Original
Operating instructions

Weber four-post lift
Model: Autolift 4.2

Version 1.2
Status: June 2023

www.weber-werke.de
Weber GmbH
Sülzbach 1
D-37293 Herleshausen
Tel: +49 (0) 5654 / 343
Fax: +49 (0) 5654 / 794
info@weber-werke.de

Contents

1 Security 4
1.1 Introduction 4
1.2 Safety instructions for commissioning 4
1.3 Safety regulations for operation 4
1.4 Safety regulations for service work 5
1.5 Safety equipment on the lifting platform 5
2 Technical manual 6
2.1 Scope of delivery 6
2.2 Technical data 7
2.3 EU Declaration of Conformity 8
3 Assembly of the lifting platform 9
3.1 Foreword 9
3.2 Choice of location 10
3.3 Soil quality 10
3.4 Foundation plan 10
3.5 Preparation for assembly 11
3.6 Assembly of the lifting columns and crossbars 12
3.7 Installing the guide rails and laying the balancing cables 15
3.8 Mounting hydraulic unit 17
3.9 Mounting electrical switch box 18
3.10 Electric motor connection 18
3.11 Installation and connection of air control valve 19
3.12 Electromagnetic lowering valve connection 19
3.13 Mounting upper limit switch 20
3.14 Mounting the CE stop switch 20
3.15 Assembly of hydraulics and pneumatics 21
3.16 Fill with hydraulic oil 23
3.17 Fastening the lifting columns 24
3.18 Rope slack detection 24
4 Completion and commissioning 27
4.1 Commissioning 27
4.2 Initial acceptance and entry in the test logbook 27
5 Operating instructions 29
5.1 Functional description 29
5.2 Warning and hazard symbols 30
5.3 Lifting 31
5.4 Parking 31
5.5 Sinks 31
6 Maintenance 31
7 Circuit diagrams 32

7.1 Circuit diagram 32
7.2 Hydraulic circuit diagram 34
7.3 Pneumatic plan 35
8 Behavior in the event of an incident 37
Test book 38

The test logbook can be found in the appendix.

The information contained in these operating instructions has been carefully checked, but errors cannot be completely ruled out. These instructions are intended for users with technical knowledge in the field of vehicle inspection and repair. We reserve the right to make technical and content-related changes.

Status of the operating instructions: June 2023

1 Security

1.1 Introduction

The assembly and operating instructions are an integral part of a lifting platform.

The installation instructions are intended for experts as defined by EC Directive MRL 2006/42/EC of May 17, 2006 and 89/391/EEC of June 12, 1989.

An expert is a person who has sufficient knowledge in the field of lifting platforms based on their professional training and experience and who is familiar with the relevant national regulations, accident prevention regulations and generally recognized rules of technology:
z. e.g. BG regulations, DIN standards, VDE regulations, technical regulations of other member states of the European Union.

No liability is accepted for personal injury, damage to the vehicle and to the lifting platform caused by failure to observe these operating instructions.

The following safety instructions warn of dangers and are intended to help prevent personal injury and damage to property. For your own safety, compliance with the safety instructions in this operating manual is absolutely essential. In addition, the applicable national and international safety regulations of the responsible authorities for occupational safety and accident prevention must be observed. Each operator is responsible for compliance with these regulations.

1.2 Safety instructions for commissioning

The Autolift 4.2 four-post lift is approved for installation and use in dry rooms. Installation in damp, wet or potentially explosive atmospheres is not permitted.

The operator is responsible for selecting the installation site, the ground conditions, the load-bearing capacity of suspended ceilings, etc. It must be ensured by testing or architect's specifications that the ground conditions meet the requirements or that foundations are laid that meet the requirements.

The mains connection of the lifting platform may only be carried out by approved electrical contractors. National regulations must be observed.

Precautions must be taken on site to prevent hydraulic oil from entering the ground.

1.3 Safety regulations for operation

The operating instructions must be accessible and must be observed by every user. The statutory accident prevention regulations must be observed. Statutory provisions and regulations take precedence over the operating instructions.

The lifting platform may only be operated by authorized and instructed persons who have reached the age of 18. To prevent unauthorized use, the lift has a lockable main switch.

The movement area of load and lifting platform parts must be kept clear of obstacles. The lifting platform must always be monitored during lifting and lowering.

The intended use must be ensured. The specified payload must not be exceeded. The load distribution must be in the ratio 2/5 : 3/5.

The lifting platform and the work area must be kept clean. Parts of the electrical system must be protected from moisture and wetness.

The lift may only be used in the lowest basic position. The vehicle may only be lifted at the designated points on the vehicle.

If the lifting points of the vehicle are reached by the support plates during lifting, check that the support arms are securely locked.

After briefly lifting free, check that the vehicle is securely supported and that the load is distributed in accordance with the manufacturer's specifications.

The vehicle doors must be closed when lifting and lowering. No parts or tools may be placed on the lifting platform, the support arms or on the vehicle to be lifted.

It is forbidden for persons to remain in the danger zone of loads and the lifting platform during the lifting and lowering process.

Persons may not be transported on the lifting platform. Climbing up the lifting platform is also prohibited.

The correct function of the safety devices must be checked regularly. Safety devices must not be put out of operation or their function manipulated in any other way. The lifting platform must not be used if there are any irregularities in the safety equipment.

The main switch is also an emergency stop switch and must be switched off in dangerous situations.

1.4 Safety regulations for service work

Maintenance and repair work may only be carried out by authorized service technicians of the contractual partners of Weber GmbH.

Before carrying out maintenance and repair work, the lift must be disconnected from the power supply (main switch off, fuse off). Suitable measures must be taken to prevent it from being switched on again.

Work on the electrical part of the lift or on the supply line may only be carried out by authorized experts or electricians.

Settings and changes to pulse generators, proximity switches etc. may only be carried out by trained service technicians.

1.5 Safety devices on the lifting platform

Dead man's control: The function of the operating elements is only given or active as long as the respective operating element is held in the corresponding position.

Emergency stop: An additional "EMERGENCY STOP SWITCH" is installed on the front panel of the electrical switch box. Otherwise, the main switch also fulfills the function of the "EMERGENCY STOP SWITCH".

Front ring operating button: The operating buttons are secured against unintentional actuation by front rings.

Synchronization control: A cable pull system ensures the same level when the lifting carriages move up and down.

Safety pawls: The engagement of safety pawls prevents the load from being lowered if the hydraulic system breaks or leaks.

Safety limit switch: Switch-off mechanism at the upper end of the lifting column to limit the maximum stroke.

Pressure relief valve: A built-in pressure relief valve limits the working pressure of the hydraulics to the maximum permissible value.

CE stop switch: By activating the CE stop switch, when the lift is lowered
The electrical circuit was interrupted approx. 30 cm from the floor and thus the lift stopped. During further lowering, the following sounds are emitted up to the lower home position
an acoustic warning signal.

2 Technical manual

2.1 Scope of delivery

The scope of delivery of the lift includes

4	Lifting columns
2	Cross member with safety catches
2	Guide rails
2	Access rails
1	Electrical switch box
1	Hydraulic power unit
1	Compressed air control valve
1	Cable guide hose
2	Plastic hoses Ø 8 mm & Ø 10 mm
1	Motor cover
1	Column cover for cables
1	Bracket & guide rail for limit switches
1	Small parts set with connecting materials
16	Heavy-duty anchor

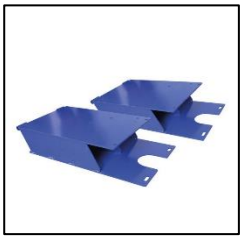
Optionally available

Item no.110510
10 l hydraulic oil HLP 32

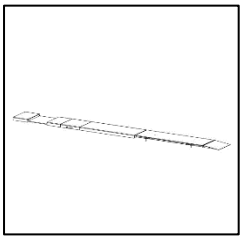
Item no.1105xx
Heavy-duty anchor set (16 pieces)

Item no.120215
Axle-free jack 2.5 2500 kg

Item no.120216
Axle-free jack 3.2 3200 kg



Item no.120225
Track extension



Item no.120221
Wheel alignment sliding plates

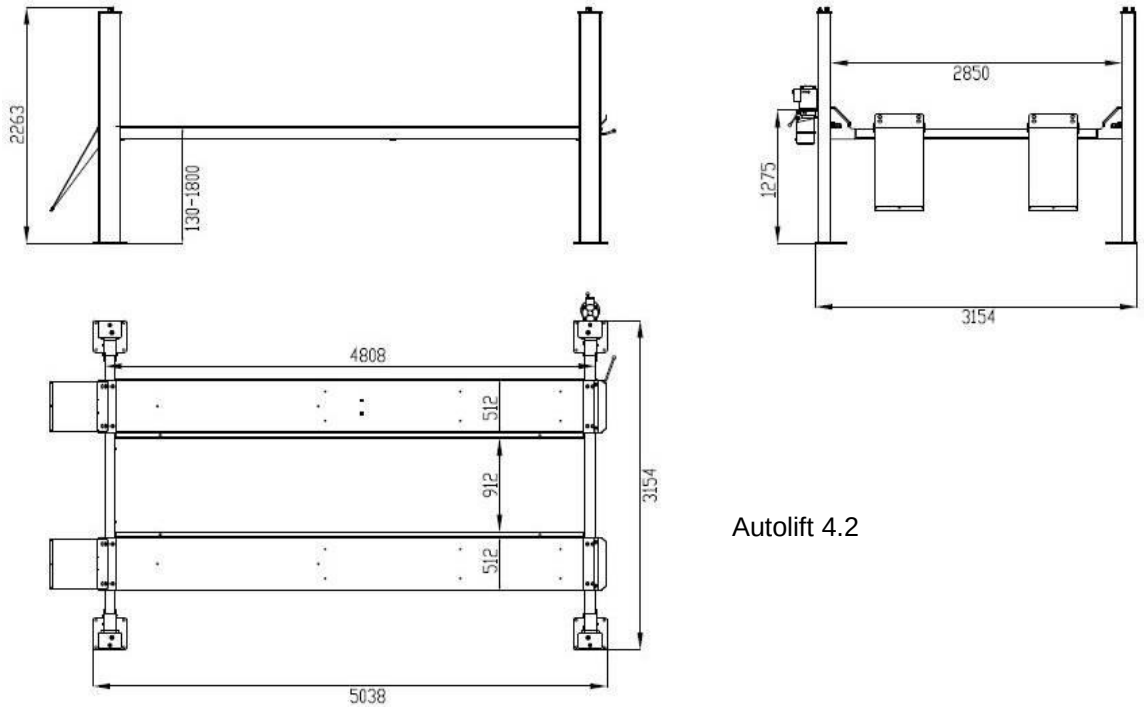
Art.No.120222
Wheel alignment turntable

To simplify the operator's work, the lift can be equipped or used with accessories. Only original accessories from the manufacturer are permitted.

2.2 Technical data

Load capacity	4200 kg
Lifting height max.	1850 mm
Track length	4808 mm
Track width	512 mm
Column spacing	2850 mm
Distance between rails	912 mm
Total length	5088 mm
Total height	2259 mm
Total width	3154 mm
Electrical connection	400 V / 3 Ph / 16 A inert / 50 Hz
Motor power	2.6 kW
Stroke time	ca.50 sec
Noise level	< 75 dB
Weight	1870 kg
Air requirement	6-8 bar
Column/rail color	anthracite - RAL 7016
Color access ramps	black - RAL 9017
Hydraulic oil filling quantity	10 l
Viscosity of hydraulic oil	HLP 32
Working temperature	- 10 °C - + 40 °C

Note: Specifications are subject to change without notice.



Autolift 4.2

.

2.3 EU Declaration of Conformity

We

Weber GmbH
Sülzbach 1
37293 Herleshausen

hereby declare that the machine designated below complies with the relevant basic safety requirements of the EC Directive due to its design and construction and in the version placed on the market by us. If the machine is modified without the consent of the undersigned, this declaration shall become invalid.

Designation:	Four-post lift
Model: **Manufacturer's designation:**	Autolift 4.2 (STD-6745)
Relevant EC directive:	EN ISO 12100:2010 Safety of machinery General design principles - risk assessment and risk reduction EN1493:2010 Lifting platforms EN1494:2000+A1:2008 Mobile or portable lifting appliances and related equipment EN60204-1:2006+A1:2009 Safety of machinery - Electrical equipment of machines - Part 1: General requirements 2006/42/EC according to Annex IV Machinery Directive
Reference number of the technical data:	TF-C-0115-14-04-02-5A
Certificate:	CE-MC-230310-014-06-5A Valid until 01.12.2026
Issuer of the certificate:	CCQS Certification Service Limited Block 1 Blanchardstown Corporate Park, Ballycoolin Road Blanchardstown, Dublin 15 D15 AKK1, Ireland Identification no. 2834

Herleshausen, June

Place/Date

Andreas Weber /

Managing Director

3 Assembly of the lifting platform

3.1 Foreword

The installation instructions must be read through and followed exactly before removing from the packaging. Failure to do so will result in exclusion of liability and warranty. Please note that incorrect installation may result in danger to life and limb. Initial installation and commissioning must be carried out by service companies authorized by Weber. Weber GmbH accepts no liability, guarantee or warranty for products or parts thereof destroyed by improper installation or handling. Please refer to the sheet "Initial commissioning by an expert".

As already mentioned in the introduction, this product should be installed by a competent professional. However, if you are new to installation, we would like to provide you with the following information:

Our products, some of which are pre-assembled, are not fully assembled and checked for function before shipping, but are merely assembled to make installation easier. Many individual components undergo a test run at the factory, for example a hydraulic pump is tested before assembly. Of course, the complete hydraulic circuit cannot be subjected to a pressure and leak test at the factory, as the various individual parts are only assembled at your premises. These tests must therefore be carried out on site during commissioning. Loading and unloading as well as transportation cause vibrations to which the product is not exposed during "normal operation", which is why it is essential to check any electrical controls already pre-installed on the product for loosely vibrated screw connections. As a general rule, pre-assembled parts must be checked, tightened, greased and oiled and, if necessary, repaired before commissioning, just like parts still to be installed, in accordance with the recognized rules of technology. It is to be expected that a thread contaminated by paint will have to be recut; this is a normal part of the assembly of a lift and not a defect in terms of the warranty. A screw that has been screwed in crookedly or torn off due to excessive torque is also not a defect; these risks are borne by the fitter.

Below are some tips on the various assemblies:

Check **screws and mechanics** for correct and tight fit, check moving parts for ease of movement and lubricate.

Check the **hydraulics** for correctly sealed and firmly tightened connection fittings and seal if necessary. **Caution!** If Teflon tape is used, it must not get into the hydraulic circuit to prevent contamination of the valve technology. Screw connections sealed with Teflon tape must not be loosened (turned backwards), otherwise they must be resealed. During the functional test, check the entire system for leaks and ensure that no oil can escape into the ground in the event of a leak. When laying hydraulic lines, make sure that they are not grazed or crushed by moving parts and secure them if necessary. Lubricate the hydraulic cylinders through the vent hole with maintenance oil with Mos2 additive (we recommend Oregon Premium Maintenance Spray or Pingo MOS2) to ensure that the seal packs are well lubricated and slide without rubbing from the first operation.

Check **cable pulls, pulleys and moving parts** (if present) for ease of movement, lubricate and grease (we recommend Oregon or Liqui Moly multi-purpose grease). If necessary, remove rollers that are difficult to move and check for dirt (remove any paint residue etc.) and refit the roller with grease. Always check that the retaining rings are correctly seated. Lubricate wire rope hoists regularly with grease to protect parts from corrosion, especially those close to the ground. Grease lift tables and sliding carriages to ensure smooth, rub-free sliding even under load **Caution!** Good lubrication is required regularly and prevents premature wear.

Electronics and wiring should always be checked and installed by a specialist electrical company. Before carrying out any work, switch off the main switch and fuses of the mains connection and secure against unintentional restarting. Check that the cables are laid correctly and ensure that they do not come into contact with moving parts; secure them additionally if necessary. Check that all screw connections, including those in the switch box, are tight and, if necessary, carefully check the cable ends for correct, tight fit using needle-nose pliers. An incorrectly inserted cable may not make contact even if the screw terminal is tight. Check the function of the limit and proximity switches.

3.2 Choice of location

The lifting platform is approved for installation in closed, dry workshop areas. Use in damp, wet or potentially explosive atmospheres is not permitted.

3.3 Soil quality

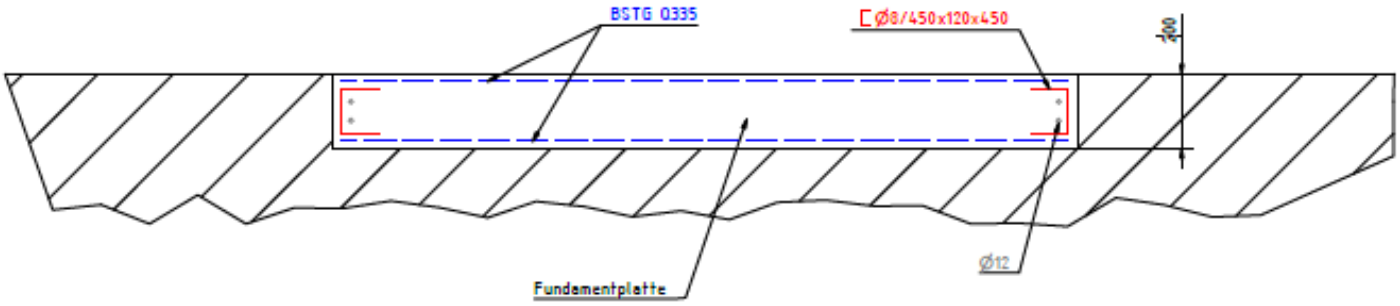
Four-post lifts must be set up on level ground. The foundation must be of grade C20/25, have a minimum concrete thickness of 200 mm without screed or other covering layers and be reinforced. The operator is responsible for selecting the correct installation site and ensuring the load-bearing capacity of the floor.

Minimum compressive strength of the installation surface: 100 N/cm(2

CAUTION: Floors that do not meet the requirements can cause serious damage to property and personal injury**.** Do not install the columns on asphalt, soft screed or near expansion joints.

3.4 Foundation plan

Foundation width min.	4000mm
Foundation length min.	6000mm
Concrete thickness min.	200mm
Concrete quality min.	C20/25 - DIN 1045
Reinforcement min:	Structural steel mesh mats Q335 - DIN 488, concrete cover of the steel mats on the top and underside min. 20 mm
Recommended:	On the top and bottom of the foundation slab, Circumferential reinforcement in both directions Reinforcing steel U-bracket D=8mm, e=450x120x450mm, as well as ring reinforcement in the U-bracket, at 150mm intervals Reinforcing steel D=12mm



3.5 Preparation for assembly

To determine the location of the lift, you should position a vehicle at the desired working position in your workshop. When calculating the total height, the height of the vehicles to be lifted must be taken into account. The user must ensure that a lifted vehicle does not encounter any external obstacles even at maximum height. Mark the optimum position of the lifting columns with chalk lines on both sides. After removing the vehicle, connect both markings with a straight line. The control column, on which the hydraulic pump and control unit are installed, can be positioned "rear right" (passenger side) or "front left" (driver's side) in the direction of travel. If the control column is installed in the "front left" direction of travel, the control unit can be operated immediately after driving onto the rails and leaving the vehicle. Position the transport frame of the lifting platform close to the installation area, ensure that it is clean and that there is sufficient working space available for installation. Remove the accessory packaging and other accessories from the shipping packaging and store them outside the working area. Ensure that no parts are lost. Two people and a forklift truck with appropriate lifting gear should be available to set up the lifting platform.

Position the transport frame close to the installation site (Fig. 1). Attach a suitable strap sling to the guide rail on the control side so that it can then be removed easily. Pull out the hydraulic cylinder completely, otherwise you will not be able to fit the balancing ropes in the lifting columns later (Fig. 2). Now turn the guide rail once through 180 degrees (Fig. 3) and place it on two supports (Fig. 4). Make sure that you do not pinch or kink the wire ropes.

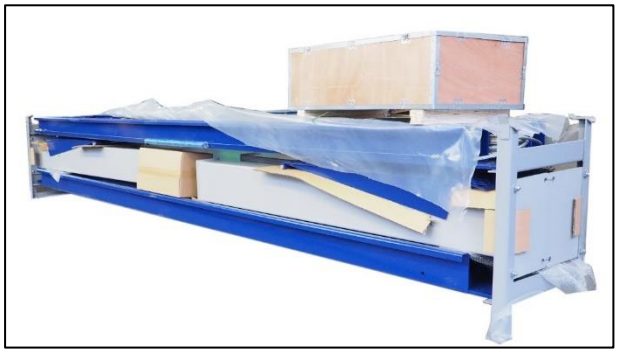


Fig.

Fig.

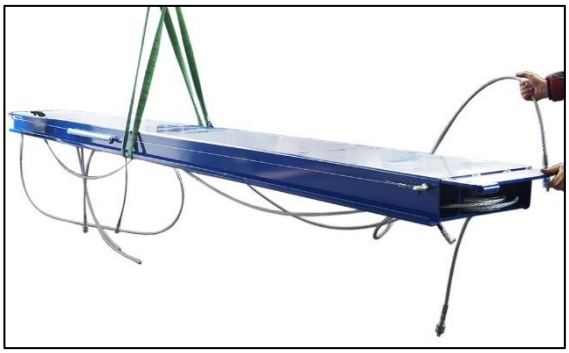


Fig. 3

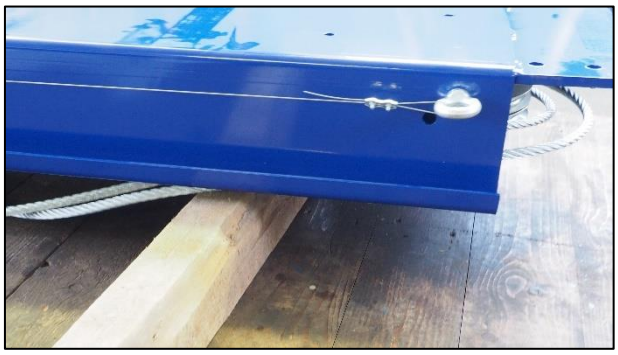


Fig. 4

3.6 Assembly of the lifting columns and crossbars

Lift the lifting columns out of the transport frame, making sure when lifting that no external parts of the lifting columns are damaged by the ropes or straps used. Now place the lifting columns in the previously selected position and secure them against falling over. You can recognize the control column by the preparation for mounting the hydraulic unit and the electrical switch box. The control column should be positioned at the front left. Position the two cross members between the respective lifting columns at the front and rear. Place the cross members on squared timber (Fig. 6). This makes assembly easier. **Please note the installation of the cable slack detection 3.18. This must be taken into account in the installation sequence**.

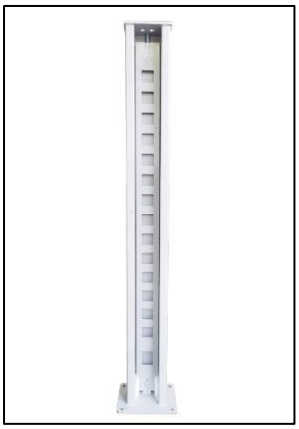


Fig. 5

Fig. 6

You can recognize the front cross member by the short compressed air hose for unlocking the safety catches. The hose must point to the inside (Fig. 7). The rear cross member has a long compressed air hose for unlocking the safety catches. This must also point to the inside of the lift (Fig. 8). Open the cover for the safety catches (Fig. 9). Remove the Phillips screws from the crossbar on the front and rear of all four lifting column mounts (Fig. 10). Then loosen the screw for the safety catch mounting rail, remove it and pull it forwards (Fig. 11 & Fig. 12). Due to the design of the attachment of the holder for the later cover on the steering column, the assembly must now be carried out. Attach the holder (Fig. 13) to the lifting column from the outside and screw it on from the other side (Fig. 14). The holes are located directly behind the red marking. As the safety catch mounting rail is not yet fitted, it is easier to access the threaded holes.

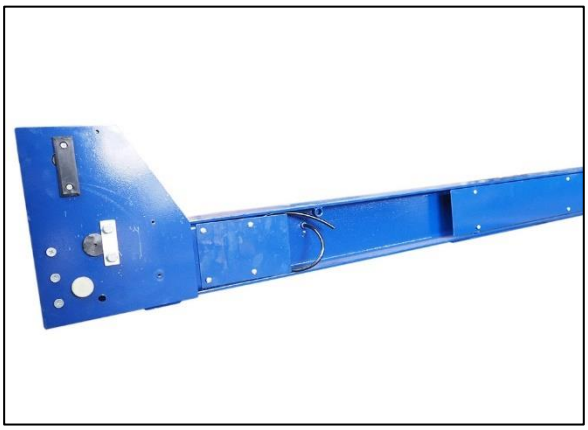


Fig. 7

Fig. 8

Fig. 9

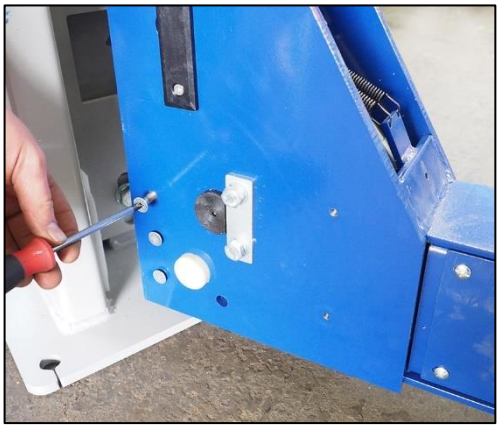


Fig. 10

Fig. 11

Fig. 12

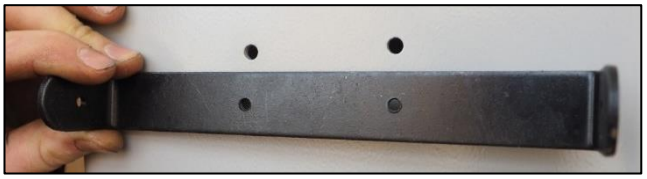


Fig. 13

Fig. 14

Place the sliding piece on the crossbar so that the threaded holes match (Fig. 15) and screw them to the front and rear of the crossbar using the Phillips screws (Fig. 16). Once you have connected all four sliding pieces to the crossbar, push the lifting columns inwards towards the crossbar (Fig. 17 & Fig. 18) and roughly align them again. The lifting columns must still be secured against falling over. Now use two people to lift the crossbar into the third safety catch to achieve a comfortable working height (Fig. 19). The screw for the safety catch rails can now be screwed back in (Fig. 20). However, do not tighten them yet, as the rails may still need to be aligned.

Fig. 15

Fig. 16

Fig. 17

Fig. 18

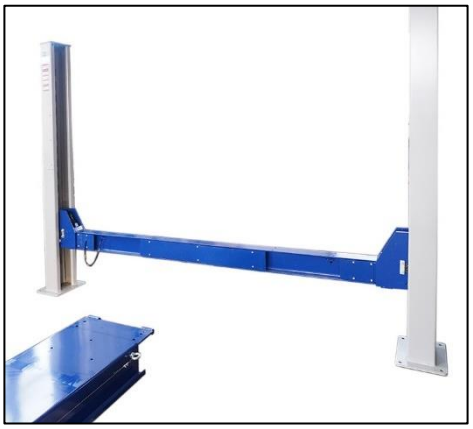


Fig. 19

Fig. 20

3.7 Installing the guide rails and laying the balancing cables

To install the guide rails, use a forklift truck and the appropriate lifting gear to lift the control guide rail with the hydraulic cylinder and the balancing cables and position it on the left in the direction of travel (Fig. 21). Guide the long compressed air line of the rear cross member through the opening as shown in Fig. 22. The guide rail with the quadruple cable drum points towards the rear cross beam (Fig. 23 / Fig. 24). The double rope drum points to the front crossbar (Fig. 25 / Fig. 26). The lengths of the compensating ropes specify the lifting column to which they must be laid. Caution, the ropes must not cross or overlap

Fig. 21

Fig. 22

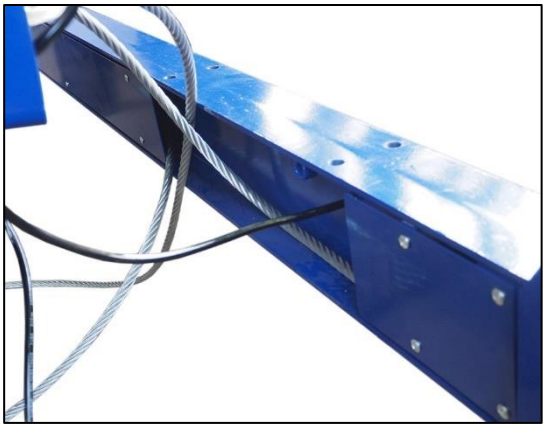


Fig. 23

Fig. 24

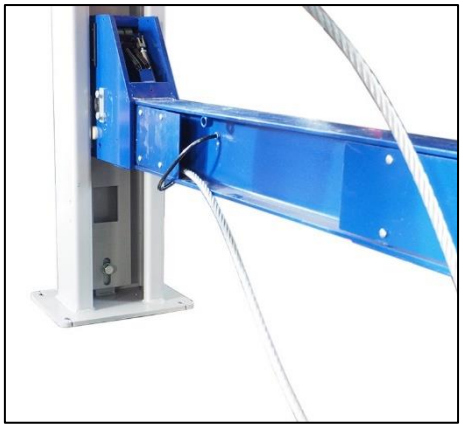


Fig. 25

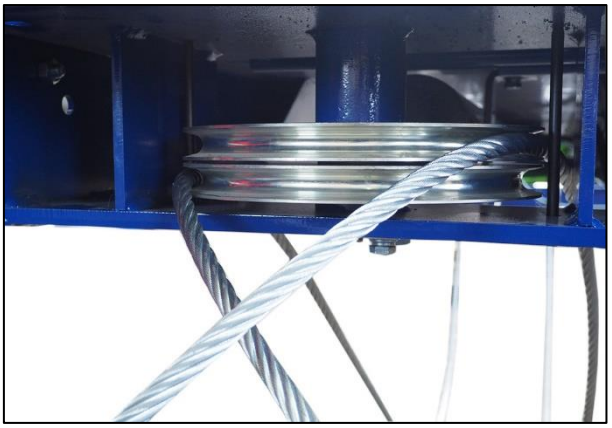


Fig. 26

The detailed drawing in Fig. 27 shows the positions of the cable lengths if required.

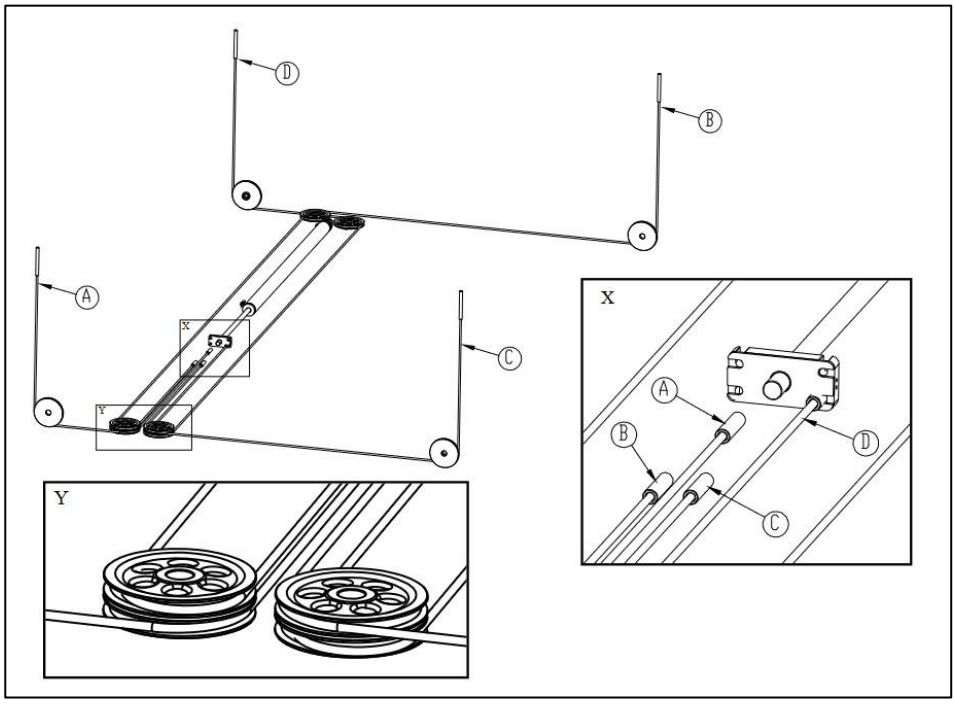


Fig. 27

Insert the compensating cables through the crossbars into the respective lifting columns (Fig. 28). Then place the compensating cable on the pulley with the aid of a tire iron and pull it through completely (Fig. 29). There must be no twists or crossings in the compensating cables.

Fig. 28

Fig. 29

Now mount the guide rails at the positions provided on the crossbars using the corresponding screws, spring washers and washers (Fig. 30 / Fig. 31).

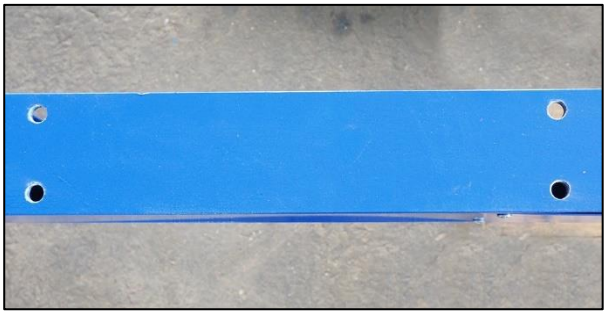


Fig. 30

Fig. 31

The compensating cables are laid freely upwards through the lifting columns and the threaded piece is guided through one of the two drill holes (Fig. 32). Select the drill hole so that the compensating cable is guided vertically (straight) upwards. Place the washer and the two nuts at the upper end of the threaded piece (Fig. 33). This allows the compensating cables to be tensioned later.

Fig. 32

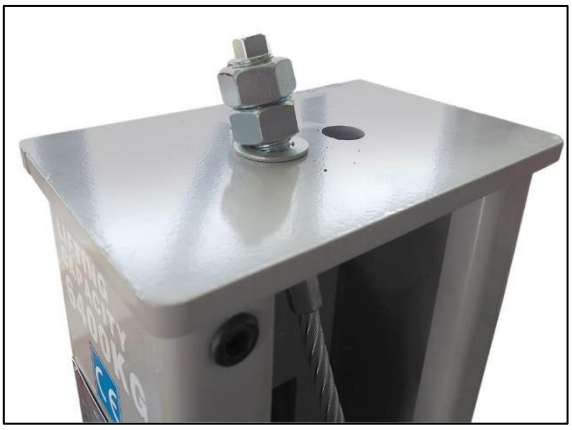


Fig. 33

3.8 Mounting hydraulic unit

Insert the two illustrated screws with spring washer and washer into the valve block of the hydraulic unit and hang them in the holder provided on the control column (Fig. 34 / Fig. 35). Now tighten the screws. Tighten the oil drain plug on the oil reservoir of the hydraulic unit (Fig. 36).

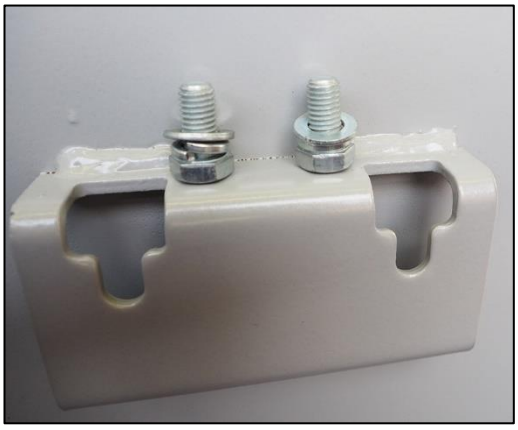


Fig. 34

Fig. 35

Fig. 36

3.9 Mounting electrical switch box

Screw the electrical switch box to the control column using the appropriate screws and washers (Fig. 37). It is important to fit the protective conductor to the lower right-hand screw (Fig. 38 / Fig. 39).

Fig. 37

Fig. 38

Fig. 39

3.10 Electric motor connection

The electric motor must be connected by a specialist electrical company. To do this, open the cover for the motor connection panel (Fig. 40). Pull the cables through the PG cable glands and connect the temperature protection switch to the pre-installed luster terminal (Fig. 41) (cable designation motor overhead protector 12, 13). In the next step, the protective earth conductor (PE) must be fitted to the housing of the motor connection panel (Fig. 42) (cable designation motor U, V, W). Connect the three outer conductors (U, V, W) (Fig. 43), retighten all contacts and close the motor connection panel again (Fig. 44).

Fig. 40

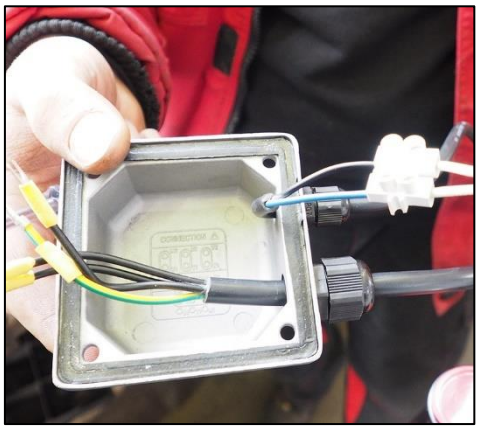


Fig. 41

Fig. 42

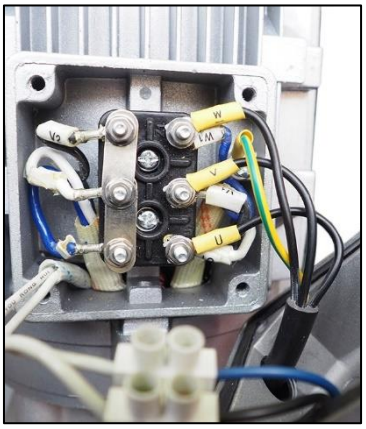


Fig. 43

Fig. 44

3.11 Installation and connection of air control valve

Remove the plug from the solenoid coil of the air control valve using a screwdriver (Fig. 45). Feed the cable through the cover and connect the conductor ends to the two front contacts (Fig. 46). The cable has the following designation (solenoid air valve 15, 16). The protective conductor remains free. Screw the air control valve into the prefabricated threaded holes between the electrical switch box and the hydraulic unit (Fig. 47). Then fit the plug to the solenoid coil (Fig. 48). The pneumatic system will be connected later.

Fig. 45

Fig. 46

Fig. 47

Fig. 48

3.12 Electromagnetic lowering valve connection

Remove the plug from the solenoid coil of the electromagnetic lowering valve using a screwdriver (Fig. 49). Feed the cable through the cover and connect the conductor ends to the two front contacts (Fig. 50). The cable has the following designation (Lowering solenoid valve 17, 18). The protective conductor remains free. Then fit the plug to the solenoid (Fig. 51).

Fig. 49

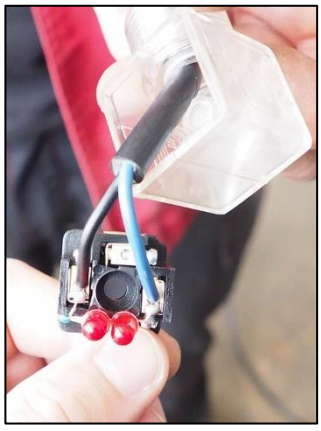


Fig. 50

Fig. 51

3.13 Mounting upper limit switch

To install the high limit switch, you must first remove it in order to guide the cable from the rear to the front through the top of the control column (Fig. 52). The cable has the following designation (Safety high limit switch 29, 30). Then reconnect the limit switch as shown in Fig. 53. The polarity of the cables does not matter. Replace the cover (Fig. 54) and screw the limit switch to the lifting column with the cable entry facing downwards (Fig. 55). Set the upper limit switch as shown in Fig. 55. The arm is adjusted using the three marked screws (Fig. 56).

Fig. 52

Fig. 53

Fig. 54

Fig. 55

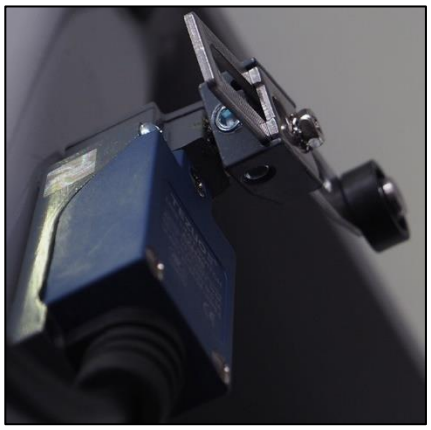


Fig. 56

3.14 Mounting the CE stop switch

The CE stop switch is already electrically pre-assembled and must still be fitted to the control lifting column. First attach the bracket for the CE stop switch to the threaded holes provided (Fig. 57). And the running rail for the roller arm (Fig. 58). The CE stop switch can now be mounted on the holder with the cable entry facing downwards (Fig. 59). Take the screws from the small parts set. Adjust the roller arm according to the same principle as described in Fig. 56.

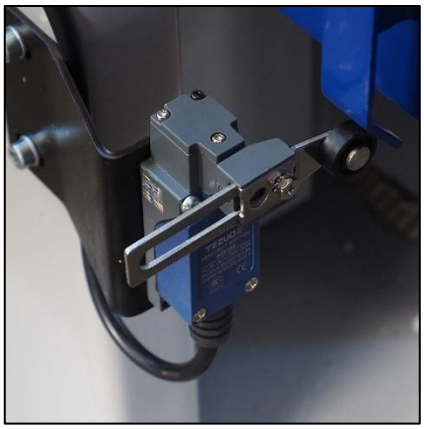


Fig. 57 Fig. 58 Fig. 59

3.15 Assembly of hydraulics and pneumatics

Tighten the connection on the hydraulic unit before fitting the hydraulic hose there with the 90 degree angle (Fig. 60). Remove the union nut for connecting the leakage line to the right. Take the plastic hose with the Ø 10 mm and put the union nut over the leakage line (Fig. 61). Push the hose onto the elbow (Fig. 62) and then tighten the union nut (Fig. 63). Now the holder for the cable support hose must be fitted to the control column using the corresponding screws from the small parts set (Fig. 64). It is then attached to the holder with the black union nut (Fig. 65). Use the hydraulic hose to shorten the cable support hose to the required length (Fig. 66). Pull the mounting head off the cut piece of hose, remove it and place it on the shortened hose to mount it on the guide rail later 8 Fig. 67).

Fig. 60

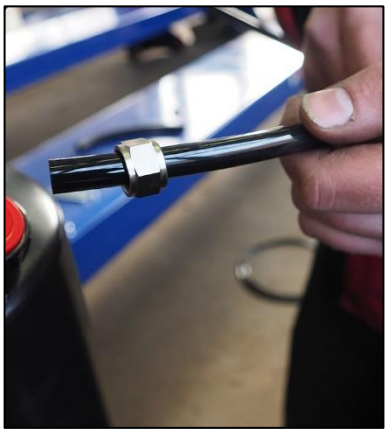


Fig. 61

Fig. 62

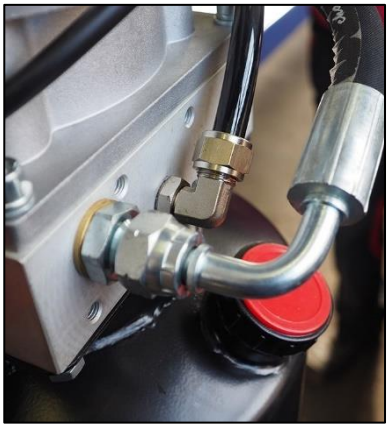


Fig. 63

Fig. 64

Fig. 65

Fig. 66

Fig. 67

Now take the plastic hose with Ø 8 mm and connect it to the air outlet of the air control valve (Fig. 68). To do this, press the hose into the cutting ring connection. Now feed the hydraulic hose, the leakage hose and the compressed air hose through the line protection hose (Fig. 69). Screw the elbow from the small parts set to the hydraulic hose of the hydraulic cylinder (Fig. 70). Place the black lock nut on the inside of the hole in the guide rail. Screw the line of the hydraulic unit to the elbow piece of the hydraulic hose of the hydraulic cylinder in the bushing of the guide rail (Fig. 71). Now guide the two plastic lines through the hole in the guide rail and screw the line protection hose to the lock nut in the guide rail (Fig. 72). Shorten the leakage hose Ø 10 mm so that you can secure it in the cutting ring connector on the hydraulic cylinder by pressing (Fig. 73).

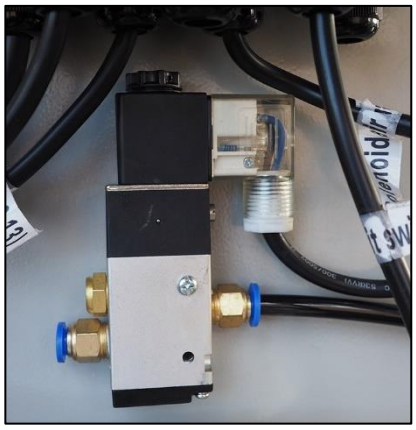


Fig. 68

Fig. 69

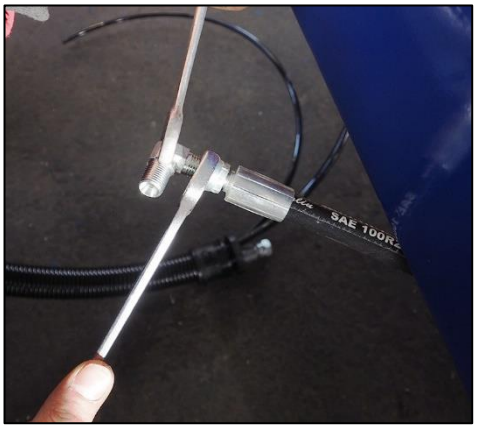


Fig. 70

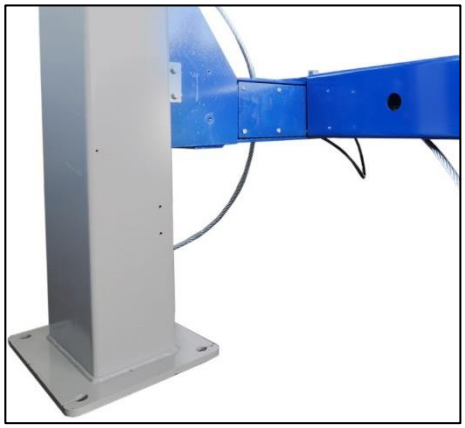


Fig. 71

Fig. 72

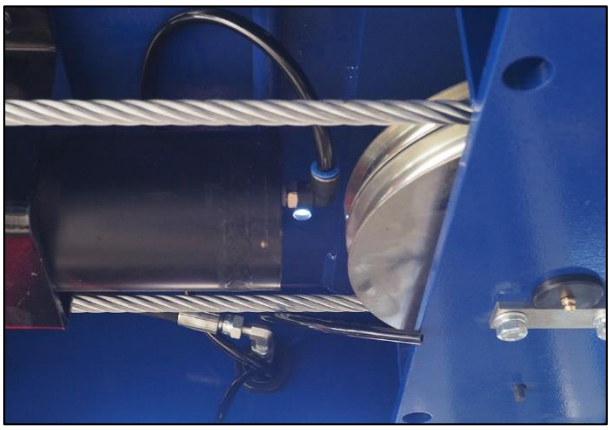


Fig. 73

Shorten the plastic hose Ø 8 mm and attach the T-piece to the guide rail bushing (Fig. 74). Ensure that the cutting ring lock is not activated unintentionally. Lay the compressed air line for unlocking the safety catches from the rear cross member through the bushing in the guide rail to the front (Fig. 75). Insert the compressed air hose for unlocking the safety catches from the rear and front cross members into the T-piece (Fig. 76). If the plastic hoses are too long, shorten them to the required length. You can now connect the compressed air supply (6 bar - 8 bar) to the left-hand side of the air control valve below the sintered metal filter (Fig. 77).

Fig. 74

Fig. 75

Fig. 76

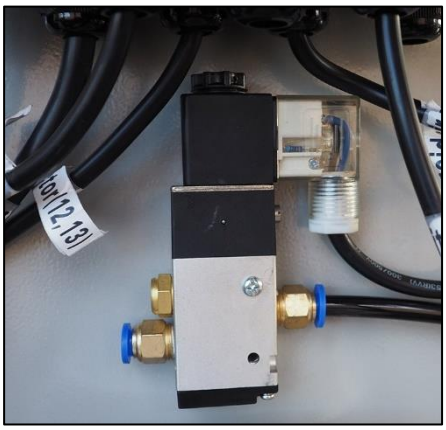


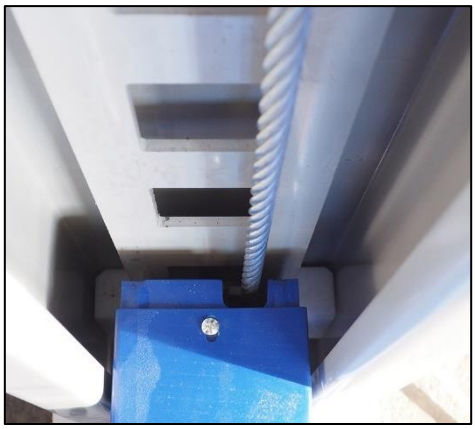
Fig. 77

3.16 Fill with hydraulic oil

Open the sealing cap (red marking) and fill the hydraulic oil HLP 32 (order no. 110510) into the hydraulic oil tank of the pump up to the specified filling level (Fig. 78). Ensure that no oil gets into the ground. The filling quantity is approx. **11-12 liters of oil**. As soon as the first test lift is carried out, it is essential to check the tightness of all screw connections to rule out any leaks and to check the oil level in the tank again. The oil level is checked using the dipstick on the cap.

Fig. 78

3.17 Fastening the lifting columns



The lifting columns must be set up vertically; if necessary, shimming must be carried out on site. Once the attachment has been completed, the safety catch and the drive-over plate can be removed again and all anchors retightened to a tightening torque of 110 Nm.

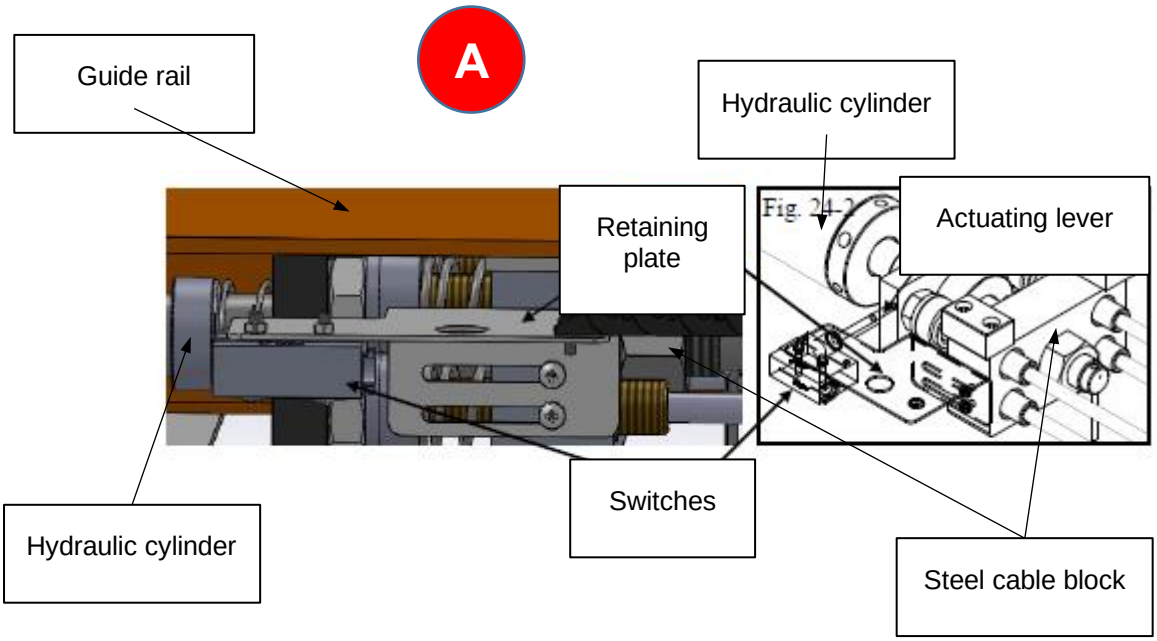
Heavy-duty anchor

Heavy-duty anchor	Fischer FAZ II 16/50
Number of heavy-duty anchors	14 pieces
Tightening torque	110 Nm

3.18 Rope slack detection

The marked component is the optimized cable slack detection.

Advantage: The cable tension is monitored at a central point with just one switch.



Installation of slack detection switch

- Install the unit consisting of the mounting plate with switch and pre-installed plastic chain for cable routing on the steel cable block.
- The plastic chain is mounted on the side of the guide rail.
- Lay the cable as described in (Fig. B).
- Use the retaining plate to adjust the switch so that it is in contact with the plate (Fig. C & Fig. D)
- Check that it is working properly and adjust the bracket setting if necessary.

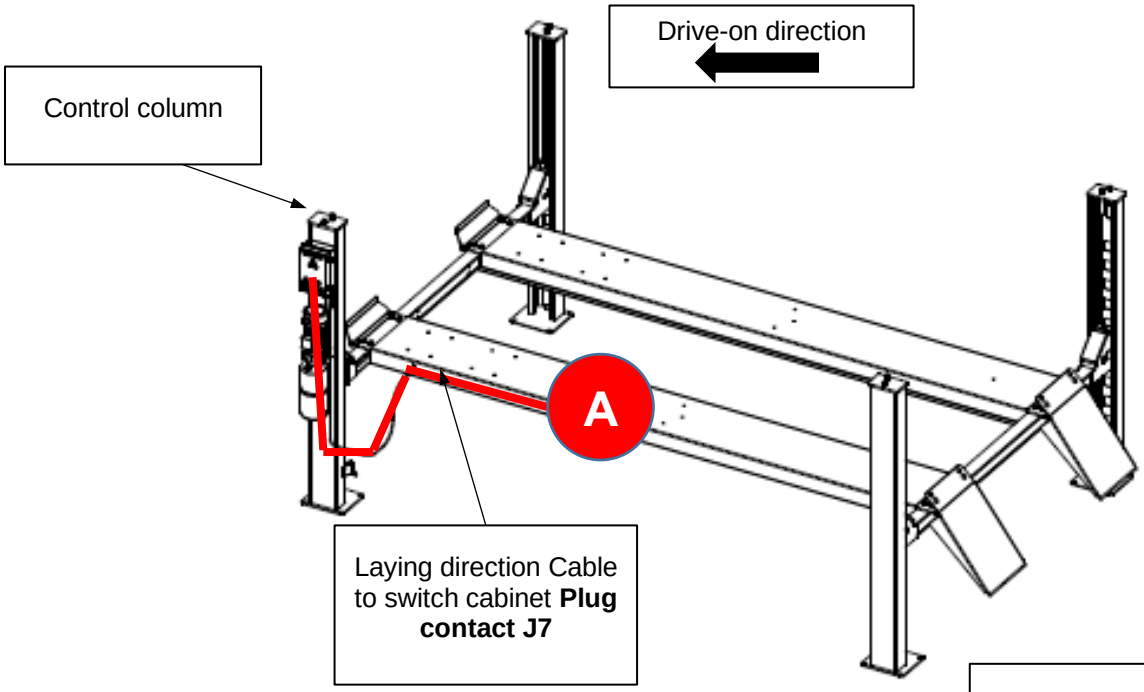


Fig. B

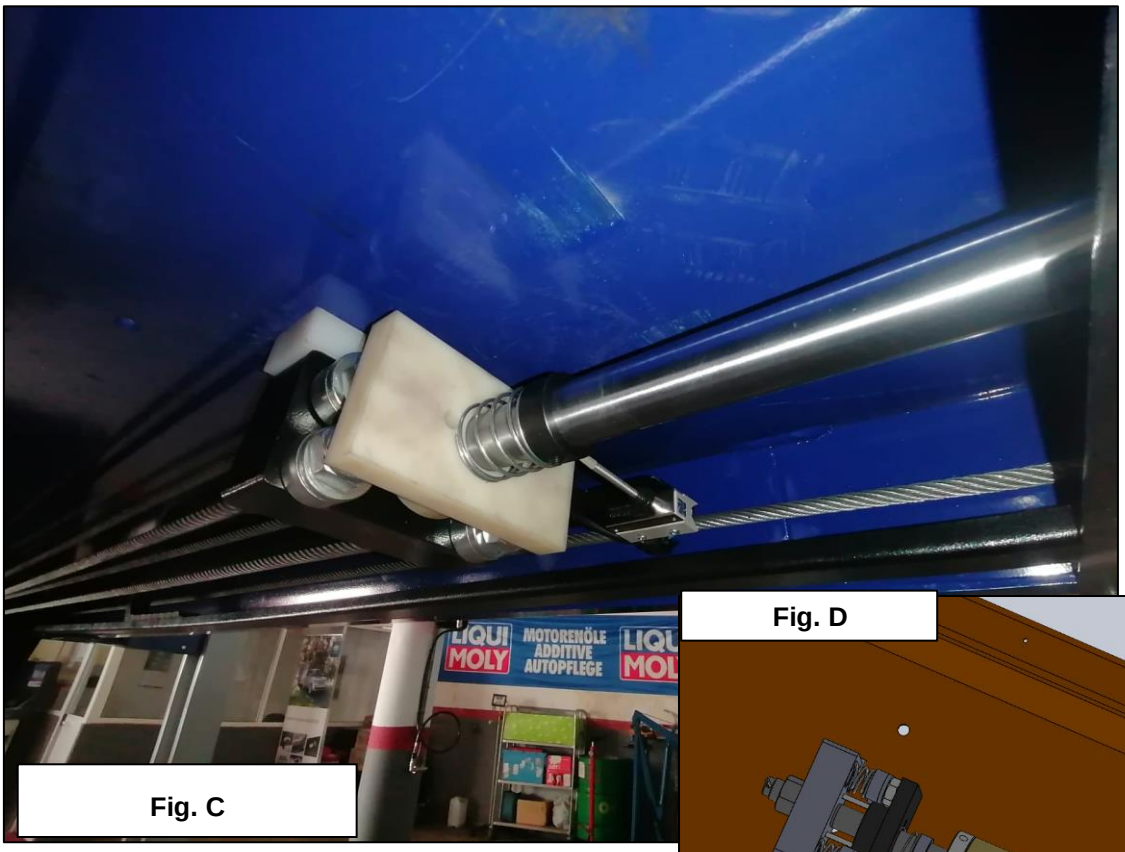
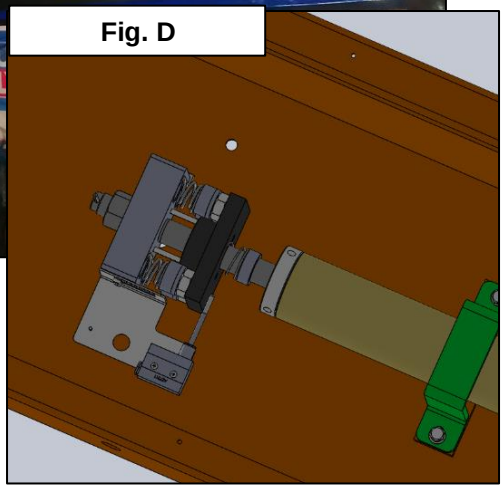


Fig. C

Fig. D



4 Completion and commissioning

4.1 Commissioning

Once assembly is complete and the lift has been fully lubricated, the electrical mains connection can be switched on. Check that the hydraulic oil tank is filled with oil, then press the "LIFT" button. The lifting movement must start after approx. 30 seconds. This time is required during start-up to pump the oil into the still empty hydraulic hose and hydraulic cylinder. The hydraulic cylinder may move jerkily at first, as the air must first escape from the hydraulic cylinder.

During this first lifting movement, move the platform without load to about half the lifting height so that the lowering safety device can be removed from under the cross beams. Please check the hydraulic lines and screw connections for leaks immediately.

CAUTION: Observe the entire lift and its components during the entire commissioning process. Do not lift any vehicle until you have completed the final assembly and checked all functions, safety devices and fastenings once again.

The track plates must lift evenly in a balanced manner; if this is not the case, please check the cable tension and re-tension if necessary. Lock the cable nuts after adjustment. In the next step, check, adjust and lock the pull rods of the safety catches.

Lower the lift using the "lowering button". The runway must be leveled using the threaded rods of the locking plates, then lock the upper nuts of the locking plates.

Once the adjustment has been completed, the lift can be moved over the full lifting distance, carry out a few test lifts and lowering operations, if the lift is working properly, you can now pick up a vehicle and raise the lift again to about half the lifting height. Lower the lift using the lowering button. If the lift functions correctly, you can carry out a new lifting process over the entire lifting height. Also monitor the hydraulic oil tank during the lifting process; the level must not fall below the minimum level. If necessary, do not add too much oil so that the tank does not overflow when lowering. Check the entire hydraulic system again for leaks when it is raised.

4.2 Initial acceptance and entry in the inspection logbook

The initial acceptance must be documented by making an entry in the inspection logbook. In these instructions, complete the form "Initial commissioning by an expert" and send it to Weber GmbH. You will find the form on the next page.

FAX: +49 (0) 5654 - 794

Make entries in the inspection logbook and sign and hand over to the operator.
Present the lift to the operator ready for operation, carry out a briefing using the operating instructions and explain the operating instructions in detail.

Initial commissioning by an expert

The lift type **Weber Autolift 6.4**, year of manufacture_____,

Serien-Nr._____

was tested for operational readiness at _____.

No defects were found, so there are no objections to commissioning.

The operator has been informed and instructed by the expert on proper handling

_____ _____
Place, date Signature of the expert

_____
Name of the expert

_____
Address

_____

_____

_____

ATTENTION: Please return the proof of initial commissioning prepared below by an expert to the manufacturer so that the WARRANTY CLAIMS are valid.

Cut off and send or fax to Weber GmbH, Sülzbach 1, 37293 Herleshausen, Germany, Fax +49 (0) 5654-794

PROOF OF INITIAL COMMISSIONING BY AN EXPERT FOR

LIFT TYPE Weber Autolift 6.4, year of manufacture_____,

Serien-Nr._____

Date: _____ Signature: _____

Name and address of the expert

_____

_____

Address of the operator

By fax to: +49 (0) 5654-794
Weber GmbH
Sülzbach 1
D-37293 Herleshausen

5 Operating instructions

5.1 Functional description

The vehicle lift is only suitable for use in dry indoor areas. It must not be used outdoors! It is not intended for use in potentially explosive atmospheres.

The Weber Autolift 4.2 electro-hydraulic four-post lift is approved for lifting cars and vans with a maximum weight of 6400 kg. It consists of the following assemblies:

- Columns with crossbars
- Guide rails
- Hydraulic system
- Equalizing ropes
- Electrical installation

The hydraulic system consists of the motor, the pump, the oil tank, the hydraulic hose and the hydraulic cylinder. The motor actuated by the push button transmits the torque to the pump via the clutch. The pump draws in oil via the oil strainer and generates a pressure of approx. 180 bar (max. operating pressure). The oil is fed into the valve block. From here, it is fed via the pressure relief valve into the hydraulic cylinder, which is mounted below the guide rail on the control side. The rails are then raised by means of a cable pull system. The pressure relief valve is set to the pressure of the maximum load capacity of the vehicle lift (6400 kg). This setting must not be changed. The tank of the hydraulic system has a capacity of approx. 11-12 liters of oil. Lowering takes place via an electromechanically operated lowering valve.

The tightening torque of the heavy-duty anchors is 110 Nm.

The vehicle lift complies with the currently applicable standards.

The operator is responsible for compliance with country-specific regulations and standards.

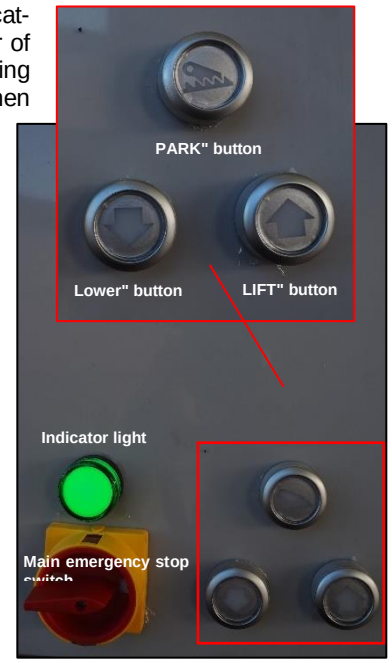
The vehicle lift may only be operated by trained, mentally and physically competent persons who are at least 18 years old. A record must be kept of the training and instruction for the vehicle lift.

5.2 Warning and hazard symbols

The warning and danger symbols attached to the lifting platform must be observed.

5.3 Lifting

To pick up a vehicle, move the guide rails to the lowest position. The safety catches are not locked in this position. The vehicle must be moved to the center of both rails. Use the "LIFT" button to start the lift and raise the vehicle. Before lifting the vehicle, make sure once again that the vehicle is centered on the rails. When the working height is reached, the lift is moved into the safety catches by pressing the "PARK" button



5.4 Parking

When the "PARK" button is pressed, the cross beams with the rails are placed in the safety catches at the desired working height. These serve as mechanical protection so that the platform cannot lower itself in the event of a fault in the hydraulic system. Never work on lifted loads if the lift has not moved into the safety catches.

5.5 Sinks

The vehicle lift may only be lowered if there are no persons under the vehicle or in its vicinity and there are no objects under the vehicle. To lower the lift, press the "Lift" button to release the safety catches. You will hear a "click" from all four safety catches. Make sure that all four safety catches are released. Otherwise, there is a risk that the lift will tilt during the lowering process and the vehicle may crash. Now press the "LOWER" button and the lift will lower. Always make sure that no persons are approaching the vehicle. In the lower area, approx. 30 cm before touching the ground, the CE stop switch interrupts the circuit and the lift stops. Now press the "PARK" button and drive the lift down to the ground accompanied by a warning signal. You can now drive the vehicle off the rails.

6 Maintenance

The user is obliged to keep the lift and its components clean at all times and to protect it from adverse environmental influences. The following maintenance work must be carried out.

Once a month Check the seat of the anchor bolts

Lubricate all moving parts with grease

Check that all ropes are evenly tensioned

Check the tightness of the hydraulic system

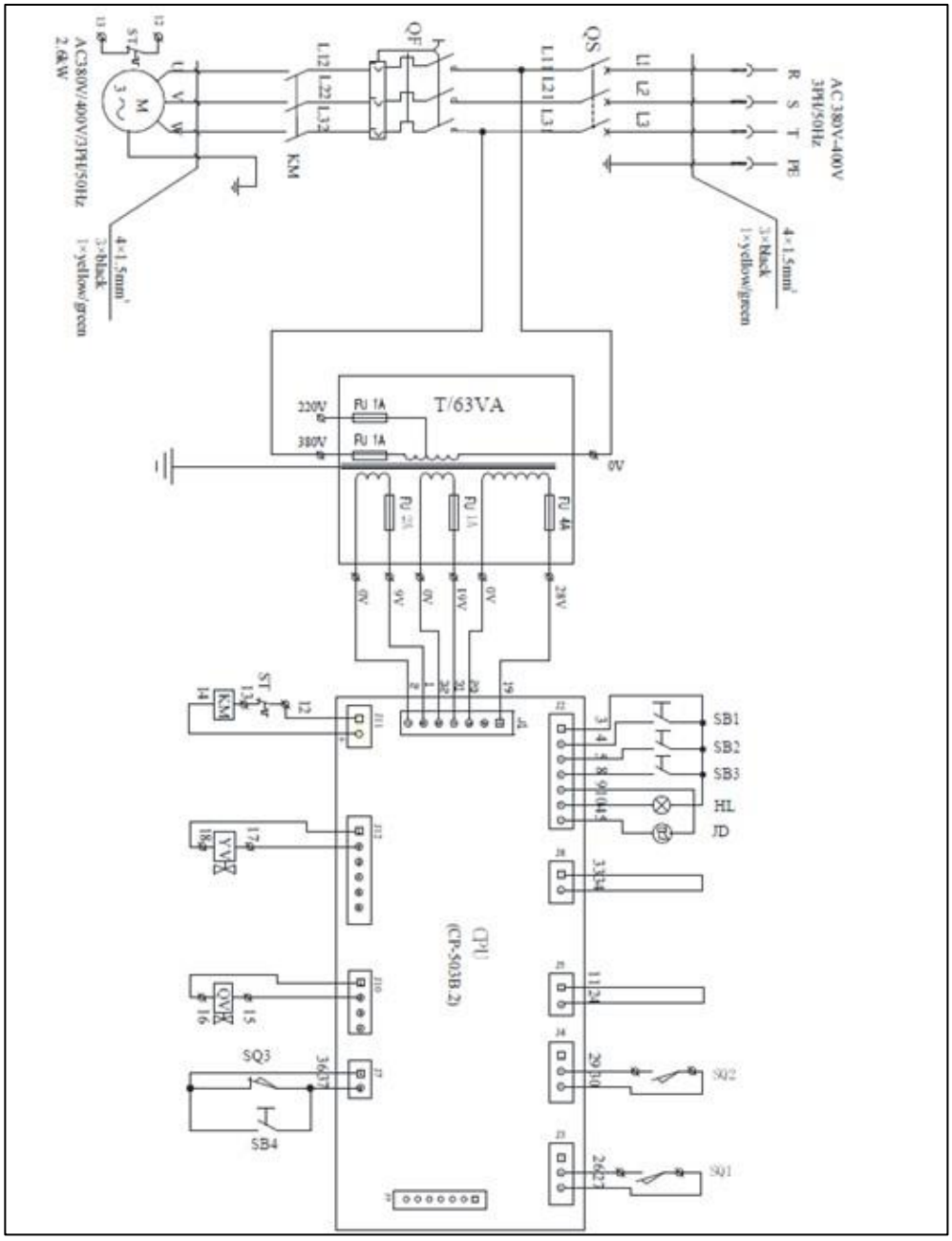
Every 3 months: visually check all parts and replace defective parts

Every 3 years: Replace the hydraulic oil and clean the filter screen

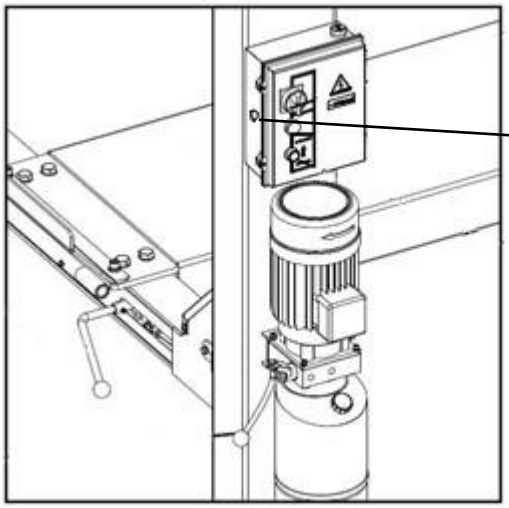
After 5 years of operation, we recommend replacing the hydraulic hose and the balancing cables that ensure the synchronization of the rails.

7 Circuit diagrams

7.1 Circuit diagram

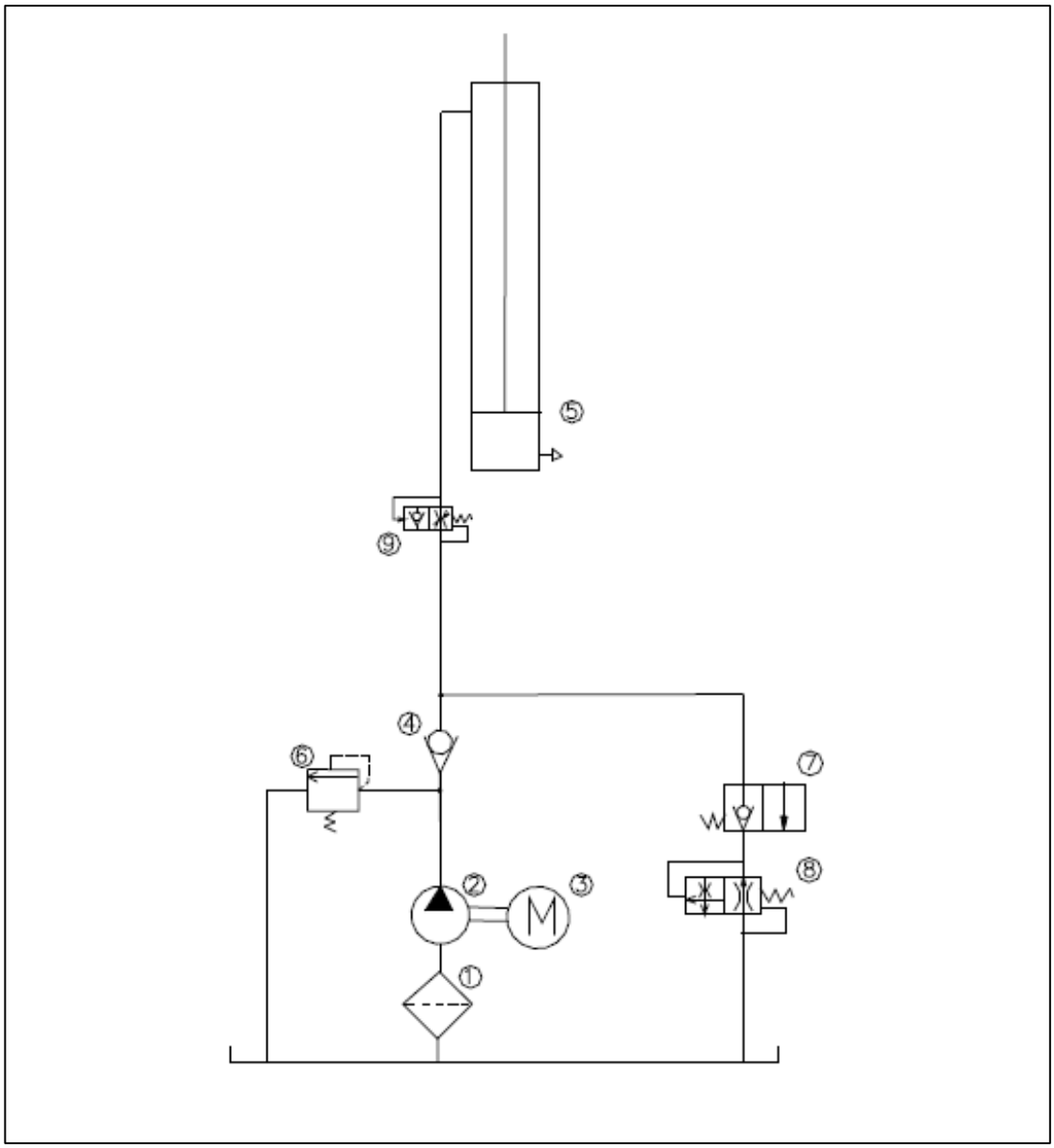


Legend			
QA	Circuit breaker	**SB4**	Cable slackness bypass button
QF	Main switch	**SQ1**	Upper limit switch
KM	Motor contactor	**SQ2**	CE stop switch
M	Motor	**SQ3**	Slack rope safety switch
ST	Temperature switch	**YV**	Electromagnetic lowering valve
T	Transformer	**QV**	Electromagnetic air valve
SB1	LIFT" button	**HL**	Indicator light
SB2	Lower" button	**JD**	Acoustic signal transmitter
SB3	PARK" button		



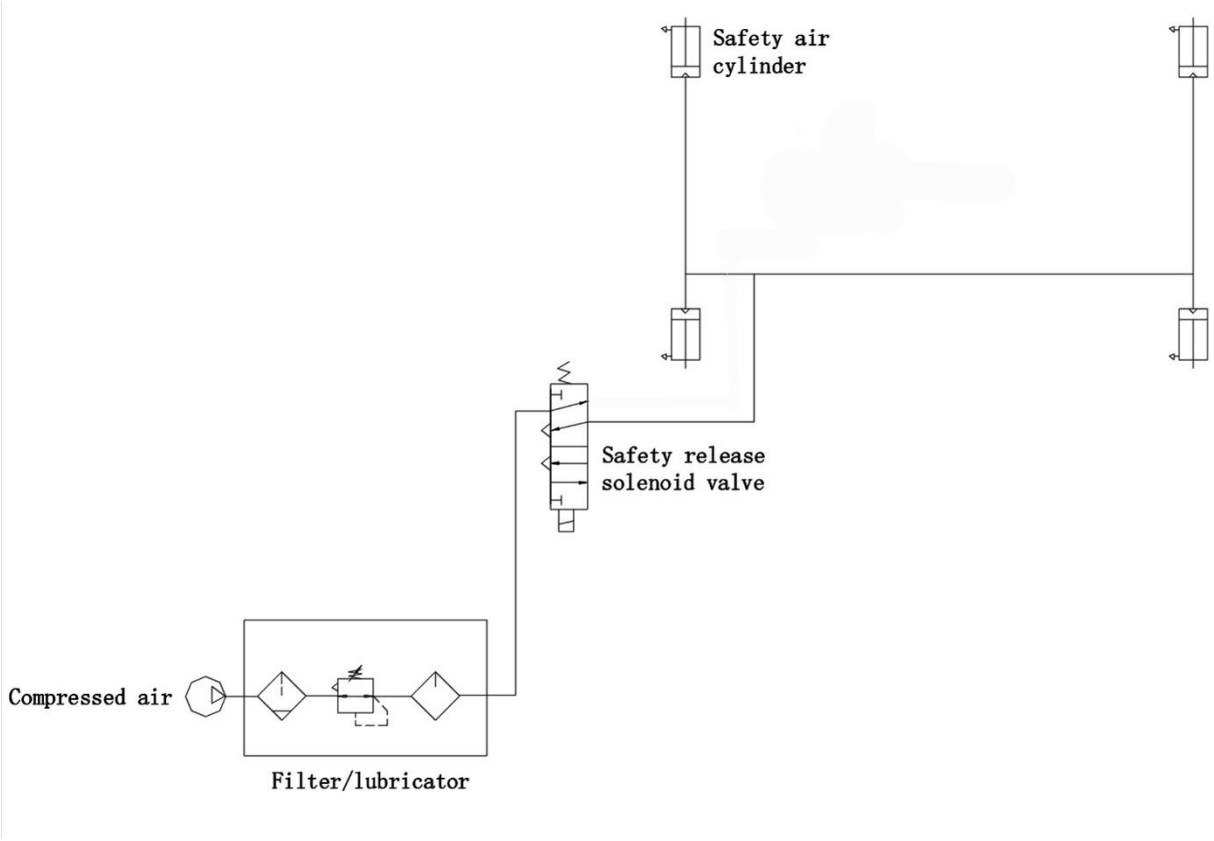
Cable slack bridging button SB4

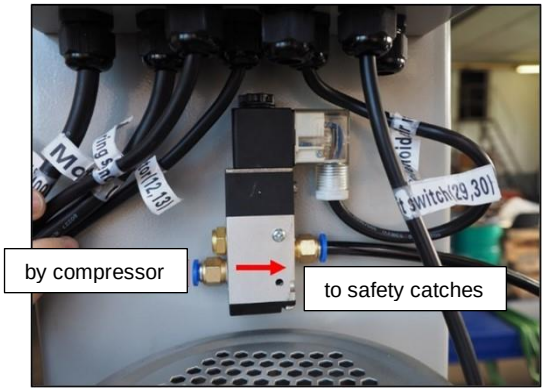
7.2 Hydraulic circuit diagram

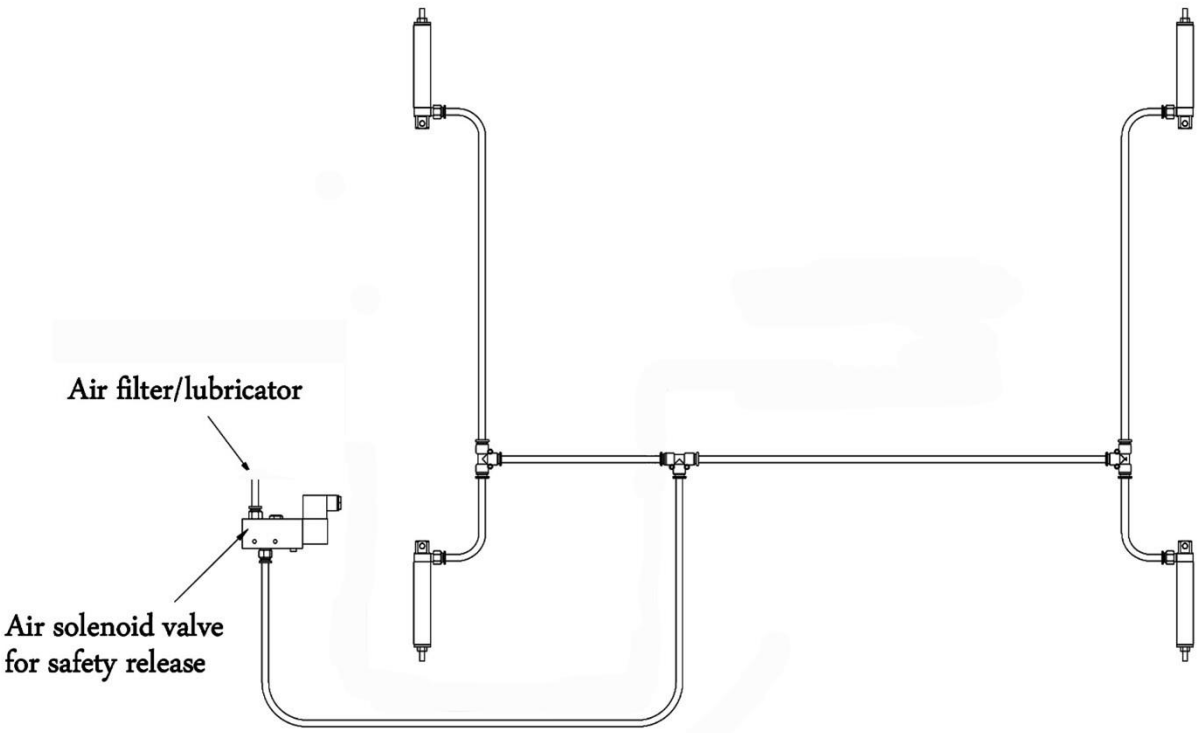


1	Oil strainer / oil filter
2	Hydraulic pump
3	Electric motor for hydraulic pump
4	Non-return valve
5	Hydraulic cylinder (operating direction TRAIN)
6	Safety / pressure relief valve
7	Electromechanical lowering valve with emergency
8	Automatic lowering speed control valve
9	Restrictor / throttle valve

7.3 Pneumatic plan






Air filter/lubricator
Air solenoid valve
for safety release

8 Behavior in the event of a malfunction

Motor does not work

- Check the electrical power supply including the circuit breakers
- Furthermore, that all cables are firmly connected
- Check "top" limit switch.

Motor is working, the lift does not lift

- The maximum permissible lifting load has been exceeded
- The condition of the oil filter in the tank must also be checked (if it is very clogged, wash out the filter and check the permeability of all connections in the hydraulic system).
- The overpressure safety valve is incorrectly set or permanently open.
- The lowering valve is dirty and does not allow pressure to build up.
- Check hydraulic oil level, may be too low.

The vehicle lift cannot be lowered

- Check whether there are any objects under the vehicle or the lifting platform.
- Check that the mechanical safety catches are unlocked.

Other faults

- In the event of jerky movements of the lift, check the balancing cable tension.
- Check that the sliding surfaces in the lifting columns are properly lubricated.

Examination

Each vehicle lift was subjected to a static and dynamic test as well as an electrical test in accordance with the specifications of the applicable European standards.

The user must regularly check the lift in accordance with the regulations applicable in the country of use.

Test book

for

Weaver

Four-post lift
Model: Autolift 4.2

Version 1.0

Status: January 2018

www.weber-werke.de
Weber GmbH
Sülzbach 1
D-37293 Herleshausen
Phone: +49 (0) 5654 / 343
Fax: +49 (0) 5654 / 794
info@Weber-Werke.de

Initial commissioning by an expert

The lift type **Weber Profi 4.2A**, year of manufacture_____, serial no._____

was tested for operational readiness at _____.

The following focal points were reviewed:

- Proper attachment of the lifting platform with heavy-duty anchors.
  (according to the operator, the workshop floor fulfils the foundation properties according to the operating instructions)

- Complete assembly of all add-on parts such as support arms, rubber discs, covers, etc.

- Check the direction of rotation of the electrical connection provided by the customer
  (according to the operator, the connection complies with VDE and EVU regulations)

- Inspection and explanation of the safety equipment
  - Function of the safety catches
  - Function of the support arm lock
  - Function of the emergency shutdowns

- Inspection and explanation of maintenance equipment
  - Smooth running and lubrication of moving parts
  - Adjustment of chains, belts, control cables and belts

- Multiple test runs with intermediate stops up to the end positions - without load
  (synchronised operation, limit switching, restart)

- Multiple test runs with intermediate stops up to the end position - with load
  (synchronised operation, limit switching, restart)

The operating personnel were given detailed instructions.

Please note that damage and malfunctions caused by non-compliance with maintenance and adjustment work (in accordance with the operating instructions and briefing), faulty electrical connections (rotating field, rated voltage, fuse protection) or improper use (overloading, outdoor installation, technical modifications) are excluded from the warranty!

_____ _____

Place, date Fitter / expert

_____

Customer / Operator

Protocol / Regular safety check

Installation site

_____

_____

_____

Lifting platform

Type / Model: **Weber Autolift 4.2**

Year built: _____

Ser.-Nr.: _____

Test step	**OK**	**deficiency**	**Review**	**Remark**
Quick guide to operation	□	□	□	_____
Warning sign	□	□	□	_____
Operating instructions	□	□	□	_____
Lockable main switch	□	□	□	_____
Labelling lifting - lowering	□	□	□	_____
Electrical cable status	□	□	□	_____
Direction of rotation of the motor	□	□	□	_____
Limit switch top - bottom	□	□	□	_____
Control cable or chain function	□	□	□	_____
Condition of column, support arms and support disc	□	□	□	_____
Condition of support nut	□	□	□	_____
Support arm locking function	□	□	□	_____
Status hydraulics - elements	□	□	□	_____
Fill level and tightness	□	□	□	_____
Tightening torques of load-bearing screws	□	□	□	_____
Tightening torques for bolt anchors	□	□	□	_____
Condition of concrete floor (cracks)[1]	□	□	□	_____
Test run with motor vehicle	□	□	□	_____
_____	□	□	□	_____
_____	□	□	□	_____
_____	□	□	□	_____

(Tick as appropriate. If verification is required, please tick additionally)
1) The operator certifies that the floor meets the requirements according to the operating instructions

Test performed

_____
Place, date, name of the expert

_____
Company stamp/signature of expert

Acknowledgement of the defects → → →

_____
Signature of customer/operato

Protocol / Regular safety check

Installation site

_____

_____

_____

Lifting platform

Type / Model: **Weber Autolift 4.2**

Year built: _____

Ser.-Nr.: _____

Test step	**OK**	**deficiency**	**Review**	**Remark**
Quick guide to operation	□	□	□	_____
Warning sign	□	□	□	_____
Operating instructions	□	□	□	_____
Lockable main switch	□	□	□	_____
Labelling lifting - lowering	□	□	□	_____
Electrical cable status	□	□	□	_____
Direction of rotation of the motor	□	□	□	_____
Limit switch top - bottom	□	□	□	_____
Control cable or chain function	□	□	□	_____
Condition of column, support arms and support disc	□	□	□	_____
Condition of support nut	□	□	□	_____
Support arm locking function	□	□	□	_____
Status hydraulics - elements	□	□	□	_____
Fill level and tightness	□	□	□	_____
Tightening torques of load-bearing screws	□	□	□	_____
Tightening torques for bolt anchors	□	□	□	_____
Condition of concrete floor (cracks)[1]	□	□	□	_____
Test run with motor vehicle	□	□	□	_____
_____	□	□	□	_____
_____	□	□	□	_____
_____	□	□	□	_____

(Tick as appropriate. If verification is required, please tick additionally)
1) The operator certifies that the floor meets the requirements according to the operating instructions

Test performed

_____
Place, date, name of the expert

_____
Company stamp/signature of expert

Acknowledgement of the defects → → →

_____
Signature of customer/operato

Protocol / Regular safety check

Installation site

_____

_____

_____

Lifting platform

Type / Model: **Weber Autolift 4.2**

Year built: _____

Ser.-Nr.: _____

Test step	**OK**	**deficiency**	**Review**	**Remark**
Quick guide to operation	□	□	□	_____
Warning sign	□	□	□	_____
Operating instructions	□	□	□	_____
Lockable main switch	□	□	□	_____
Labelling lifting - lowering	□	□	□	_____
Electrical cable status	□	□	□	_____
Direction of rotation of the motor	□	□	□	_____
Limit switch top - bottom	□	□	□	_____
Control cable or chain function	□	□	□	_____
Condition of column, support arms and support disc	□	□	□	_____
Condition of support nut	□	□	□	_____
Support arm locking function	□	□	□	_____
Status hydraulics - elements	□	□	□	_____
Fill level and tightness	□	□	□	_____
Tightening torques of load-bearing screws	□	□	□	_____
Tightening torques for bolt anchors	□	□	□	_____
Condition of concrete floor (cracks)[1]	□	□	□	_____
Test run with motor vehicle	□	□	□	_____
_____	□	□	□	_____
_____	□	□	□	_____
_____	□	□	□	_____

(Tick as appropriate. If verification is required, please tick additionally)
1) The operator certifies that the floor meets the requirements according to the operating instructions

Test performed

_____
Place, date, name of the expert

_____
Company stamp/signature of expert

Acknowledgement of the defects → → →

_____
Signature of customer/operato

Protocol / Regular safety check

Installation site

_____

_____

_____

Lifting platform

Type / Model: **Weber Autolift 4.2**

Year built: _____

Ser.-Nr.: _____

Test step	**OK**	**deficiency**	**Review**	**Remark**
Quick guide to operation	□	□	□	_____
Warning sign	□	□	□	_____
Operating instructions	□	□	□	_____
Lockable main switch	□	□	□	_____
Labelling lifting - lowering	□	□	□	_____
Electrical cable status	□	□	□	_____
Direction of rotation of the motor	□	□	□	_____
Limit switch top - bottom	□	□	□	_____
Control cable or chain function	□	□	□	_____
Condition of column, support arms and support disc	□	□	□	_____
Condition of support nut	□	□	□	_____
Support arm locking function	□	□	□	_____
Status hydraulics - elements	□	□	□	_____
Fill level and tightness	□	□	□	_____
Tightening torques of load-bearing screws	□	□	□	_____
Tightening torques for bolt anchors	□	□	□	_____
Condition of concrete floor (cracks)[1]	□	□	□	_____
Test run with motor vehicle	□	□	□	_____
_____	□	□	□	_____
_____	□	□	□	_____
_____	□	□	□	_____

(Tick as appropriate. If verification is required, please tick additionally)
1) The operator certifies that the floor meets the requirements according to the operating instructions

Test performed

_____
Place, date, name of the expert

_____
Company stamp/signature of expert

Acknowledgement of the defects → → →

_____
Signature of customer/operato

Protocol / Regular safety check

Installation site

_____

_____

_____

Lifting platform

Type / Model: **Weber Autolift 4.2**

Year built: _____

Ser.-Nr.: _____

Test step	**OK**	**deficiency**	**Review**	**Remark**
Quick guide to operation	□	□	□	_____
Warning sign	□	□	□	_____
Operating instructions	□	□	□	_____
Lockable main switch	□	□	□	_____
Labelling lifting - lowering	□	□	□	_____
Electrical cable status	□	□	□	_____
Direction of rotation of the motor	□	□	□	_____
Limit switch top - bottom	□	□	□	_____
Control cable or chain function	□	□	□	_____
Condition of column, support arms and support disc	□	□	□	_____
Condition of support nut	□	□	□	_____
Support arm locking function	□	□	□	_____
Status hydraulics - elements	□	□	□	_____
Fill level and tightness	□	□	□	_____
Tightening torques of load-bearing screws	□	□	□	_____
Tightening torques for bolt anchors	□	□	□	_____
Condition of concrete floor (cracks)[1]	□	□	□	_____
Test run with motor vehicle	□	□	□	_____
_____	□	□	□	_____
_____	□	□	□	_____
_____	□	□	□	_____

(Tick as appropriate. If verification is required, please tick additionally)
1) The operator certifies that the floor meets the requirements according to the operating instructions

Test performed

_____
Place, date, name of the expert

_____
Company stamp/signature of expert

Acknowledgement of the defects → → →

_____
Signature of customer/operato

Protocol / Regular safety check

Installation site

_____

_____

_____

Lifting platform

Type / Model: **Weber Autolift 4.2**

Year built: _____

Ser.-Nr.: _____

Test step	**OK**	**deficiency**	**Review**	**Remark**
Quick guide to operation	□	□	□	_____
Warning sign	□	□	□	_____
Operating instructions	□	□	□	_____
Lockable main switch	□	□	□	_____
Labelling lifting - lowering	□	□	□	_____
Electrical cable status	□	□	□	_____
Direction of rotation of the motor	□	□	□	_____
Limit switch top - bottom	□	□	□	_____
Control cable or chain function	□	□	□	_____
Condition of column, support arms and support disc	□	□	□	_____
Condition of support nut	□	□	□	_____
Support arm locking function	□	□	□	_____
Status hydraulics - elements	□	□	□	_____
Fill level and tightness	□	□	□	_____
Tightening torques of load-bearing screws	□	□	□	_____
Tightening torques for bolt anchors	□	□	□	_____
Condition of concrete floor (cracks)[1]	□	□	□	_____
Test run with motor vehicle	□	□	□	_____
_____	□	□	□	_____
_____	□	□	□	_____
_____	□	□	□	_____

(Tick as appropriate. If verification is required, please tick additionally)
1) The operator certifies that the floor meets the requirements according to the operating instructions

Test performed

_____
Place, date, name of the expert

_____
Company stamp/signature of expert

Acknowledgement of the defects → → →

_____
Signature of customer/operat

Protocol / Regular safety check

Installation site

_____

_____

_____

Lifting platform

Type / Model: **Weber Autolift 4.2**

Year built: _____

Ser.-Nr.: _____

Test step	**OK**	**deficiency**	**Review**	**Remark**
Quick guide to operation	□	□	□	_____
Warning sign	□	□	□	_____
Operating instructions	□	□	□	_____
Lockable main switch	□	□	□	_____
Labelling lifting - lowering	□	□	□	_____
Electrical cable status	□	□	□	_____
Direction of rotation of the motor	□	□	□	_____
Limit switch top - bottom	□	□	□	_____
Control cable or chain function	□	□	□	_____
Condition of column, support arms and support disc	□	□	□	_____
Condition of support nut	□	□	□	_____
Support arm locking function	□	□	□	_____
Status hydraulics - elements	□	□	□	_____
Fill level and tightness	□	□	□	_____
Tightening torques of load-bearing screws	□	□	□	_____
Tightening torques for bolt anchors	□	□	□	_____
Condition of concrete floor (cracks)[1]	□	□	□	_____
Test run with motor vehicle	□	□	□	_____
_____	□	□	□	_____
_____	□	□	□	_____
_____	□	□	□	_____

(Tick as appropriate. If verification is required, please tick additionally)
1) The operator certifies that the floor meets the requirements according to the operating instructions

Test performed

_____
Place, date, name of the expert

_____
Company stamp/signature of expert

Acknowledgement of the defects → → →

_____
Signature of customer/operato