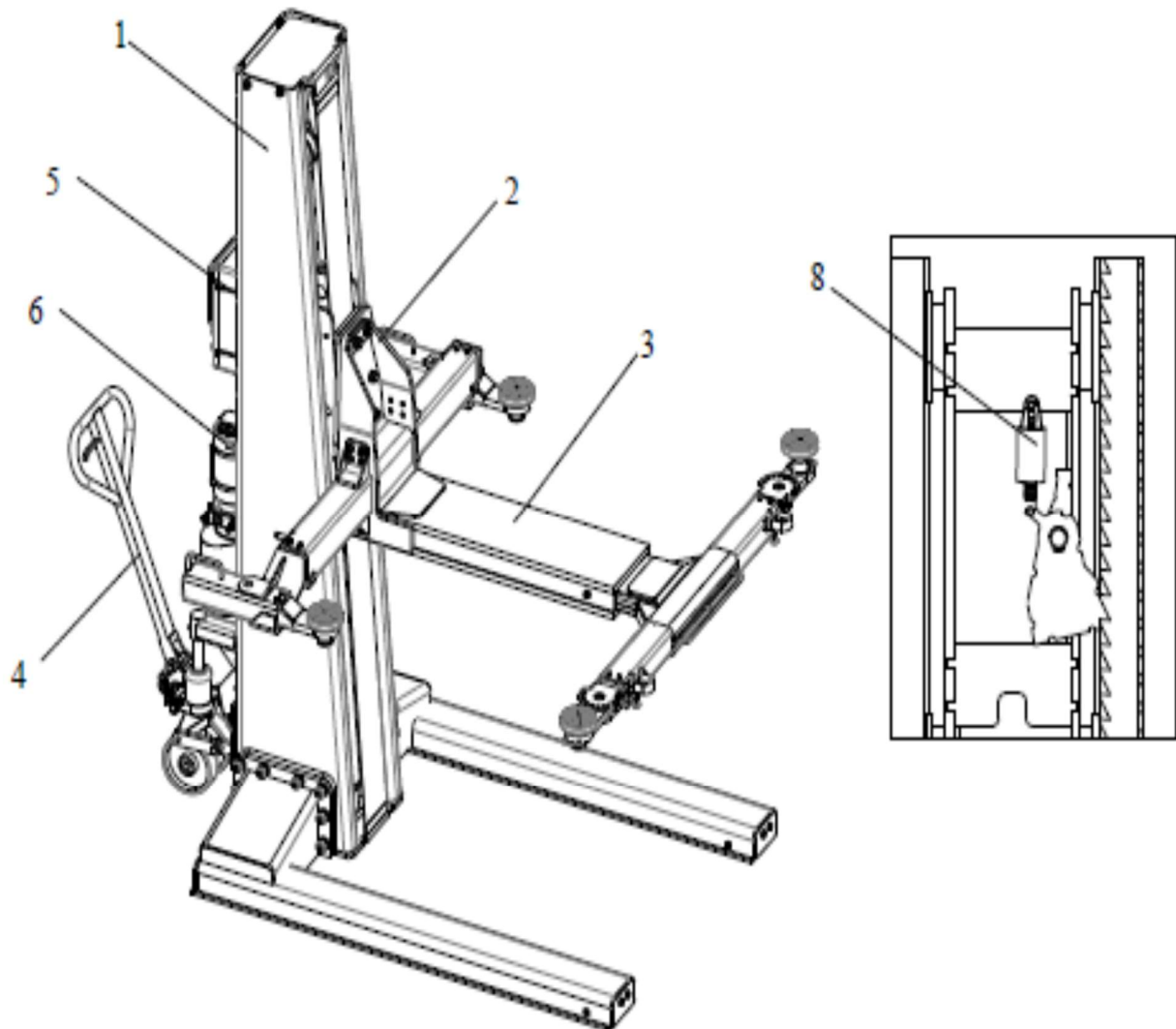
### 1.1 General Information

	<p><b>THESE INSTRUCTIONS ARE AN INTEGRAL PART OF THE MACHINE. THEY MUST BE READ AND UNDERSTOOD BY THE USER. NO LIABILITY IS ASSUMED FOR ANY DAMAGES CAUSED BY FAILURE TO FOLLOW THESE INSTRUCTIONS OR THE VALID SECURITY PROVISIONS.</b></p>
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	<p>WARNING: Follow the instructions to prevent injury or damage.</p>
	<p>TIP: Provides more information on functionality and tips for using the device efficiently.</p>

	<p>Appropriate protective clothing must be worn for all work on the described system.</p>
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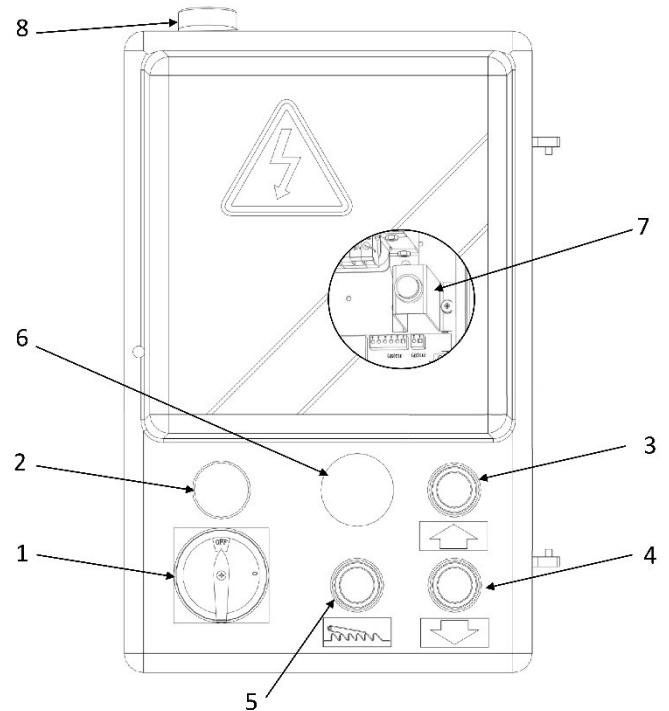
## 1.2 Description



1. Lifting column  
The lifting carriage is guided by rollers as it moves up and down the lifting column.  
The hydraulic lifting cylinder and the lifting chain are also located here.
2. Lifting carriage  
The lifting carriage supports the arm (load bearing equipment). It is lifted and lowered by the hydraulic cylinder by means of chains; it is guided in the column by rollers.
3. Arm  
The adjustable support arm and support plate are attached here. The length of the arm can be adjusted.
4. Drive kit  
Serves to drive and position the lift. The procedure may only be carried out when empty without a load.
5. Control box  
The complete electrical control system is located here. All buttons are protected by a front ring in order to prevent them being pressed accidentally. Furthermore, all movements are immediately stopped when the buttons are released (dead man's control).
6. Hydraulic unit  
The hydraulic oil is fed from the tank to the lifting cylinder by a gear pump driven by an electric motor. The lowering valve allows the oil to flow back into the tank.
7. Base frame  
Serves to stabilise the lift and contains the front rollers which drive the lift.
8. Release magnet  
Electromagnet for releasing the safety catch during the lowering process.  
The safety catch prevents the lift from lowering autonomously in the case of an error.

### 1.3 Operation

1. Lockable main switch  
To switch the lift on and off and to prevent operation by unauthorised persons.
2. Operating light  
Indicates whether the lift is in operation.
3. Lift button  
To raise the lift.
4. Lower button  
To lower the lift.
5. Park button  
To park and continue to lower the lift after it has reached the CE stop.
6. Emergency stop button  
To switch the lift off in dangerous situations.
7. Override button  
Overrides the chain emergency off switch where necessary.
8. Alarm  
Warning signal when the CE stop is reached.



## Safety instructions

### HAZARD NOTE

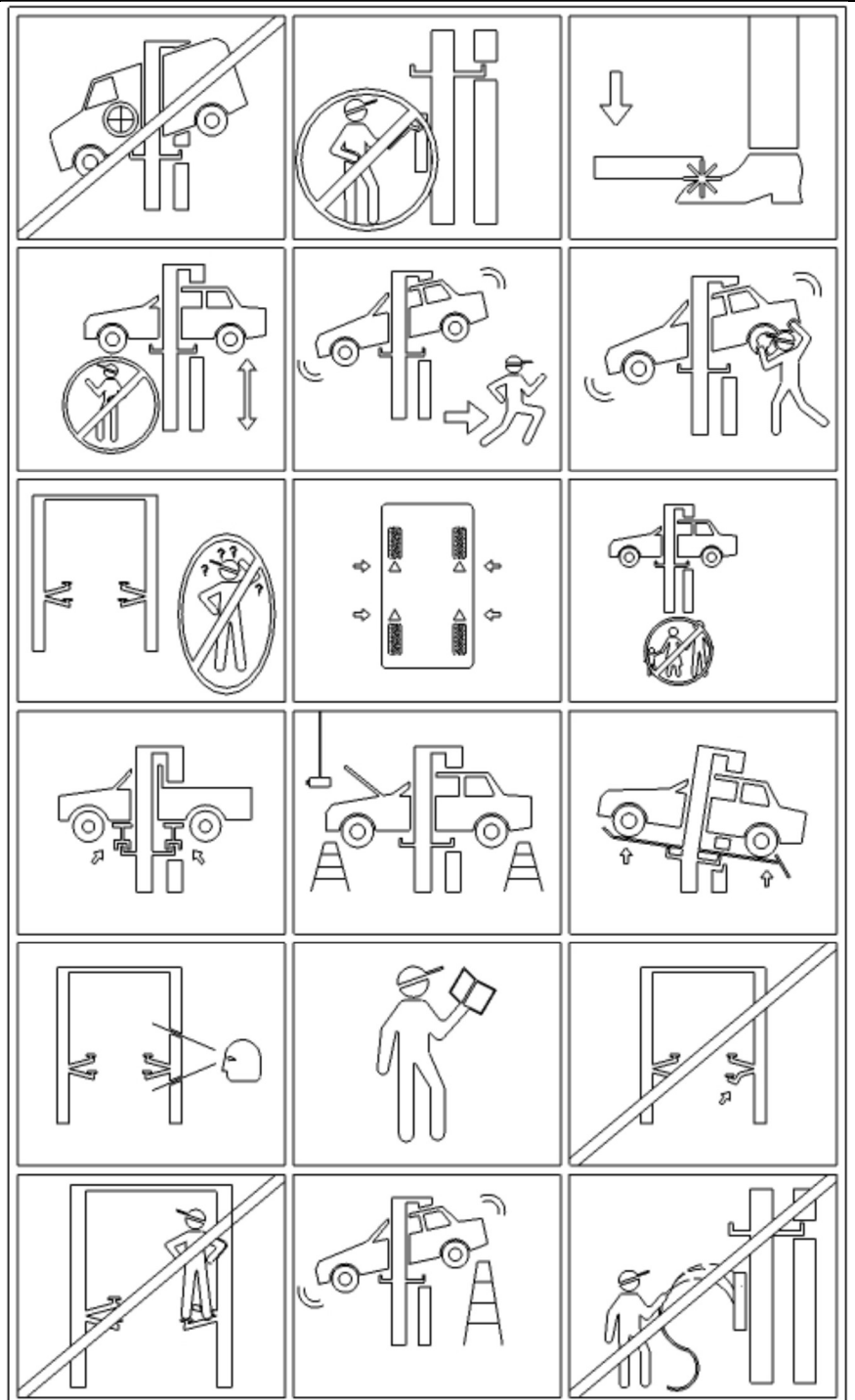
1. The danger zone must be kept clear when lifting and lowering
2. If there is a danger of the vehicle falling, you must leave the danger zone immediately

### WARNING NOTE

3. Lift may only be operated by trained personnel.
4. Ensure there are no obstacles when lowering
5. Prevent the lifted vehicle from swaying significantly
6. Always ensure that the lifted vehicle is secured against slipping.
7. Changes to the lift of any kind are not permitted
8. Leave the danger zone when lowering the lift
9. Work on electrical components may only be performed by authorised electricians.
10. Do not work on damaged lifts
11. Only authorised persons are allowed to enter the danger zone.


### GUIDING PRINCIPLES

12. Read and understand the operating instructions before operating the lift
13. Do not clean the lift under running water.
14. Do not use any paint-dissolving or aggressive detergents



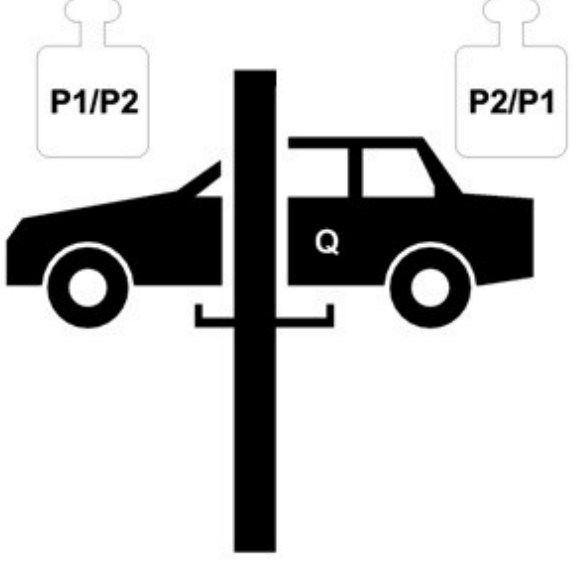
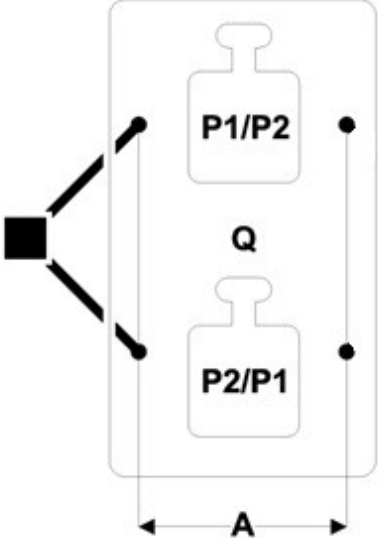
## 1.4 Technical Data


Model	<b>ATH Single Lift 35M</b>
Load capacity	3,500 kg
Lifting time (2,000 kg)	40 s
Lowering time (2,000 kg)	45 s
Electrical system	1/230V/50 Hz or 3/400V/50 Hz
Lifting height	100-1850 mm
Control voltage	DC24V
Motor	2.2 KW or 2.6 KW
Upstream fuse	1 C 16 A / 3 C 16 A
Connection cable	Min. 3 x 1.5 mm <sup>2</sup> or 5 x 2.5 mm <sup>2</sup>
Protection type	IP 43
Working pressure <sup>2</sup>	Approx. 120 bar
Recommended hydraulic oil	Summer: HVLP-D 46 (e.g.: ENI Precis HVLP-D 46) Winter: HVLP-D 32
Oil quantity	Approx. 6 l
Permissible sound level	≤ 76 dB
Weight	1,300 kg

 The factory-set working pressure is adjusted to the maximum power rating. The pressure relief valve must not be manipulated. Changing the settings can lead to serious damage. If the indicated rated load cannot be lifted, please contact our service team.

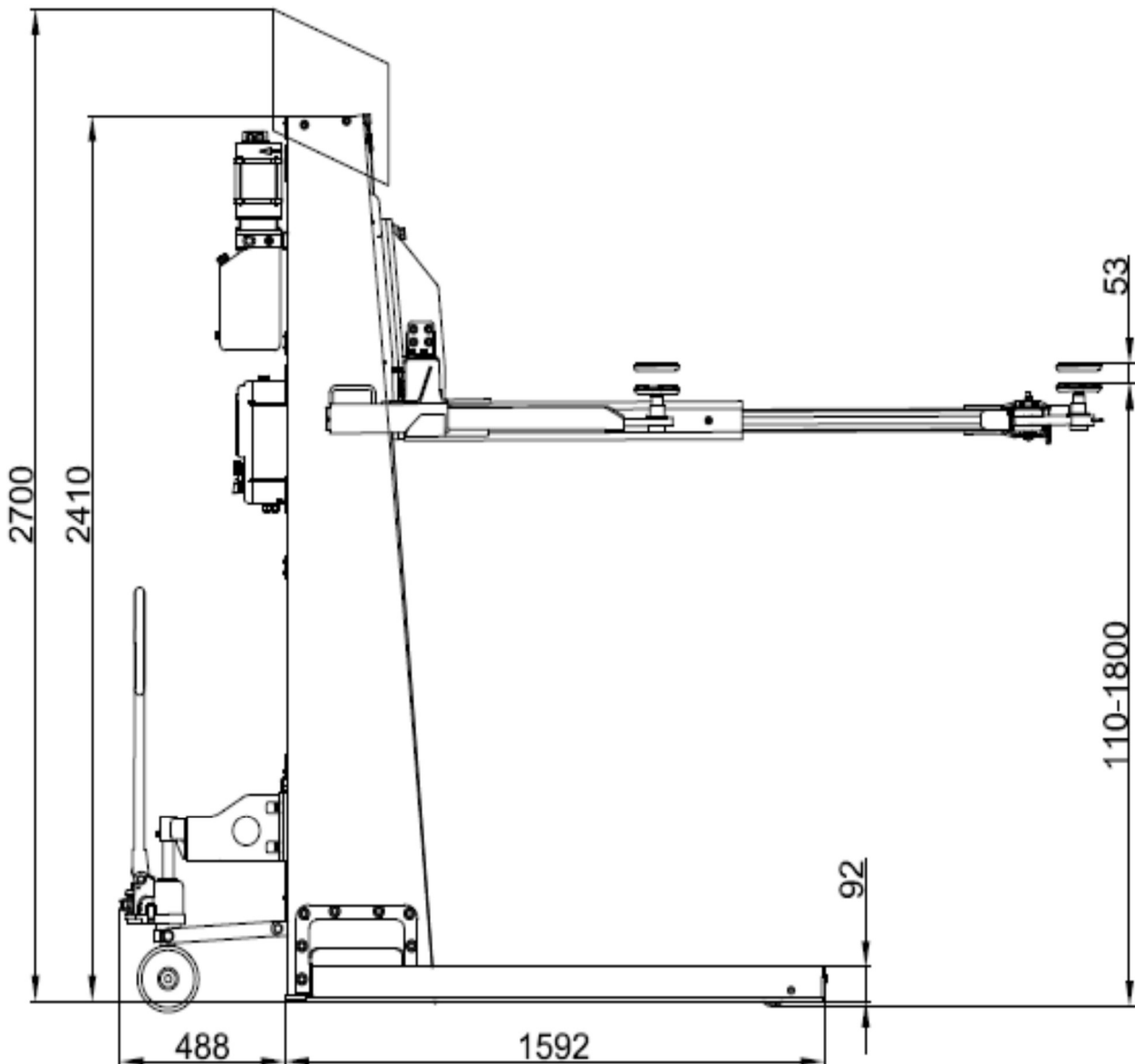


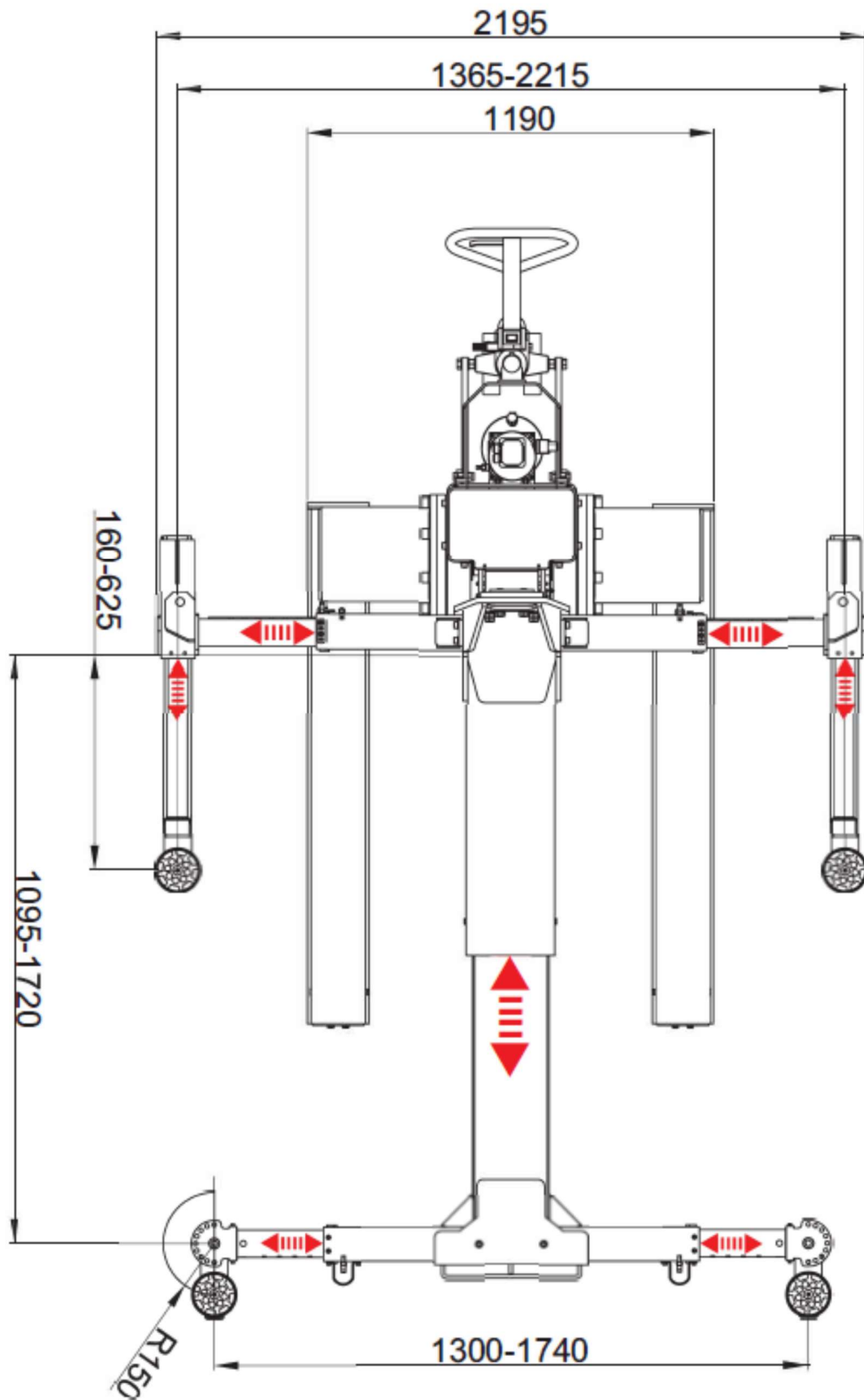
Load distribution

	<p>Q</p>	<p>Total weight of the vehicle</p>
	<p>P1</p>	<p>Max <math>2/5 \times Q</math></p>
	<p>P2</p>	<p>Max <math>3/5 \times Q</math></p>
	<p>Load distribution</p>	<p><math>2/3</math></p>
	<p>A</p>	<p>Min. 1,000 mm<sup>2</sup></p>

<sup>2</sup>  The load capacity of the lift is reduced at lesser distances. Please consult the manufacturer in such cases, as well as in all other cases not foreseen in these instructions.


### 1.5 Scale Drawing





## 2.0 INSTALLATION

The machine must be installed by an authorised person according to the instructions.

	<p><b>The operating instructions (including the log) are an important part of the machine / product.</b>  <b>!!!PLEASE STORE CAREFULLY!!!</b></p>
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The product must be checked after completion of the installation, handover, if necessary briefing and then regularly in accordance with the applicable regulations and legal provisions in the country of operation by a suitable and approved company or facility.


### 2.1 Transport & Storage Conditions

When transporting and positioning the machine, always use suitable lifting and material handling equipment and consider the machine's centre of gravity.

The machine should only be transported with the original packaging.

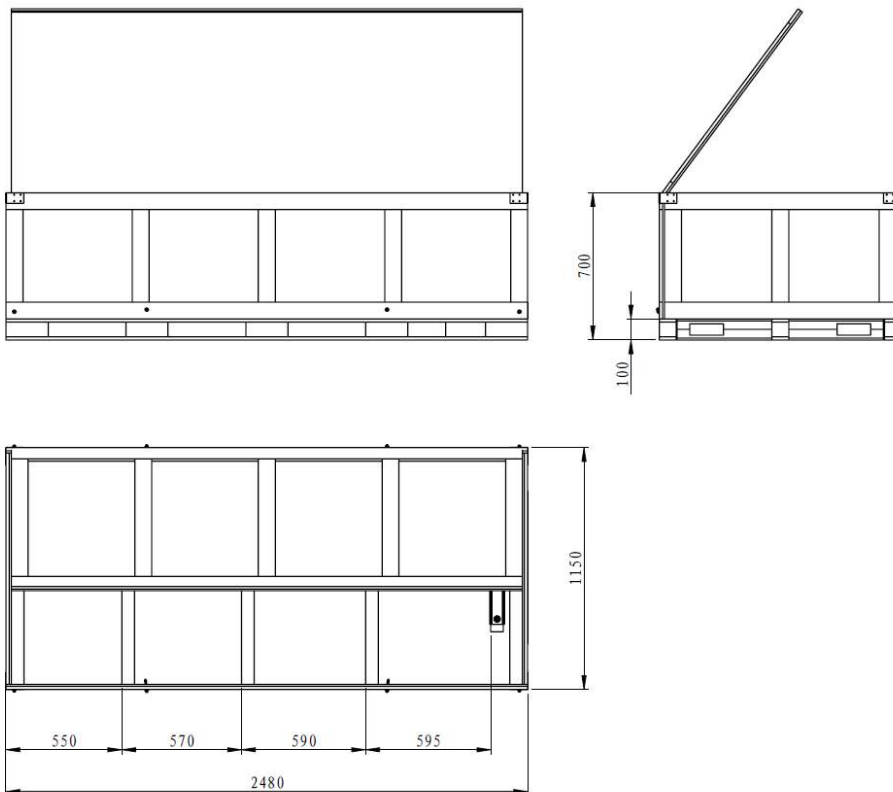
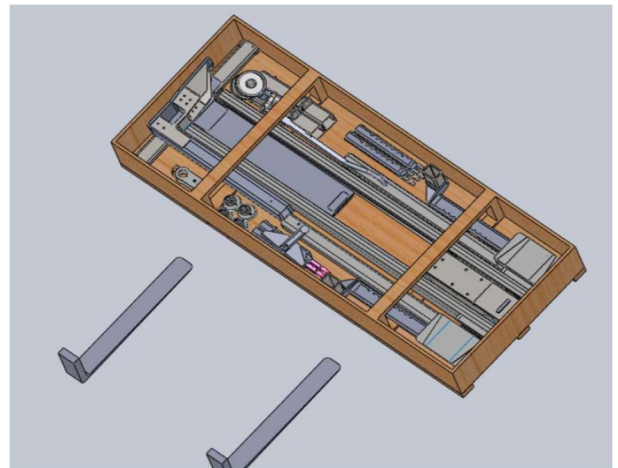
Data:	
Width	1.150 mm
Length	2.480 mm
Height	700 mm
Storage temperature	-10 to +50 °C

### 2.2 Unpacking the machine

	<p>Remove the top cover of the packaging and make sure that no damage has occurred during transport.</p> <p>Remove the safety bolt to remove the machine from the pallet / rack.          Use a suitable lifting device (possibly with a stopping rope) to lower the machine from the pallet / frame.</p> <p>The packaging material used for the machine should be stored carefully.          Keep the packaging material out of the reach of children as it may be hazardous.</p>
---	--

## 2.3 Delivery Contents

1. Transport box with:
  - column
  - arm
  - support arm and plate
  - base frame
  - drive kit
  - hydraulic unit
  - electric control



 If something is missing from your delivery, please contact our sales department.

### Tips for transport and storage:

- Lift carefully. Support the weight properly using suitable equipment that is in a good condition and in good working order.
- Avoid unexpected raises and jerky movements. Beware of bumps, gutters, etc.
- Store the removed packaging at a collection point inaccessible to children and animals until it has been disposed of.
- Storage temperature:  $-25^{\circ}\text{C} \sim +55^{\circ}\text{C}$

## 2.4 Location

The machine should be kept away from flammable and explosive materials, as well as from sunlight and intense light. The machine should be placed in a well-ventilated location.

The machine must be set up on sufficiently firm ground, if necessary, according to the minimum requirements of the information given in the foundation plan.

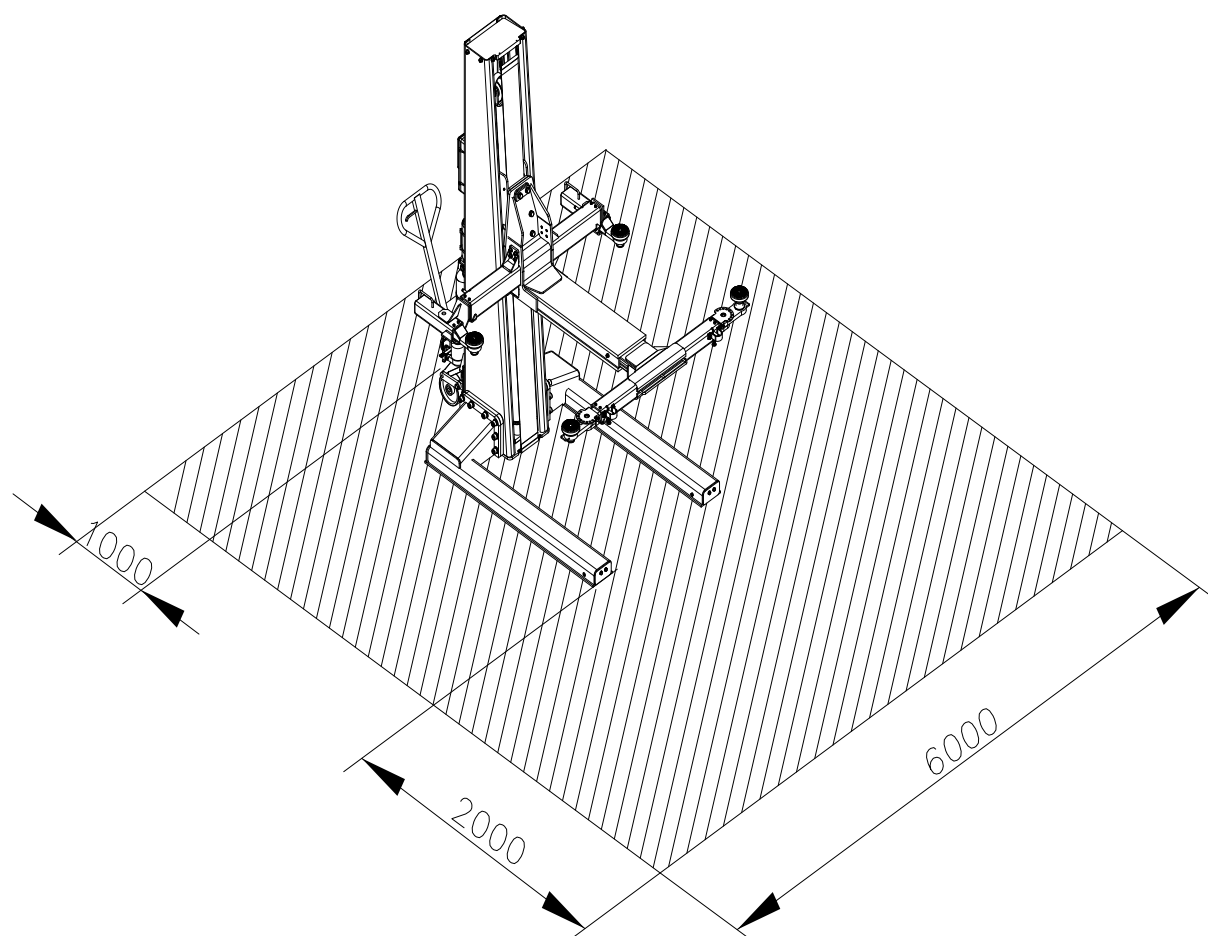
In addition to the ground conditions, the guidelines and instructions of the accident prevention regulations as well as the workplace regulations must be observed when selecting an installation site.

When assembling on floor coverings, check their load-bearing capacity. A construction expert should be consulted for inspection when mounting on floor coverings.

The machine should only be mounted and used within closed rooms. It has no corresponding safety features (e.g. IP protection, galvanised design, etc.).

Temperature	4-40 °C
Sea level	< 1500 m
Humidity	50% at 40 °C – 90% at 20 °C

### Drawing



## 2.5 Fixing



General and local regulations must be observed. Therefore, these steps should only be carried out by a trained professional.

The machine must be set up and fixed on sufficiently firm ground, if necessary, according to the minimum requirements of the information given in the foundation plan.

The machine must be fastened at the points provided with suitable or specified fastening material.

In addition to the ground conditions, the guidelines and instructions of the accident prevention regulations as well as the workplace regulations must be observed when selecting an installation site.

When assembling on floor coverings, check their load-bearing capacity. A construction expert should be consulted for inspection when mounting on floor coverings.

## 2.6 Electrical Connection



General and local regulations must be observed. Therefore, these steps may only be carried out by a trained professional.  
Pay attention to the necessary supply line (see technical data).

The connection should be made with a 230V Schuko plug or 5-phase 16 A CEE plug (partially included).

Voltage deviations should be 0.9 - 1.1 times the nominal voltage range and the frequency deviation should be 0.99 - 1.01 times the frequency range.

Necessary protective measures must be taken to guarantee this.

At the end of the work, the direction that the motor rotates must be checked.

## 2.7 Pneumatic Connection



For all pneumatic systems, a compressed air maintenance unit (partially included) must be installed between the supply line and the system.

The air pressure of the supply line must at least correspond to the technical data.

The compressed air maintenance unit must be set correctly and checked.

The compressed air maintenance unit must be serviced at regular intervals.

The maximum or minimum pressure ensures perfect functioning without any damage.

## 2.8 Hydraulic Connection



Before the system is put into operation or operated for the first time with oil, the following must be observed with regard to the optimal, trouble-free and almost air-free functioning

All hydraulic lines must be connected and tightened according to the hydraulic plan and, if applicable according to the hose designation.

All hydraulic lines and cylinders must be vented according to the hydraulic plan and, if applicable, according to the hose designation.

In order to ensure the faultless and safe functioning of the system and the hose assemblies used, the hydraulic fluids used must comply with the specific instructions and recommendations of the manufacturer.

Used media that do not meet the specific requirements or which have unauthorised contamination damage the entire hydraulic system and shorten the service life of the hydraulic systems used. Warning: (system contamination can also occur when oil is refilled)

The minimum requirement and minimum oil quantity must be checked and ensured.

## 2.9 Assembly



These instructions are not to be viewed as assembly instructions; hints and tips are provided only for trained expert installers. Suitable clothing and personal protection must be worn for the following work.  
Incorrect installation and settings lead to exclusion of liability and warranty.

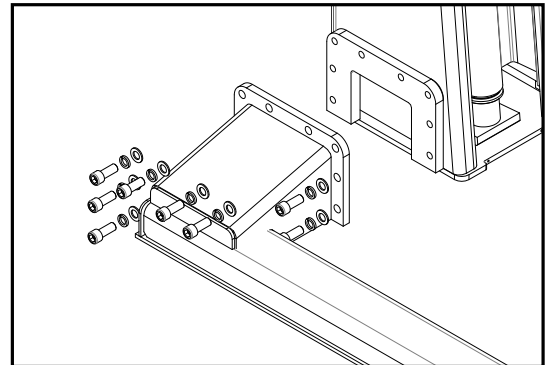
Partly pre-assembled machines must be checked, introduced and approved by a competent person before commissioning.

Machine assembly must be carried out by a qualified and competent person.



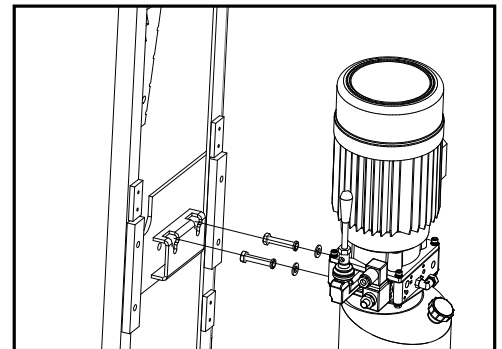
### Base frame / column feet assembly

Place the column in a vertical position. Ensure the column is standing securely and cannot be knocked over.  
Place the two column feet at the side of the column. Check whether both rollers are already installed in the feet.  
Connect the two arms using the supplied M20X50 screws and take care to follow the correct order of washers and spring washers as shown in the adjacent diagram.



### Hydraulic unit assembly

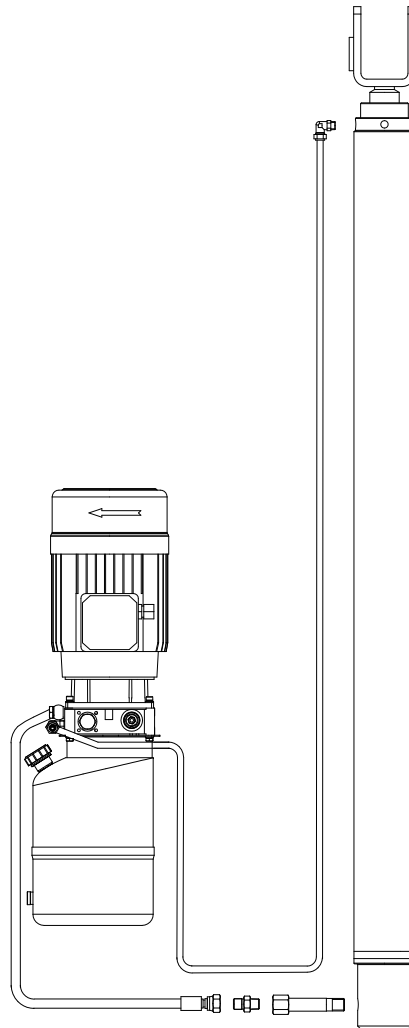
Attach the hydraulic unit to the bracket on the rear of the column as shown in the adjacent diagram. Use the supplied M10X50 screws and corresponding washers for this purpose.



## Hydraulic line connection

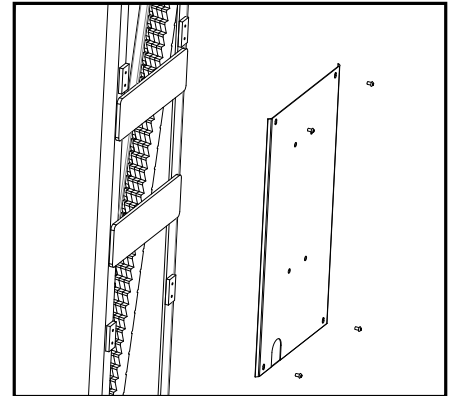
Take care that the hoses and connection pieces are clean and free of contamination. Clean the parts if required.

Check all parts for damage and ensure that all screw connections and connecting pieces are in good order. Connect the hoses to the hydraulic unit and the cylinder in accordance with the drawing below. Tighten all connections to prevent any oil leaks.



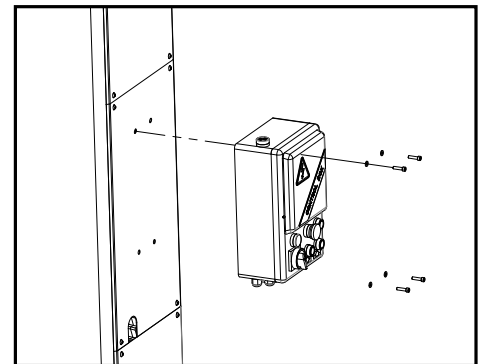
## Base plate assembly

Install the middle rear cover with the 4 drill holes to fit the electric control to the column. Use the supplied M6X10 screws as shown in the adjacent diagram.



## Electric control assembly

Fit the electric control to the column using the supplied screws as shown in the adjacent diagram. Check the nameplate to ensure that the motor is suitable for the voltage available at the customer's premises. Establish the electrical connections as shown in the circuit diagram (point 6.2). Use the cables and lines supplied for this purpose. Work must be carried out in accordance with local regulations. Make sure that the phases are properly connected (direction of rotation) and the lift is properly grounded.



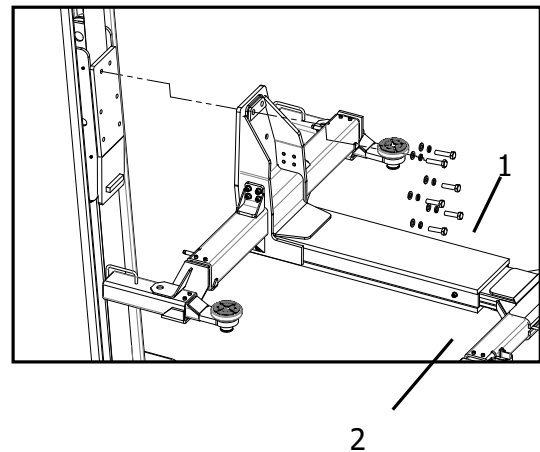
## Filling the oil and venting

Use only the hydraulic oil specified in the operating instructions. Open the oil filler cap and fill approx. 6 litres of hydraulic oil into the tank. Pressing the LIFT button moves the lift upwards until the max. height has been reached. Release the button when the maximum height has been reached, as otherwise the electric motor or the gear pump may be damaged. Pressing the LOWER button moves the lift right to the bottom. Keep holding the LOWER button for around 3 seconds after the lift has reached its lowest point to allow any trapped air to escape. Repeat this LIFT and LOWER procedure three times.

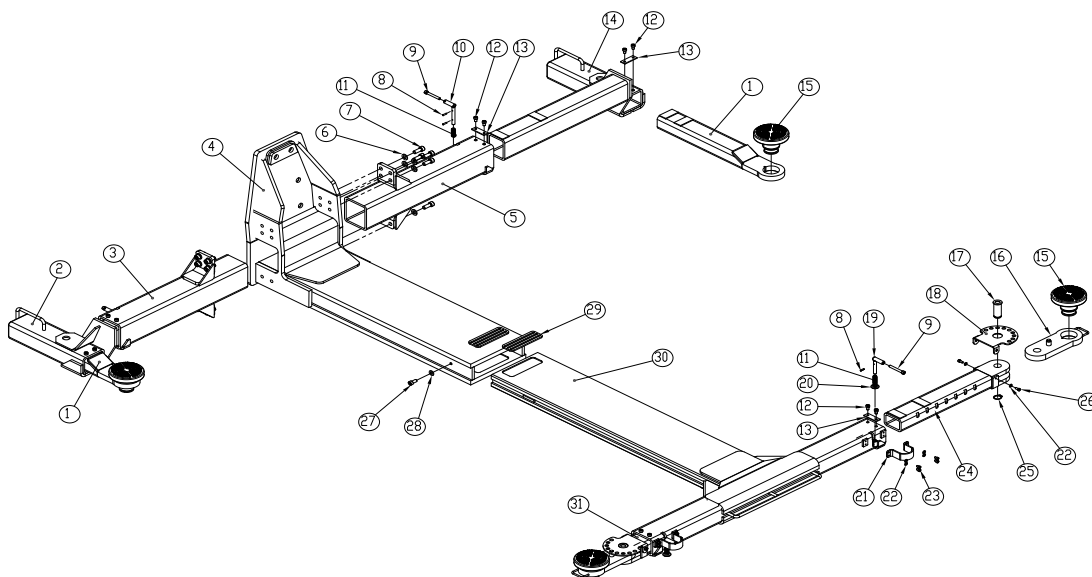
**Warning:** Attempting to test without oil or when the motor is rotating in the wrong direction can destroy the hydraulic pump.

## Assembling the arm together with the support plates

Fit the arm on the lifting carriage of the lift. Use the two M16X70 screws (1), four M16X60 screws (2) and the corresponding washers supplied for this purpose as shown in the adjacent diagram.



Install all the support arm components on the arm as shown in the adjacent diagram. Ensure that all components are assembled and the safety equipment works reliably.



No.	Description	No.	Description	No.	Description
1	Rear support arm	12	M8X12 screw	23	M6X8 screw
2	Left rear support arm extension	13	Mounting plate	24	Front right extension
3	Left rear support arm holding fixture	14	Right rear support arm extension	25	D.25 circlip
4	Arm base plate	15	Support plate	26	M6X12 screw
5	Right rear support arm holding fixture	16	Support plate holding fixture	27	M10X20 screw
6	D.12 washer	17	Bolt	28	D.10 washer
7	M12X30 screw	18	Notched plate	29	Plastic sliding part
8	4X16 bolt	19	Support arm release	30	Variable arm extension
9	M8X60 screw	20	Flat-head bushing	31	Front left extension
10	Support arm release	21	Guard bracket		
11	Spring	22	D.6 washer		

## Assembly of the lifting unit (drive kit)

Fit the rear cover (1) using the corresponding screws (2).

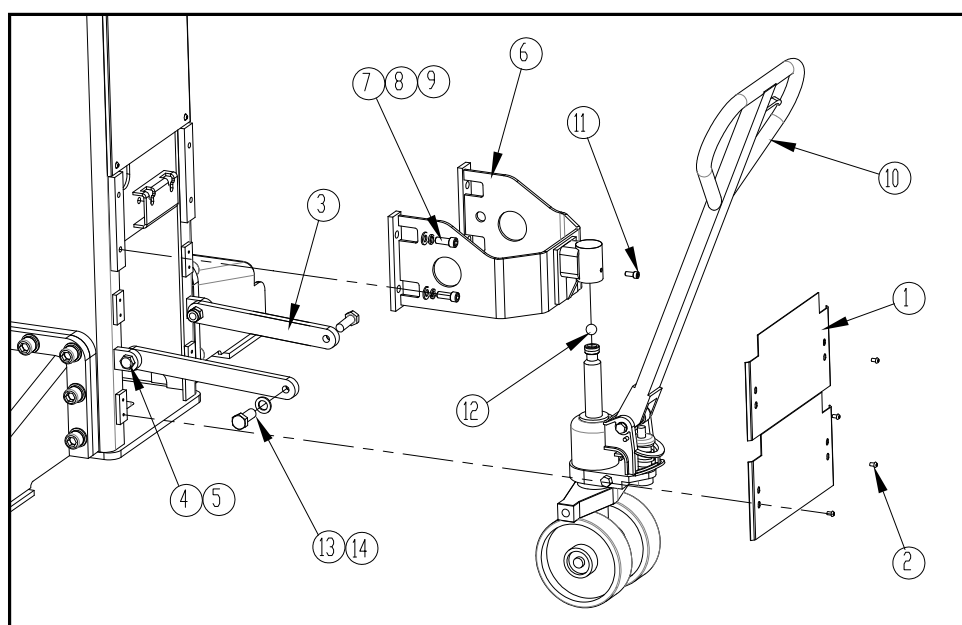
Screw the connecting plates (3) to the column. Tighten the screws!

Fit the bracket for the lifting equipment (6) to the column using the supplied screws (7) and washers (8 + 9).

Connect the hydraulic hoist (10) to the bracket (6) using the screws (11).

Ensure that the steel ball (12) is in the correct position as shown below.

Connect the lifting equipment (10) to the connecting plates (3) using the supplied screws (13) and washers (14).



No.	Description	No.	Description
1	Cover	8	D.12 safety washer
2	M6X10 screw	9	D.12 washer
3	Connecting plates	10	Hydraulic hoist
4	M16X50 screw	11	M8X18 screw
5	M16 nut	12	D.20 steel ball
6	Bracket for lifting equipment	13	M18X45 screw
7	M12X30 screw	14	D.18 washer

## 2.10 Completion of Work



Before commissioning, check all fastening screws, electrical, pneumatic and hydraulic lines and, if necessary, tighten these. Warning: in some cases, this must be checked at regular intervals and tightened if necessary (note in the instructions).

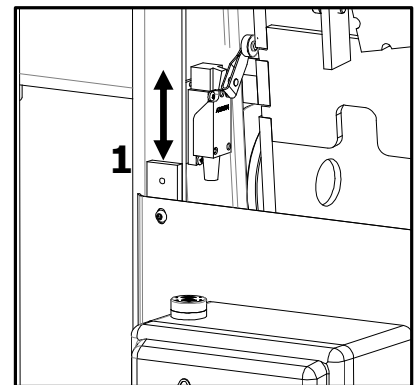
### Checking and adjusting limit switches

If the limit switches do not work or are working incorrectly, they can be adjusted as described below.

#### Adjusting the TOP (1) limit switch

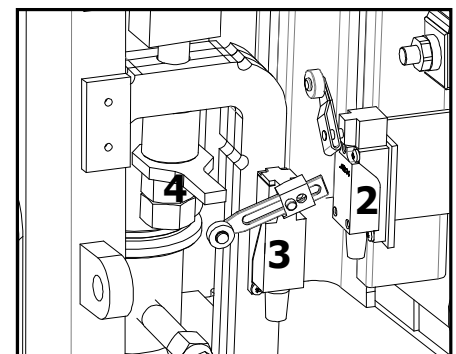
Raise the lift to *1800 mm*.

The switch can be installed at two positions. Install it in the correct position for operating the switch when the lifting carriage is lifted to the desired height. Tighten the screws after adjusting.



#### Adjusting the CE STOP (2) limit switch

Move the lift to a height of 220 mm. The switch can be installed at two positions. Install it in the correct position for operating the switch when the lifting carriage is lowered to the desired height. Tighten the screws after adjusting.



#### Adjusting the SAFETY CHAIN (3) limit switch

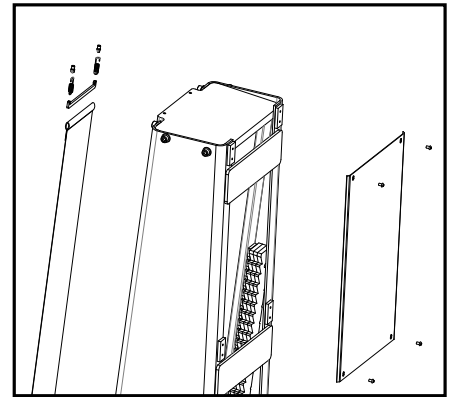
This switch must be installed correctly according to the following instructions to ensure the switch can be operated by the switch cam (4) and prevent the lift dropping if the chains slacken or snap.

Change the position of the switch or move the switch lever on the limit switch up or down a little until the optimal switching position has been reached. Tighten all screws after adjusting.

## Final assembly

Fit the front cover using the supplied spring, spring bolt and bracket as shown in the adjacent diagram.

Install the remaining rear covers on the column using the supplied M6x10 screws.



## General final checks

Check all fixing screws and bolts.  
Check that the chain has been correctly installed.

Make sure that the electrical installation has been carried out correctly.  
Check the rotational direction of the motor.

Carefully inspect the operation of the safety catch, support arm lock and all other safety equipment.

Ensure that all end switches switch to the correct position safely and reliably.

## Hydraulic system checks

Check the oil level and refill as required.  
Raise lift completely and press for 5 seconds (bridge limit switch at top).  
Check that all hose connections, the unit and the cylinder are leak-tight.  
Vent the cylinder again, if required.

## Tests under load

Place a vehicle on the lift and operate 3 complete lifting and lowering procedures. Carefully observe the lift and the load while doing so.  
Pay attention to whether there are any unusual or loud noises when lifting or lowering.  
To finish, fully lubricate the lift again at the required points.

### 3.0 OPERATION

#### 3.1 Operating Instructions

Company:	<b>Operating Instructions</b>	Date:
Place of work:	for <b>Lifting Platform</b>	Signature:

#### **Risks to People and the Environment**



- Falling of loads or parts
- Crushing and shearing points when moving the lifting platform
- Danger due to uncontrolled moving parts



#### **Protective Measures and Rules of Conduct**

##### **Before starting work:**



- Lifting platforms may only be used independently by trained persons over the age of 18 who have been instructed in writing.
- When working with more than one person, a supervisor must be appointed
- Daily functional check
- Observe the manufacturer's operating instructions

##### **During operation:**



- Pay attention to crush and shear points in the environment
- Do not load the lifting platform above the permitted maximum load
- Do not lift people
- Do not shake the lifting platform, avoid rocking.
- When lowering, do not stand in the lifting platform movement area
- Arrange regular checks of the lifting platform

#### **Response to faults and hazards**

- In case of fault, stop the lifting platform immediately
- Secure against further use
- Report defects to the installer or manufacturer

#### **First Aid**



- Inform first aiders (see alarm/emergency plan)
- Treat injuries immediately
- Enter into the accident book
- Contact emergency services for serious injuries

**Emergency number:** \_\_\_\_\_  
**Ambulance service:** \_\_\_\_\_

#### **Maintenance**

- Repair only by instructed and trained persons
- Disconnect or secure the lifting platform from the mains power supply for set-up, adjustment, maintenance or servicing
- Clean the lifting platform after operation and check the hydraulic level
- **Annual check** of the lifting platform by an authorised and trained person



### 3.2 Basic Information

Independent operation of the machine may only be carried out by persons over the age of 18 who have been trained in the operation of the machine and have demonstrated their ability to do so to the employer. They must be expressly contracted by the employer to operate the machine. The order to operate the machine must be given in writing.

The machine must only be used for its intended use.

Always use appropriate material during installation and operation.




Before assembly or disassembly check all components for damage.

If necessary, observe special manufacturer instructions for mounting or dismounting of vehicle-specific work.

An important part of the guarantee / warranty is fulfilment of the maintenance plan. This includes in particular, ensuring cleanliness, corrosion protection, checks and repairing damages immediately if required.

During operation attention should always be paid to hazards. As soon as dangers occur, switch off the machine immediately, remove the mains plug and disconnect the air supply. Then contact your dealer.



All warning labels must always be easy to read. If damaged, they must be replaced immediately.

	<p>Pay attention to possible shearing points around the machine.</p>
	<p>During operation, the noise can reach 85dB (A), so the operator should take appropriate protective measures.</p>
	<p>Moving parts of the machine can catch loose clothing, long hair or jewellery.</p>

## 4.0 MAINTENANCE

The user must maintain the machine regularly to ensure safe operation.

Repair work may only be carried out by authorised service partners or after customer consultation with the manufacturer.

	<p>Before maintenance and repair work:</p> <ul style="list-style-type: none"> <li>- The machine must be disconnected from ALL supply networks</li> <li>- Pull main switch out of mains plug, if necessary, discharge compressed air from system</li> <li>- Appropriate measures must be taken against a restart</li> </ul>
	<p>Work on electrical elements or on the supply line may only be carried out by experts or electricians.</p>

### 4.1 Consumables for installation, maintenance and servicing

#### Hydraulic Oil

**General** minimum requirement:

Eni PRECIS HVLP-D Item No. 00066018

Summer (15° to 45°): HVLP-D 46 (e.g.: Eni PRECIS HVLP-D)

Winter (under 10°): HVLP-D 32 (e.g.: Eni PRECIS HVLP-D)

Minimum requirement **especially for 2-post lifts:**

Eni PRECIS HVLP-D Item No. 00067218

Summer (15° to 45°): HVLP-D 32 (e.g.: Eni PRECIS HVLP-D)

Winter (under 10°): HVLP-D 22 (e.g.: Eni PRECIS HVLP-D)

#### Preservative for ropes, welds, screws, corners, edges and cavities.

Minimum requirement:

Petec spray translucent - 500 ml Item No. 73550 / Petec wall inlet translucent - 1000 ml Item No. 73510

Petec UBS pistol Item No. 98507

#### Slideway lubricant

Minimum requirement:

STORER WHS 2002 White EP high performance grease. Item No. KPF1-2K-20

#### Lubricant for bushes, chains, rollers & moving parts

Minimum requirement:

White ultra lube, 500 ml aerosol. Item No. 34403 – WUL – White Ultra Lube

#### Floor anchor

Minimum requirement **for lifting platforms:**

Fischer FIS A M 16 x 200 galvanised in combination with Fischer Superbond reaction cartridge

Minimum requirement for **passenger car and passenger car/truck balancing machine:**

Impact anchor M8 x 100

Minimum requirement **for truck mounting machine:**

Impact anchor M12 x 100

#### Compressed air system

Minimum requirement:

PROMAT chemicals special compressed air oil      Item No.: 4000355209

### **Cleaning**

Minimum requirement:

Caramba intensive brake cleaner acetone-free

### **Care and protection of metals, painted or powder-coated surfaces**

Minimum requirement:

Petec spray translucent - 500 ml      Item No. 73550

Petec wall inlet translucent - 1000 ml      Item No. 73510

Petec UBS pistol      Item No. 98507

### **Care and protection of metals, painted or powder-coated surfaces in the tread area and plastic parts**

Minimum requirement:

Valet Pro Classic Protectant Plastic Sealant 500 ml

## **4.2 Safety Regulations for Oil**

Always observe the legal requirements or regulations for handling used oil.

Always dispose of used oil through a certified organisation.

In the case of leaks, oil must be collected immediately with binders or trays so that it cannot penetrate into the soil.


Avoid any skin contact with the oil.

Do not allow oil vapours to escape into the atmosphere.

Oil is a combustible medium. Pay attention to possible hazards.

Wear oil-resistant protective clothing, such as gloves, goggles, protective clothing, etc.

### 4.3 Notes

	<p>Regardless of the level of dirt, the machine must be maintained, cleaned and serviced at regular intervals.</p> <p>The machine should then be treated with a care product (such as oil or wax spray). Do not use cleaning agents that are harmful to the skin.</p> <p>IF THE ABOVEMENTIONED POINTS ARE NOT FULFILLED, THE WARRANTY CLAIM IS EXCLUDED</p>
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### 4.4 Maintenance or Service Plan

Interval	Immediately	Weekly	Monthly	Every 3 months	Every 6 months
Check of ALL safety-relevant parts	X				
Cleaning	X				
Check or restore surface protection	X				
Check for leaks in the hydraulic system	X				
Check or restore surface protection or corrosion protection	X				
Check or restore damage to the paint and components	X				
Check or restore rust damage	X				
Check or treat cavities and non-painted areas	X				
Check for leaks in the pneumatic system	X				
Control the tightness of screws	X				
Check, lubricate & adjust bearing slack	X				
Check wear parts		X			
Check fluids (level, wear, contamination, quality)		X			
Check and lubricate sliding surfaces		X			
Remove any dirt inside			X		
Clean and check electrical components				X	
Check motor and transmission for function and wear				X	
Check welds and construction				X	
Visual inspection (according to inspection plan)					X

## 4.5 Troubleshooting / Error Display and Solutions

Symptoms	Cause	Solution
<b>Lifting Problems</b>		
<b>Lifting platform does not lift when button is pressed (motor does not run)</b>	Damage to the motor	Check motor and replace if necessary
	Blown fuses from e.g. voltage fluctuations	Remedy the causes and replace the fuses
	Defective button and/or contact	Replace button and/or contact
	Defective main switch and/or contact	Replace main switch and/or contact
	Defective or insufficient supply line	Replace cable
	Fluctuating or incorrect input voltage	Check power
	Defective motor contactor	Replace motor contactor
	Thermal relay has tripped	Check thermal relay and motor
	Limit switch defective or blocked	Check limit switch and replace if necessary
<b>Lifting platform does not lift when button is pressed (motor runs)</b>	Hydraulic oil shortage	Refill oil
	Oil filter blocked	Clean the oil filter
	Oil leakage	Replacement of damaged components
	Opened lowering valve	Check and replace the lowering valve if required
	Motor rotates in wrong direction	Replace phases
	Broken gear pump	Check the pump and replace if necessary
	Permissible load has been exceeded	Work within the specified load
	Pressure relief valve set too low	Set pressure relief valve to maximum load
<b>Lifting platform lifts jerkily</b>	Not enough space between rails	Distance between rails and guide must be 1.5 - 2.5 mm
	Air in hydraulic system	Bleed the hydraulic system
	Contaminated hydraulic oil	Change the hydraulic oil
	Slideways are not lubricated	Lubricate the slideways
<b>Lifting platform continues to lift after releasing the button</b>	Defective button	Replace the defective button

<b>Lowering Problems</b>		
<b>Lifting platform does not lower</b>	Safety catches do not respond	Check cable connection Check electromagnets, replace if necessary Relieve the catches by lifting
	Defective control relay	Check control relay
	Obstruction under platform	Remove obstruction
	Hose rupture protection triggered	Lift the platform briefly and press "DOWN" again
	Lowering valve is not activated	Check electrical connection
	Defective lowering valve solenoid	Replace solenoid
	Defective lowering valve	Replace
	Valve for lowering speed set incorrectly	Set
<b>If the errors cannot be rectified, lower the lifting platform with the emergency lowering screw and contact our service team</b>		
<b>Platform lowers too slowly or jerkily</b>	Contaminated lowering valve	Clean lowering valve
	Valve for lowering speed set incorrectly	Set
<b>Lifting platform lowers by itself</b>	Leaking hydraulic connections	Retighten connections if necessary
	Leaking hydraulic lines	Replace hydraulic line
	Leaking hydraulic cylinder	Replace and clean the seals of the hydraulic system
	Dirty or defective lowering valve	Clean or replace the lowering valve
	Leaking check valve	Clean or replace
<b>Other Problems</b>		
<b>Lifting platform does not raise or lower synchronously</b>	Air in hydraulic circuit	Bleed the hydraulic circuit
	Synchronising cables not tight enough	Adjust the tension or the synchronicity
<b>Product shows (heavy) rust damage</b>	Damage or lack of corrosion protection, possibly maintenance	Remove rust, clean and restore surface.
<b>Abnormal motor volume</b>	Dirty oil filter	Clean the oil filter
	Air in hydraulic circuit	Bleed the hydraulic system
	Contaminated hydraulic oil	Change the hydraulic oil
<b>Circuit breaker has been activated</b>	Check the contact on the contactor	Replace the contactor
	Check the capacity of circuit breakers	Replace the fuses
	Check for damage to the cable	Replace the cable
<b>ALWAYS USE ORIGINAL PARTS AND ACCESSORIES.</b>		

## 4.6 Maintenance and Service Instructions



All maintenance and service work should be carried out at least according to the maintenance schedule

### COMPRESSED AIR MAINTENANCE UNIT (Partial stock if necessary for the activity)

#### SETTING THE WORKING PRESSURE:

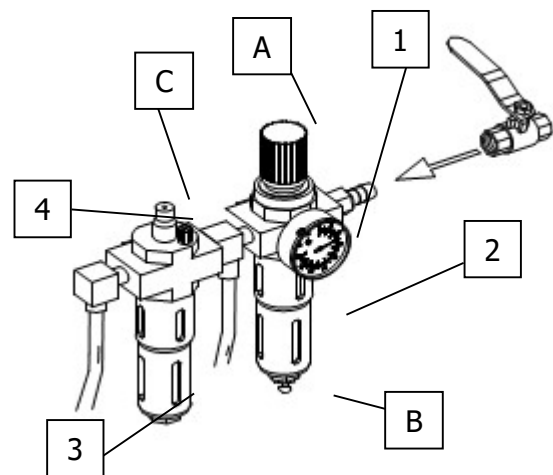
- Check the working pressure displayed by the manometer (1). This must correspond to the technical data.
- The working pressure can be adjusted with a pressure regulator (A).
- Pull the pressure regulator upwards to make adjustments.
- Turn the knob clockwise to increase the pressure in the machine, turn it counter clockwise to decrease.

#### OILER

- Check the oil level in the oil reservoir (3).
- Remove the oil reservoir.
- Now refill the tank with a pneumatic oil with a viscosity of SAE20.
- Check the injection quantity of the oil through the viewing glass (4).
- Generally, the screw must be closed completely in a clockwise direction and then opened again about  $\frac{1}{4}$  to  $\frac{1}{2}$  turn by turning it counter clockwise.

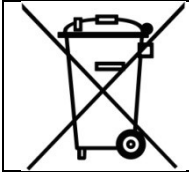
#### WATER SEPARATOR

- Check the water level in the separator (2).
- Water is drained when the valve (B) is opened.



## 4.7 Disposal

- Remove the air and power supply.
- Remove all non-metallic substances and store them in accordance with local regulations.
- Remove the oil from the machine and store it in accordance with local regulations.
- Recycle all metallic substances.



The machine contains some substances that can pollute the environment and cause harm to the human body if not handled correctly.



## 5.0 EG-/EU-KONFORMITÄTSERKLÄRUNG / EC-/EU-DECLARATION OF CONFORMITY

gemäß Maschinenrichtlinie 2006/42/EG, Anhang II 1A, EMV-Richtlinie 2014/30/EU, Anh. IV  
In accordance to Machine Directive 2006/42/EG, Appendix II 1A, EMC Directive 2014/30/EU, App. IV

Seriennummer  
*Serial number*

Firmenbezeichnung und vollständige Anschrift des Herstellers  
*Business name and full address of the manufacturer*

**ATH-Heinl GmbH & Co. KG**  
Gewerbepark 9  
DE – 92278 Illschwang

Name und Anschrift des Dokumentations-Bevollmächtigten  
*Name and address of the Technical Files authorized representative*

**ATH-Heinl GmbH & Co. KG**  
Gewerbepark 9  
DE – 92278 Illschwang

Hiermit erklären wir, dass die nachfolgend bezeichnete Maschine in der von uns in Verkehr gebrachten Ausführung den einschlägigen, grundlegenden Sicherheits- und Gesundheitsanforderungen der EG-Richtlinie 2006/42/EG sowie den unten aufgeführten Harmonisierungsrechtsvorschriften entspricht.

*We herewith declare that the machine described below, as a result have been brought on to the general market comply with the relevant fundamental Safety and Health regulations of the of Directive 2000/60/EC and the harmonized standards listed below.*

### **Beschreibung der Maschine** *Descriptions of the machine*

### **Hebebühne für Fahrzeuge** *Car lift*

Typbezeichnung  
*Model name*

**ATH-Single Lift 35M**

Der oben beschriebene Gegenstand der Erklärung erfüllt die folgenden einschlägigen Harmonisierungs-Rechtsvorschriften der Union

*The object of the declaration described above meets the following applicable Community harmonisation legislation*

2006/42/EG (Machine-Directive)  
2006/95/EC (Low voltage directive)

Folgende harmonisierten Normen und Vorschriften wurden eingehalten

*The following harmonized standards and regulations are applied*

DIN EN 1493:2010 (Machine-Directive)  
DIN EN 60204-1: 2006+A1:2009 (Low voltage directive)  
EN ISO 121 :2010 (Risk assessment and risk reduction)

Prüfinstitut  
*Institute of Quality*

CCQS UK Ltd.  
Level 7; Westgate House; Westgate Road  
London – W5 1YY  
UNITED KINGDOM

Referenznummer der technischen Daten  
*Reference number for the technical data*

TF-C-0115-14-04-01-5B

Nummer des Zertifikats  
*Number of the certificate*

CE-C-0115-14-04-01-5B

### **ATH-Heinl GmbH & Co. KG**

Gewerbepark 9  
92278 Illschwang  
Germany  
Im Juni 2012



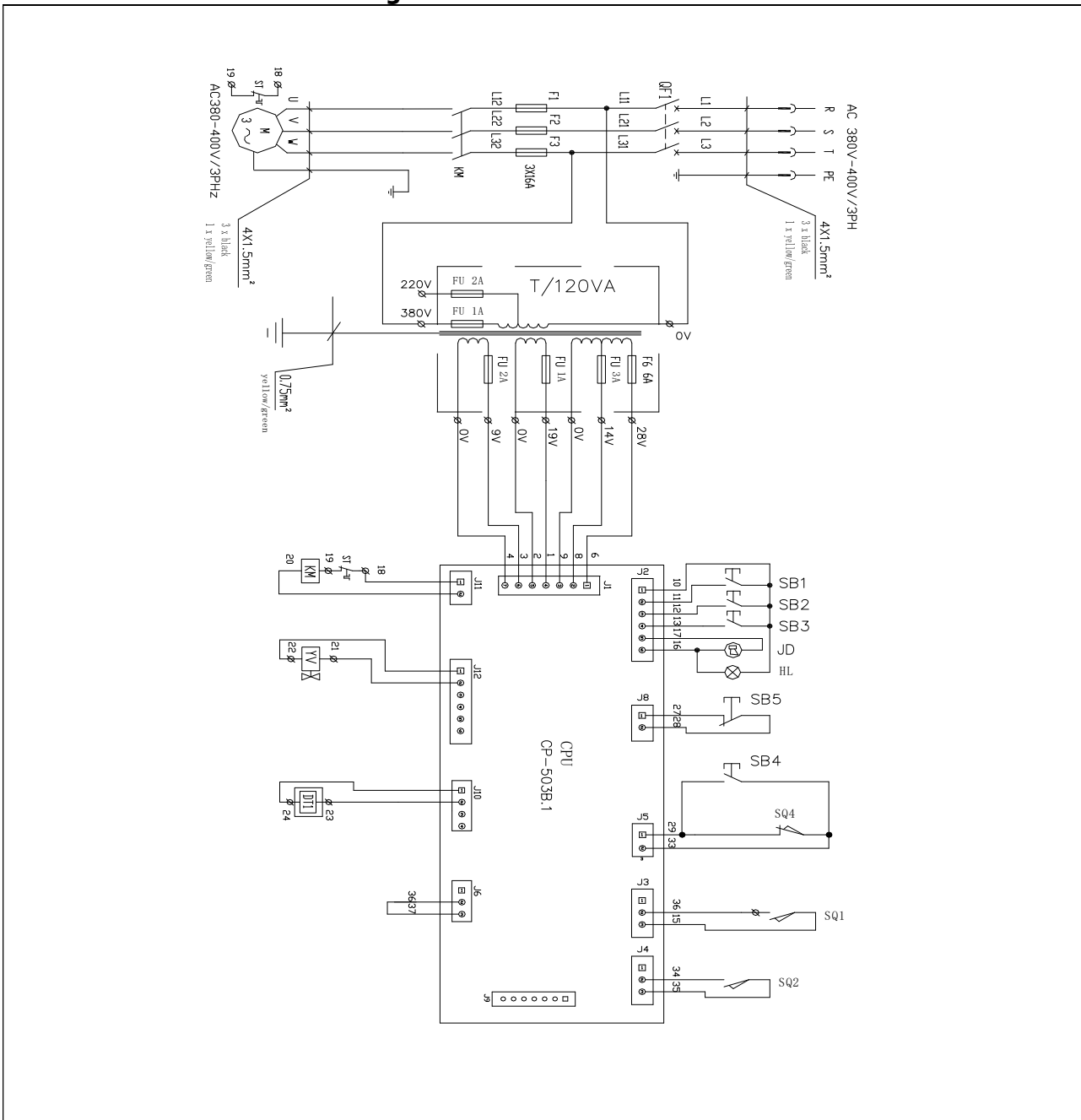
Hans Heinl  
(Geschäftsführer / General Manager)

**DURCH UMBAUTEN UND/ODER VERÄNDERUNGEN AN DER MASCHINE WIRD DIE CE-PRÜFUNG AUSSER KRAFT GESETZT UND EINE HAFTUNG AUSGESCHLOSSEN.**  
**BY MODIFICATION AND / OR CHANGES TO THE MACHINE, THE CE EXAMINATION IS EXCLUDED WITHOUT LIMITATION AND A LIABILITY SHALL BE EXCLUDED.**

## **6.0 APPENDIX**

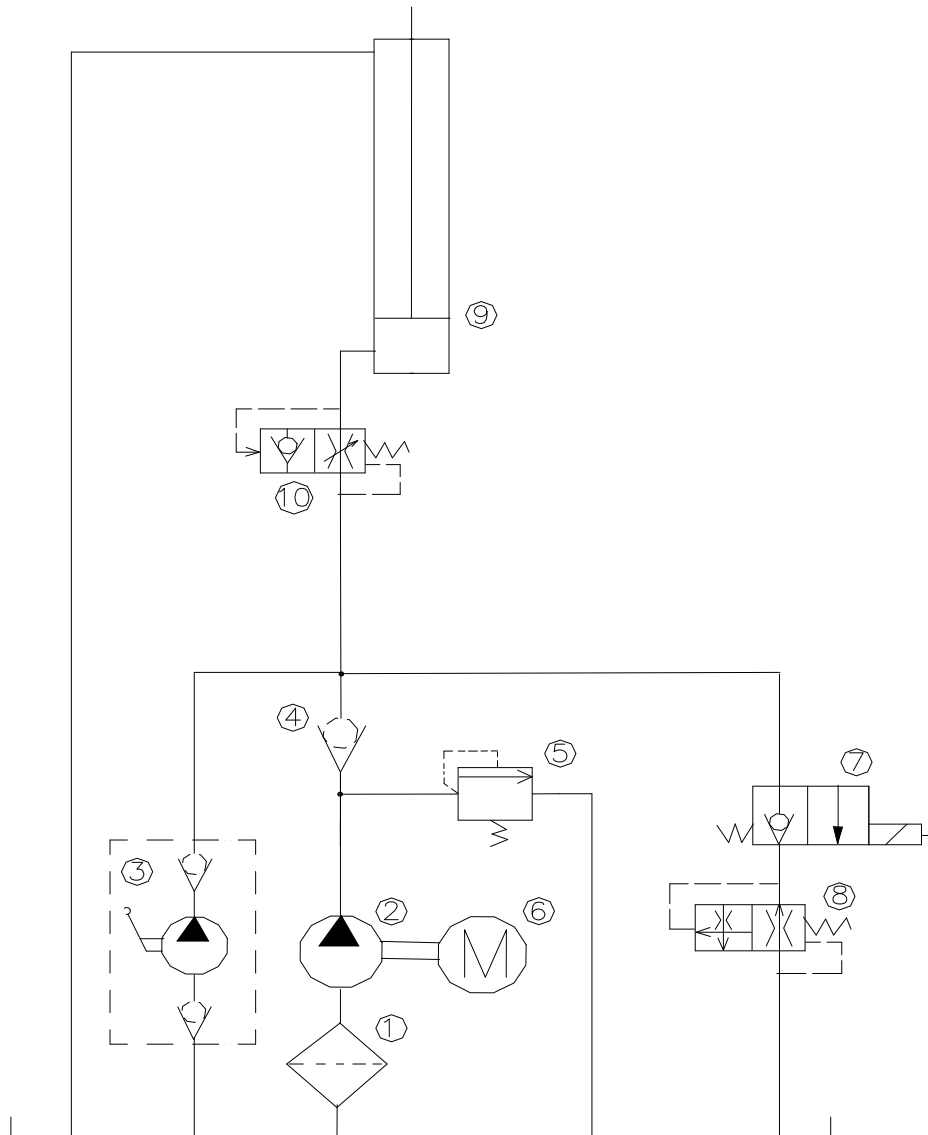
### **6.1 Pneumatic circuit diagram** Not relevant!

## 6.2 Electric circuit diagram



QF	Main switch	SB5	Emergency stop button
KM	Motor protection 24V DC	SQ1	Top limit switch
M	Motor 1.5 KW / 3~400 V/50 Hz	SQ2	CE stop limit switch
T	Transformer 120 VA	SQ4	Chain safety switch
SB1	LIFT button	JD	Alarm
SB2	LOWER button	HL	Control light ON
SB3	CE + Park button	YV	Electromagnetic lowering valve

### 6.3 Hydraulic circuit diagram



1	Oil filter	6	Electric motor
2	Gear pump	7	Lowering valve
3	Emergency hand pump – optional	8	Lowering speed valve
4	Check valve	9	Hydraulic cylinder
5	Pressure limiting valve	10	Hose rupture protection

## 7.0 WARRANTY CARD

Dealer address:	Customer address:		
Company (or customer number):	Company (or customer number):		
Contact partner:	Contact partner:		
Street:	Street:		
Postcode & town:	Postcode & town:		
Tel. & Fax:	Tel. & Fax:		
Email:	Email:		
Manufacturer & model:	Serial number:	Year of construction:	Reference number:
Message description:			

Description of required spare parts:		
Spare part:	Item number:	Amount:

### IMPORTANT:

Damage resulting from improper handling, lack of maintenance or mechanical damage is not covered by the warranty. For systems that have not been installed by an ATH approved installer, the warranty is limited to the provision of the necessary spare parts.

### Transport damages:

Visible defect (visible transport damage, note on freight forwarder delivery note, immediately send copy of the delivery note and photos to ATH-Heinl)

Hidden defect (transport damage is only detected when unpacking the goods, send damage report with pictures to ATH-Heinl within 24 hours)

Place & Date

Signature & Stamp

## 7.1 Scope of the Product Warranty

- Five years for the devices structure
- Power supplies, hydraulic cylinders and all other wear components such as turntables, rubber plates, ropes, chains, valves, switches, etc., are limited to one year under normal circumstances/use under warranty conditions.


The warranty does not extend to:

- Defects caused by normal wear and tear, misuse, transport damage, improper installation, tension or lack of required maintenance.
- Damage caused by neglect or failure to follow the instructions in this manual and/or other accompanying instructions.
- Normal wear and tear on parts requiring service to keep the product in safe working condition.
- Any component that has been damaged during transport.
- Other components that have not been explicitly listed but are considered to be general consumables.
- Water damage caused by e.g. rain, excessive humidity, corrosive environments or other contaminants.
- Blemishes that do not affect function.

**WARRANTY IS NOT VALID,  
IF THE WARRANTY CARD WAS NOT SENT TO ATH-HEINL.**

Damage and malfunctions caused by non-compliance with maintenance and adjustment work (according to operating instructions and/or training), faulty electrical connections (rotating field, rated voltage, protection) or improper use (overload, outdoor installation, technical changes) are excluded from the warranty!

## 8.0 INSPECTION LOG

	<p><b>This inspection manual (including log) is an important part of the operating instructions and product.</b></p> <p><b>!!!PLEASE STORE CAREFULLY!!!</b></p>
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### Check

The product must be checked after completion of the installation, handover, if necessary briefing and then regularly in accordance with the applicable regulations and legal provisions in the country of operation by a suitable and approved company or facility.

In the case of changes or extensions to the product type, an additional inspection book must be maintained and accepted.

### Scope of Inspection




In addition to perfect function, cleanliness and maintenance requirements, it is vital that the safety-relevant components of the entire system are checked.

### Technical Data

- Please refer to the enclosed operating instructions.

### Nameplate

- Make a note of all the data below
- Manufacturer & type of mounting materials used:

 <b>ATH-Heinl</b>	
<b>Typ</b> Type	<b>Volt</b>
<b>Serien #</b> Serial #	<b>Ph</b>
<b>Baujahr</b> Year of built	<b>Hz</b>
	<b>Amp.</b>
	<b>kW</b>
 	Designed by ATH-Heinl Germany Manufactured in China  <b>ATH-Heinl GmbH &amp; Co. KG</b> Gewerbepark 9 D 92278 Illschwang Germany

## 8.1 Installation and Handover Log

**Site:**

Company:  
Street:  
Town:  
Country:

**Device / system:**

Manufacturer:  
Type / model:  
Serial no.:  
Year of construction:

Responsible retailer:

The above product has been assembled, checked for function and safety and put into operation. Installation was carried out by:

the operator

the technical expert

The operator confirms that the product type has been set up correctly, that he/she has read and understood all information contained in these operating instructions and the log, and that he/she keeps this documentation accessible to the instructed operator at all times.

The operator confirms that after installation and commissioning by a person trained by the manufacturer or an authorised dealer (expert), instruction in the function, handling, safety-relevant specifications, maintenance and care of the machine has taken place, documents, information and specifications of the machine have been provided and the product is working properly.

**IMPORTANT NOTES:**

**IF THE ABOVEMENTIONED POINTS ARE NOT FULFILLED, THE WARRANTY CLAIM IS EXCLUDED:**

The warranty is only valid in conjunction with compliance and evidence of proper assembly, handover, and if necessary training, as well as yearly maintenance carried out by an expert authorised by the manufacturer. The interval between services must not exceed 12 months. In case of non-standard use or multi-shift or seasonal use, a bi-annual inspection and maintenance must be arranged.

Warranty claims are only recognised if all points in the log and operating instructions have been met, the claim is asserted immediately after detection and **this log is sent to the manufacturer along with the maintenance and service logs.**

Further specific information about the warranty, such as scope, requirements and specifications, are described in the operating instructions and must be observed.

Damages and complaints caused by improper handling; failure to maintain and service; use of unsuitable or unspecified assembly, operating, maintenance or service products; mechanical damage; intervening in the unit without consultation or by an unauthorised expert are excluded from the warranty. For systems that have not been installed by an authorised expert, the warranty is limited by agreement of the manufacturer to the provision of the necessary spare parts.

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Expert name and company stamp  
if necessary, number and name of retailer

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Date and expert signature

---

Operator name and company stamp

---

Date and operator signature



## 8.2 Inspection Plan

Nameplate				
Quick reference guide				
Operating instructions				
Safety label				
Operation label				
Other labels				
Construction (deformation, cracks)				
Fixing dowels and stability				
Condition of concrete floor (cracks)				
Condition / general condition				
Condition / cleanliness				
Condition / care and sealing				
Condition / liquids				
Condition / lubrication				
Condition / aggregate				
Condition / drive				
Condition / motor				
Condition / transmission				
Condition / cylinder				
Condition / valve				
Condition / electrical control				
Condition / electric buttons				
Condition / electric switches				
Condition / electric lines				
Condition / hydraulic lines				
Condition / hydraulic screws				
Condition / pneumatic lines				
Condition / pneumatic screws				
Condition / tightness				
Condition / bolts and bearings				
Condition / consumables				
Condition / covers				
Condition / functions under load				
Condition / safety-relevant components				
Condition / electrical safety device				
Condition / hydraulic safety device				
Condition / pneumatic safety device				
Condition / mechanical safety device				
Condition / functions under load				
Inspection sticker issued				

**8.3 Visual inspection (authorised expert)**

**Inspection Certificate**  
relating to a regular / extraordinary inspection / audit \*)

The device has undergone a readiness test.  
No / the following \*) defects were found:

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Inspection contents: functional and visual inspection according to specifications  
Pending partial inspection:

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There were no \*) concerns arising from commissioning, an audit is not \*) required.

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\_\_\_\_\_  
(Place, date)

\_\_\_\_\_  
(Technical expert signature)

**Confirmation of acceptance:**

\_\_\_\_\_  
(Name of technical expert)

\_\_\_\_\_  
(Title)

\_\_\_\_\_  
(Address)

\_\_\_\_\_  
(Employed at)

\_\_\_\_\_  
Operator (company stamp, date, signature)

Faults noted \*\*) \_\_\_\_\_

Faults remedied \*\*) \_\_\_\_\_

\*) Delete if not applicable  
\*\*) Confirmation of operator or a representative with date and signature

Visual inspection (authorised expert)

## Inspection Certificate

**relating to a regular / extraordinary inspection / audit \*)**

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---

Inspection contents: functional and visual inspection according to specifications  
 Pending partial inspection:

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There were no \*) concerns arising from commissioning, an audit is not \*) required.

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 (Place, date)

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 (Technical expert signature)

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 (Name of technical expert)

\_\_\_\_\_  
 (Title)

\_\_\_\_\_  
 (Address)

\_\_\_\_\_  
 (Employed at)

\_\_\_\_\_  
 Operator (company stamp, date, signature)

Faults noted \*\*) \_\_\_\_\_

Faults remedied \*\*) \_\_\_\_\_

\*) Delete if not applicable  
 \*\*) Confirmation of operator or a representative with date and signature

Visual inspection (authorised expert)

## Inspection Certificate

**relating to a regular / extraordinary inspection / audit \*)**

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 No / the following \*) defects were found:

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Inspection contents: functional and visual inspection according to specifications  
 Pending partial inspection:

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---

There were no \*) concerns arising from commissioning, an audit is not \*) required.

---

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 (Place, date)

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 (Technical expert signature)

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 (Name of technical expert)

\_\_\_\_\_  
 (Title)

\_\_\_\_\_  
 (Address)

\_\_\_\_\_  
 (Employed at)

\_\_\_\_\_  
 Operator (company stamp, date, signature)

Faults noted \*\*) \_\_\_\_\_

Faults remedied \*\*) \_\_\_\_\_

\*) Delete if not applicable  
 \*\*) Confirmation of operator or a representative with date and signature

Visual inspection (authorised expert)

## Inspection Certificate

**relating to a regular / extraordinary inspection / audit \*)**

The device has undergone a readiness test.  
 No / the following \*) defects were found:

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Inspection contents: functional and visual inspection according to specifications  
 Pending partial inspection:

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There were no \*) concerns arising from commissioning, an audit is not \*) required.

---

\_\_\_\_\_  
 (Place, date)

\_\_\_\_\_  
 (Technical expert signature)

**Confirmation of acceptance:**

\_\_\_\_\_  
 (Name of technical expert)

\_\_\_\_\_  
 (Title)

\_\_\_\_\_  
 (Address)

\_\_\_\_\_  
 (Employed at)

\_\_\_\_\_  
 Operator (company stamp, date, signature)

Faults noted \*\*) \_\_\_\_\_

Faults remedied \*\*) \_\_\_\_\_

\*) Delete if not applicable  
 \*\*) Confirmation of operator or a representative with date and signature



