

# TV 260 B4.5

# INSTALLATION, OPERATION AND MAINTENANCE MANUAL



!

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



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# **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=otZHoSjtiiQ 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=hRZ8k7vEkok or scan the QR code.







#### **TIPS & TRICKS**



In the "Tips & Tricks" section, we show you simple solutions in videos to work even more efficiently with your TWIN BUSCH® products. Our technical specialist explains the exact steps to take.

https://www.twinbusch.co.uk/2-post-lifts/2-post-lift-6-0-t-clear-floor-HEAVY-LINE::267.html#horizontalTab4

#### 24/7 Service Center:



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 <a href="twinbusch.com/qr">twinbusch.com/qr</a> 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

This two-post lift consists of columns, beams, support arms, cylinders, motor unit, etc.

The necessary hydraulic pressure is generated by a gear pump. Controlled by valves, the pressurised oil reaches the lifting cylinders in the columns via pipes. These cylinders actuate a chain on the right and left, to which the carriage with the support arms is attached. During lifting, safety latches engage between the carriage and column to prevent a sudden drop in the event of a fault in the hydraulic system.

#### OPTIONALLY AVAILABLE EXTRAS

We recommend the following **extras** for this lifting platform, such as special adapters in our shop.

https://www.twinbusch.co.uk/2-post-lifts/2-post-lift-6-0-t-clear-floor-HEAVY-LINE::267.html#horizontalTab6



#### 2. Identification of the instructions for use

Instruction manual TW 260 B4.5

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#### 3. Technical data

Power supply (3-phase)	400 V / 50 Hz
Protection	C 16A (slow)
Load capacity	6,000 kg
Degree of protection	IP 54
Lifting time	approx. 50 sec
Lowering time	approx. 30 sec
Net weight	1090 kg
Noise level	< 70 db
Working environment	Working temperature: -15°C to +40°C
	rel. Humidity: 30 % to 85 %

#### Manual 2-post lift TW260B4.5



#### 4. Modification of the product

Improper use, modifications, conversions and attachments of the 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 wish to make 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.

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. Safety instructions

- · Do not install the lift on an asphalt surface.
- · Read and understand the safety instructions before operating the lift.
- · 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.
- Bystanders are not permitted in the vicinity of the lifting platform.
- · Wear suitable work clothing.
- The area around the lifting platform should always be kept free of obstructions.
- The lift is designed for lifting the entire vehicle, which does not exceed the maximum authorised weight.
- · Always ensure that all safety precautions have been taken before working near or under the vehicle.

Never remove safety-relevant components from the lift. Do not use the lift if safety-relevant components are missing or damaged.

- Do not under any circumstances move the vehicle or remove heavy objects from the vehicle that could cause significant weight differences while the vehicle is on the lift.
- Always check the manoeuvrability of the lift to guarantee its performance. Ensure regular
  maintenance. If an irregularity occurs, stop working with the lift immediately and contact your dealer.
- · Lower the lift completely when it is not in use. Do not forget to disconnect the power supply .
- · If you do not use the lift for a longer period of time:
  - a. Disconnect the lift from the power source.
  - b. Empty the oil tank.
  - c. Lubricate the moving parts with hydraulic oil.

Caution: To protect the environment, dispose of the unused oil in an appropriate manner.

• The optional special lifting adapters must be used to safely lift transporters. You can find these at: www.twinbusch.co.uk.



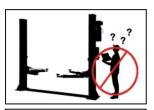
#### 5.2. Warnings and symbols

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

The warning signs must be kept clean and replaced if they are damaged or missing. Read instructions and safety instructions carefully before use!



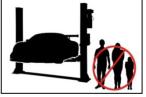
Read Instructions and safety instructions carefully before use!



The lift may only be operated by qualified personnel!



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



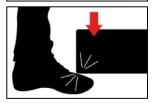
Specialist staff only permitted in the vicinity of the lifting platform!



Always keep escape routes clear!



It is forbidden for persons to stand under the lift (when lifting or lowering)!



Pay attention to the lifting arms and don't lower on to our feet!
Crushing hazard!



It is forbidden for persons to climb up onto the lift.



Observe the vehicle manufacturer's mounting points!



After briefly lifting the vehicle a few inches, check that it is securely seated!



Do not exceed the specified load capacity!



Take care when installing or removing heavy parts as this car tip the vehicle over!



Never attempt to load only one side of the lift!



Protect the lift from moisture! Electrical connections must be dry!



Strong shaking Avoid shaking to the vehicle!



CAUTION! Electrical voltage!

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#### 5.1. Safety equipment

The lift is equipped with the following safety devices to ensure safe operation \*):

- Safety catches
- Throttle valve in hydraulic line
- Limit switch
- Support arm lock
- Devices to prevent jamming and crushing (shaft protection, foot deflector)
- Synchronisation cables
- \*) depending on the design and type of lift

#### 5.2. Monitoring and testing the safety equipment

- Safety catch function test, when lowering the lift, safety catches must engage and stop

the downward movement

- Throttle valve Fixed throttle, cannot be checked by the user

- Limit switch When the limit switch is pressed, the motor stops or cannot start

- Support arm locking device When the support arms are raised, the support arm locking device must

engage and remain securely locked in place under lateral load

- The devices must be attached, ready for use and not deformed

- Check synchronisation line status

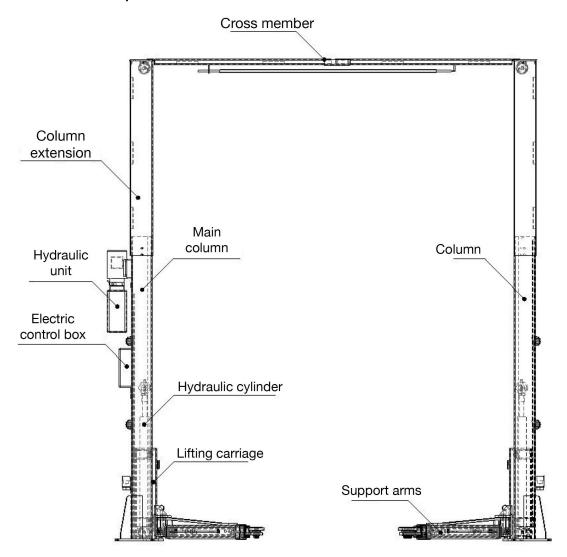
#### 6. Conformity with the product

The TW 260 B4.5 2-post lift is CE-certified and complies with the Machinery Directive 2006/42/EC and fulfils the standards EN 1493:2022, EN 60204-1:2018+A1:2009 and EN ISO 12100:2010. See also the 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. Before installation

#### 8.1.1. Tools and equipment required

- · Suitable lifting tool for bulky and heavy components
- · Hammer, pliers
- · Phillips and slotted screwdriver
- · Set of Allen keys
- · Spanner attachments and open-end spanners
- · Impact drill
- · Hydraulic oil HLP 32

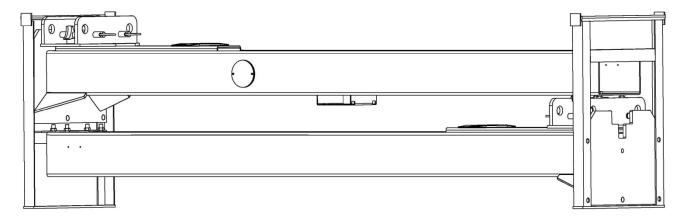


#### 8.2. Concrete conditions

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 250 mm. Detailed information can also be found in the corresponding foundation plan on our homepage at www.twinbusch.co.uk

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 and cover plates. Read and understand the operating instructions before proceeding.
- 2) Firstly, you must place a support between the two pillars or lift one of the two pillars using a crane. Then remove the bolts from the frame.

Caution: Please take particular care to ensure that the column cannot fall down. The accessories could be damaged or people could be injured.

- **3)** After you have removed the first column, place a support under the other column. Then remove the bolts from the transport rack.
- **4)** Bolts the pillar extensions to both pillars. Ensure that the bolted connections are firmly tightened. You can also use screw locking.

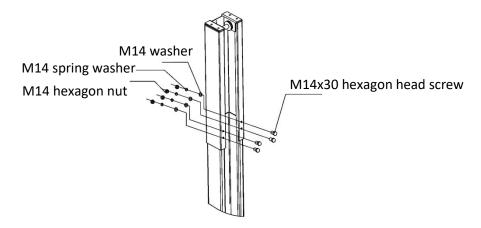


Figure: Fastening the pillar extension



5) Pre-assembly of the crossbar and limit switch

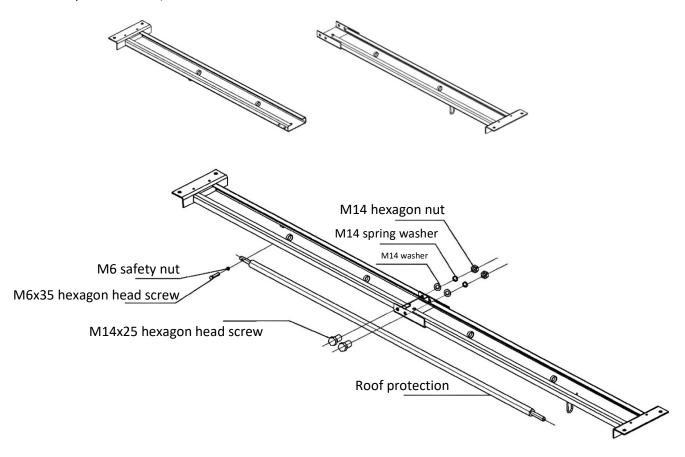
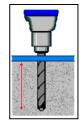
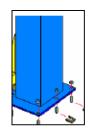


Figure: Pre-assembly of the crossbar

- 6) Set up both columns. Align the main and secondary pillars with each other (outer edge of base plate to outer edge of base plate approx. 4028 mm)
  - a) After unpacking, you must decide which column you want to attach the power supply and control unit to.
  - b) Set up the main columns, determine the assembly dimensions and fasten the main column as described in point 7. Now erect the secondary pillar and position it at the distance of the crossbar.
- 7) First attach the main pillar, then the secondary pillar with the distance of the crossbar.
  - a) Drill the holes in the foundation for each ground anchor using a percussion drill. Drill perpendicular to the floor level.
  - b) Carefully remove dirt and dust after drilling (vacuum and blow out if necessary).





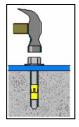




Figure: Work steps for fixing the pillars



# 8) Fit the crossbar

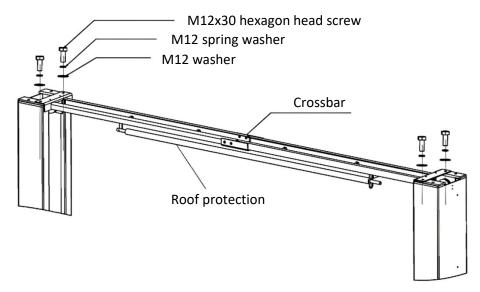
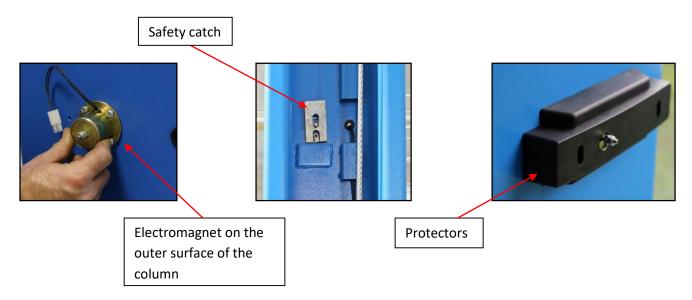


Figure: Mounting the crossbar

9) Fit the safety catches, the four electromagnets and the corresponding protectors.



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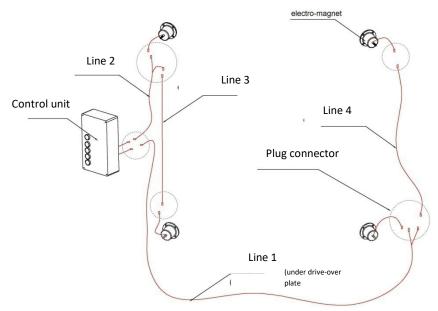


Figure: Electromagnet release connections

- 10) Install the hydraulic system
  - a) Fit the motor unit

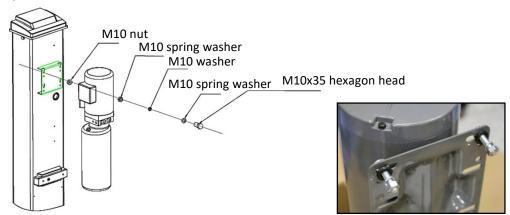


Figure: Mounting the motor unit

- b) Make sure that all hose ends are clean and free of dirt.
- c) Connect the hydraulic lines as shown in the following illustration or in the hydraulic circuit diagram.



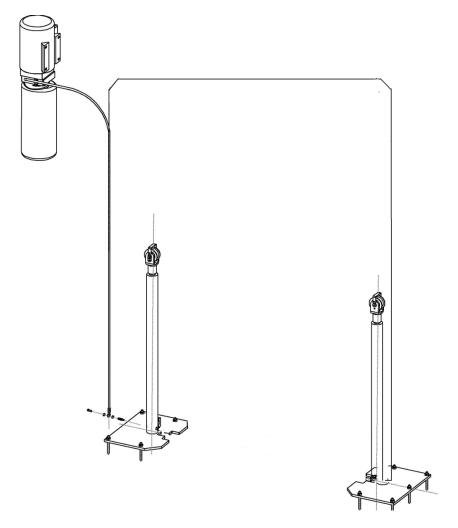


Figure: Connecting the hydraulic lines

- 11) After installing the safety catches, connect the carraiges to the steel cable
  - a) Align the carraiges on both sides of the column approx. 800 mm above floor level.
  - b) Ensure that the safety catches on both sides of the column are engaged before you start installing the steel cables.
  - c) The carraiges must be at the same height from the ground before you continue.
  - d) Pull in the steel cables as shown in the following illustration.
  - e) The steel cables must be set "tight" on both sides of the pillar. When doing this, make sure that during the subsequent test run (see 16), the engaging sound of the safety latches can be heard synchronously on both sides. If this is not the case, the steel cables or a steel cable must be retightened.
  - f) The ropes must always be secured against unintentional loosening (locking) and oiled with WD40 to ensure a long service life.



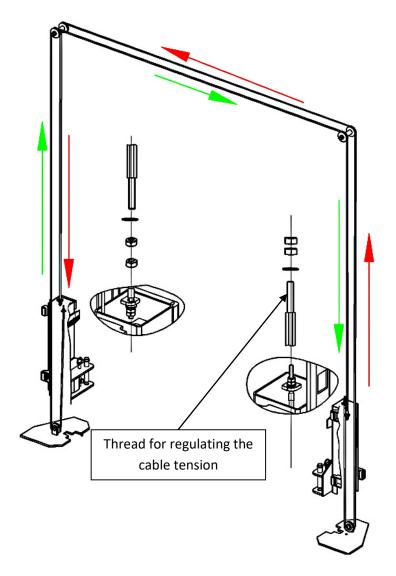


Figure: Fastening the steel cables

Caution: After adjusting the steel cable tension, the adjusting nuts on both sides of the column must be locked with another nut! The cables must also be lubricated with WD40 after installation.

- 12) Install the control unit or control box
  - a) Mount the control unit on the main column.
  - b) Connect the power supply to the control unit as shown in the following illustration.

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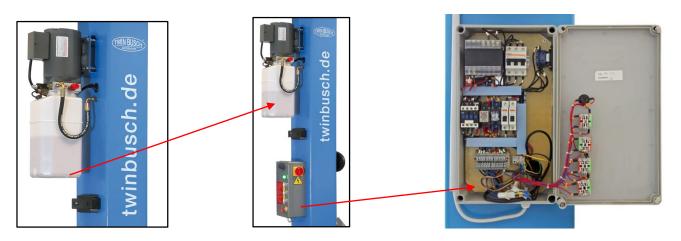


Figure: Connecting the power supply to the control unit

c) Fit the limit switch at the top of the main column as shown in the following illustration.

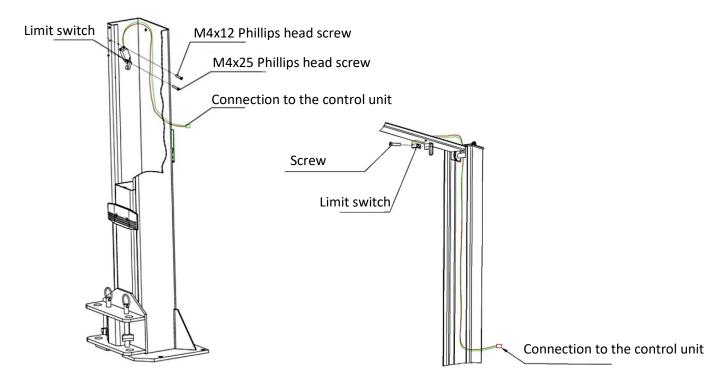


Figure: Mounting the limit switches



#### 13) Fit the protective covers for the hydraulic lines

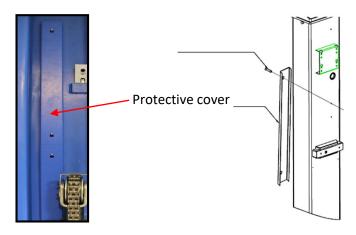


Figure: Fitting the protective covers

#### **14)** Fit the support arms

- a) Insert the support arms into the lifting carriages, paying attention to the interlocking of the antirotation blocks.
- b) Insert the support arm bolts into the holes provided, as shown in the following illustration.

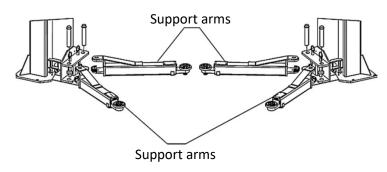




Figure: Mounting the support arms on the lifting carriage

#### 15) Filling the hydraulic system

The hydraulic oil tank has a capacity of approx. 10 litres. To ensure that the lift functions correctly, you should fill the oil tank to 80 % with hydraulic oil. **Hydraulic oil type: HLP 32** 

#### 16) Test run

- a) Follow the procedure in the 9 **Commissioning** and make absolutely sure that <u>NO</u> vehicle is on the lift during a test run.
- b) Before the test run, check that all connections are functioning correctly.



# 17) Fit the chain and door stop protection

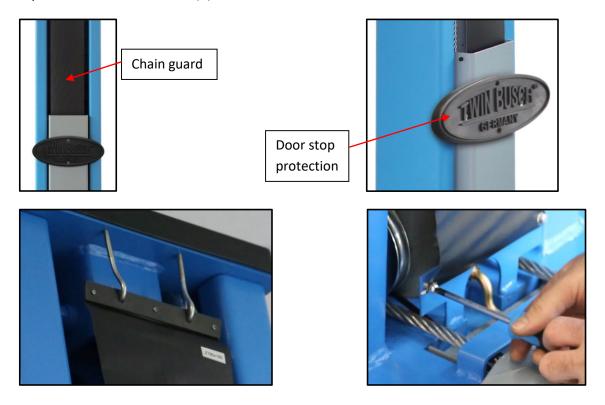


Figure: Fitting the chain and door stop guard

# 8.4. Checkpoints according to the structure

S/N	Check	YES	NO
1	Are the columns vertical to the floor? (90°)		
2	Are the two columns parallel to each other?		
3	Is the oil hose connected correctly?		
4	Is the steel cable correctly and firmly connected?		
5	Are all support arms correctly and firmly fitted?		
6	Are the electrical connections correct?		
7	Are the joints all screwed tight?		
8	Have all parts that need to be greased been greased?		

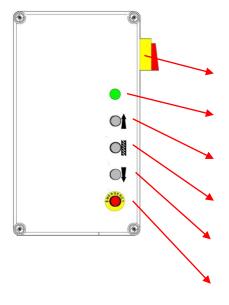


#### 9. Commissioning

#### 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) Vehicles should always be aligned so that the vehicle's centre of gravity is in the middle between the lift columns. If this is not the case, the lift should not be used. Otherwise, neither we nor the dealer, if any, will accept responsibility for any problems or damage caused.
- e) When the desired lifting height has been reached and the safety catches are engaged, switch off the power supply to the lift before starting work in order to avoid incidents caused by unintentional operation by other persons.
- f) 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 lift during the lifting and lowering process.

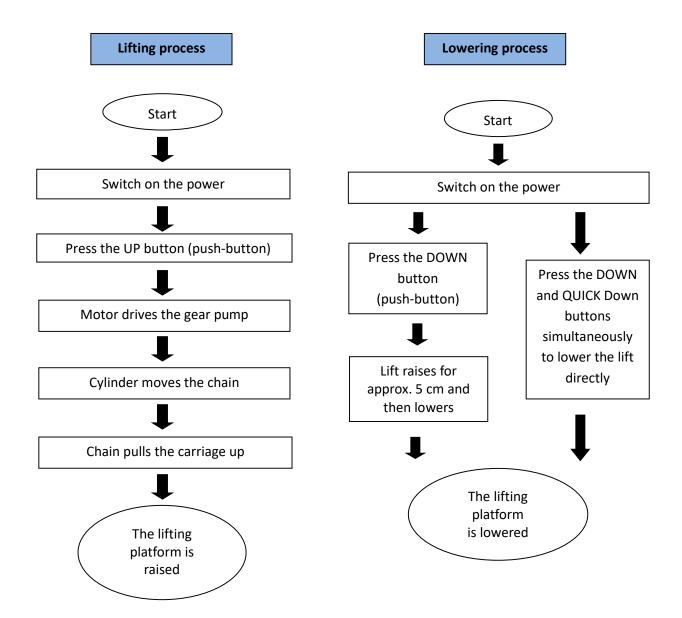
#### 9.2. Description of the control unit (control box)



Description	Function
Main switch	Switch on or off
Operating light	Indicates whether there is a power supply
UP button (push-button)	Raising the lifting platform
Safety catches	Lowering into the safety catches
DOWN button (push-button)	Lowering the lifting platform
Emergency stop switch	Switches the system off in an emergency



# 9.3. Lifting and lowering process flow chart





#### 9.4. Operating instructions

#### 9.4.1. Lifting process

- 1. Read and understand the operating instructions before starting work.
- 2. Connect the power supply and switch the main switch to ON.
- 3. Park the vehicle with its centre of gravity in the middle between the two pillars.
- 4. Align the support arms of the lift so that the pick-up points are in line with the lift. Make sure that the vehicle is positioned correctly.
- 5. Switch on the lift and press the UP button on the control unit until the support arms touch the vehicle at the pick-up points specified by the vehicle manufacturer and the vehicle has been lifted approx. 10-15 cm. Stop the lifting process and make sure that the vehicle has been picked up correctly and safely.
- 6. After final alignment and checking, press the UP button again and hold it down until the desired lifting height is reached.
- 7. Press the safety catch button to engage the lifting carriages in the safety catches.
- 8. Set the main switch to OFF and start working on or under the vehicle.

#### 9.4.2. Lowering process

- 1. Connect the power supply and switch the main switch to ON.
- 2. Press the DOWN button on the control unit. The lifting carriages of the lifting platform will now raise by about 5 cm to release the locking mechanism of the safety catches. The electromagnetic release valve then opens and the lifting carriages lower.
- 3. As soon as the lifting carriages have reached the lowest position, the support arms can be swivelled out from under the vehicle.
- 4. The vehicle can now be removed.

#### 9.5. Emergency lowering function in the event of a power failure

#### 1. If the lifting carriage is **NOT** engaged.

a) Pull all electromagnets simultaneously to the outside of the two columns to open the safety catches.

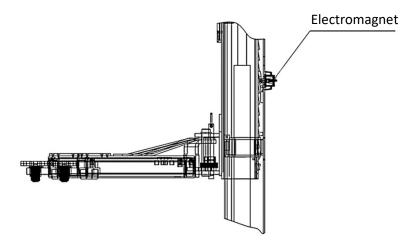
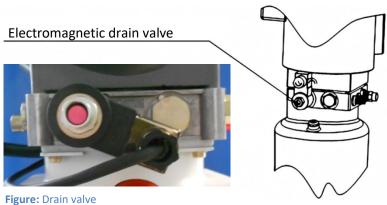


Figure: Unlocking all electromagnets



b) Actuate the manual drain (bayonet catch). (Push in the knurled screw and turn -> anti-clockwise: "Open", -> clockwise: "Close")



#### With the lifting carriage engaged

a) Unscrew the sealing plug to be able to connect the manual hydraulic pump.

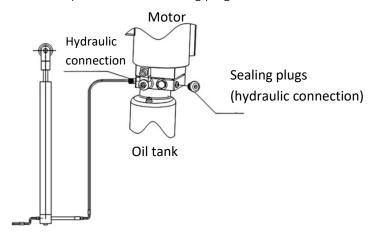


Figure: Sealing plug

b) Actuate the hand lever of the hydraulic pump (optional) to supply the cylinder with oil and release the lock.

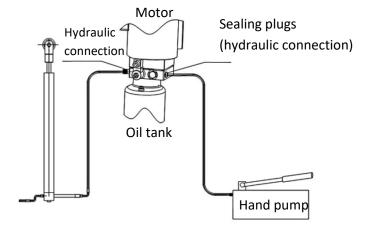


Figure: Connection of the hand pump

c) Then follow the procedure from **1. If the lifting carriage is NOT engaged.** 

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#### 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	The cable connections are loose.	Check the cables and reconnect them.	
be started, nor does the lift move	The motor is defective.	Replace it.	
up.	The limit switch is defective/damaged or the	Reconnect the cables or replace	
	cable connection is loose.	the limit switch.	
	The motor runs backwards/in the wrong direction of rotation.	Check the cable connection.	
Motor runs,	The pressure relief valve is loose or dirty.	Clean or screw it tight.	
but does not raise	The gear pump is defective.	Replace them.	
the lift.	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.	
	The oil hose is leaking.	Check or replace it.	
The beams lower	The oil cylinder/piston is leaking.	Replace the seal.	
slowly after they	The directional valve is leaking.	Clean or replace it.	
have been raised.	The pressure relief valve is leaking.	Clean or replace it.	
	Manual or electric drain valve is leaking/dirty.	Clean or replace it.	
	The oil filter is dirty or jammed.	Clean or replace it.	
	Oil level is too low.	Top up with oil.	
Lifting too slowly.	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.	
	The throttle valve is jammed/dirty.	Clean or replace it.	
Lowering too	The hydraulic oil is contaminated.	Change the oil.	
slowly.	The drain valve is blocked.	Clean it.	
	The oil hose is damaged/kinked.	Replace it.	
The steel cable is worn.	Not greased during installation or it is worn.	Replace it.	

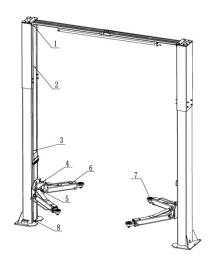


#### 11. Maintenance

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.

The following points must be lubricated:

S/N	Description
1	Upper pulley
2	Steel cable
3	Sprocket wheel
4	Chain
5	Carraige
6	Bolt
7	Safety block
8	Support arm
9	Recording
10	Lower pulley



#### 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 all connections and screw connections for tightness.
- Check the hydraulic system for leaks and functionality.
- Check that the support arm locks are working correctly.
- Carry out a test run (without the vehicle) to check whether the safety catches are working properly.
- Clean heavily soiled lifting platform elements.
- Lubricate all lifting platform elements that are not well lubricated.

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

- Check the mobility of all adjustable and flexible lifting platform elements.
- Check the condition and correct functioning of all safety-relevant lifting platform elements.
- Check the fill level of the hydraulic oil (lowered lifting carriage high fill level, max. raised lifting carriage low fill level).

#### 11.3. Monthly inspection and maintenance of the lifting platform elements

- Check all screw connections and joints for tightness.
- Check the lifting carriage, the support arm bolts, the support arms and all other moving lift elements for wear and lubricate them.
- Check the condition of the steel cable for signs of wear and oil the steel cable with low-viscosity lubricating oil.

#### 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 is not listed or 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!

#### Problem: Lift can neither be raised nor lowered.

<u>Possible causes</u> <u>Remedy</u>

No power supply available.

Check power supply.

Check power supply line.

Main switch not switched on or defective.

Check main switch.

Unlock emergency stop, check.

Fuse in the power connection has tripped or is defective. Check fuse.

Fuse in the switch box has tripped or is defective. Check fuse.

#### Problem: Lifting platform cannot be raised.

#### Possible causes Remedy

With three-phase current: one phase missing.

Check power supply.

With three-phase current:

Direction of rotation of motor reversed necessary.

Check direction of rotation, swap phase if.

Notify Twin Busch Service.

Emergency release open. Close emergency release valve. Motor is defective. Notify Twin Busch Service.

Overload. Overload valve has opened, reduce load.

#### Problem: Lift cannot be lowered.

#### Possible causes Remedy

Lifting platform sits in safety catches.

Raise platform slightly, pull catches, lower.

Lift has run into limit switch.

If necessary, release limit switch, raise 1 cm

and lower.

Motor is defective. Open the safety latch and raise the lift

Lower emergency lowering.

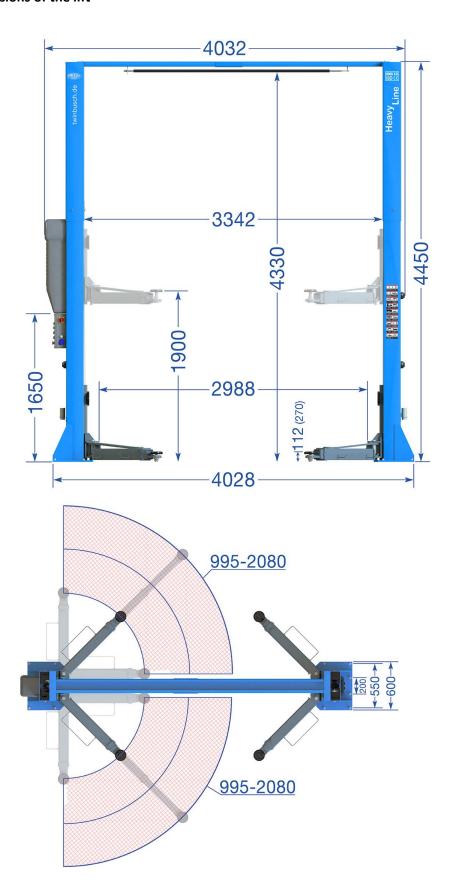
Lift has been blocked during lowering. Raise the lift again slightly and remove the

obstacle.



# 13.Appendix

# 13.1. Dimensions of the lift





#### 13.2. Foundation requirement and working area

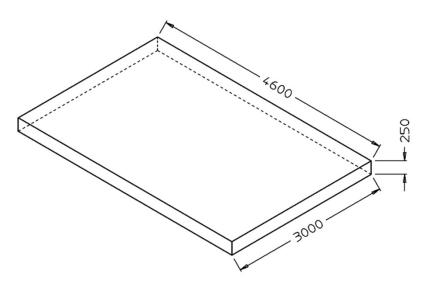
#### Requirements for the concrete:

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

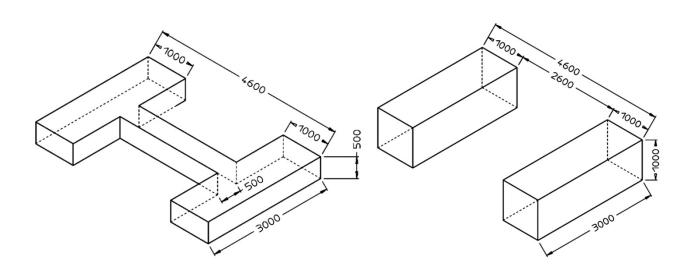
#### Foundation dimensions:

Ideally, the entire hall floor should be made of C20/25 concrete with a thickness of at least

#### Minimum dimensions of the foundation slab (lifting platform placed in the centre):



#### Alternatively in H-shape or two blocks:





#### 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.

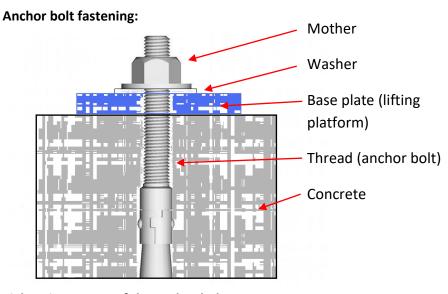
This results in the following minimum requirements for concrete under frost stress:

Exposure class: XF4
Maximum w/c: 0,45

Minimum compressive strength: C30/37 (instead of C20/25)

Minimum cement content: 340 kg/m³
Minimum air void content: 4.0 %

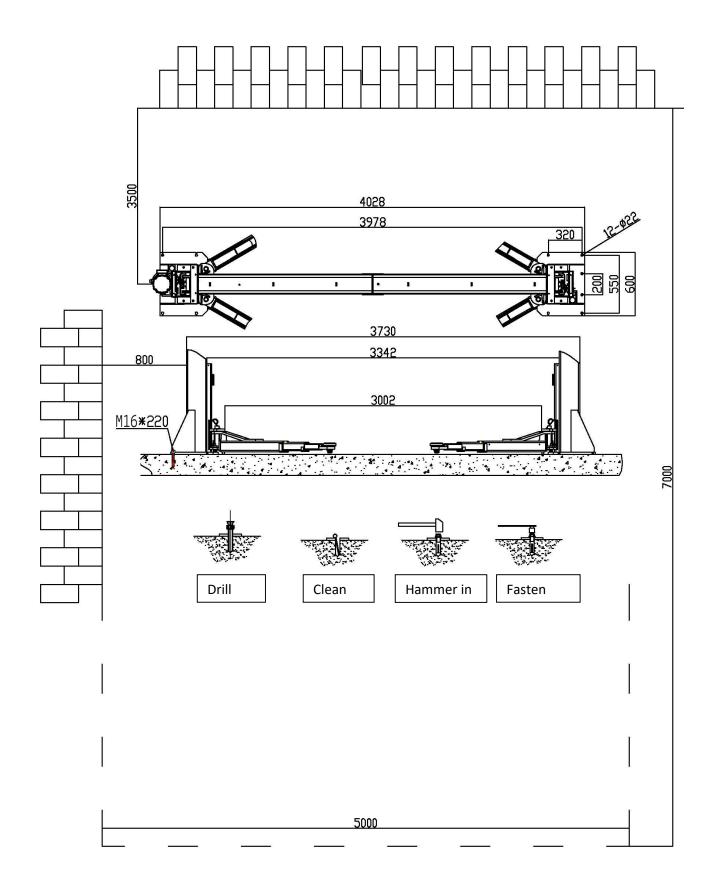
However, it must be noted that the lifts are not designed for outdoor use. Although the control box complies with IP54, the rest of the electrics, motors and limit switches have a maximum IP44 rating.



Tightening torque of the anchor bolts

is: 105 Nm

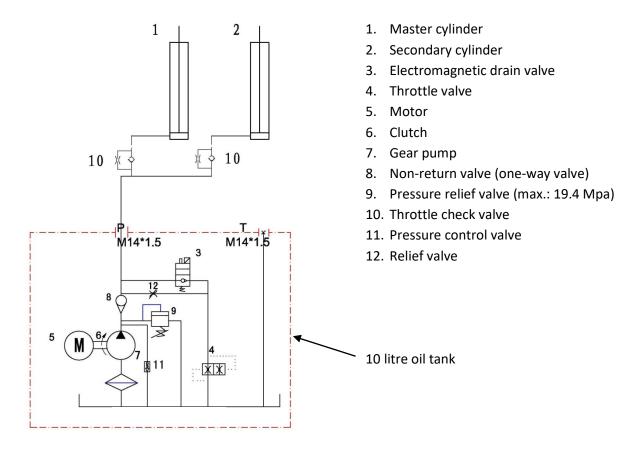


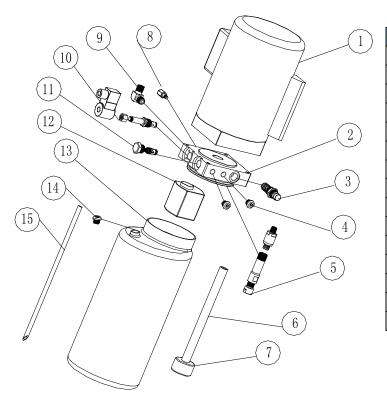






# 13.3. Hydraulic system

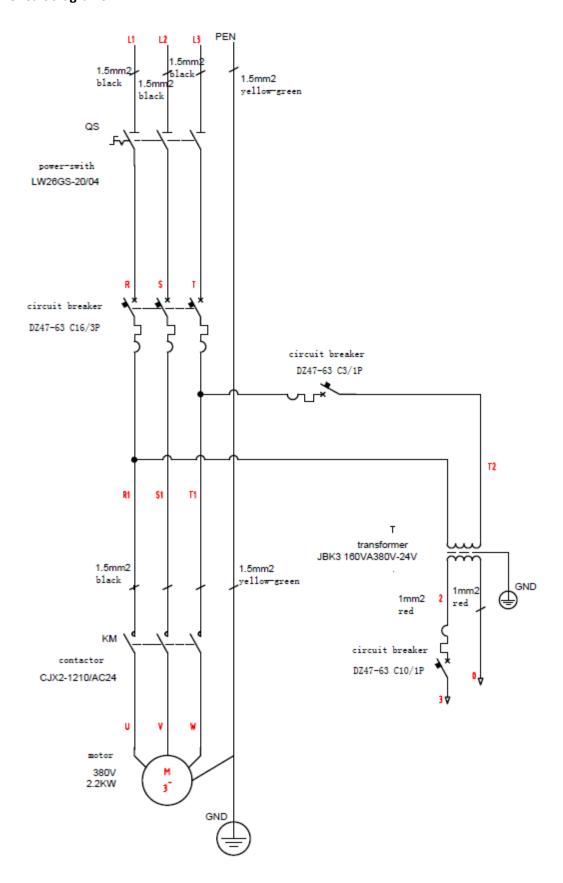




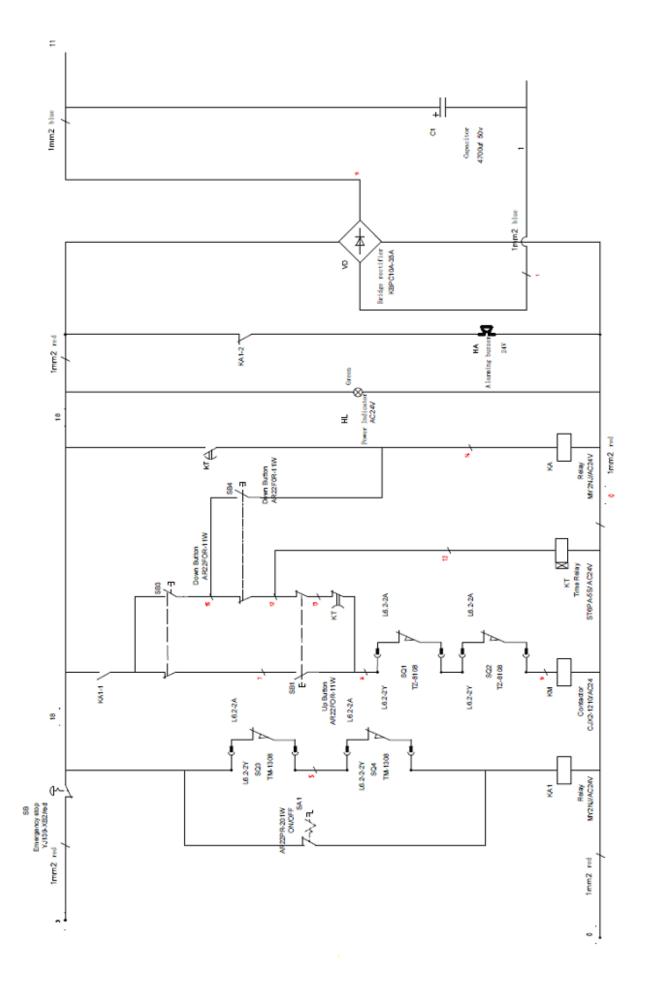
S/N	Name	Quantity
1	Motor	1
2	Hydraulic block	1
3	Pressure relief valve	1
4	Screw plug	2
5	Pressure control valve	1
6	Oil intake pipe	1
7	Oil filter	1
8	Throttle valve	1
9	Connection link	1
10	Electromagnetic drain valve	1
11	One-way valve	1
12	Gear pump	1
13	Plastic oil tank	1
14	Oil tank plug	1
15	Oil return line	1



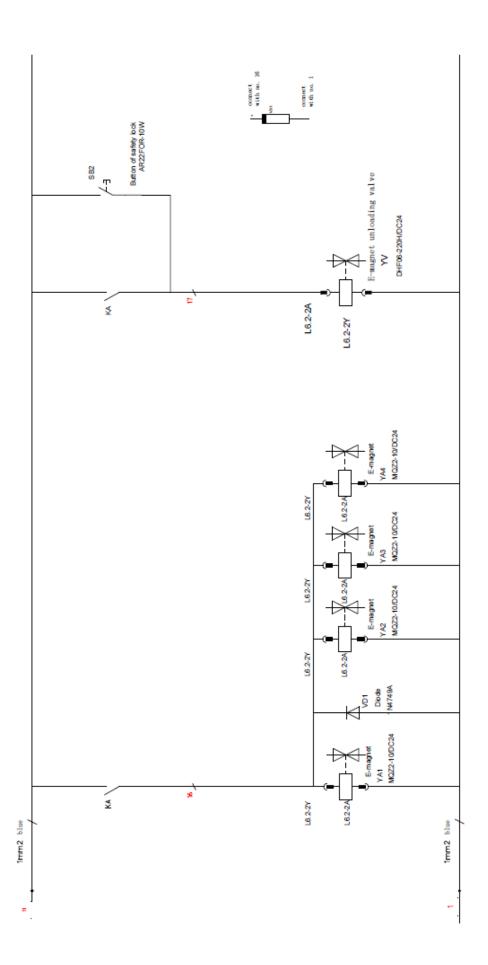
# 13.4. Circuit diagrams



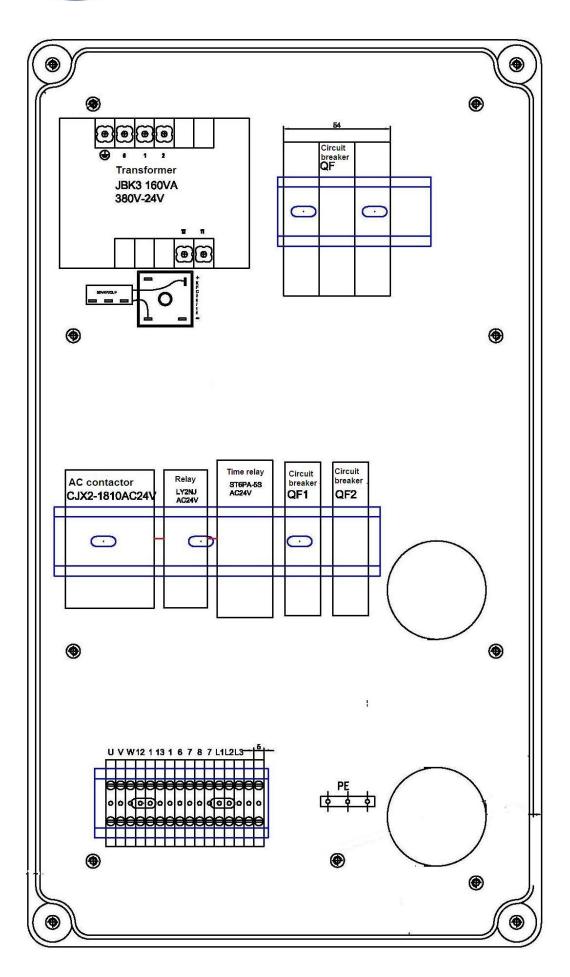






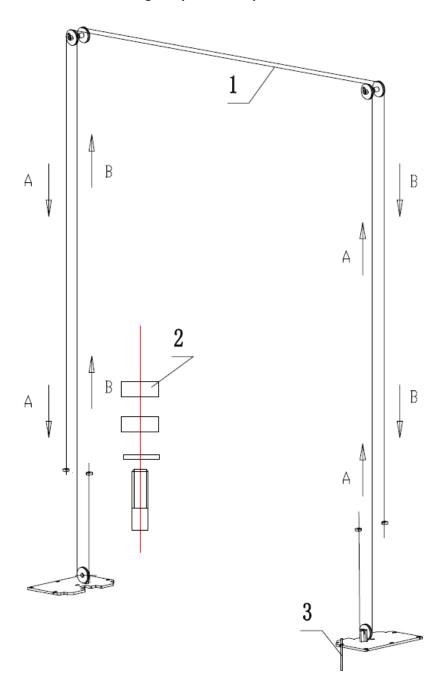






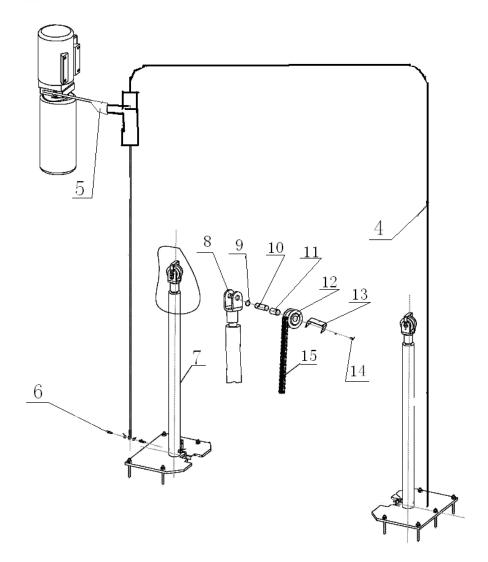


# 13.5. Detailed drawing and parts description of the lift



S/N	Name	Drawing no.	Quantity	Feature
1	Steel cable L=12.490mm	8226E-A8	2	Assembly
2	M20 hexagon nut	GB/T6170-2000	4	standard
3	M16*220 anchor bolt		12	standard

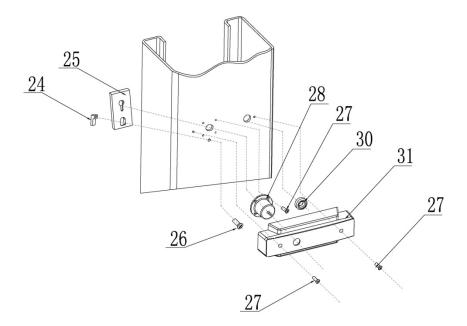




S/N	Name	Drawing no.	Quantity	Feature
4	Oil line L=10100			
5	Motor/hydraulic unit		1	Assembly
6	Oil line L=2265 / connector L=70		1	Assembly
7	Hydraulic cylinder	8225E-A4-B2	2	Assembly
8	Sprocket mount	8226E-A4-B2	2	Welded
9	Type B Circlip 25	GB/T894.2-1986	4	standard
10	Bolt	8226E-A4-B4	2	galvanised
11	Bearing 2548	SF-1	2	standard
12	Sprocket wheel	8226E-A4-B3	2	galvanised
13	Stop plate	8226E-A4-B5	2	galvanised
14	Hexagon socket screw	GB/T70.1-2000	4	standard

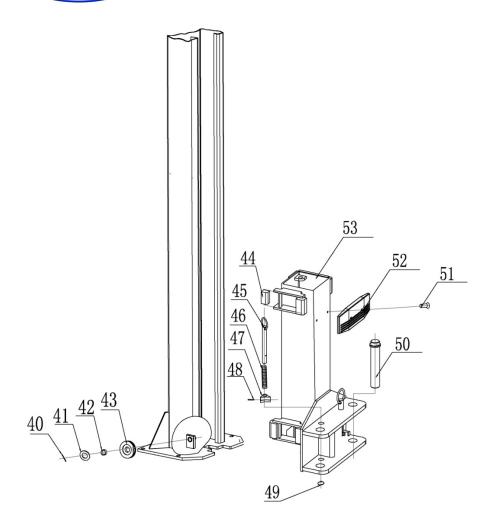






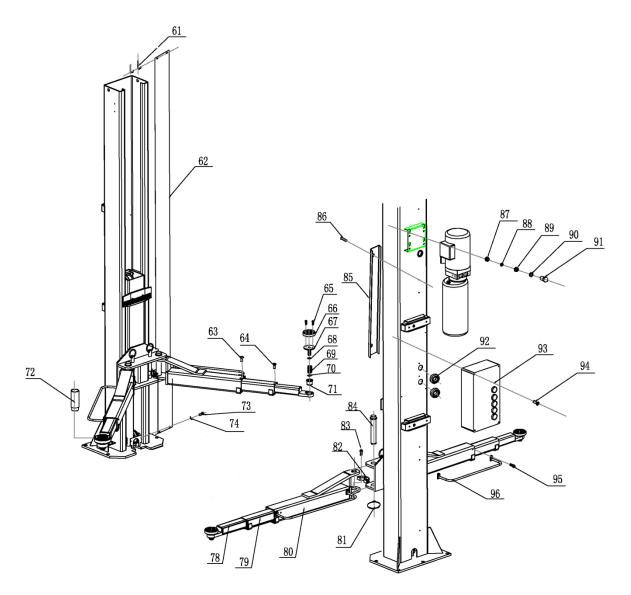
S/N	Name	Drawing no.	Quantity	Property
24	Stop block (safety catch)	8224E-A1-B3	4	galvanised
25	Safety catch	8224E-A1-B2	4	galvanised
26	M6*16 (cross recess)	GB/T818-2000	4	standard
27	M6*10 (cross recess)	GB/T818-2000	24	standard
28	Electromagnet MQZ2-10	8224E-A1-B4	4	Assembly
30	Ø20 Cable entry ring	8224E-A1-B6	4	Rubber
31	Electromagnet cover	8224E-A1-B5	4	Plastic





S/N	Name	Drawing no.	Quantity	Feature
40	Locking pin Ø2.5*30	GB/T91-2000	4	standard
41	Washer		4	galvanised
42	Bearing 2518	SF-1	4	standard
43	Idler pulley (bottom)	8225E-A1-B2	4	galvanised
44	Glider	8224-A3-B6	16	Nylon
45	Anti-rotation bolt	8225E-A3-B4	4	galvanised
46	Pressure spring	8224-A3-B5	4	galvanised
47	Tooth block	8225E-A3-B4	4	galvanised
48	Parallel key pin 5*35	GB/T879.1-2000	4	standard
49	Type B Circlip 22	GB/T894.2-1986	4	standard
50	Support arm bolts	8225E-A12	4	galvanised
51	M8*16 countersunk head screw Phillips head	GB/T819.1-2000	4	standard
52	Door stop protection	8225E-A3-B3	2	Rubber
53	Lifting carriage	8226E-A3-B1	2	Welded





S/N	Name	Drawing no.	Quantity	Feature
60	M6 washer (flat)	GB/T95-1985	4	standard
61	Threaded hook	8224-A13	4	standard
62	Chain guard	2700*180	2	Fabric
63	M8*12 countersunk head screw (cross recess)	GB/T819.1-2000	4	standard
65	M8*20 countersunk head screw (hexagon socket)	GB/T70.3-2000	8	standard
66	Rubber shim	8225E-A7-B4-C4	4	Rubber
67	Turntable	8225E-A7-B4-C1	4	Welded
68	Circlip 35	GB/T895.2-1986	4	standard
69	Turntable (outer piece)	8225E-A7-B4-C3	4	galvanised
70	Circlip 42*2.5	GB/T895.2-1986	8	standard
71	Turntable (inner piece)	8225E-A7-B4-C2	4	galvanised
72	Adapter (high mount)	8225E-A11	4	galvanised
73	M6*8 Phillips head screw	GB/T818-2000	4	standard
74	M6 washer (flat)	GB/T95-1985	4	standard
75	M12*16 countersunk head screw (hexagon socket)	GB/T70.3-2000	2	standard



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S/N	Name	Drawing no.	Quantity	Feature
76	Drive-over plate	8225E-A9	1	Q235A
77	Drive-over plate Base plate	8225E-A8	1	Welded
78	Inner support arm tube	8226E-A5-B3	4	Welded
79	Centre support arm tube	8226E-A5-B2	4	Welded
80	Support arm outer tube/support arm	8226E-A5-B1	4	Welded
81	Circlip 38	GB/T894.2-1986	4	standard
82	Tooth block (support arm)	8225E-A7-B5	4	Q235A
83	M10*35 hexagon socket screw	GB/T70.1-2000	12	standard
84	Support arm bolts	8224-A12	4	galvanised
85	Protective cover for hydraulic line	8224E-A1-B8	6	Q235A
86	M6*25 Phillips head screw	GB/T818-2000	12	standard
87	M10 nut	GB/T6170-2000	4	standard
88	M10 spring washer	GB/T93-1987	4	standard
89	Washer	8224-A14	4	Rubber
90	M10 washer	GB/T95-1985	4	standard
91	M10*35 hexagon head screw	GB/T5781-2000	4	standard
92	Ø 40 Cable bushing	8224E-A1-B7	2	Rubber
93	Control unit	8224E-A5	1	Assembly
94	M5*10 Phillips head screw	GB/T818-2000	4	standard
95	M8*12 hexagon socket screw	GB/T70.2-2000	8	standard
96	Foot guard	8224-A8-B3	4	Welded



#### 13.6. Spare parts list

S/N	Name	Specification	Quantit	Picture
1	Main switch	LW26GS-20/04	1	•
2	Push button	Y090-11BN	1	
3	Operating light	AD17-22G-AC24	1	root ve
4	Transformer	JBK-160VA380V-24V JBK-160VA220V-24V	1	
5	AC contactor	CJX2-1210/AC24	1	
6	Circuit breaker	DZ47-63 C16/3P DZ47-63 C32/2P	1	<b>3 9 0</b>
7	Circuit breaker	DZ47-63 C3/1P	1	
8	Limit switch	TZ8108	1	
9	Emergency stop switch	Y090-11ZS/RED	1	EMG. STOP
10	Bridge rectifier	KBPC5A-35A	1	
11	Capacitor	4700UF/50A	1	on Rinkson Natur 10 of 50 4700 = 50 47
12	Relay	LY2NJ/AC24	1	



## Manual 2-post lift TW260B4.5

S/N	Name	Specification	Quantit	Picture
13	Relay holder	PTF-08A	1	
14	Time relay	ST6PA-5S/AC24V	1	am sur
15	Time -Relay holder	PYF-08AE	1	The same of the sa
16	Control unit housing	260*460*135	1	

### Mechanical spare parts

S/N	Name	Drawing no.	Quantity	Feature
1	Glider	8224-A3-B6	16	Nylon 1010
2	Rubber shim	8225E-A7-B4-C4	4	Rubber
3	O-ring	Inside diameter 23.6*3.55		
4	Y-shaped sealing ring	SD70*60*8		
5	Dust protection ring	DHS40(40*48*5/6.5)		



# **Conversions and major repairs**

Kind	Date / Name



### **Notes**



### **Notes**





The company

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

hereby declares that the 2-post vehicle lift

TW260-400, TW260-230, TW 260B4.5-400, TW260B4.5-230 6.000 kg

Serial number:				
twinbusch twi	nhusch	twinbusch	twinbusch	twin

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 2014/35/EU Low Voltage

Applied harmonized standards and regulations

EN 1493:2022 Vehicle Lifts

EN 60204-1:2018 Safety of Machinery – Electrical Equipment

of Machines

**CE** Certificate

**M6A 087411 0035 Rev. 01** date of issue: 26.06.2023 **N8MA 087411 0036 Rev. 01** place of issue: München

technical file no.: 646642303601

<u>Certification body</u> TÜV SÜD Product Service GmbH,

Ridlerstraße 65, D-80339 München

Notified Body Appointment No.: 0123

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, 07.11.2023

Michael Glade
Qualitätsmanagement

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