

Serial-number CSL670/671: _____

Serial-number CPD600: _____

The Crypton Test Lane Class 7

Automotive-Lift CSL670/671
Axle play detector CPD600
Operating Instructions and Documentation

TES1519/E

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Foreword

CRYPTON-products are a result of long-standing experiences.

The high quality and the superior concept guarantee them reliability, a long lift time and the economic business.

To avoid unnecessary damages and dangers, read the operating instructions and follow the instructions.

Do not use for any other purpose other than described otherwise the guarantee will become invalid.

Crypton is not liable for damage or injury arising from misuse. The user carries the risk himself.

Notes for the user:

- Observe and comply with all the instructions in the operating manual
- Please follow the inspection and maintenance procedure as well as the prescribed tests
- The instruction for use should be observed by all persons working with the lift.
- The chapter "Safety/accident Prevention" should be especially observed.
- In addition to the safety remarks included in the instructions for use, the local valid regulations and instructions at the location of operation should also be observed.

Obligations of the operator:

The operator is obliged to allow only those persons complying to the following requirements to work with the unit.

- Being well acquainted with the basic regulations concerning labour safety and accident prevention and being trained to operate the unit.
- Having read and understood the chapter concerning safety and warning instructions and confirmed that by their signature.

Dangers when operating with the lift:

The CRYPTON-Lifts are designed and built according to technical standard and the approved regulations for technical security. Yet, danger for body and life of the operator may occur when using the lift carelessly.

The lift must only be operated:

- for its appropriate use
- in an unobjectionable condition concerning technical security.

Organisation requirements


- The instructions for use are constantly to be kept at the place of operation, being at hand at ALL times.
- In addition to the instructions for use, rules pertaining to other regulations i.e. accident prevention and environmental rules are to be observed and directed.
- All personnel should be safety and danger alert by occasionally reading and by observing the instructions for use, this act should be recorded.
- As far as required and ordered by regulations, personal protective equipment and clothes are to be worn.
- All safety and danger warnings on or near the lift are to be observed!
- Spare parts must comply with technical requirements laid down by the manufacturer. The lift is only warranted with original parts.
Consideration should be given to the time intervals, or fixed instructions for periodic tests/inspections.

Maintenance works, remedy of faults and disposal

- Fixed Adjusting, maintenance, and inspection works and time intervals including details for exchange of parts/part components as mentioned in the instructions for use are to be adhered to.
This work should only be carried out by trained personal.
- After maintenance and repair works, screw connections should always be checked and firmly tightened where required!

Guarantee and liability

- Our “General conditions of sales and delivery” are valid.
There will be no guarantee or liability for injuries of persons or anything else if these injuries are caused by one or by some of the following reasons.
- Inappropriate use of the lift
- Inappropriate installation, initiation, operation and maintenance of the lift.
- Use of the lift while one or several security devices do not work, or do not work correctly, or are not installed correctly.
- Not to follow the regulations of the operating instruction concerning transport, storing, installation, initiation, operation and maintenance of the lift.
- Changes to the construction of the lift without written authority of the manufacturer.
- Changes of important adjustments of the lift (e.g. driving elements, power rating, motor speed, etc)
- Wrong or incorrect maintenance.
- Catastrophes, acts of God or external reasons.

 **After completely filling out this sheet including signatures, copy and return the original to the manufacturer. The copy must remain in the manual.**

**Crypton Technology Business Park
 Bristol Road, Bridgwater, Somerset, England, TA6 4BX**

Record of installation

The automotive lift CSL670/671

with the serial number:..... was installed on:.....

at the firm:..... in:.....

The initial safety check was carried out and the lift was started.

The installation was carried out by the operating authority/competent
 (please delete as applicable).

The initial safety check was carried out by a competent person before the initial operation.

The operating authority confirms the correct installation of the automotive lift, the competent person confirms the correct initial operation.

.....
date	name of the operating authority	signature of the operating authority

.....
date	name of the competent person	signature of the competent person

Your customer service:.....(stamp)



Record of Handover

The automotive lift CLS670/671

with the serial number:..... was installed on:.....

at the firm:..... in:.....

the initial safety check was carried out and the lift was started.

The persons below were introduced after the installation of the automotive lift. The introduction was carried out by either the installer from the lift-manufacturer or from a franchised dealer (competent person).

.....
date name signature

.....
date name signature

.....
date name signature

.....
date name signature

.....
date name signature

.....
date name signature

.....
date name signature

.....
date name signature

.....
date name signature

Your customer service:.....(stamp)

1. General Information

The document “**Operating Instructions and Documentation**” contains important information about installation, operation and maintenance of the automotive lift.

- Conformation of **installation of the automotive lift** is recorded on the “Record of Installation” form and must be signed and returned to Crypton Limited.
- Conformation of once off, regular and out of the ordinary service checks are recorded on the respective check forms. The forms are used to document the checks. They should not be removed from the manual.

All **Changes to the structure** and any change of **location** of the automotive lift must be registered in the “**Master document**” of the lift.

1.1 Installation and service checks of the automotive lift

Only specialised staff are allowed to repair and maintain the lift and only these specialised staff are allowed to conduct safety checks on the lift. For the purposes of this document these specialised staff will be called Experts and Competent persons.

Experts are persons (for example self-employed engineers, experts) who have received instructions and have the appropriate experience to check and to test the automotive lifts. They are aware of the work involved and know the accident prevention regulations.

Competent persons are persons who have acquired adequate knowledge and experience with automotive lifts. They have completed the appropriate training provided by the lift-manufacturer (the servicing technicians of the manufacturer or dealer, are regarded as competent)

1.2 Warning Symbols

The three symbols below are used to indicate danger and other important information. Pay attention to areas on and around the lift that are marked with these symbols.



Danger! This sign indicates danger. Ignoring this warning may result in injury or even death.



Caution! This sign cautions against possible damage to the automotive lift or other material objects in the case of improper use.



Attention! This sign indicates an important function or other important information regarding the operation of the lift.

2. Master document of the automotive lift

2.1 Lift–manufacturer Crypton
Crypton Technology Business Park
Bristol Road Bridgwater, Somerset
England
TA6 4BX

2.2 Application

The automotive lift is a lifting mechanism for lifting motor vehicles with a laden weight of 5000 kg. The automotive lift also incorporates equipment for axial measurement of tyre and brake service. The automotive lift can be installed above or below the floor surface. It is not permitted to install the standard lift in hazardous locations or in wash bays. The lift is not equipped to be installed on ramped surfaces or for carrying people. Before operating the lift pay attention to the detailed operating instructions and maintenance instructions.

The lift is equipped with a play detector which is able to detect play in the axles and on single wheel suspensions. The detection is possible up to a load of 1300 kg per wheel.

2.3 Changes to the Lift Construction

Changes to the construction, expert checking, resumption of work (date, type of change, signature of the expert)

.....
.....
.....
.....

Name, address of the expert

.....
.....

Location, Date

Signature of the expert

2.4 Re positioning of the automotive lift

Re positioning of the automotive lift, expert checking, resumption of work (date, kind of change, signature of the competent)

.....
.....
.....
.....

Name, address of the competent person

.....
.....

Location, Date

Signature of the competent person

2.5 Crypton Declaration of conformity



CE Declaration of Conformity

Declaration of Conformity according to Machinery Directive 2006/42/EG
ANNEX II 1A

Hereby we declare that the lift models: CSL670 and CSL 671 fulfil all the relevant provisions of the following Directives:

Machinery Directive: 2006/42/EG
Low Voltage Directive: 2006/95/EG
EMC Directive: 2004/108/EG

And were manufactured in conformity with the following harmonized norms:

Vehicle lifts: EN 1493:1998
Safety related parts of control systems: EN 13849-1
Electrical equipment of machines: EN 60204-1
Electromagnetic compatibility (EMC) EN 61000-6-2, -6-4

Authorised to complete the Technical file:

Michael Golutzki –
Otto Nussbaum GmbH & Co KG, Korker Str 24, D77694, Kehl, Germany.

Serial Number: _____

30.12.2009



Peter Houlden, Director

Crypton Ltd, Crypton Technology Business Park, Bristol Road, Bridgwater, Somerset. TA6 4BX

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TES1686 Iss. A

3. Technical Information

3.1 Technical ratings

Lifting capacity	5000 kg
Load distribution	max. 2:1 in or against the drive on direction
Lifting time	approx. 27 sec
Lowering time	approx. 32 sec
Lifting capacity play detector	minimum 1300 kg per wheel
Line voltage	400 Volt three phase
Power rating	3.0 kW
Motor speed	2800 rev./min
Pump capacity	2.7 ccm (Marz.)
Hydraulic pressure	approx. 300 bar
Pressure control valve	approx. 320 bar
Hydraulic pressure play detector	approx. 123 bar
Pressure control valveplay detector	approx. 125 bar
Oil tank	per Hydraulic unit approx. 17 Litre
Sound level	≤ 75 dB(A)
Connection by customer	3~/N+PE, 400V, 50 Hz fuse T16A (time-lag fuse) observe your country regulations

3.2 Safety devices

1. Click and pawl arrangement
Safety device of the load against unintentional lowering.
2. Pressure relief valve
Pressure relief-safety for the hydraulic system.
3. Roll-off safety on the platforms
Safety device of the lift against vehicle roll.
4. Lockable main switch.
Safety device against unauthorised use.
5. Check valves at the hydraulic cylinders
Safety device against lowering and pipe-breaking.
6. CE-Stop and Danger signal
Security equipment against crushing (foot area).The end of the lowering process is accompanied by an acoustic warning signal.

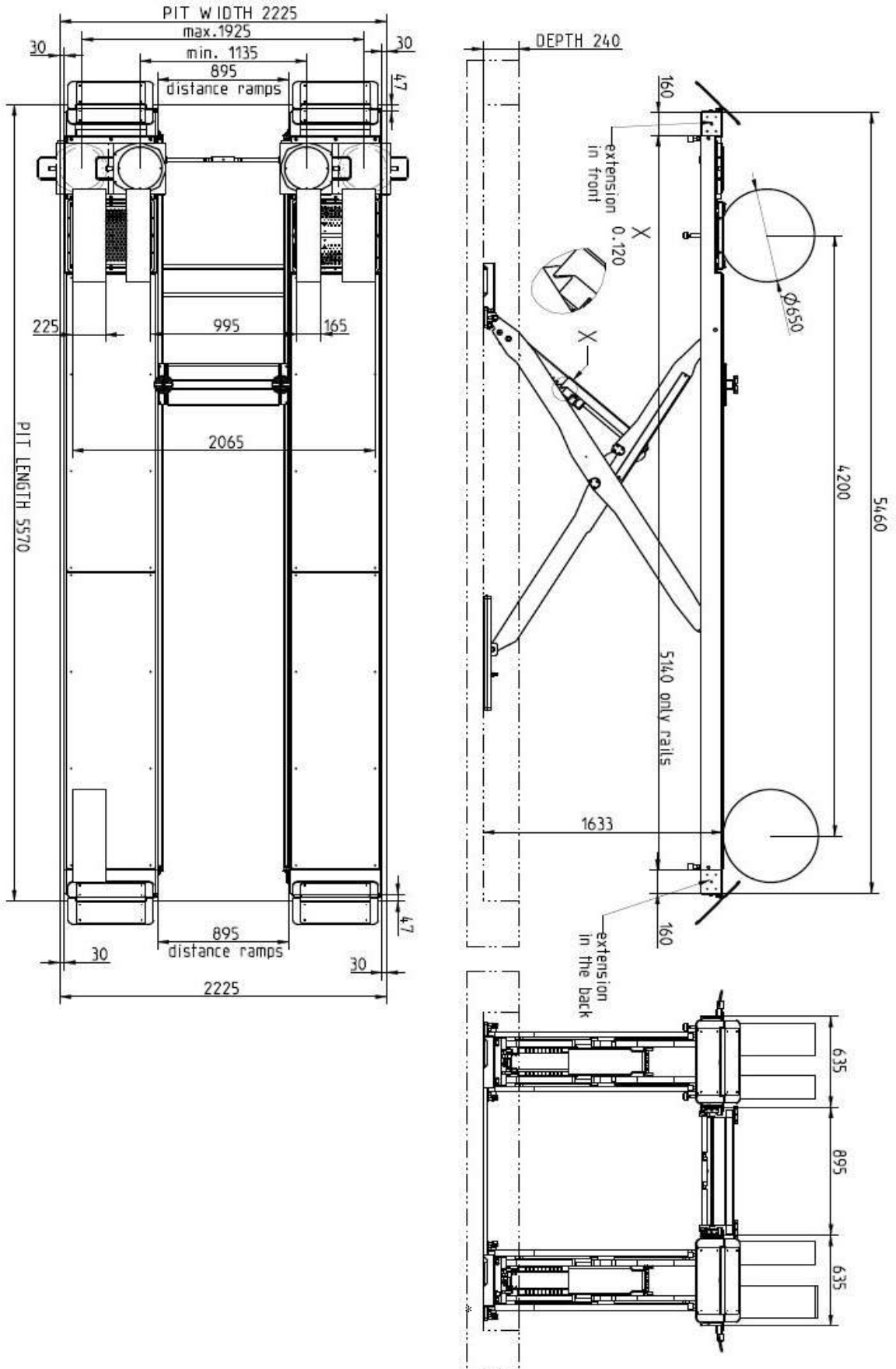


Control of Synchronisation is part of the anti blocking system for lowering onto an obstacle. For electrical diagram of the system please turn to section 3.6.1

If either ramp is offset by more than 14 mm i.e. after an obstruction has halted one side, then the system will actuate and stop the descent of the lift.

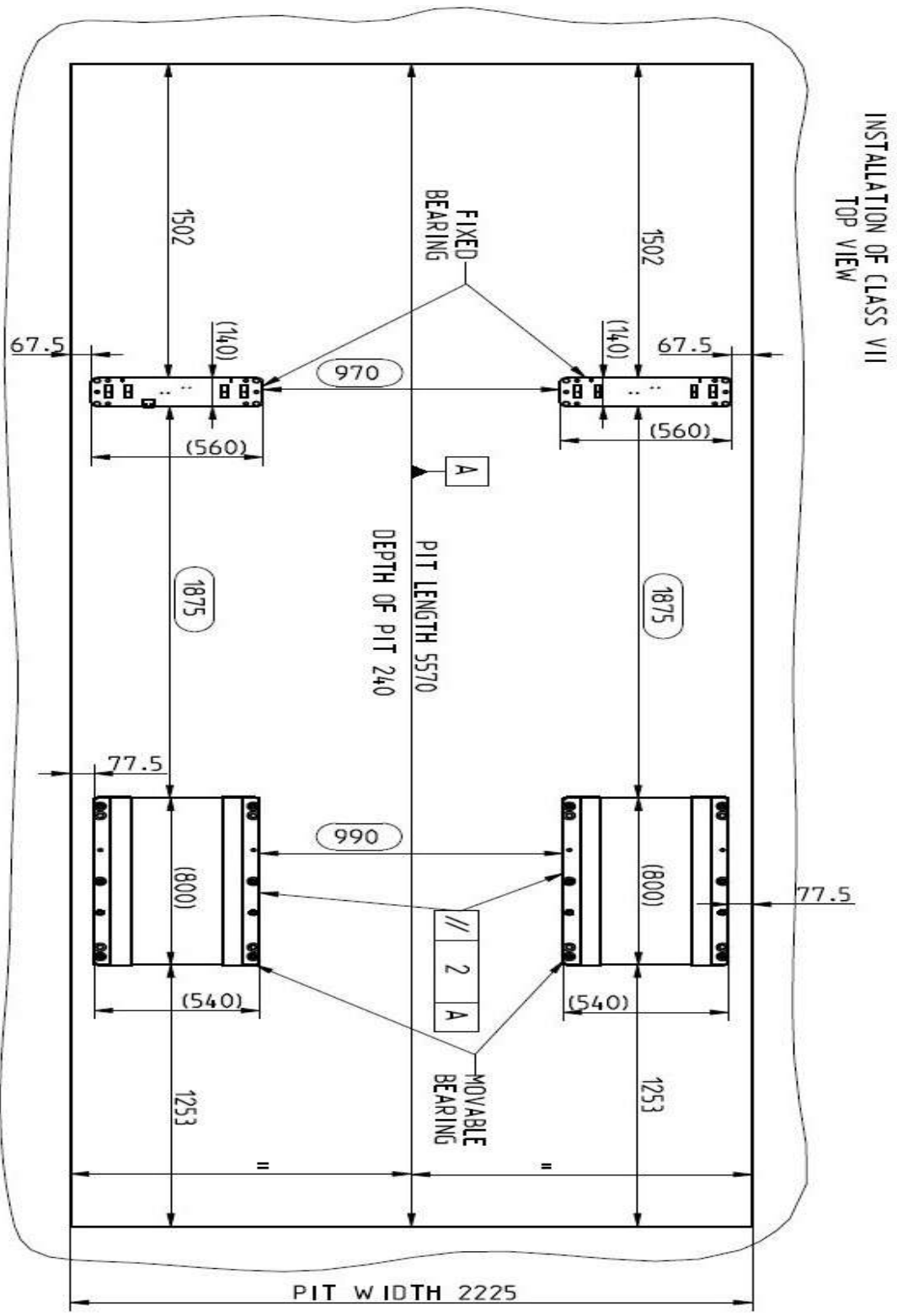
Turn to section 6.1 lowering onto an obstacle for instructions on how to bring the lift back into operation.

Data sheet - CSL670/671

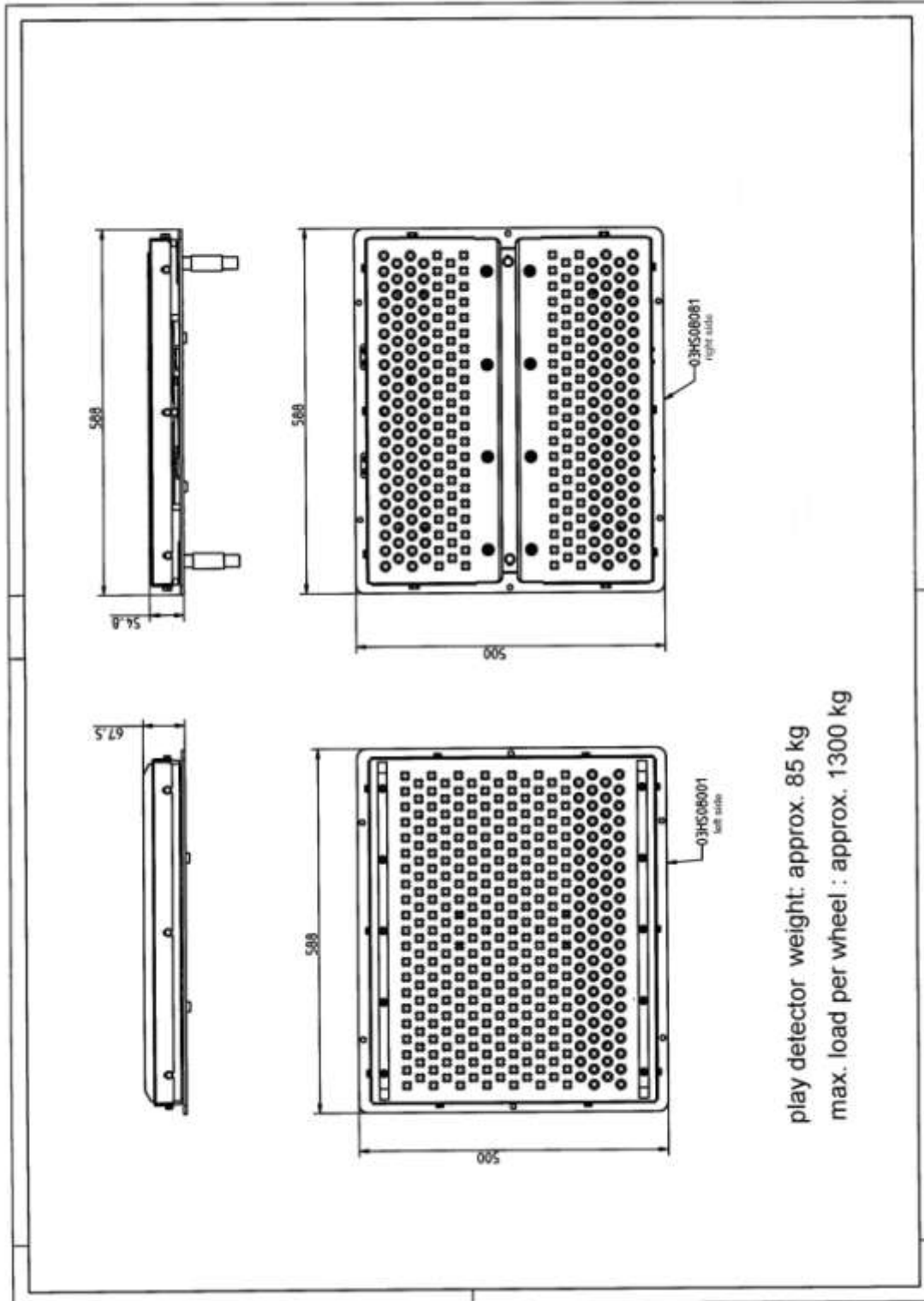


3.4 Floor Plan - CSL670/671

Note: This plan is supplied for reference only,



3.5 Data sheet - Play Detector CPD600



MOT Play detector CPD600

Piston Rod: \varnothing 25 mm

Piston rod surface: $A = 490,87 \text{ mm}^2$

$F = 6 \text{ KN} \Rightarrow p = 122,2 \text{ bar}$ **CLASS IV**

$F = 8 \text{ KN} \Rightarrow p = 162,9 \text{ bar}$ **CLASS VII**

3.6 Electrical Circuit Diagrams (Connection Diagrams)

The earth connections should comply with local regulations
Make sure that all connections and contacts are secure and in place
Check that all wiring and electrical components are in place before commissioning
Do not allow commissioning at a site not suitable for the equipment.

1. Connection diagrams and electrical components

All diagrams have been drawn by us to the best of our knowledge. We take no responsibility for diagrams other than these to be used with the equipment. This is especially the case of diagrams drawn by second parties.

2. Checking the diagrams

The diagrams do not always refer to serial components. Some of these components such as switches, thermostats and motors might not be shown. Even with careful testing, we cannot rule out problems occurring with the systems. We cannot take any responsibility for misuse of the guidelines on installation of the equipment. Any request for changes to the diagrams in order to enable the equipment to function better will be at the request of a surplus charge. Improvements by third parties cannot be accepted.

Equipment: CSL 670/671
Diagram No. CSL 670/671

3. Safety checks and means of protection

All connections have been made under the code VDEO 100/0113 and the accident prevention code V8641 for electrical equipment.

The following tests have been completed:

1. Isolation check on the switchboard and control boards according to VDEO/5 73
2. Checking the functions of the applied safety features by indirect touching of components according to the code VDEO100g/7/75 par 22.
3. Functions and component checks according to code VDE560/11 87

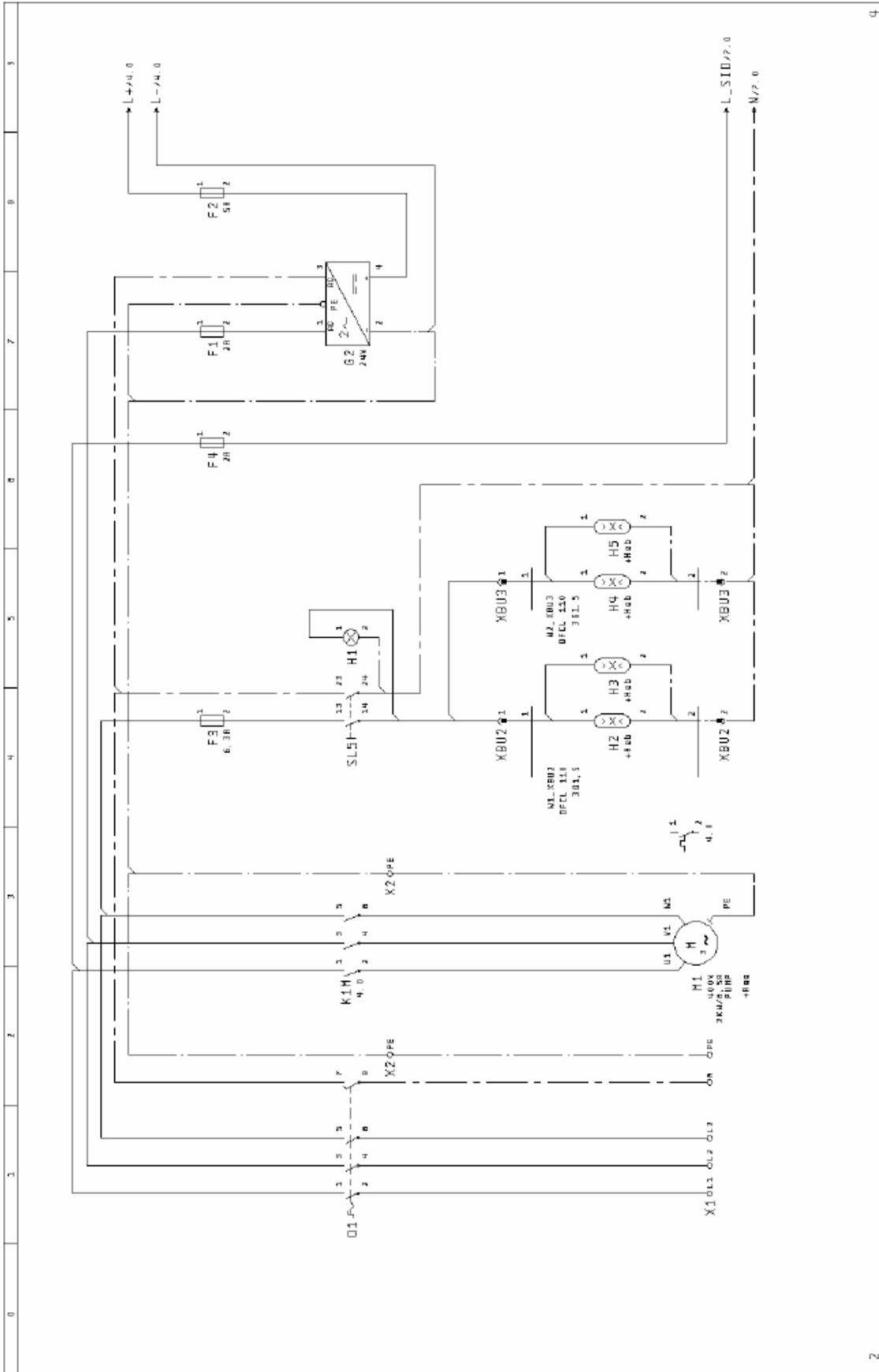
Other safety codes have been adhered to:

1. Protection against direct contact code VDEO100/5. 73. Par 4
2. Protection against indirect contact code VDE=100/5. 73. Par 5

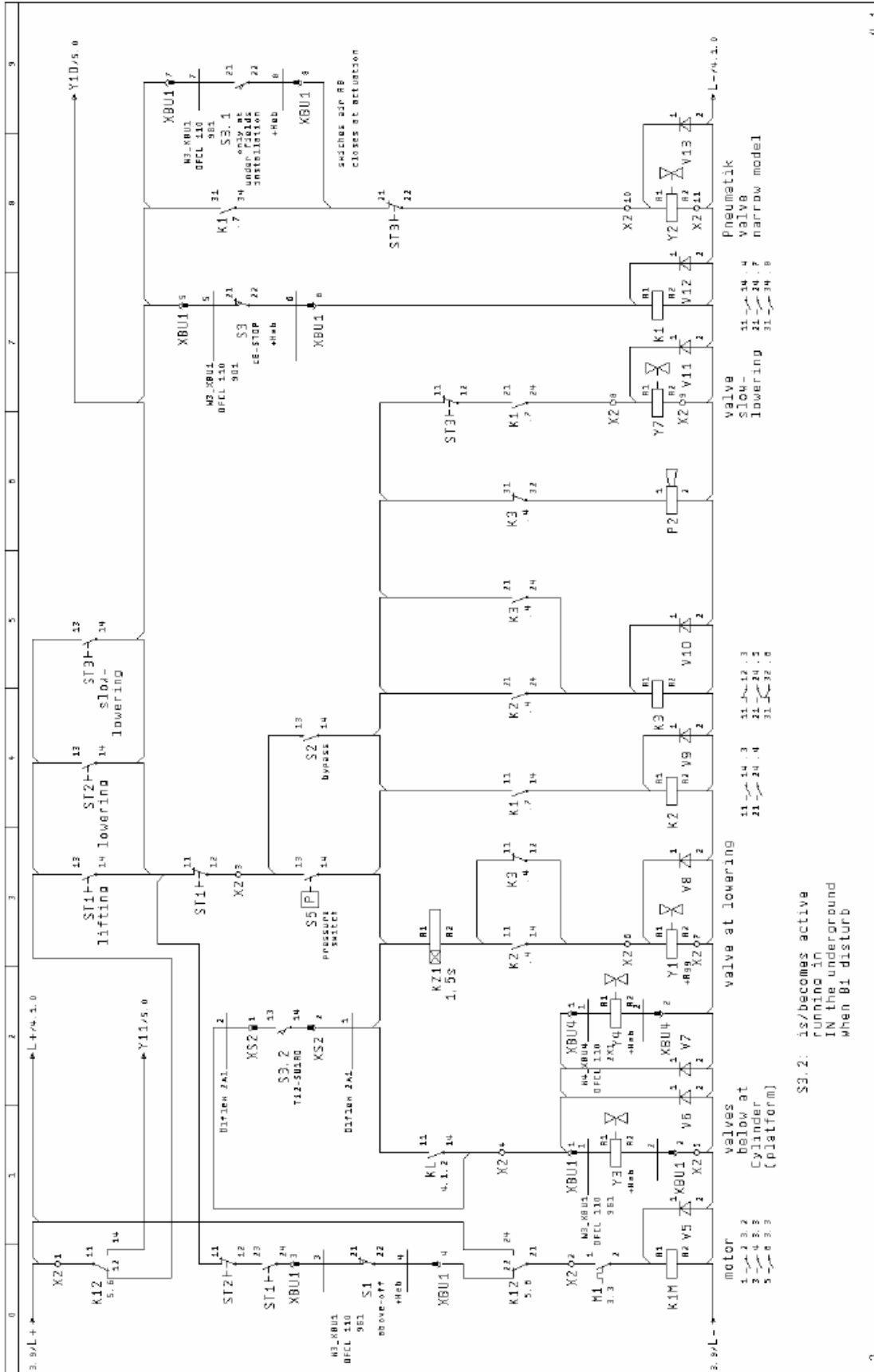
These connection diagrams are the property of the manufacturers. They should not be used for any other purpose or given to a third party without the authority of the manufacturers

Next: Schematic Diagrams for CSL670/CSL671 with hydraulic Axle Play Detector.

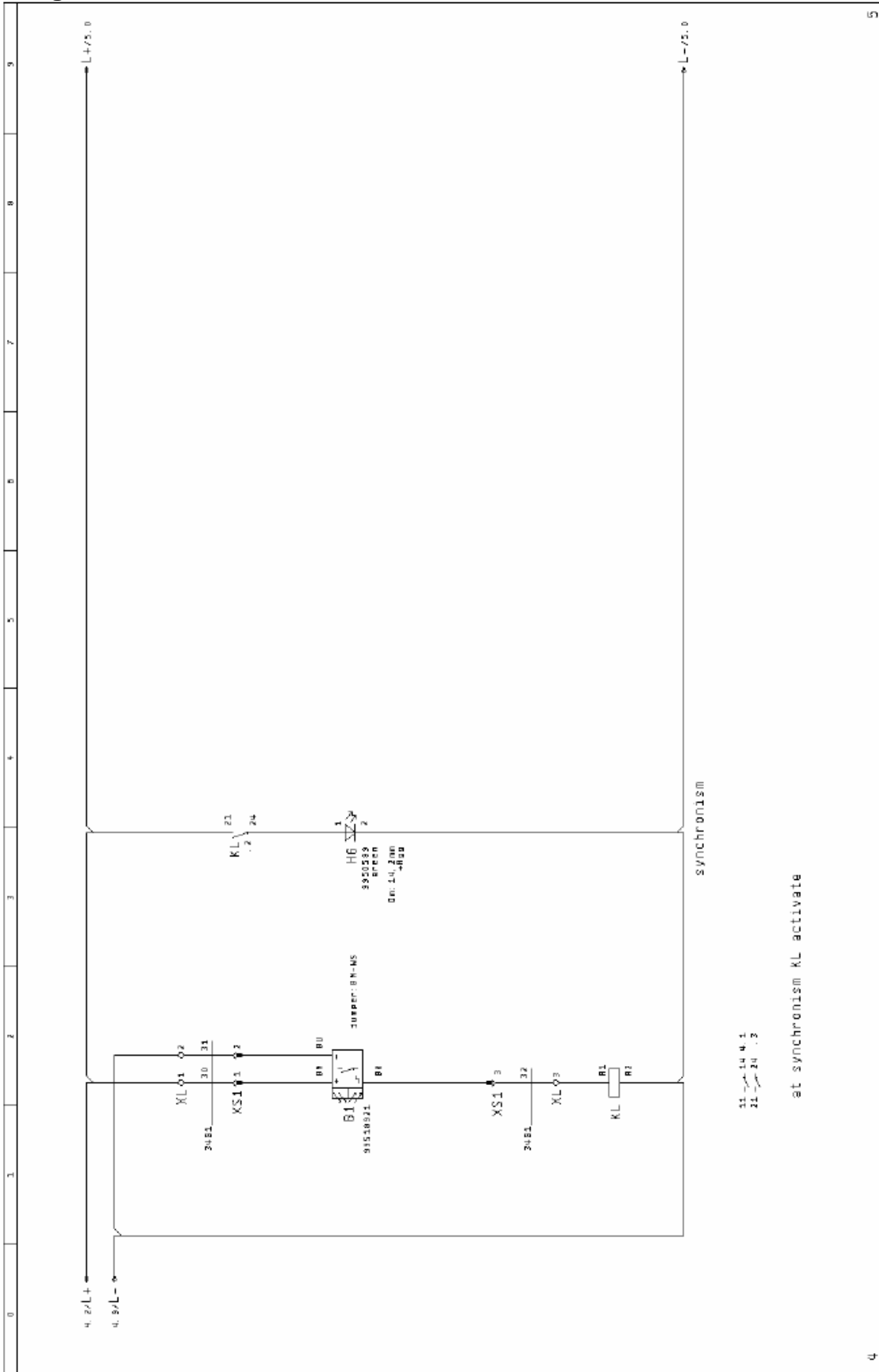
Supply



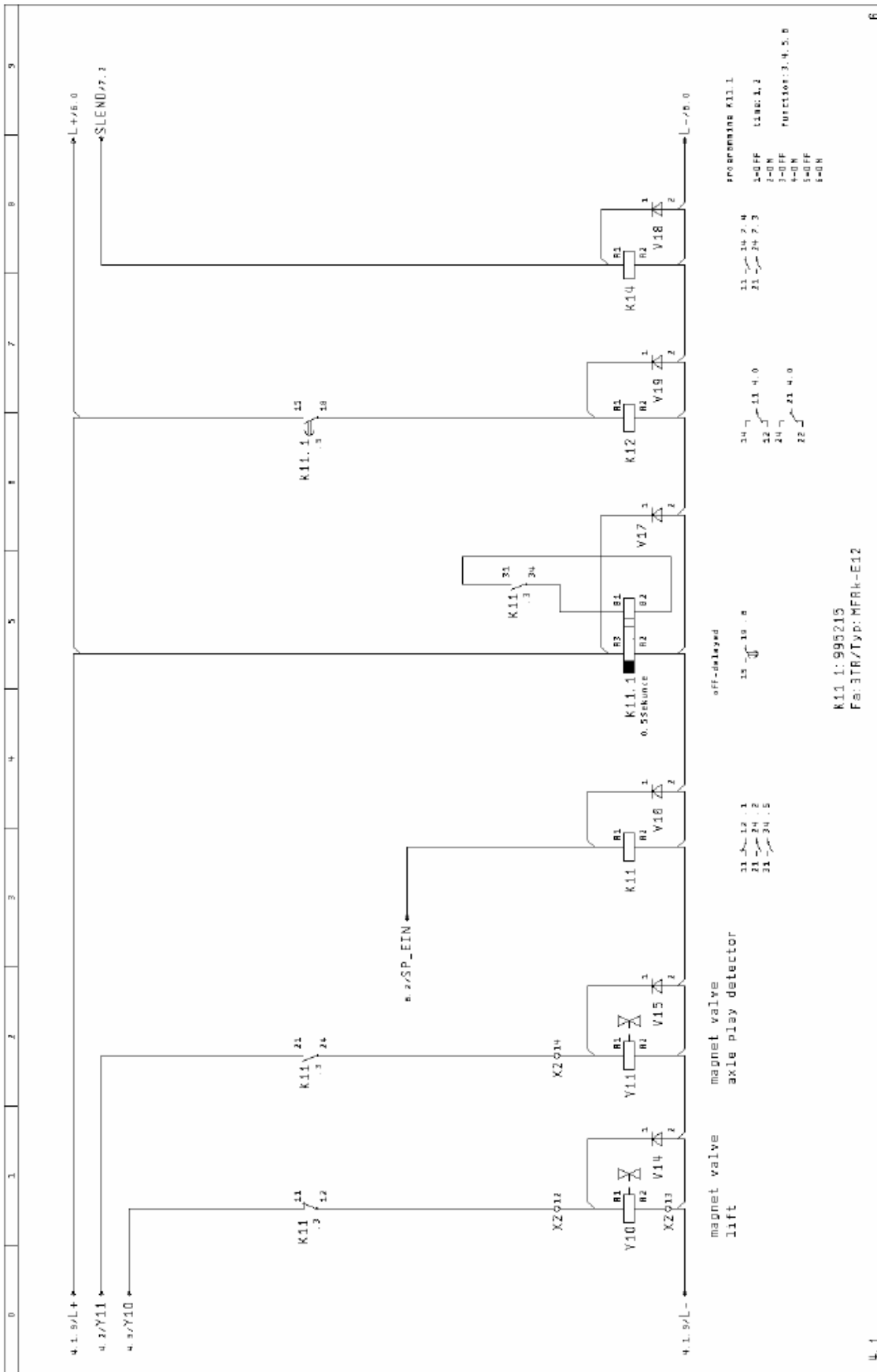
Control Unit



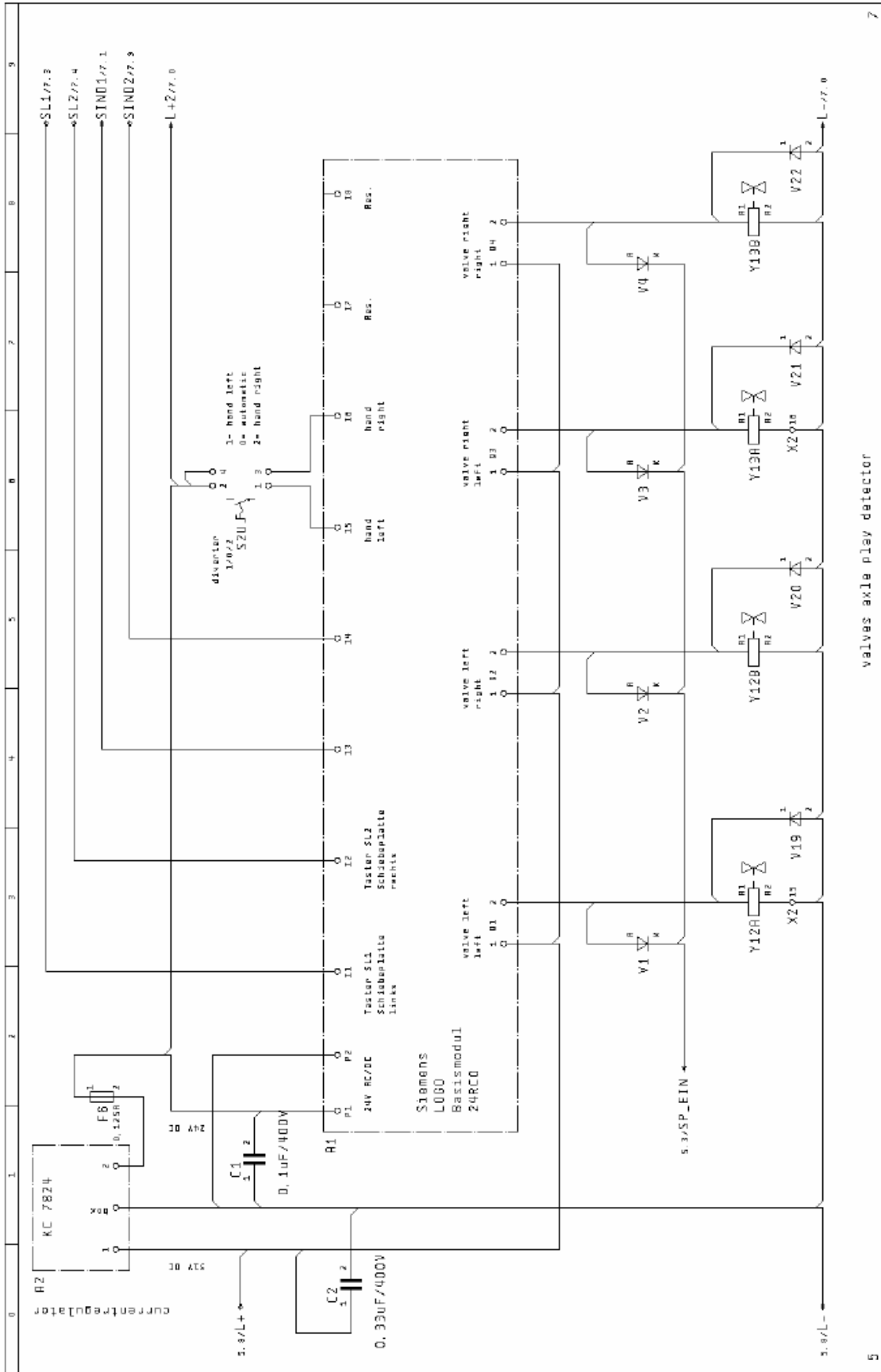
Light Barrier



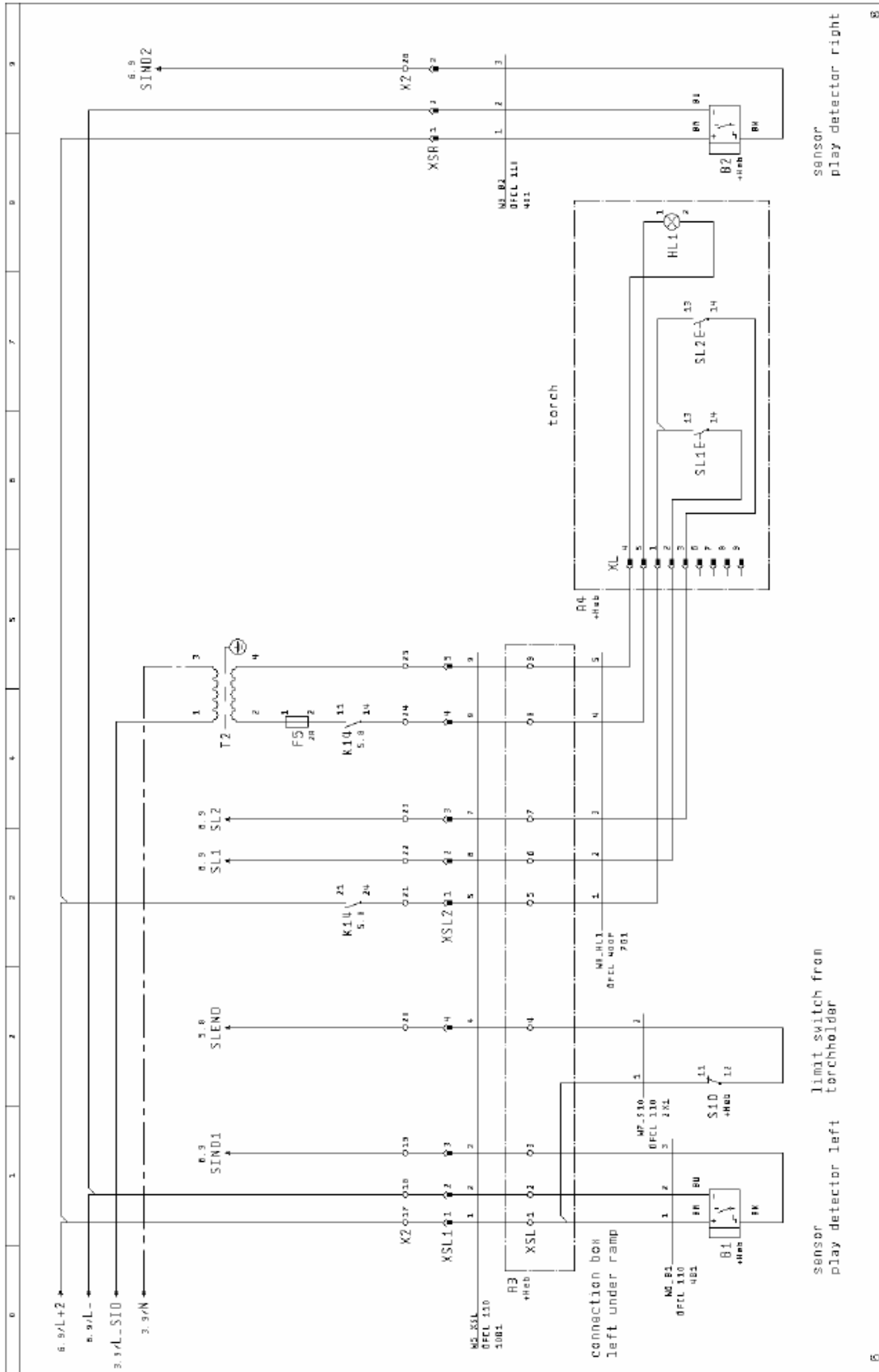
Control Unit



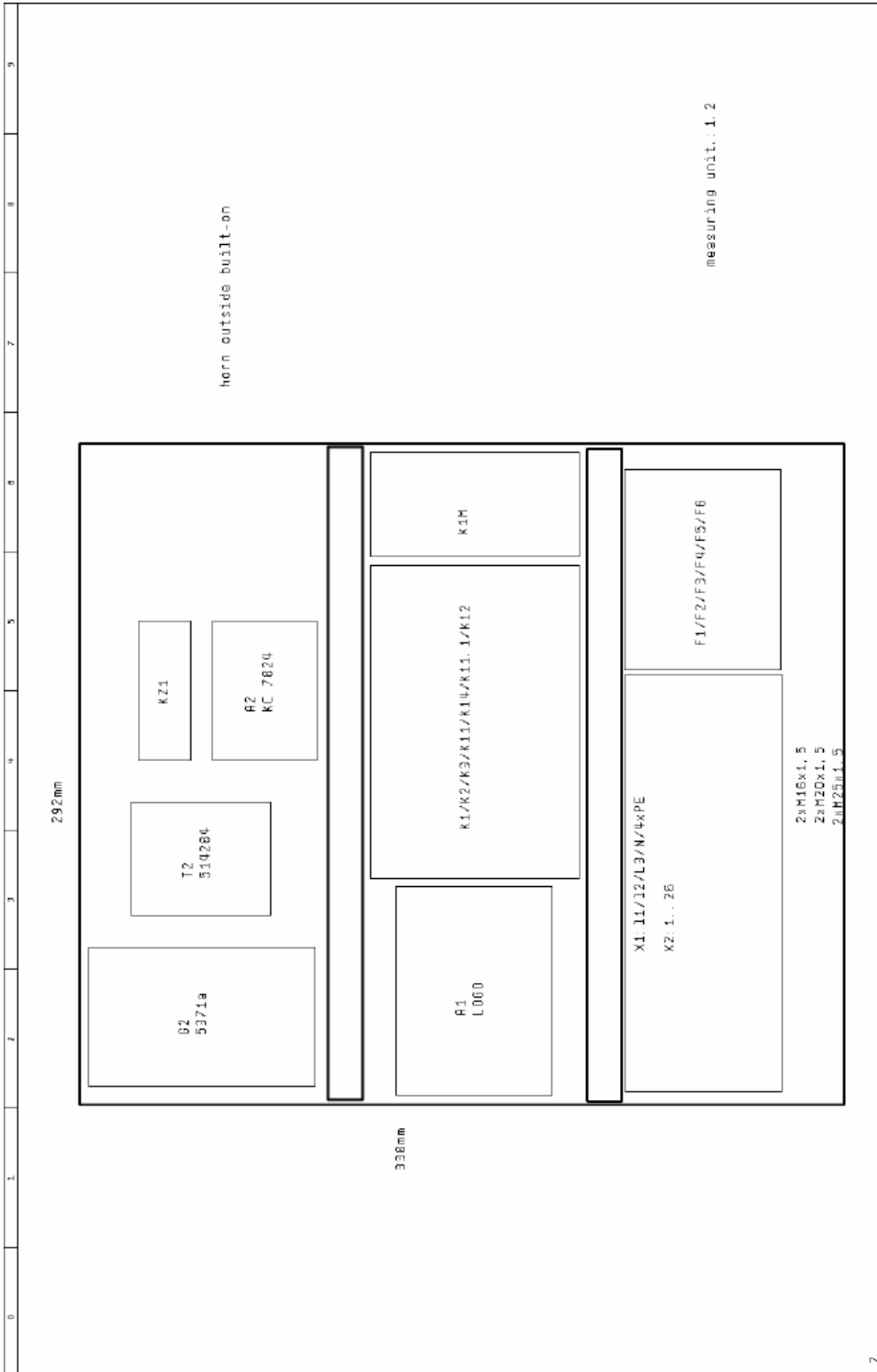
Play Detector Control



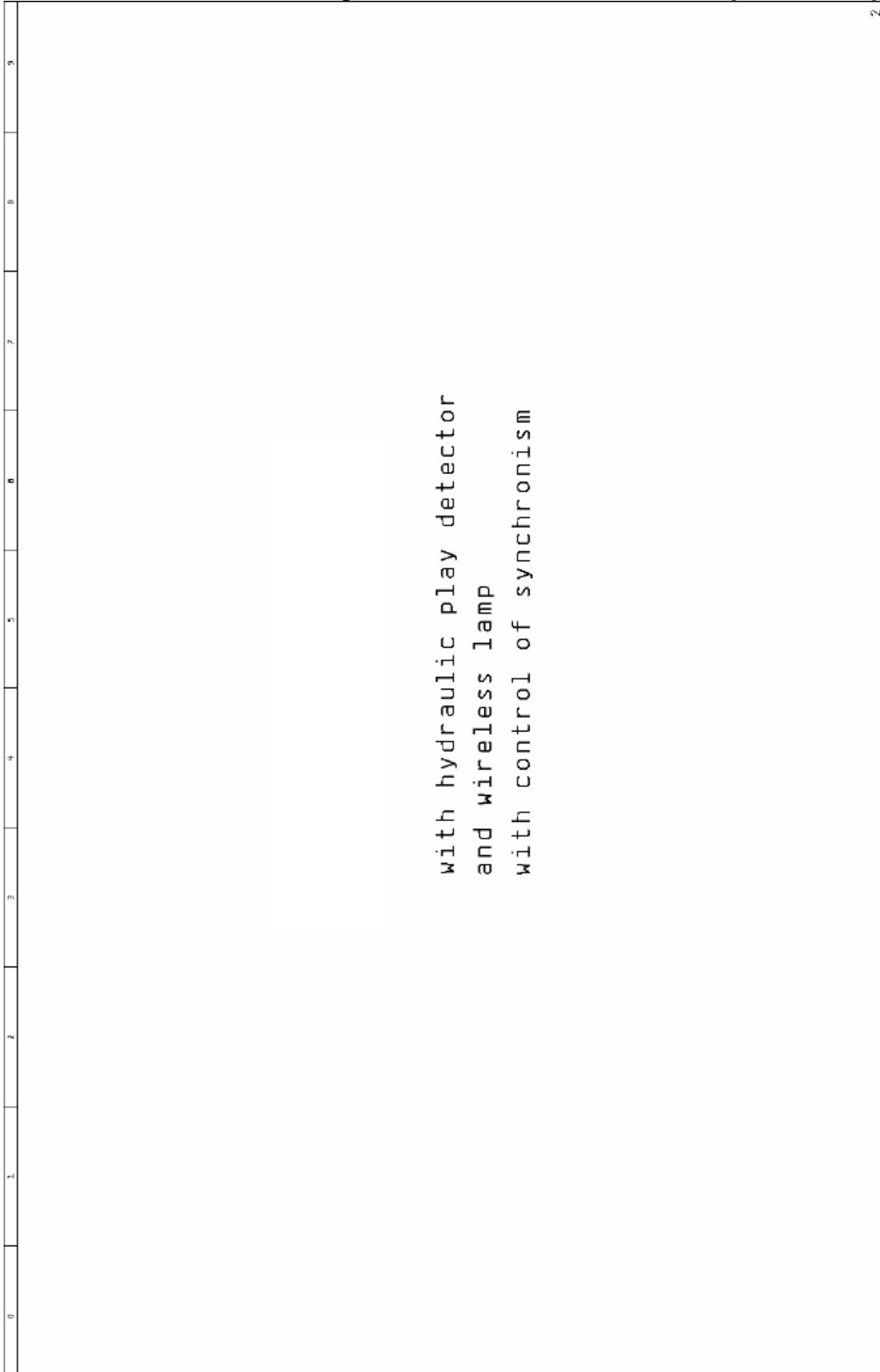
Inspection Torch



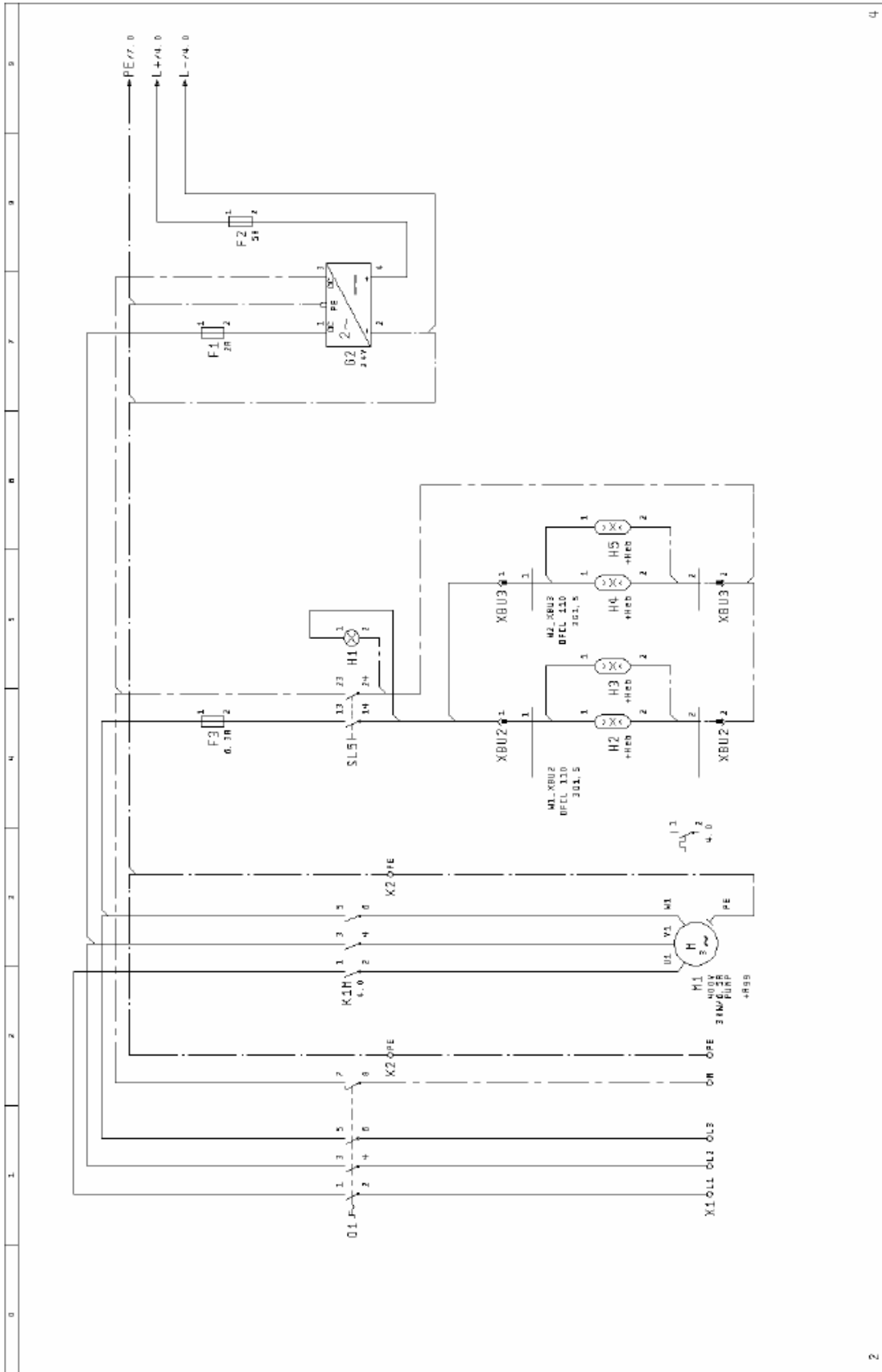
Mounting Panel



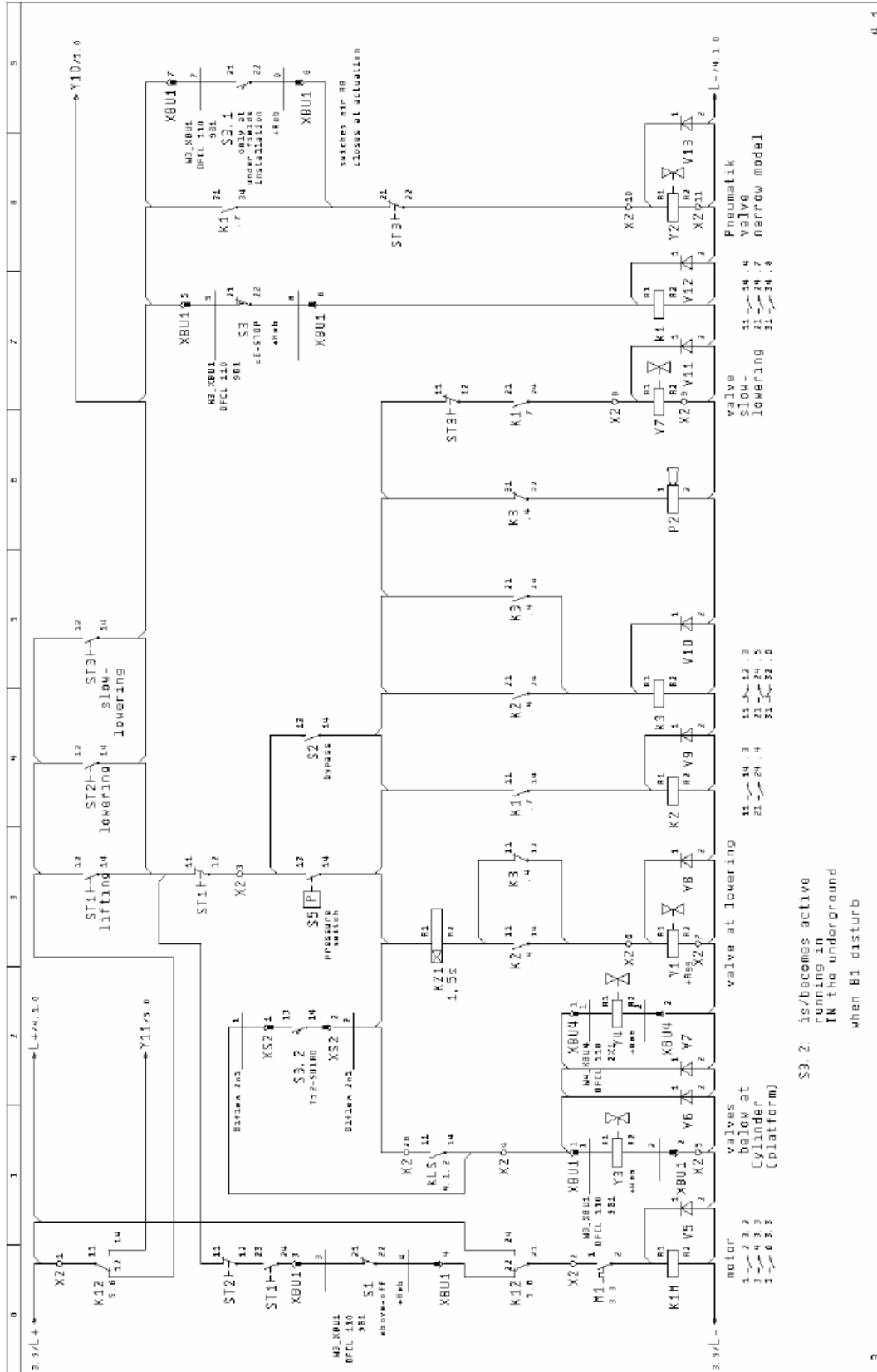
3.6.2 Electrical Circuit Diagram – Version with wireless inspection lamp



Supply ST01



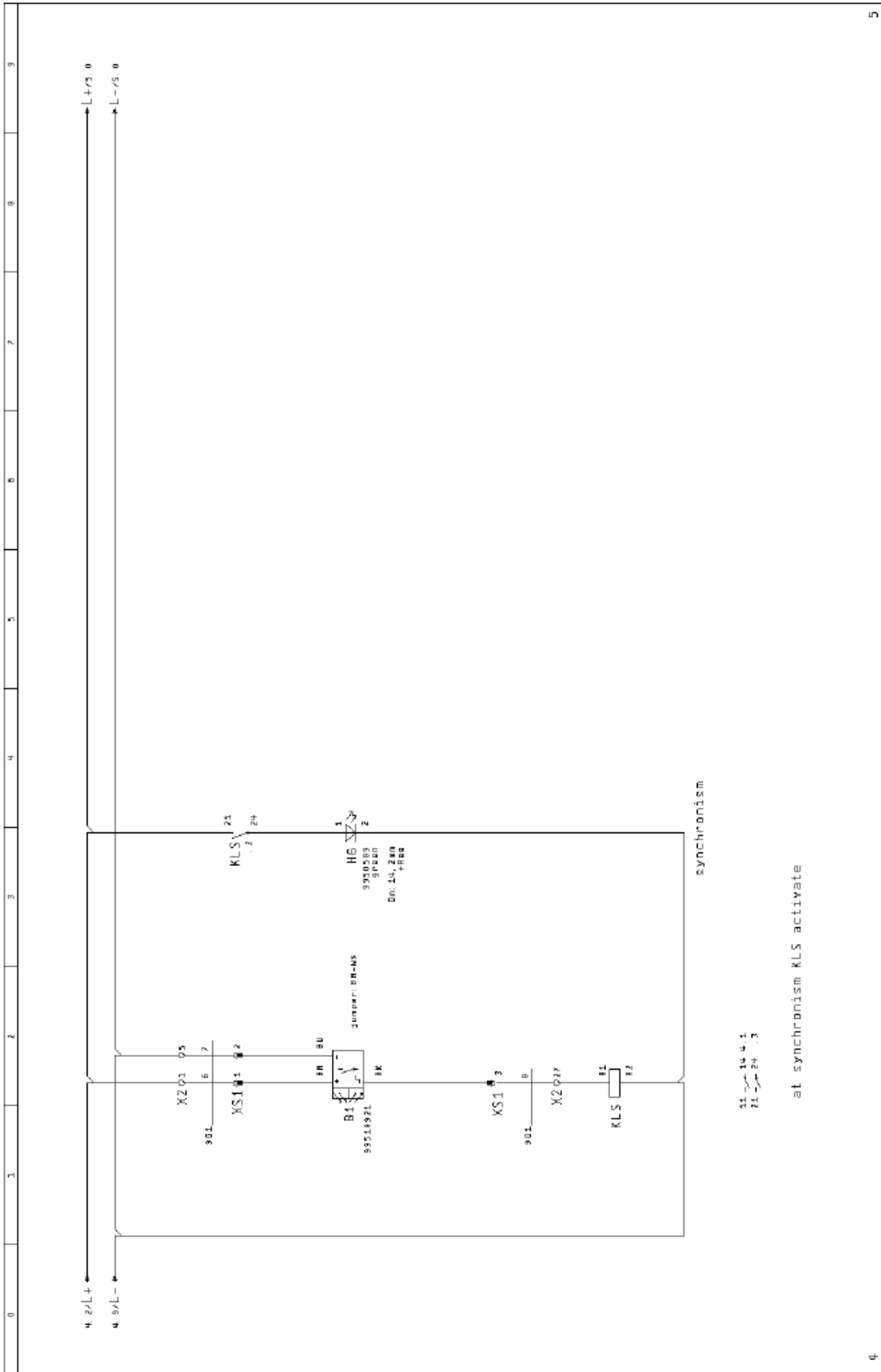
Control Unit ST01



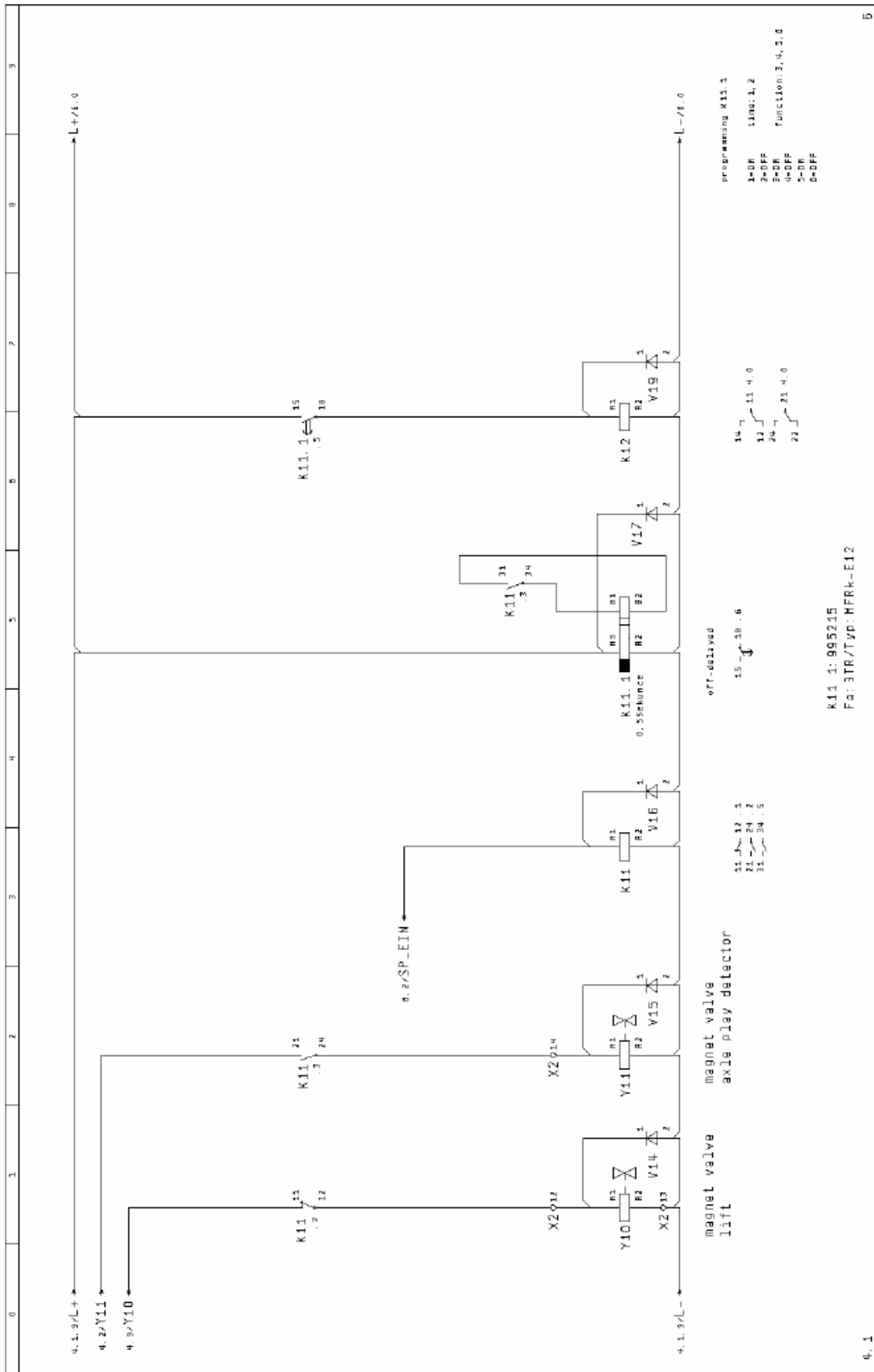
4.1

3

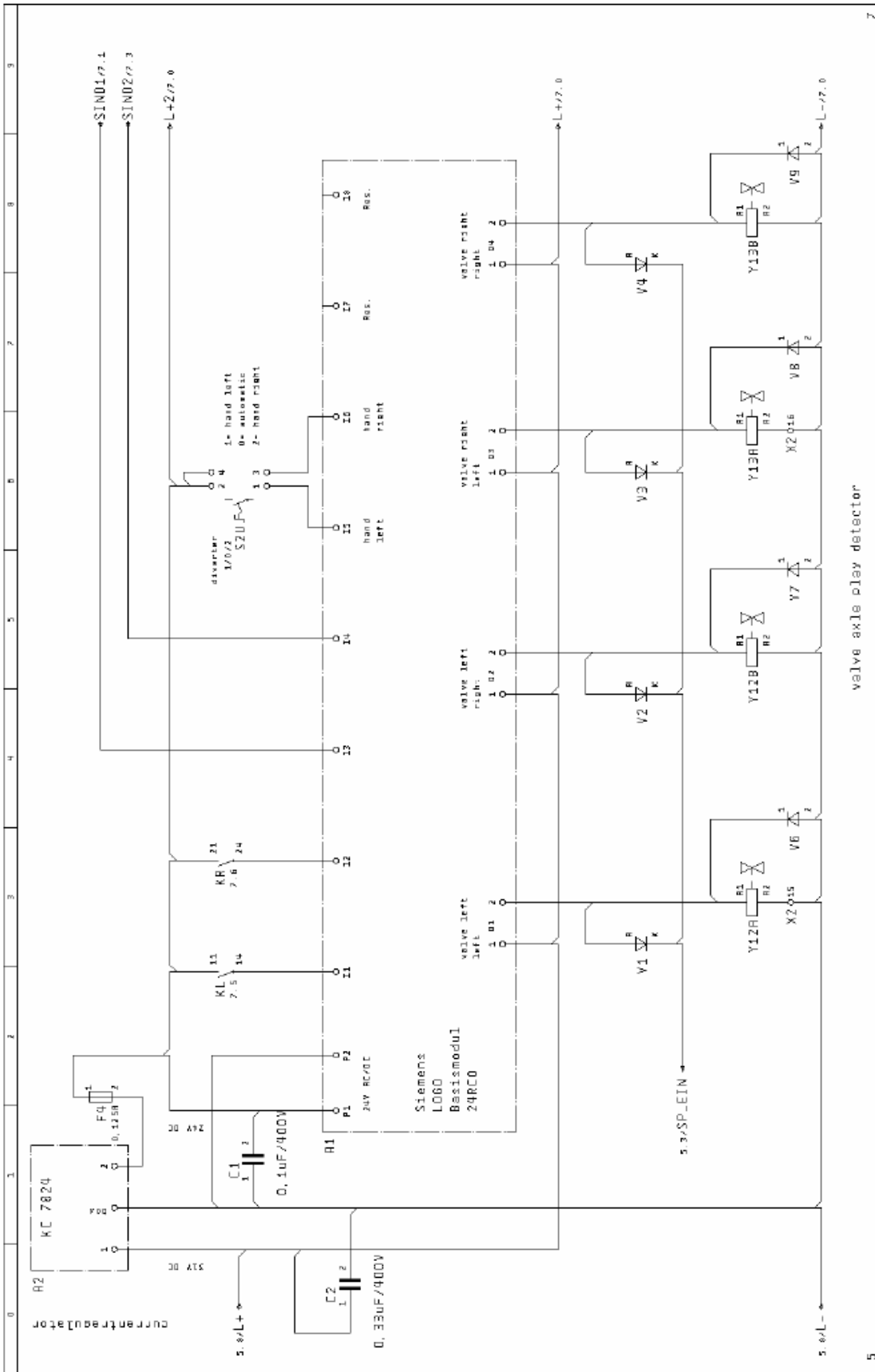
Light Barrier ST01



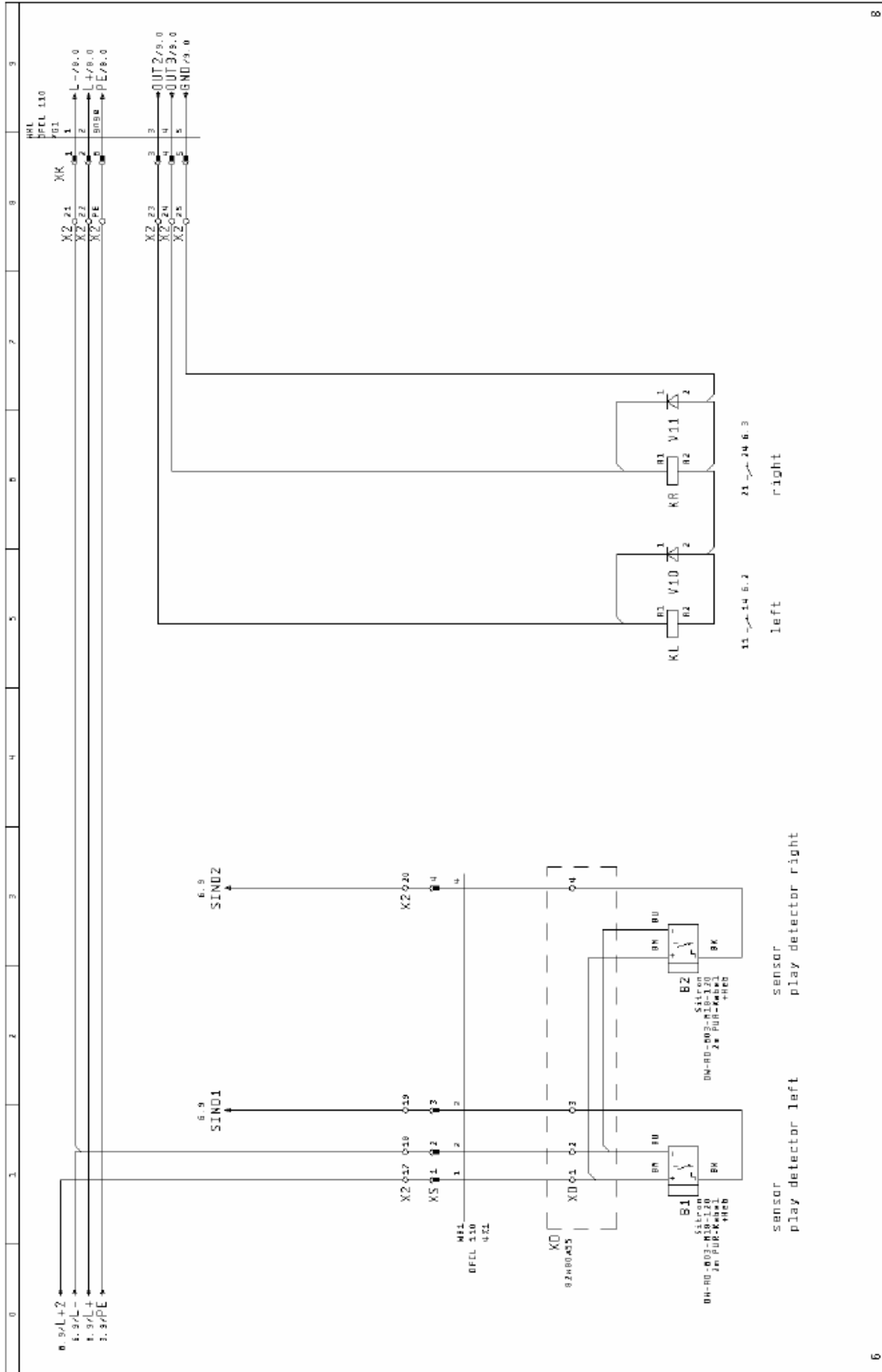
Control Unit ST01



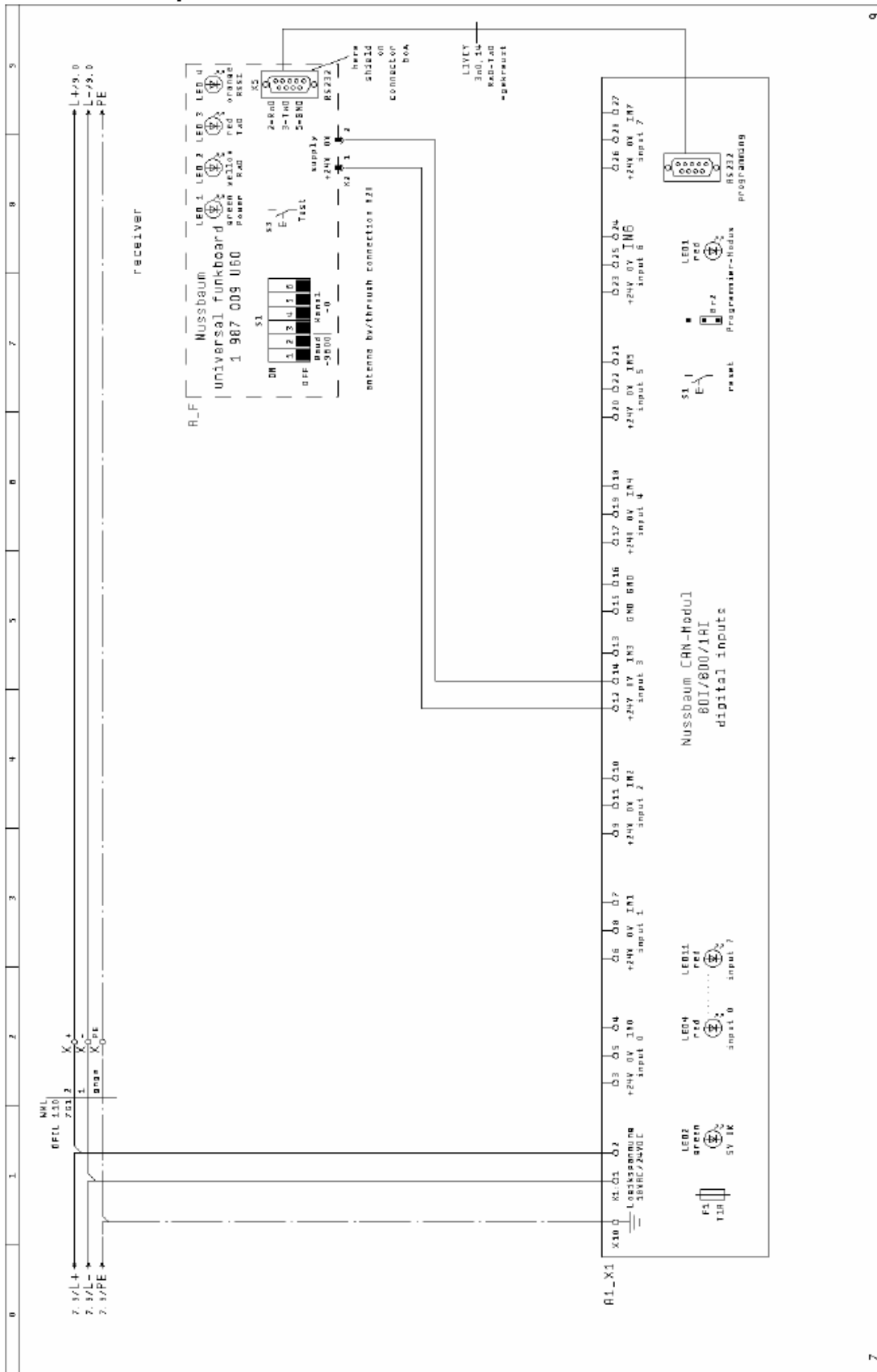
Play Detector Control ST01



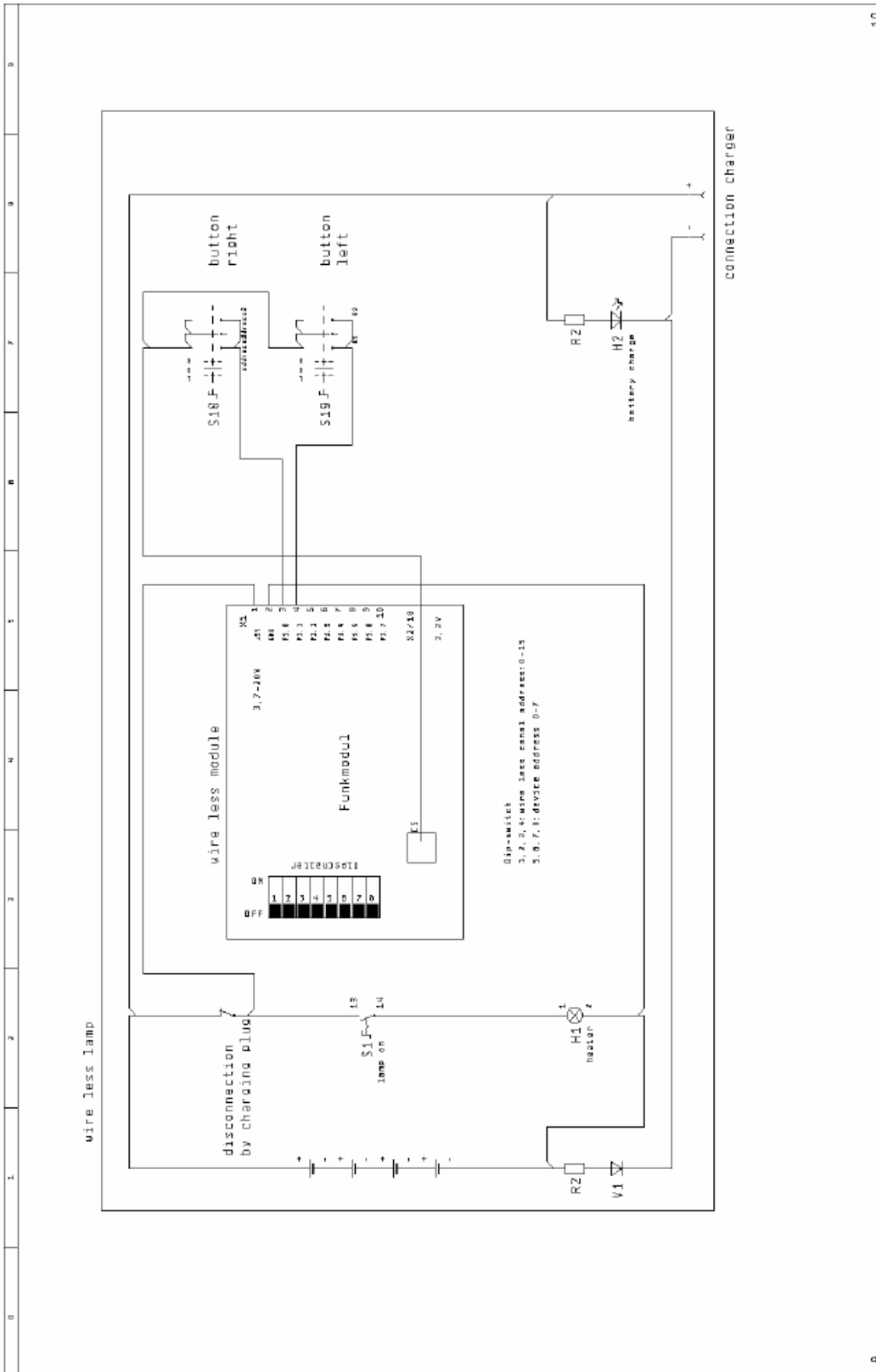
Play Detector Control ST01



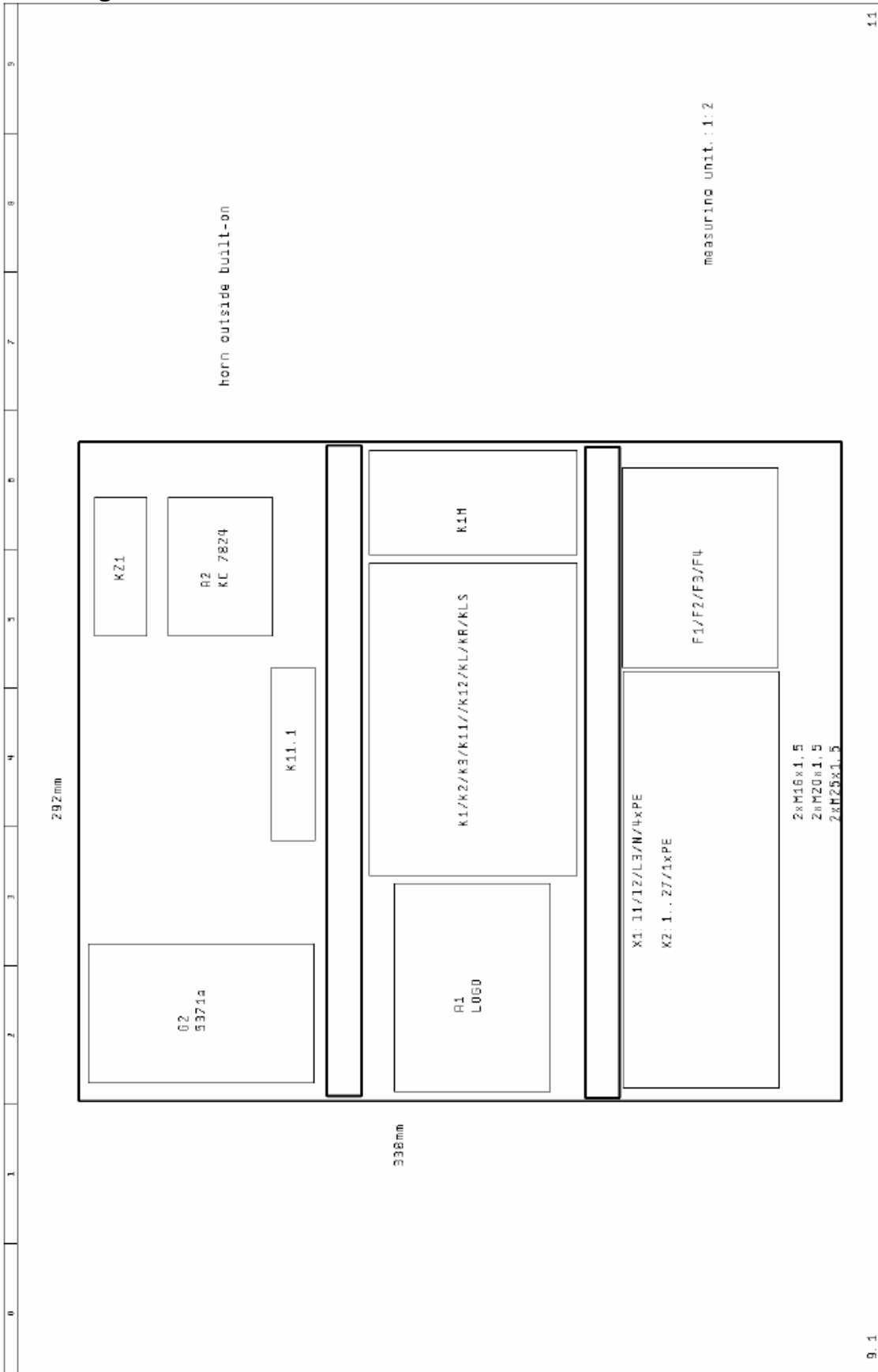
Can Module Inputs ST02



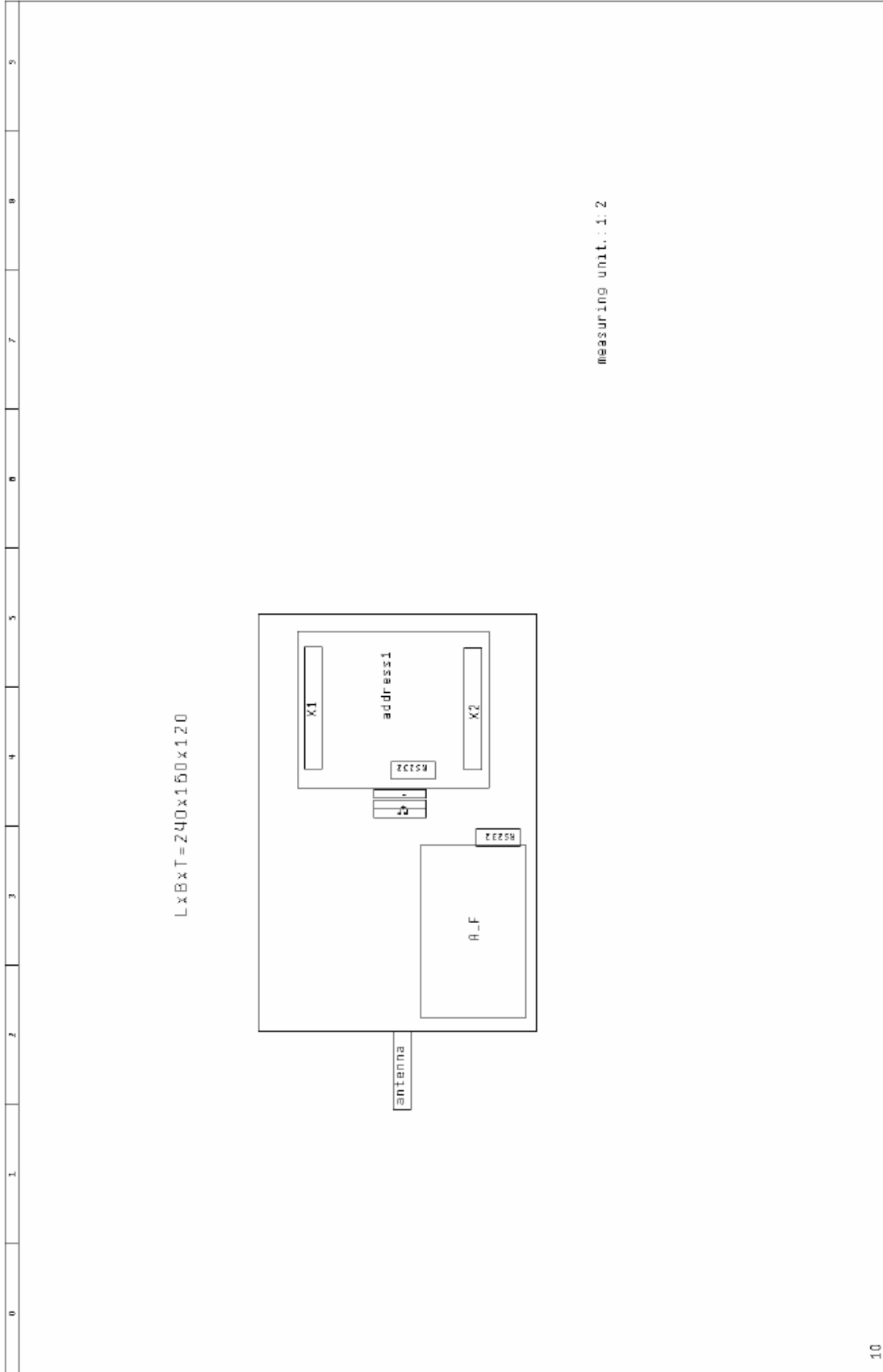
Wireless Torch



Mounting Panel ST01



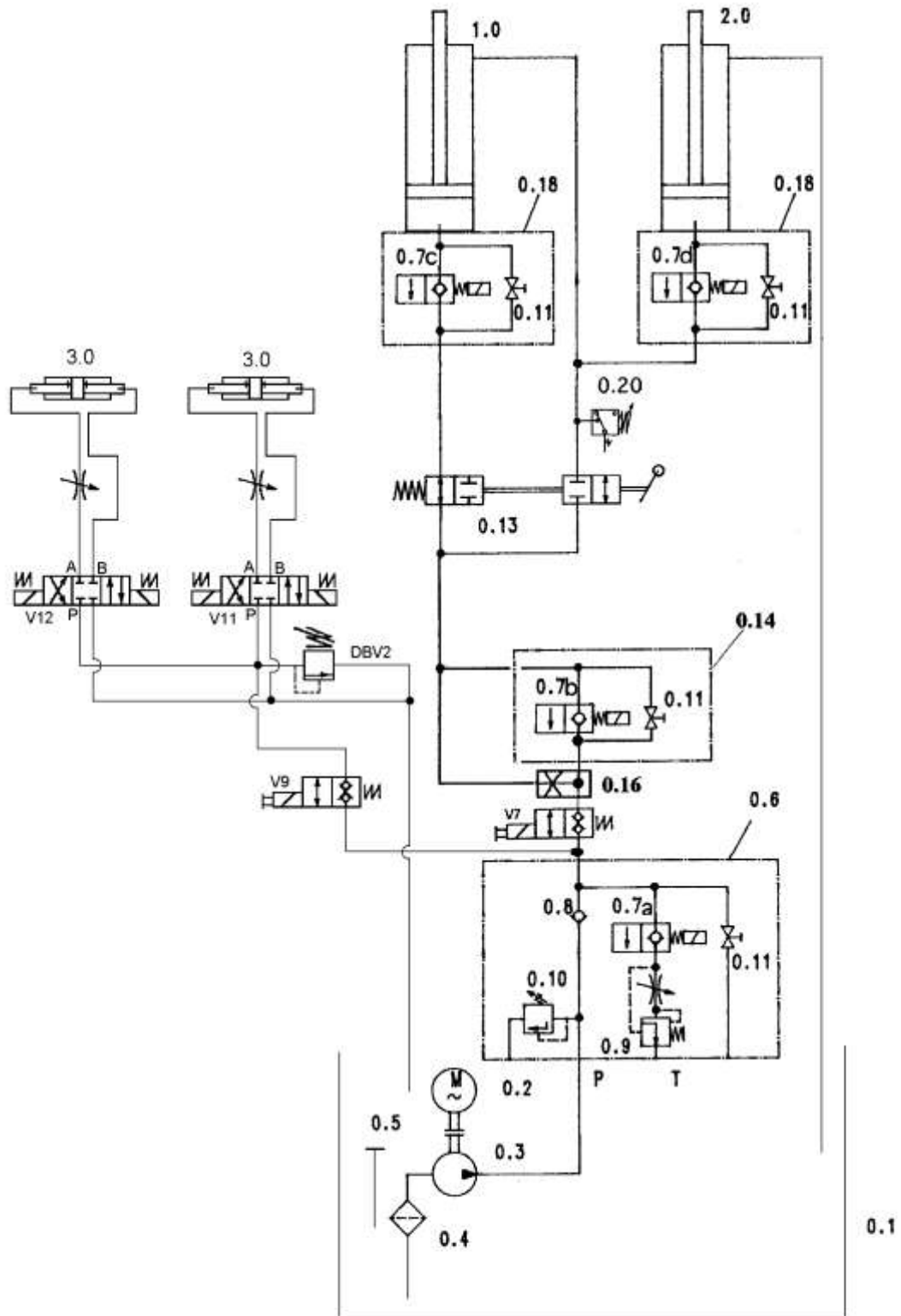
Mounting Panel ST02



3.9 Overview of the fuses in Crypton lifts

Fuses for CSL 640/641 and CSL 670/671							
FUSE	AMPS	Voltage	DIMENSION	TYPE	Location	Description	Electric plan
F1	T 2 A	250V AC	5x20mm	Slow Blow	Next to connection strip	Primary fuse for G2 power control	Plan no. 3
F2	T 5 A	250V AC	5x20mm	Slow Blow	Next to connection strip	Secondary fuse for G2 power control	Plan no. 3
F3	T 6,3 A	250V AC	5x20mm	Slow Blow	Next to connection strip	Fuse for separate lighting if installed	Plan no. 3
F4	T 2 A	250V AC	5x20mm	Slow Blow	Next to connection strip	Primary fuse for torch	Plan no. 3
F5	T 2 A	250V AC	5x20mm	Slow Blow	Next to connection strip	Secondary fuse for torch	Plan no. 7
F6	M 0,125A	250V AC	5x20mm	Fast acting	Next to connection strip	Safety fuse for Logo module and sensors on play detector	Plan no. 6

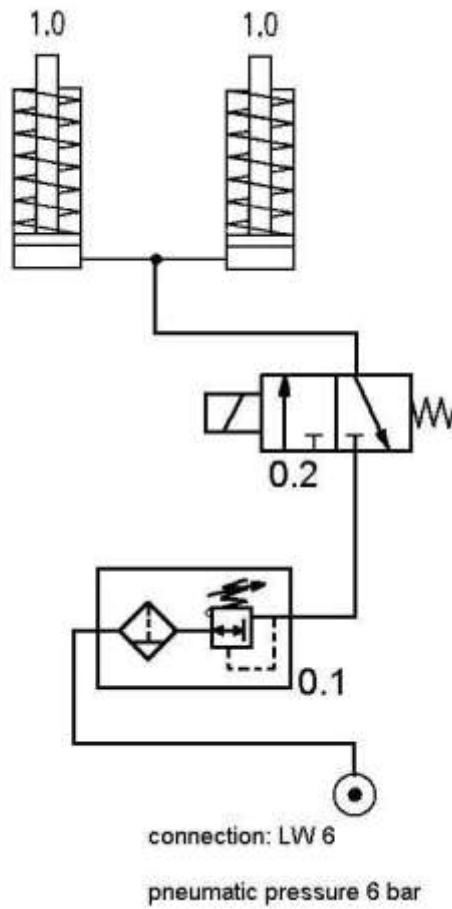
3.10 Hydraulic Diagram



3.10.1 Hydraulic parts list

Pos.	Description	order no.:
0.1	oil tank	
0.2	motor 400 V; 50 Hz	990303
0.3	gear pump 2.7cm ³ /revolution	980282
0.4	oil filter	980201
0.5	oil level gauge	980098
0.6	hydraulic block complete	232POW22037
0.7a	electrical controlled holding valve	980478
0.7b	valve (deposit in the ratchet)	980478
0.7c	safety valve on the lift	980478
0.7d	safety valve on the lift	980478
0.8	holding valve	980480
0.9	2-way-flow- control valve	980481
0.10	pressure relief valve	232NSTL02084
0.11	emergency lowering	030ULN02064
0.13	2/2-way valve double (ball valve) - equalisation of the two rails manually	980513
0.14	bypass valve complete	
0.16	screen (mounted in T-piece)	
0.18	safety hydraulic block complete	030ULN02061
0.20	pressure switch"automotive lift slave side, without pressure"	DSH000/003
1.0	cylinder master side	040ULN22001
2.0	cylinder slave side	040ULN22037
3.0	cylinder play detector	
V7	double seat valve	158641
V9	double seat valve	158641
V11	Way valve	117640
V12	Way valve	117640
DB2	pressure relief valve	155211

3.11 Pneumatic Diagram



Pneumatic parts list

No.	Description	order no.:
0.1	pneumatic unit	960039
0.2	3/2 way valve	960047
1.0	pneumatic cylinder	030ULN10036

4. Safety regulations

If you use the automotive lift, the following European regulations are to be considered:
BGG945: Examine of automotive-lifts; BGR500 Using automotive-lifts; (VBG14).

4.1 General safety-regulations

When using your garage equipment, basic safety precautions should always be followed, including the following:

Important Safety Instructions

1. Read all instructions
2. Care must be taken as burns can occur from touching hot parts.
3. Do not operate equipment with a damaged cord or main switch – until it has been examined and repaired by qualified service personnel.
4. Always isolate equipment from electrical outlets when not in use.
5. To reduce the risk of fire, do not operate equipment in the vicinity of open containers of flammable liquids (gasoline).
6. Adequate ventilation should be provided when working on operating internal combustion engines.
7. Keep hair, loose clothing, fingers and all parts of the body away from moving parts.
8. To reduce the risk of electric shock, do not use on wet surfaces or expose to rain.
9. Use only as described in this manual. Use only manufacturer's recommended Crypton replacements.

SAVE THESE INSTRUCTIONS

4.2 Additional safety-regulations

Especially the following regulations are very important:

- The laden weight of the lifted vehicle must not exceed 5000kg.
The maximum load distribution is 2:1 in or against the drive-on direction.
- The automotive lift must be in its lowest position, before the vehicle can be driven onto or off the lift and can only be driven onto or off the lift from the drive on side.
- While working with the lift the operating instructions must be followed.
- Any vehicles with low clearance or vehicles with optional equipment should be pre tested to ensure that they clear the lift ramp to avoid damage.
- Only trained personnel over the age of 18 years old are to operate this lift.
- No one is to stand within the working area (danger area) during lifting and lowering
- No one is to be raised or lowed either directly or in a vehicle by the automotive lift.
- No one is to climb onto the automotive lift or onto an already raised vehicle.
- Position the lifting pads as described by the vehicle manufacturer under the vehicle.
- Check the centre of gravity of the vehicle if heavy parts (e.g. the motor) are to be removed.
- If heavy parts must be removed (e.g. motor) the centre of gravity will change. Secure the vehicle before removing parts to avoid the possibility of the vehicle becoming insecure.
- The automotive lift must be checked by an expert after changes in construction or after repairing carrying pads.
- The main switch must be switched off and locked before work on the vehicle can commence. This is a safety precaution to ensure that the lift does not move during work.
-*The main switch must be switched off and locked before any maintenance or repair work on the automotive lift itself can be carried out.*
- During lifting or lowering, the operator must observe the vehicle to ensure that the vehicle and the lift are functioning correctly.

- Installation of the standard-mobile column lift in hazardous or dangerous locations such as washing bays is dangerous and is not allowed.
- During lifting or lowering the vehicle it must be observed by the operator.

5. Operating Instructions



The Safety Regulations must be observed and adhered to while working with the automotive lift. Read the safety regulations in chapter 4 carefully before working with the lift!

5.1 Lifting the vehicle

- Drive vehicle onto the centre of the lift in the longitudinal and transverse directions.



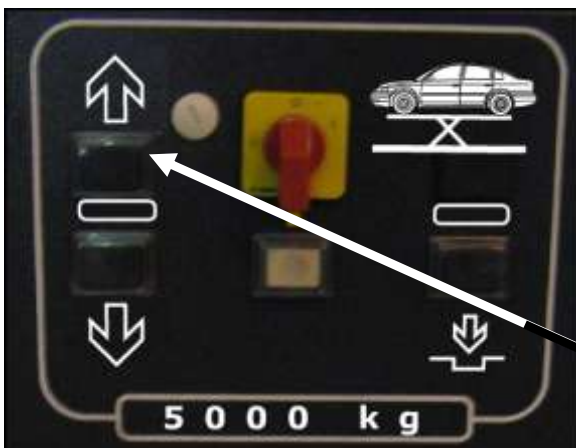
Each wheel must rest completely on its respective platform. Failure to correctly position the vehicle may result in the vehicle falling from the lift.

- Secure the vehicle against rolling away put into gear and apply the handbrake.
- Check the dangerous places around and on the lift and be sure that there are no objects or people in the immediate area surrounding the lift or on the lift.
- Switch on the control system and switch the main switch to position "1" (pic.1)
- Lift the vehicle to the required working height by pushing the 'lift' button (pic.2).



Main Switch

Pic. 1



Pic. 2

Button "Lifting"

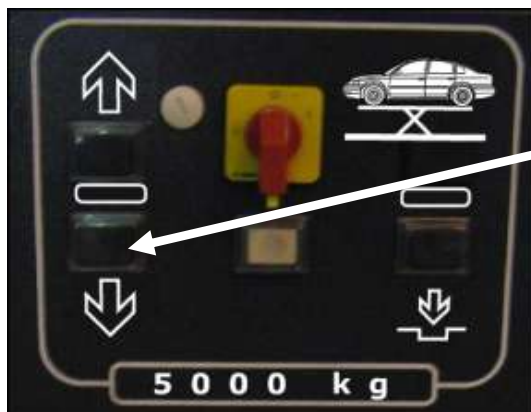
5.2 Lowering the vehicle



Attention! Your lift is equipped with the optional CE-Stop safety system, during lowering the lift will stop a short distance above the floor.

Check the danger areas around and on the lift and be sure that there are no objects or People in the immediate area around the lift or on the lift. To complete the lowering process push the 'lower' button (see pic 3) again. An alarm will sound to caution that the lift is completing its lowering function.

- Check the danger areas around and on the lift and be sure that there are no objects or people in the immediate area around the lift or on the lift.
- Lower the vehicle to the required working height or until the platforms are in their lowest position.



Button "Lowering"

Pic. 3

5.3 Lowering onto the safety ratchet (latch)

To perform the play detector, the platforms must be lowered onto the safety ratchets (latches).

- Raise the lift to the working height.
- Push the button shown in pic 4 to lower the lift into safety ratchets. The lift will slowly lower itself to the next ratchet (latch) position.
- Continue to push this button until the hydraulic system is no longer pressurized.



Button for lowering to next ratchet Position.

Pic. 4

- The lift must be raised slightly before lowering to free the platforms from the ratchets (latches). Once the platforms are free of the ratchets, the lift can be lowered once again.
- Press the button "Lifting"

5.4 Manual equalisation of the lift platforms

If the lifting platforms are not level allow the hydraulic oil to cool down and check the heights again. If the platforms are still unequal a manual equalisation must be performed.

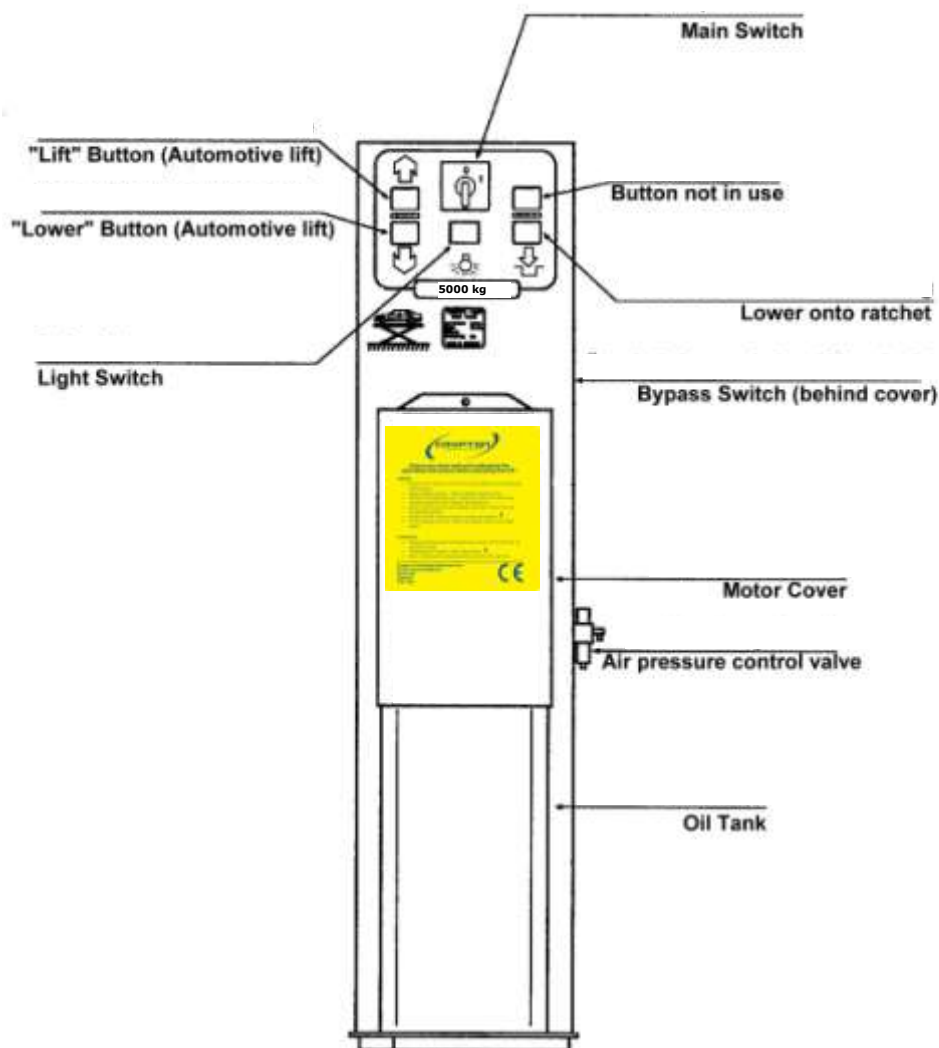


The manual equalisation must be performed without the vehicle. During the manual equalisation there is no safety device ensuring that the platforms remain level. If the manual equalisation is performed with a vehicle, the danger exists that the lift will become unstable and may result in the vehicle falling from the lift.

- Push the bypass switch located behind the cover on the right side of the command unit (See pic.5 and pic.6)



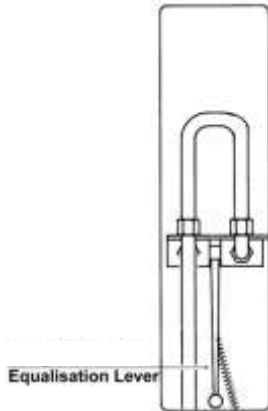
The bypass switch may only be used to restore the normal operating condition of the lift. Using the bypass switch while the lift is loaded with a vehicle may result in the vehicle falling from the lift.



Pic 5: Operating Unit

- Lower the lift to its lowest position, drive the vehicle off the lift
- Raise the lift approximately 500 mm.
- Pull equalisation lever (pic.6) 90° upwards and hold it in position.
The equalisation lever is located in the right side of the command unit (behind covering)
- Simultaneously push the bypass switch, located behind the cover in the right side of the command unit.

- While pulling the equalisation lever and pressing the bypass switch, Press either the "Up" or "Down" buttons to adjust the height until the height of the two platforms are equal.
- Once the platforms are equal in height, release the equalisation lever (It will return automatically) and close the covering.



Pic 6: Equalisation Lever

5.5 Play detector



Warning !
Only operate the Play Detector when the lift has been lowered into its Safety latch position

Application

The Play detector is a tool for the recognition of slackness in the ball and socket joints of vehicles. The operating unit is equipped with a lamp. The testing vehicle-parts can become illuminated under the vehicle.



Pic.7
Press the button to start the cycles with the left play detector.

Cycle: centre => left => right => centre



Pic.8
Press the button to start the cycles with the left right play detector.

Cycle: centre => left => right => centre

The axle play detector should be operated and used in accordance with the MOT testing procedure which can be found in the relevant up to date testers manual.

- By pressing the top button the cycle of the left plate will activate. After activation release the button and check the ball joints and steering components according to the MOT procedures.
 - By pressing the lower button the cycle of the right plate will activate. After activation release the button and check the ball joints and steering components according to the MOT procedures.
- After checking, put the operating unit into the holding device. The lamp will go off.

5.6 Function test before first initiation

- Before working with the play detector, carry out a functionality test.
- Behind the operating unit is a additional switch with three positions.
- Remove the rear upper the cover of the operating unit.



Test the function of the individual play detector plates.
Pos. "0" - This is the Position for the normal function

Pos. "1" - Plate 1 of the play detector is individually moveable.
Press the button of the hand lamp. The plate starts the cycle until the button is pressed again

Pos. "2" - Plate 2 of the play detector is individually moveable.
Press the button of the hand lamp. The plate starts the cycle until the button is pressed again.

- After testing, set the switch on Position "0".

6. Troubleshooting

If the lift is not working properly, the reason might be quite simple. Please check the lift for the potential reasons mentioned on the following pages. If the cause of trouble cannot be found, please call the technical service on 0844 665 7610



Repairs to the lift's safety devices as well as repairs and examinations of the electrical fittings may only be performed by specialists.

Problem: Motor does not start!	
Potential causes: <i>No power supply</i> <i>Main switch is not engaged</i> <i>The main switch is defective</i> <i>Fuse defective</i> <i>The feed line is cut</i> <i>Thermal switch in the motor is active</i> <i>Motor is defective</i>	solution: <i>Check the power supply</i> <i>Check the main switch</i> <i>Check the main switch</i> <i>Check Fuse</i> <i>Check the complete cable</i> <i>Let motor cool down</i> <i>Call technical service</i>

Problem: Motor starts, lift does not lift!

Potential causes:

*The vehicle is too heavy
Level of the oil is too low*

The emergency lowering screws are not closed

*Cylinder is defective
Hydraulic lines are defective
Hydraulic valve is defective
Gear pump is defective*

solution:

*unload the vehicle
check the oil level, fill with hydraulic oil as required
Check the emergency lowering screw
Call technical service
Check hydraulic lines
Call technical service
Call technical service*

Problem: the lift does not lower!

Potential causes:

*An obstacle is restricting the lift from being lowered
Ratchets are engaged*

*Hydraulic valve is defective
Fuse is defective*

solution:

*(see chapter 6.1)
Raise lift slightly before lowering
Call technical service
Check the fuse*

6.1 Lowering onto an obstacle

If the lift is lowered onto an obstacle on its slave side during lowering, it stops automatically. In this case push bypass switch S2 in command unit and the "lifting" button simultaneously and raise the lift until the obstacle can be removed. Now the lift can function normally again and can be used as described in this manual.

If the lift is lowered onto an obstacle on its master side during lowering, it will stop automatically. In this case push button "lifting" and raise the lift until the obstacle can be removed.

6.2 Emergency lowering

In the case of **power failure**, the emergency-lowering can only be done if the automotive-lift is not locked in a safety device. If the lift is locked, the command valve cannot be opened and the security system cannot open. In this case, wait until power is restored.

In the case of **defective electromagnetic valves**, the hydraulic valves of the lift will not open. Therefore the lift cannot be lowered. In this case there is the possibility to open the hydraulic valves manually and to lower the lift into its lowest position, so that the vehicle can be driven off.



If the vehicle is lifted with an axle-lift (jack) the axle-lift must be lowered first, because the emergency lowering screw of the axle-lift is not accessible once the lift has been completely lowered.



The emergency lowering can only be performed when the ratchets are not engaged (they can be lifted manually).



The emergency lowering must only be performed by persons instructed to use the lift. Please refer to the regulation "Lowering".



If the hydraulic hoses are damaged replace them and continue on as described in the operating instructions.

6.2.1 Emergency lowering of the automotive lift

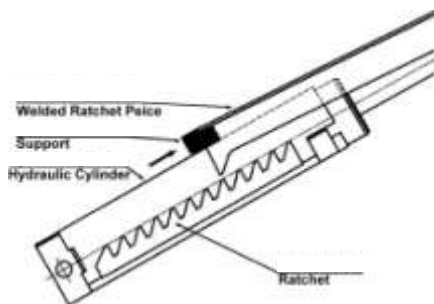
- Loosen the lock nut (marked with red colour) at the valve located at the bottom of each cylinder. This nut secures the set screw. Turn the set screw about one turn clockwise. This has to be done at both cylinders.



Warning !

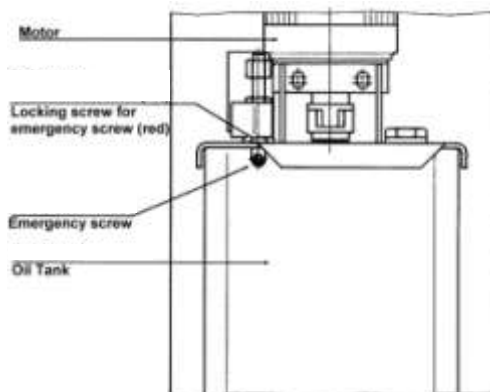
In the case where hydraulic hoses are defective, the lift will lower into the safety ratchets, once the ratchet is engaged the lift can not be lowered. The defective hydraulic hoses must be replaced to use the lift again.

- In the case where the hydraulic hoses are not defective, the ratchets can be raised off the hydraulic cylinders manually. This can be done by inserting a wooden wedge between the cylinder and upper part of the ratchet so that the ratchet cannot engage (see pic. 9). This must be performed at both hydraulic cylinders.



Pic 9: Supporting ratchet

- Remove motor-covering from command unit (see pic. 5)
- Loosen locking screw of emergency lowering screw at command unit (marked with red colour, see pic. 10)
- Loosen emergency lowering screw (threaded pin) about one turn anti-clockwise to start lowering.



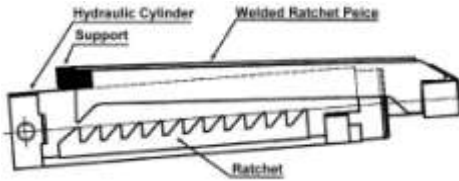
Pic 10:
Position of the emergency screw

- Fasten set screw when the upper parts of the ratchets have passed the last ratchet tooth (the ratchets can no longer engage) (see pic. 11)
- Remove supports from ratchets at both cylinders



The supports must be removed before lowering the lift to the ground. otherwise the lift could be seriously damaged.

- Continue lowering the lift (loosen set screw again) until the lift has reached its lowest position.



Pic 11: Removing support

- Fasten the set screw and secure it by fastening the locking screw.
- Turn out thread pins at both stop valves of the bottom of hydraulic cylinders. Secure them with the red security nuts.



After finishing the emergency lowering, all the set screws must be adjusted back to their original positions. Otherwise a malfunction may occur.

- Reinstall covering plates of both stop valves in the drive-on areas of the platforms.
- Drive vehicle off the lift
- Shut down the lift until the defective pieces or valves have been replaced

7. Inspection and Maintenance



Before conducting maintenance work, preparations must be made to ensure that during maintenance and repair work there is no risk to the safety of people working on

or around the lift, and also that there is no risk of damage to equipment being used on or around the lift.

To guarantee the utmost availability and to ensure that the lift remains functional, maintenance work contracts are organised between our clients and their local retailers.

A service must be performed at regular intervals of 12 months through the operator in accordance with following service manual. If the lift is in continuous operation or in a dirty environment, the maintenance rate must be increased.

During daily operation the lift must be closely observed to ensure that it is functioning correctly. In the case of malfunction or leakage the technical service must be informed 0845 634 9904

7.1 Maintenance schedule for the lift

- Before beginning any maintenance work isolate the power supply. Secure the main switch (lock it). Secure the danger area around the automotive lift and secure the lift against unintentional lowering.
- Clean the piston-rod using compressed air.
Grease the piston rods with multipurpose oil.
Clean and check the stripper of the guidance-piston.
- Grease the lubricate nipples with a multipurpose lipid. (Example: Auto Top 2000 LTD. Agape)
- Clean and lubricate the moving parts of the lift (hinge bolts, sliding pieces, and sliding surfaces) grease with a multipurpose lipid (example: Auto Top 2000 LTD. Agape).
- Check the hydraulic tubes for leakage.

Life time of the hydraulic hoses.

The use duration of the hose lines should not exceed six years, including a storage time of at the most, two years.

Deviating of the use duration, according to available inspection results and empirical values with consideration of the operating conditions, can be specified in individual cases (excerpt from standard: ZH 1/74// DIN 20066).

- Remove all fluids in the canister. After it, seal the cover again.

- Check the oil level. Fill the tank with clean, high quality oil (32 cst) (e.g. HLP 32 LTD. OEST Company)
- The hydraulic oil has to be changed at least once a year. To change the oil, lower the lift into its lowest position. Empty all tanks and refill with clean oil, see chapter 3.1.
Use an ATF-Suffix hydraulic-oil (OEST Company) if the ambient temperature is less than 5 degrees centigrade. After filling, the hydraulic oil must be between the upper and lower markings of the oil level gauge.
Remove and dispose of the old oil in accordance with the appropriate regulations.
- Check all welded joints for cracks on the automotive-lift.
If any cracks are found on the lift cease use immediately. Switch-off and secure the main switch (lock) and call your service agent.
- Check the condition and the function of the safety ratchet.
- Check all surfaces and repair if necessary.
- Damage to external surfaces, must be immediately repaired.
If these repairs are not made immediately, permanent damage to the powder-coated surface may result.
Repair and clean damaged areas with an abrasive paper (grain 120). After this is complete, use a suitable paint (observe the RAL Number).
- Check the zinc surface and repair it with a suitable tool. Use abrasive paper (grain 280).
White rust can result from moisture lying in certain areas for long periods of time. Poor aerating can also result in rust formation.
Rust may result from mechanical damage, wear, aggressive sediments (de-icing salt, liquids) or insufficient cleaning.
Repair and clean these areas with abrasive paper (grain 280).
After this is complete, use a suitable paint (observe the RAL Number).
- Check all the safety devices of the lift (ratchet, the optional CE-Stop, etc.)
- Check the electric cable and channels for Damage.
- Check all the covers for Damage.
- Check that all screws and bolts are correctly torque (turning moments, see the list)

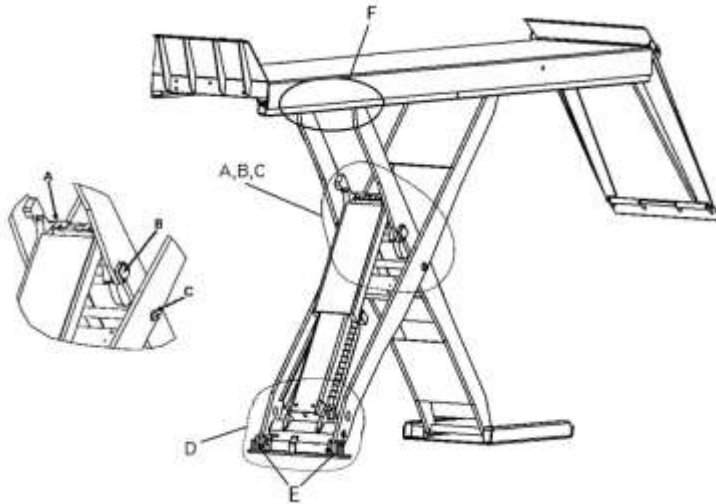
Turning moment for screws

	property class 8.8			property class 10.9		
	0,10*	0,15**	0,20***	0,10*	0,15**	0,20***
M8	20	25	30	30	37	44
M10	40	50	60	59	73	87
M12	69	87	105	100	125	151
M16	170	220	260	250	315	380
M20	340	430	520	490	615	740
M24	590	740	890	840	1050	1250

* sliding friction 0,10 for very good surfaces, lubricated
 ** sliding friction 0,15 for good surfaces, lubricated oder dry
 *** sliding friction 0,20 surface black or phosphatized, dry

Pic 12:

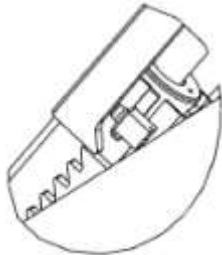
The following bearing points of the LIFT should be examined by a competent person (as described in this manual) who is able to judge the structural integrity of the lift. After examining the lift, the bolts and bearing bushings should be lubricated as described in this manual.



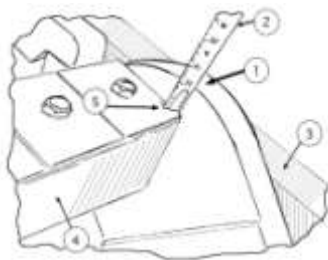
- Pos. A** - Piston-rod head and bearing bushings.
- Pos. B** - Bolt and bearing bushings of cylinder hinge plate.
- Pos. C** - Central bolt and bearing bushings.
- Pos. D** - Lower cylinder bolt and bearing bushings.
- Pos. E** - Lower fixed-bearing bolt and bearing bushings.
- Pos. F** - Upper fixed-bearing bolt and bearing bushings.

Pos. A - Piston-rod head and bearing bushings

Raise the lift slightly over the highest safety ratchet position.
Do NOT lower the lift in to the locked position.



Pic G: Position A (Piston-rod Head)



Pic H: Measuring points

Measuring the dimension between points 1 and 5. (see illustration)

- 1 - Highest measuring point at cylinder hinge plate
- 2 - Measuring tape
- 3 - Inner scissor arm
- 4 - Square piston-rod head
- 5 - lowest measuring point at leaf spring (or square head)

Make sure that leaf springs are properly tightened down. In some lift models the leaf springs are fitted differently from the illustration. In such cases the measurement should be taken from the top surface of the square head.

Check the following dimension:

The original dimension (lift in as new condition) between leaf spring and the highest point of the cylinder hinge plate is:

Model CSL670/CSL671: Original dimension: $7,5 \pm 2\text{mm}$



In case the measurement is taken directly from the square head, add 2mm to the measured dimension to obtain the original dimension of the lift in as new condition.

Pos. B - Bolt and bearing bushings of cylinder hinge plate



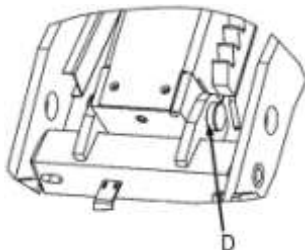
- Remove cover
- Clean area. Visually examine condition of bolt and bushings for wear. Do NOT move or remove bolt.
- Both scissors need to be examined.
- *Repair or re-install back to original condition. Grease/oil as described in the lubrication instructions.*

Pos. C - Central bolt and bearing bushings



- Remove castle-nut and split-pin
- Clean area. Visually examine the condition of bolt and bushings for wear. Do **NOT** move or remove bolt.
- Both scissors need to be examined
- *Repair or re-install back to original condition. Grease/oil as described in the lubrication instructions.*

Pos. D - Lower cylinder bolt and bearing bushings

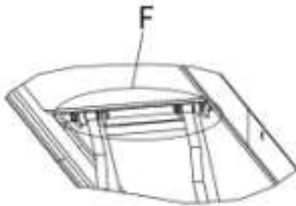


- The condition of the bolt and bushings need to be visually examined for wear.
- The platforms of the lift need to be lowered on to an adequate support, so that the cylinder is unloaded. **Be careful not to damage the safety ledge!**
- Remove the split-pin from the bolt.
- Slide the bolt only so far until the bearing surface of the bushing can be examined.
- Both scissors need to be examined.

- Repair or re-install back to original condition. Grease/oil as described in the lubrication instructions.

Pos. E - Lower fixed-bearing bolts and bearing bushings

- The condition of the bolts and bushings need to be visually inspected for wear and abrasion.
- Remove the split-pin from the bolt.
- Slide the bolt only so far until the bearing surface of the bushing can be examined
- Both scissors need to be examined.
- Repair or re-install back to original condition. Grease/oil as described in the lubrication instructions.

Pos. F - Upper fixed-bearing bolts and bearing bushings

- The condition of the bolts and bushings need to be visually inspected for wear and abrasion.
- *Remove the split-pin from the bolt.*
- Slide the bolt only so far until the bearing surface of the bushing can be examined.
- Both scissors need to be examined.
- Repair or re-install back to original condition. Grease/oil as described in the lubrication instructions.

Lubrication Instructions for bearing points

The bushings used on our lifts are self-lubricating. No maintenance is necessary under normal operating conditions. In extreme cases, for instance in aggressive environments with heavy dust and dirt, paint mist and chemicals there is a risk of corrosion through the penetration of foreign objects at the bearing points. Lubrication can improve the protection of these areas. This practice is recommended as a preventative measure. The lubrication should be carried out as follows:

- With a grease gun, whenever the bearing has a grease nipple.
- For bearings without grease nipples, use a lubricating spray with good viscous properties. Be sure to thoroughly clean all surfaces before applying the grease.

There should be no load on the bearing during the greasing operation. Please observe the safety instructions.

After having lubricated the bearings, the lift should be run up and down a few times, without a load, so that the grease properly spreads in the bearings.

In order to maintain the grease film, the bearings should be lubricated on a regular basis. We recommend this should be done at least once a month or, more often when the lift is being used more intensely.

Recommended lubricants:

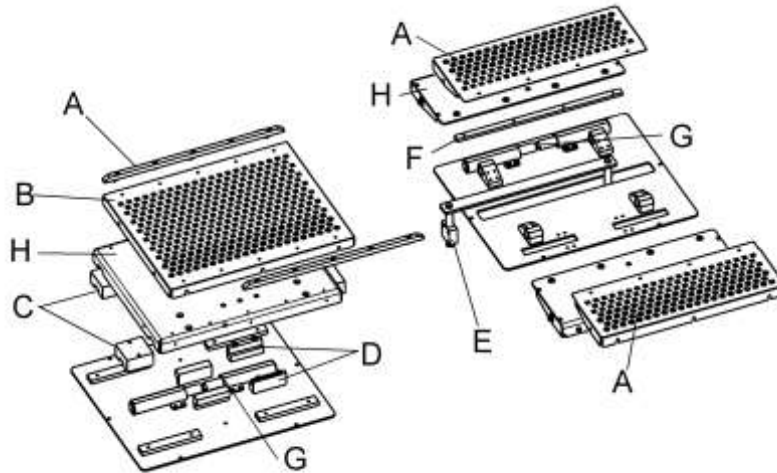
Grease: any regular grease

Do not use grease with Graphite or Mos 2 additives.

Spray: any regular lubricating spray
Do not use spray with a Silicon additive.

7.2 Maintenance schedule for the play detector

To be carried out at least once in a period of twelve months.



- Before beginning any maintenance work isolate the power supply. Secure the main switch (lock it). Secure the danger area around the automotive lift and secure the lift against unintentional lowering.
 - A Clean the position assistance and examine it for damages.
 - B Clean the plate with air pressure and examine it for damages. Afterwards lubricate with multipurpose grease.
 - C First remove the plates B, H before cleaning the sliding blocks with air pressure and examine it for damages. After lubricate with multipurpose grease.
 - D Clean the plate with air pressure and examine it for damages. Afterwards lubricate with multipurpose grease.
 - E Check the easy-running of the lifting device.
 - F Clean the plate with air pressure and examine it for damages. Do not lubricate this sliding block, otherwise the dirt remains hanging on it
 - G Clean the piston-rods using compressed air.
- Check the hydraulic tubes for leakage.
Life time of the hydraulic hoses.
The use duration of the hose lines should not exceed six years, including a storage time of at the most two years.
Deviating of the use duration, according to available inspection results and empirical values with consideration of the operating conditions, can be specified in individual cases (except from standard: ZH 1/74// DIN 20066).
 - Check the press buttons, lamp, and cable of the hand lamp.
 - Check the function of the play detector with the hand lamp.

7.3 How often must the lift be cleaned?

A regular and appropriate maintenance practice will aid the preservation of the lift.

No guarantees can be given when damage (egg rust or fading colour) is the direct result of poor maintenance and cleaning practice.

Regular cleaning of all kinds of dirt is the best protection against wear and the formation of rust and will prolong the life of the lift

- Dirty deposits that can cause rust include:
 - de-icing salt
 - sand, pebble stone, natural soil
 - all types of industrial dust
 - water; also in connection with other environmental influences
 - all types of aggressive deposits
 - constant humidity caused by insufficient ventilation

Obviously this is dependent on the type of work being done with the lift, the degree of cleanliness of the workshop and location of the lift. The degree and amount of dirt is dependent on the season, on the weather conditions and the ventilation of the workshop. During poor conditions it may be necessary to clean the lift once week, but cleaning once a month will suffice.

Clean the lift and the floor with a non-aggressive and non-abrasive detergent. Use a gentle detergent to clean the parts. Use standard washing-up liquid and lukewarm water.

- Do not use steam jet cleaners.
- Remove all dirt carefully with a sponge or if necessary with a brush.
- Ensure that no washing-up liquid is left on the lift after cleaning.
- Do not use aggressive means for cleaning the workshop floor and the automotive lift.
- A permanent contact with any kind of liquid is not allowed. Do not use high pressure devices for cleaning the lift.

8. Security check

The security check is necessary to guarantee the safety of the lift during use. It has to be performed in the following cases:

1. Before the initial operation, after the first installation.
Use the form "First security check".
2. In regular intervals after the initial operation, at least annually.
Use the form "Regular security check".
3. Every time the construction of that particular lift has been changed.
Use the form "Extraordinary security check".



The first and regular security check must be performed by a competent person. It is also recommended that a service be carried out during these checks.



After the construction of the lift has been changed (for example changing the lifting height or capacity) and after serious maintenance works (welding on load bearing parts) an extraordinary security check must be performed by an expert.

This manual contains a form with a schedule for the security checks. Please use the appropriate form for the particular security check. The forms should remain in this manual after they have been filled out.

9. Installation and Initiation

9.1 Installation of the lift

The standard installation requires the command unit to be installed at the front left side of the lift (refer to data sheet). The command can be installed in other areas if necessary but special hydraulic hoses are needed.

9.2 Regulations for the installation

- The installation of the lift is performed by trained technicians of the manufacturer or its distribution partner. If the operator can provide trained mechanics, he can install the lift himself. The installation has to be done according to this regulation.
- For the installation a concrete floor with a specified thickness (see foundation plan) and a quality of at least C20/25 has to be provided. If these requirements cannot be fulfilled a foundation according to the foundation plan must be made. The area must be completely even. Foundations located outside or in areas that are vulnerable to frost must be made frost proof.
- An electric supply 3~/N + PE, 400 V, 50 Hz has to be provided by the customer. The connection is located in the command unit.
- A compressed air supply with an inside diameter of 6 mm must be provided at the command unit. The pressure must be 6 bar (max. 10 bar).
- All cable ducts have to be equipped with protective coverings to prevent accidental damage.

9.3 Erection and doweling (Masonry bolting) the lift

- Install the lift according to the data sheet, foundation plan and recommendations described in Installation Instructions document TES1532.
- Fill the hydraulic oil, approximately 10 litres. A high quality hydraulic oil is recommended, its viscosity should be 32 cst. (HLP 32 OEST Company)
- Connect hydraulic and pneumatic hoses and electrical wires between command unit and lift in accordance with plan:
- Push "up" button until the vent screw at the top of master cylinder is accessible. If the lift does not work activate bypass switch (see pic. 5) in addition with the "up" button until the lift is at the relevant height.
- Open vent screw (cylinder screw with copper ring), located at upper side in guide bush of the master cylinder. Unscrew until oil comes out of the bore-hole for deaerating (Do not unscrew vent screw completely).
- Shut vent screw immediately and fasten it.
- If the ratchets of the lift engage before oil comes out of the vent screw, shut the vent screw and lift the lift with button "up" until the ratchet is no longer engaged.
- Afterwards repeat deaerating as described until oil comes out of the ventilating screw.
- Carry out equalisation of the platforms as described in the „operating instructions“ chapter.
- Raise the lift to a height of 1500 mm.
- Before the lift is doweled to the ground, the quality of the ground must be checked. For an existing concrete floor the dowels have to be chosen according to pic. 16, if the ground is covered with floor tiles, the dowels have to be chosen according to pic. 17.
- CRYPTON demands dowels as described on pages 60 or 61 of this manual.
- Check adjustment of the ground plates again. Drill the holes into the ground through the corresponding holes in the ground plates. Clean the holes and insert dowels.
- Adjust lift according to separate instruction. The manufacturer demands Liebig safety-dowels type B 12 or equal dowels from another manufacturer.
- Adjust the lift by screwing the adjusting screws at the base plate of the sliding end and the fixed pivot end. Adjust one platform until it is level first and then adjust the second platform so that it is even with the first.
- Tighten the dowels (masonry bolts) with a dynamometric key or torque wrench (M = 70 Nm)



Each dowel (masonry bolt) must be tightened to a torque of 70 Nm. Otherwise the normal function of the lift cannot be guaranteed.

- Lift and lower the automotive lift repeatedly. Tighten dowels with dynamometric key or torque wrench again (M = 70 Nm) and check hydraulic lines are tightly sealed.

9.4 Initiation



Before the initiation a security check must be performed. Therefore use form: First security check.

If the lift is installed by a competent person, he will perform this security check. If the operator installs the lift by himself, he must instruct a competent person to perform the security check. The competent person confirms the faultless function of the lift in the installation record and the form for the security check and allows the lift to be used.



Please send the filled installation record to the manufacturer after installation.

9.5 Changing of the place of installation

If the place of installation must be changed, the new place has to be prepared according to these regulations. The changing of the location must be performed according to the following schedule:

- Loosen dowels.
- Lift the lift without any load to a height of 500 mm.
- Put a wooden bar with a sufficient length (longer than platform's width) under the central axes of the each of the scissors.
- Lower the lift until the central axes rests on the wooden bar and the ground plates begin to lift of the ground.

Secure the lift against swinging and overturning by appropriate means in order to eliminate the danger of accident.

- Tie the ground plates to the platforms.
- Disconnect electrical wires, hydraulic hoses and air hoses.
- Transport the lift to its new location.
- Install the lift according to these regulations.



Use new dowels. Used dowels have been mechanically stressed and can no longer be used.



A security check must be performed before reinitiating by a competent person. Use form "Regular security check".

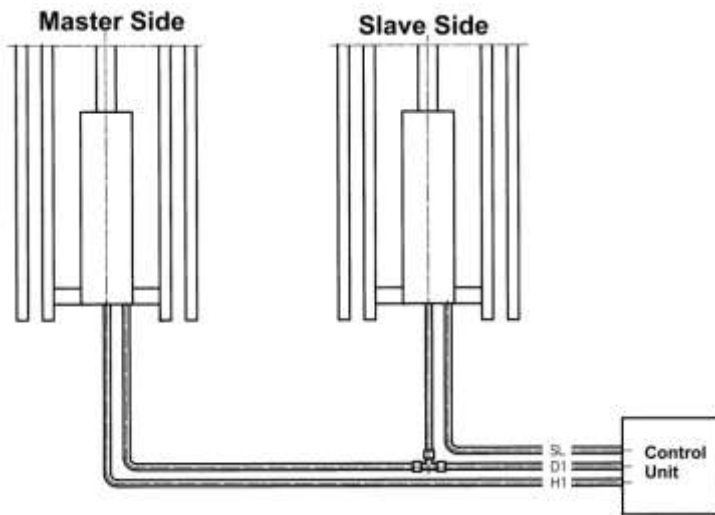
- If necessary, carry out a reset before the first operation. (see chapter 6.3)
- Raise the lift to a height of about 800 mm.
- Mount the lifting arms.
- Raise and lower the lift several times without a load (vehicle) to the upper and lower limits.
- Check that the safety devices are functioning correctly.
- Raise and lower the lift several times with a vehicle to the upper and lower limits. (see chapter 5.2)
- Check the hydraulic system for leakages.
- Check that the masonry-bolts are correctly torqued again.



In the case of any faults, call the customer service immediately



Pic 13:
Connection of hydraulic hoses in command unit

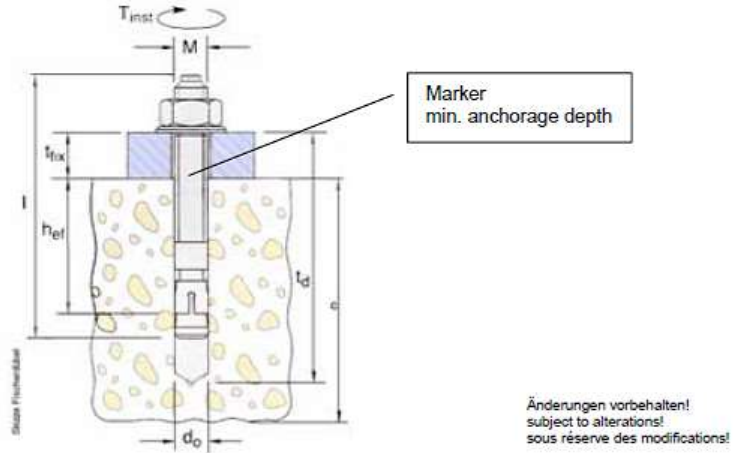


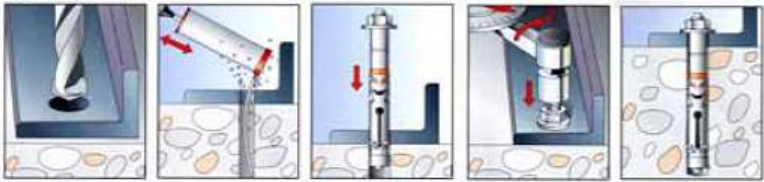
Pic 14:
Hydraulic hoses paths
from command unit to the lift

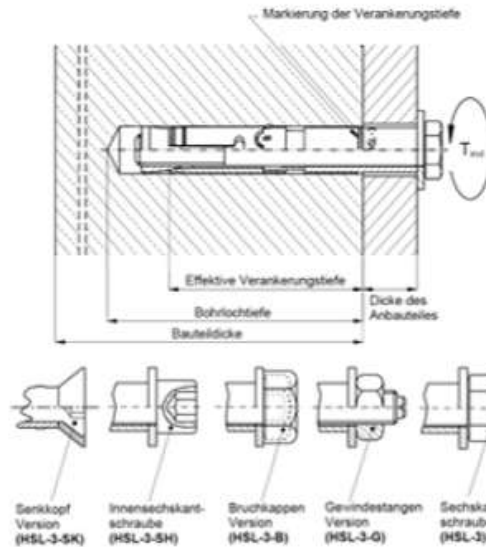
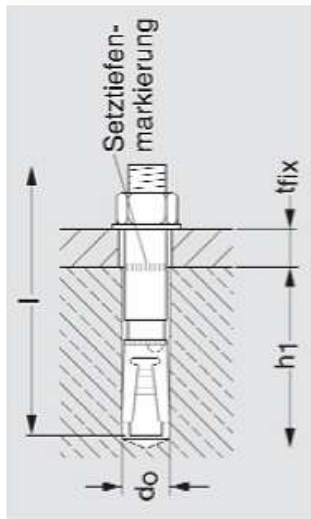


Pic.15 Electrical parts in command unit

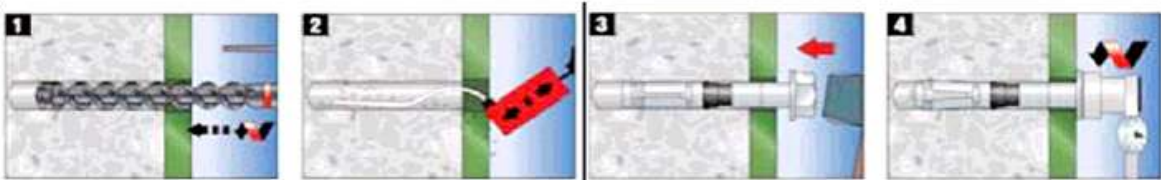
Pic.16 Choice of the dowel length without floor pavement or tile surface
BM12-20




fischer-Dübel		CSL 670/671		
Dübel typ of dowel type de cheville		FH 15/50 B Bestellnr. 970265	FH 18 x 100/100 B Bestellnr: 972230	FH 24/100 B Bestellnr. 970267
Bohrtiefe drilling depth Profondeur de l'alsage	td	145	230	255
Mindestverankerungstiefe min.anchorage depth Profondeur minimale d'ancrage	hef	70	100	125
Betonstärke thickness of concrete Epaisseur du béton	c	siehe den aktuellen Fundamentplan see current foundation-diagram drawing vois le plan de fondation actuel		
Bohrerdurchmesser diameter of bore Diamètre de l'alsage	do	15	18	24
Bauteildicke thickness of the lift-piece Epaisseur de la pièce	tfix	0-50	0-100	0-100
Anzugsdrehmoment Nm turning moment moment d'une force	MD	40	80	120
Gesamtlänge Total length Longueur totale	l	155	230	272
Gewinde Thread fil	M	M10	M12	M16
Stückzahl piece number nombre des pièces	a	4		
	b	8		
	c	10		
	d	12		
	e	16		
	f	20		
	g	14		
Montage 				
<p>Es können auch gleichwertige Sicherheitsdübel anderer Hersteller (mit Zulassung) unter Beachtung deren Bestimmungen verwendet werden. It is possible to use equivalent safety-dowels (with license) of other manufacturer but observe their regulations. Des chevilles des autres marques (autorisées) peuvent aussi être choisies en respectant les directives du fabricant.</p>				



Änderungen vorbehalten!
subject to alterations!
sous réserve des modifications!

Hilti-anchor		CSL 670/671				
Bodenbelag (Estrich, Fliesen)		ohne Bodenbelag	Without tiles With Tiles		ohne Bodenbelag	mit Bodenbelag
					g	
Dübel typ of dowel type de cheville		HSL-3-G M10/40 Art.Nr.371797	HSL-3-G M12/50 Art.Nr.371800	HSL-3-G M12/100 Art.Nr.371831	HSL-3-G M16/50 Art.Nr.371803	HSL-3-G M16/100 Art.Nr.371832
Bohrtiefe drilling depth Profondeur de l'alésage	h ₁	90	105	105	125	125
Mindestverankerungstiefe min.anchorage depth Profondeur minimale d'ancrage	h _{ef}	70	80	80	100	100
Betonstärke thickness of concrete Epaisseur du béton	c	siehe den aktuellen Fundamentplan see current foundation-diagram drawing vois le plan de fondation actuel				
Bohrerdurchmesser diameter of bore Diamètre de l'alésage	do	15	18	18	24	24
Bauteildicke thickness of the lift-piece Epaisseur de la pièce	t _{fix}	0-40	0-50	0-100	0-50	0-100
Anzugsdrehmoment Nm turning moment moment d'une force	T _{inst}	35	60	60	80	80
Gesamtlänge Total length Longueur totale	l	135	164	214	188	238
Gewinde Thread fil	M	10	12	12	16	16
Stückzahl piece number nombre des pièces	a	4				
	b	8				
	c	10				
	d	12				
	e	14				
	f	16				
	g	28				
						
<p>Es können auch gleichwertige Sicherheitsdübel anderer Hersteller (mit Zulassung) unter Beachtung deren Bestimmungen verwendet werden. It is possible to use equivalent safety-dowels (with license) of other manufacturer but observe their regulations. Des chevilles des autres marques (autorisées) peuvent aussi être choisies en respectant les directives du fabricant.</p>						

First security check before installation

 Complete and leave in this manual

Serial-number: _____

Check:	all right	defect missing	verification	remark
Type plate.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Short operating instruction.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Warning designation.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sticker "max. capacity".....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Function button lifting/lowering/equalization.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Detailed operating instruction.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Condition of concrete.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Condition of Safety bolts.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Condition of automotive lift.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Condition of paint.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Construction (deformation, cracking)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Torque of the dowels (bolts).....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
torque moments of the screws and dowels.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Conditic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Conditic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Conditic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Condition of electrical wires	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Level of hydraulic oil	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Closeness of the hydraulic system.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Condi	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Function test with vehicle.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Function of safety devices.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Condition of welding	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Function/c	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lifting lever condition (connected to top of cyl) ...	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lifting lever press plate condition	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Function CE-Stop.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Function acoustic warning signal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

(mark here applicable, in case of verification mark in addition to the first mark!)

Security check carried out. Name :.....Date :.....

Carried out by (Company):.....

Signed by (Competent person):.....

Result of the Check:

- Initiation not permitted, verification necessary
- Initiation possible, repair failures until.....
- No failings, Initiation possible

.....
Signature of the expert


.....
Signature of the operator

If failures must be repaired:

Failures repaired at:Signature of the operator

(Use another form for verification!)

Regular security check and Maintenance

 Complete and leave in this manual

Serial-number: _____

Check:	all right	defect missing	verification	remark
Type plate.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Short operating instruction.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Warning designation.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sticker "max. capacity".....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Function button lifting/lowering/equalization.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Detailed operating instruction.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Condition of concrete.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Condition of Safety bolts.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Function play detector / lamp / press button.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Condition of automotive lift.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Condition of paint.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Construction (deformation, cracking)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Torque of the dowels (bolts).....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
torque moments of the screws and dowels.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Condition of operating unit.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Condition of surface of piston rod	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Condition of coverings.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Condition of electrical wires	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Level of hydraulic oil	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Closeness of the hydraulic system.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Condition of hydraulic hoses.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Function test with vehicle.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Function safety devices.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Condition of welding.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Function/condition of ratchet.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lifting lever condition (connected to top of cyl) ...	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lifting lever press plate condition	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Function CE-Stop	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Function acoustic warning signal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

(mark here applicable, in case of verification mark in addition to the first mark!)

Security check carried out. Name :.....Date :.....

Carried out by (Company):.....

Signed by (Competent person):.....

Result of the Check:

- Initiation not permitted, verification necessary
- Initiation possible, repair failures until.....
- No failings, Initiation possible

.....
Signature of the expert


.....
Signature of the operator

If failures must be repaired:

Failures repaired at:signature of the operator

(Use another form for verification!)

Regular security check and Maintenance

 Complete and leave in this manual

Serial-number: _____

Check:	all right	defect missing	ver-ification	remark
Type plate.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Short operating instruction.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Warning designation.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sticker "max. capacity".....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Function button lifting/lowering/equalization.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Detailed operating instruction.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Condition of concrete.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Condition of Safety bolts.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Function play detector / lamp / press button.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Condition of automotive lift.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Condition of paint.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Construction (deformation, cracking)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Torque of the dowels (bolts).....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
torque moments of the screws and dowels.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Condition of operating unit.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Condition of surface of piston rod	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Condition of coverings.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Condition of electrical wires	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Level of hydraulic oil	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Closeness of the hydraulic system.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Condition of hydraulic hoses.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Function test with vehicle.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Function safety devices.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Condition of welding.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Function/condition of ratchet.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lifting lever condition (connected to top of cyl) ...	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lifting lever press plate condition	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Function CE-Stop	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Function acoustic warning signal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

(mark here applicable, in case of verification mark in addition to the first mark!)

Security check carried out. Name : Date :

Carried out by (Company):.....

Signed by (Competent person):.....

Result of the Check:

- Initiation not permitted, verification necessary
- Initiation possible, repair failures until.....
- No failings, Initiation possible

.....
Signature of the expert

.....
Signature of the operator


If failures must be repaired:

Failures repaired at:

.....Signature of the operator

(Use another form for verification!)

Regular security check and Maintenance

 Complete and leave in this manual

Serial-number: _____

Check:	all right	defect missing	verification	remark
Type plate.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Short operating instruction.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Warning designation.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sticker "max. capacity".....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Function button lifting/lowering/equalization.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Detailed operating instruction.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Condition of concrete.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Condition of Safety bolts.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Function play detector / lamp / press button.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Condition of automotive lift.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Condition paint.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Construction (deformation, cracking).....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Torque of the dowels (bolts).....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
torque moments of the screws and dowels.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Condition of operating unit.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Condition of surface of piston rod.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Condition of coverings.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Condition of electrical wires.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Level of hydraulic oil.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Closeness of the hydraulic system.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Condition hydraulic hoses.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Function test with vehicle.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Function safety devices.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Condition of welding.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Function/condition of ratchet.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lifting lever condition (connected to top of cyl) ...	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lifting lever press plate condition.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Function CE-Stop.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Function acoustic warning signal.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

(mark here applicable, in case of verification mark in addition to the first mark!)

Security check carried out. Name :.....Date :.....

Carried out by (Company):.....

Signed by (Competent person):.....

Result of the Check:

- Initiation not permitted, verification necessary
- Initiation possible, repair failures until.....
- No failings, Initiation possible

.....
Signature of the expert

.....
Signature of the operator


If failures must be repaired:

Failures repaired at:

.....Signature of the operator

(Use another form for verification!)

Regular security check and Maintenance

 Complete and leave in this manual

Serial-number: _____

Check:	all right	defect missing	verification	remark
Type plate.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Short operating instruction.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Warning designation.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sticker "max. capacity".....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Function button lifting/lowering/equalization.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Detailed operating instruction.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Condition of concrete.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Condition of Safety bolts.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Function play detector / lamp / press button.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Condition of automotive lift.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Condition of paint.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Construction (deformation, cracking).....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Torque of the dowels (bolts).....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
torque moments of the screws and dowels.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Condition of operating unit.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Condition of surface of piston rod.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Condition of coverings.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Condition of electrical wires.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Level of hydraulic oil.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Closeness of the hydraulic system.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Condition of hydraulic hoses.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Function test with vehicle.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Function safety devices.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Condition of welding.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Function/condition of ratchet.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lifting lever condition (connected to top of cyl) ...	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lifting lever press plate condition.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Function CE-Stop.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Function acoustic warning signal.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

(mark here applicable, in case of verification mark in addition to the first mark!)

Security check carried out. Name :.....Date :.....

Carried out by (Company):.....

Signed by (Competent person):.....

Result of the Check:

- Initiation not permitted, verification necessary
- Initiation possible, repair failures until.....
- No failings, Initiation possible

.....
Signature of the expert

.....
Signature of the operator


If failures must be repaired:

Failures repaired at:

.....Signature of the operator

(Use another form for verification!)

Regular security check and Maintenance

 Complete and leave in this manual

Serial-number: _____

Check:	all right	defect missing	verification	remark
Type plate.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Short operating instruction.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Warning designation.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sticker "max. capacity".....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Function button lifting/lowering/equalization.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Detailed operating instruction.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Condition of concrete.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Condition of Safety bolts.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Function play detector / lamp / press button.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Condition of automotive lift.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Condition of paint.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Construction (deformation, cracking)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Torque of the dowels (bolts).....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
torque moments of the screws and dowels.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Condition of operating unit.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Condition of surface of piston rod	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Condition of coverings.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Condition of electrical wires	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Level of hydraulic oil	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Closeness of the hydraulic system.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Condition of hydraulic hoses.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Function test with vehicle.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Function safety devices.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Condition of welding.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Function/condition of ratchet.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lifting lever condition (connected to top of cyl) ...	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lifting lever press plate condition	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Function CE-Stop.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Function acoustic warning signal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

(mark here applicable, in case of verification mark in addition to the first mark!)

Security check carried out. Name :.....Date :.....

Carried out by (Company):.....

Signed by (Competent person):.....

Result of the Check:

- Initiation not permitted, verification necessary
- Initiation possible, repair failures until.....
- No failings, Initiation possible

.....
Signature of the expert

.....
Signature of the operator


If failures must be repaired:

Failures repaired at:

.....Signature of the operator

(Use another form for verification!)

Regular security check and Maintenance

 Complete and leave in this manual

Serial-number: _____

Check:	all right	defect missing	verification	remark
Type plate.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Short operating instruction.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Warning designation.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sticker "max. capacity".....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Function button lifting/lowering/equalization.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Detailed operating instruction.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Condition of concrete.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Condition of Safety bolts.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Function play detector / lamp / press button.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Condition of automotive lift.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Condition of paint.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Construction (deformation, cracking)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Torque of the dowels (bolts).....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
torque moments of the screws and dowels.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Condition of operating unit.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Condition of surface of piston rod	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Condition of coverings.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Condition of electrical wires	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Level of hydraulic oil	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Closeness of the hydraulic system.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Condition of hydraulic hoses.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Function test with vehicle.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Function of safety devices.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Condition of welding.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Function/condition of ratchet.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lifting lever condition (connected to top of cyl) ...	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lifting lever press plate condition	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Function CE-Stop	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Function acoustic warning signal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

(mark here applicable, in case of verification mark in addition to the first mark!)

Security check carried out. Name :.....Date :.....

Carried out by (Company):.....

Signed by (Competent person):.....

Result of the Check:

- Initiation not permitted, verification necessary
- Initiation possible, repair failures until.....
- No failings, Initiation possible

.....
Signature of the expert

.....
Signature of the operator


If failures must be repaired:

Failures repaired at:

.....Signature of the operator

(Use another form for verification!)

Regular security check and Maintenance

 Complete and leave in this manual

Serial-number: _____

Check:	all right	defect missing	veri- fication	remark
Type plate.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Short operating instruction.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Warning designation.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sticker "max. capacity".....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Function button lifting/lowering/equalization.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Detailed operating instruction.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Condition of concrete.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Condition of Safety bolts.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Function play detector / lamp / press button.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Condition of automotive lift.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Condition of paint.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Construction (deformation, cracking)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Torque of the dowels (bolts).....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
torque moments of the screws and dowels.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Condition of operating unit.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Condition of surface of piston rod	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Condition of coverings.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Condition of electrical wires	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Level of hydraulic oil	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Closeness of the hydraulic system.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Condition of hydraulic hoses.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Function test with vehicle.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Function of safety devices.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Condition of welding.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Function/condition of ratchet.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lifting lever condition (connected to top of cyl) ...	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lifting lever press plate condition	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Function CE-Stop	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Function acoustic warning signal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

(mark here applicable, in case of verification mark in addition to the first mark!)

Security check carried out. Name : Date :

Carried out by (Company):.....

Signed by (Competent person):.....

Result of the Check:

- Initiation not permitted, verification necessary
- Initiation possible, repair failures until.....
- No failings, Initiation possible


.....
Signature of the expert

.....
Signature of the operator

If failures must be repaired:

Failures repaired at: Signature of the operator
(Use another form for verification!)

Regular security check and Maintenance

 Complete and leave in this manual

Serial-number: _____

Check :	all right	defect missing	veri- fication	Remarks
Type plate.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Short operating instruction.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Warning designation.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sticker "max. capacity".....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Function button lifting/lowering/equalization.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Detailed operating instruction.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Condition of concrete.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Safety device of bolts.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Function play detector / lamp / press button.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Condition of automotive lift.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Condition of paint.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Construction (deformation, cracking)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Torque of the dowels (bolts).....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
torque moments of the screws and dowels.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Condition of operating unit.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Condition of surface of piston rod	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Condition of coverings.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Condition of electrical wires	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Level of hydraulic oil	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Closeness of the hydraulic system.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Condition of hydraulic hoses.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Function test with vehicle.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Function of safety devices.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Condition of welding.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Function/condition of ratchet.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lifting lever condition (connected to top of cyl) ...	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lifting lever press plate condition	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Function CE-Stop	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Function acoustic warning signal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

(mark here applicable, in case of verification mark in addition to the first mark!)

Security check carried out. Name :Date :

Carried out by (Company):.....

Signed by (Competent person):.....

Result of the Check:

- Initiation not permitted, verification necessary
- Initiation possible, repair failures until.....
- No failings, Initiation possible

.....
Signature of the expert

.....
Signature of the operator


If failures must be repaired:

Failures repaired at:

.....Signature of the operator

(Use another form for verification!)

Regular security check and Maintenance

 Complete and leave in this manual

Serial-number: _____

Check:	all right	defect missing	verification	Remarks
Type plate.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Short operating instruction.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Warning designation.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sticker "max. capacity".....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Function button lifting/lowering/equalization.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Detailed operating instruction.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Condition of concrete.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Condition of Safety bolts.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Condition of automotive lift.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Condition of paint.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Construction (deformation, cracking)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Torque of the dowels (bolts).....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
torque moments of the screws and dowels.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Condition of operating unit.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Condition of surface of piston rod	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Condition of coverings.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Condition of electrical wires	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Level of hydraulic oil	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Closeness of the hydraulic system.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Condition of hydraulic hoses.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Function test with vehicle.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Function of safety devices.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Condition of welding.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Function/condition of ratchet.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lifting lever condition (connected to top of cyl) ...	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lifting lever press plate condition	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Function CE-Stop	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Function acoustic warning signal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

(mark here applicable, in case of verification mark in addition to the first mark!)

Security check carried out. Name :.....Date :.....

Carried out by (Company):.....

Signed by (Competent person):.....

Result of the Check:

- Initiation not permitted, verification necessary
- Initiation possible, repair failures until.....
- No failings, Initiation possible


.....
 Signature of the expert

.....
 Signature of the operator

If failures must be repaired:

Failures repaired at:Signature of the operator
 (Use another form for verification!)

Extraordinary security check

 Complete and leave in this manual

Serial-number: _____

Check:	all right	defect missing	verification	Remarks
Type plate.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Short operating instruction.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Warning designation.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sticker "max. capacity".....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Function button lifting/lowering/equalization.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Detailed operating instruction.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Condition of concrete.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Condition of Safety bolts.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Function play detector / lamp / press button.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Condition of automotive lift.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Condition of paint.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Construction (deformation, cracking)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Torque of the dowels (bolts).....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
torque moments of the screws and dowels.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Condition of operating unit.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Condition of surface of piston rod	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Condition of coverings.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Condition of electrical wires	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Level of hydraulic oil	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Closeness of the hydraulic system.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Condition hydraulic hoses.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Function test with vehicle.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Function of safety devices.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Condition of welding.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Function/condition of ratchet.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lifting lever condition (connected to top of cyl) ...	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lifting lever press plate condition	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Function CE-Stop.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Function acoustic warning signal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

(mark here applicable, in case of verification mark in addition to the first mark!)

Security check carried out. Name :.....Date :.....

Carried out by (Company):.....

Signed by (Competent person):.....

Result of the Check:

- Initiation not permitted, verification necessary
- Initiation possible, repair failures until.....
- No failings, Initiation possible

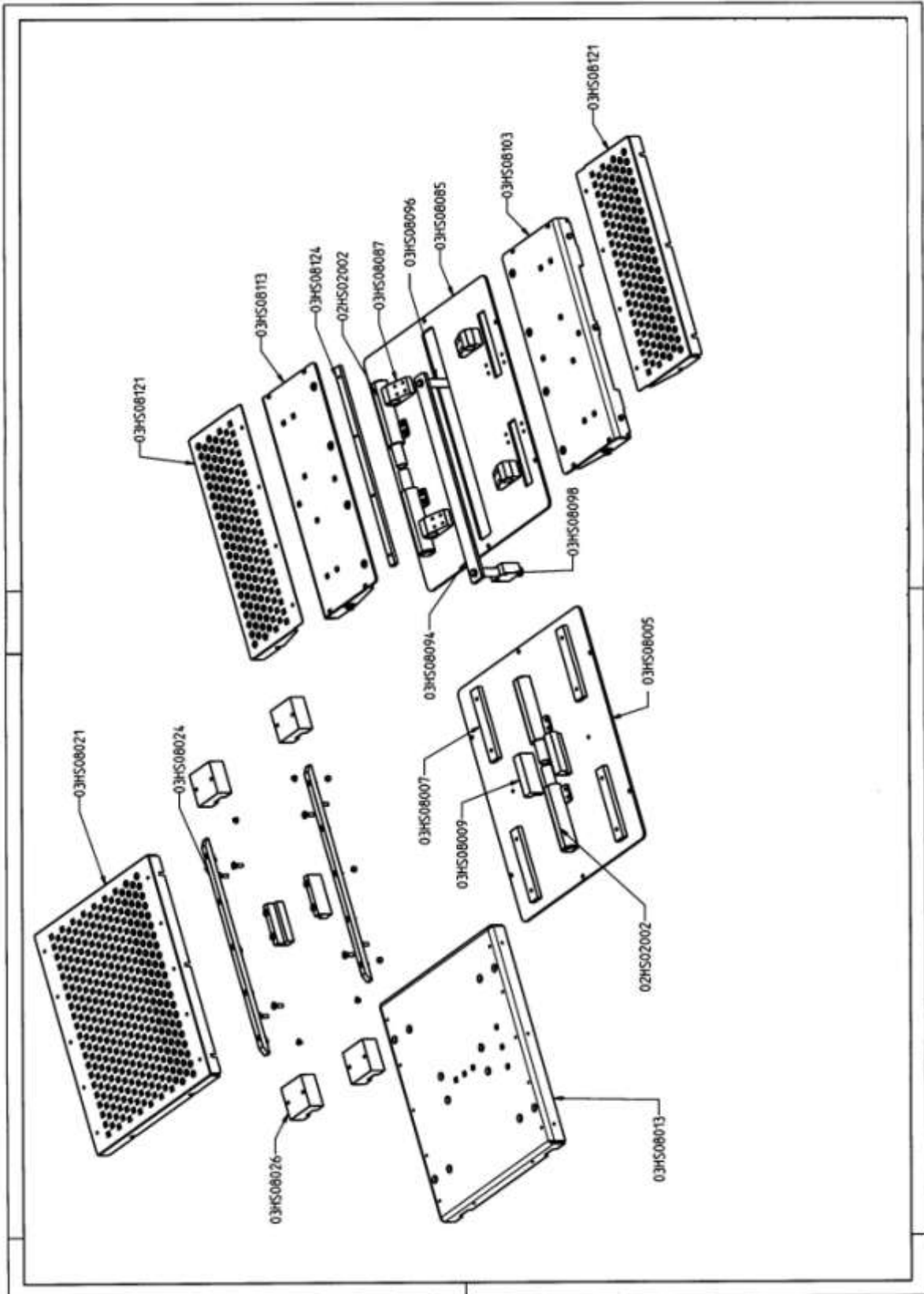
.....
Signature of the expert

.....
Signature of the operator

If failures must be repaired:

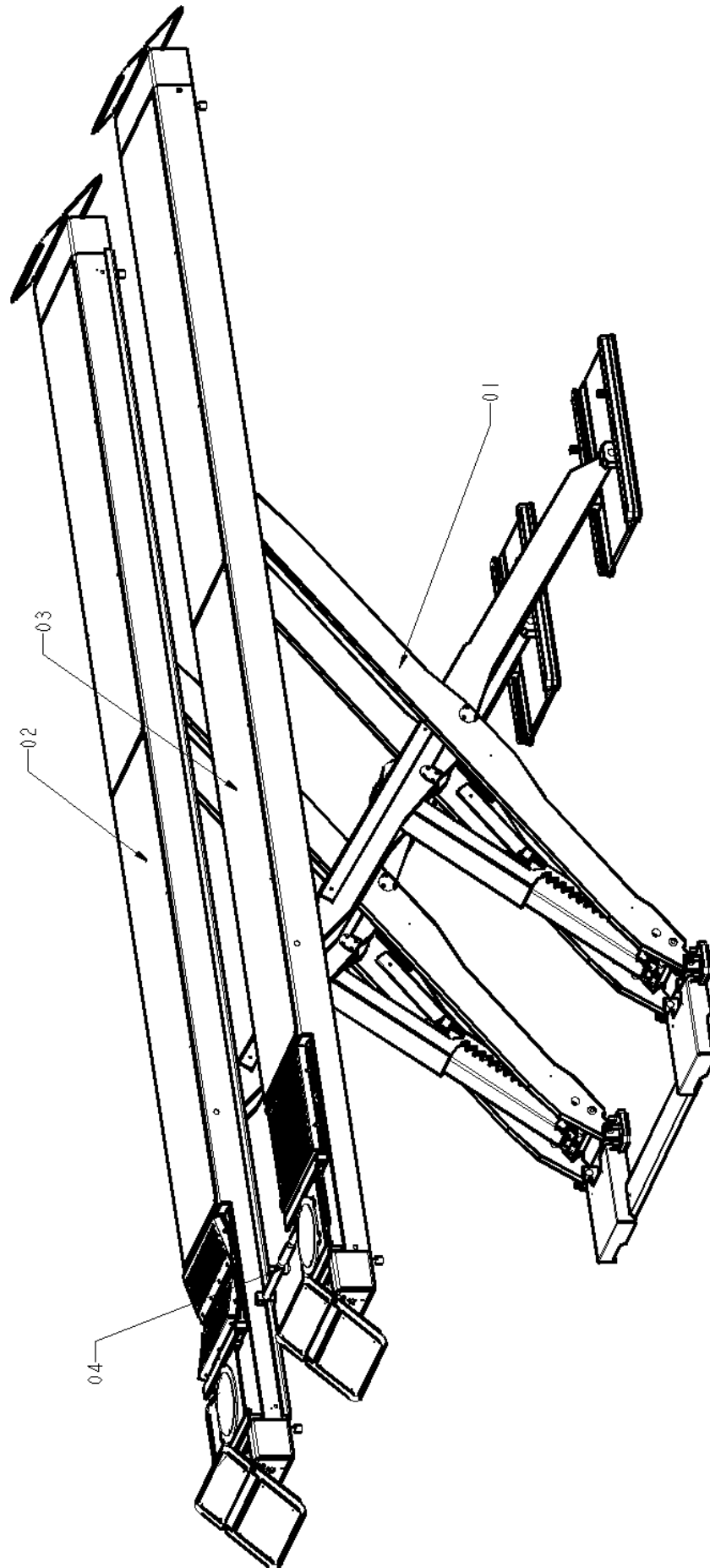
Failures repaired at:Signature of the operator

(Use another form for verification!)

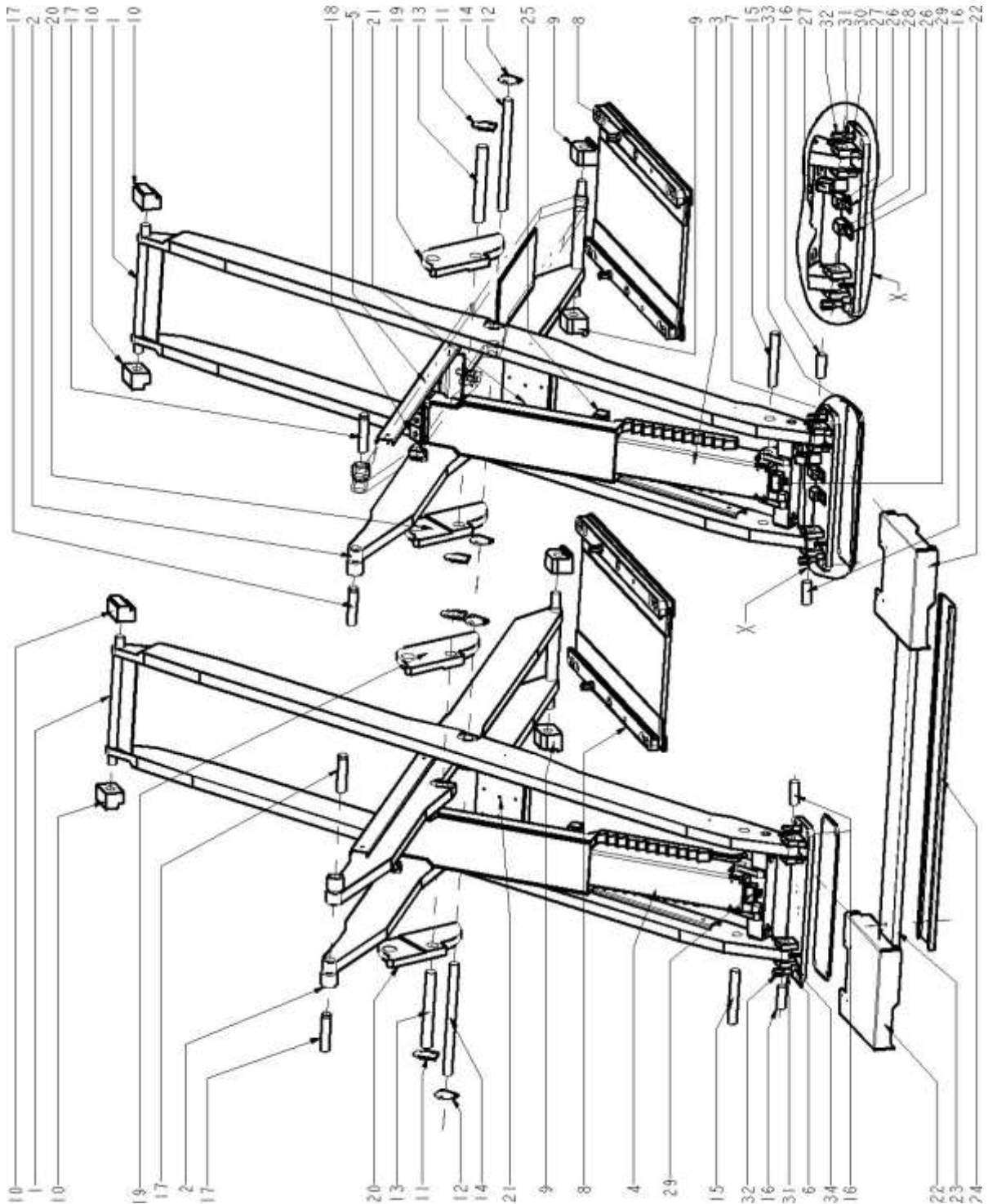


Spare part list

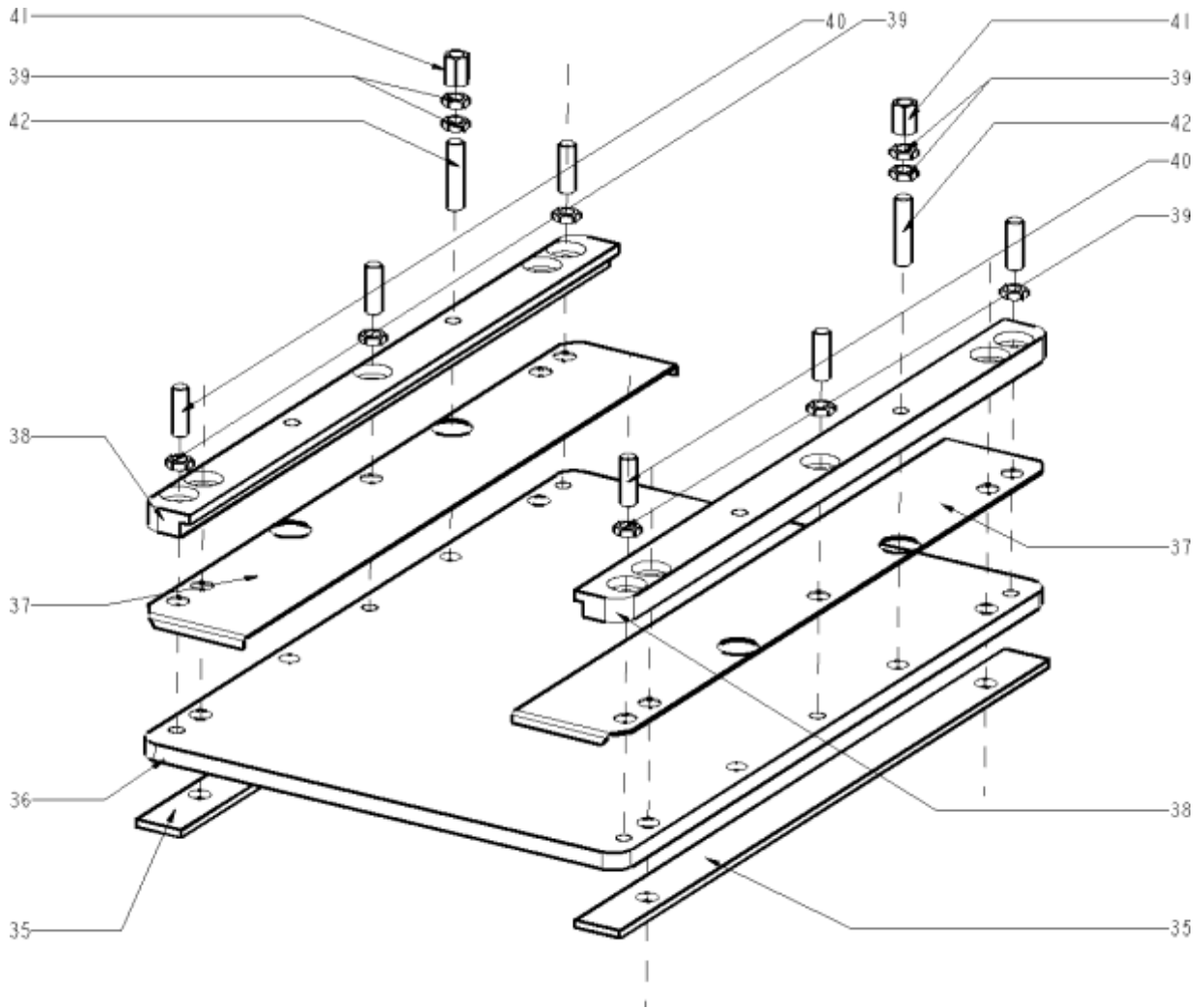
Pages: 74 to 96



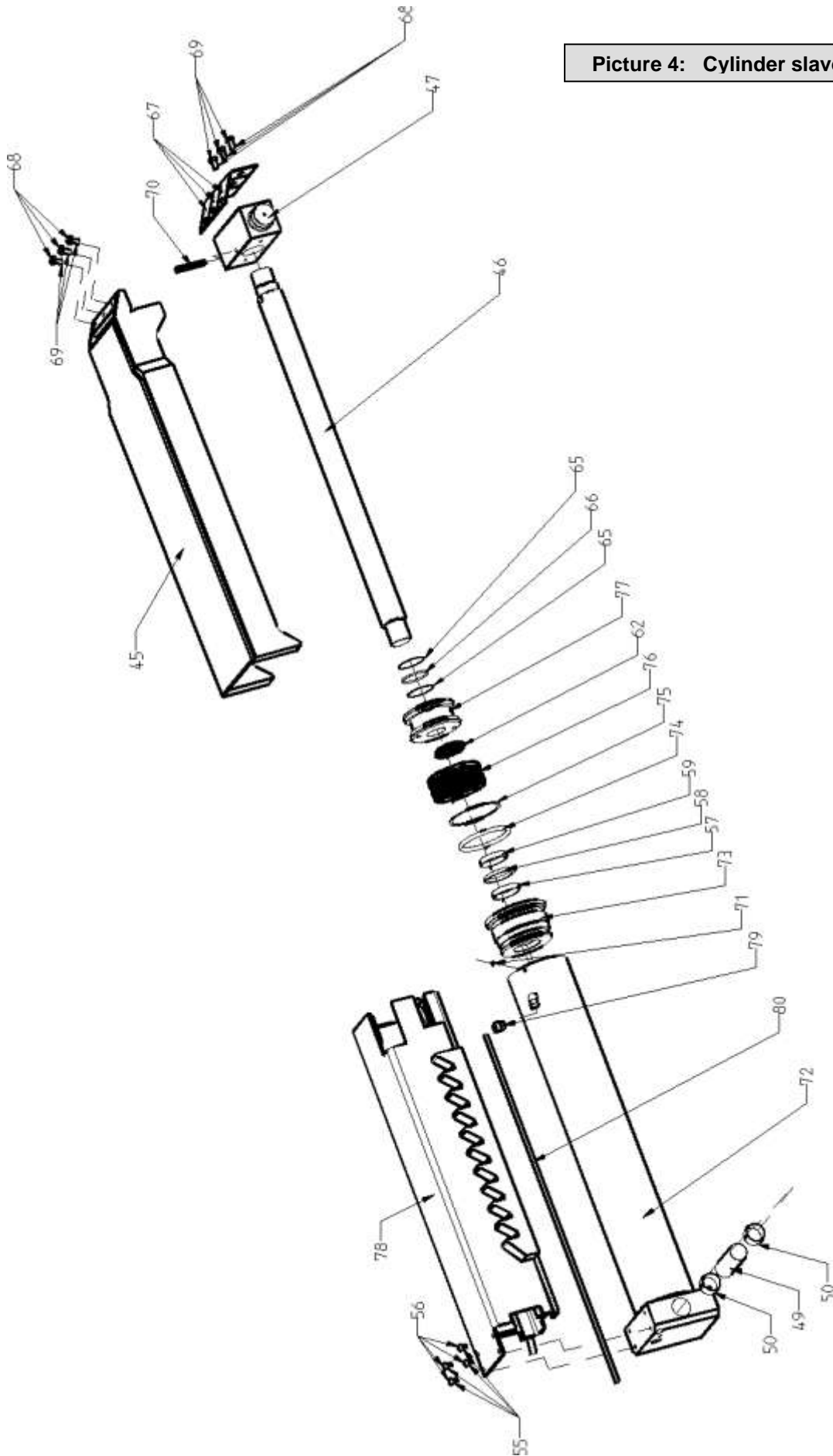
Picture 2: Scissors



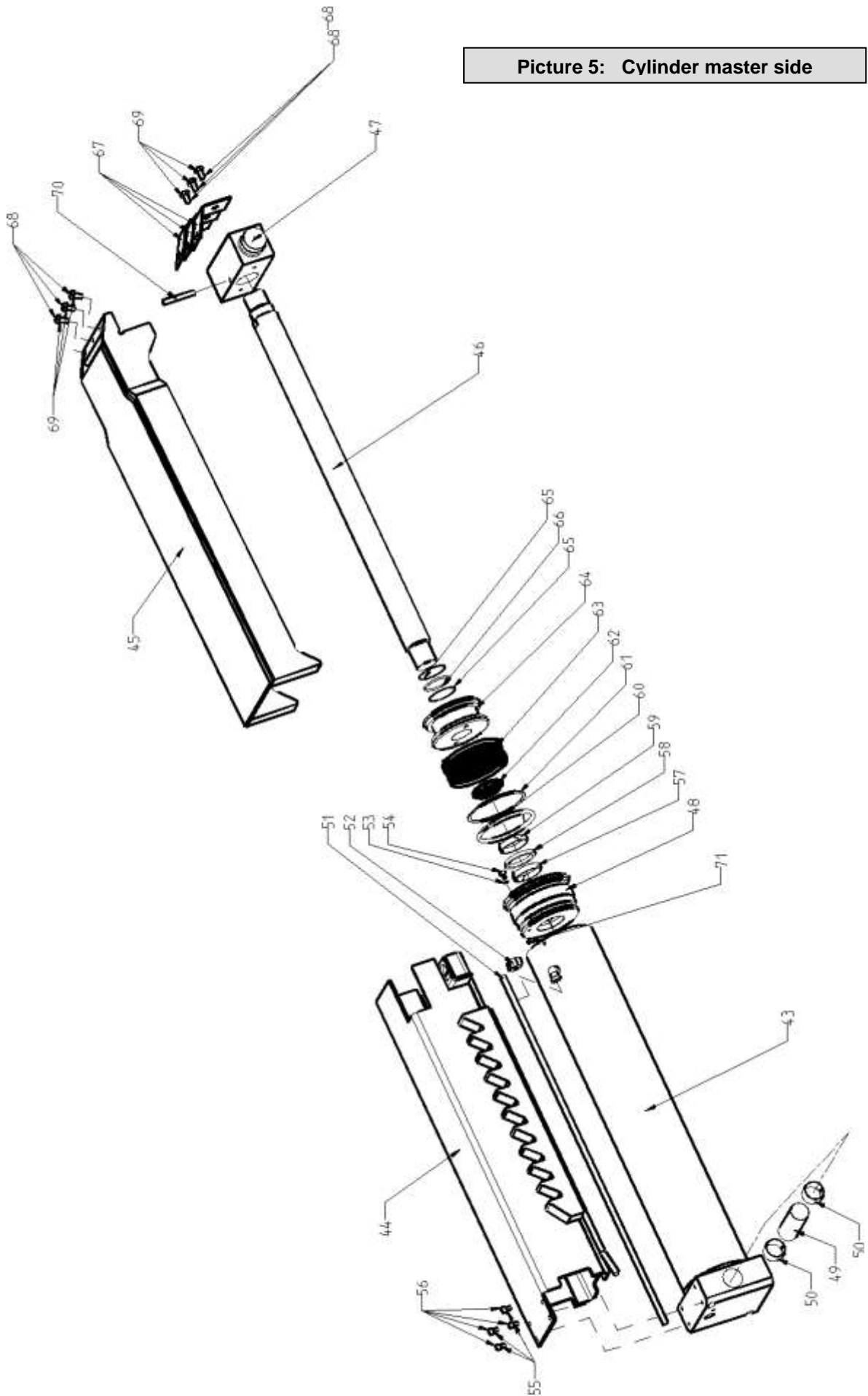
Picture 3: Base plate



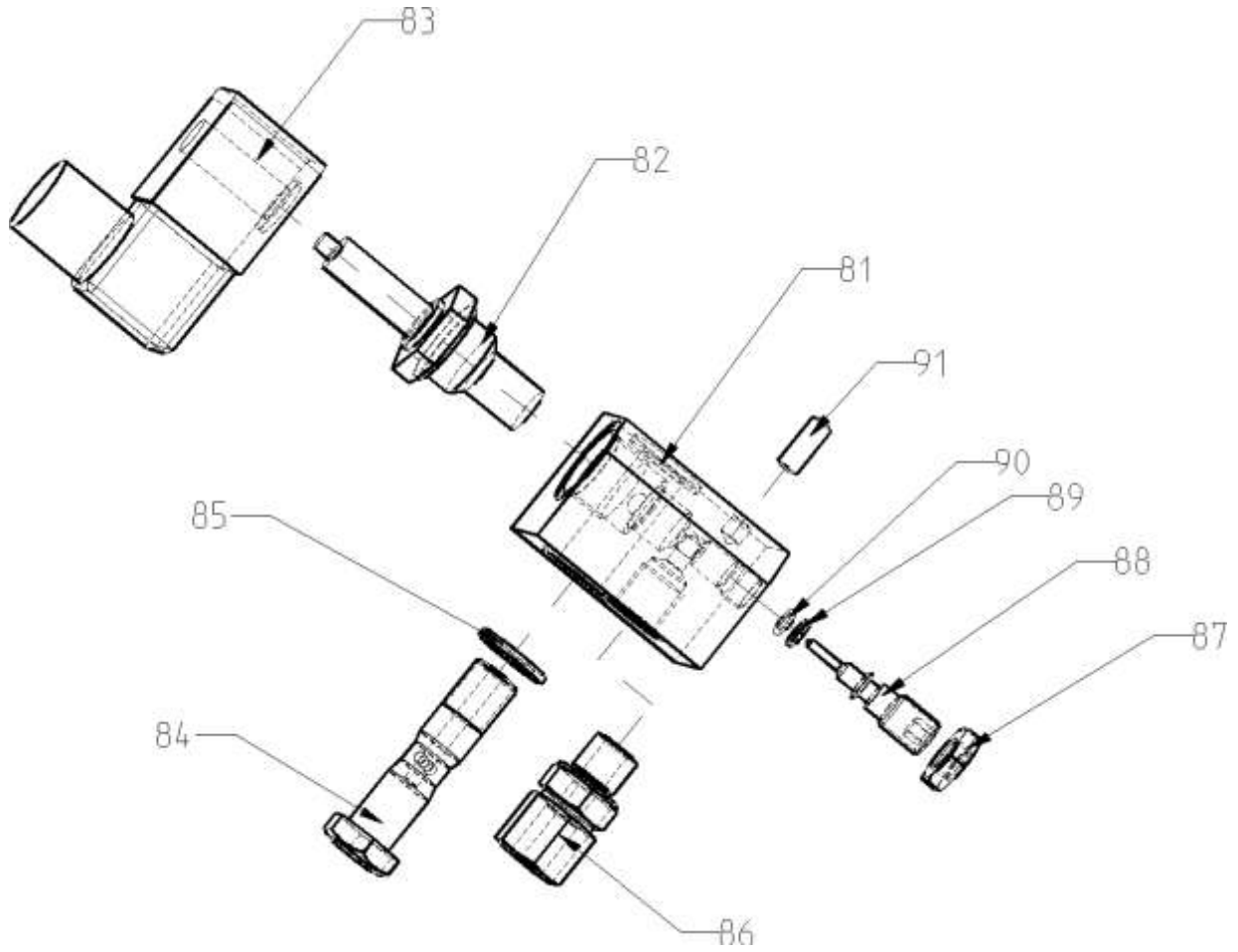
Picture 4: Cylinder slave side



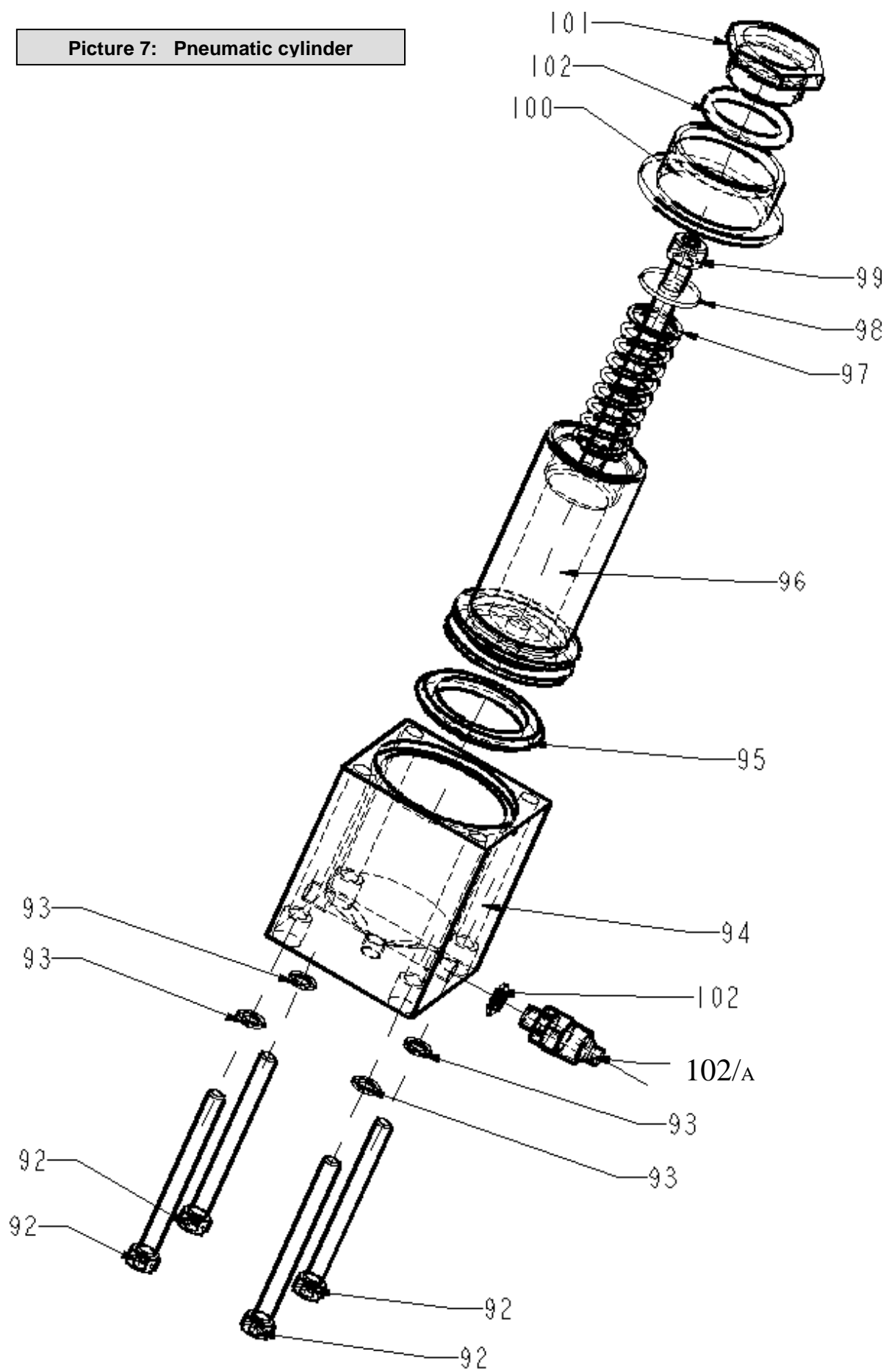
Picture 5: Cylinder master side



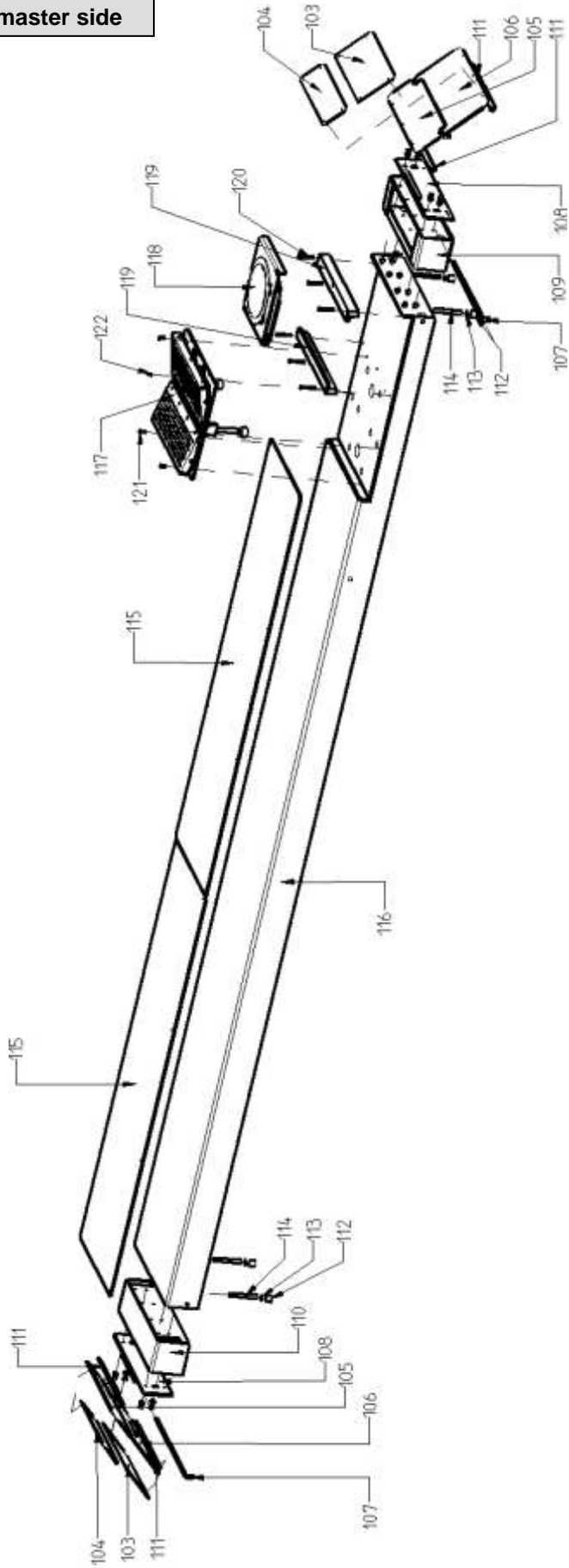
Picture 6: Valve



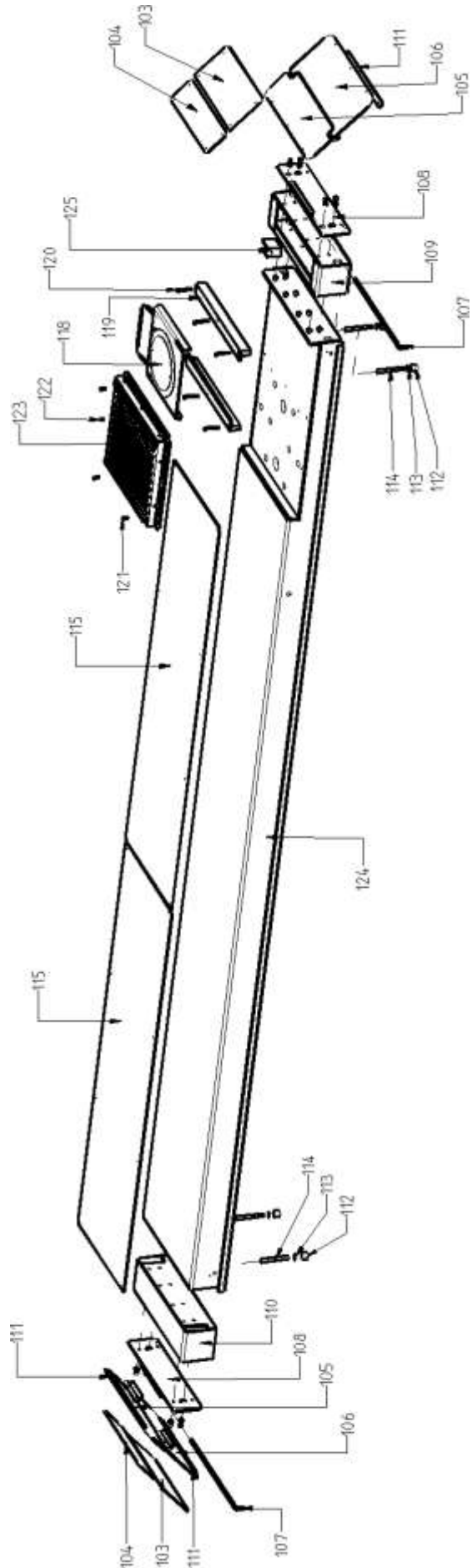
Picture 7: Pneumatic cylinder



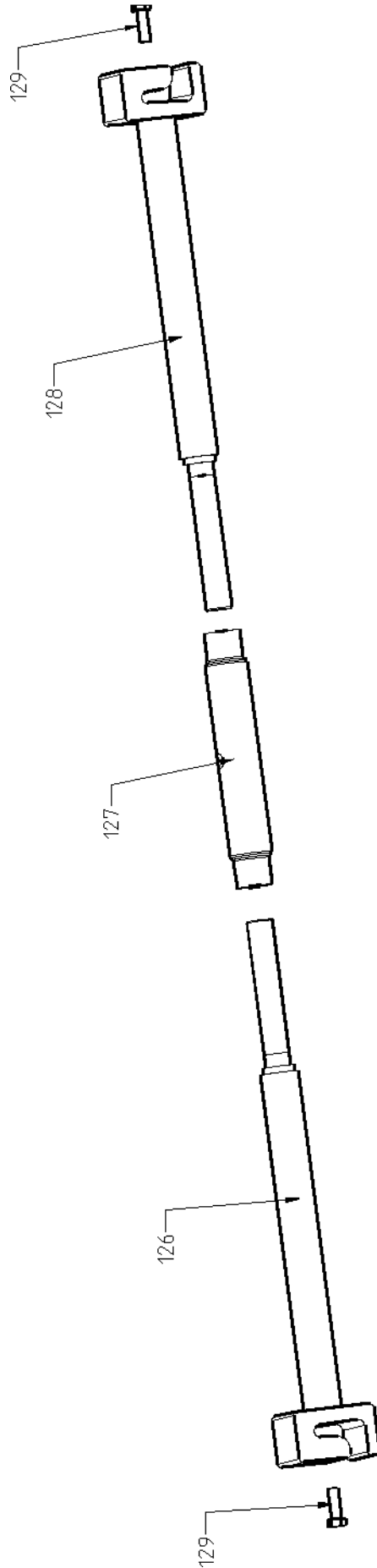
Picture 8: Drive-on rail master side



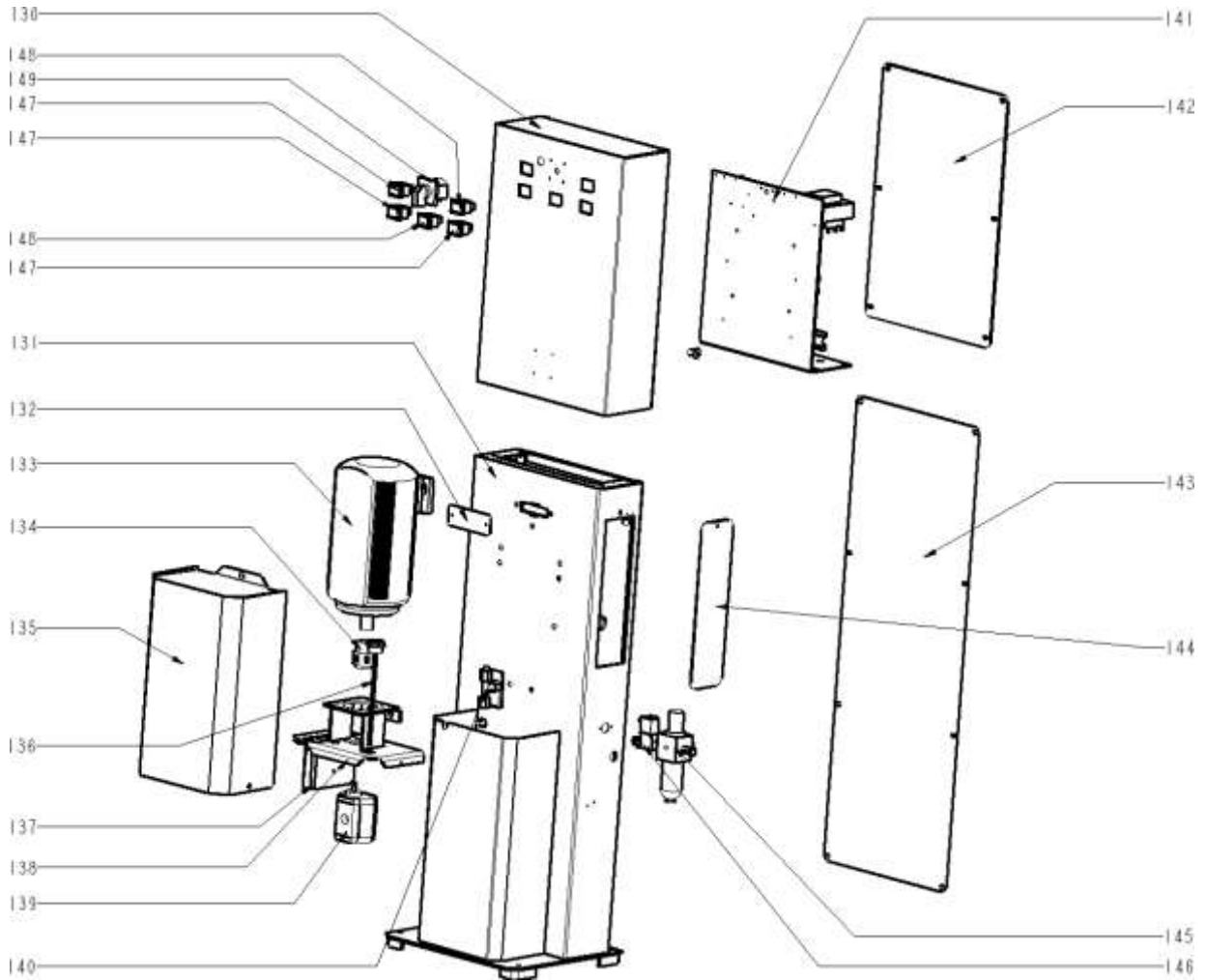
Picture 9: Drive-on rail slave side



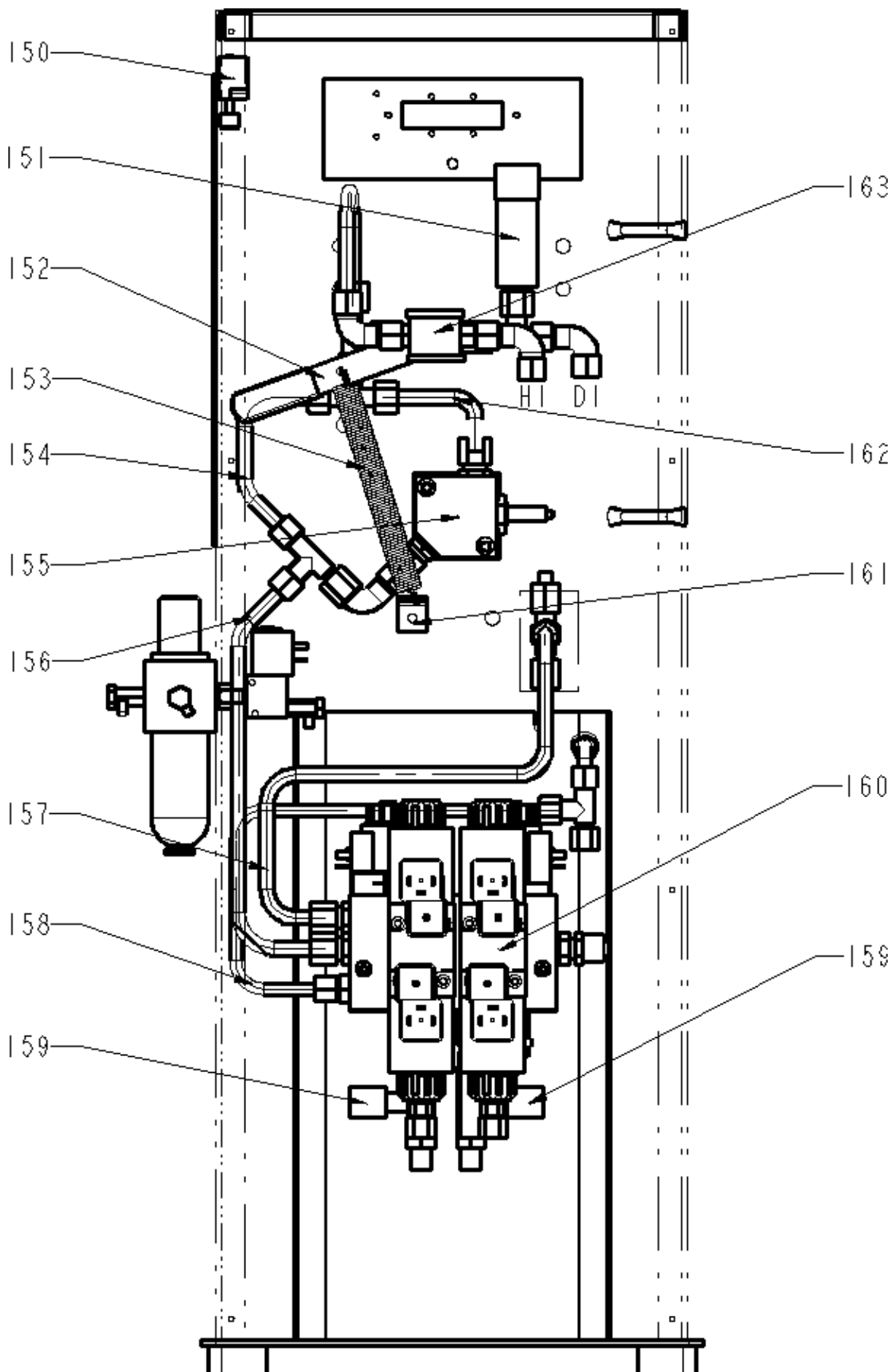
Picture 10: Traverse



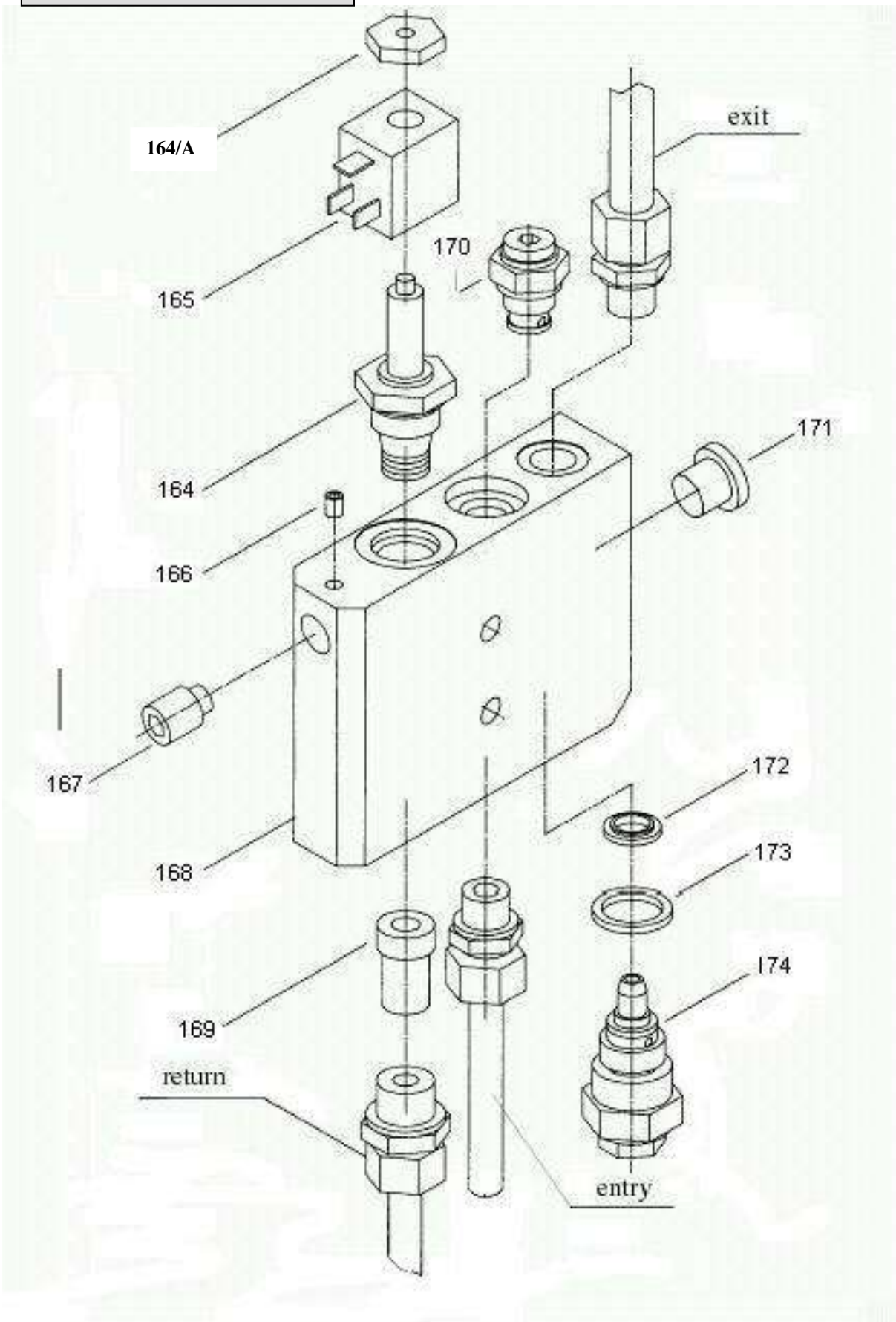
Picture 11: Hydraulic Unit front



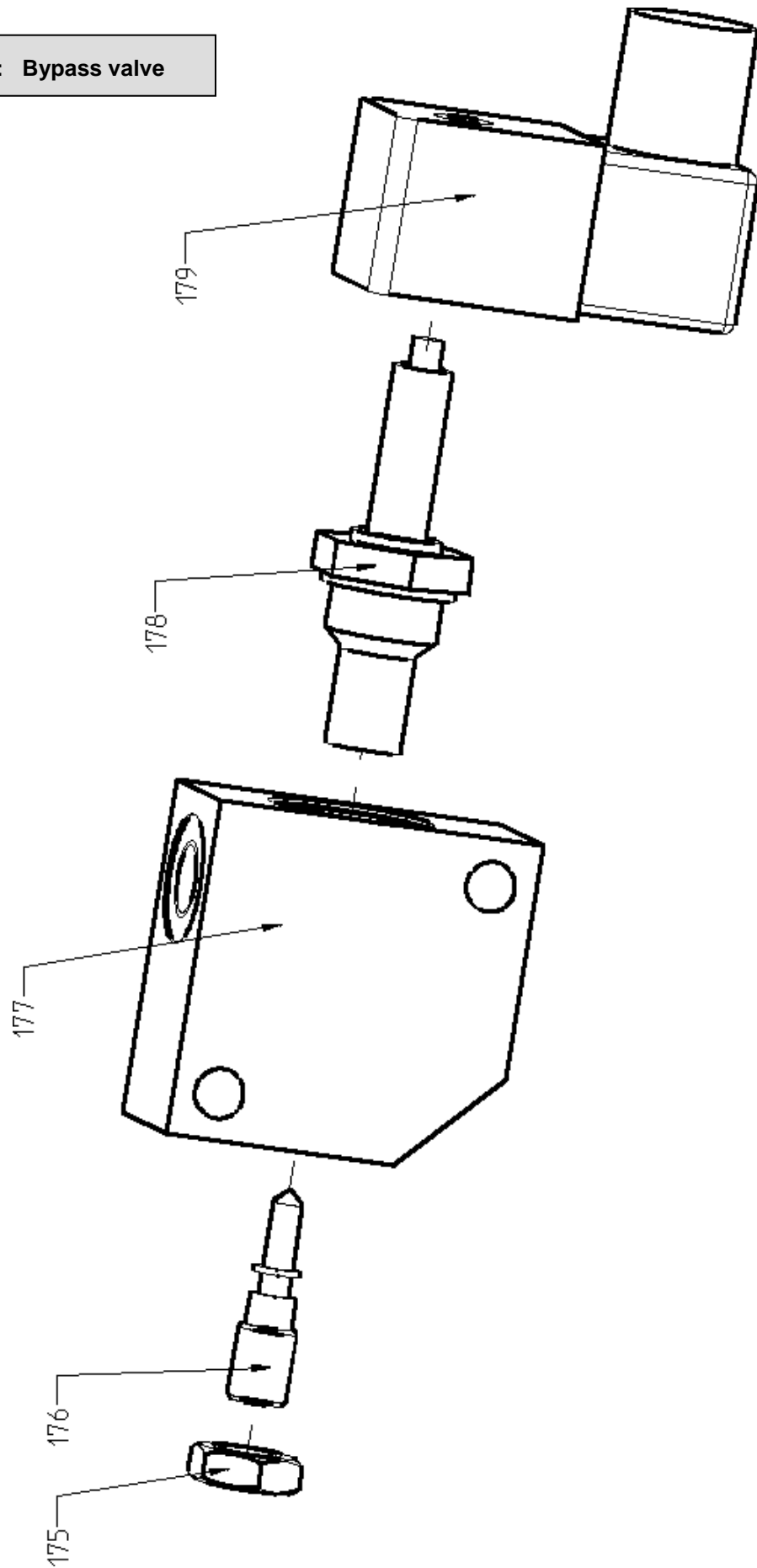
Picture 11a: Hydraulic unit rear



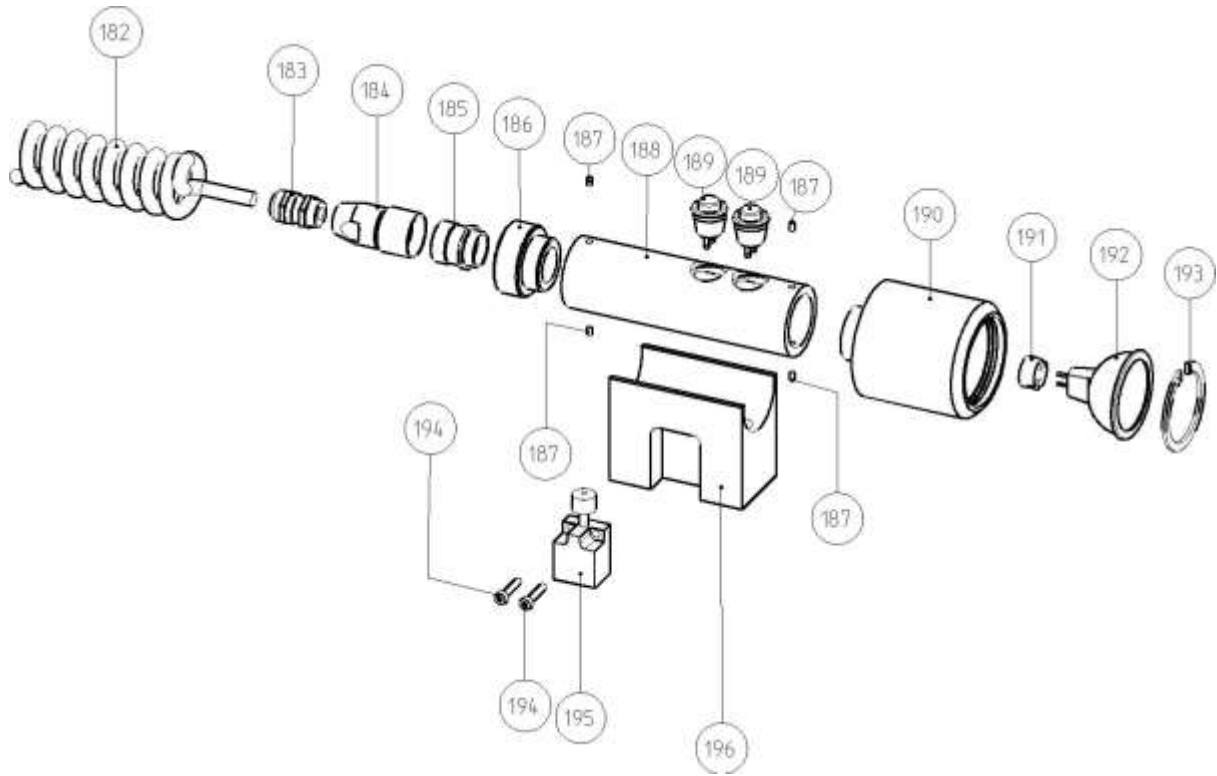
Picture 12: Hydraulic Block



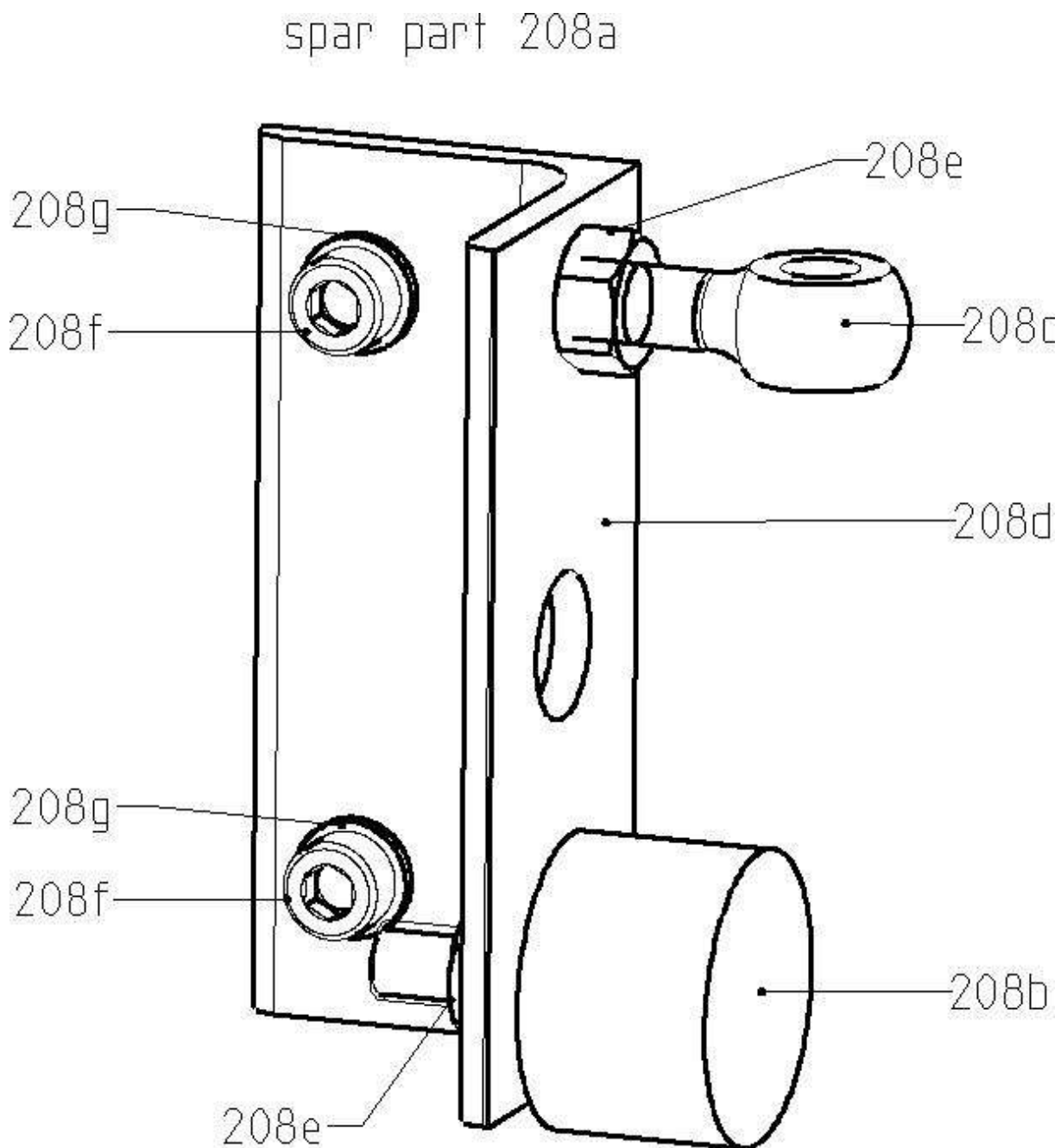
Picture 13: Bypass valve



Picture 14: lamp



Picture 15: Stop for jack



No.	Part No.	Description
01	Lift order No.	Lift complete
02	See picture 8	Drive-on rail master side
03	See picture 9	Drive-on rail slave side
04	See picture 10	Traverse
05	See picture 11-11a	Hydraulic unit
1	050ULN06003	Scissors outside
2	050ULN06073	Scissors inside
3	040ULN22037	Cylinder slave side
4	040ULN22001	Cylinder master side
5	050ULN26020	Cable channel
6	050ULN05025	Plate, bottom master side
7	050ULN05035	Plate, bottom slave side
8	050ULN05010	Plate, bottom
9	050ULN06021	Sliding block bottom
10	050ULN06030	Sliding block above
11	040ULN06049	Locking plate
12	040ULN06046	Locking plate
13	032ULN06048	Axle cylinder
14	040ULN06045	Bolt center
15	030ULN06070	Bolt cylinder
16	040ULN06110	Bolt lower
17	040ULN06115	Bolt upper
18	029UL3001	Metal sheet
19	040ULN06033	Suspension cylinder
20	040ULN06030	Suspension cylinder
21	032ULN06027	Forcing plate
22	050ULN09003	Covering
23	050ULN29017	Covering hoses
24	050ULN29016	Tray hoses
25	030ULN10036	Pneumatic cylinder
26	029UL05006	Metal sheet for limit switch
27	990004	Limit switch
28	9914830	Limit switch
29	030ULN02061	Valve complete
30	9439M16ZN	Nut M16 DIN439B
31	9913M16X050ZN	Set screw M16x50
32	030ULN45011	Hexagon nut
33	032ULN05004	Adjusting metal sheet
34	9913M16X050ZN	Set screw M16x50
35	032ULN05015	Metal sheet

No.	Part No.	Description
36	050ULN405017	Base plate
37	050ULN05022	Crosshead guide
38	050ULN05030	Wrap around
39	9439M16ZN	Nut M16 DIN439B
40	9913M16X050ZN	Set screw M16x50
41	030ULN45011	Hexagon nut
42	9913M16X070ZN	Set screw M16x70
43	032ULN02003	Cylinder tube master side
44	032ULN30016	Ratchet (tube) master side
45	032ULN10001	Ratchet
46	040ULN02009	Piston rod
47	030ULN22010	Bolt
48	030ULN02014	Guide bush master side
49	030ULN02002S1	Spacer tube
50	970071	Slide bearing
51	032ULN02002S1	Hydraulic pipe
52	9M10L	Sleeve nut
53	97603A06.5x9.5	Gasket
54	9912M06X008ZN	Socket screw
55	9912M06X012ZN	Socket screw
56	9125M06A	Bolt washer
57	985097	Rotating band
58	985220	Seal piston rod
59	985100	Rotating band
60	9OR94.62X5.33	O-ring seal
61	985101	Bearing ring
62	985099	Stripper
63	985096	Seal master side
64	025AL42020	Piston master side
65	985102	Bearing ring
66	9OR45.69x2.62	O-ring seal
67	029UL30011	Metal sheet
68	9933M08X016ZN	Screw
69	9125M08A	Bolt washer
70	91481D08X060	Retaining bush

No.	Part No.	Description
71	9914M06X008ZN	Thread plug
72	032ULN02039	Cylinder tube slave side
73	030ULN02050	Guide bush slave side
74	9OR85.09x5.33	O-ring seal
75	985104	Bearing ring
76	985086	Seal slave side
77	025AL42059	Piston slave side
78	032ULN10017	Ratched (tube) slave side
79	9M8L	Sleeve nut
80	032ULN02037S1	Hydraulic pipe
81	030ULN02062	Hydraulic block
82	980478	Magnet valve
83	980630	Magnet
84	030ULN02066	Banjo bolt
85	985037	Seal ring
86	9GE10PLRED	Screw
87	9439M10ZN	Nut M10 DIN439B
88	030ULN02064	Emergency lowering
89	980604	Bearing ring
90	9OR4.47X1.78	O-ring seal
91	96325D06X016	Plain pin
92	9912M04X045ZN	Socket screw
93	97980M04ZN	Spring ring
94	030ULN10037	Cylinder case
95	960001	Seal
96	9030ULN10039	Piston
97	9DFD-187ZN	Compression spring
98	99021M05ZN	Bolt washer
99	9912M05X055ZN	Socket screw
100	030ULN10038	Guide bush
101	030ULN10045	Cover
102	9OR15.54X2.62	O-ring seal
102/A	960003	Screw connection
103	035ULN08058	Alu plank
104	035ULN08056	Alu plank
105	035UL28055	Safety against to roll back

No.	Part No.	Description
106	035UL48065	Ramp
107	Not yet allocated	Amended New style Pin
108	035UL28070	Adapter metal sheet
109	050ULN08223	Extension ahead
110	050ULN08213	Extension rear
111	435H08097	Polyamid support
112	035UNI08415	Buffer
113	9439M016ZN	Nut M16 DIN439B
114	9913M16X0140ZN	Set screw M16x140
115	050ULN08820	Alu plank
116	050ULN08203	Drive-on rail master side
117	03HS08281	Spid right
118	1987009A42A	Rotary disc (Sandpaper surface)
118	1987009A89A	Rotary disc (Metal surface)
119	035ULN083851	Wrap-around
120	9912M08X070ZN	Socket screw
121	9912M08X025ZN	Socket screw
122	97991M008X020ZN	Counter sunk screw
123	03HS080	Spid left
124	050ULN08303	Drive-on rail slave side
125	032ULB03210	Mounting plate for lamp
126	035ULN08676	Hanging up left
127	91478M20ZN	Screw shackle
128	035ULN08678	Hanging up right
129	9933M08X25ZN	Screw
130	035ULN01215	Upper section
131	035ULN01203	Lower surface
132	032ULN01040	Front sheet metal
133	990303	Motor 3,3kW
134	970290	Clutch
135	030ULN01025	Covering motor
136	980098	Oil level gauge
137	030ULN21076	Hydraulic block
138	030ULN01038	Holder for the pump
139	980282	Pump 2,7ccm
140	9EW10PL	Union piece hyd.

No.	Part No.	Description
141	035ULN01255	Structure sheet metal
142	035ULN01219	Cover upper
143	025SPR21012	Cover lower
144	030ULN01033	Covering
145	960039	Pneumatic unit
146	960047	Pneumatic valve
147	990334	Press button
148	990321	PVC cap
149	9951257	Main Switch
150	990300	Bypass switch
151	DSH000/003	Pressure switch
152	030ULN41130	Lever
153	9ZFZ141ZN	Tension spring
154	035ULN01225	Hydraulic pipe
155	032UL12364	Bypass Valve
156	035ULN01222	Hydraulic pipe
157	035ULN01224	Hydraulic pipe
158	035ULN01226	Hydraulic pipe
159	986263	One-way restrictor valve
160	99-571-00-00-5	Hydraulic block
161	030ULN01134	Springholder
162	035ULN01220	Hydraulic pipe
163	980513	Ball valve
164	980478	Magnet valve inc.nut 164/A
165	980630	Coil
166	9914M05X010	Set screw
167	9915M12X020ZN	Screw plug
168	232POW22039	Hydraulic block
169	980629	Brake valve
170	980480	Nonreturn valve
171	980096	Screw plug
172	980240	Bonded seal
173	9OR17X2.5	O-ring seal
174	232NSTL02082	Pressure control valve
175	9439M10ZN	Nut M10 DIN439B
176	030ULN02064	Emergency drain
177	032UL12364	Hydraulic block
178	980478	Magnet valve
179	980630	Magnet
182	990369	helix cable Spirex 400P
183	990007	cable grommet

No.	Part No.	Description
184	990373	connector
185	990374	connector
186	032ULB03112	lock
187	9913M4X5	setscrew DIN913 M4x5
188	032ULB03211	handle bar
189	990366	push button
190	032ULB03110	housing
191	9903681	socket
192	990368	halogen lamp
193	9472D050X2.0	locking ring DIN472 50x2
194	9912M4X20ZN	allen screw
195	990300	limit switch
196	032UL03210	lamp holder
208a	050ULN08910	stop for jack complete unit
208b	970424	Rubber stop
208c	9444-A-M8x30	Eye bolt
208d	050ULN08911	Elbow bracket
208e	9934M8ZN	nut
208f	9912M6x12ZN	Cylinder screw
208g	9125-11-A6-4	Washer

AFTER SALES SERVICE

Apart from the routine maintenance and adjustments stipulated in this manual the equipment must not be tampered with in any way. All further servicing must be carried out only by an engineer from an Authorised Agent. Failure to observe these conditions will invalidate the Guarantee.

On-Site Service / Overhaul / Spare Parts

If you require a Service Engineer to attend ON SITE, either due to an equipment fault, or for machine calibration, or if the equipment covered by this manual requires to be sent back for factory overhaul, or if you need spare parts, please contact our Product Support Helpline at the following number. Tel: 0844 665 7610 Fax: 0844 665 7604

Overseas

Service abroad is provided by the agent from whom your equipment was purchased.

Fully Comprehensive After-Sales Service

Call Crypton Helpline for details of local service agents please call 0844 665 7613

Technical Information

Crypton provide information and contracts covering:

Car Data, Fault Code Information, Diagnostic Information, Software Support Contracts, Software Updates & Accessories

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