

5000KG ISO C€

# TW 250 B4.5

HeavyLine

HP . TW 404

Clear Floor Two Post Lift Lifting Capacity 5000KG



# Installation, Operation and Parts Manual



Please read this entire manual carefully and completely before installation or operation of the lift.

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## SAFETY INSTRUCTIONS

#### **1.1 Important notices**

Twin Busch offers a one-year's quality warranty for the whole machine, during which any quality problems will be properly solved to the user's satisfaction. However, we will not take any responsibility for whatever bad consequence resulted from improper installation and operation, overload running or unqualified ground condition.

This 2-posts lift is specially designed for lifting motor vehicles that weighs within its outmost lifting capacity. Users are not allowed to use it for any other purposes. Otherwise, we will not bear any responsibility for accidents or damages of the lift. Make sure to pay careful attention to the label of the lifting capacity attached on the lift and never try to lift cars with its weight beyond the limit. Read this manual carefully before operating the machine so as to avoid economic loss or personnel casualty incurred by wrong operation.

Without our professional advice, users are not permitted to make any modification to the control unit or whatever mechanical unit.

#### **1.2 Qualified personnel**

- 1.2.1 Only these qualified staff, who have been properly trained, can operate the lift.
- 1.2.2 Electrical connection must be done by a competent electrician.
- 1.2.3 People who are not concerned are not allowed in the lifting area.

#### **1.3 Danger notices**

- 1.3.1 Do not install the lift on any asphalt surface.
- 1.3.2 Read and understand all safety warnings before operating the lift.
- 1.3.3 The lift, if is not specially designed upon customer's request, is not fit for outdoor use.
- 1.3.4 Keep hands and feet away from any moving parts. Keep feet clear of the lift when lowering.
- 1.3.5 Only these qualified people, who have been properly trained, can operate the lift.
- 1.3.6 Do not wear unfit clothes such as large clothes with flounces, tires, etc, which could be caught by moving parts of the lift.
- 1.3.7 To prevent evitable incidents, surrounding areas of the lift must be tidy and with nothing unconcerned.
- 1.3.8 The lift is simply designed to lift the entire body of vehicles, with its maximum weight within the lifting capacity.
- 1.3.9 Always insure the safety latches are engaged before any attempt to work near or under the vehicle.
- 1.3.10 Make sure to place the lifting pads to the positions as suggested by vehicle makers and when gradually lift the vehicle to the desired height, operators should be certain that the vehicle will not slant, roll-over or slide in lifting process.
- 1.3.11 Check at any time the parts of the lift to ensure the agility of moving parts and the performance of synchronization. Ensure regular maintenance and if anything abnormal occurs, stop using the lift immediately and contact our dealers for help.
- 1.3.12 Lower the lift to its lowest position and do remember to cut off the power source when service finishes.
- 1.3.13 Do not modify any parts of the lift without manufacturer's advice.
- 1.3.14 If the lift is going to be left unused for a long time, users are required to:
  - a. Disconnect the power source;
  - b. Empty the oil tank;
  - c. Lubricate the moving parts with hydraulic oil.

#### 1.4 Training

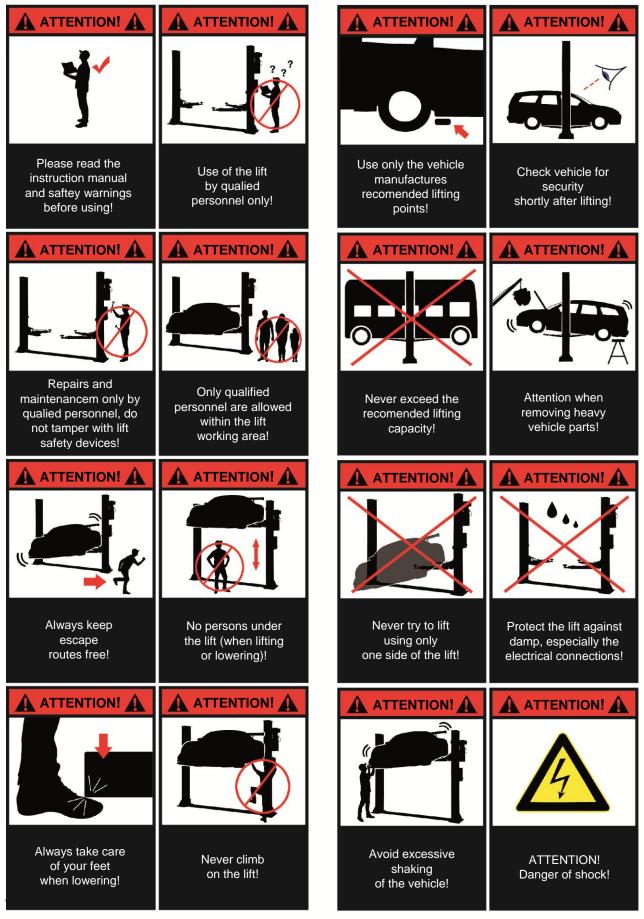
Only these qualified people, who have been properly trained, can operate the lift. We are quite willing to provide professional training for the users when necessary.

Attention: For environment protection, please dispose the disused oil in a proper way.



#### 1.5 Warning signs

All safety warning signs attached on the machine are for the purpose of drawing the user's attention to safety operation. The labels must be kept clean and need to be replaced when they are worn-out or have dropped. Read the explanations of the labels carefully and try to memorize them.





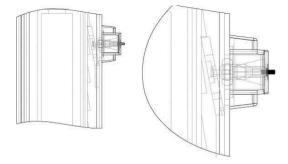
## **OVERVIEW OF THE LIFT**

#### 2.1 General descriptions

This two-post lift is composed of posts, carriages, lifting arms, cylinders and motor unit, etc.

The lift is driven by an electro-hydraulic system. The gear pump delivers hydraulic oil to oil cylinders and pushes upwards its piston. The piston drives the chain to raise the carriage and the lifting arms. During lifting process, the safety teeth will automatically and firmly bite with the safety rod in the posts. Therefore, no slipping will happen in case the hydraulic system breaks down.

#### Safety structure:

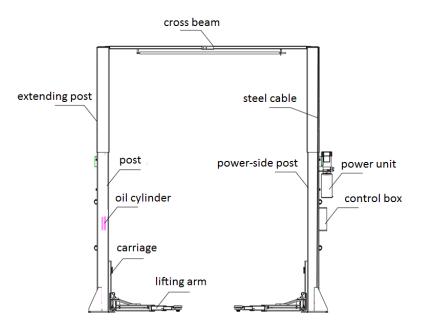


#### 2.2 Technical data

| Model       | lel Lifting capacity Lifting time Lifting height |        | Height Width |         | Width between posts |         |
|-------------|--|--------|--------------|---------|---------------------|---------|
| TW 250 B4.5 | 5000 kg  | 50 Sec | 1900 mm      | 4450 mm | 4028 mm             | 3342 mm |



#### 2.3 Construction of the lift



## INSTALLATION INSTRUCTIONS

#### 3.1 Preparations before installation

#### 3.1.1 Tools and equipments needed

- ✓ Appropriate lifting equipment
- ✓ Anti-abrasion hydraulic oil.
- ✓ Rotary Hammer Drill with 3/4" drill bit.
- ✓ Chalk and tape measure, magnetic plump, 8 metersΦ15 level pipe.
- $\checkmark$  Sockets and open wrenches, a set of inside hex wrenches, cross and straight screw drivers.
- ✓ Hammer, 4pounds, sharp nose pliers, Φ17,Φ19,Φ22 socket spanners

#### 3.1.2 List for parts checking ---Annex 1 (Packing list)

Unfold the package and check if any parts are missing. Do not hesitate to contact us in case any parts are missed.

#### 3.1.3 Ground conditions

The lift should be fixed on a smooth and solid concrete ground with its strength more than 3000psi, tolerance of flatness less than 5mm and minimum thickness of 200mm. In addition, newly built concrete ground takes 28 days to fully harden.

#### 3.2 Precautions for installation

- 3.2.1 Make sure the two posts stand paralleled and are vertical to the ground. No slanting.
- 3.2.2 Joints of oil hose and steel cable must be firmly connected in order to avoid the looseness of steel cable and leakage of oil hose.
- 3.2.3 All bolts should be firmly screwed up.
- 3.2.4 Do not place any vehicle on the lift in the case of trial running.

#### 3.3 Installation

To make it easiler for you clients we have prepared a video that shows you how to perform the installation step by step. This can be found on our internet site or on youtube.

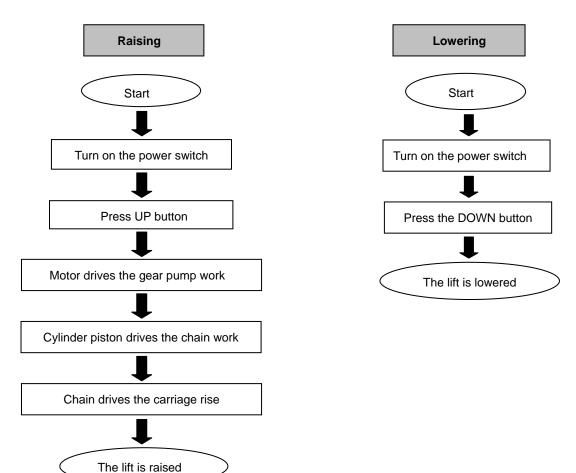


## **OPERATION INSTRUCTIONS**

#### 4.1 Precautions

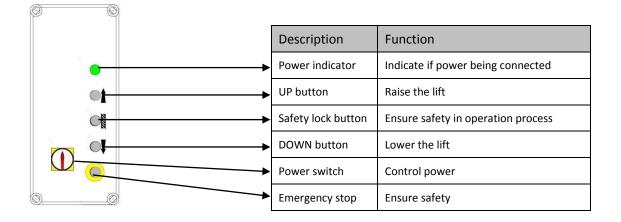
- 4.1.1 Check all the joints of oil hose. Only when there is no leakage, the lift can start work.
- 4.1.2 The lift, if its safety device malfunctions, shall not be used.
- 4.1.3 The machine shall not lift or lower an automobile if its center of gravity is not positioned midway of the lifting arms.
- 4.1.4 Operators and other personnel concerned should stand in a safety area during lifting and lowering process.
- 4.1.5 When lifting arms rise to the desired height, switch off the power at once to prevent any mal-operation done by unconcerned people.
- 4.1.6. Make sure the safety lock of the lift is engaged before you start working under the vehicle.

#### 4.2 Flow chart for operation





## 4.3 Operation instructions



#### **Raise the lift**

- 1. Make sure that you have read and understood the operation manual before operation.
- 2. Park the vehicle between two posts.
- 3. Adjust lifting arms until they reach the supporting positions of the vehicle and make sure the gravity of vehicle located midway of four lifting arms.
- 4. Switch on and insure to operate as per requirements on the nameplate attached.
- 5. Press the "UP" button on the control box until pads of lifting arms touched the prop-position of vehicle.
- 6. Keep on raising the vehicle to let it have a bit clearance from the ground and check again its stability.
- 7. Raise the vehicle to the desired height, check it is safe or not, press the "Safety Lock" button on the control panel to have the safety lock engaged, turn off the power and then perform maintenance or repair work underneath.

#### Lower the lift

- 1. Switch on.
- 2. Press the "DOWN" button on the control box. Meanwhile the lifting arms automatically go upwards about 5CM to release the safety lock. Then lifting arms start lowering.
- 3. After lifting arms lower to the lowest position, pull them out from under the vehicle and clear up all the obstacles.
- 4. Drive the vehicle away.



## **TROUBLE SHOOTING**

ATTENTION: If the trouble could not be fixed by yourself, please do not hesitate to contact us for help. We will offer our service at the earliest time we can. By the way, troubles could be judged and solved much faster if more details or pictures could be provided.

| TROUBLES                      | CAUSE  | SOLUTION                            |
|-------------------------------|--|-------------------------------------|
| Abusernaliss                  | Abrasion exists on insider surface of the posts.             | Grease the inside of the post.      |
| Abnormal noise                | Trash in the post.   | Clear the trash.                    |
|                               | The wire connection is loose.                                | Check and make a good connection.   |
| Motor does not run            | The motor is blown.  | Replace it.                         |
| and will not rise             | The limit quitch is demograd or the wire connection is lease | Connect it or adjust or replace the |
|                               | The limit switch is damaged or the wire connection is loose. | limit switch.                       |
|                               | The motor run reversely.                                     | Check the wire connection.          |
|                               | Overflow valve is loose or jammed.                           | Clean or adjust it.                 |
| Motor runs but will           | The gear pump is damaged.                                    | Replace it.                         |
| not raise                     | Oil level is too low.  | Add oil.                            |
|                               | The oil hose became loose or dropped off.                    | Tighten it.                         |
|                               | The cushion valve became loose or jammed.                    | Clean or adjusts it.                |
|                               | The oil hose leaks.  | Check or replace it.                |
| Carriages go                  | The oil cylinder is not tightened.                           | Replace the seal.                   |
| down slowly after             | The single valve leaks.                                      | Clean or replace it.                |
| being raised                  | E-magnetic valve fails to work well.                         | Clean or replace it.                |
|                               | Steel cable is loose or not with same tightness.             | Check and adjust the tightness.     |
|                               | The oil filter is jammed.                                    | Clean or replace it.                |
|                               | Oil level is too low.  | Add oil.                            |
|                               | The overflow valve is not adjusted to the right position.    | Adjust it.                          |
| Raising too slow              | The hydraulic oil is too hot (above 45°).                    | Change the oil.                     |
|                               | The seal of the cylinder is abraded.                         | Replace the seal.                   |
|                               | Inside surface of the posts is not well greased.             | Add grease.                         |
|                               | The throttle valve jammed.                                   | Clean or replace.                   |
|                               | The hydraulic oil is dirty.                                  | Change the oil.                     |
| Lowering too slow             | The anti-surge valve jammed.                                 | Clean it.                           |
|                               | The oil hose jammed.   | Replace it.                         |
| The steel cable<br>is abraded | No grease when installation or out of lifetime.              | Replace it.                         |

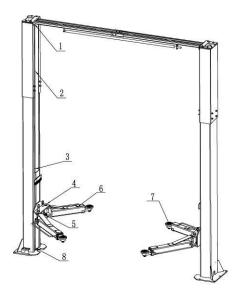


## MAINTENANCE

Easy and low cost routine maintenance can ensure the lift works normally and safely. Follow all requirements for routine maintenance. Frequency of routine maintenance is determined by working condition and frequency.

The following parts need lubrication.

| S/N | Name         |  |  |  |
|-----|--------------|--|--|--|
| 1   | UP pulley    |  |  |  |
| 2   | Steel cable  |  |  |  |
| 3   | Slider       |  |  |  |
| 4   | Shaft        |  |  |  |
| 5   | Arm lock     |  |  |  |
| 6   | Lifting arm  |  |  |  |
| 7   | Lifting tray |  |  |  |
| 8   | DOWN pulley  |  |  |  |



#### 6.1 Daily Check

The user must perform a daily check. Daily check of safety lock system in very

important - the discovery of device failure before action could save time and prevent great loss, injury or casualty.

- Before operation, judge whether the safety locks are engaged.
- · Check whether the oil hose leaks or not.
- · Check the connections of the chain and steel cable and check the power unit.
- · Check whether the expansion bolts are firmly screwed.
- · Check if the arm lock works well or not.

#### 6.2 Weekly Check

- · Check the flexibility of moving parts.
- · Check the working conditions of the safety parts.
- Check the amount of oil left in the oil tank.
- Check whether the expansion bolts are firmly screwed.

#### 6.3 Monthly Check

- · Check whether expansion bolts are firmly screwed.
- · Check the tightness of the hydraulic system and screw firm the joints if it leaks.
- Check the lubrication and abrasion circumstance of axial pins, carriages, lifting arms and other related parts and replace in time with new ones if they failed to work well.
- Check the lubrication and abrasion circumstance of steel cable.

#### 6.4 Yearly Check

- Empty the oil tank and check the quality of hydraulic oil.
- · Wash and clean the oil filter.



If the above maintenance suggestions are strictly followed, the lift will always keep in a good working condition and meanwhile accidents could be avoided to a large extent.

#### Annex 1, Packing List of the whole lift

| S/N | Material # | Name                           | Drawing#       | Qty | Property       |
|-----|------------|--------------------------------|----------------|-----|----------------|
| 1   |            | Power unit                     |                | 1   | Assembly       |
| 2   |            | Extending post                 | 8215E-A9       | 2   | Assembly       |
| 3   |            | Power-side post                | 8215E-A1       | 1   | Assembly       |
| 4   |            | Post                           | 8215E-A2       | 1   | Assembly       |
| 5   |            | Arm assembly                   | 8255E-A4       | 4   | Assembly       |
| 6   |            | Control box                    |                | 1   | Assembly       |
| 7   |            | Electromagnets package         |                | 1   | Package        |
| 8   |            | Cross beam (out)               | 8215E-A10-B1   | 1   | Powder-coating |
| 9   |            | Cross beam (in)                | 8215E-A10-B2   |     | Powder-coating |
| 10  |            | Roof protection bumper         | 8215E-A10-B3   | 1   | Powder-coating |
| 11  |            |                                |                |     | ·              |
|     |            | Feet protection fender         | 8255E-A4-B1-C7 | 4   | Welded         |
|     |            | Lifting tray                   | 8254E-A7-B4    | 4   | Assembly       |
|     |            | Chain protection cloth         | 8215E-A5       | 2   | Assembly       |
|     |            | Rubber oil hose L=400          | 8214E-A4-B3    | 1   | Assembly       |
|     |            | Rubber protection pad          | 8255E-A3-B3    | 2   | Rubber         |
|     |            | Oil hose clip (Big)            | 8214-A1-B2     | 6   | Zinc plating   |
|     |            | Pin                            | 8255E-A13      | 4   | Zinc plating   |
|     |            | Safety locking plate           | 8254E-A13      | 4   | Zinc plating   |
|     |            | Electromagnet                  | 8254E-A15      | 4   | ABS            |
|     |            | Height adapter                 | 8254E-A11      | 4   | Zinc plating   |
|     |            | Positioning block              | 8254E-A17      | 4   | Zinc plating   |
|     |            | Hose& wire cover               | 8254E-A18      | 6   | Powder-coating |
|     |            | Rod for chain protection cloth | 8254E-A1-B5    | 4   | Zinc plating   |
|     |            | Hex head full swivel screw     | M8*35          | 4   | Standard       |
|     |            | Hex head full swivel screw     | M14*30         | 16  | Standard       |
|     |            | Hex head full swivel screw     | M14*25         | 5   | Standard       |
|     |            | Hex head full swivel screw     | M6*35          | 1   | Standard       |
|     |            | Hex head full swivel screw     | M12*30         | 4   | Standard       |
|     |            | Hex socket button head screw   | M8*12          | 8   | Standard       |
|     |            | Cross socket cap head screw    | M5*10          | 24  | Standard       |
|     |            | Cross socket cap head screw    | M5*23          | 12  | Standard       |
|     |            | Cross socket cap head screw    | M6*8           | 10  | Standard       |
|     |            | Cross socket cap head screw    | M6*16          | 4   | Standard       |
|     |            | Cross socket flat head screw   | M8*16          | 4   | Standard       |
|     |            | Flat washer                    | M6             | 16  | Standard       |
|     |            | Flat washer                    | M14            | 21  | Standard       |
|     |            | Flat washer                    | M8             | 4   | Standard       |
|     |            | Flat washer                    | M12            | 4   | Standard       |
|     |            | Spring washer                  | M8             | 4   | Standard       |
|     |            | Spring washer                  | M14            | 21  | Standard       |
|     |            | Spring washer                  | M12            | 4   | Standard       |

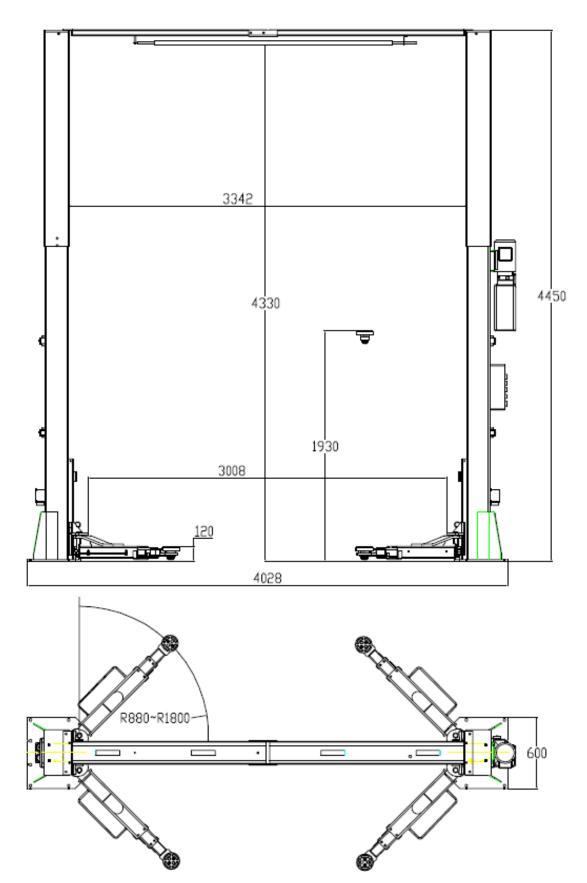


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| S/N | Material # | Name            | Drawing# | Qty | Property |
|-----|------------|-----------------|----------|-----|----------|
|     |            | Nut             | M6       | 9   | Standard |
|     |            | Nut             | M8       | 4   | Standard |
|     |            | Nut             | M14      | 21  | Standard |
|     |            | Circlip 38      | 38       | 4   | Standard |
|     |            | Expansion bolts | M18*180  | 10  | Standard |

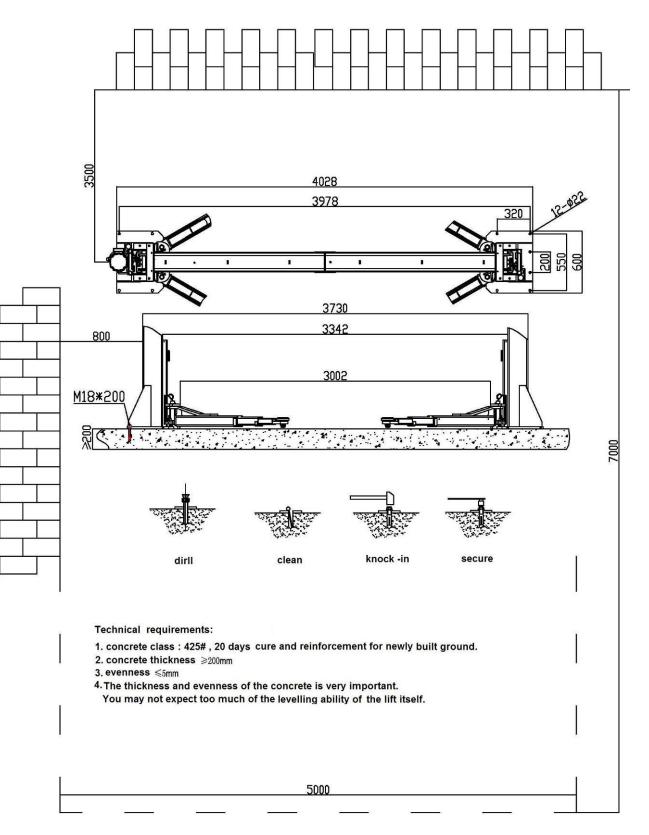


## Annex2, Overall diagram





#### Annex3, Floor plan

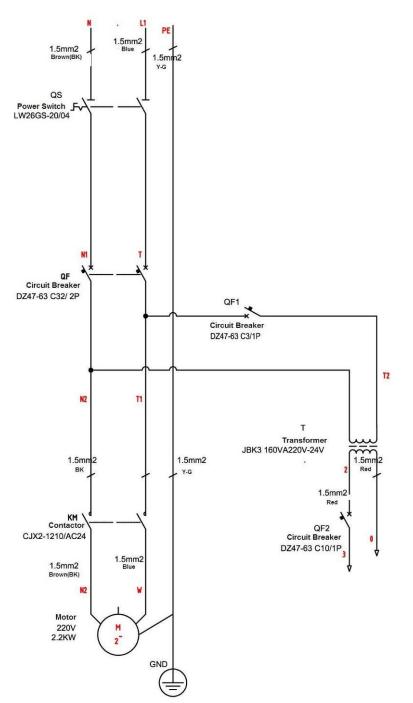




#### Annex4, Wiring diagram

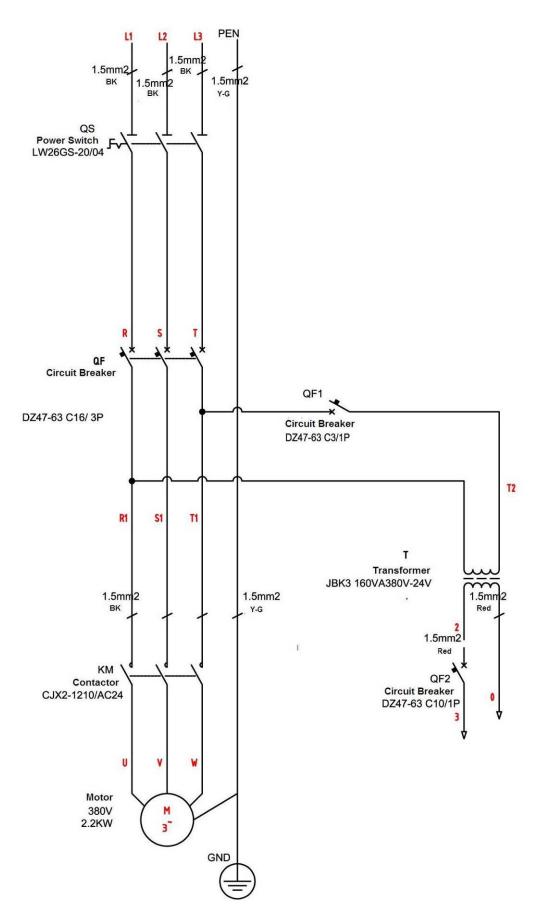
NOTE: For specific requirements on voltage, the actual voltage of your lift may differ with the voltage marked in the following diagram.

#### Single phase

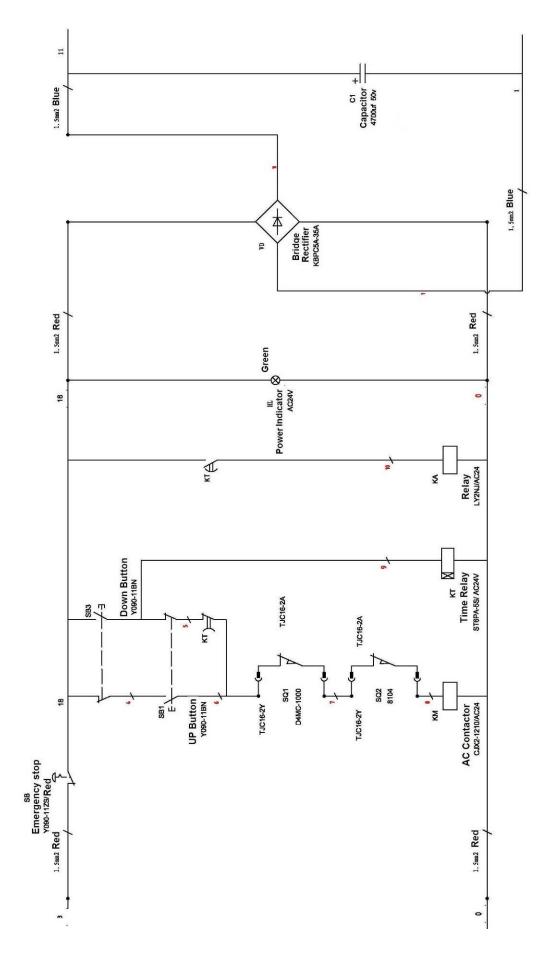


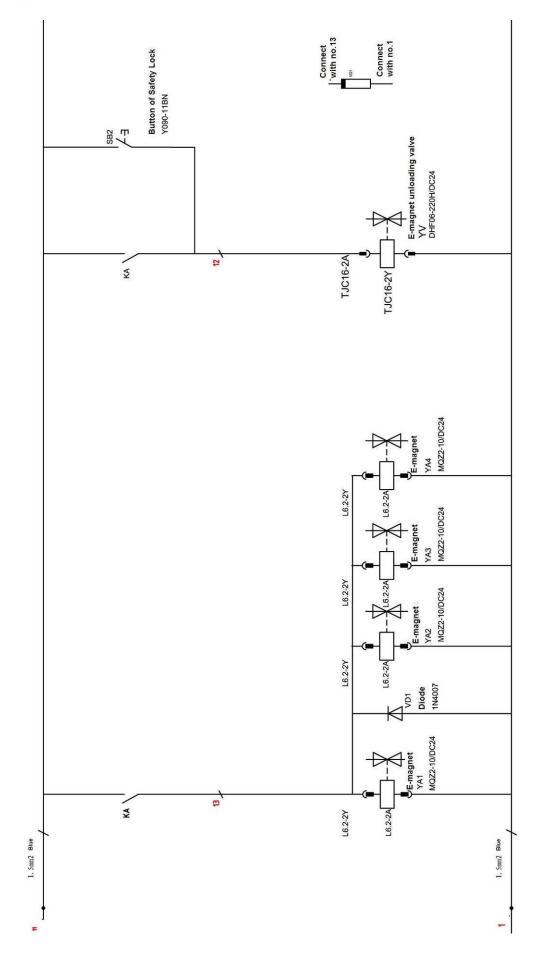


#### 3 Phase

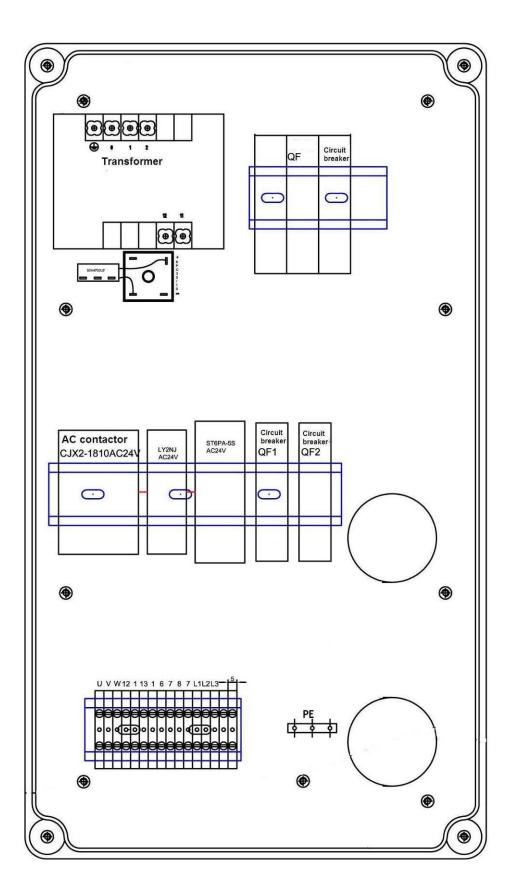




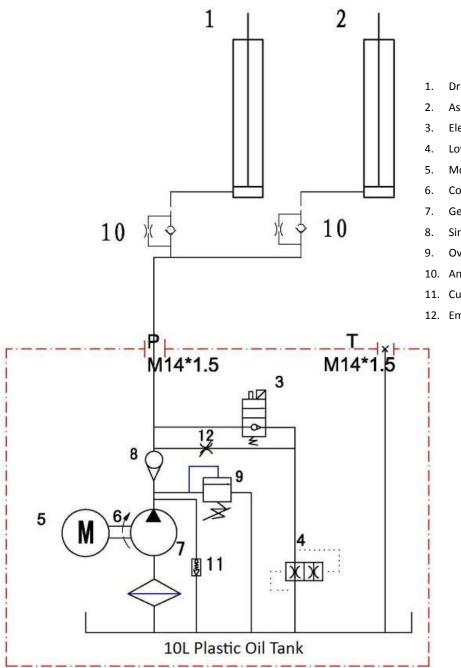






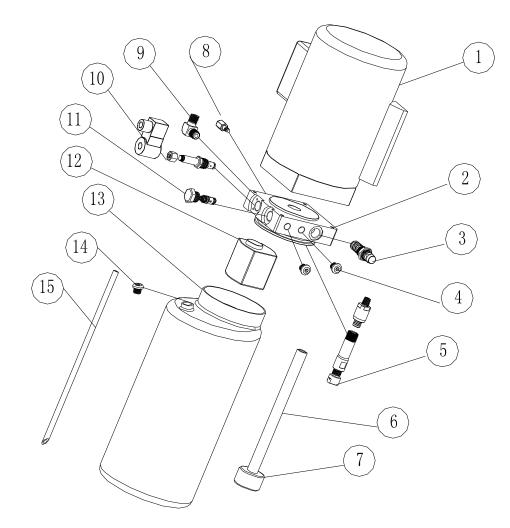






- Driving cylinder
- Assistant cylinder
- Electro-unloading valve
- Lowering throttle valve
- Motor
- Coupling
- Gear pump
- Single-way valve
- Overflow valve
- Anti-surge valve
- Cushion valve
- Emergent unloading valve

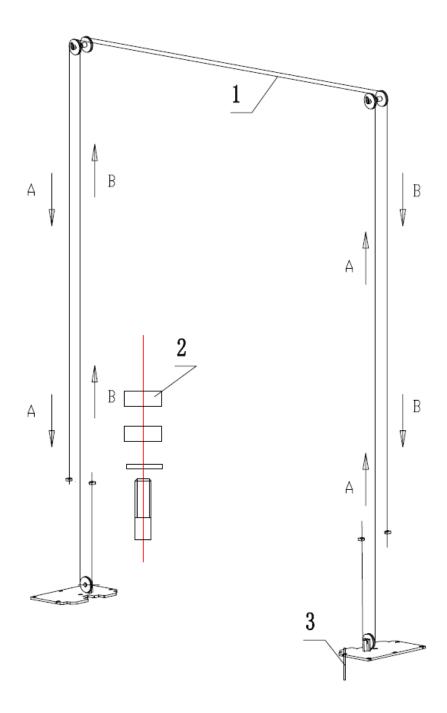




| S/N | Name                    | Qty |  |  |
|-----|-------------------------|-----|--|--|
| 1   | Motor                   | 1   |  |  |
| 2   | Hydraulic block         | 1   |  |  |
| 3   | Overflow valve          | 1   |  |  |
| 4   | Removable plug          | 2   |  |  |
| 5   | Cushion valve           | 1   |  |  |
| 6   | Oil absorbing pipe      | 1   |  |  |
| 7   | Oil filter              | 1   |  |  |
| 8   | Throttle valve          | 1   |  |  |
| 9   | Oil pipe tie-in         | 1   |  |  |
| 10  | Electro-unloading valve | 1   |  |  |
| 11  | One-way valve           | 1   |  |  |
| 12  | Gear pump               | 1   |  |  |
| 13  | 3 Plastic oil tank      |     |  |  |
| 14  | Oil tank cover          |     |  |  |
| 15  | Oil back pipe           | 1   |  |  |

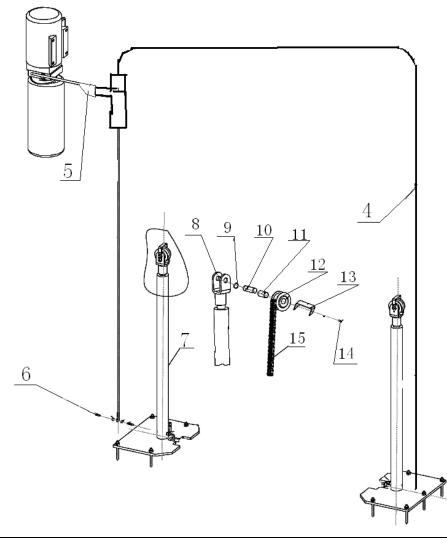


## Annex6, Separated drawings for the lift



| S/N | Material # | Name Drawing#/Spec.    |              | Qty | Property | Note |
|-----|------------|------------------------|--------------|-----|----------|------|
| 1   |            | Steel cable L=12490mm  |              | 2   | Assembly |      |
| 2   |            | Hex nut M20            | GB/T610-2000 | 8   | Standard |      |
| 3   |            | Expansion bolt M18*180 |              | 12  | Standard |      |

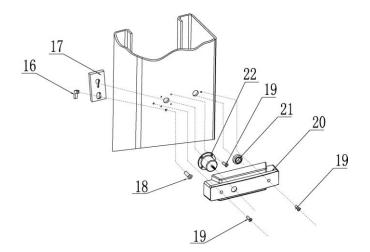




| S/N | Material # | Name                       | Drawing#/Spec.          | Qty | Property | Note |
|-----|------------|----------------------------|-------------------------|-----|----------|------|
| 4   |            | Oil Hose L=10100           |                         | 1   | Assembly |      |
| 5   |            | Short oil hose L=500       |                         | 1   |          |      |
| 6   |            | Connector                  |                         | 1   |          |      |
| 7   |            | Oil cylinder               | FL-8225E-A4-B3          | 2   | Assembly |      |
| 8   |            | Cylinder fixing ring       | FL-8224-A4-B9           | 2   | Q235A    |      |
| 9   |            | Hex head full swivel screw | GB/T894.2-1986          | 4   | Standard |      |
| 10  |            | Chain shaft                | FL-8224-A4-B11          | 2   | Q235A    |      |
| 11  |            | Shaft 2548                 | SF-1                    | 2   | Assembly |      |
| 12  |            | Chain wheel                | FL-8225E-A4-B6          | 2   | Assembly |      |
| 13  |            | U shape plate              | FL-8225E-A4-B7          | 2   | Assembly |      |
| 14  |            | Anex screw M6*10           | GB/T70.1-2000           | 4   | Copper   |      |
| 15  |            | Chain                      | LH1234-127LGB/6074-1995 | 2   | Assembly |      |



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| S/N | Material # | Name                                | Drawing#/Spec. | Qty | Property | Note |
|-----|------------|-------------------------------------|----------------|-----|----------|------|
| 16  |            | Positioning block                   | FL-8224E-A1-B3 | 4   | Q235A    |      |
| 17  |            | Safety locking plate                | FL-8224E-A1-B2 | 4   | Q235A    |      |
| 18  |            | Cross socket cap headed screw M6*16 | GB/T818-2000   | 4   | Standard |      |
| 19  |            | Cross socket cap headed screw M6*10 | GB/T818-2000   | 24  | Standard |      |
| 20  |            | Electromagnet protection cover      | FL-8224E-A1-B5 | 4   | Plastic  |      |
| 21  |            | Φ20 hose protection ring            | FL-8224-A1-B6  | 4   | Rubber   |      |
| 22  |            | Electromagnet (small)               | FL-8224E-A1-B4 | 4   | Assembly |      |



## Annex7, Spare parts list

#### Spare parts list -for the electrical system

| S/N | Material<br># | ltem            | Spec.             | Qty | PIC.                                  | Note |
|-----|---------------|-----------------|-------------------|-----|---------------------------------------|------|
| 1   |               | Power switch    | LW26GS-20/04      | 1   |                                       |      |
| 2   |               | Button          | Y090-11BN         | 3   |                                       |      |
| 3   |               | Power indicator | AD17-22G-AC24     | 1   |                                       |      |
| 4   |               | Transformer     | JBK-160VA220V-24V | 1   | Same as item7                         |      |
| 5   |               | Transformer     | JBK-160VA230V-24V | 1   | Same as item7                         |      |
| 6   |               | Transformer     | JBK-160VA240V-24V | 1   | Same as item7                         |      |
| 7   |               | Transformer     | JBK-160VA380V-24V | 1   |                                       |      |
| 8   |               | Transformer     | JBK-160VA400V-24V | 1   | Same as item7                         |      |
| 9   |               | Transformer     | JBK-160VA415V-24V | 1   | Same as item7                         |      |
| 10  |               | AC contactor    | CJX2-1210/AC24    | 1   |                                       |      |
| 11  |               | Circuit breaker | DZ47-63 C16 /3P   | 1   | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 |      |
| 12  |               | Circuit breaker | DZ47-63 C32 /2P   | 1   |                                       |      |
| 13  |               | Circuit breaker | DZ47-63 C3 /1P    | 1   | and a                                 |      |
| 14  |               | Circuit breaker | DZ47-63 C6 /1P    | 1   | Same as item7                         |      |
| 15  |               | Limit switch    | D4MC1000          | 1   |                                       |      |
| 16  |               | Limit switch    | TZ8108            | 1   |                                       |      |



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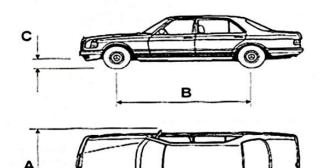
| S/N | Material<br># | ltem              | Spec.          | Qty | PIC.                                  | Note |
|-----|---------------|-------------------|----------------|-----|---------------------------------------|------|
| 17  |               | Bridge rectifier  | KBPC5A-35A     | 1   | M                                     |      |
| 18  |               | Capacitor         | 4700UF/50V     | 1   | Managerine Alex<br>10 50. \$700 50.47 |      |
| 19  |               | Control box       | big            | 1   |                                       |      |
| 20  |               | Relay             | LY2NJ/AC24     | 1   |                                       |      |
| 21  |               | Relay holder      | PTF-08A        | 1   |                                       |      |
| 22  |               | Time relay        | ST6PA-5S/AC24V | 1   |                                       |      |
| 23  |               | Time relay holder | PYF-08A        | 1   |                                       |      |

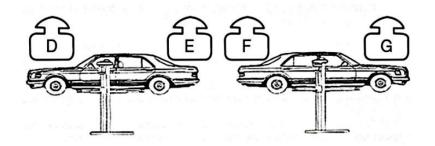
## Spare parts list – for the mechanical system

| S/N | Material # | Name               | Drawing#/Spec.            | Qty | Property   | Note |
|-----|------------|--------------------|---------------------------|-----|------------|------|
| 1   |            | Slider             | FL-8224-A3-B6             | 16  | Nylon 1010 |      |
| 2   |            | Rubber lifting pad | FL-8225E-A7-B4-C4         | 4   | Rubber     |      |
| 3   |            | O-shape seal ring  | Inside diameter 23.6*3.55 |     |            |      |
| 4   |            | Y-shape seal ring  | SD70*60*8                 |     |            |      |
| 5   |            | Anti-dust ring     | DHS40(40*48*5/6.5)        |     |            |      |



# Vehicle weight distribution





| Modell | А    | В    | С    | D    | E    | F    | G    |
|--------|------|------|------|------|------|------|------|
| Nr.    | (mm) | (mm) | (mm) | (kg) | (kg) | (kg) | (kg) |
| TW 250 | 2720 | 3850 | 100  | 2800 | 2200 | 2800 | 2200 |



# Preperation protocol

| The lift type   | with the                                     |             |
|---|--|-------------|
| serial number:  | was built on                                 |             |
| by the company  | in   |             |
| and was checked for safety and functi                                 | on and was put into operation.               |             |
|   |  |             |
|   |  |             |
| The set up and preparation was carrie                                 | d out by the OPERATOR   EXPORT               |             |
| The safety of the lift was checked by a                               | in .   |             |
| The operator confirms the installation install before launching unit. | of the lift, and qualified experts have comf | rmed proper |
| Date  | Owner/ Operator                              | Signature   |
| Date  | Installation expert                          | Signature   |
| Address Owner/ Operator:  |  |             |
| Address Installation expert:  |  |             |
|   |  |             |

Twin Busch GmbH | Amperestr. 1 | 64625 Bensheim | twinbusch.de | Tel.: 06251/70585-0

## **Inspection findings**



Regular/ extraordinary inspection

On the date of ..... this lift was put through a regular/ extraordinary and thorough inspection. During this inspection these issues were/ were not found.

Scope of the audit:

Outstanding partial inspection:

The use of this equipment is authorized and the machine and all features have been inspected .

Location/ Date

Inspectors signature

#### **Operator or agent**

| Taken notes of the defects |      |           |
|----------------------------|------|-----------|
| Defect corrected           | Date | Signature |
| Verification               | Date | Signature |

On the date of ...... this lift was put through re-inspection. During this inspection these issues were/ were not found.

The use of this equipment is authorized and the machine and all features have been inspected.

Location/ Date

Inspectors signature



## Safety review pursuant to UVV type

Safety inspection before commissioning/ regular checks/ extraordinary (Mark off those that do not apply)

| Inspection                             | Good<br>shape  | defective         | Re-inspection   | Notes |
|--|----------------|-------------------|-----------------|-------|
| Warning labels/ signs                  |                |                   |                 |       |
| Name plate/ ID                         |                |                   |                 |       |
| Limit switch function                  |                |                   |                 |       |
| Condition of rubber plates             |                |                   |                 |       |
| Function of carrier arm locks          |                |                   |                 |       |
| Supporting structure (cracks etc.)     |                |                   |                 |       |
| Function of safety latches             |                |                   |                 |       |
| All screws tight                       |                |                   |                 |       |
| Condition of steel cables              |                |                   |                 |       |
| Condition of covers                    |                |                   |                 |       |
| Condition of chain                     |                |                   |                 |       |
| Condition of cable pulleys             |                |                   |                 |       |
| Condition of hydraulic lines           |                |                   |                 |       |
| Fluid level of hydraulic unit          |                |                   |                 |       |
| Hydraulic system seals                 |                |                   |                 |       |
| Condition of the piston rod            |                |                   |                 |       |
| Condition of electronics               |                |                   |                 |       |
| Function test of the lift              |                |                   |                 |       |
| Foundation condition (cracks)          |                |                   |                 |       |
| Lift Slides/guides in the lift         |                |                   |                 |       |
| column                                 |                |                   |                 |       |
| Other                                  |                |                   |                 |       |
| (Check the appropriate box if re-inspe | action is noce | ssary mark that h | (Illow as woll) |       |

(Check the appropriate box, if re-inspection is necessary mark that box as well!)

Inspector (Name, Address): .....

Inspected on: .....

#### Inspection result:

| 1     |
|-------|
| <br>ł |
|       |

Commissioning/ use possible. Resolve issues by ..... Commissioning/ use prohibited. Re-inspection neccesary. No defects. Commissioning/ use possible.

Signature owner/ operator: .....

Signature inspector: .....

## **Inspection findings**



Regular/ extraordinary inspection

On the date of ..... this lift was put through a regular/ extraordinary and thorough inspection. During this inspection these issues were/ were not found.

Scope of the audit:

Outstanding partial inspection:

The use of this equipment is authorized and the machine and all features have been inspected .

Location/ Date

Inspectors signature

## **Operator or agent**

| Taken notes of the defects |      |           |
|----------------------------|------|-----------|
| Defect corrected           | Date | Signature |
| Verification               | Date | Signature |

On the date of ...... this lift was put through re-inspection. During this inspection these issues were/ were not found.

The use of this equipment is authorized and the machine and all features have been inspected.

Location/ Date

Inspectors signature



## Safety review pursuant to UVV type

Safety inspection before commissioning/ regular checks/ extraordinary (Mark off those that do not apply)

| Inspection                             | Good<br>shape  | defective          | Re-inspection | Notes |
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| Limit switch function                  |                |                    |               |       |
| Condition of rubber plates             |                |                    |               |       |
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| Supporting structure (cracks etc.)     |                |                    |               |       |
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| All screws tight                       |                |                    |               |       |
| Condition of steel cables              |                |                    |               |       |
| Condition of covers                    |                |                    |               |       |
| Condition of chain                     |                |                    |               |       |
| Condition of cable pulleys             |                |                    |               |       |
| Condition of hydraulic lines           |                |                    |               |       |
| Fluid level of hydraulic unit          |                |                    |               |       |
| Hydraulic system seals                 |                |                    |               |       |
| Condition of the piston rod            |                |                    |               |       |
| Condition of electronics               |                |                    |               |       |
| Function test of the lift              |                |                    |               |       |
| Foundation condition (cracks)          |                |                    |               |       |
| Lift Slides/guides in the lift         |                |                    |               |       |
| column                                 |                |                    |               |       |
| Other                                  |                |                    |               |       |
| (Check the appropriate box if re-inspe | ection is nece | ssary mark that ho | v as well!)   |       |

(Check the appropriate box, if re-inspection is necessary mark that box as well!)

Inspector (Name, Address): .....

Inspected on: .....

#### Inspection result:

Commissioning/ use possible. Resolve issues by ..... Commissioning/ use prohibited. Re-inspection neccesary. No defects. Commissioning/ use possible.

Signature owner/ operator: .....

Signature inspector: .....

Twin Busch GmbH | Amperestr. 1 | 64625 Bensheim | twinbusch.de | Tel.: 06251/70585-0



The company

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

declares hereby, that the 2-

2-post vehicle lift

TW 250 + TW 250 B4.5 | 5000 kg

serial no.

in the configuration placed on the market by us, meets the relevant safety and health requirements, as required by the following EC directive(s) in it's/their current version(s).

EC-directive(s)

## 2006/42/EC Machinery 2006/95/EC Low Voltage

Applied harmonized standards and regulations

EN 1493:2010 Car lifts EN 60204-1:2006/A1:2009 Safety of machinery - Electrical equipment of machines

CE Certificate

N8M 15 04 87411 014 M6A 15 04 87411 013 date of issue: place of issue: technical file no.: 20.04.2015 München 646821 400902

Certification body

TÜV Süd Product Service GmbH, Ridlerstraße 65, D-80339 München Notified Body Appointment No. 0123

Any alteration to the equipment, improper use or installation void this declaration.

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

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

Authorized signatory: Michael Glade Bensheim, 23.06.15 Qualitätsmanagement

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