

# **TWX-11**

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



*Always read these operating instructions carefully before using the tyre changer. Follow the instructions carefully.*

**Table of contents**

**1. General information .....1**

**2. Identification of the instructions for use .....1**

**3. Technical data .....1**

**4. Modification of the product.....2**

**5. Safety-related information .....2**

    5.1 *Safety instructions*.....2

**6. Compliance with the product.....4**

**7. Technical specification.....4**

    7.1 *Machine description*.....4

**8. Structure and installation.....5**

    8.1 *Preparation before installation* .....5

    8.2 *Soil conditions* .....5

    8.3 *Assembly instructions*.....5

**9. Commissioning..... 11**

    9.1 *Safety precautions*..... 11

    9.2 *Function tests*..... 11

    9.3 *Description of the control unit*..... 12

**10.Troubleshooting ..... 16**

**11.Maintenance ..... 17**

**12.Appendix ..... 19**

    12.1 *Dimensions of the tyre changer*..... 19

    12.2 *Circuit diagram*.....20

    12.3 *Pneumatics*.....20

    12.4 *Detailed drawing and parts description* .....21

**Further attachment:**

- **EU Declaration of Conformity**

Important information:

**ASSEMBLY**



You can find the assembly video for this machine on YouTube: <https://youtu.be/GkhYzqK1Olg> or scan the QR code.



**PRODUCT PRESENTATION**



You can find the product presentation video for this lift on YouTube: <https://youtu.be/wpxmK3ngbnQ> or scan the QR code.





## TIPS & TRICKS



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

<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 information

The TWX-11 automatic tyre changer with swing arm design has been developed for demounting / mounting tyres.

Special features of the product:

- **Top built quality with CE- certificat**
- Manufactured to **ISO 9001**
- Side swing mpounting arm design
- Eccentric-tension of mount and demount head
- Powerful bead breaker
- Self centered 4 clamping jaws system
- 24" large turntable for cars and vans
- Tubeless tyre infl ating system
- Powerful E-Motor for supply and return lines
- Clamping jaws made of special steel
- Plastic protectors for mounting head / jaws
- Top qualitiy and massive construcion

## 2. Identification of the instructions for use

Operating instructions for the **TWX-11**

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

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

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

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

Status: -00, 13.11.2024

File: TWX-11\_Tyre\_changer\_Manual\_uk\_00\_20241113.pdf

## 3. Technical data

Bead breaker force	2500 kg
Power supply	230 V / 400 V
Motor power	1.1 kW at 230V   0.75 KW at 400V
Noise level	< 70 dB
Wheel diameter max.	41" (1040 mm)
Wheel width max.	14" (355 mm)
Weight	211 kg
Air supply	8 - 10 bar
Outside clamping	10" (254 mm) to 21" (534 mm)
Inside clamping	12" (305 mm) to 24" (610 mm)
Recommended for low cross-section tyres	Yes

Pressure reducer with maintenance unit	Yes
Pneumatic clamping disc / Adjustable and stoppable	Yes

#### **4. Modification of the product**

Improper use, modifications, conversions and attachments of the tyre changer 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 tyre changer. Keep the instructions for future reference. Follow the instructions carefully to achieve the best performance from the machine and to avoid damage caused by personal negligence.

Check all connections and components thoroughly for damage.

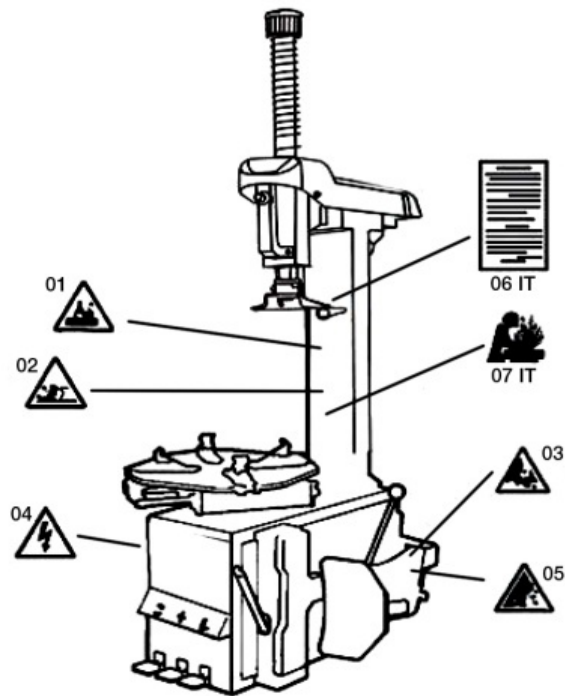
##### **5.1 Safety instructions**

We accept no liability for damage caused by improper installation and operation, overloading or unsuitable floor conditions.

- Read and understand all safety instructions before operating the appliance.
- Only trained personnel may operate the tyre changer.
- Pneumatic connections must be carried out by competent persons.
- Unauthorised persons are not permitted in the work area.
- Do not leave the controls while the machine is in motion.
- Keep hands and feet away from moving parts.
- Do not wear unsuitable clothing that could be caught by moving parts.
- To avoid accidents, the work area must be tidy.
- Regularly check the machine components for mobility.
- Do not make any modifications to parts without the manufacturer's instructions.

## 5.2 Warnings

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.



- 01 Never place your hands under the mounting head during operation.
- 02 Never place your hands between the clamping jaws during operation.
- 03 Do not place your hands in the tyre bead during dismounting.
- 04 Please ensure that the system is properly earthed.
- 05 Never place your feet between the bead breaker blade and the housing during operation.
- 06 It is imperative that you observe all warnings:

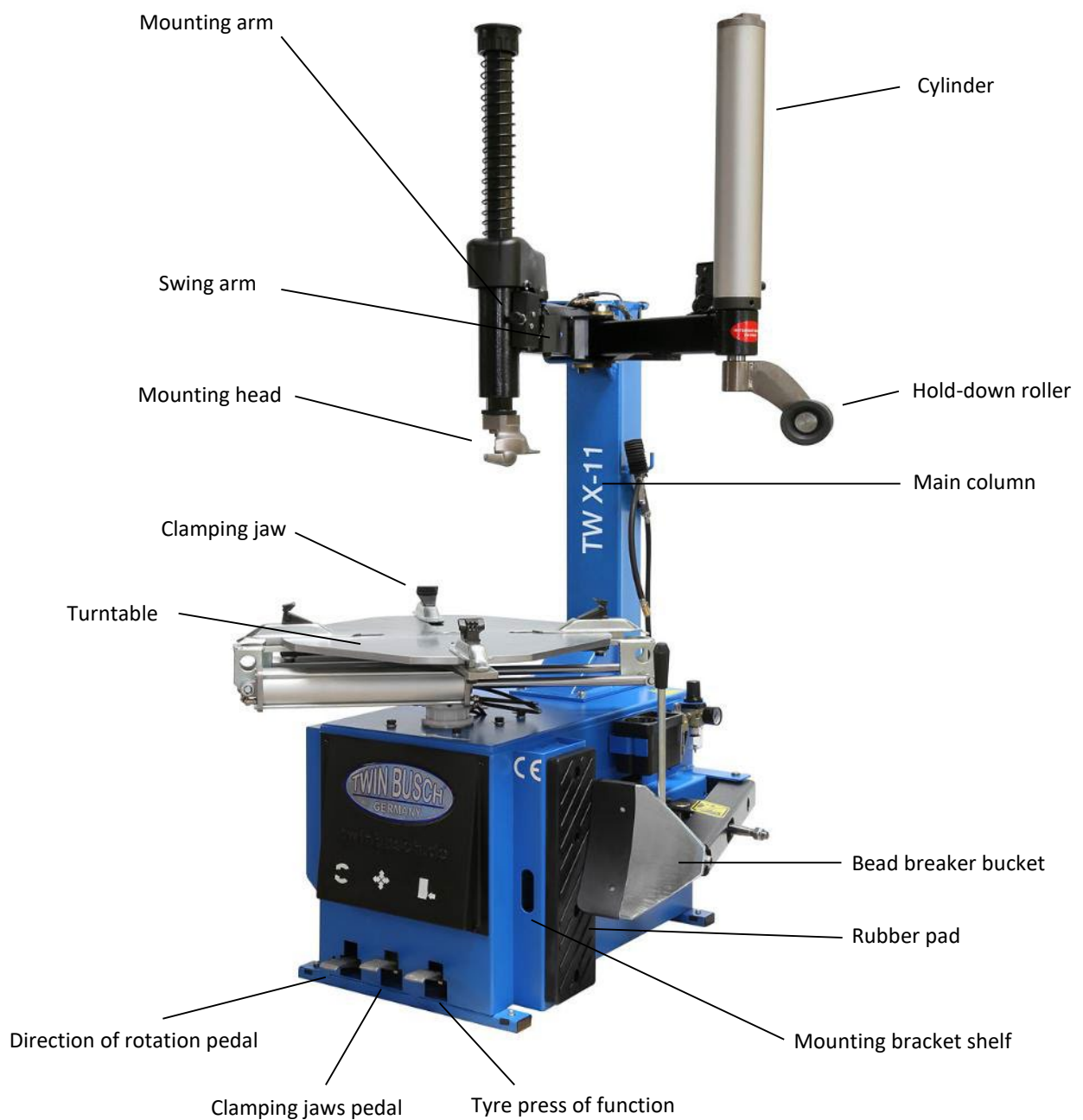
- This machine is not equipped with any mechanical protection against tyre explosions. equipped.
- Tyre and rim diameters must be the same and must not have any defects.
- Do not exceed the tyre pressure specified by the manufacturer. If the tyre pressure the tyre can explode and cause serious bodily injury as well as death. Cause death of the operator.
- Keep hands and body away during tyre inflation.

## 6. Compliance with the product

The TWX-11 tyre changer is CE-certified and complies with the Machinery Directive 2006/42/EC and fulfils the standards EN ISO 12100:2010 and EN 17347:2001. See also the EU Declaration of Conformity at the end of the operating instructions.

## 7. Technical specification

### 7.1 Machine description





## 8. Structure and installation

### 8.1 Preparation before installation

Tools and equipment required:

- Hammer and rubber mallet
- Set of open-end spanners
- Set of Allen keys
- Screwdriver
- Side cutter

### 8.2 Soil conditions

The tyre changer should be set up on a level surface.

### 8.3 Assembly instructions

- 1) Remove the packaging.
- 2) Use a hammer to loosen the wooden slats from the pallet and remove the packaging film.
- 3) Remove the small parts and put them to one side. Read and understand the operating instructions before continuing.
- 4) Remove the nuts for fastening the mounting arm.

**Note:** The washers can be removed more easily with a flat screwdriver.

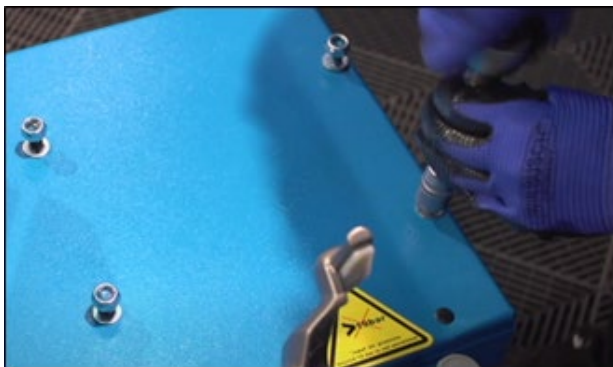


Illustration: Removing the nuts

- 5) Remove the transport bracket



Illustration: Removing the transport lock

- 6) Lift the mounting arm into position and screw the washers and nuts back on to secure the mounting arm. Tighten them firmly.

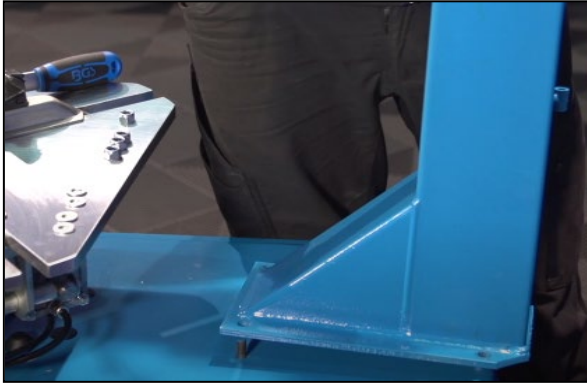
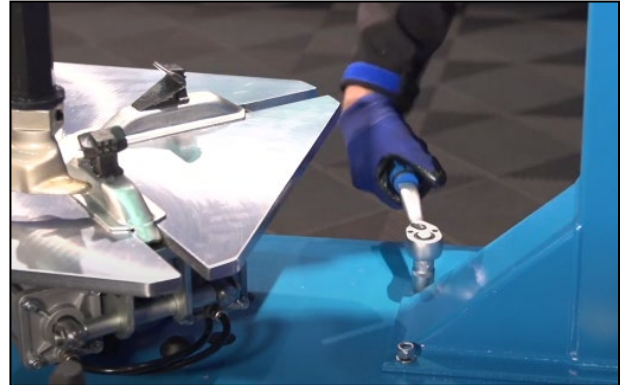


Illustration: Positioning the mounting arm



- 7) Fit the rubber stop to the bead breaker. To do this, loosen the nut on the bead breaker and place the rubber stop on the rod. Screw the nut back on.



Illustration: Fastening rubber stop

- 8) Mount the auxiliary arm
- Loosen the bolt and keep it within easy reach.
  - Screw the joystick to the control unit.
  - Attach the first part of the auxiliary arm to the mounting arm. Screw the bolt tight.



Illustration: Auxiliary arm



- 9) Remove the screws to insert the cylinder. Insert the cylinder so that the screws end in the pre-drilled holes. **Note that the compressed air connections must point to the rear of the control unit.**



Illustration: Inserting the cylinder



- 10) Connect the compressed air hoses of the cylinder.



Illustration: Compressed air hoses

- 11) Remove the nut from the open end of the T-piece on the auxiliary arm and place it on the open end of the hose on the mounting arm.
- a) Now connect the T-piece from the auxiliary arm to the open end of the hose.
  - b) Place the open end of the hose on the auxiliary arm on the intermediate piece.
  - c) Tighten all connections well.

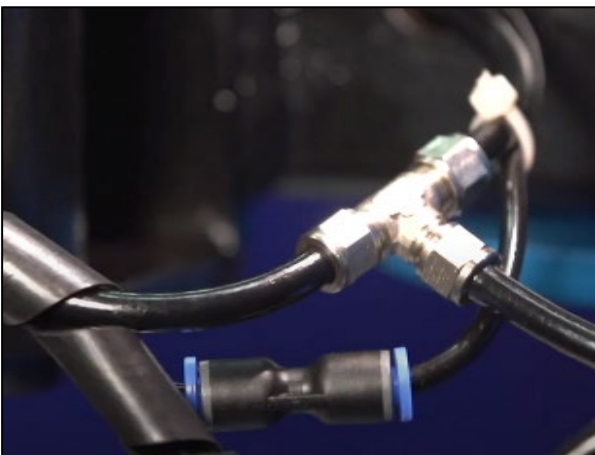


Illustration: T-piece and intermediate piece

- 12) Route the hose downwards through the brackets and connect the compressed air hose to the air supply at the bottom of the machine.

**Note: Make sure that the top of the hose is not under tension.**

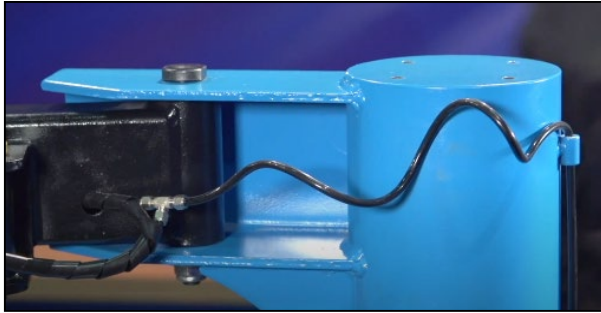


Illustration: Compressed air hose on the machine



- 13) Fit the hold-down roller to the auxiliary arm. Note that the fixing screw must later run in the groove on the piston. The hold-down roller should be able to move freely after installation.

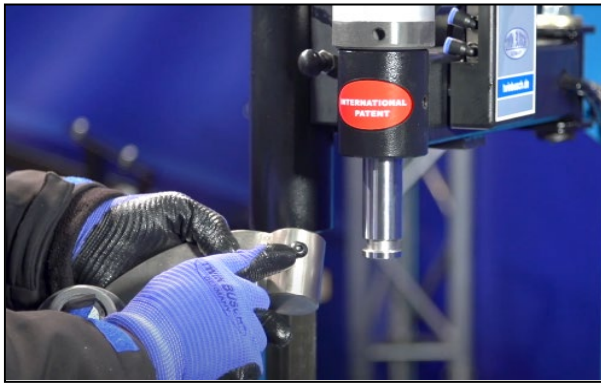


Illustration: Screwing the auxiliary arm

- 14) Insert the adjusting screw to set the rim diameter.
- 15) Fitting the tyre inflator
  - a) Loosen the screw connection on the tyre inflator.
  - b) Insert the hose. (An air pressure of 8-10 bar is recommended.)
  - c) Tighten the screw connection securely.

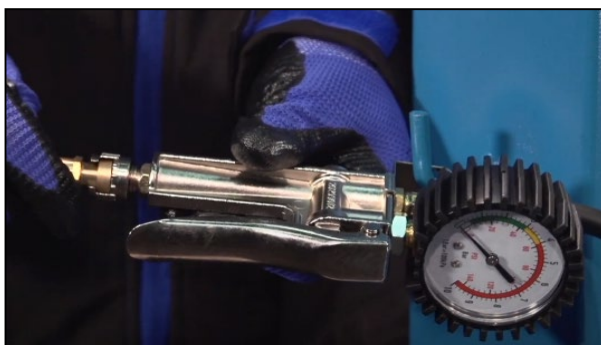


Illustration: Tyre inflator screw connection

- d) Repeat this procedure on the lower compressed air outlet.



Illustration: Compressed air outlet screw

e) Establish the connection to the compressed air.

- 16) Lock the mounting arm in the upper position so that the spring can be inserted. Remove the transport lock from the mounting arm. You will no longer need this screw. Insert the spring and screw the cap back on with the new screw. Replace the protective cap and secure it with the pre-assembled retaining screws.



Illustration: Inserting the spring

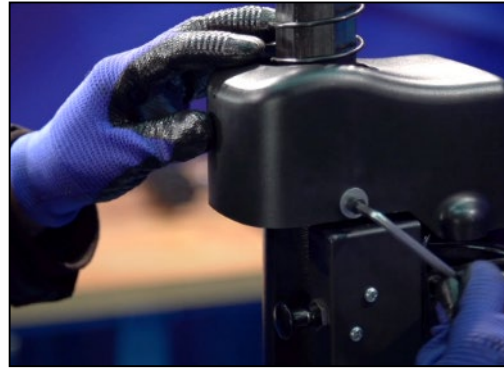


Illustration: Inserting the protective cap

- 17) Put on the bead breaker protective cap.  
**Note: A rubber mallet can be used to make fitting the guard easier.**
- 18) Insert the ring that serves as a holder for the tyre mounting wax.
- 19) If necessary, fit the rim protectors. Simply press them onto the clamping claws from above.



Illustration: Rim protector on clamping claws

- 20) Detach the machine from the pallet.  
**Caution: Secure the mounting arm when lifting it down!**
- 21) Setting up the mounting head
- a) Establish the connection to the compressed air.
- b) Fit a rim with the diameter you want to machine.  
**Note: If you later work with rims that have a significantly smaller diameter, a new adjustment is recommended.**

- c) Guide the mounting head onto the rim. The large slider should lie smoothly against the side of the rim during operation.

**Note:** If this is not the case, loosen the screws to align the head precisely. When the glider is in position, first fix the position with the side screw to prevent accidental adjustment. Then tighten the bottom screw firmly. Finally, tighten the two screws equally tightly to finalise the set angle.



**Illustration:** Positioning the sliders

### 22) Replacing the plastic glides

You will need a hammer and a flat screwdriver to change the sliders.

Remove the plastic glides with the screwdriver and simply tap the new plastic glides back into place.

## 9. Commissioning

### 9.1 Safety precautions

- a) If the safety devices are defective or show abnormalities, the machine must not be put into operation under any circumstances!
- b) Check that all connections are tight and functional.
- c) Make sure that the tyre is completely deflated and remove all wheel weights from the rim.

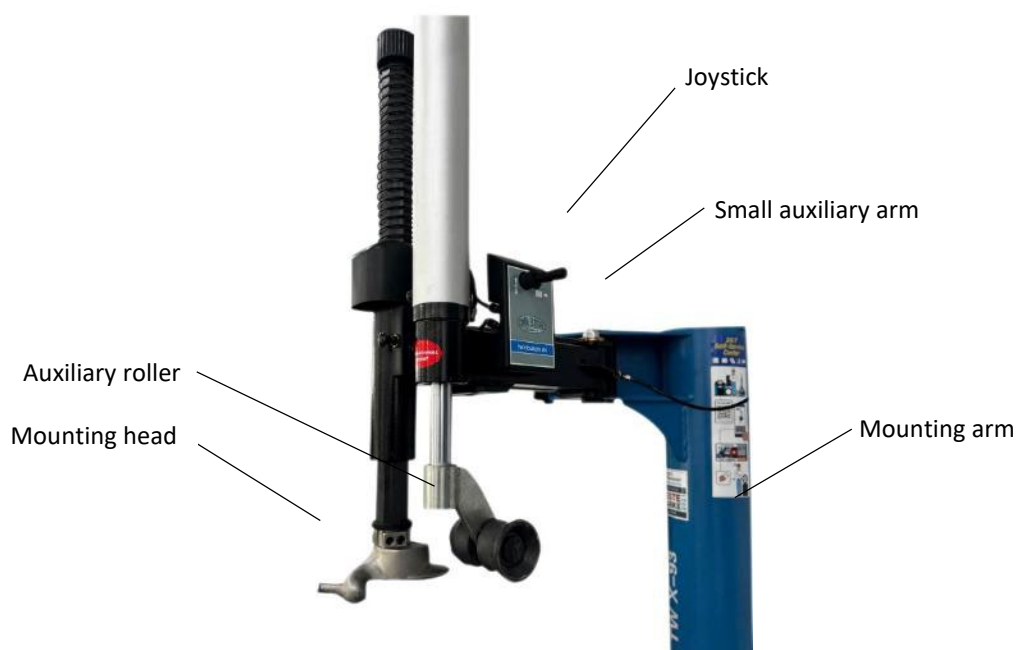
### 9.2 Functional tests

#### 9.2.1 Pedal function

- Press the direction of rotation pedal (1), the turntable should rotate clockwise.
- Pull the direction of rotation pedal (1) by placing the tip of your foot under the pedal and moving it upwards. The turntable should then rotate anti-clockwise.
- Press the bead breaker pedal to open the bead breaker arm. Release it to close it again.
- Press the clamping jaw pedal to open the four jaws, press it again to close the jaws. Hold the pedal in the centre position to hold the jaws in the current position.
- Operate the locking handle. The horizontal and vertical arm is then locked in this position. The mounting head is automatically lifted approx. 2 - 3 mm from the edge of the rim.




#### 9.2.2 Small auxiliary arm

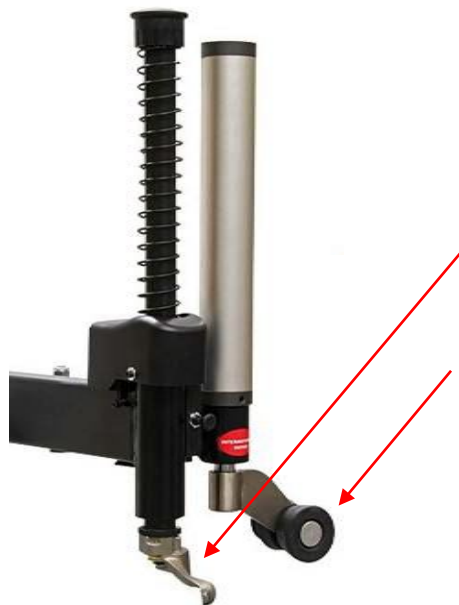
The joystick is used to adjust the auxiliary roller to ensure that the tyre is pressed down during mounting.



9.3 Description of the control unit



Symbol	Description	Function
	Mounting disc Direction of rotation Pedal	Used to turn the turntable clockwise / anti-clockwise.
	Clamping jaws Pedal	Is used to open or close the four jaws on the turntable.
	Tyre bead breaker Pedal	Is used to operate the bead breaker arm.



Description	Function
Mounting head	Can be automatically raised 2-3 mm when the lock is engaged.
Hold-down roller	Used to ensure that the tyre is pressed down during mounting.



### 9.3.1 Bead breaking of the tyre

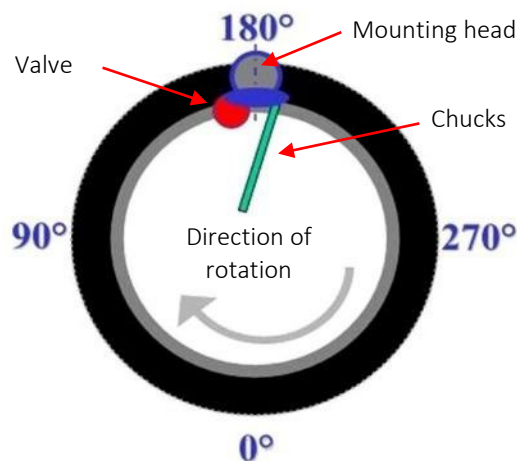
- 1) Read and understand the operating instructions before starting work.
- 2) To completely deflate the tyre, unscrew the valve core.
- 3) Close the four jaws on the turntable to avoid injury.  
**Caution: If the clamping jaws open, injuries may occur!**
- 4) Open the bead breaker arm by hand by pushing it outwards. Place the wheel against the rubber buffer. Place the blade against the bead 10 mm from the edge of the rim.
- 5) Press the push-off pedal to press the blade against the tyre. Repeat the the above procedure at different positions, around the tyre and on both sides of the tyre.

### 9.3.2 Clamping the wheel

- 1) Remove all weights on the rim.
- 2) Lubricate the tyre bead and the rim with suitable tyre mounting paste.
- 3) Clamp the rim on the turntable from the inside or outside.
- 4) Press the clamping jaw pedal halfway down to position the four clamping jaws. Place the wheel in the centre of the turntable, press the clamping jaw pedal until the wheel is the clamping jaws is secured.

**Caution: Do not put your hands under the wheel when tensioning the wheel!**

### 9.3.3 Dismounting the tyre



- 1) Move the mounting head to the edge of the rim.

- 2) Adjust the lateral distance with the left-hand screw and lock the mounting head height with the locking lever on the right-hand side, the mounting head rises automatically approx. 2 - 3 mm.
- 3) Insert the tyre lever between the tyre bead and the front section of the tyre. Mounting head and move the tyre over the mounting head.



Illustration: Mounting iron

**Note:** To avoid damaging the inner tube, it is recommended that this step is carried out with the Valve should be positioned about 10 cm to the right of the mounting head.

With the mounting bracket held in position, turn the turntable clockwise through fully depress the direction of rotation pedal.

- 4) Continue until the tyre is completely separated from the rim.

**Note:** The tyre can be pushed out of the mounting head due to age. To prevent this, turn the turntable 1 - 2 cm anti-clockwise with the tyre lever into position.

### 9.3.3 Fitting the tyre

- 1) Replace the tyre valve.
- 2) Lubricate the tyre bead and the rim with tyre mounting paste.  
**Tyre mounting paste type: TW1530MP**
- 3) Mount the rim in accordance with the section "**Mounting the wheel**" if the rim has been removed from the turntable.
- 4) Bring the tyre valve to the height of the mounting head.
- 5) Place the tyre on the rim, observing the running direction of the tyre.
- 6) Move the mounting arm back into the mounting position as described in section "**Dismantling the mounting arm**". Keep your hands away from the rim to avoid injury during this process.

- 7) Move the tyre so that the bead is under the front section of the mounting head and against the edge of the rear section of the mounting head.



Illustration: Assembly

- 8) Press the tyre bead over the rim flange, press the direction of rotation pedal (clockwise rotation) until the tyre bead is completely over the rim flange.
- 9) If the tyre has an inner tube, insert it.
- 10) Press the clamping jaw pedal and remove the wheel from the turntable.  
**Note: The turntable always rotates clockwise during assembly or disassembly; counterclockwise is only for the correction.**

### 9.3.5 Locking the mounting arm



In this video, we show you how to optimally adjust the **locking mechanism of the mounting arm** of a tyre changer. The optimum adjustment of the locking mechanism ensures that the mounting head maintains the optimum working distance to the rim during operation. [https://youtu.be/rp0ZQNh3\\_QA](https://youtu.be/rp0ZQNh3_QA)

## 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.

PROBLEM	CAUSE	SOLUTION
The turntable only rotates in one direction or does not rotate at all.	Switch defective.	Replace.
	V-belt loose.	Tensioning.
	Motor defective.	Check the cable, replace the motor if defective.
The clamping jaws open or close too slow.	Compressed air leakage.	Eliminate leaks/replace defective parts.
	Cylinder defective.	Replace the cylinder.
	Silencer valves dirty.	Replace or clean according to the maintenance instructions.
The mounting head always touches the rim during operation.	The locking plate is set incorrectly.	Replace or adjust according to the maintenance instructions.
Pedal cannot be returned to its original position.	Return spring is damaged.	Replace the return spring.
Tyre bead breaker powerless or too slow.	Silencer valves dirty.	Replace or clean according to the maintenance instructions.
Hand tyre inflator does not supply enough compressed air.	Not enough compressed air available.	Open the maintenance flap on the side and increase the pressure reducer in the top left-hand corner to the desired pressure range.

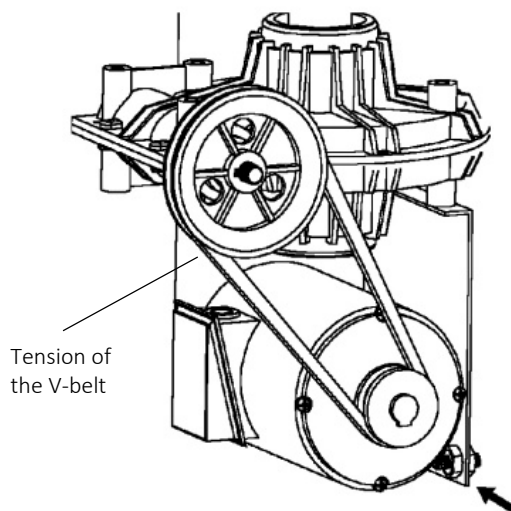
## 11. Maintenance

Regular, simple and cost-effective maintenance work ensures normal and safe operation of the tyre changer. The following requirements apply to regular maintenance. How often you service your machine depends on the ambient conditions, the degree of soiling and, of course, the stress and load.

**Note: Always disconnect the mains plug before carrying out maintenance.**

Switch off the compressed air, disconnect the compressed air hose from the maintenance unit and press down the trigger pedal 3 - 4 times to release the remaining compressed air.

- Clean heavily soiled areas on the moving parts.
- Keep the hexagonal column clean and lubricate it regularly so that it can be moved easily.
- Keep the mounting arm clean and lubricate it regularly so that it can be moved easily.
- Clean and lubricate the turntable, jaws and guide rails daily.
- Clean and lubricate all other moving parts weekly.
- Check and top up the oil level in the oiler once a week. (oil SAE 30)
- Empty the condensed water in the water tank daily.
- Check the tension of the V-belt every 6 months.
- Clean the valves of the tensioning claws and the tyre bead breaker every 6 months.
- Tighten the fixing screws under the turntable after every 20 days of use.



If the horizontal arm cannot be moved correctly with the hexagonal rod or the distance after locking is too large or too small, adjust according to the following steps:

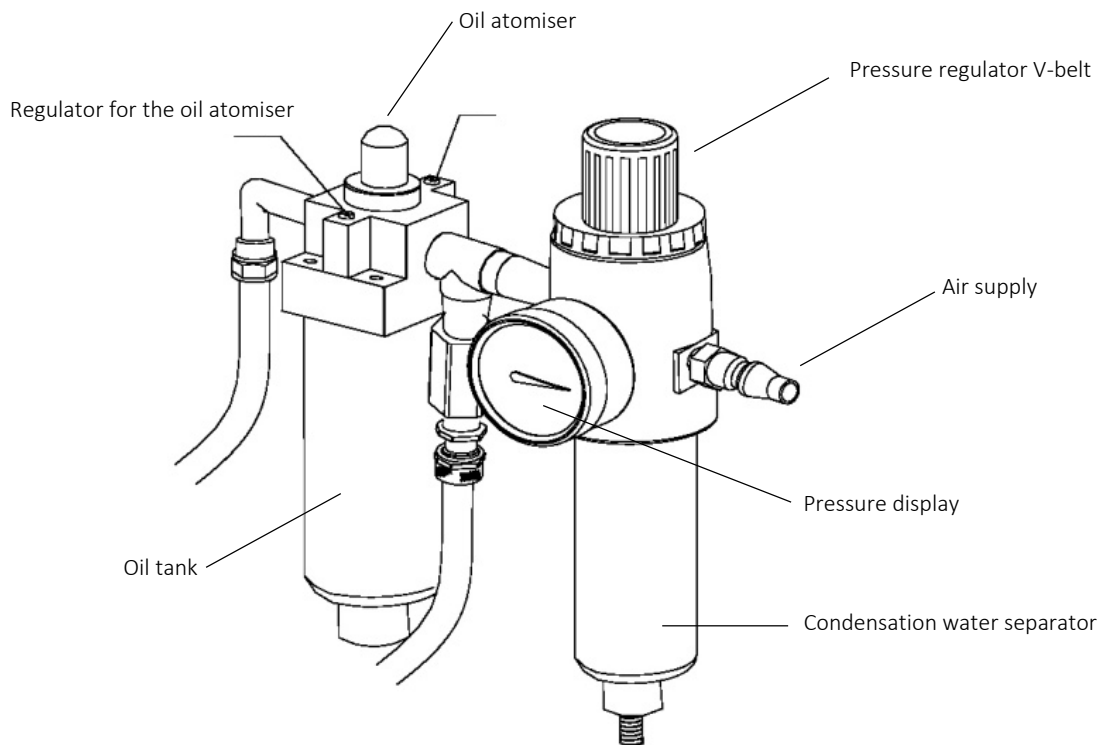
- Switch off compressed air.
- Remove the protective cover of the vertical arm.
- Readjust the two hexagon nuts on the locking plate.
- Turn on the compressed air and check the position after adjustment.

Clean the valves of the tensioning claws and the tyre bead breaker in accordance with the following steps:

- Remove the side cover of the housing.
- Unscrew the silencer valves of the bead breaker and the clamping claws.

If the machine will not be used for a longer period of time, disconnect the power and compressed air supply from the machine.

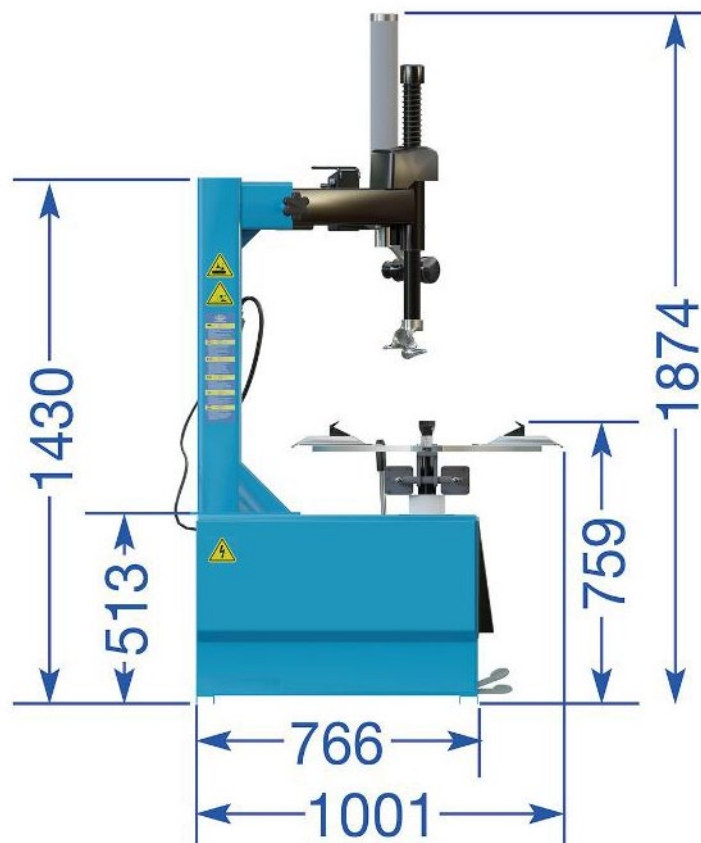
- Clean and oil all moving parts.
- Empty the oil and water from the maintenance unit.
- Protect the machine from dust and dirt with a cover film.



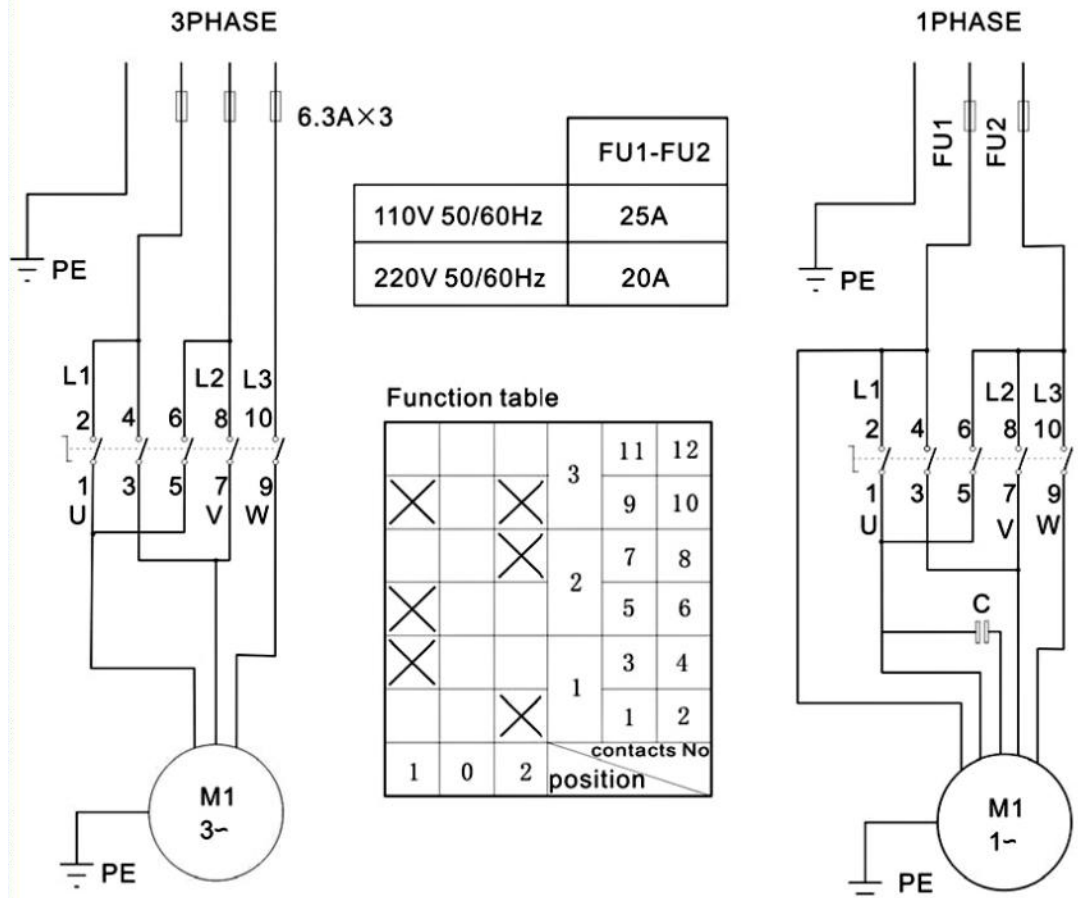
**If you follow the above maintenance intervals and maintenance activities, your machine will remain in good condition and damage and accidents will continue to be avoided.**

**12. Appendix**

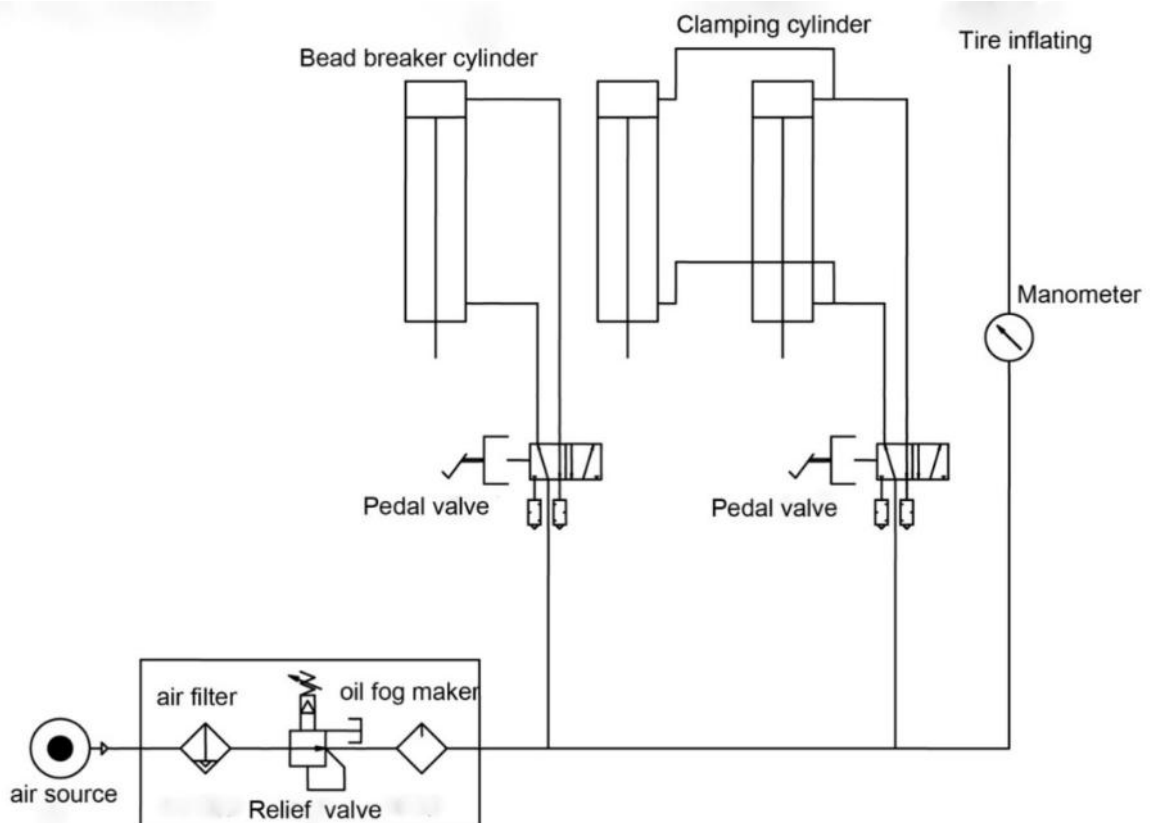
**12.1 Dimensions of the tyre changer**



12.2 Circuit diagram

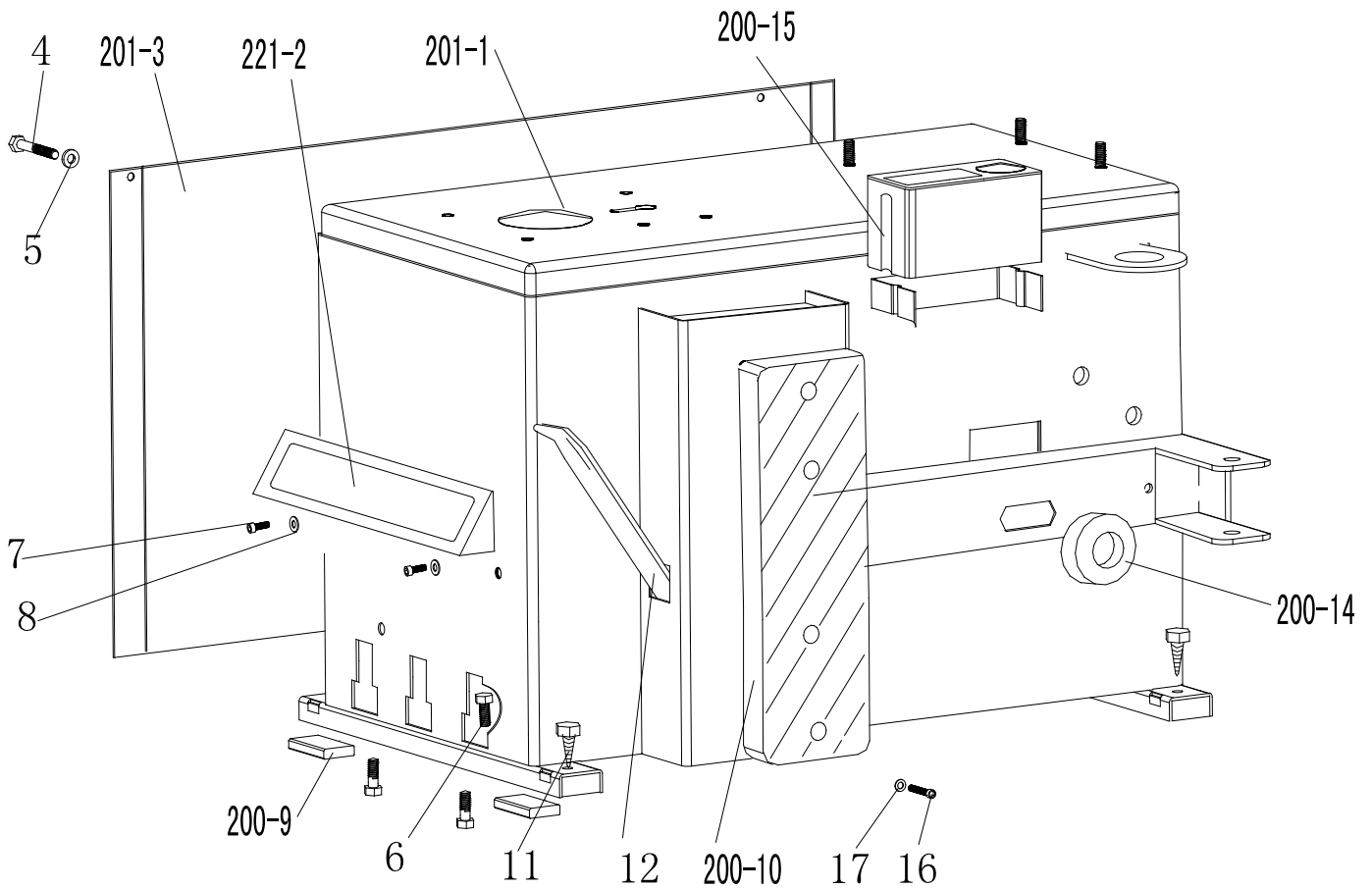


12.3 Pneumatics

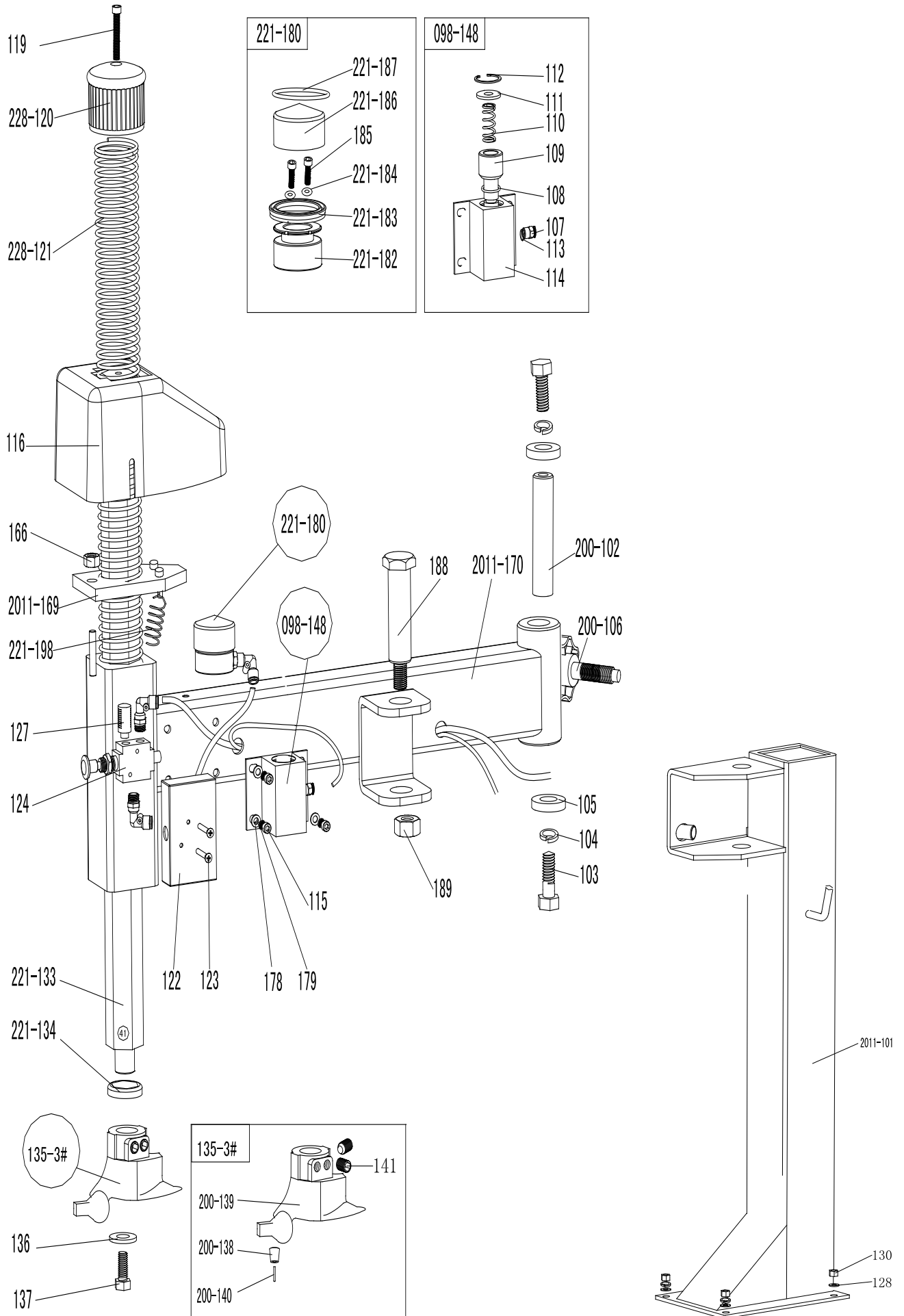




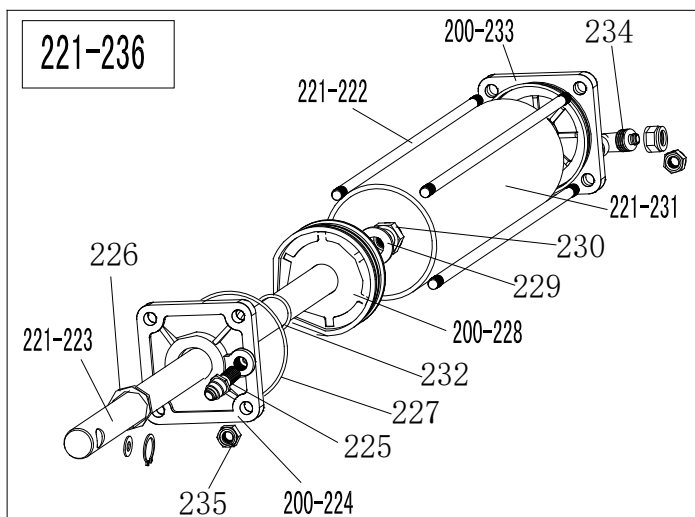
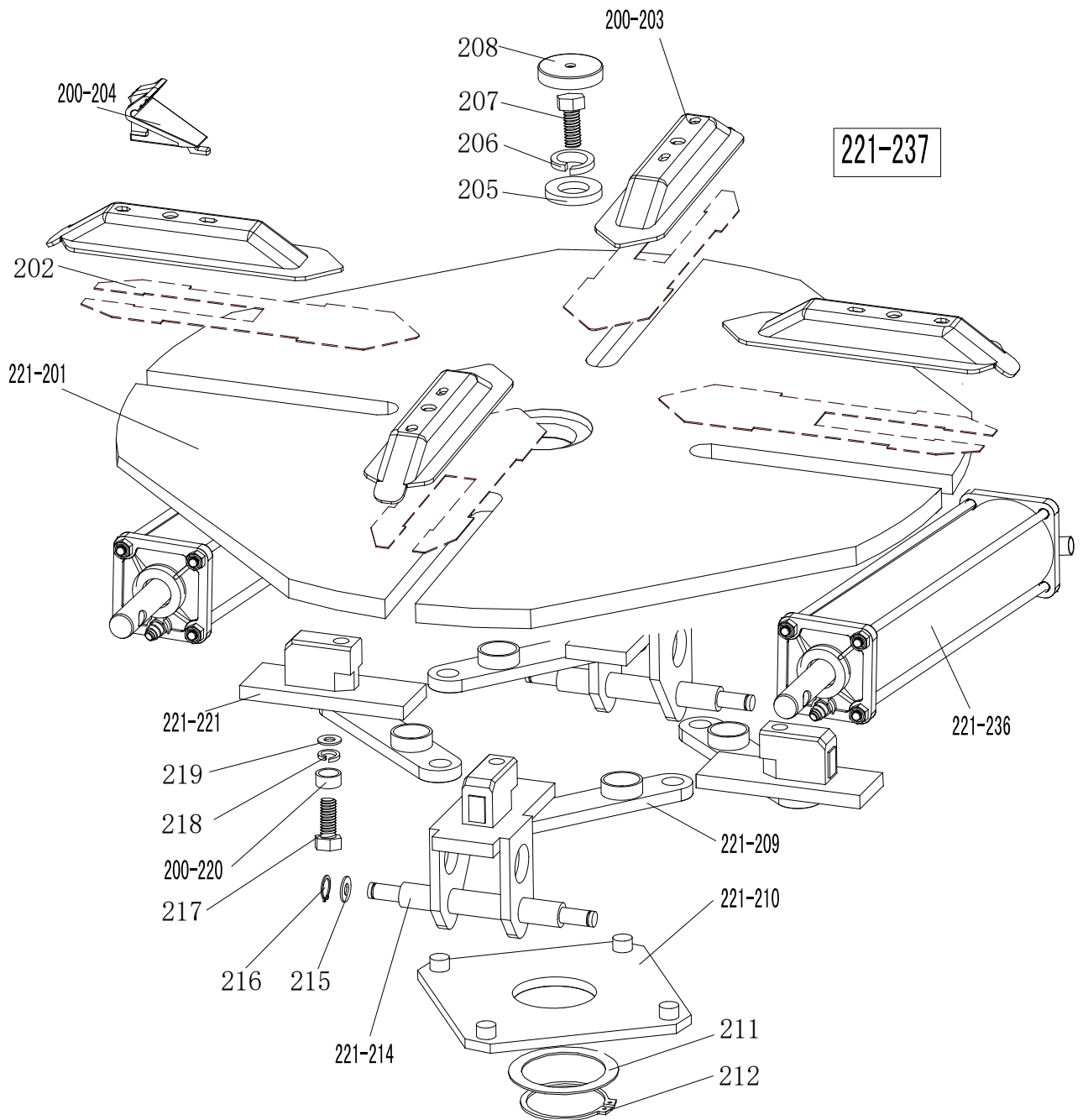
12.4 Detailed drawing and parts description



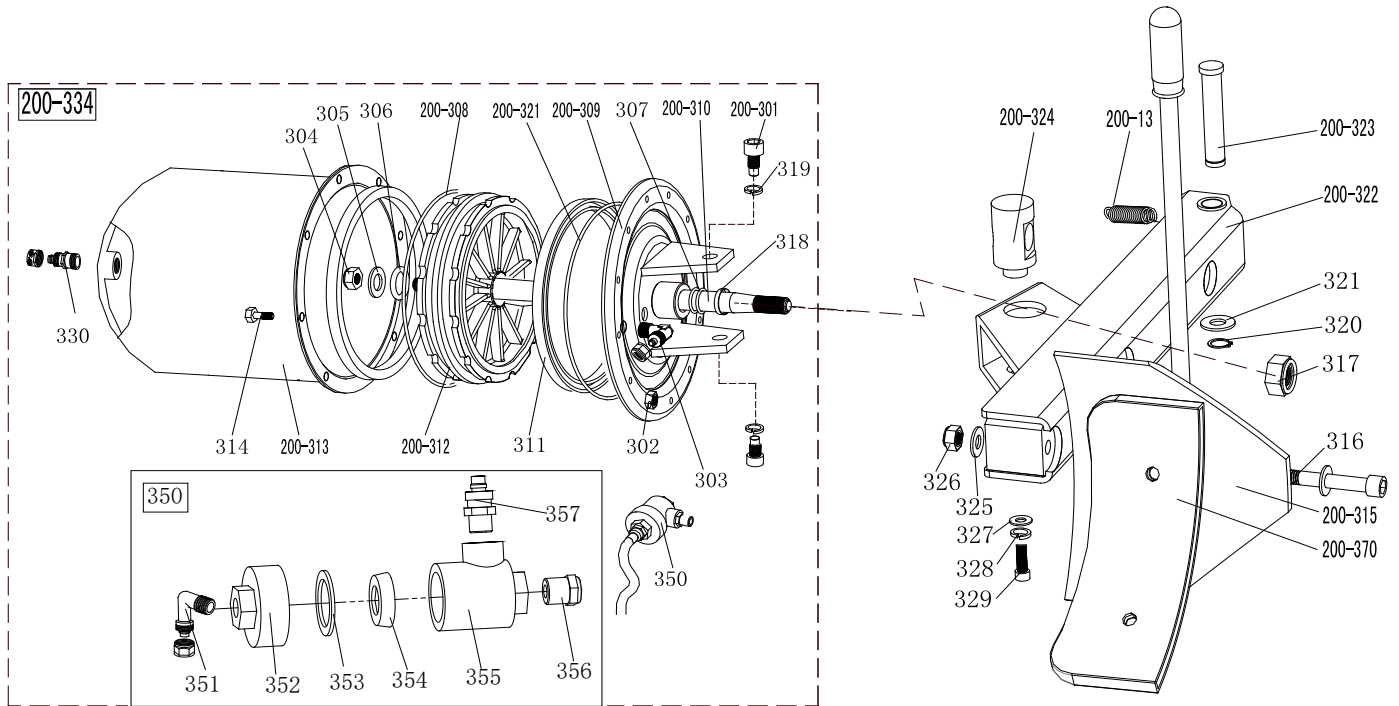
S/N	Number	Name
201-1	CX-201-010000-0	Machine body
221-2	CZ-221-080000-0	Pedal front cover
201-3	CX-201-020000-0	Left cover
4	B-010-060101-0	Hex socket head bolt M6x10
5	B-040-061412-1	Flat washer $\varnothing 6*14*1.2$
6	B-014-080251-0	Outer hex bolt M8x25
7	B-010-080201-0	Hex socket head bolt M8x20
8	B-040-061412-1	Flat washer $\varnothing 6*14*1.2$
200-9	C-000-001020-0	Rubber foot buffer
200-10	C-200-500000-0	Bead breaker buffer
11	B-027-060401-0	Grounding screw M6x40
12	C-200-580000-0	Lifting lever
200-14	C-200-510000-0	Bead breaker arm rubber
200-15	C-200-470000-0	Oil-water box
16	B-010-080201-0	Hex socket head bolt M8x20
17	B-040-081715-1	Flat washer $\varnothing 8*17*1.5$



S/N	Number	Name
2011-101	CX-2011-250000-0	Square column
200-102	CX-200-190000-0	Swing arm pin
103	B-014-140351-0	Outer hex bolt M14x35
104	B-050-140000-0	Spring washer Ø14
105	CX-200-140000-0	Big washer
200-106	C-200-350000-0	Column adjust handle
107	S-010-050004-0	Quick stright union M5- Ø 4
108	S-000-030355-0	O-seal 30X3.55
109	CX-007-180600-0	098 Swing arm spring plate
110	C-007-180700-0	098 Swing arm spring
111	CX-007-180800-0	098 Swing arm plate washer
112	B-055-300002-0	Snap ring Ø30(hole)
113	S-000-005200-0	O-seal Ø 5.6X2
114	CX-098-080000-0	098 Pneumatic lock barrel
115	B-010-060201-0	Hex socket head bolt M6X20
116	C-298-480000-0	Locking plate cap
119	B-010-100301-0	Hex socket head bolt M10x30
228-120	C-228-490000-0	Vertical arm cap
228-121	C-228-390000-0	Vertical arm spring
122	C-098-090000-0	Locking switch box
123	B-017-040301-0	cross head screw M4*30
124	S-030-010414-2	Hand valve
127	S-023-010801-0	Muffler 1/8"
221-133	CX-221-160000-0	Vertical arm
221-134	C-228-520000-0	Vertical arm washer
135-3#	CW-113-020003-0	Complete mount/demount head 3#
200-138	CX-200-150200-0	Mount/demount head pulley
200-139	C-200-150100-3	Mount/demount head 3#
200-140	C-200-150400-0	Hex round pin
141	B-007-120161-0	Hex socket head bolt M12X16
136	CX-200-170000-0	Mount/demount head flat washer
137	B-014-100251-0	Outer hex bolt M10x25
098-148		Complete 098 Pneumatic lock
166	B-001-100001-0	Self-locking nut M10
2011-169	CX-298-22000-0	Hex locking board 2011
2011-170	CX-211-180000-0	Swing arm 2011
178	B-040-061210-1	Flat washer Ø6
179	B-050-060000-0	Spring washer Ø6
221-180		Complete locking cylinder
221-182	C-221-090100-0	locking cylinder piston
221-183	S-005-050065-0	V-seal 60*50*6.5
221-184	S-000-005200-0	O- seal Ø 5.6*2
185	B-010-060551-0	Hex socket head bolt M6x55
221-186	CX-221-090200-0	locking cylinder cover Ø 60
221-187	S-000-052200-0	O- seal Ø52*2
188	CX-098-030000-0	Pressing arm pin (right)
189	B-001-160001-1	Self-locking nut M16*1.5
221-198	C-221-400000-0	Hex locking board spring



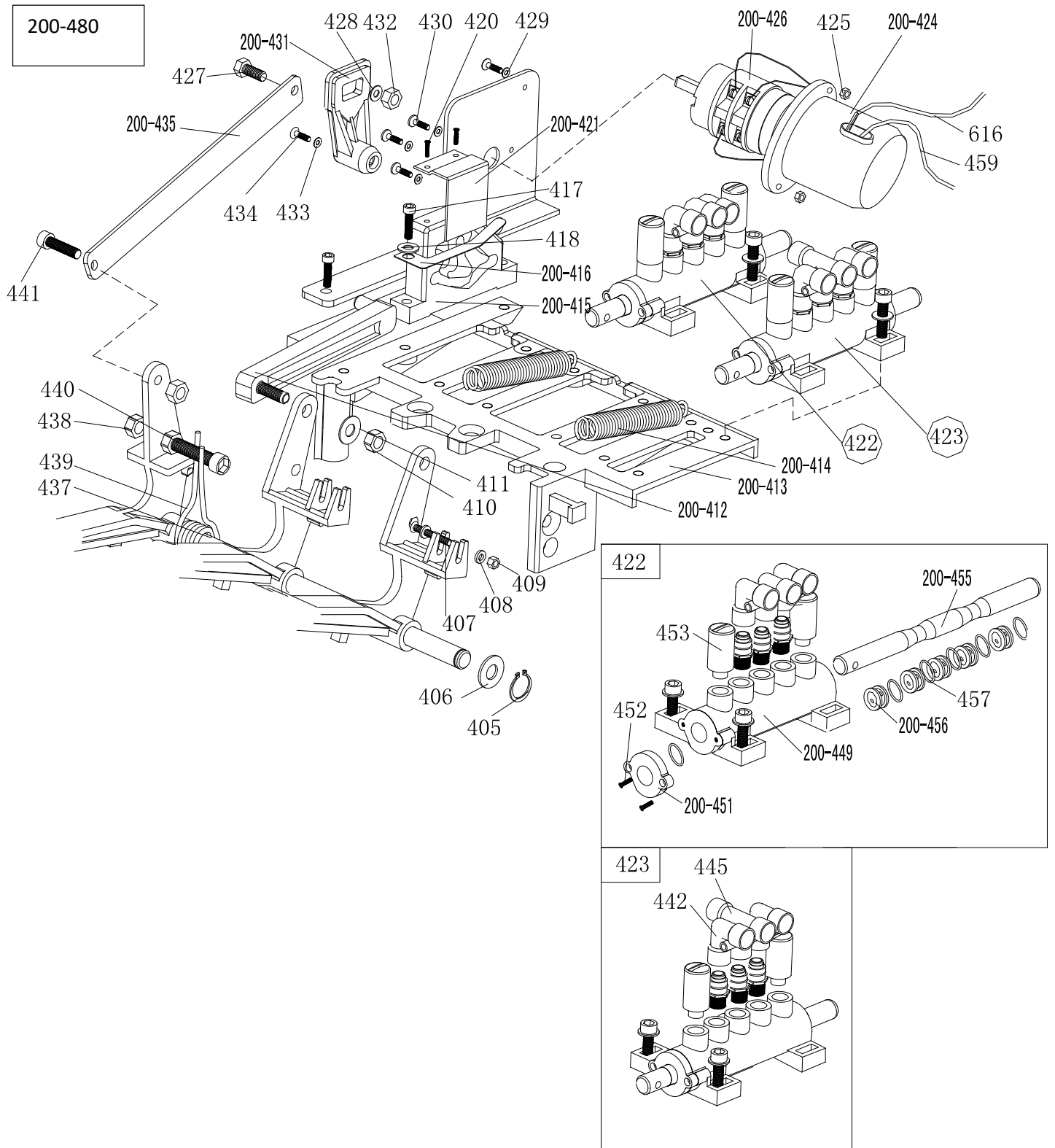
S/N	Number	Name
221-201	CX-221-130000-0	Turntable assembly 615
202	CX-221-120300-0	Jaw sliding plate(optional)
200-203	CX-200-120000-0	Jaw cap assembly
200-204	C-200-570000-0	Jaw 200
205	CX-200-140000-0	Big washer
206	B-050-160000-0	Spring washer Ø16
207	B-014-160401-0	Outer hex bolt M16x40
208	C-200-440000-0	Turntable cap
221-209	CX-221-310000-0	Connection rod assembly 615
221-210	CX-221-280000-0	Square turntable 615
211	CX-200-290000-0	Square turntable washer
212	B-055-650001-0	Snap ring Ø65 (shaft)
221-214	CX-221-110000-0	Jaw slide guide with pin
215	B-040-122520-1	Flat washer Ø12X25X2
216	B-055-120001-0	Snap ring Ø12 (shaft)
217	B-014-120801-0	Hex socket head bolt M12x40
218	B-046-122050-1	Teeth locking washer Ø 12x20.5x1
221-237	CW-104-021100-0	Complete square turntable 615
219	B-040-123030-1	Flat washer Ø12X30X3
200-220	CX-200-300000-0	Connection rod nut
221-221	CX-221-110100-0	Jaw slide guide without pin
221-222	C-221-100400-0	Threaded connection rod 393
221-223	C-221-100200-0	Clamping cylinder piston rod 400
200-224	C-200-100100-0	Clamping cylinder cover without handle
225	S-011-010808-0	Straight union 1/8"- Ø8
226	S-005-020075-0	V- seal 20*28*7.5
227	S-000-063265-0	O- seal 63*2.65
200-228	C-200-540000-0	Clamping cylinder piston Ø 70
229	B-040-122520-1	Flat washer Ø 12X25X2
230	B-004-120071-1	Groove M12X7X1.75
221-231	C-221-100500-0	Clamping cylinder barrel 360
232	S-000-019262-0	O- seal Ø 19.6X2.62
200-233	C-200-100300-0	Clamping cylinder cover with handle
234	S-018-010808-0	Union 1/8-Ø8
235	B-001-080001-0	Self-locking nut M8
221-236	CW-105-021101-0	Complete clamping cylinder



S/N	Number	Name
200-13	C-200-360000-0	Bead breaker arm spring
200-301	B-010-140301-0	Hex socket head bolt M14x30
302	B-001-060001-0	Self-locking nut M6
303	S-018-010408-0	Union (90°) 1/4-Ø8
304	B-004-160001-1	Groove M16*1.5
305	B-040-162820-1	Flat washer Ø16*28*2
306	S-000-016265-0	O-seal Ø 16*2.65
307	S-000-020265-0	O-seal Ø 20*2.65
200-308	S-000-180500-0	O-seal 180x5
200-309	CX-200-050500-0	Bead breaker cylinder cover assembly
200-310	C-200-050100-0	Bead breaker cylinder piston rod
311	S-005-168115-0	V-seal 185X168X11.5
200-312	C-200-050200-0	Bead breaker cylinder piston
200-313	CX-200-050300-0	Bead breaker cylinder barrel
314	B-010-060161-0	Hex socket head bolt M6x16
200-315	CX-200-070000-0	Bead breaker shovel assembly
316	B-010-120901-0	Hex socket head bolt M12x90
317	B-004-160001-1	Self-locking nut M16*1.5
318	U-006-000001-2	Guide belt

200-370	C-200-070600-0	Bead breaker shovel protection cover(optional)
319	B-050-140000-0	Spring washer Ø14

320	B-055-160001-0	Snap ring Ø16
321	B-040-162820-1	Flat washer
200-321	S-000-175500-0	O-seal Ø173.4x5.3
200-322	CX-200-030000-0	Bead breaker arm 200
200-323	CX-200-040000-0	Bead breaker pin
200-324	CX-200-050600-0	Bead breaker cylinder rotating pin
325	B-040-122520-1	Flat washer Ø12*24*2
326	B-001-120001-0	Self-locking nut M12
327	B-040-083030-1	Flat washer Ø8*30*3
328	B-050-080000-0	Spring washer Ø8
329	B-014-080201-0	Outer hex bolt M8x20
330	S-011-010808-0	Straight union1/8-Ø8
200-334	CW-108-020000-0	Complete bead breaker cylinder
350	CW-112-209800-0	Bead breaker cylinder exhaust valve
351	S-012-010808-0	Union (90°)1/8-Ø8
352	C-098-600200-0	Bead breaker cylinder exhaust valve cover
353	C-098-600400-0	Seal washer
354	C-098-600300-0	Bidirectional seal
355	C-098-600100-0	Bead breaker cylinder exhaust valve barrel
356	S-023-010401-6	Muffler
357	S-010-010408-0	Straight union1/8-Ø8

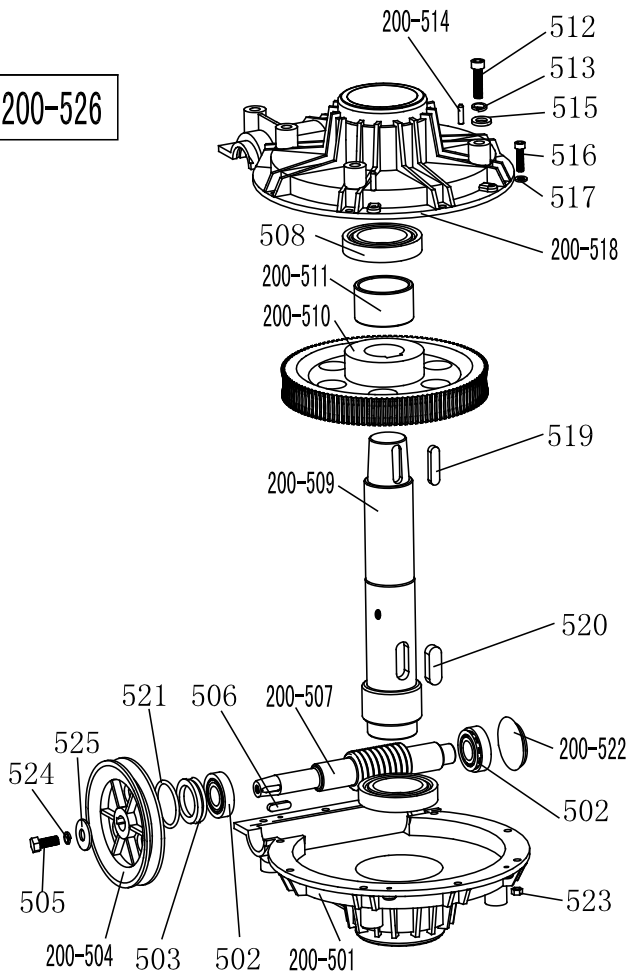




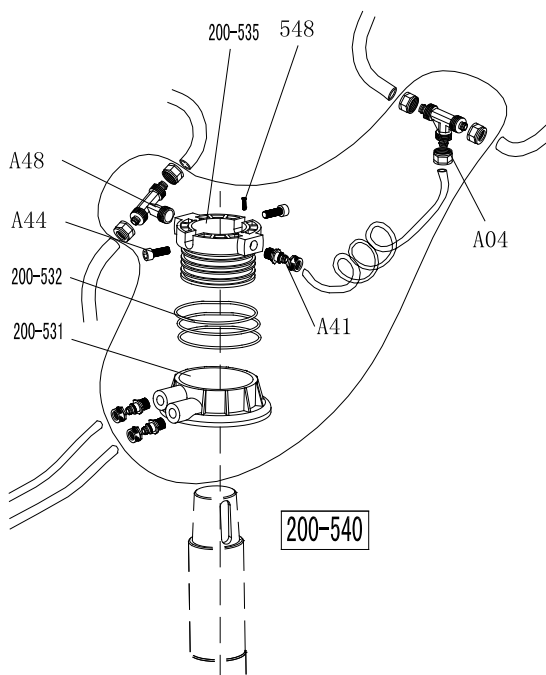
S/N	Number	Name
200-401	C-200-060400-0	Reverse switch pedal
221-402	C-221-060300-0	5-way valve pedal(right)
405	B-055-120001-0	Snap ring Ø12
406	B-040-122520-1	Flat washer Ø12*24*2
407	B-024-040301-0	Cross head screw M4X30
408	B-040-040000-1	Flat washer Ø 4
409	B-001-040001-0	Self-locking nut M4
410	B-001-080001-0	Self-locking nut M8
411	B-040-081715-1	Flat washer Ø8*17*1.5
200-412	C-200-061300-0	Cam connection rod
200-413	C-200-060100-0	Pedal support board
200-414	C-200-380000-0	Pedal Spring
200-415	C-200-061500-0	Cam
200-416	C-200-810000-0	Cam washer
417	B-010-060201-0	Hex socket head bolt M6x20
418	B-040-061210-1	Flat washer Ø6*12*1
420	B-019-290121-0	Cross head self tapping screw
200-421	CX-200-060500-0	Cam cover
422	CW-110-020000-0	Complete 5-way valve for clamping cylinder
423	CW-110-020001-0	Complete 5-way valve for bead breaker cylinder
200-424	C-200-061400-0	Reverse switch cover
425	B-004-040001-0	Groove M4
200-426	S-060-016000-1	Reverse switch
427	B-010-060201-0	Hex socket head bolt M6x20
428	B-040-061210-1	Flat washer Ø 6X12X1

S/N	Number	Name
429	B-040-040000-1	Flat washer Ø 4
430	B-024-040161-0	Cross-round head screw M4*16
200-431	C-200-530000-0	Reverse switch handle
432	B-001-060001-0	Self-locking nut M6
433	B-040-030000-1	Flat washer Ø3
434	B-017-030161-0	Cross head screw M3X18
200-435	CX-200-060600-0	Pedal connection rod
437	CX-200-060700-0	Pedal front shaft
438	B-004-080001-0	M8 groove
439	C-200-370000-0	Pedal twist spring
440	B-010-080501-0	Hex socket head bolt M8x50
441	B-010-080201-0	Hex socket head bolt M8x20
442	S-012-010808-0	Quick Union1/8- Ø 8
445	S-016-010808-2	Quick T-union1/8-2* Ø 8
200-449	C-200-060901-0	5-way valve barrel
200-451	C-200-061100-0	5-way valve cover
452	B-024-290121-0	cross head screw ST2.9*14
453	S-023-010801-0	Muffler 1/8"
200-455	CX-200-061200-0	5-way valve rod
200-456	C-200-061000-0	5-way valve rod spacer
457	S-000-012400-0	O-Seal 12*20*4
459	C2-000-103150-0	Power supply cable
616	C2-000-205150-0	Motor cable
200-480	CW-109-020000-0	Complete 3-pedals assembly 200

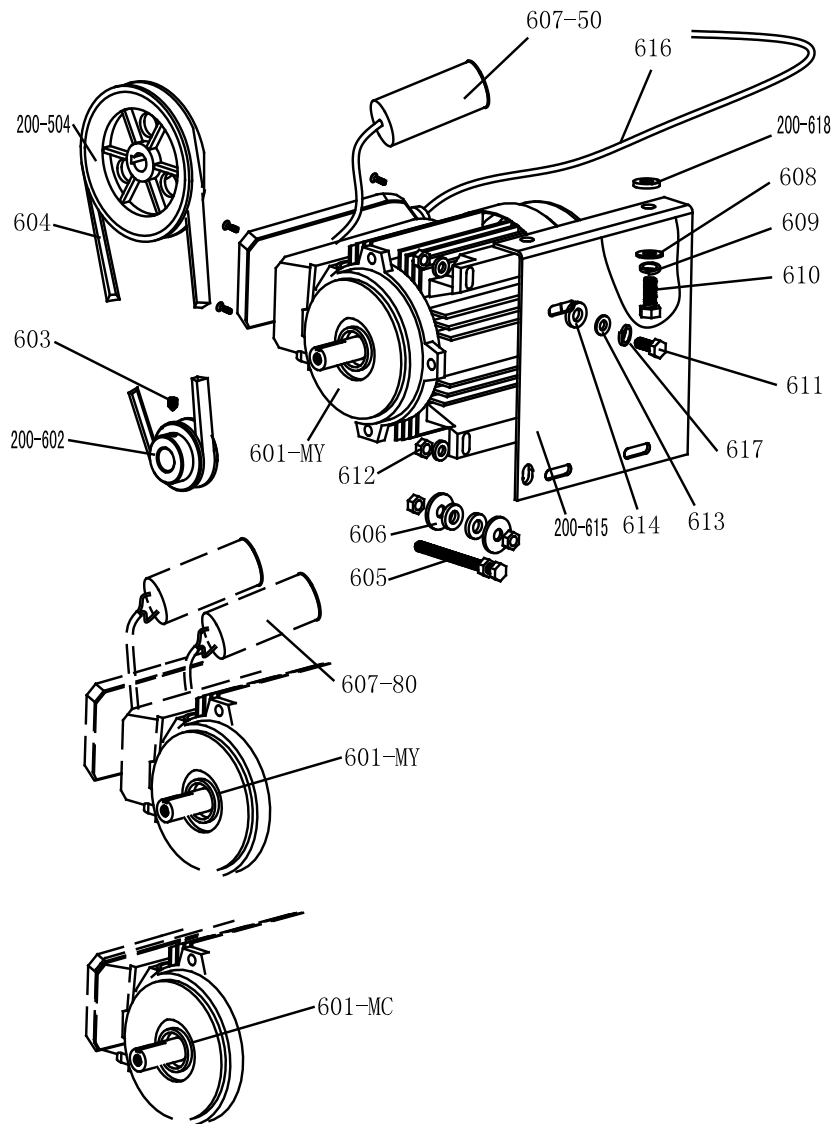
200-526



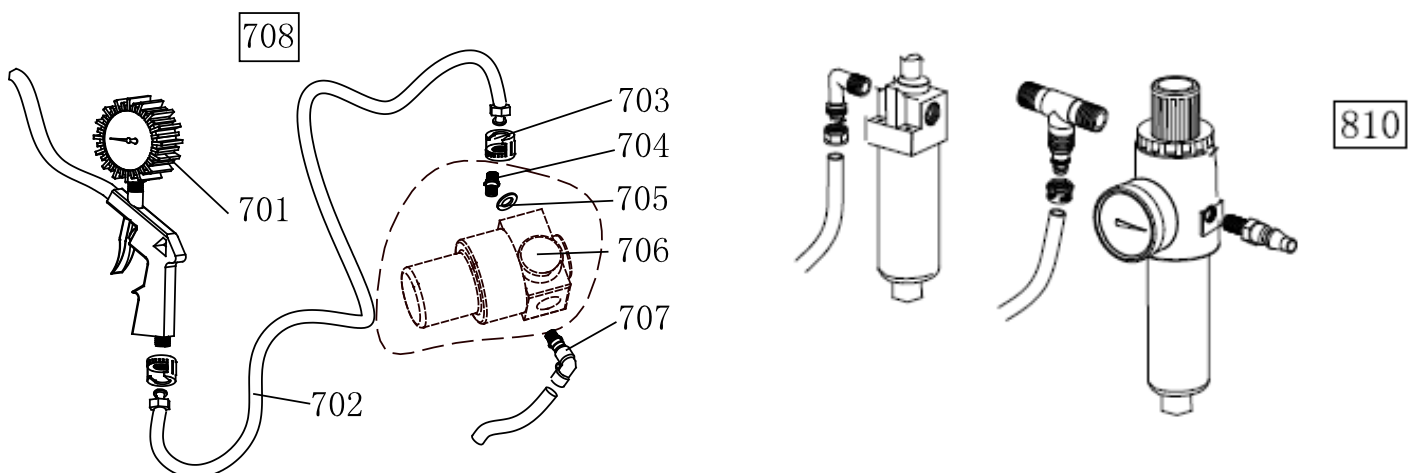
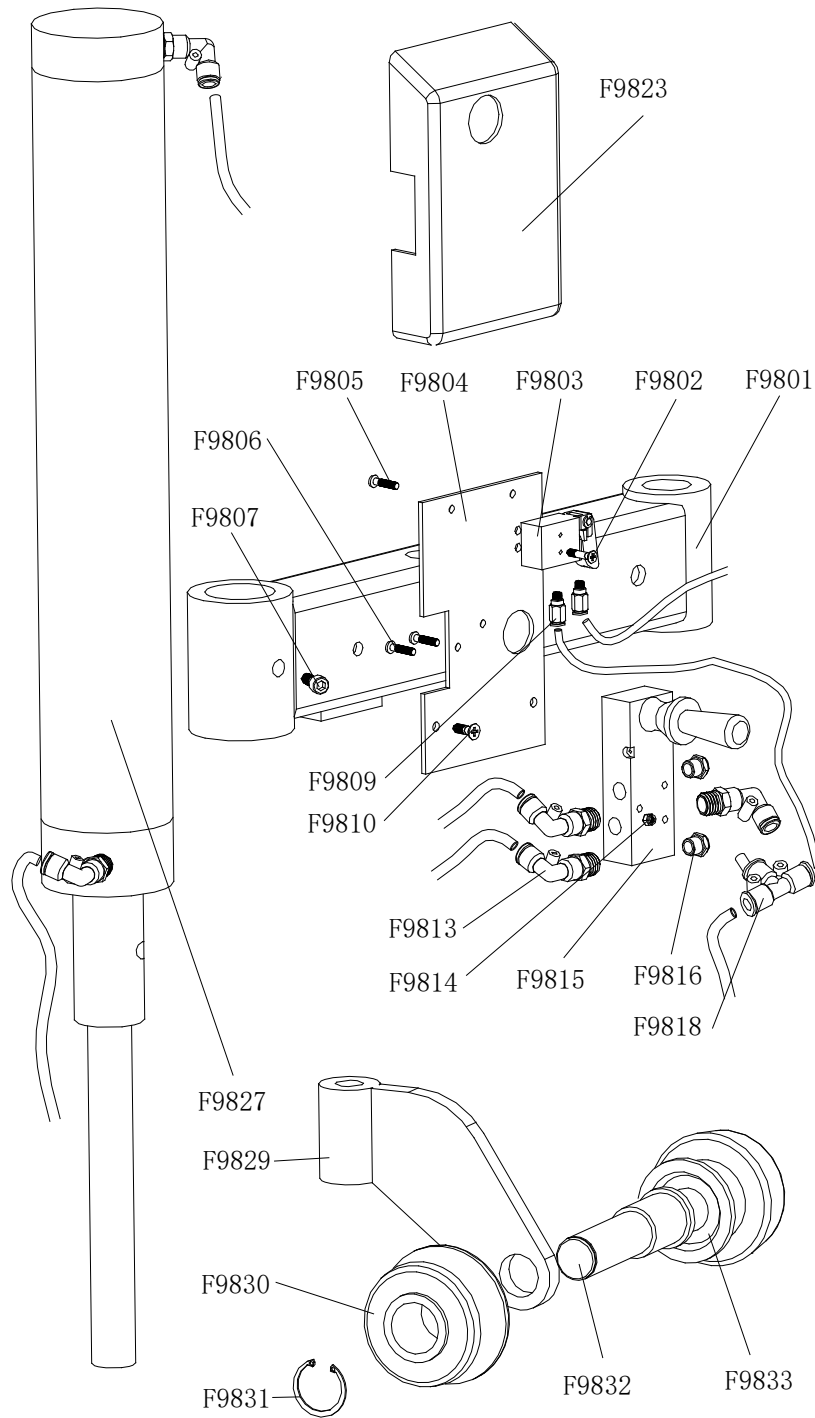
S/N	Number	Name
200-501	C-300-320302-0	Gear box lower cover
502	S-040-030204-0	Bearing 30204
503	S-005-020080-1	Gear box seal $\phi 20 \times 35 \times 8$
200-504	C-200-320500-0	Gear belt pulley
505	B-014-080251-0	Outer hex bolt M8x25
506	B-065-006020-0	Key washer 6x20
200-507	C-200-320400-0	Worm rod
508	S-040-006010-0	Bearing 6010
200-509	C-200-320200-0	Worm gear shaft
200-510	C-200-320100-0	Worm gear
200-511	CZ-200-320600-0	Worm gear shaft spacer
512	B-014-100551-0	Outer hex bolt M10x55
513	B-050-100000-0	Spring washer $\phi 10$
200-514	B-060-006020-0	Pin 6X20
515	B-040-102020-1	Flat washer $\phi 10 \times 20 \times 2$
516	B-010-060201-0	Hex socket head bolt M6x20
517	B-040-061412-1	Flat washer $\phi 6 \times 14 \times 1.2$
200-518	C-300-320301-0	Gear box upper cover
519	B-065-010040-0	Key washer 10x40
520	B-065-014040-0	Key washer 14x40
521	S-000-027310-0	O-seal $\phi 27.8 \times 3.1$
200-522	C-200-320700-0	Oil resistant seal
523	B-001-060001-0	Self-locking nut M6
524	B-050-080000-0	Spring washer $\phi 8$
525	B-040-083030-1	Flat washer $\phi 8 \times 30 \times 3$
200-526	CW-107-020001-0	Complete gear box



S/N	Number	Name
A04	S-015-000008-3	T-union 3* $\phi 8$
A44	B-010-060161-0	Hex socket head bolt M6x16
A48	S-017-010808-2	Quick T-union
200-531	CZ-200-430100-0	Rotating valve casing
200-532	S-000-059262-0	O-seal 59.9X2.62
200-535	CZ-200-430200-0	Rotating valve mandrel
537	S-035-055080-0	hose 5.5* $\phi 8$
A41	S-011-010808-0	Straight union 1/8- $\phi 8$
548	B-007-040061-0	Hex socket head bolt M4X6
200-540	CW-016-020000-2	Complete Rotating valve



S/N	Number	Name
200-504	C-200-320500-0	Gear belt pulley
601-MC	S-050-220110-5	Motor 220V/50HZ
601-MY	S-050-230075-0	Motor 220v
200-602	CX-200-330000-0	Motor Belt pulley
603	B-007-080121-0	Hex socket head bolt M8x12
604	S-042-000686-0	Tyre changer belt A-28
605	B-014-080651-0	Outer hex bolt M8X65
606	B-040-083030-1	Flat washer Ø8X30X3
607-80	S-063-008000-0	Capacitor 80µf, 110V
607-50	S-063-005000-0	Capacitor 50µf, 220V
608	B-040-102020-1	Flat washer Ø10X20X2
609	B-050-100000-0	Spring washer Ø10
610	B-014-100251-0	Outer hex bolt M10X25
611	B-014-080351-0	Outer hex bolt M8X35
612	B-004-080001-0	M8 groove
613	B-040-082220-1	Flat washer Ø8X22X2
614	C-200-560000-0	Motor rubber washer
200-615	CX-200-340000-2	Motor support
616	CZ-000-205150-0	Motor cable 5x1.0
617	B-050-080000-0	Spring washer Ø8
200-618	C-200-560000-0	Motor rubber buffer



S/N	Number	Name
F9801	CX-098-020000-0	Pressing arm(right)
F9802	B-024-050101-1	Cross head screw M5X10
F9803	S-030-010414-0	Pneumatic valve
F9804	CX-005-200000-0	Raise-fall switch base plate
F9805	B-017-040161-0	Cross flat head screw M4*16
F9806	B-017-040301-0	Cross flat head screw M4*30
F9807	B-007-100121-0	Hex socket head bolt M10*12
F9809	S-010-050004-0	Straight union M5-Ø4
F9810	B-010-050161-0	Hex socket head bolt M5*16
F9813	S-012-010406-0	union 1/4-Ø6
F9814	B-004-040001-1	Groove ( silver ) M4
F9815	S-030-010818-0	Raise-fall control valve
F9816	S-023-010801-6	Muffler (brass)
F9817	S-012-010406-0	Quick L-union 1/4-φ6
F9818	S-013-104206-0	Quick T-union 2XØ6-Ø4
F9820	S-017-010806-2	T-union 1/8-2*Ø6
F9823	C-007-181000-0	Control valve protect cover
F9827	CA-005-209800-2	Complete 098 cylinder
F9828	S-012-010406-0	Quick Union 1/4-Ø6
F9829	CX-098-040000-0	Pressing roller bracket
F9830	C-098-060100-0	Tyre pressing roller 1
F9831	B-055-300002-0	Snap ring Ø30(hole)
F9832	CX-098-050000-0	Tyre pressing roller shaft
F9833	C-098-060200-0	Tyre pressing roller 2

701	S-038-000100-0	Inflating gun indicator
702	S-035-014150-1	Rubber connection hose
703	S-025-104008-0	Notch nut
704	S-011-010414-1	Straight union 1/4-1/4
705	B-040-132420-1	Flat washer Ø13
706	S-030-010400-2	Pressure adjust valve
707	S-012-010408-0	Quick Union 1/4-Ø8
708	CW-090-000201-0	Complete inflating gun
810	CW-114-020005-0	Complete oil fog maker



The company

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

hereby declares that the **Tyre Changer**

**TW X-11, TW X-31, TW X-36, TW X-36 WDK, TW X-93, TW X-98,  
TW X-610** (PL-1211, PL-1231, TW-1236, TW-1236X, TW-1293, TW-1298, TW-1261)

Serial number:

in this 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 ISO 12100:2010**

**Safety of Machinery**

**EN 17347:2001**

**Machines for fitting vehicle tires**

CE Certificate

**M.2021.206.C65380**

date of issue:

09.06.2021

place of issue:

Ankara

technical file no.:

MD-TCF-210601-31310

Certification body

UDEM International Certification,

Mutlukent Mahallesi 2073 Sokak (Eski 93 Sokak) No: 10,

Çankaya - Ankara - Turkey

Notified Body Appointment No.: 2218

**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 (address as below)



**TWIN BUSCH GmbH**

Amperestr. 1 · 64625 Bensheim

Tel. 06251 / 70585-0 · Fax: 70585-29

Authorized signatory: Michael Glade  
Bensheim, 25.11.2021 Qualitätsmanagement

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

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



*You can find more products at:*

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

---

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

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

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