



**MOTORCYCLE LIFT**  
**TWM-02**  
(Lifting capacity: 500 kg)

# **TWM02**

## **INSTALLATION, OPERATION AND MAINTENANCE MANUAL**



*Always read these operating instructions carefully before operating the lift. Follow the instructions carefully.*

**Table of contents**

- 1. General information.....1**
- 2. Identification of the instructions for use .....1**
- 3. Technical data .....1**
- 4. Modification of the product.....1**
- 5. Safety-related information .....2**
  - 5.1 Symbols .....2
  - 5.2 Safety instructions.....2
  - 5.3 Warnings and symbols .....3
- 6. Conformity with the product .....4**
- 7. Technical specification.....4**
  - 7.1 Machine description .....4
- 8. Assembly of the lifting platform.....5**
  - 8.1 Checklist (packing list):.....5
  - 8.2 Ground conditions .....5
  - 8.3 Assembly instructions.....5
  - 8.4 Checkpoints according to the structure.....6
- 9. Commissioning.....7**
  - 9.1 Safety precautions.....7
  - 9.2 Description of the control unit.....7
- 10.Troubleshooting .....9**
- 11.Maintenance..... 10**
  - 11.1 Daily inspection and maintenance of the lifting platform elements before use .....10
  - 11.2 Weekly inspection and maintenance of the lifting platform elements .....10
  - 11.3 Monthly inspection and maintenance of the lifting platform .....10
  - 11.4 Annual inspection and maintenance of the lifting platform elements.....10
- 12.Behaviour in the event of a malfunction ..... 11**
- 13.Appendix ..... 11**
  - 13.1 Packing list .....11
  - 13.2 Dimensions of the lift .....12
  - 13.3 Foundation requirements and working area .....12
  - 13.4 Pneumatic plan .....13
  - 13.5 Circuit diagrams .....14
  - 13.6 Detailed drawing and parts description of the lift .....15



**Further attachment:**

- **EU Declaration of Conformity**

**Important information:**

**ASSEMBLY**



You can find the assembly video for this lift on YouTube:

<https://www.youtube.com/watch?v=qGnyPqr8oUI>

or scan the QR code.



**PRODUCT PRESENTATION**



You can find the product presentation video for this lift on YouTube:

<https://www.youtube.com/watch?v=kzDfI9FLEd4>

or scan the QR code.







## TIPS & TRICKS



In the "Tips & Tricks" section, we show you simple solutions, in videos to make your TWIN BUSCH® products even more efficient to work. Our technical specialist will explain the exact steps to you.

[Tips & Tricks - Tips & Tricks \(twinbusch.co.uk\)](https://twinbusch.co.uk)

## 24/7 Service Centre:



Our **24/7 Self-Service Centre** is a mobile website for self-diagnosis of problems with your Twin Busch lift, tyre changer or balancer. Here we offer you an extensive collection of videos covering a wide range of topics relevant to your Twin Busch product, from fine adjustment to maintenance and component replacement.

The **24/7 Self-Service Centre** is a versatile tool that helps you learn how to maintain and repair your Twin Busch lift, tyre changer or balancer yourself.

To open the page on your mobile device, please visit [twinbusch.com/qr](https://twinbusch.com/qr) or scan the QR code opposite.

For Twin Busch lifts delivered from mid-2020, you will also find the QR code on a sticker on the control box.

## 1. General information

With the **TWM-02** motorbike lift, you have an extremely solid hydraulic scissor lift for motorbikes (also for large machines such as choppers, tourers, etc.) and scooters weighing up to 500 kg. A powerful electric motor ensures comfortable lifting and lowering of your two-wheelers.

## 2. Identification of the instructions for use

Instruction manual **TWM-02**

of Twin Busch GmbH,  
Ampèrestraße 1,  
D-64625 Bensheim

Twin Busch UK Ltd.  
9, Linnell Way  
Telford Way Industrial Estate  
NN16 8PS, Kettering (Northants)

Phone: +49 6251-70585-0  
Telefax: +49 6251-70585-29  
Internet: [www.twinbusch.de](http://www.twinbusch.de)  
Email: [info@twinbusch.de](mailto:info@twinbusch.de)

Phone: +44 (0) 1536 522 960  
Internet: [www.twinbusch.co.uk](http://www.twinbusch.co.uk)  
Email: [info@twinbusch.co.uk](mailto:info@twinbusch.co.uk)

Status: -02, 02.07.24

File: TWM-02\_Motorcycle\_lift\_manual\_uk\_02\_20240702.pdf

## 3. Technical data

Power supply	230 V
Protection	16A (C/sluggish)
Load capacity CE	500 kg
Lifting height max.	1200 mm
Lifting and lowering time	approx. 30 sec
Platform length	2480 mm
Platform length (incl. access ramp)	3810 mm
Platform width	715 mm
Drive power	0.75 kW
Tare weight	285 kg

## 4. Modification of the product

Improper use, modifications, conversions and attachments of the motorbike lift and all its components that have not been agreed with the manufacturer are not permitted. The manufacturer accepts no liability for improper installation, operation or overloading. Improper use also invalidates the CE certification and the validity of the certificate.

If you require any changes, please contact your dealer or the expert staff at Twin Busch GmbH beforehand.

## 5. Safety-related information

Read the operating instructions carefully before operating the lift. Keep the instructions in a safe place for future reference. Follow the instructions carefully to achieve the best performance from the machine and to avoid damage due to personal negligence.

Unpack all parts and use the packing list to check that all components are present.

Check all connections and components thoroughly for damage. The lift may only be put into operation if it is in a safe operating condition.

### 5.1 Symbols



**Warning of danger spots**



**Warning of dangerous electrical voltage**



**Important instructions, non-compliance may result in damage to the test stand**



**Warning of crushing hazard**



**Important information**

### 5.2 Safety instructions

- Installation only permitted on smooth and solid surfaces with a compressive strength of more than 3 kg/mm<sup>2</sup>.
- Read and understand the operating instructions and safety instructions before operating the motorbike lift.
- **Pay particular attention to the authorised maximum load capacity of 500 kg.** Never attempt to lift vehicles that exceed the maximum permitted load with this lift.
- The vehicle must always be secured with safety straps before it is lifted.
- Do not leave the control unit under any circumstances when the lift is in motion.
- Keep hands and feet away from moving parts. Pay particular attention to your feet when lowering.
- The lifting platform may only be operated by trained personnel.
- Wear suitable work clothing.
- The area around the lifting platform must always be kept free of obstructions. The area around the lifting

platform must be tidy and clean.

- Always ensure that all safety precautions have been taken before working in the vicinity of the lift.
- Never remove safety-relevant components from the lift. Never use the lift under any circumstances if safety-relevant components are missing or damaged.
- Always check that the lift is in perfect condition before putting it into operation to ensure its performance.
- Ensure regular maintenance. If any irregularities occur, stop using the lift and contact your dealer or Twin Busch GmbH.
- Lower the lift completely when it is not in use. Do not forget to disconnect the power supply.
- **Ensure that the air pressure in the system remains constant, otherwise the clamping force of the front wheel clamp may be reduced and the function impaired.**

### 5.3 Warnings and symbols

All warnings are clearly visible on the lift to ensure that the user uses the device in a safe and appropriate manner.

The warning signs must be kept clean and replaced if they are damaged or missing. Please read the signs carefully and memorise their meaning for future use.



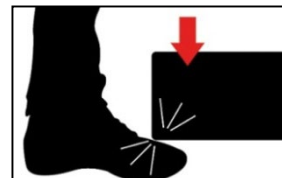
Read Instructions and safety instructions carefully before use!



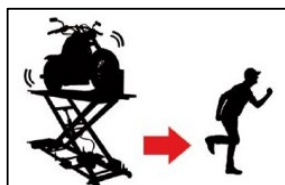
Operation of the lifting platform only by qualified personnel!



Repairs and maintenance only by qualified personnel, never disable safety devices!



Watch your feet when lowering!  
Danger of crushing!



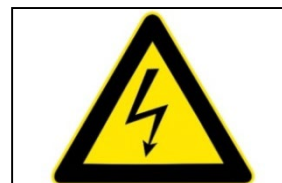
Always keep escape routes clear!



Risk of crushing when lifting or lowering!



The vehicle must be braced so that it is secured against falling over!



CAUTION!  
Electrical voltage!

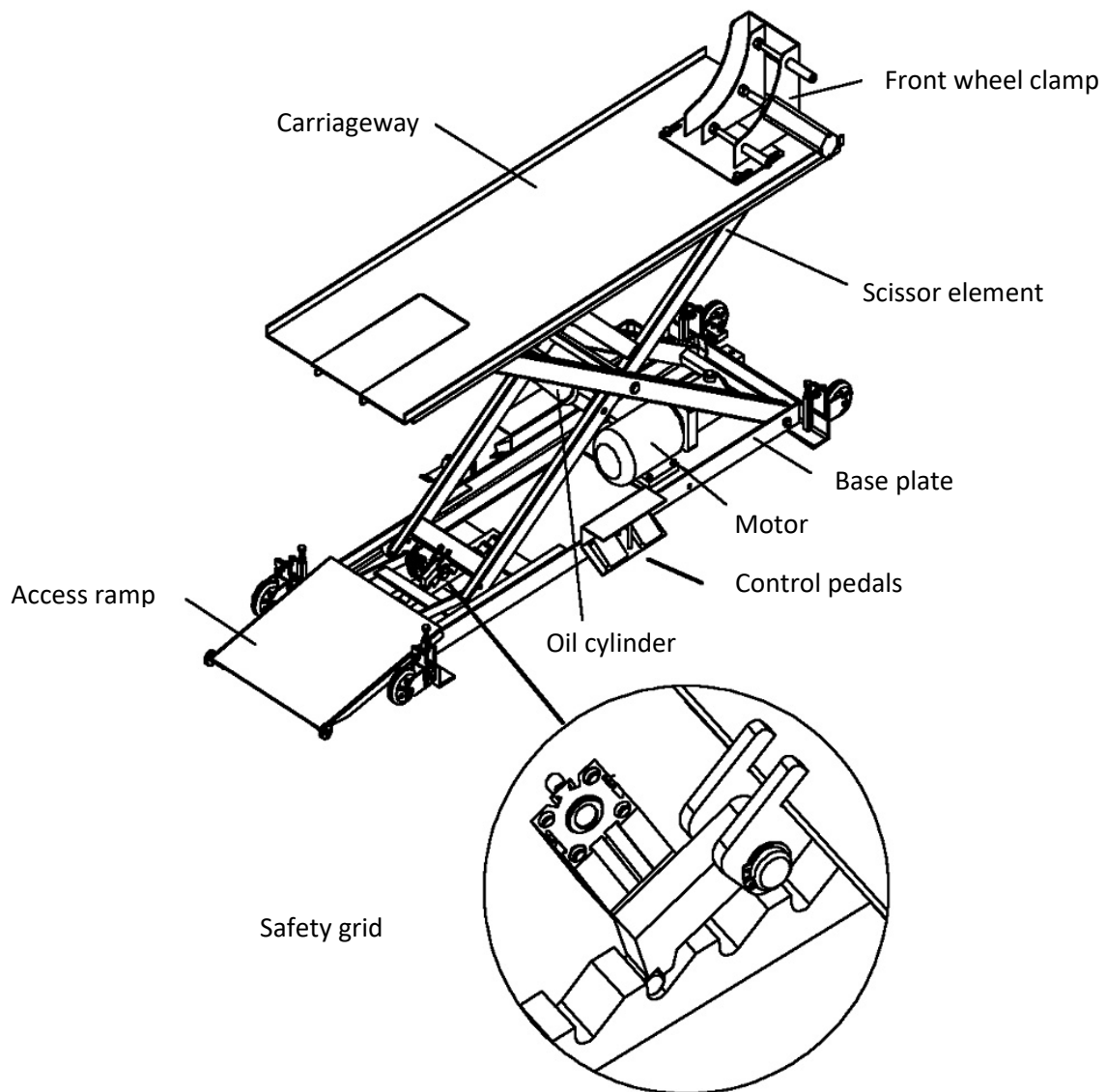


## 6. Conformity with the product

The TWM-02 motorbike hoist is CE-certified and complies with the Machinery Directive 2006/42/EC and fulfils the standards EN 1493:2022, EN 60204-1:2018, EN IEC 61000-6-2:2019, EN IEC 61000-6-4:2019, EN IEC 61000-3-2:2019+A1:2021 and EN 61000-3-3:2013+A2:2021 (see under: EU Declaration of Conformity, at the end of the instructions for use).

## 7. Technical specification

### 7.1 Machine description



## 8. Assembly of the lifting platform

### 8.1 Checklist (packing list)

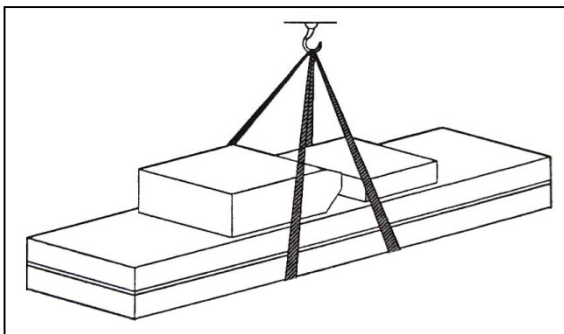
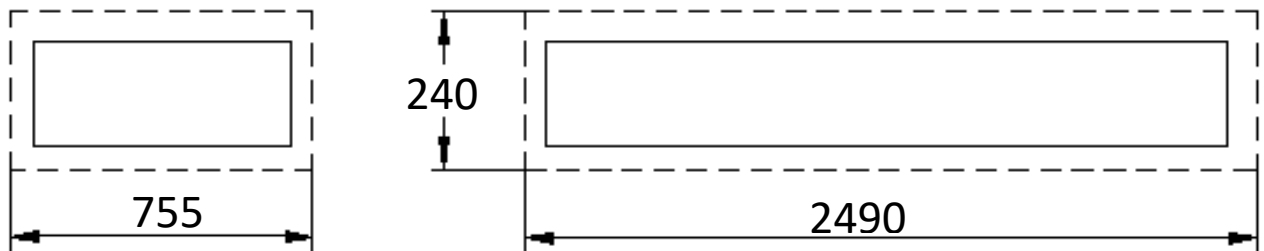
Unpack all components of the lift and check that all components are complete using the packing list (see appendix: Packing list).

### 8.2 Ground conditions

The lifting platform must be installed on a solid foundation with a compressive strength of more than 3 kg/mm<sup>2</sup>, a flatness of less than 5 mm and a minimum thickness of 100 mm. Detailed information can also be found in the corresponding foundation plan on our homepage at [www.twinbusch.de](http://www.twinbusch.de).

Note: If a new concrete floor is to be poured, it must cure for at least 28 days before a lifting platform can be installed.

### 8.3 Assembly instructions



- 1) Remove the packaging and take out the box containing the accessories. Read and understand the operating instructions before proceeding.
- 2) Remove the ramp and put it to one side.
- 3) To remove the platform from the pallet, extend the wheels. This allows the platform to be rolled off the pallet. Then retract the wheels so that the platform stands firmly on the floor again.
- 4) Connect the lifting platform and raise it to a comfortable working height.

- 5) Front wheel fixation  
Mount these. Depending on the length of your motorbike, you can screw the front wheel fixation in one of 3 different positions on the platform. Tighten the screws lightly and adjust the fixation to the desired length. The 4 bolts can then be tightened firmly.
  
- 6) Guide the two compressed air hoses through the hole provided in the carriageway and connect each hose to one of the T-pieces. Now lay the hoses inside the shaft under the carriageway.
  
- 7) Remove the pre-assembled screws for mounting the ramp. Insert them and screw them tight. Also screw on the retaining rings on both sides of the carriageway.
  
- 8) Finally, establish the connection to the compressed air.
  
- 9) Carry out a test run of the lift after the prescribed installation. Carry out the test run of the operating functions without a vehicle on the lift.
  - a. Test the function of the pneumatically operated wheel clamp
  - b. Test the function of the hydraulic lifting and lowering device

**Note:** If problems occur or the lift does not function properly, check all connections for faults again or contact your dealer or Twin Busch GmbH.

**8.4 Checkpoints according to the structure**

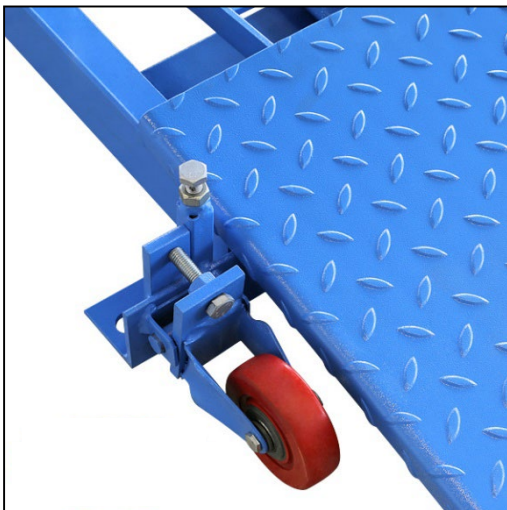
S/N	Check	YES	NO
1	Is the oil hose connected correctly?		
2	Are the electrical connections correct?		
3	Have all parts that need to be greased been greased?		

## 9. Commissioning

### 9.1 Safety precautions

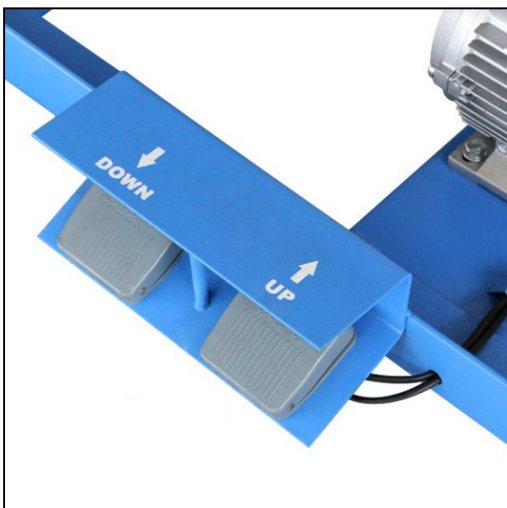
- a) If the safety devices are defective or show abnormalities, the lift must not be put into operation under any circumstances!
- b) Check that all connections of the hydraulic lines are tight and functional. If there are no leaks, the lifting process can be started.
- c) Only the operator should be in the vicinity of the lifting platform during a lifting or lowering operation. Always ensure that there are no persons in the danger zone.
- d) Ensure that the safety catches are engaged before starting work on or under a vehicle. No persons may be in the working area of the lifting platform during the lifting and lowering process.

### 9.2 Description of the control unit

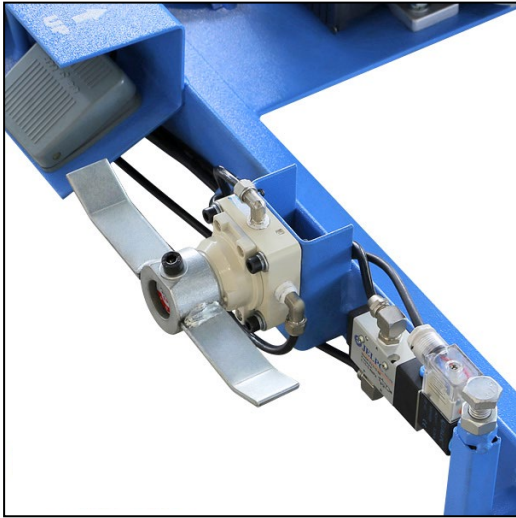


Before operating the lift, make sure that all wheels are adjusted so that they are no longer in contact with the ground.

Use the adjusting screw to adjust the wheels.



Use the foot pedals ("UP" and "DOWN") to control the lifting and lowering of the lifting platform.



The rocker switch is for controlling the front wheel clamp.



The front wheel lock can be controlled pneumatically.



The access ramp automatically moves out of the user's range of movement during the lifting process.



## 10. Troubleshooting

**Please note:** Do not hesitate to contact the expert staff at Twin Busch GmbH if you are unable to rectify a fault yourself. We will be happy to help you solve the problem. In this case, please document the fault and send us pictures and a precise description of the fault so that we can identify and rectify the cause as quickly as possible.

The following table lists possible errors, their cause and the associated troubleshooting for quicker identification and self-remedy.

PROBLEMS	CAUSE	SOLUTION
Unusual noise.	Wear on the inside of the pillars.	Grease the inside of the pillars.
	Contamination in the columns.	Remove the dirt.
The motor cannot be started, nor does the lift move up.	The cable connections are loose.	Check the cables and reconnect them.
	The motor is defective.	Replace it.
	The limit switch is defective/damaged or the cable connection is loose.	Reconnect the cables or replace the limit switch.
Motor runs, but does not raise the lift.	The motor is running backwards/in the wrong direction of rotation.	Check the cable connection.
	The pressure relief valve is loose or dirty.	Clean or screw it tight.
	The gear pump is defective.	Replace them.
	The oil level is too low.	Top up with oil.
	The oil hose has come loose or is torn off.	Fasten or replace it.
	The damping valve is loose or jammed/blocked.	Clean or fasten it.
Lifting too slowly.	The oil filter is dirty or jammed.	Clean or replace it.
	Oil level is too low.	Top up with oil.
	The pressure relief valve is installed incorrectly.	Mount it correctly.
	The hydraulic oil is too hot. (over 45°C)	Change the oil.
	The cylinder seal is worn.	Replace the seal.
Lowering too slowly.	The throttle valve is jammed/dirty.	Clean or replace it.
	The hydraulic oil is contaminated.	Change the oil.
	The drain valve is blocked.	Clean it.
	The oil hose is damaged/kinked.	Replace it.

## **11. Maintenance**

Regular maintenance of your lift will ensure a long and safe service life. Suggestions for maintenance intervals and the activities to be carried out are listed below. How often you service your lift depends on the ambient conditions, the degree of soiling and, of course, the stress and load on the lift.

### **11.1 Daily inspection and maintenance of the lifting platform elements before use**

A daily check of the safety-relevant components must be carried out before each start-up! This can save you a lot of time due to failure, major damage or even injury.

- Check that the oil hoses are attached and tight.
- Check the electrical connections. Ensure that all connections are in good condition.
- Check that the bolts and screws are tight.
- Check that the safety devices are working.

### **11.2 Weekly inspection and maintenance of the lifting platform elements**

- Check all moving parts.
- Check all safety functions.
- Check the hydraulic oil level by raising the lift.  
If the lift does not reach its maximum height, you should check the oil level.
- Check all screws, bolts and nuts and tighten if necessary.

### **11.3 Monthly inspection and maintenance of the lifting platform**

- Check all screws, bolts and nuts and tighten if necessary.
- Check that all moving parts are sufficiently lubricated. The entire construction should be inspected for any signs of wear; if any damage is discovered, you should repair it.

### **11.4 Annual inspection and maintenance of the lifting platform elements**

- Empty and clean the hydraulic oil tank and replace the hydraulic oil.
- Replace the oil filter.

**If you follow the above maintenance intervals and maintenance activities, your lift will remain in good condition and damage and accidents will continue to be avoided.**

## 12. Behaviour in the event of a malfunction

If the lift malfunctions, simple faults may be the cause. Use the following list for troubleshooting \*).

If the cause of the fault cannot be found, please contact the expert Twin Busch GmbH team.

***Never attempt to carry out repairs yourself, especially on safety equipment or electrical system components.***








\*) Points depending on the design and type of lift



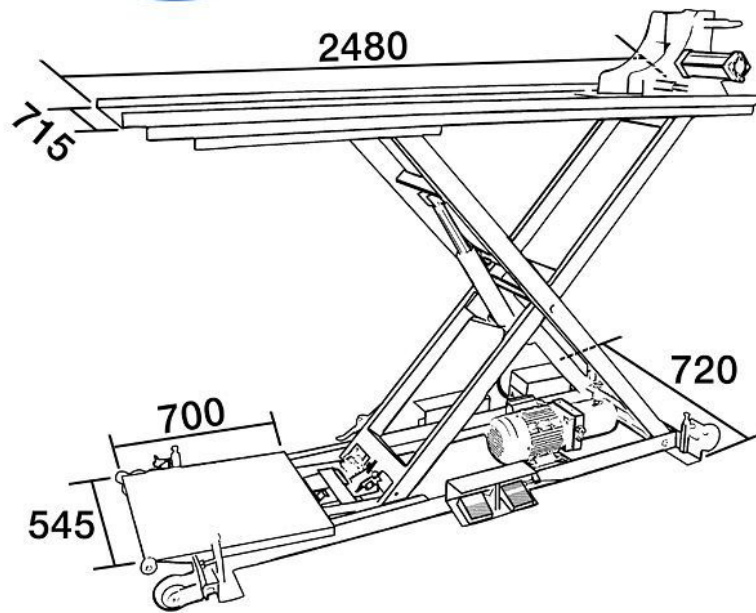
Work on electrical systems only by qualified electricians!

## 13. Appendix

### 13.1 Packing list

Name	Pic	Spec.	Qty
1. Pneumatic valve		φ6*4	1
2. T-piece		φ6*4	1
3. Air hose connection		φ6*4	1
4. Pedal switch		CFS-201 AC-15	1
5. Fuse		2A	2
6. Fuse		10A	2
7. Angle		φ6*4	1
8. Instructions			1

### 13.2 Dimensions of the lift



### 13.3 Foundation requirements and working area

#### Requirements for the concrete:

- Concrete C20/25 according to DIN 1045-2 (previous designation: DIN 1045 concrete B25).
- The floor must be level and have a flatness of less than 5 mm/m.
- Newly poured concrete must cure for at least 28 days.

#### Other requirements:

- The surrounding soil must be suitable for the load, e.g. no sandy soils, etc.
- Reinforcements in the concrete are not mandatory for proper use of the lift, but are recommended.
- If in doubt, the foundation should be determined and checked by a structural engineer.

#### The following must be observed for soil exposed to frost:

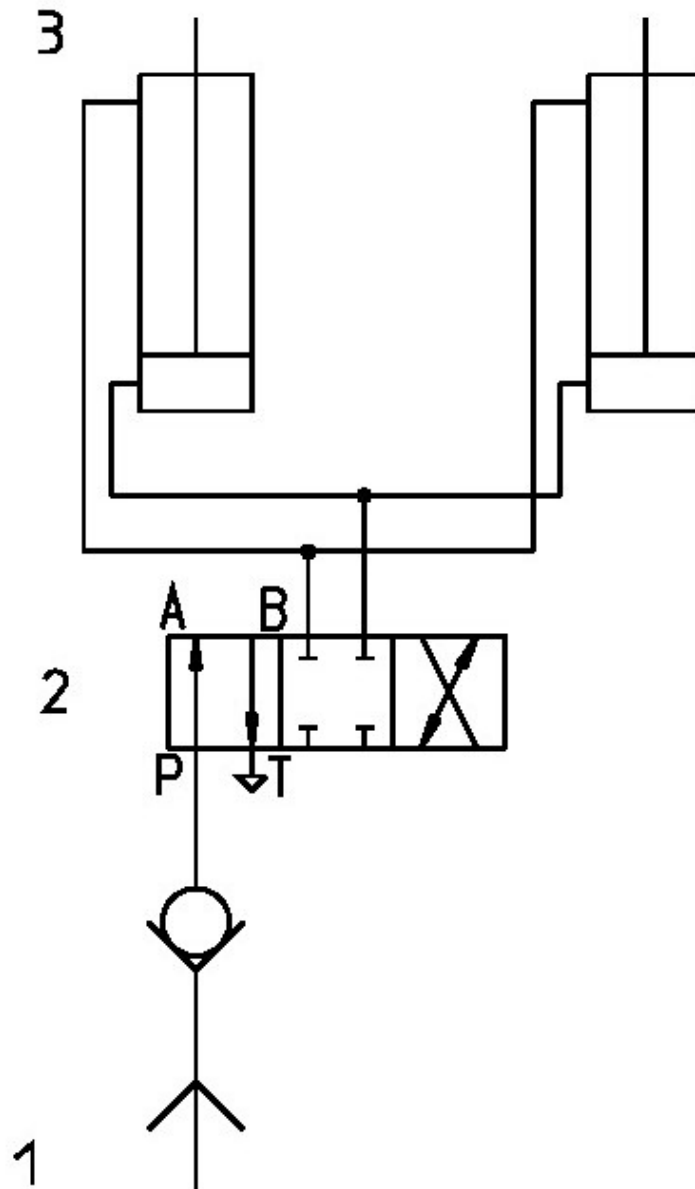
In the case of frost exposure, the concrete must correspond to exposure class XF4, as dripping de-icing agent cannot be ruled out.

This results in the following minimum requirements for concrete under frost stress:

Exposure class:	XF4
Maximum w/c:	0,45
Minimum compressive strength:	C30/37 (instead of C20/25)
Minimum cement content:	340 kg/m <sup>3</sup>
Minimum air void content:	4.0 %

However, it must be noted that the lifts are not designed for outdoor use. Although the control box complies with IP54, the rest of the electrics, motors and limit switches have a maximum IP44 rating.

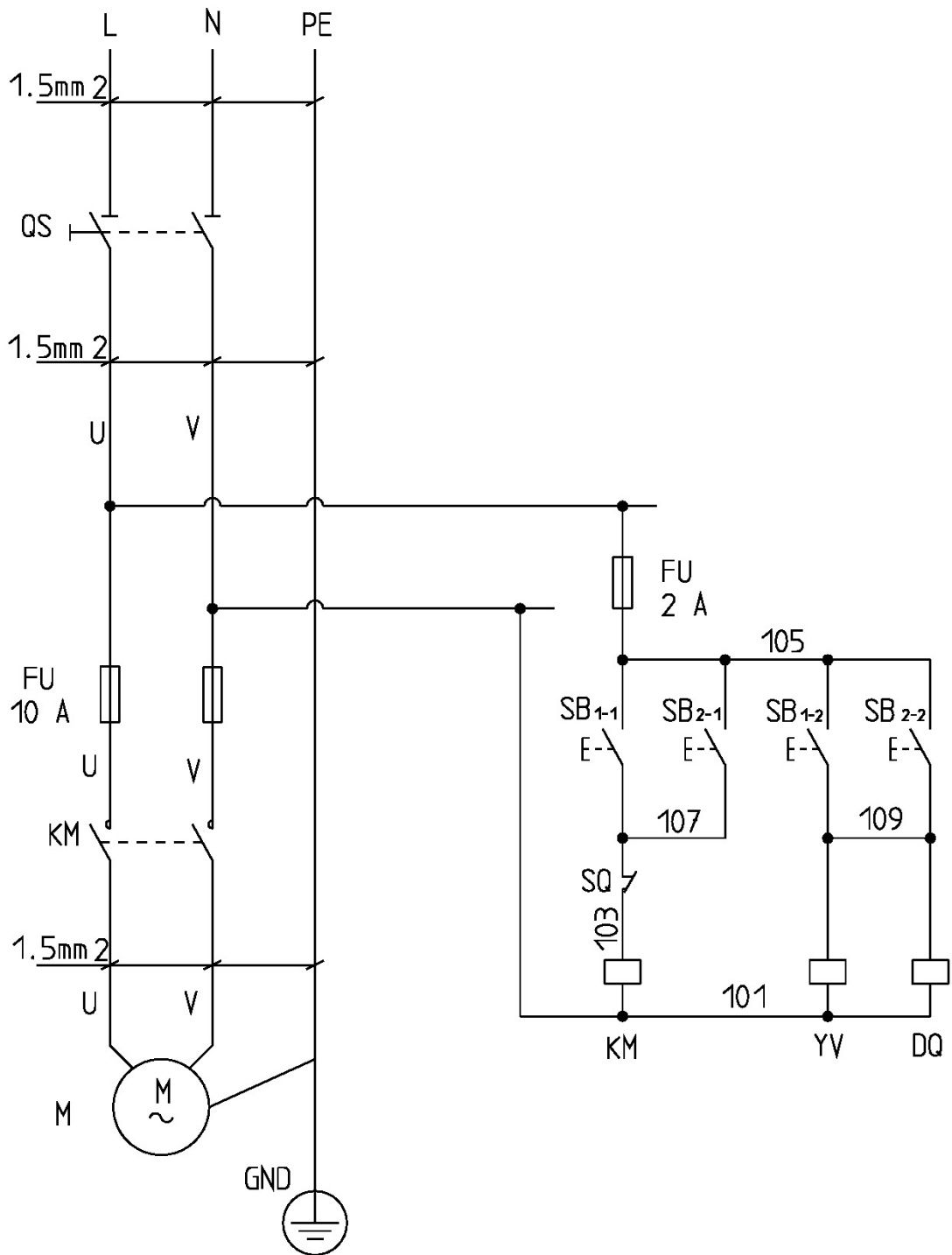
13.4 Pneumatic plan



- 1 Quick-release coupling, locking on one side
- 2 4/3 way valve
- 3 Pneumatic cylinders, double-acting



13.5 Circuit diagrams



SB foot pedal

DQ Pneumatic valve

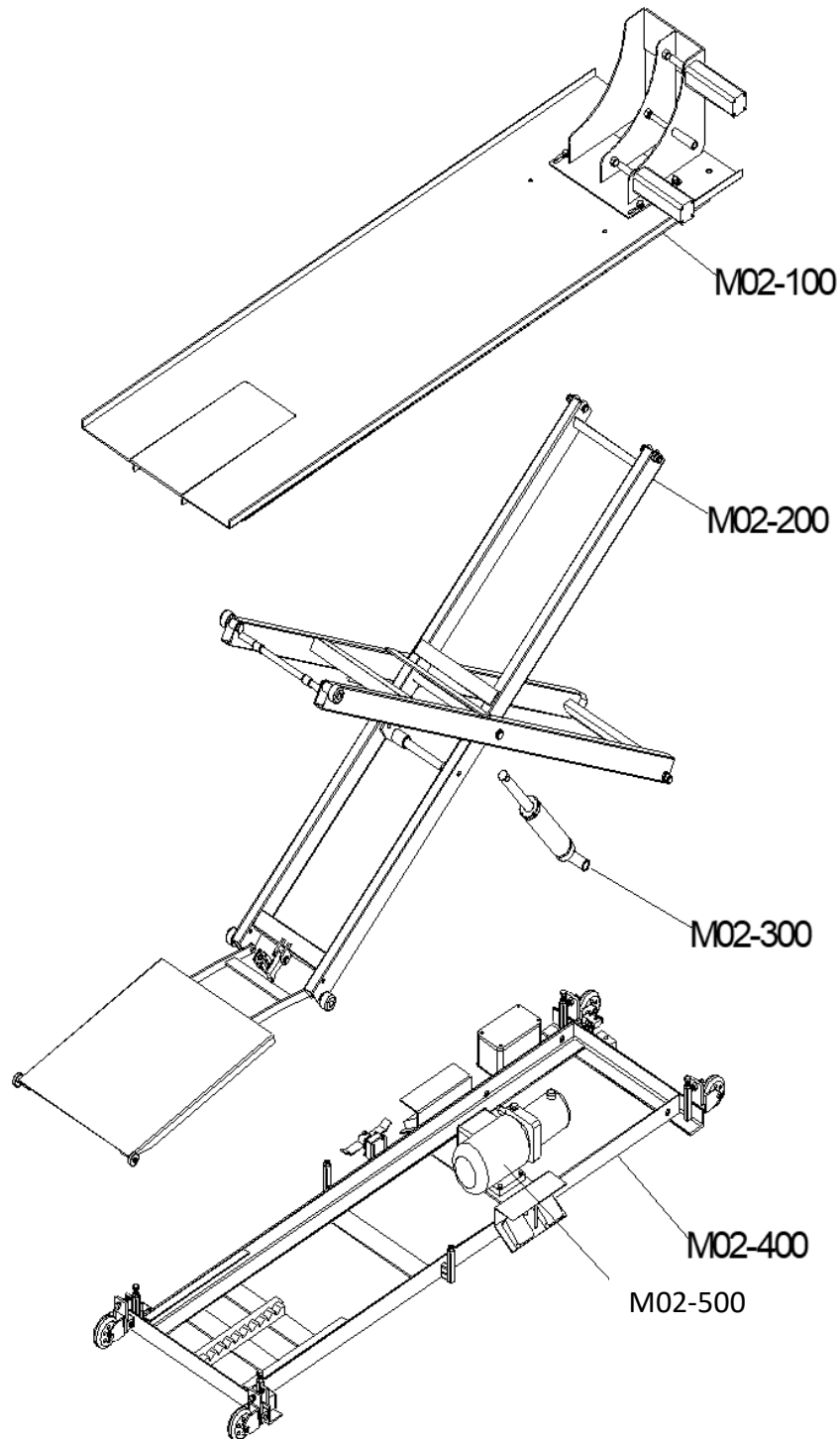
SQ limit switch

FU fuse

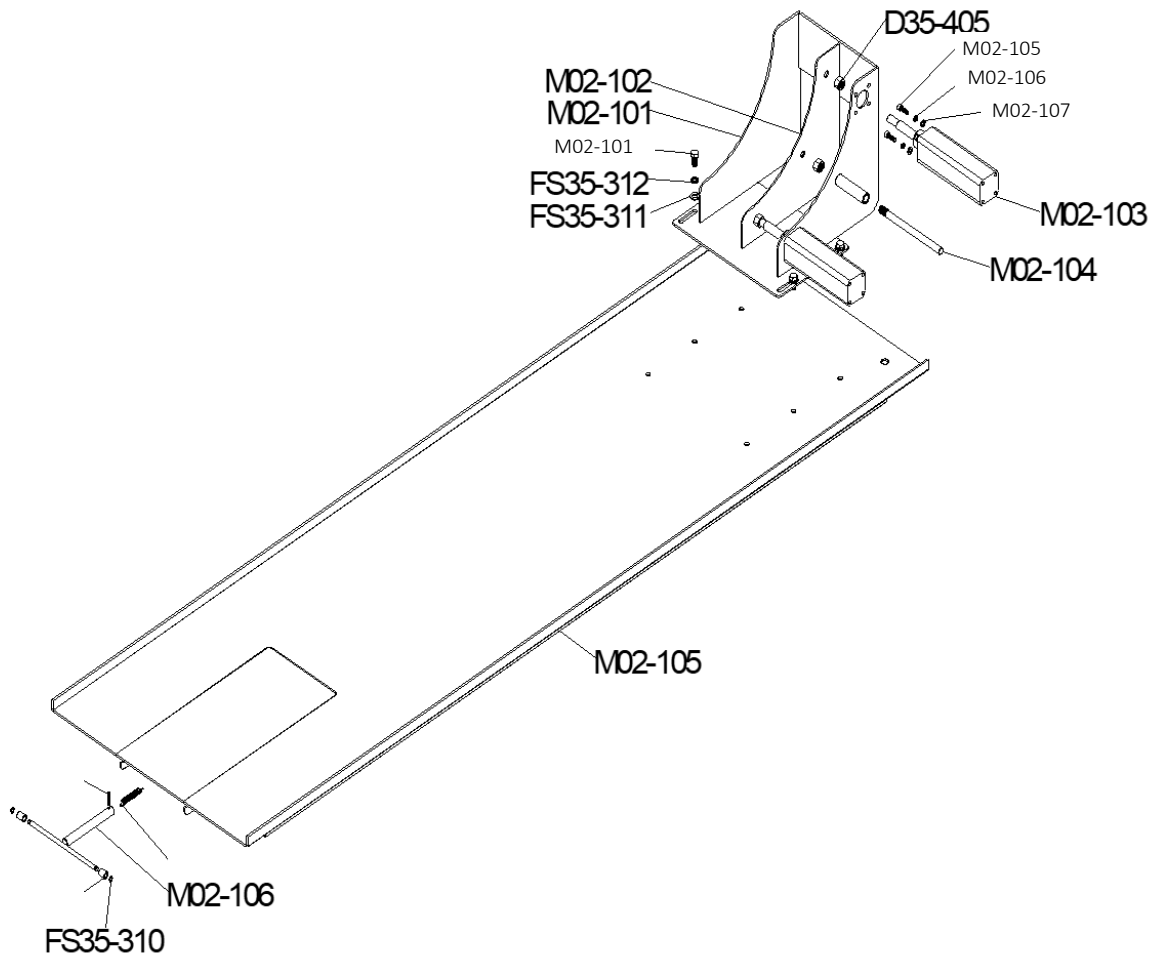
M Motor

KM motor contactor

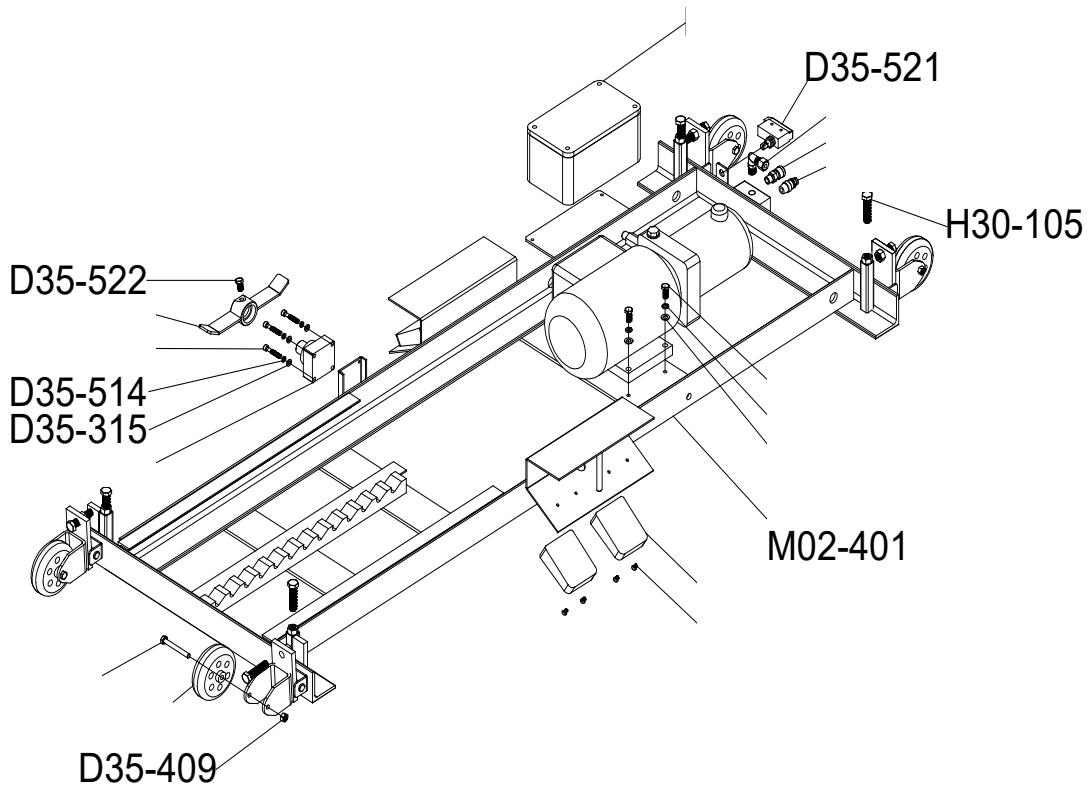
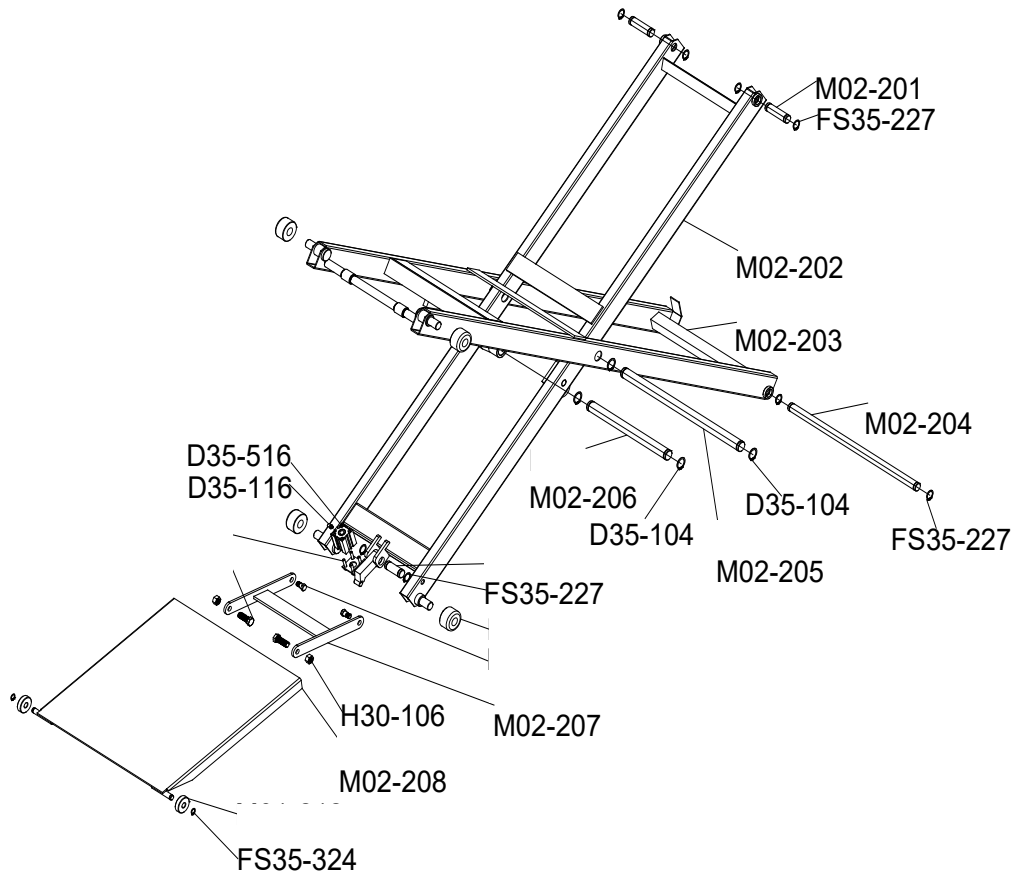
13.6 Detailed drawing and parts description of the lift



M02-100	Complete carriageway at the top
M02-200	Complete scissor system
M02-300	Oil cylinder complete
M02-400	Floor slab complete
M02-500	Motor unit



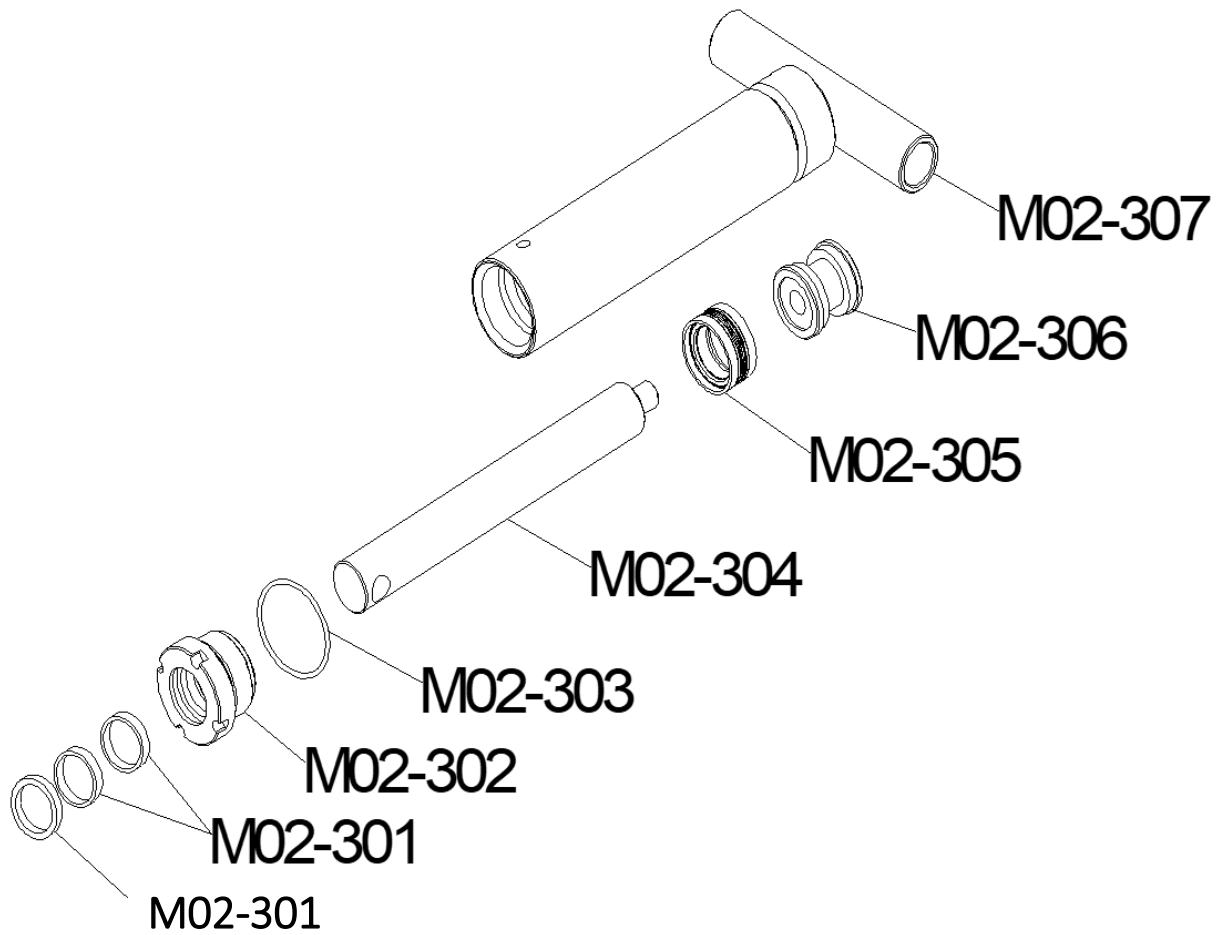
FS35-311	U disc $\varnothing 12$
FS35-312	Spring washer $\varnothing 12$
D35-405	Nut M16
FS35-310	Seeger ring $\varnothing 10$
M02-101	Wheel clamp complete
M02-102	Pressure plate
M02-103	Pneumatic cylinders
M02-104	Guide pin
M02-105	Carriageway
M02-106	Guide bush
M02-107	U disc $\varnothing 8$



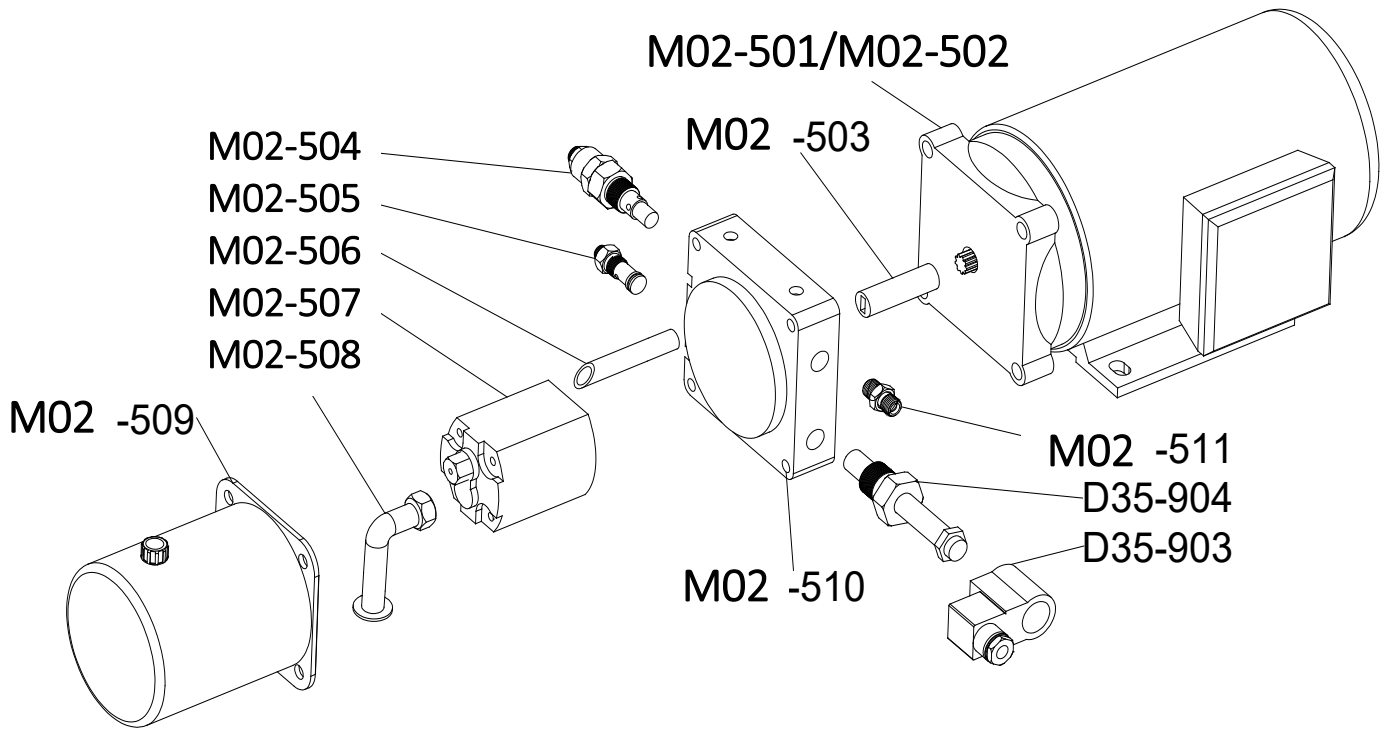
<b>M02-201</b>	Pen
<b>FS35-227</b>	Seeger ring Ø20
<b>M02-202</b>	Connecting rod inside
<b>M02-203</b>	External connecting rod
<b>M02-204</b>	Pen
<b>D35-104</b>	Seegerring Ø25
<b>M02-205</b>	Pen
<b>M02-206</b>	Mounting cylinder
<b>M02-207</b>	Pin for access ramp
<b>H30-106</b>	Nut M12
<b>M02-208</b>	Access ramp
<b>FS35-324</b>	Seegerring Ø12
<b>D35-516</b>	Cylinder SSDA25X25

<b>D35-515</b>	U disc Ø6
<b>D35-514</b>	Spring washer Ø6
<b>D35-522</b>	M8X16 screw
<b>D35-521</b>	Limit switch LZ7312
<b>H30-105</b>	M12X50 screw
<b>M02-401</b>	Bottom frame
<b>D35-409</b>	Nut M8





<b>M02-301</b>	Slip ring
<b>M02-302</b>	Oil cylinder cover
<b>M02-303</b>	O-ring $\varnothing 45 \times 3.55$
<b>M02-304</b>	Piston rod
<b>M02-305</b>	Sealing ring $\varnothing 45 \times 29 \times 18.4$
<b>M02-306</b>	Piston
<b>M02-307</b>	Oil cylinder



<b>M02-501</b>	1 phase motor (M01, M02)
<b>M02-502</b>	3 phase motor (M01, M02)
<b>M02-503</b>	Socket (M01, M02)
<b>M02-504</b>	Relief valve (M01, M02)
<b>M02-505</b>	Throttle valve (M01, M02)
<b>M02-506</b>	Escape oil hose (M01, M02)
<b>M02-507</b>	Gearbox (M01, M02)
<b>M02-508</b>	Oil line (M01, M02)
<b>M02-509</b>	Oil tank (1.5 litre) (M01, M02)
<b>M02-510</b>	Valve block (M01, M02)
<b>M02-511</b>	Hose connection (M01, M02)
<b>D35-904</b>	Drain valve (M01, M02)
<b>D35-903</b>	Solenoid valve (M01, M02)





The company

**Twin Busch GmbH | Amperestr. 1 | D-64625 Bensheim**

hereby declares that the **Motorcycle scissor lift**

**TWM-02 | 500 kg**

Serial number:

in these configurations we have placed on the marked complies with the relevant essential health and safety requirements of the following EC-directive(s) in its/their current version(s).

EC-directive(s)

**2006/42/EC**

**machinery**

Applied harmonized standards and regulations

**EN 1493:2022**

**EN 60204-1:2018, EN IEC 61000-6-2:2019, EN IEC 61000-6-4:2019,  
EN IEC 61000-3-2:2019+A1:2021, EN 61000-3-3:2013+A2:2021**

CE Certificate

**ICR Polska/VC/HS221004**

date of issue: 11.10.2022  
place of issue: Warschau  
technical file no.: TLSH22092941493, ...4

Certification body

ICR Polska co. Ltd.  
Plac Przymierza 6,  
03-944 Warszawa, Poland  
Notified Body Appointment No.: 2703

**In the case of improper use, as well as in the case of assembling, modification or changes which are not agreed with us, this declaration will lose its validity.**

Authorized person to compile technical documentation is: Michael Glade (adress as below)

  
  
**TWIN BUSCH GmbH**  
Amperestr. 1 · 64625 Bensheim  
Tel. 06251 / 70585-0 · Fax: 70585-29

Authorized signatory: Michael Glade  
Bensheim, 23.10.2023 Qualitätsmanagement

**Twin Busch GmbH | Amperestr. 1 | D-64625 Bensheim**

**twinbusch.de | E-Mail: info@twinbusch.de | Tel.: +49 (0)6251-70585-0**



*You can find more products at:*

***[twinbusch.co.uk](http://twinbusch.co.uk)***

---

**Twin Busch UK LTD**  
Kettering  
Northants NN16 8PS

Tel.: +44 (0) 1536 522 960  
E-Mail: [info@twinbusch.co.uk](mailto:info@twinbusch.co.uk)  
Web: [www.twinbusch.co.uk](http://www.twinbusch.co.uk)

The technical specifications and illustrations provided in the user manual are not binding. Our products are subject to technical changes, so the delivered condition may vary.