



PROFESSIONAL SCISSOR LIFT TABLE

TWSH10-18

(Lifting capacity: 1000 kg)

TWSH10-18

INSTALLATION, OPERATION AND MAINTENANCE MANUAL



Always read these operating instructions carefully before operating the scissor lift table. 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://youtu.be/gX7dlGzo4dc> or scan the QR code.



PRODUCT PRESENTATION



You can find the product presentation video for this lift on YouTube: <https://youtu.be/dq9JI2kVa50> or scan the QR code.





TIPS & TRICKS



In the "Tips & Tricks" section we show you simple solutions to work even more efficiently with your TWIN BUSCH® products.

[https://www.twinbusch.co.uk/Tips-Tricks: :74.html](https://www.twinbusch.co.uk/Tips-Tricks/:74.html)

24/7 Service Center:



Our **24/7 Self-Service Center** is a mobile website designed for self-diagnosis of issues with your Twin Busch lift. Here, we provide an extensive video collection covering a wide range of relevant topics for your Twin Busch lift, from fine-tuning and maintenance to component replacement.

With the **24/7 Self-Service Center**, you have a versatile tool at your disposal to learn how to independently maintain and repair your Twin Busch lift.

To access the site on your mobile device, please visit [twinbusch.com/qr](https://www.twinbusch.com/qr) or scan the QR code provided alongside.

For Twin Busch lifts shipped from mid-2020 onwards, you'll also find the QR code on a sticker attached to the control box.

1. General

Professional scissor lift table 1000 kg, with pneumatic-hydraulic -drive and 5-fold lifting and lowering speed, platform with extension and inclination angle adjustable in longitudinal direction as well as optionally available 8 adapter plates and 8 pick-ups, is suitable for daily professional workshop use. The professional scissor lift table can be moved as easily as a pallet truck.

Perfect for disassembly & assembly of vehicle components such as axle, engine, transmission and vehicle batteries. The adjustable mounting surface of the lifting platform is equipped with 104 threaded holes (M10), which in combination with the optionally available 8 adapter plates and 8 transducers can be used extremely flexibly for the respective positioning.

The scissor lift table has four 360-degree swivel castors with brake function and rotation stop function, making it very mobile and maneuverable. Additionally 2-fold adjustable and removable push handle.

Special features of the product:

- **1A processing quality with CE certificate for UVV approval**
- Manufactured according to **ISO 9001**
- Pneumatic hydraulic drive (compressed air is required)
- Platform size Width: 800 mm Length: 1310 mm to 1490 mm
- Inclination angle of the platform adjustable in longitudinal direction
- Optional 8 adapter plates with 8 holders for flexible mounting
- 40 + 64 = 104 holes M10 with thread for fixture mounting
- 5-fold lifting and lowering speed
- 2-fold adjustable and removable push handle
- Four 360-degree swivel castors with brake function and rotation stop function
- High-quality construction made of special rolled profile
- 1 hydraulic cylinder for powerful lifting and lowering
- High quality powder coating

2. Identification of the instructions for use

Instruction manual TWSH10-18

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Status: -00, 03.07.24

File: TWSH10-18_Scissor_lift_table_Manual_uk_00_20240703.pdf

3. Technical data

Lifting capacity CE	1,000 kg
Lifting height max.	1790 mm / OD max. 2100 mm
Lifting time	5-step adjustable drive/ pneumatic hydraulic
Own weight	385 kg
Total width	800 mm
Total length	1550 mm

4. Modification of the product

Improper use, modifications, conversions and attachments of the scissor lift table 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 scissor lift table. Keep the instructions 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 scissor lift table may only be put into operation if it is in a safe operating condition.

The applicable national regulations, laws and directives must be observed.

Only users over the age of 18 who have been instructed in the operation of the scissor lift table and have demonstrated their ability to do so to the owner may be authorised to operate the scissor lift table unsupervised. Authorisation must be given in writing.

Only lift within the rated load. Do not attempt to lift with excessive weight.

5.1 Safety instructions

- Recommended for indoor use only.
- Read and understand the safety instructions before operating the scissor lift table.
- Only use the scissor lift table if the foundation is stable and can bear the load.
- 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.
- Only lift within the lifting capacity.
- Wear suitable work clothing.
- The area around the lifting platform should always be kept free of obstructions.
- Always ensure that all safety precautions have been taken. Do not go under the scissor lift table unless it is mechanically locked.

Never remove safety-relevant components.

Do not use the scissor lift table if safety-relevant components are missing or damaged.

- Always check the mobility of the scissor lift table to guarantee its performance. Ensure regular maintenance. If an irregularity occurs, stop work immediately and contact your dealer.
- Lower the scissor lift table completely when it is not in use. Do not forget to disconnect the power supply.
- If you do not use the scissor lift table 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 lubricating oil/grease

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

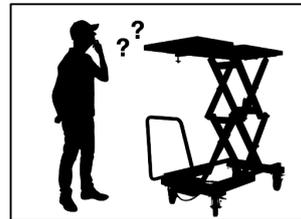
- **The special adapter plate set must be used to raise the lift table platforms higher. You can find this at: www.twinbusch.co.uk**

5.2 Warnings and symbols

All warnings are clearly visible to ensure that the user uses the appliance 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!



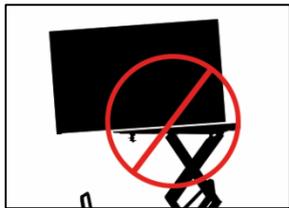
The scissor lift table may only be operated by qualified personnel!



Repairs and maintenance only by qualified personnel, never put safety devices out of operation!



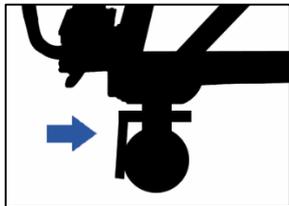
Risk of crushing when lifting or lowering!



Do not exceed the specified load capacity! Place the weight in the centre of the platform!



Always monitor the scissor lift table (when lifting or lowering)!



When parking the scissor lift table, always tighten the brakes on the castors!



No additional supports or interfering objects when lowering!



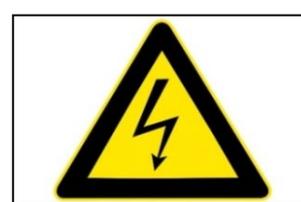
It is strictly forbidden for persons to stand on the scissor lift table or to ride on it!



Do not use on a gradient of more than 2.5 %!



Do not use outdoors at wind speeds higher than 14 m/s!



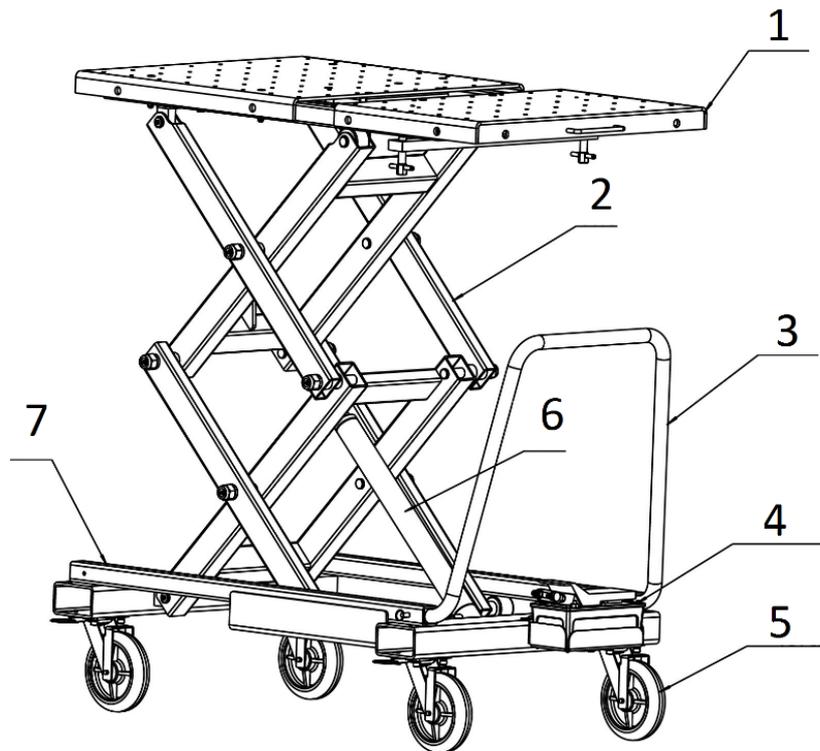
CAUTION!
Electrical voltage!

6. Conformity with the product

The scissor lift table TWSH10-18 is CE-certified and is compliant with the Machinery Directive 2006/42/EC and fulfilling the standards EN 1570-1:2011 + A1:2014 (look at: EU Declaration of Conformity, at the end of the user manual).

7. Technical specification

7.1 Machine description



S/N	Description
1	Platform with pull-out
2	Support arm
3	Handle bar
4	Pneumatic hydraulic drive
5	Caster
6	Hydraulic cylinder
7	Base frame

8. Assembly of the scissor lift table

8.1 Before installation

Tools and equipment required:

- Allen key (8 mm)
- Lifting tool (e.g. forklift truck)
- Hydraulic oil HM 46

8.2 Soil conditions

Only use this scissor lift table on a surface that is stable, level, dry, non-slippery and capable of bearing the load. The scissor lift table must not be used on a solid concrete floor with a slope of more than 2.5 %. Failure to do so may result in injury or even death. Only use the scissor lift table on stable asphalt surfaces.

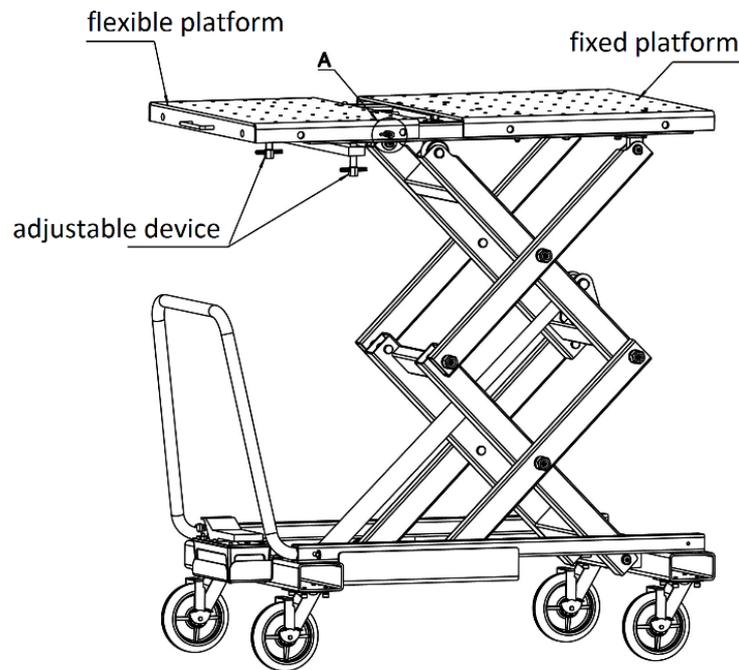
Detailed information can also be found in the corresponding foundation plan on our homepage at www.twinbusch.co.uk.

8.3 Assembly instructions

- 1) Remove the packaging film. Look out for loosely packed parts. Read and understand the operating instructions before proceeding.
- 2) Loosen the fastening screws of the transport frame (8 mm Allen key).

Caution: Before lifting, ensure that the hoses and cables are protected from damage. The platform must be secured during the lifting process.

- 3) Lift the frame of the lift table with a lifting tool to remove the pallet underneath and fit the heavy-duty castors.
- 4) Attach the four heavy-duty castors, each with a locking mechanism, using the hexagon head screws, washers and spring washers supplied. Once the castors have been fitted, you can remove the substructure.

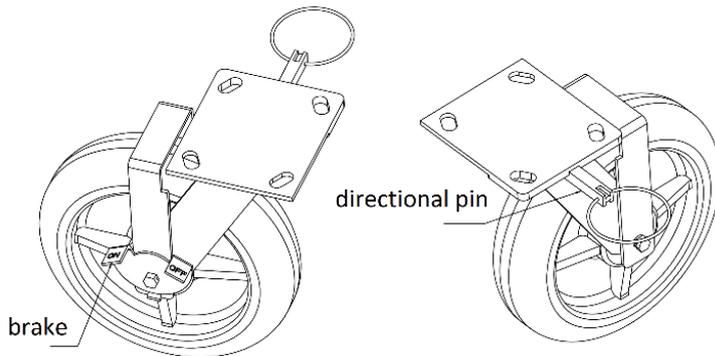


- 5) Extend lifting surface
Release the bolt and pull the flexible part of the platform to extend the lifting surface. **Ensure that the bolt is returned to the locked position before loading.**

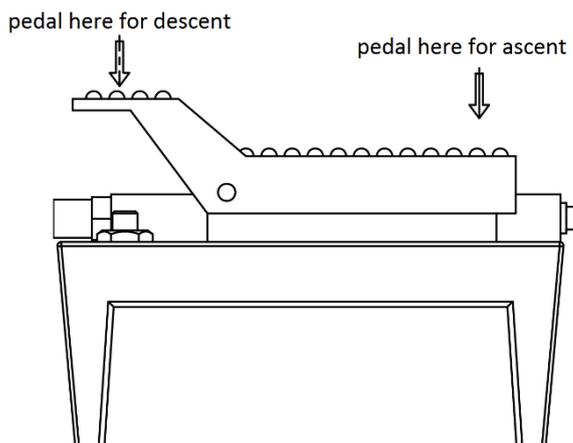


Figure: Adjustable device

6) Use the direction pin attached to the castor to transfer the direction of movement.



7) Remove the foot pump from its holder and place it in a suitable location with sufficient distance between the lifting platform and the operator.



8.4 Checkpoints according to the structure

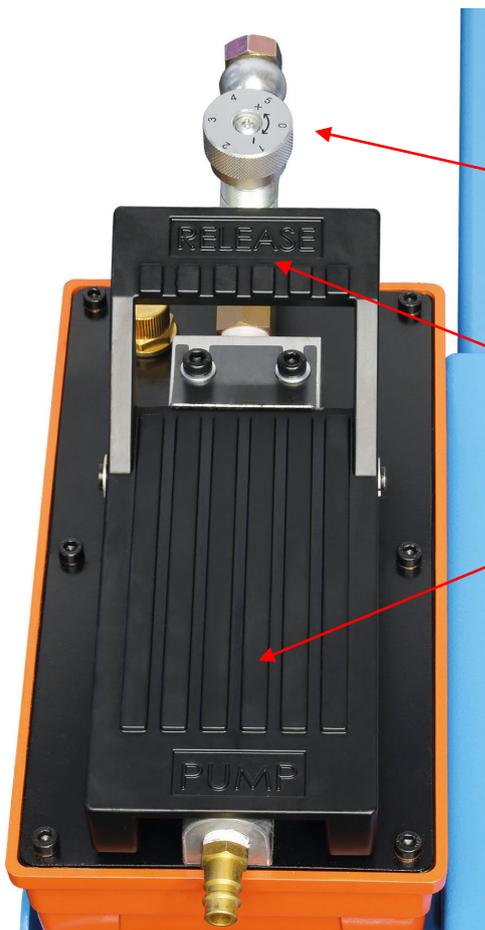
S/N	Check	YES	NO
1	Does the brake function work?		
4	The scissor lift table raises and lowers gently?		
5	There are no unusual noises when operating under nominal load?		
6	There is no oil leakage under nominal load?		
7	Are the joints all screwed tight?		
8	Have all parts that need to be greased been greased?		

9. Commissioning

9.1 Safety precautions

- a) If the safety devices are defective or show abnormalities, the scissor lift table 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 and observe it during a lifting or lowering operation. Always ensure that there are no persons in the danger zone.
- d) Vehicle components should always be aligned so that the centre of gravity is in the middle of the platform. If this is not the case, the scissor lift table should not be used. Otherwise, neither we nor the dealer, if any, will accept responsibility for any problems or damage caused as a result.
- e) When the desired lifting height is reached, lock the castors with the brake function before starting work so that they do not move.

9.2 Description of the operating unit



The scissor lift table is operated with compressed air at a working pressure of 6-8 bar.

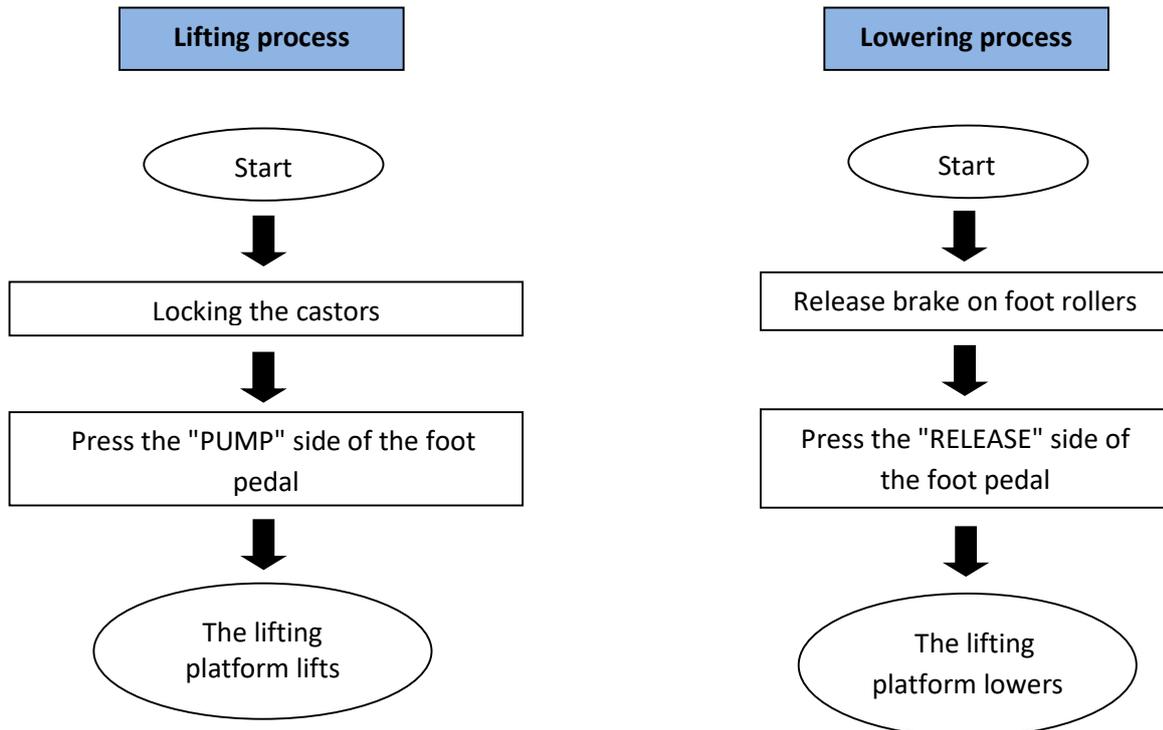
The lifting and lowering speed can be precisely regulated in 5 stages using a valve.

The foot pump for operating the lifting height:

"RELEASE" for lowering

"PUMP" for lifting

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. Ensure that the load is centred on the lifting platform.
3. Slide the scissor lift table under the load to be lifted. Lock the castors in place.
4. Press the "PUMP" side to raise the lift to the desired height.
5. Place the load. Make sure that the load is centred on the lifting platform.

9.4.2 Lowering process

1. When lowering the lifting platform, make sure that people and objects are kept away.
2. Press the "RELEASE" side on the pump to lower it.
3. Release the brake on the foot rollers and push the scissor lift table away.

10. Troubleshooting

Attention: 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.

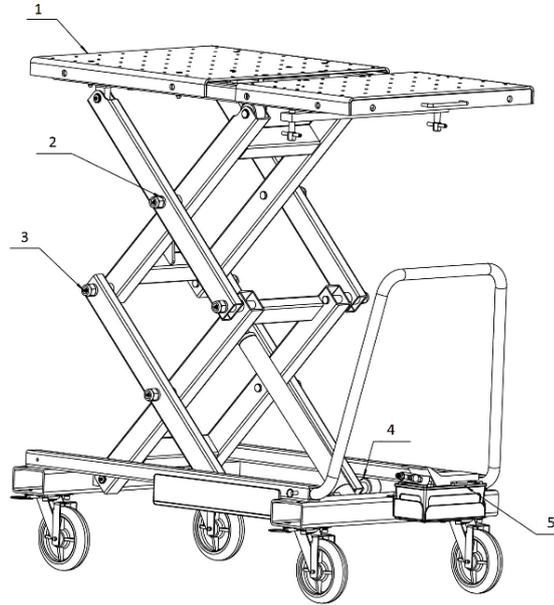
The following table lists possible errors, their cause and the associated troubleshooting for quicker identification and self-remedy.

PROBLEMS	CAUSE	SOLUTION
The lift table does not lift.	Insufficient air supply pressure.	Check the air pressure and set it to a value between 0.6-1 MPA.
	Damaged pump.	Replace with a new pump.
	Overload	Check the weight of the load.
The lift table only lifts slowly.	Insufficient air supply pressure.	Check the air pressure and set it to a value between 0.6-1 MPA.
	Damaged pump.	Replace with a new pump.
Too much noise when lifting or lowering.	Damaged pump.	Replace with a new pump.
The table lowers slowly after it has been raised.	Leak in the hydraulic line.	Inspect hydraulic line and eliminate leakage.
	Damaged pump.	Replace with a new pump.
The lift table does not lower.	Damaged pump.	Replace with a new pump.
	Jammed oil hose connection.	Check and clean hose connections.
Lowering too slowly.	Throttle valve too tight.	Set the throttle valve correctly.

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	ITEM	DESCRIPTION	PERIOD
1	Surface of carrying platform	Clean the surface of the platform.	when necessary
2	Bearings	Check and replace worn bearings.	Every 3 months
3	Oil cups	Pour the grease into the oil containers.	Every 3 months
4	Slider and moving tracks	Raise and lower the platform to check whether a slider is excessively worn. Add grease to ensure smooth operation. Replace worn sliders.	Every 3 months
5	Hydraulic oil	Change the hydraulic oil 6 months after initial commissioning and then once every two years. It is recommended to use HM NO.46 hydraulic oil.	Every 3 months
	Hydraulic line	Check that there are no leaks before use.	Daily

12. Behavior in the event of an incident

If the lift malfunctions, simple faults may be the cause.

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

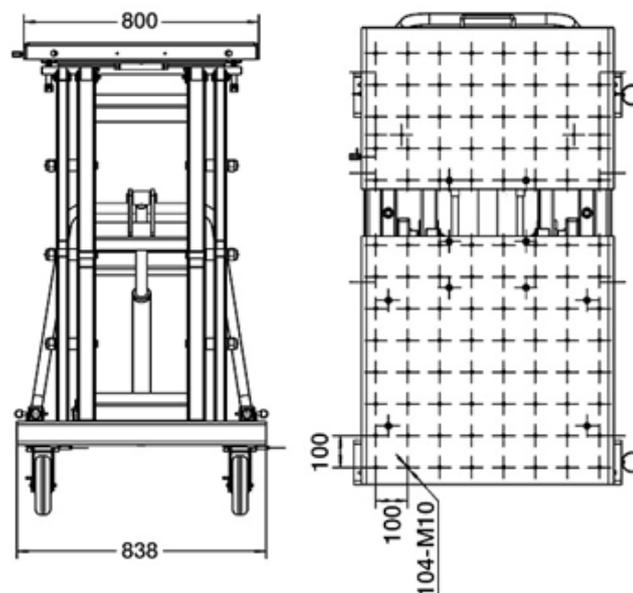
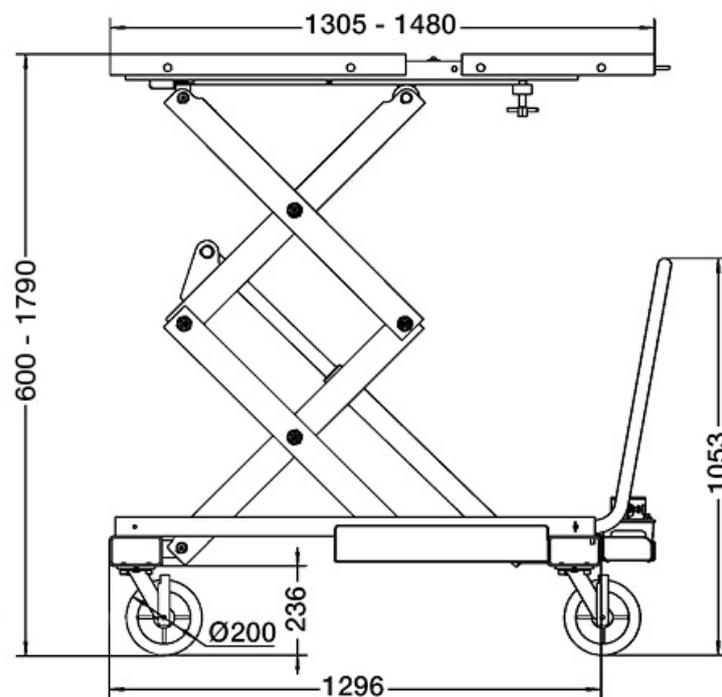
Never attempt to carry out repairs yourself, especially on safety equipment or electrical system components.



Work on electrical systems only by qualified electricians!

13. Appendix

13.1 Dimensions of the scissor lift table



13.2 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:

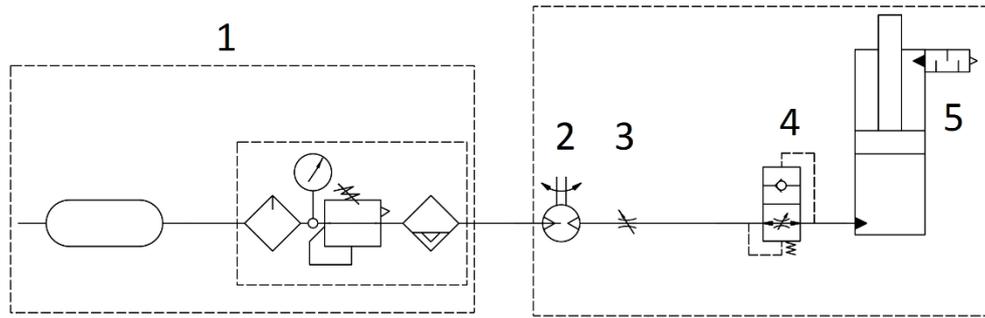
In the case of frost exposure, the concrete must correspond to exposure class XF4, as dripping de-icing agent cannot be ruled out.

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

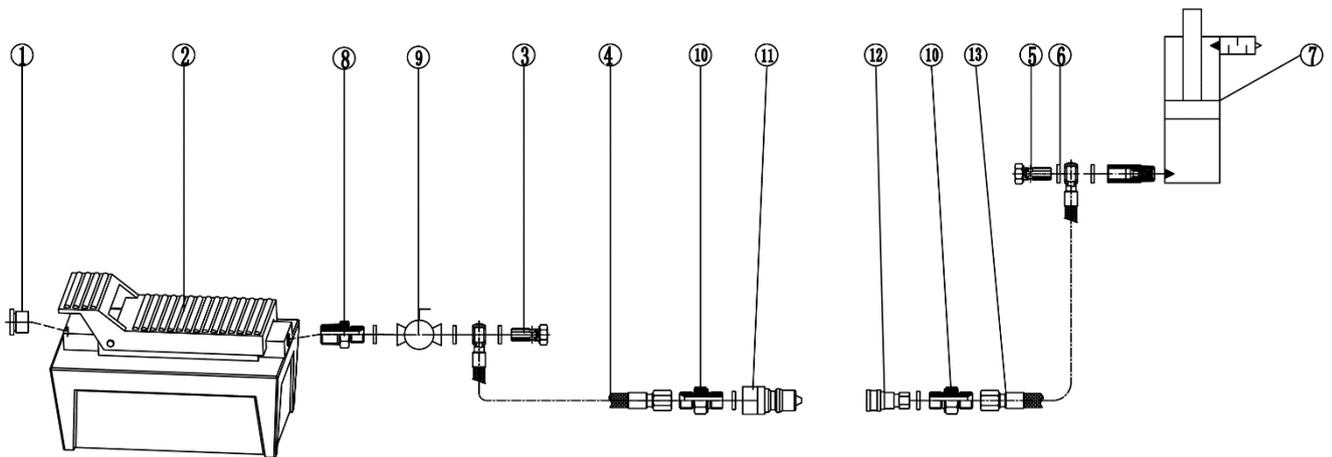
Exposure class:	XF4
Maximum w/c:	0,45
Minimum compressive strength:	C30/37 (instead of C20/25)
Minimum cement content:	340 kg/m ³
Minimum air void content:	4.0 %

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.

13.3 Hydraulic system

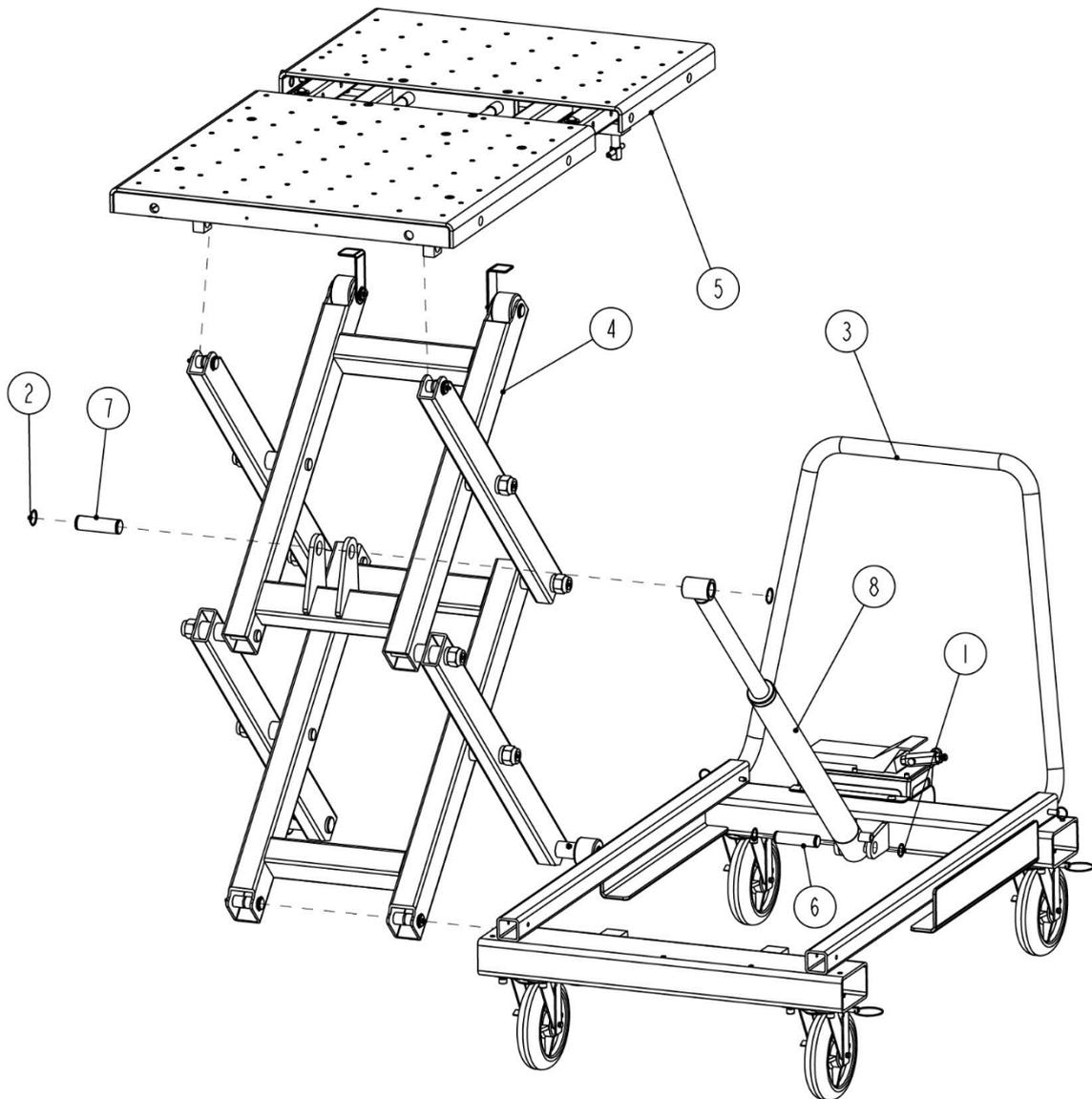


1. Air supply
2. Pneumatic hydraulic pump
3. Throttle valve
4. Composite hose fitting
5. Oil cylinder

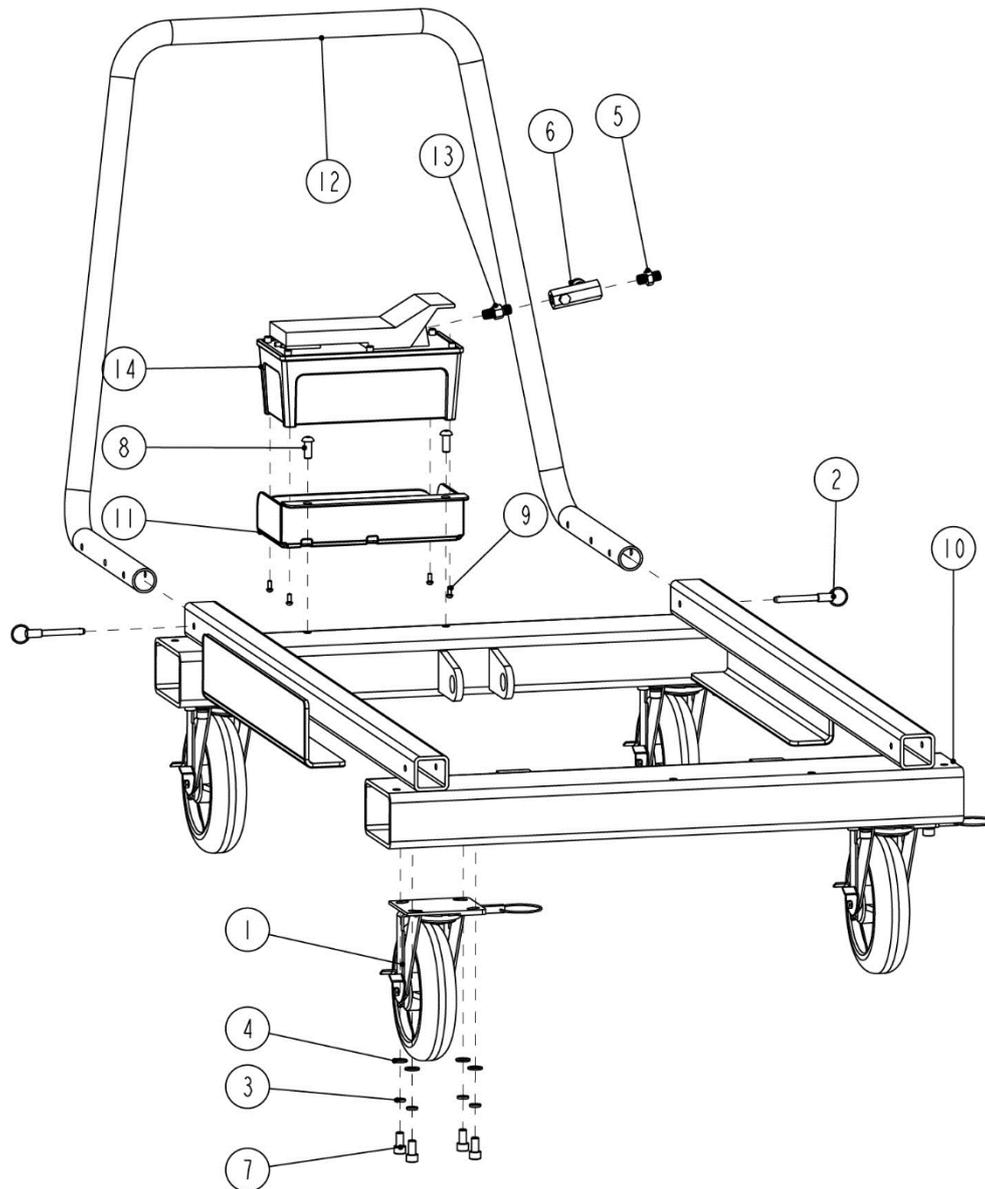


S/N	Code	Description	Specification	Quantity
1	310101015	Quick straight air hose fitting	KLC8-02	1
2	615028024	Pneumatic pump	BQ-DA5,P=30MPa	1
3	410281130	Cylinder fitting	CJ-A12-B5-C10	1
4	624002120	Oil hose	Φ6*2, L=1000	1
5	615006004	Composite fitting	6254E-A4-B8(6214A-A5-B4)	1
6	207103019	Composite disc	M14	7
7	615062006	Cylinder assembly	YG5060-38-520	1
8	310101061B	Straight mounting	NPT3/8-G1/4, L=60	1
9	330305004	Throttle valve	DVG-R-DN8 G1/4-1A	1
10	310101010	Straight fitting	G1/4---G1/4	2
11	320701024	Quick connector (male)	LSQ-S2-02PF-G1/4	1
12	320701025	Quick connector (female)	LSQ-S2-02SF-G1/4	1

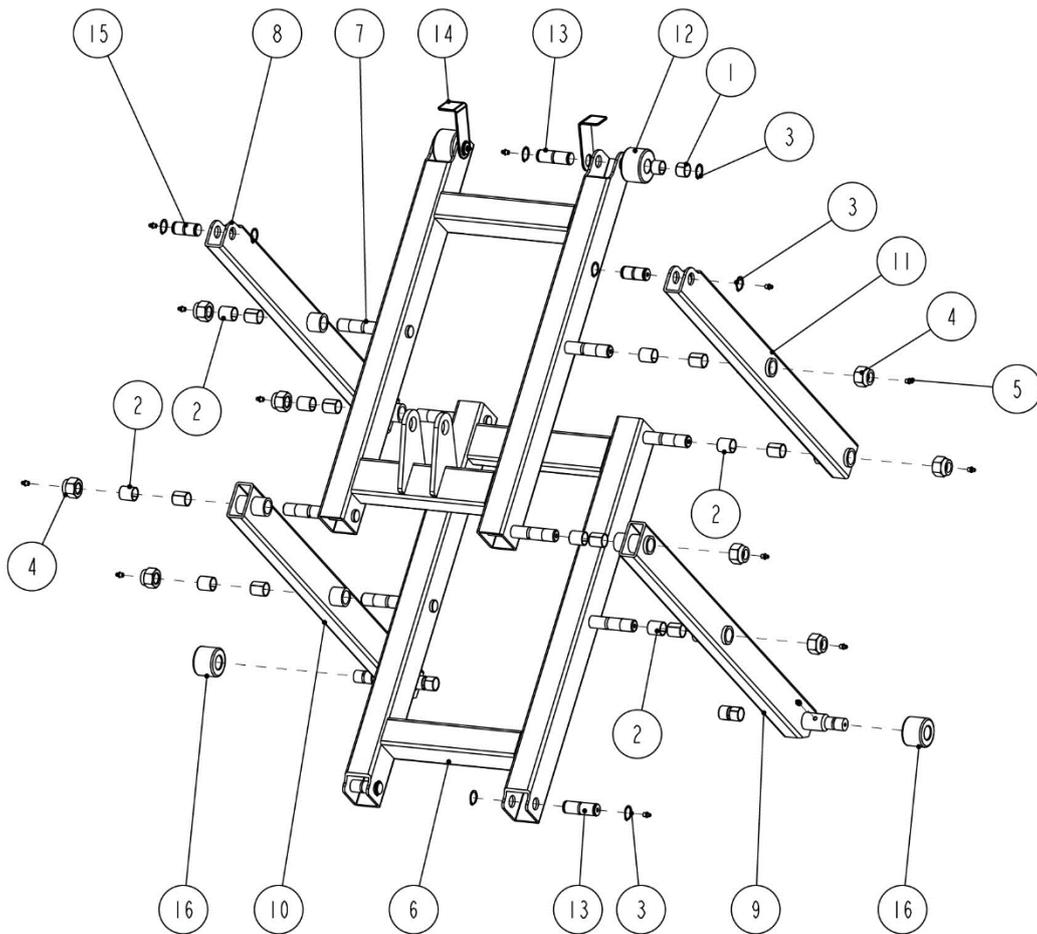
13.4 Exploded mechanical drawings and parts list



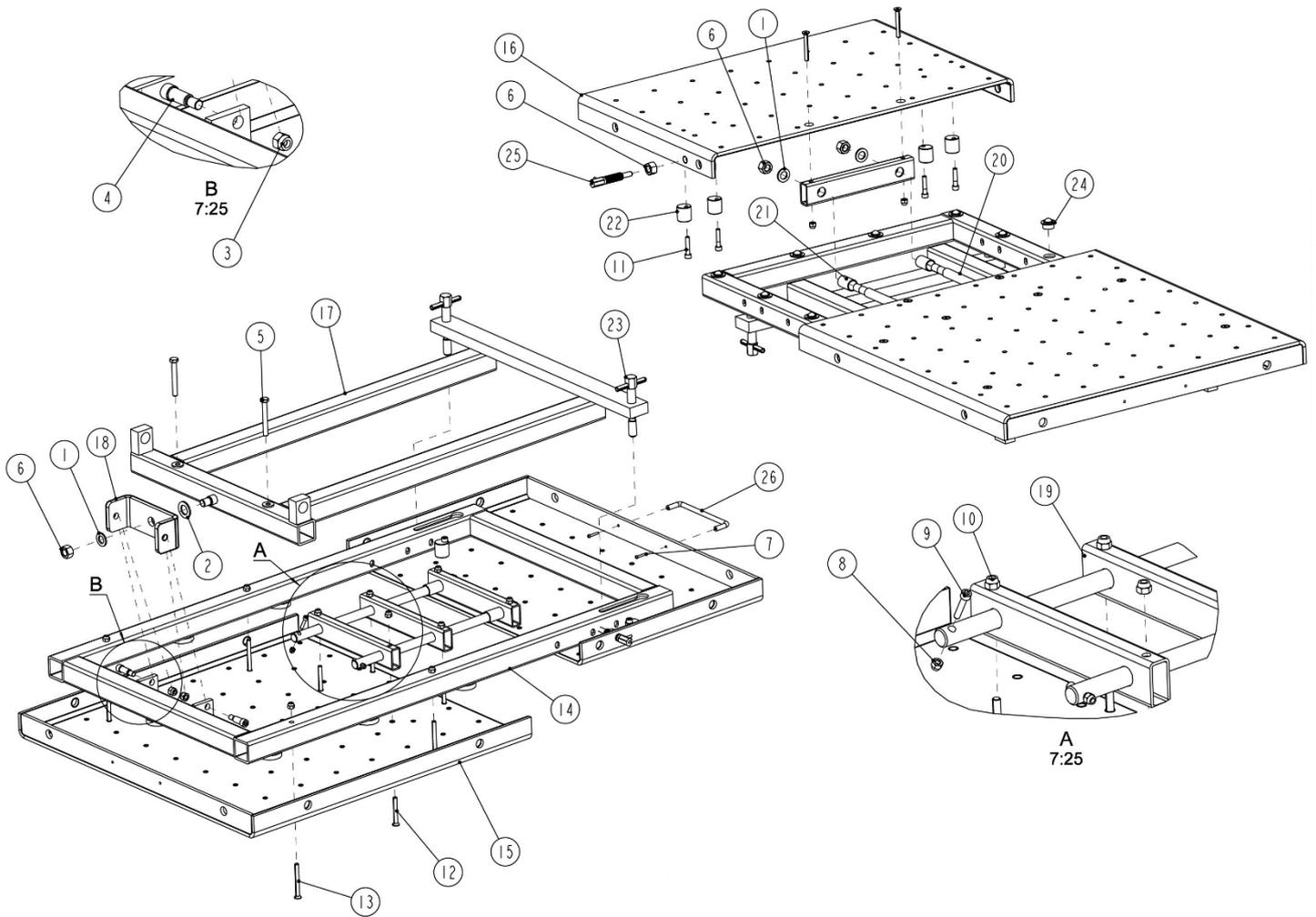
S/N	Code	Description	Specification	Quantity
1	204301009	Circlip	D25-GB894_1	2
2	204301011	Circlip	D30-GB894_1	2
3	615062107	Base frame assembly	MS10-A01	1
4	615062108	Support arm assembly	MS10-A02	1
5	615062109	Platform assembly	MS10-A03	1
6	410562191	DOWN Shaft of the cylinder	MS10-A04	1
7	410562201	UP shaft of the cylinder	MS10-A05	1
8	615062006	Cylinder	YG5060-38-520	1



S/N	Code	Description	Specification	Quantity
1	208109015	Brake	208109015	4
2	206105002	Single steel ball pin	BLPF8_55	2
3	204201005	Spring washer	D10-GB93	16
4	204101006	Flat washer	D10-GB95	16
5	310101010	Straight fitting	G1_4-G1_4	1
6	330305004	Throttle valve	DVG-R-DN8 G1/4-1A	1
7	202109041	Hex socket cylinder head screw	M10X20-GB70	16
8	202110007	Hex socket button head screw	M10X20_GB70_2	2
9	202101022	Cross socket cap head screw	M5X12-GB818	4
10	614059101	Base frame assembly	MS10-A01-B01	1
11	410562723	Holder for the pump	MS10-A01-B02	1
12	410562101	Handle bar	MS10-A01-B03	1
13	310101061B	Straight fitting	NPT3/8-G1/4, L=60	1
14	615028024	Pneumatically driven hydraulic pump	BQ-DA5 (RAL2004) 30MPa	1



S/N	Code	Description	Specification	Quantity
1	205101096	Bushing	2520_SF-1	8
2	205101012	Bushing	2530_SF-1	16
3	204301009	Circlip	D25-GB894_1	12
4	203103011	Hex tightening nut	M24-GB889	8
5	208106001	Straight oil cup	M8X1-GB7940	16
6	614059103	Support arm A	MS10-A02-B01	1
7	614059104	Support arm B	MS10-A02-B02	1
8	614059105	Support arm C	MS10-A02-B03	1
9	614059106	Support arm D	MS10-A02-B04	1
10	614059107	Support arm E	MS10-A02-B05	1
11	614059108	Support arm F	MS10-A02-B06	1
12	410562151	UP sliding wheel	MS10-A02-B07	2
13	410562161	Shaft of thr sliding wheel	MS10-A02-B08	4
14	410562543	Roll-over prevention plate	MS10-A02-B09	2
15	410562551	Shaft of the platform support holder	MS10-A02-B10	2
16	410562141	Down sliding wheel	MS10-A02-B11	2



S/N	Code	Description	Specification	Quantity
1	204101009	Flat washer	D16-GB95	3
2	204101011	Flat washer	D20-GB95	1
3	203103007	Hex tightening nut	M10-GB889	2
4	202208007	Hex socket cylinder head shoulder screw	M10X25-GB5281	2
5	201102072	Hexa head full swivel screw	M10X80-GB5783	2
6	203101009	Hex nut	M16-GB6170	4
7	202101010	Cross screw with hexagon socket	M4X25-GB818	2
8	203103005	Hexagon clamping nut	M6-GB889	2
9	202109023	Cross recessed cylinder head screw	M6X30-GB70	2
10	203103006	Hex tightening nut	M8-GB889	10
11	202109033	Cross socket cylinder head screw	M8X40-GB70	4
12	202111033	Cross socket flat head screw	M8X65-GB70-3	6
13	202111034	Cross socket flat head screw	M8X80-GB70-3	4
14	614059109	Tilting platform assembly	MS10-A03-B01	1
15	614059111	Platform A	MS10-A03-B02	1

S/N	Code	Description	Specification	Quantity
16	614059112	Platform A	MS10-A03-B03	1
17	614059110	Base frame assembly of the platform	MS10-A03-B04	1
18	410562673	Hinge	MS10-A03-B05	1
19	410562683	Guiding tube	MS10-A03-B06	3
20	410562211	Guiding rod	MS10-A03-B07	2
21	410562221	Spacing sheath	MS10-A03-B08	2
22	410562231	Guiding eccentric wheel	MS10-A03-B09	4
23	615062105	Adjustable screw rod assembly	MS10-A03-B10	2
24	208109013	Universal ball	SP-15	8
25	206105001	Plunger pin	TBLT10	1
26	208109014	Stainless knob	US10-160	1



The company

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

hereby declares that the **Scissor lift table**

TW SH10-18 | 1.000 kg
(EE-MS10)

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 1570-1:2011+A1:2014

CE Certificate

MDC 2319

date of issue: 25.10.2019
place of issue: Durham
technical file no.: CST285243/1

Certification body

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