



Operating Instructions



ATH-Cross Lift

Cross Lift 50+

Serial number: 8851970600369

















Contents

1.0	INTRODUCTION	3 -
1.1	General Information	
1.2	Description	
1.3	Operation	- 10 -
1.4	Technical Data	- 15 -
1.5	Scale Drawing	- 16 -
2.0	INSTALLATION	- 19 -
2.1	Transport & Storage Conditions	- 19 -
2.2	Unpacking the machine	- 19 -
2.3	Delivery Contents	- 20 -
2.4	Location	- 22 -
2.5	Fixing	- 23 -
2.6	Electrical Connection	- 23 -
2.7	Pneumatic Connection	- 24 -
2.8	Hydraulic Connection	- 24 -
2.9		
2.10	Completion of Work	- 35 -
3.0	OPERATION	
3.1	Operating Instructions	
3.2		
4.0	MAINTENANCE	
4.1	Consumables for installation, maintenance and servicing	
4.2	Safety Regulations for Oil	
4.3	Notes	
4.4	Maintenance or Service Plan	
4.5	Troubleshooting / Error Display and Solutions	
4.6	Maintenance and Service Instructions	
4.7	Disposal	- 45 -
5.0	EG-/EU-KONFORMITÄTSERKLÄRUNG / EC-/EU-DECLARATION OF CONFORMITY	
6.0	APPENDIX	
6.1	Pneumatic circuit diagram	
6.2	Electric circuit diagram	
6.3	,	
7.0	WARRANTY CARD	
7.1	Scope of the Product Warranty	
8.0	INSPECTION LOG	- 55 -
8.1	Installation and Handover Log	
8.2	Inspection Plan	- 57 -
8.3		
9.0	NOTES	- 62 -



1.0 INTRODUCTION

1.1 General Information



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.



WARNING: Follow the instructions to prevent injury or damage.



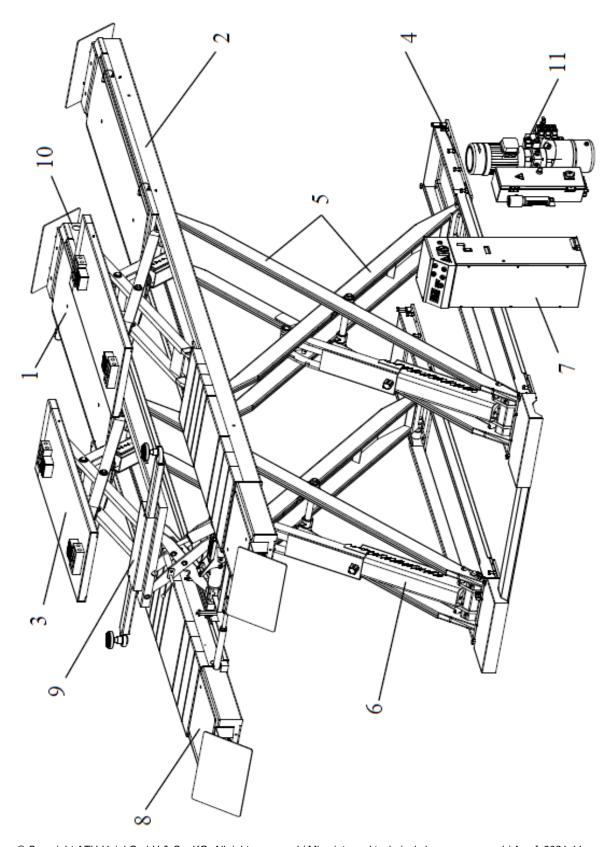
TIP: Provides more information on functionality and tips for using the device efficiently.



Appropriate protective clothing must be worn for all work on the described system.



1.2 Description



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1. Access rails secondary side main lift

The access rails are fitted with swing plates at the back and recesses at the front (including blank plates)

for axle measurement rotary plates.

2. Access rails control side main lift

Both access rails are moved upwards using the internal scissor lift system (5) and hydraulic cylinder (6).

3. Wheel-free lift

Facilitates additional vehicle lifting on the rocker rail.

4. Base frame

Secures the lifting platform and guides the scissors.

5. Scissor lift system

Converts the longitudinal movement of the hydraulic cylinder into a lifting movement.

6. Hydraulic lift cylinder with integrated safety catches.

These safety catches prevent the raised platform from lowering by more than 100 mm in the event of any defects.

Pneumatic cylinders unlock the system each time it is lowered.

7. Control box

Contains the complete electrical control system. All buttons are protected by a front ring in order to prevent them from being pressed accidentally. Furthermore, all movements are immediately stopped when the buttons are released (dead man's control).

Integrated hydraulic unit

The hydraulic oil is fed from the tank to the cylinders by a gear pump driven by a motor. A lowering valve allows the oil to flow back into the tank.

8. Light barrier and limit switch

The light barrier monitors the secure synchronisation of the two scissors.

The UP limit switch prevents an unnecessarily high build-up of pressure in the hydraulic circuit.

The CE stop switch stops the lift descending at a height of 400 mm.

9. Jacking beam (optional)

This facilitates additional vehicle lifting on the axle or chassis.

10. Play detector and extension

The extensions extend the access rails by 600 mm.

The extension is designed so that the play detector can be mounted onto it.

11. Play detector unit

The hydraulic unit is an integral part of the electric control system. The wired remote control is already permanently connected here. The unit can be mounted on the lift control box or next to it on the wall.

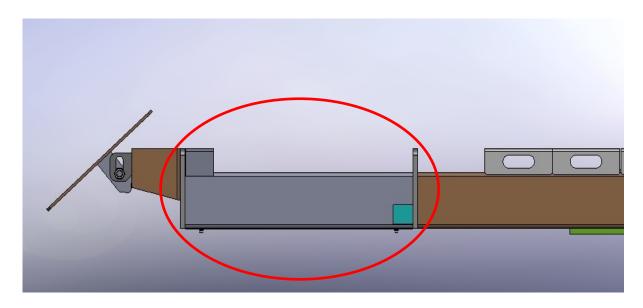


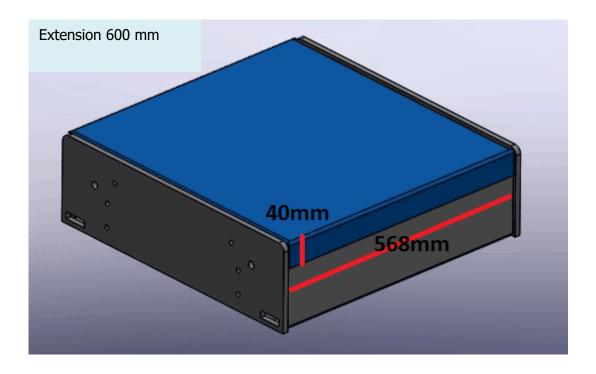
1.2.1 Description of Play Detector and Extensions

These extensions are pre-installed on the **ATH-Cross Lift 50 plus**. The play detector plates are mounted on the extensions.

The optional extensions can be used to extend the access rails by 600 mm.

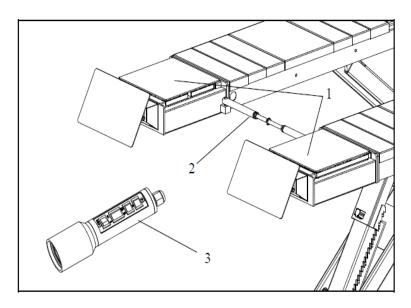
The required fastening bores are already provided on the guide rail of the lift.



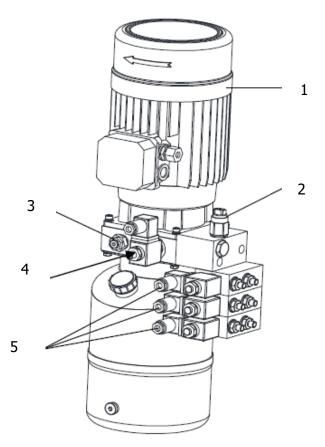




Play detector with hydraulic unit



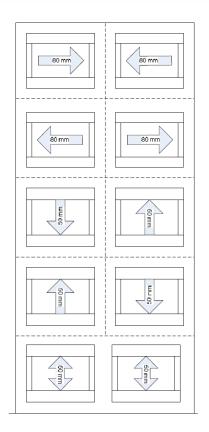
- 1 Play detector plates
- 2 Cross strut scissors
- 3 Remote control with lamp



- 1 Electric motor
- 2 Pressure switch
- 3 Pressure limiting valve
- 4 Disengaging valve
- 5 Control valve













The ATH Heinl axle play tester was developed for testing the chassis suspension and steering elements of passenger cars and light commercial vehicles. Operation is via a wired remote control with integrated test lamp.

Technical description:

Mechanical system: The test unit consists of two test plates. The transverse movement is 80 mm in both directions and 50 mm in the longitudinal direction both forwards and backwards. The longitudinal movement can also be performed simultaneously by

both plates. Both plates are designed as bulb plates for improved adhesion.

Safety

All axle play testers are developed and manufactured in accordance with current safety requirements. Safety has been further increased by also covering the plate edges and corners.

Control unit and test lamp: The control unit and hydraulic components

have been integrated into a single unit and can be installed on the lift unit. This unit contains all components required for operation. The remote control with test lamp is connected to this central unit via a cable.

Standard delivery contents:

- 2 test plates
- Central unit and hydraulics unit
- Remote control with test lamp
- The hydraulic hoses are already installed and connected to the platform.

Certifications / standards

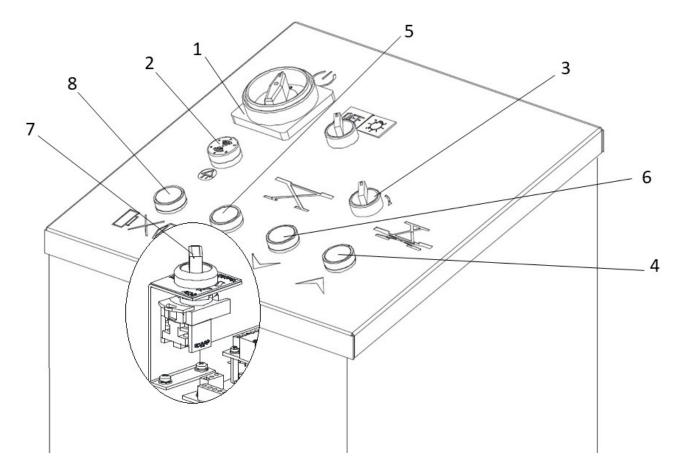
- CE
- Fulfils the requirements of the Austrian Ordinance on Testing Laboratories 3rd PBStV-Nov. of July 2008 Annex 2a / Point 9 (and thus also the less stringent requirements of the 5th PBStV-Nov. of December 2010)

Technical data:

- Actuation: Hydraulic
- Hydraulic oil quantity: approx. 8 litres
- Corrosion protection: Galvanised
- Maximum axle load: 2.6 t
- Maximum actuating force per plate: 8 kN
- Speed of movement: 50 mm/sec.
- Movements:
- Transverse movement: 80 mm per plate, inverse
- Longitudinal movement: 50 mm per plate, inverse and parallel
- Power supply: 3 x 400 V / PE 50 Hz □ Fuse protection: 16 A
- Overall dimensions (2 separate units): 600 x 500 x 56 mm
- Test plate dimensions: 270 x 500 mm



1.3 Operation



- 1. Lockable main switch with emergency stop function to switch the lift on and off and to prevent operation by unauthorised persons.
- 2. Alarm gives an acoustic and visual signal when the CE stop is reached
- 3. Selector switch

Selects either main lift or free lift

4. Lift button

Raises the lift

5. Park button

Parks the lift on the safety catches. Delete rest

6. Lower button

After a short automatic lift, the safety catches are unlocked and the platform is then lowered. An acoustic signal is also generated when the CE stop is reached.

7. Adjustment switch and work switch

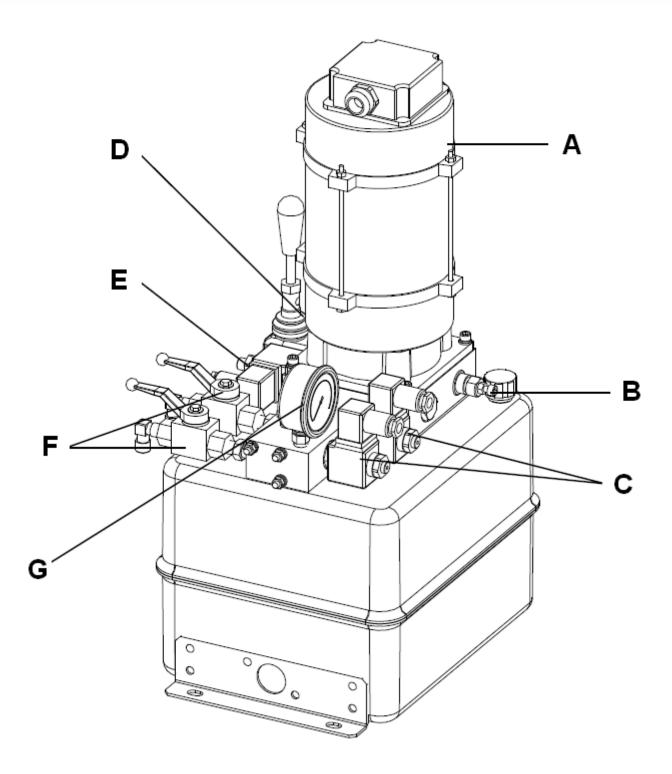
Position: WORK indicates that the lift is in normal operation

Position: ADJ indicates that the lift is in adjustment mode

8. Switch for light barrier

Muting the light barrier for adjustment and/or installation measures





A = Motor

C = Solenoid valves

E = Lowering and control solenoid valve

G = Manometer

B = Pressure control valve

D = Emergency manual pump

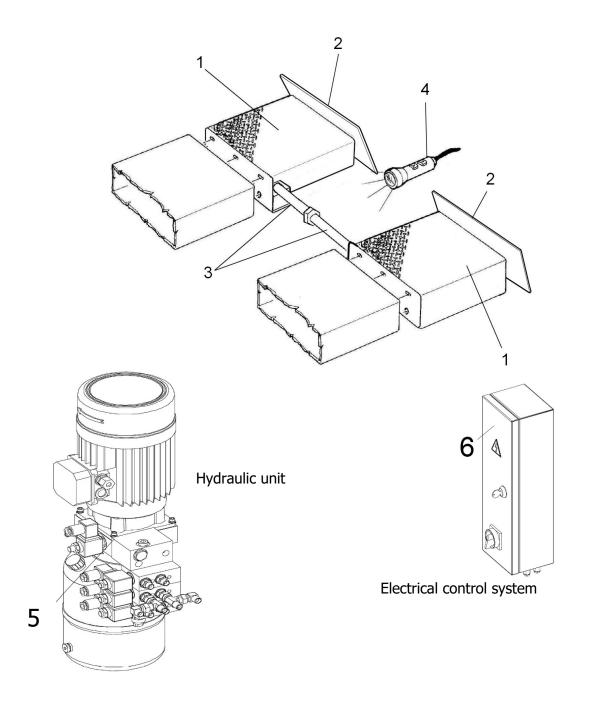
F = Levelling valves



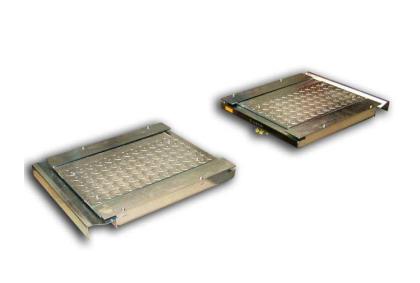
1.3.1 Operation – Play Detector

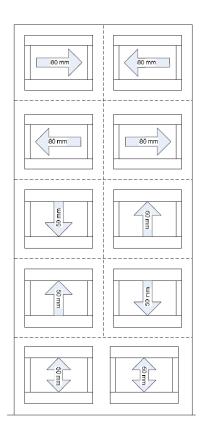
The play detector consists of the following parts:

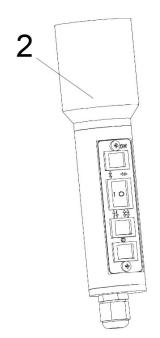
- 2 movable test plates (1)
- Electrical control system (6) and hydraulic unit (5)
- Cross strut on access rails (3)
- Remote control with test lamp (4)
- The access ramps (2) for the lift are now mounted on the extensions.











The play detector can be switched on and off and the function of the play detector can be pre-selected and controlled using the remote control including hand lamp (2) (see above for different test types).

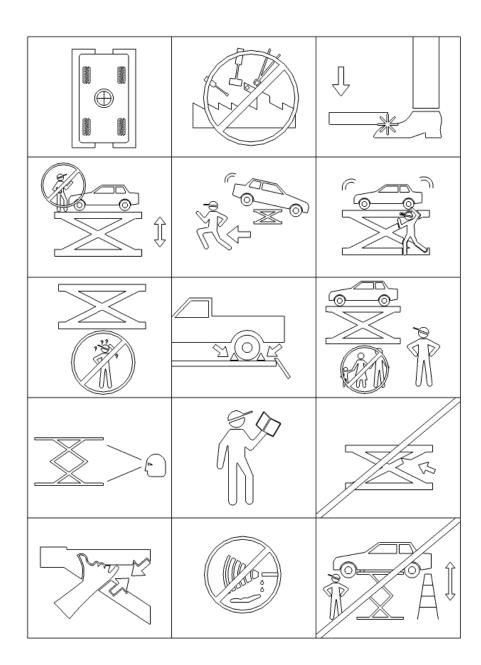
The transverse movement is 80 mm in both directions and 50 mm in the longitudinal direction both forwards and backwards. The longitudinal movement can also be performed simultaneously (parallel and inversely) by both plates.



OPERATION

Safety instructions

- 1. Ensure there is correct weight distribution of the vehicle
- Changes to the lift of any kind are not permitted
- 3. Leave the danger zone when lowering the lift
- 4. No objects or persons may be transported on the lift, the two guide rails or on the vehicle that is being lifted.
- 5. If there is a danger of the vehicle falling, you must leave the danger zone immediately
- 6. Prevent the lifted vehicle from swaying significantly
- 7. The lift may only be operated by trained personnel.
- 8. Use suitable roll protection
- 9. Only authorised persons are allowed to enter the danger zone.
- 10. Proper maintenance and inspections are necessary for safe work
- 11. Read and understand the operating instructions before operating the lift
- 12. Do not work on damaged lifts
- 13. Keep the shearing points free when moving the lift
- 14. Do not clean the lift under running water.
- 15. The danger zone must be kept clear when lifting and lowering





Technical Data 1.4

Model	ATH Cross Lift 50 Plus
Load capacity of main lift	5,000 kg
Load capacity of wheel-free lift	4,000 kg
Lifting time (2,000 kg)	70 s
Lowering time (2,000 kg)	60 s
Electrical system	3/400 V/50 Hz
Control voltage	DC 24 V
Motor	3.5 kW
rpm	1375
Upstream fuse	3 C 16 A
Connection cable	Min. 5 x 2.5 m ²
Protection type	IP 54
Flow rate	4.8 cm ³ /U
Working pressure ²	240 bar (max. 300 bar)
Required compressed air connection	8 bar
Recommended hydraulic oil	Summer (15 °C to 45 °C): HVLP-D 46 (e.g.: Eni PRECIS HVLP-D)
	Winter (under 10 °C): HVLP-D 32 (e.g.: Eni PRECIS HVLP-D)
Oil quantity	Approx. 18 l
Floor anchor	Bolt anchor: M16 x 180 (e.g. Atrion ABL-W 16-060-180)
	Compound anchor: M16 x 190 (e.g. Atrion AVA-W 16-045-190)
Number of anchors	16 units
Permissible sound level	≤ 80 dB
Weight	2,840 kg



If the indicated rated load cannot be lifted, please contact our service team.

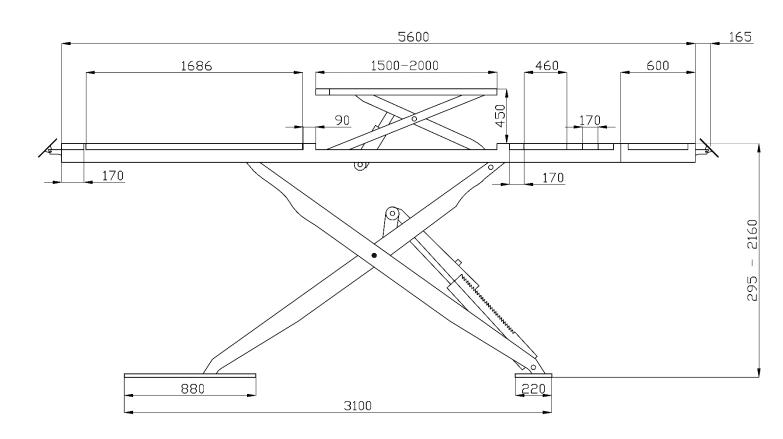
1.4.1 Technical Data - Play Detector

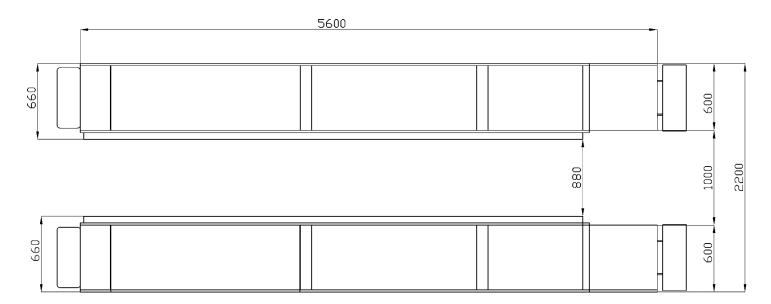
Type / actuation	Hydraulic
Maximum axle load	2600 kg
Actuating force per plate	8 kN
Speed of movement	50 mm/s
Transverse movement	80 mm per plate, inverse
Longitudinal movement	50 mm per plate, inverse and parallel
Control voltage	3/400 V/50 Hz
Motor	1.1 kW
rpm	1400
Upstream fuse	3 C 16 A
Connection cable	Min. 5 x 2.5 m ²
Protection type	IP 54



Scale Drawing 1.5

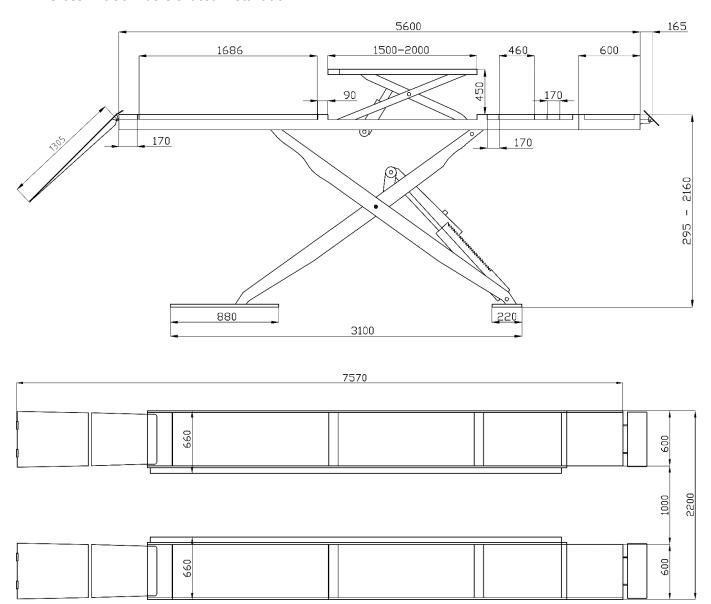
ATH Cross Lift 50 Plus floor-level installation:



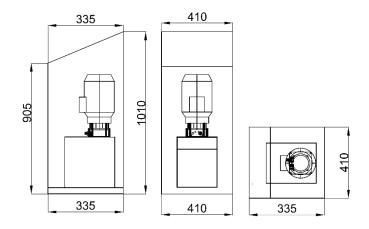




ATH Cross Lift 50 Plus elevated installation:

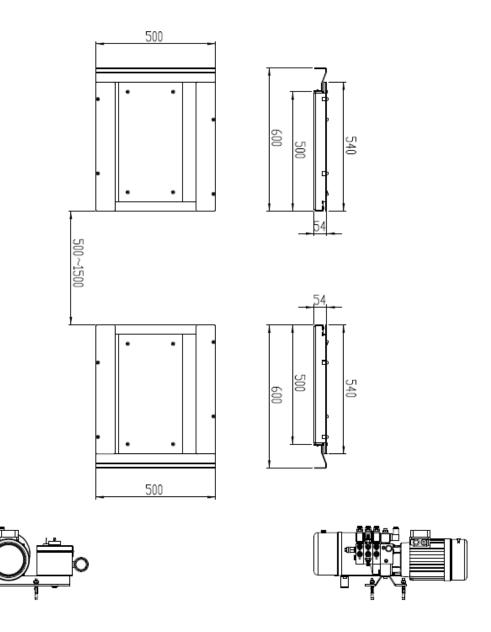


ATH-Cross Lift 50 plus dimensions control unit





1.5.1 Scale Drawing - Gelenkspieltester





2.0 INSTALLATION

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



The operating instructions (including the log) are an important part of the machine / product. !!!PLEASE STORE CAREFULLY!!!

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:	2.550 kg
Width	700 mm
Length	5.000 mm
Height	1.440 mm
Storage temperature	-10 to +50 °C

2.2 Unpacking the machine

Remove the top cover of the packaging and make sure that no damage has occurred during transport.



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.

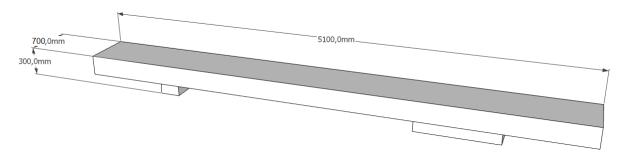
The packaging material used for the machine should be stored carefully. Keep the packaging material out of the reach of children as it may be hazardous.



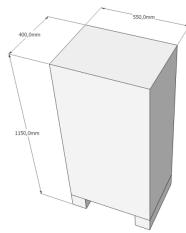
2.3 Delivery Contents

Basic package with:

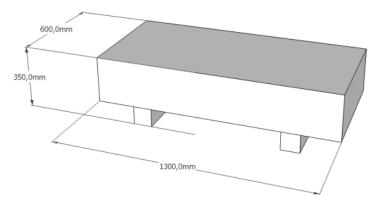
2 x scissors including integrated cylinders
 Dimensions (L x W x H): 5700 x 700 x 300 mm/scissors
 Weight: 1040 kg/scissors



1 x package with control box, hydraulic and pneumatic hoses:
 Dimensions (L x W x H): 400 x 540 x 1,140 mm
 Weight: 130 kg



1 x package with accessories, ramps and bridging track sections.
 Dimensions (L x W x H): 1300 x 600 x 350 mm
 Weight: 150 kg

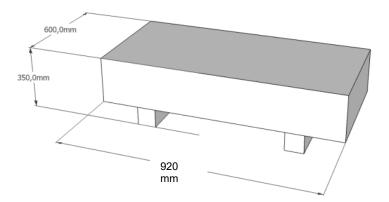




• 1 x package with play detector unit.

Dimensions (L x W x H): 920 x 600 x 340 mm

Weight: 40 kg





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 is disposed.
- Storage temperature: -10 °C∼+40 °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.

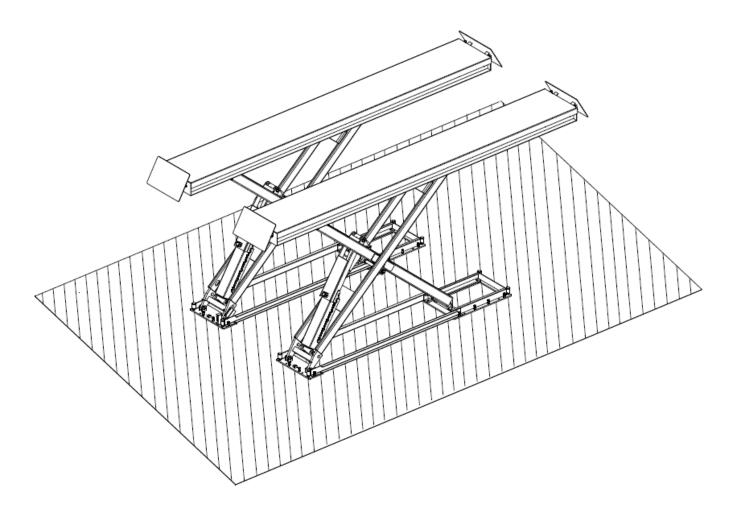
In addition to the ground conditions, the guidelines and instructions of the accident prevention regulations as well as the workplace regulations must be observed when selecting an installation site.

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





Safety area min. 1 m
Permissible operating temperatures: 10 - 40 °C

Maximum permitted humidity: ≤80 % at 30 °C

Height above sea level: ≤ 2000 m

Power connection & earthing cable (see technical data) is to be installed as a connector system (socket and

plug) or a fixed connection.

Required supply See technical data



The lift may only be installed indoors and may **not** be installed outdoors.

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.

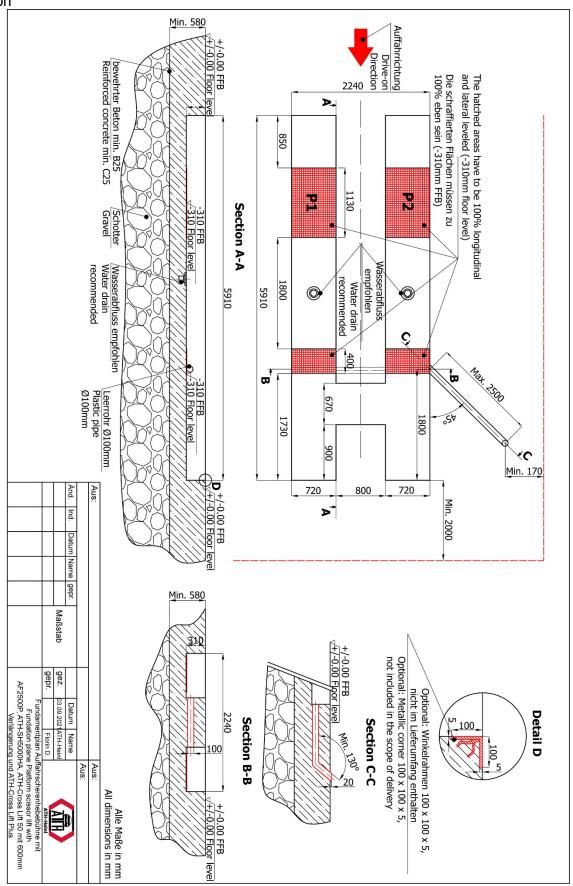
Incorrect installation and settings lead to exclusion of liability and warranty.

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.

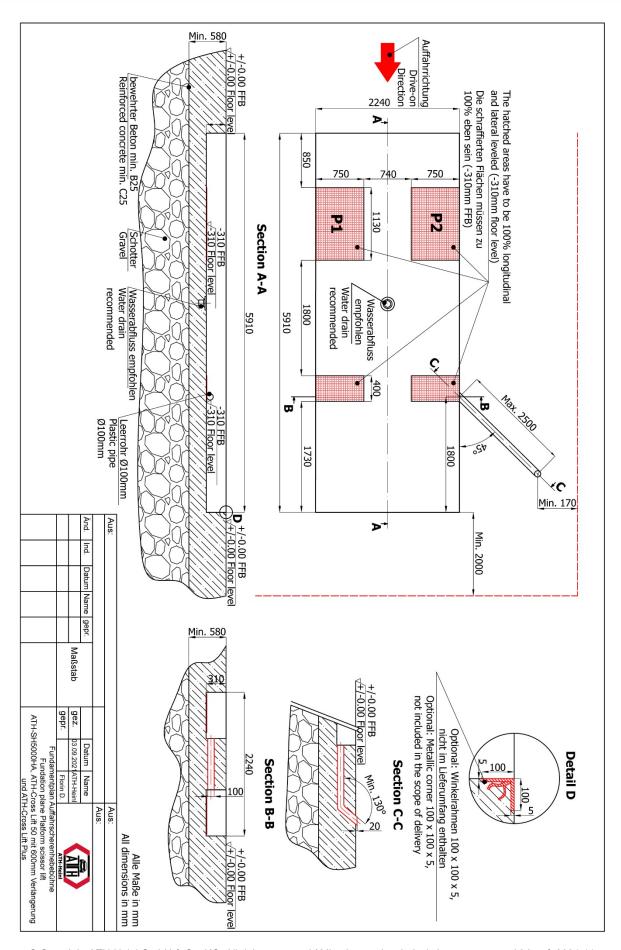


INSTALLATION Foundation

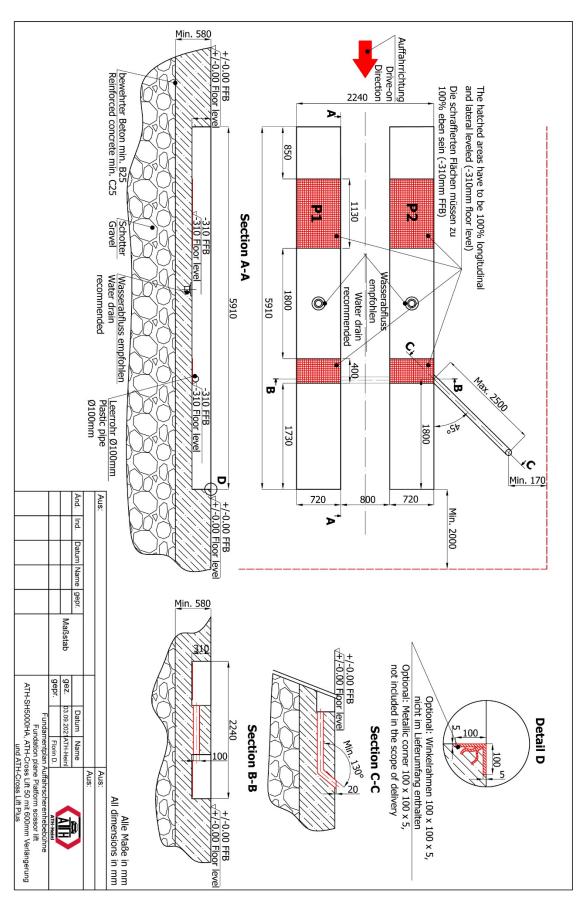


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Concrete quality: Concrete curing time: C20/25 Min. 20 days





Do not install the scissors on **asphalt** or **soft screed**.

There cannot be **any expansion joints** or **cracks** that may interrupt the continuity of the reinforcement.

The operator must check the load capacity of suspended ceilings.



Assembly

- 1. Setting up and aligning the pairs of scissors
 - a. FOR UNDERFLOOR ASSEMBLY:

Position both pairs of scissors in the pit provided and place the control box on the surface intended for this purpose.

FOR ELEVATED ASSEMBLY:

Position both pairs of scissors parallel to one another and place the control box on the surface intended for this purpose, as detailed in the technical data section. Before fixing with dowels, ensure that both scissors are aligned and, if necessary, adjust using washers or plates.

2. Install hydraulic hoses

In order to attach the hydraulic hoses, it is advisable to lift the two pairs of scissors up to the first catch position using a suitable tool

- a. Open the front cover of the control box.
- b. Install the hydraulic hose(s) as shown below.
- c. Connect hydraulic hoses and overflow oil lines to the cylinders as shown.



3. Hydraulic oil

Fill hydraulic oil up to the mark on the dipstick. Only use the oils specified in Technical Data for this purpose.



Main lift

B-2 = Main cylinder

B-1 = Secondary cylinder

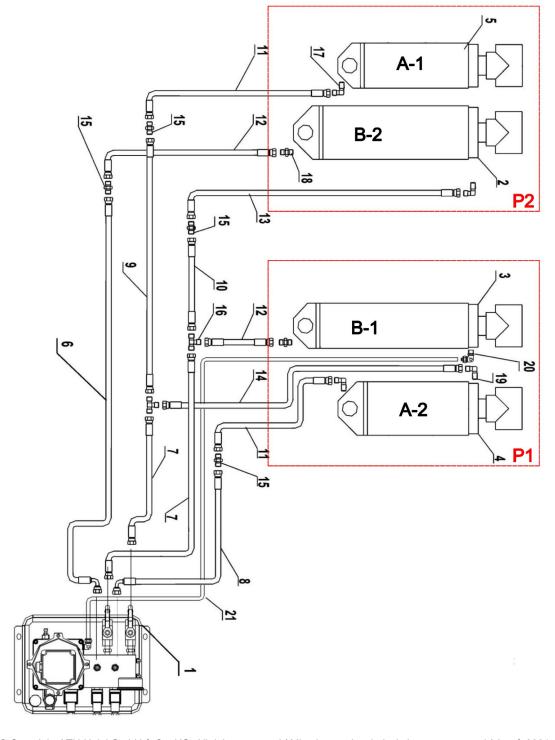
Wheel-free lift

A-2 = Main cylinder

A-1 = Secondary cylinder



You will find the associated circuit diagram in Appendix 6.3 of these operating instructions.





4. Pneumatic connection

a. Install the pneumatic hose(s) as shown below.

P1 = Secondary scissors main lift

A-2 = Secondary cylinder wheel-free lift

AV2 = Release for main lift

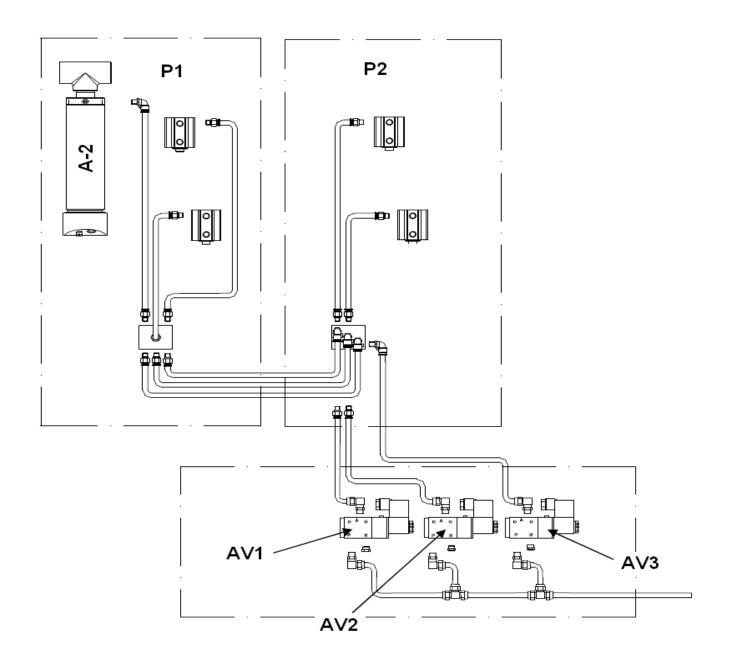
P2 = Main scissors main lift

AV1 = Release for wheel-free lift

AV3 = Lowering acceleration valve



You will find the associated circuit diagram in Appendix 6.1 of these operating instructions.





5. Electrical connection

- a. Lay all electrical cables between the control box and the lift and connect them in accordance with the numbering or connectors.
- b. The limit switches for the lift are only electrically connected at this stage. Please install them on the platform later.



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



You will find the associated circuit diagram in Appendix 6.2 of these operating instructions.

6. Bleeding the hydraulic circulation
See the instructions in the **Final Tasks** section.

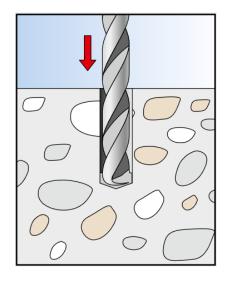
Important!

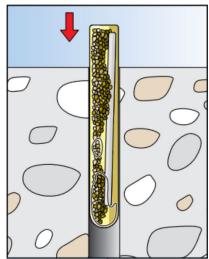
Before the system is put into operation or operated with oil for the first time, the following must be observed with regard to optimal, trouble-free and virtually air-free functioning.

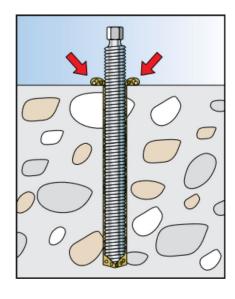
- Use the prescribed hydraulic oil (see Technical Data)
- All hydraulic lines must be connected and tightened according to the hydraulic plan and, if applicable, according to the hose designation!
- A minimum quantity of 20 litres of oil is required! Use caution when filling for the first time!

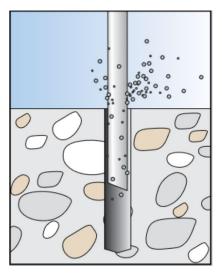


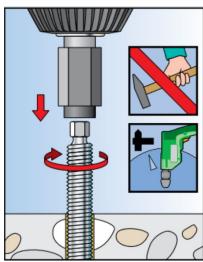
7. Fixing with safety anchors:

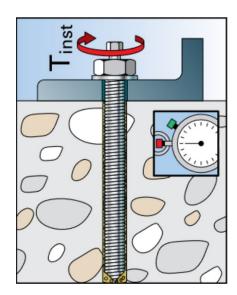








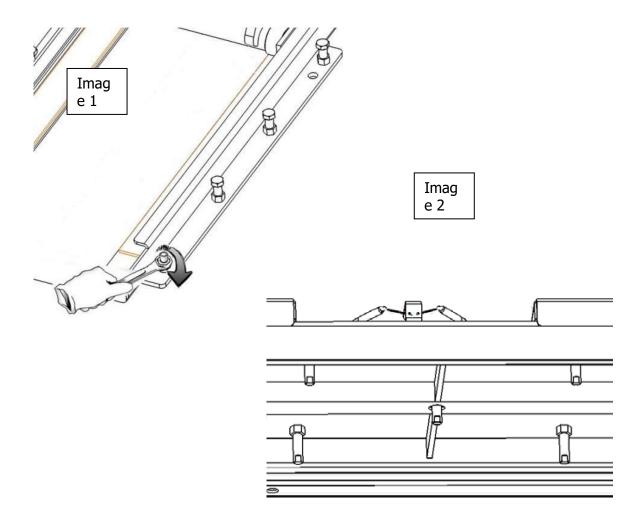






8. Lift configuration

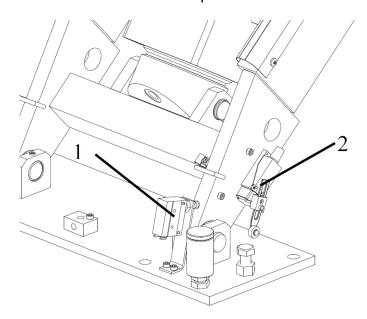
- a. Raise the lift to a height of approx. 1,000 mm.
- b. Continue moving the lift to the next catch position and ensure that both scissors are in the same catch (same height).
- c. Use a spirit level to check the level of the platform. If necessary, the platform can be adjusted using the built-in levelling screws. (Image 1)
- d. When using an axle alignment turntable, this can be adjusted using the screw positioned underneath it (optional). (Image 2)





9. Limit switch installation

- a. Raise the lift up to the maximum height (see technical data).
- b. Install the limit switch (1) on the elbow and adjust this using suitable nuts so that the limit switch is activated in this position.
- c. Carry out a function test for the limit switch.
- d. Lower the lift to a height of 400 mm above the floor.
- e. Install the CE stop (2) on the scissors and adjust the shutdown arm so that it is activated in this position.
- f. Carry out a function test for the CE stop



10. Final function check

- a. Check the strength of the safety anchors
- b. Check synchronisation and light barriers
- c. Check function of limit switch
- d. Acoustic warning signal when the CE stop is reached
- e. Oil level check
- f. Lift a load of approx. 2,000 kg to a height of approx. 1,000 mm
- q. Lower the load to the first catch (approx. 500 mm).
- h. For further lifting, check the synchronisation and adjust this again if necessary.
- i. Lower the load and assemble the missing covers
- 11. After the set-up process, fill in the attached inspection log.





We recommend carrying out cavity sealing for optimum corrosion protection. Suitable silicone must also be used for the joints.



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).

Lift configuration and venting (main lift)

- 1. All valves should be closed!
- 2. Selector switch on main scissors!
- 3. Open connection on the main cylinder (Hose A, Drawing A-2)!
- 4. Carefully press the lifting button and watch until hydraulic oil comes out of connection A!
- 5. As soon as the air has been released from the line and hydraulic oil appears, close the connection!
- 6. Raise the main scissors and leave in end position
- 7. Open valve B!
- 8. Open bleed valve on main cylinder!
- 9. Carefully press the lifting button (if necessary using the additional light barrier muting button) and watch until oil comes out of the bleed valve on the main cylinder!
- 10. As soon as the air has been released from the bleed valve on the main cylinder and hydraulic oil appears, close the connection!
- 11. Carefully press the lifting button until the lift is right at the top. Oil level warning.
- 12. Close valve B!
- 13. Lower the lift right down!
- 14. You can start by equating the guide rails from the main lift via the balancing valve.





Lift configuration and venting (free lift)

- 1. All valves should be closed!
- Selector switch on wheel-free lift!
- 3. Open connection on the main cylinder (accelerated hose, Drawing A-2)!
- 4. Carefully press the lifting button and watch until hydraulic oil comes out of the accelerated hose!
- 5. As soon as the air has been released from the line and hydraulic oil appears, close the connection!
- 6. Raise the main scissors from the wheel-free lift and leave in end position
- 7. Open valve C!
- 8. Open bleed valve on secondary cylinder!
- 9. Open connection hose to the main cylinder (opposite side)!
- 10. Carefully press the lifting button and watch until hydraulic oil comes out of the bleed valve from the secondary cylinder!
- 11. As soon as the air has been released from the bleed valve on the secondary cylinder and hydraulic oil appears, close the connection!
- 12. Keep carefully pressing the lifting button and watch until hydraulic oil comes out of the connection hose to the main cylinder (opposite side)!
- 13. As soon as the air has been released from here as well and hydraulic oil appears, close the connection!

You can start by equating the guide rails from the free lift via the valve.





A test of the main and free lifts under load can be carried out as a final step while continuously observing the lifting platform and load.



3.0 OPERATION

3.1 Operating Instructions

Company: Operating Instructions for Date:

Place of work: Lifting Platform 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.



Pay attention to possible shearing points around the machine.



During operation, the noise can reach 85dB (A), so the operator should take appropriate protective measures.



Moving parts of the machine can catch loose clothing, long hair or jewellery.



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.



Before maintenance and repair work:

- The machine must be disconnected from ALL supply networks
- Pull main switch out of mains plug, if necessary, discharge compressed air from system
- Appropriate measures must be taken against a restart



Work on electrical elements or on the supply line may only be carried out by experts or electricians.

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 250 galvanised in combination with Fischer Superbond reaction cartridge

Minimum requirement for passenger car and passenger car/truck balancing machine: Impact anchor M8 \times 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



Regardless of the level of dirt, the machine must be maintained, cleaned and serviced at regular intervals.

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.

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

4.4 Maintenance or Service Plan

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



4.5 **Troubleshooting / Error Display and Solutions**

Symptoms	Cause	Solution		
Lifting Problems				
	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		
Lifting platform does not lift when button is pressed (motor	Defective main switch and/or contact	Replace main switch and/or contact		
does not run)	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		
	Hydraulic oil shortage	Refill oil		
	Oil filter blocked	Clean the oil filter		
	Oil leakage	Replacement of damaged components		
l ifting platform door not lift	Opened lowering valve	Check and replace the lowering valve if required		
Lifting platform does not lift when button is pressed (motor runs)	Motor rotates in wrong direction	Replace phases		
iulis)	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		
	Not enough space between rails	Distance between rails and guide must be 1.5 - 2.5 mm		
Lifting platform lifts jerkily	Air in hydraulic system	Bleed the hydraulic system		
	Contaminated hydraulic oil	Change the hydraulic oil		
	Slideways are not lubricated	Lubricate the slideways		
Lifting platform continues to lift after releasing the button	Defective button	Replace the defective button		



Lowering Problems				
	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		
Lifting platform does not lower	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		
If the errors cannot be rectified, screw and contact our service tea	<u> </u>	the emergency lowering		
Platform lowers too slowly or	Contaminated lowering valve	Clean lowering valve		
jerkily	Valve for lowering speed set incorrectly	Set		
	Leaking hydraulic connections	Retighten connections if necessary		
	Leaking hydraulic lines	Replace hydraulic line		
Lifting platform lowers by itself	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		
Other Problems				
Lifting platform doos not raise	Air in hydraulic circuit	Bleed the hydraulic circuit		
Lifting platform does not raise or lower synchronously	Synchronising cables not tight enough	Adjust the tension or the synchronicity		
Product shows (heavy) rust damage	Damage or lack of corrosion protection, possibly maintenance	Remove rust, clean and restore surface.		
	Dirty oil filter	Clean the oil filter		
Abnormal motor volume	Air in hydraulic circuit	Bleed the hydraulic system		
	Contaminated hydraulic oil	Change the hydraulic oil		
Circuit breaker has been	Check the contact on the contactor	Replace the contactor		
activated	Check the capacity of circuit breakers	Replace the fuses		
	Check for damage to the cable	Replace the cable		

ALWAYS USE ORIGINAL PARTS AND ACCESSORIES.



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:

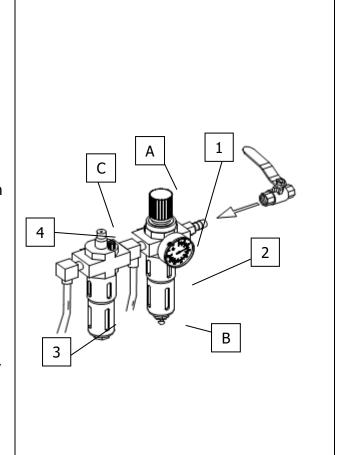
- Check the working pressure displayed by the manometer (1). This must correspond to the technical data.
- The working pressure can be adjusted with a pressure regulator (A).
- Pull the pressure regulator upwards to make adjustments.
- Turn the knob clockwise to increase the pressure in the machine, 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 ¼ to ½ 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*

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

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 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

Typbezeichnung Model name

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

Folgende harmonisierten Normen und Vorschriften wurden eingehalten

The following harmonized standards and regulations are applied

Prüfinstitut
Institute of Quality

Referenznummer der technischen Daten Reference number for the technical data

Nummer des Zertifikats Number of the certificate

ATH-Heinl GmbH &Co. KG

Gewerbepark 9 DE-92278 Illschwang October 2012 Hebebühne für Fahrzeuge Car lift

ATH Cross Lift 50+

Richtlinie 2006/42/EG, EU-Abl. L157/24 vom 09.06.2006 Richtlinie 2014/30/EU, EU-Abl. L 96/79 vom 29.03.2014

DIN EN 1493:2010 (Machine-Directive)
DIN EN 60204-1: 2006+A1:2009 (Low voltage directive)

CCQS UK Ltd., Level 7, Westgate House, Westgate Rd., London W5 1YY UK

TF-C-0106-12-02-17-5A

CE-C-0106-12-02-17-5A (Machine-Directive)

Hans Heinl (Geschäftsführer / General Manager)

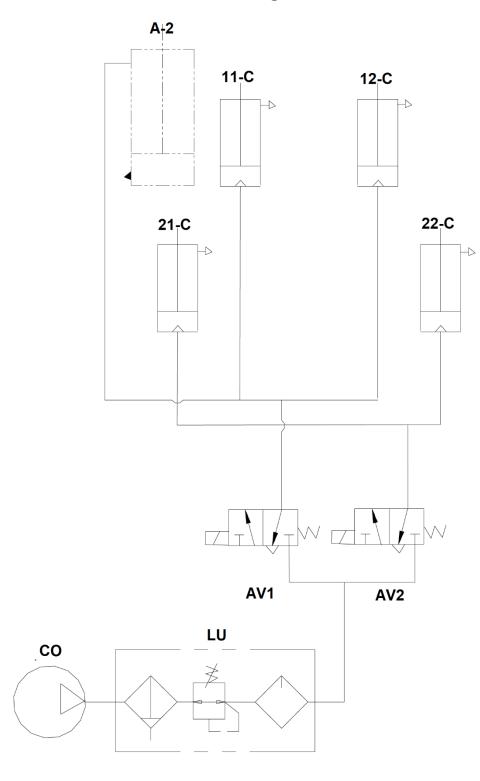
DURCH UMBAUTEN UND/ODER VERÄNDERUNGEN AN DER MASCHINE WIRD DIE CE-PRÜFUNG AUSSER KRAFT GESETZT UND EINE HAFTUNG AUSGESCHLOSSEN.

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



A-2: Secondary cylinder wheel-free lift

11-C: Pneumatic cylinder for unlocking secondary scissors on main lift

12-C: Pneumatic cylinder for unlocking main scissors on main lift

21-C: Pneumatic cylinder for unlocking main scissors on wheel-free lift

22-C: Pneumatic cylinder for unlocking secondary scissors on wheel-free lift

AV1: Release for wheel-free lift

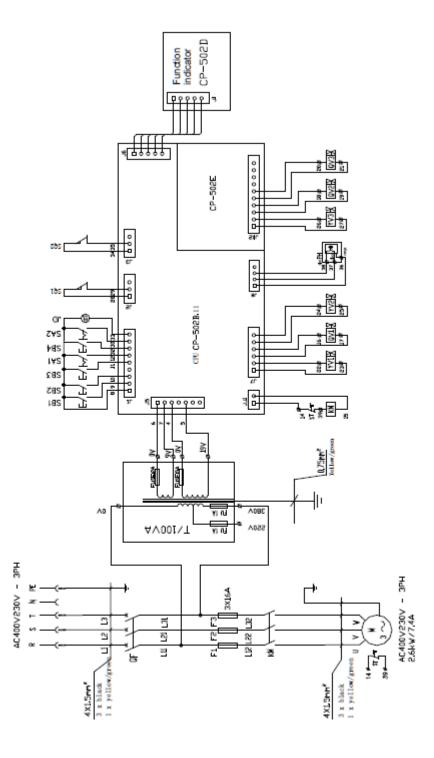
AV2: Release for main lift

LU: Compressed air maintenance unit (not included in scope of delivery)

CO: Compressor (not included in scope of delivery)



6.2 Electric circuit diagram



QF: Main switch

M: Motor

ST: Thermal relay

T: Transformer 100 VA

KM: DC contactor

SB1: Lifting button

SB2: Lowering button

SB3: Safety button

SB4: Button for muting the light

barrier

SA1: Selector switch for main or

wheel-free lift

SA2: Work / adjustment selector

switch

JD: Alarm

SQ1: Lift limit switch

SQ2: CE stop limit switch

YV1: Electromagnet for lowering

valve

YV2: Switch electromagnet for

main lift

YV3: Switch electromagnet for

wheel-free lift

QV1: Air valve for main lift

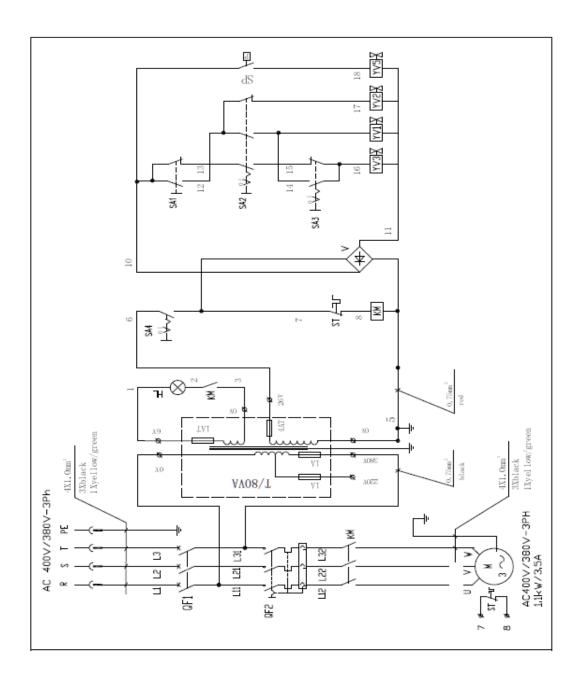
QV2: Air valve for wheel-free lift

QY3: Air valve to accelerate the lowering of the wheel-free lift

PH: Light barrier



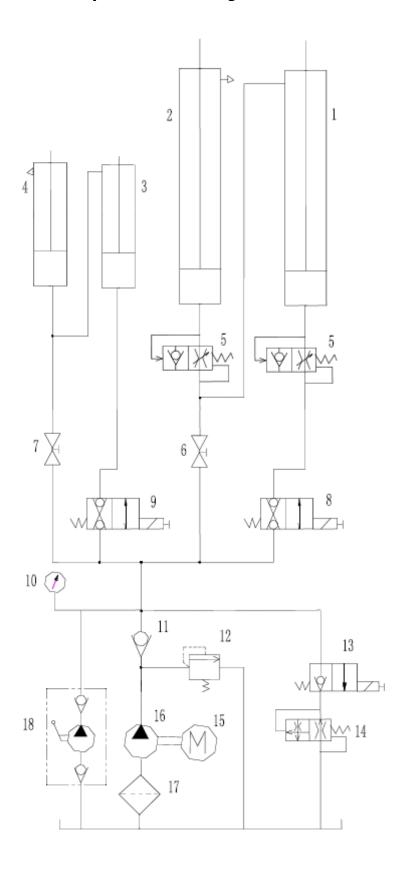
6.2.1 Electric Circuit Diagram - Play Detector



QF1	Main switch	HL	Control light	SA4	Switch ON
QF2	Motor protection	V	Rectifier	YV1	Control valve 1
	switch				
М	Electric motor	SP	Pressure switch	YV2	Control valve 2
ST	Thermal contact (M)	SA1	Push button	YV3	Control valve 3
KM	Motor contactor	SA2	Selector switch 1	YV5	Disengaging valve
Т	Transformer 80 VA	SA3	Selector switch 2		



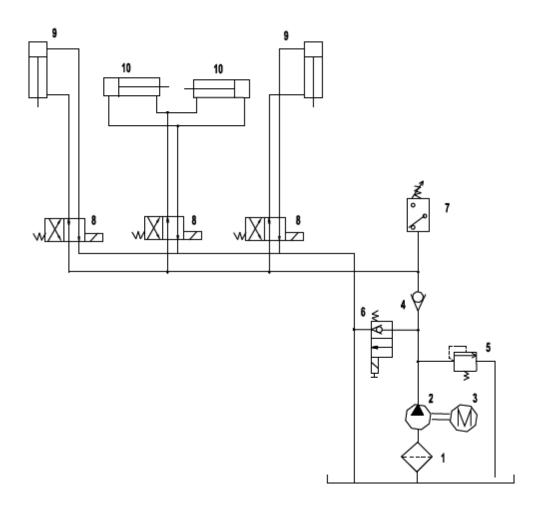
6.3 Hydraulic circuit diagram



- 1 Main cylinder main lift P1
- 2 Secondary cylinder main lift P2
- 3 Main cylinder wheel-free lift P2
- 4 Secondary cylinder wheel-free lift P1
- 5 Hose breakage fuse
- 6 Balancing valve 1 main lift
- 7 Balancing valve 2 wheel-free lift
- 8 Switch electromagnet for main lift
- 9 Switch electromagnet for wheelfree lift
- 10 Manometer
- 11 Check valve
- 12 Pressure limit valve
- 13 Electromagnet for lowering valve
- 14 Valve for lowering speed
- 15 Motor
- 16 Pump
- 17 Oil filter
- 18 Emergency manual pump

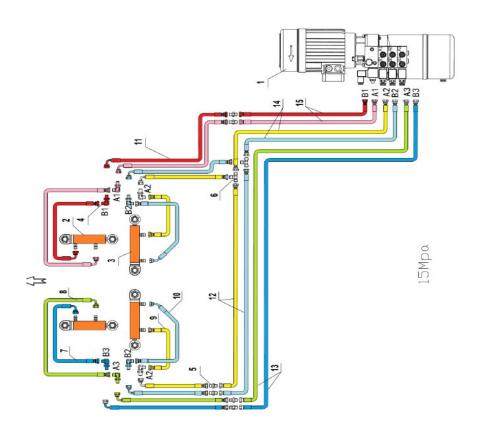


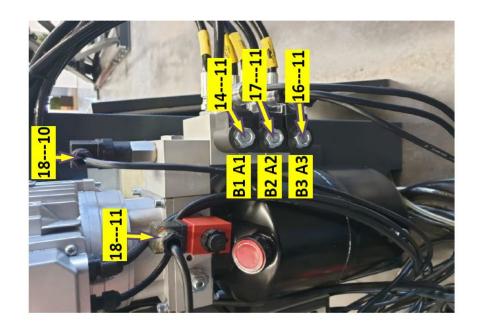
6.3.1 Hydraulic Circuit Diagram - Play Detector



1	Oil filter	6	Disengaging valve
2	Gear pump	7	Pressure switch
3	Electric motor	8	Control valve
4	Check valve	9	Cylinder longitudinal
			movement
5	Pressure limiting valve	10	Cylinder transverse movement









WARRANTY CARD

Dealer address:		Customer address:	
Company (or customer nui	mber):	Company (or customer n	umber):
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 spa Spare part:	ire parts: Item number:	Amoun	t:
IMPORTANT: Damage resulting from important the warranty. For systems limited to the provision of	that have not been install	ed by an ATH approved in	
Transport damages: Visible defect (visible transport of the delivery note a		freight forwarder delivery	note, immediately send
☐ <u>Hidden defect</u> (transpo with pictures to ATH-Heinl		d when unpacking the goo	ds, send damage report

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



This inspection manual (including log) is an important part of the operating instructions and product. !!!PLEASE STORE CAREFULLY!!!

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

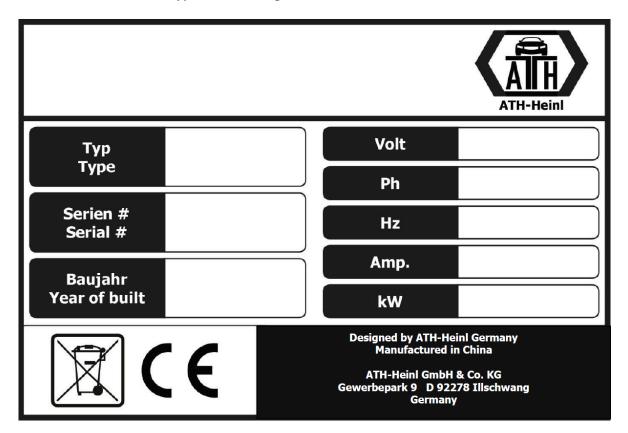
In addition to perfect function, cleanliness and maintenance requirements, it is vital that the safety-relevant components of the entire system are checked.

Technical Data

Please refer to the enclosed operating instructions.

Nameplate

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





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 carried out by: the operator	on and safety and put into operation. Installation was
The operator confirms that the product type has been set u information contained in these operating instructions and the log, and that he/she keeps thall times.	
The operator confirms that after installation and commission manufacturer or an authorised dealer (expert), instruction in maintenance and care of the machine has taken place, documented been provided and the product is working properly.	n the function, handling, safety-relevant specifications,
IMPORTANT NOTES:	
IF THE ABOVEMENTIONED POINTS ARE NOT FULFIL	LED, THE WARRANTY CLAIM IS EXCLUDED:
The warranty is only valid in conjunction with compliance are necessary training, as well as yearly maintenance carried or interval between services must not exceed 12 months. In cabi-annual inspection and maintenance must be arranged.	ut by an expert authorised by the manufacturer. The
Warranty claims are only recognised if all points in the log a asserted immediately after detection and this log is sent t and service logs.	
Further specific information about the warranty, such as scooperating instructions and must be observed.	ope, requirements and specifications, are described in the
amages and complaints caused by improper handling; failure to maintain and service; use of unsuitable or inspecified assembly, operating, maintenance or service products; mechanical damage; intervening in the unit it it is into or by an unauthorised expert are excluded from the warranty. For systems that have not been istalled by an authorised expert, the warranty is limited by agreement of the manufacturer to the provision of the ecessary spare parts.	
Expert name and company stamp if necessary, number and name of retailer	Date and expert signature
Operator name and company stamp	Date and operator signature



Inspection Plan 8.2

Nameplate		
Quick reference guide		
Operating instructions		
Safety label		
Operation label		
Other labels		
Construction (deformation, cracks)		
Fixing dowels and stability		
Condition of concrete flor (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		



Visual inspection (authorised expert) 8.3

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

No / the following *) defects were found:	
Inspection contents: functional and visual inspending partial inspection:	pection according to specifications
There were no *) concerns arising from comm	nissioning, an audit is not *) required.
(Place, date)	(Technical expert signature)
Confirmation of acceptance:	(None of technical context)
	(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 *)

(Place, date) Confirmation of acceptance: Operator (company stamp, date, signature)	(Name of technical expert) (Title) (Address) (Employed at)	
	(Name of technical expert) (Title) (Address)	
	(Name of technical expert) (Title)	
	(Name of technical expert)	
(Place, date)	(Technical expert signature)	
There were no *) concerns arising from c	commissioning, an audit is not *) required.	
		_
		_
Inspection contents: functional and visual Pending partial inspection:	I inspection according to specifications	
		_
		_
		_
		_

- 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:	
	
	
Inspection contents: functional and visual i Pending partial inspection:	nspection according to specifications
There were no *) concerns arising from co	mmissioning, an audit is not *) required.
(Place, date)	(Technical expert signature)
Confirmation of acceptance:	
	(Name of technical expert)
	(Title)
	(Address)
	(Employed at)
Oneveter (company stems date signature)	
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:	•						
nspection contents: functional and visual inspection according to specifications ending partial inspection:							
There were no *) concerns arising from commissioning, an audit is not *) required.							
(Place, date)	(Technical expert signature)						
Confirmation of acceptance:	(Name of technical expert)						
	(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



9.0	NOTES			