



TW X-11

Tyre changer

twinbusch.de



Installation, Operation and Parts Manual



Read this entire manual carefully before installation or operation of the Tyre changer. Follow the instructions strictly.

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1. Introduction/application

This automatic tyre machine is especially designed for the removal and fitting of standard tyres up to small transporters (12" outer & 24" inner).

Attention:

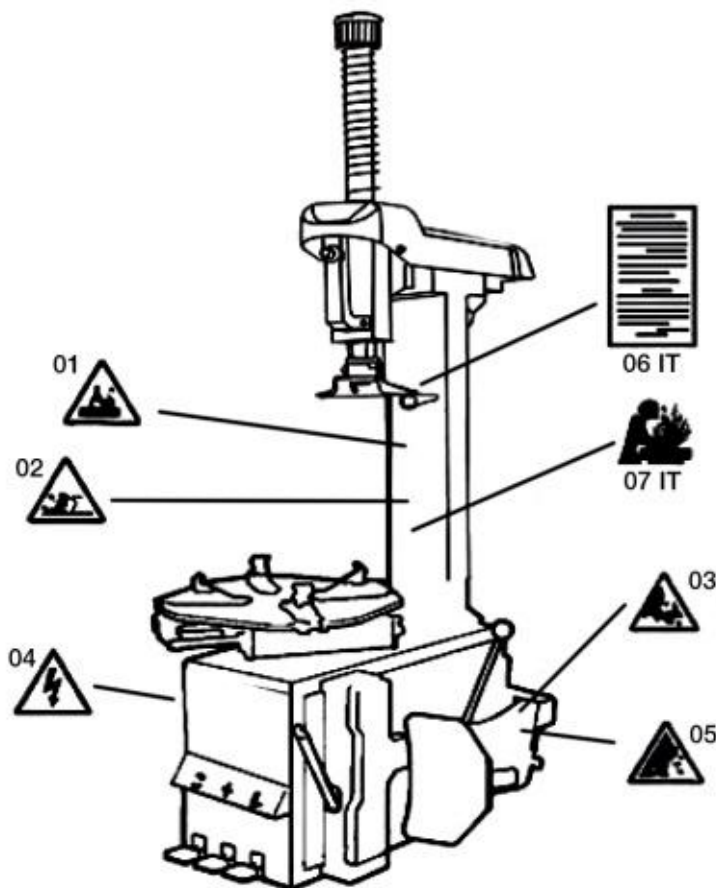
This machine is only designed for the removal and fitting of tyres, under no circumstances should you use this machine for any other purpose. The manufacture will not accept any responsibility for damage or injury caused by misuse.

2. Safety precautions

Only qualified personnel are allowed to operate the TW-X11 tyre fitting machine.

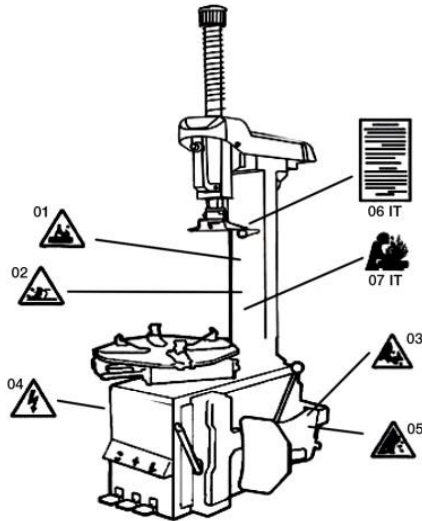
If the machine is damaged or needs parts replaced, work should be stopped immediately. For advice and repairs please contact the manufacture or dealer for further information.

The manufacture offers a one year guaranty on the whole machine. Damage caused by misuse will not be covered.



3. Safety warning

- Keep hands clear of the rim clamp during operation.
- Please make sure that the TW X-11 is correctly earthed.
- Always wear protective clothing and safety glasses during operation.
- Take note of all warnings!
- The TW X-11 is equipped with a mechanical protection against over inflating.
- Tyres and rims should always have the same sizes and have no signs of damage.
- Over inflation can lead to explosions which can cause serious injury or even death.
- Take care when inflating tyres not to trap fingers.

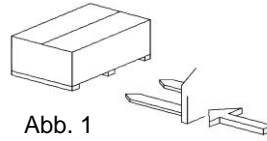


4. Technical Data

Technical Data	TW X-11
Rim diameter (outer)	12" - 26"
Rim diameter (inner)	14" - 28"
Wheel (max.)	45" (1143 mm)
Rim diameter (max.)	16" (406 mm)
Pressing weight	2500 kg
Pneumatic connection	8-10 bar
Power input	400 V / 3 Phase
Motor output	1,1 kW
Noise level	<70 dB
Net weight (ca.)	276 kg

5. Transport

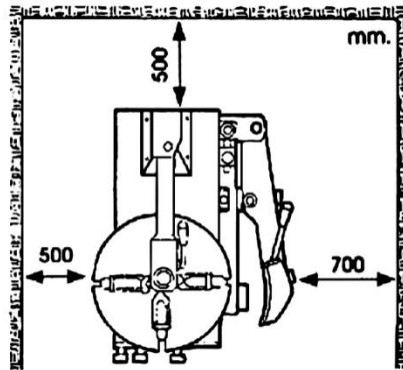
To transport the TW X-11 a fork lift should be used and please take note of the lifting points (see diagram below)



6. Packing

Remove carefully the packing and make sure all needed parts for assembly (see pack list) are available. Should any parts be missing or damaged don't hesitate to contact the manufacture or dealer.

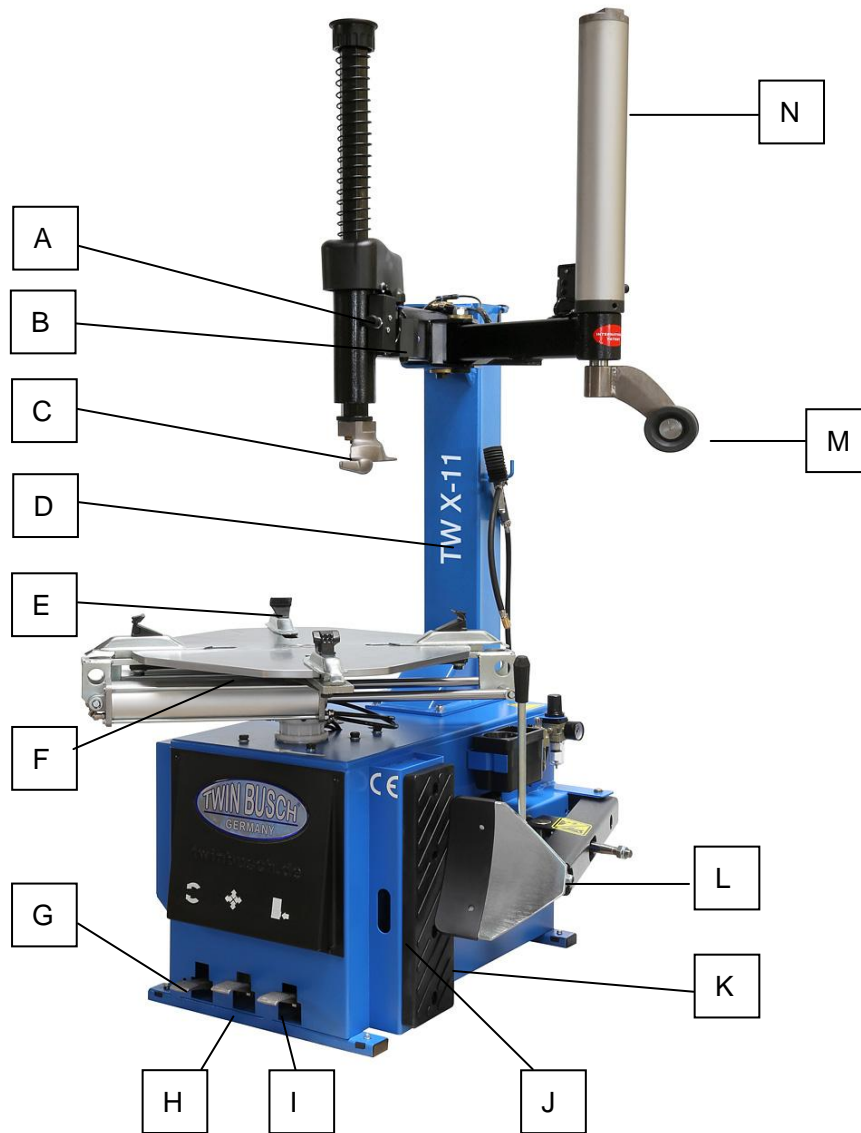
7. Required work space



Choose the designated work place for the TW X-11 according to the safety regulations. The power and air supply should be connected according to the instructions. The work place should be dry and the floor level to mount the machine, and a distance should be kept between walls (see Fig. 2).

Warning:

The TW X-11 should not be used in areas where there are dangers of explosions.

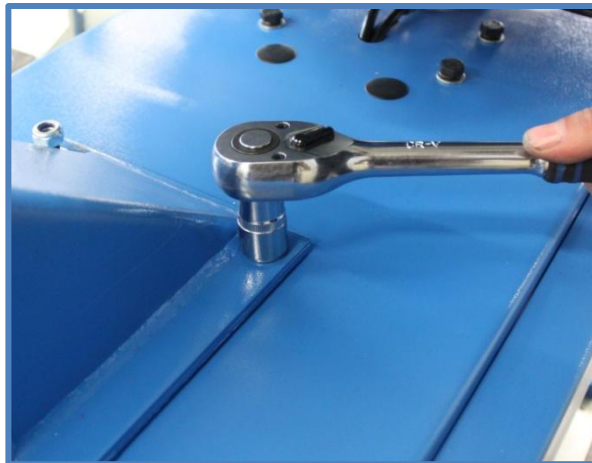


- | | | | |
|---|--------------------|---|-------------------|
| A | Mounting arm lock | J | Tyre lever holder |
| B | Swing arm | K | Rubber protection |
| C | Mounting head | L | Bead press |
| D | Main post | M | Tyre press |
| E | Wheel clamp | N | Cylinder |
| F | Turntable | | |
| G | Turntable pedal | | |
| H | Wheel clamp pedal | | |
| I | Bead breaker pedal | | |

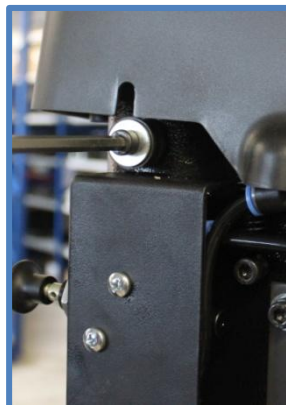
8. Assembly



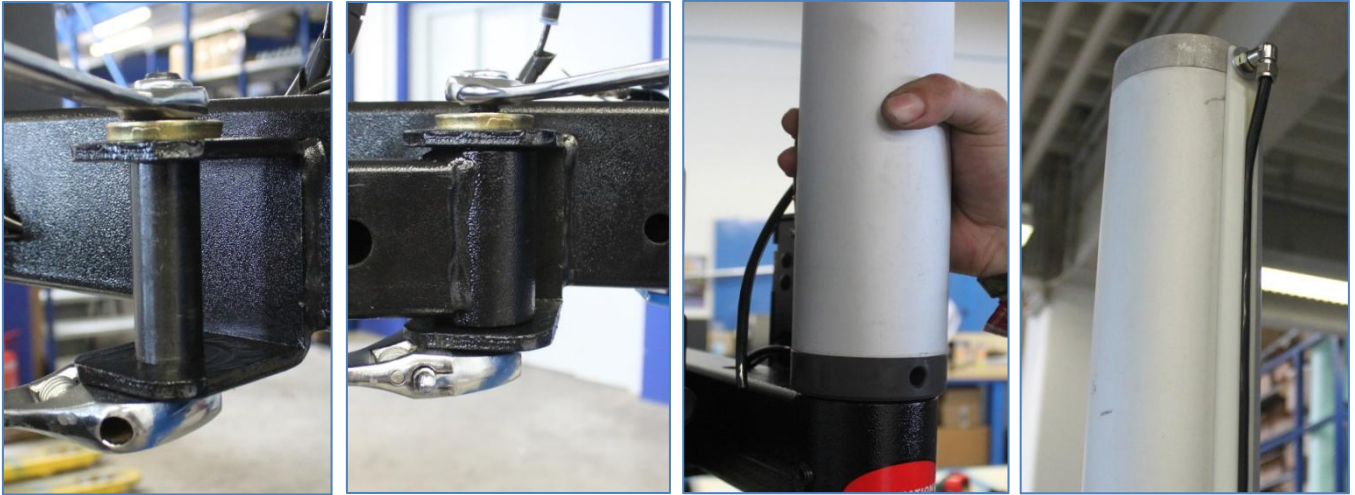
Unpack the machine and check all delivered parts.



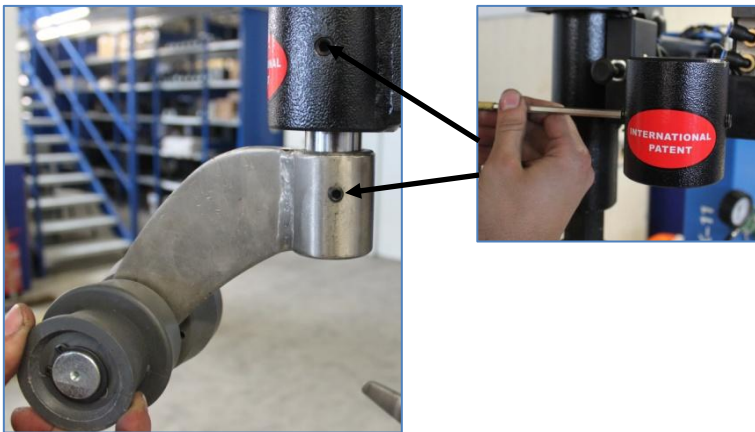
Mount the main column.



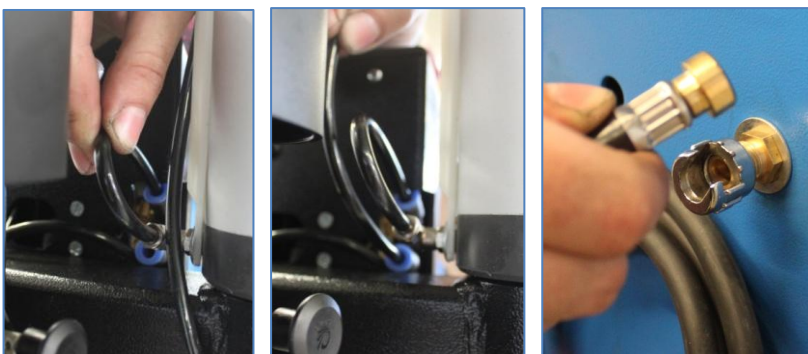
Remove the safety clamp and fit the cover, spring, and cap.



Mount the help arm and cylinder, tighten the allen screws.



Fit the air hoses as in the picture.





Fit the bead press and protection rubber. Fit the Joystick button.

Electrical connection

Attention:

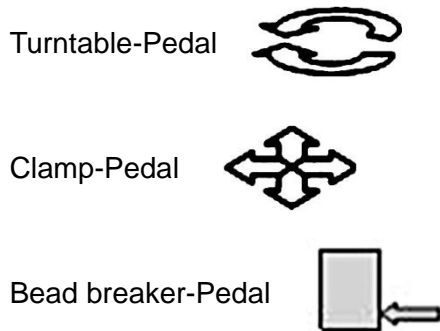
Check the ID plate for the correct voltage. All electrical connections must be carried out by a qualified electrician. The machine must be fitted with a 400V 16 A CEE or 230V CEE 7/4 plug. The manufacture will take no responsibility through disregard to the manual.

Warning:

Warning stickers should be kept clean and replaced when unreadable or damaged. The machine should not be used when the stickers are missing. Do not obstruct the stickers they should be readable at all times.

9. Controls

Foot pedals:



10. Function test

Please check that all connections are correct and working:

- Press the turntable pedal and check that it turns in both directions.
- Hold the bead breaker lever, move the shoe over the tyre approx. 10 mm from the rim and press the pedal .
- Press the wheel clamp pedal to open and close the claws, release to hold position.
- Open the column locking lever (anti clockwise), and the hexagonal column unlocks move the arm into position on the rim and turn the lever clockwise to lock.

11. Tyre fitting instructions

Attention: Remove all weights from the rim before you start working with the machine.

11.1 Breaking the bead

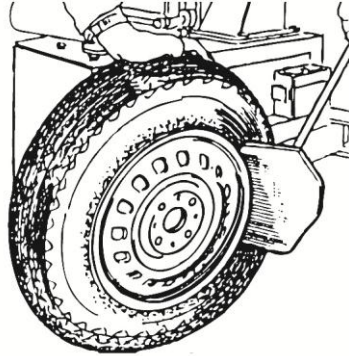


Fig. 7

Please take care when using the bead breaker, the arm presses with a force of 2500 kg and moves with a great jolt. This could lead to injury if wrongly operated.

Be sure to let the air completely out of the tyre by removing the valve core before trying to press off the tyre.

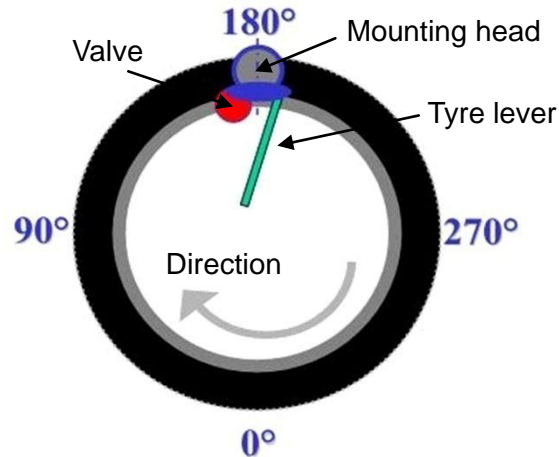
Open the arm with the lever by hand and roll the wheel in up to the desired point. Press the rim against the rubber support on the machine, and place the shoe (Fig. 7) 10mm away from the rim.

Press the bead pedal and the shoe will press against the tyre, repeat this action in various positions on both sides of the wheel until the tyre is completely free from the rim.

11.2. Clamping the rim

- Make sure that all weights are removed.
- Clamp the rim using pedal (H), making sure that the wheel is in the middle of the turntable.
- Press the tyre down with the assistant arm (P) to aid with the lubrication (Fig. 6).
- Lubricate the tyre and remove.

11.3. Removal of the tyre



To avoid accidents always keep hands and other body parts away from moving parts when operating.

- Place the mounting head on the rim using the swing arm and adjust the distance, press the button on the swing arm to fix the position. The mounting head will automatically lift 2 or 3 mm.
- Insert the tyre lever between the tyre and right side of the mounting head and pull the tyre over the mounting head. (See Fig. 7-8).

Attention:

With spoked rims there is a danger of damaging the rim please use the plastic mounting head (available as accessories).



Fig. 7

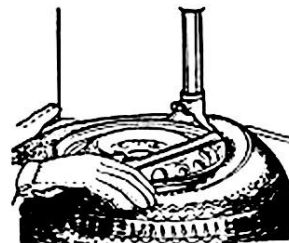


Fig. 8

Caution:

If the wheel is fitted with an inner tube it is recommended to place the valve approximately 10 cm to the left of the mounting head to avoid damage to the tube.

- Hold the tyre lever in position (Fig. 8) and press the pedal (J), the turntable will turn clockwise and the tyre will be forced over the mounting head. Keep pedal pressed until the tyre is completely removed from the rim.
- When fitted remove the inner tube.
- Repeat the steps to dismount the back side of the tyre and remove from rim.

11.4. Mounting the tyre

Check tyre and rim,

Attention: Be sure that tyre and rim are of the same size to avoid accidents.

Check for damage on the rim and tyre, if damaged it should be replaced.

Take extra care with aluminium rims as hairline cracks are difficult to see and these should not be used.

Mounting the tyre:

- Replace the valve.
- Lubricate the tyre with appropriate paste.
- Clamp the rim, if it was removed.
- Turn the valve to the top position next to the mounting head.
- Place the tyre according to the markings in the right direction of rotation over the rim.
- Adjust the mounting head as in description 13.3.
- Be careful not to trap fingers when mounting tyres, keep hands away from the rim when turning the wheel.
- Place the tyre over the front side of the mounting head and push the tyre down over the rim. (Fig. 9)
- Press the turntable pedal (J) until the tyre drops completely over the rim.
- If an inner tube is fitted then replace it before continuing with the front side of the tyre.
- Repeat the steps for the front side of the tyre.



Fig. 9

12. Inflating the tyre

Warning 

Important: Inflating tyres can be very dangerous, always follow safety instruction to avoid serious injury.

Tyres can explode due to the following:

- The rim and tyre are of different sizes.
- The tyre or rim is damaged.
- The tyre pressure is over the maximum manufactures recommendation.

Inflating the tyre

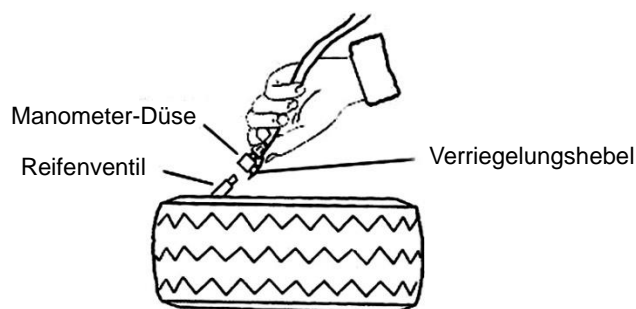
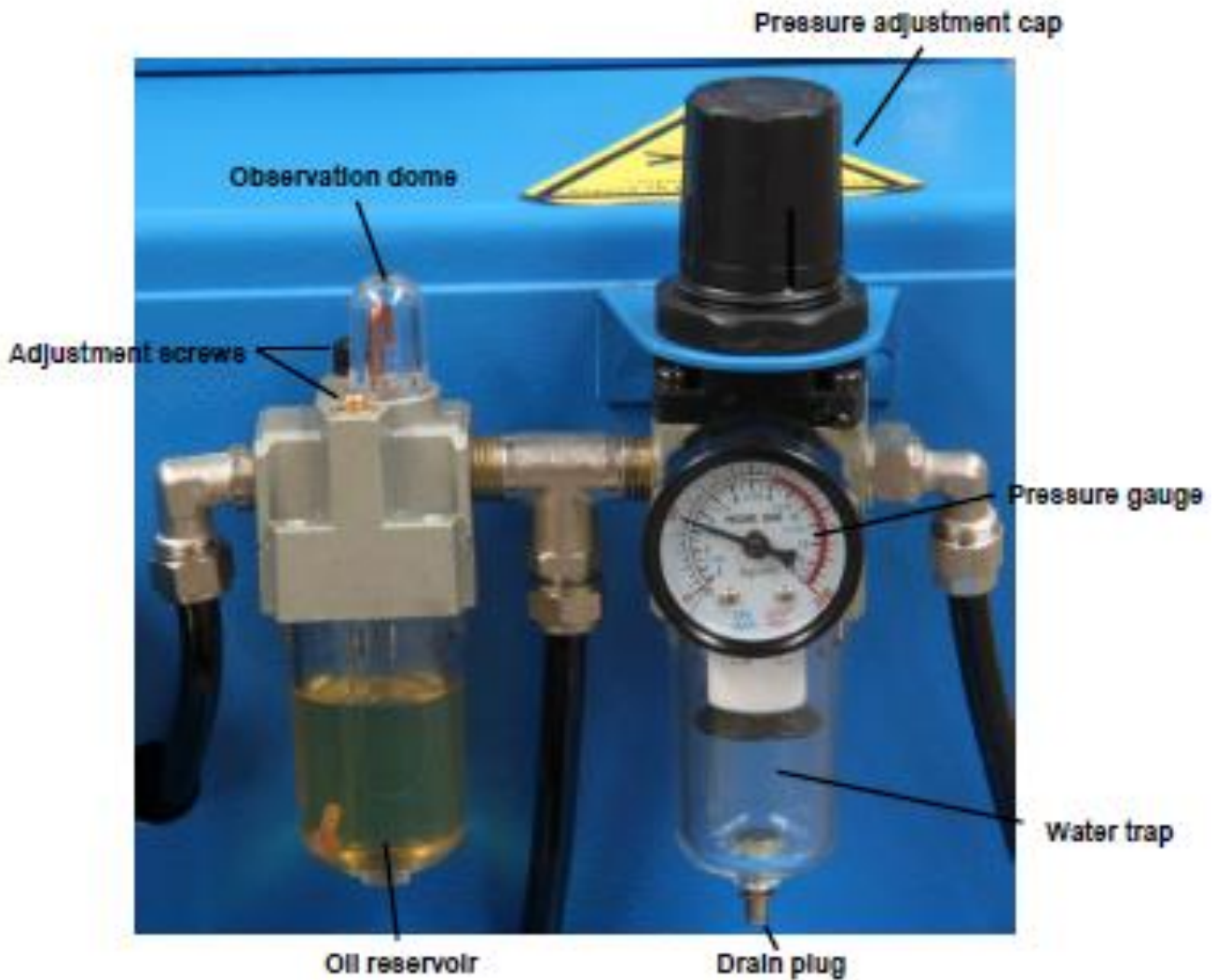


Abb. 10

- Remove the valve cap and take out the valve core.
- Hold and push the nozzle clamp over the valve completely and release the clamp.
Pump the tyre up to approximately 3 bar to ensure that the tyre is properly seated and sealed not forgetting to constantly check the pressure to avoid over inflating.
- Check that the tyre is evenly seated use tyre guidelines if available, replace the valve core and inflate to manufactures recommended pressure.

Water trap / Oil vaporiser



The air pressure can be adjusted using the pressure cap (anticlockwise to open) a working pressure of 5-6 bar is required.
 To adjust the amount of oil turn the screw in the + direction and in - to reduce, the drop speed can be seen in the dome.
 To empty the water trap open the bottom drain screw
 Never force the adjustment screws or use inadequate tools

13. Storage

If the machine is not used for a longer period of time it should be disconnected from the power and air supply.

Lubricate all moving parts and drain the water separator/ oil vaporiser.

Cover the machine to protect against dust.

14. Maintenance

Attention: Never allow unqualified people to work on this machine, all maintenance work should be carried out by professionally trained personnel. Before any maintenance work is done disconnect the power and air supply. In order to prolong the life of your TW X-11 it is important to carry out regular maintenance and to follow the directions in this manual. Keeping your TW X-11 in good working order will save expensive repairs and prevent injury.

- Always keep your working area clean and free from dust.
- Check the hexagonal column for movement and keep well lubricated.
- Check the assistant arms for movement and lubricate regularly.
- Check the turntable and claws daily. Clean and lubricate.
- Clean and lubricate all moving parts weekly.
- Check the oil level in the vaporiser weekly, refill when necessary. (SAE30).
- Empty the water reservoir daily.
- Check the tension of the drive belt every 6 months (Abb. 16).
- Check the jets on the claws after 6 months.
- Check the bolts under the turntable (Fig. 15-B) monthly tighten and adjust if necessary.
- Remove the protective cover on the hexagonal column and check the tightness of the fixing plate nuts.
- Adjust and clean the valve system as follows:
Remove the cover panel of the housing, unscrew the cushion valve and clean the valves (Fig. 17-A) with compressed air. Replace defect parts if needed.

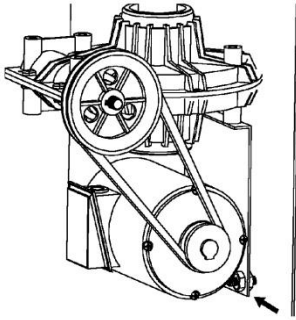


Fig. 16

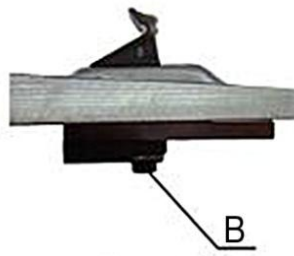


Fig. 15

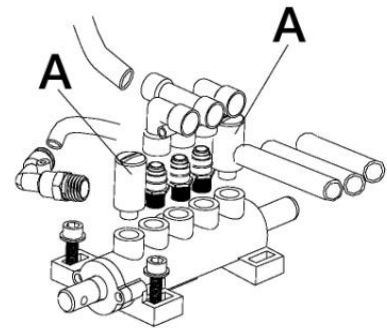


Fig. 17

The lever on the hexagonal column can be adjusted as follows:

- Lift the plastic cover.
- Adjust the bolt to the desired position.
- Tighten the nut. (Abb. 18)

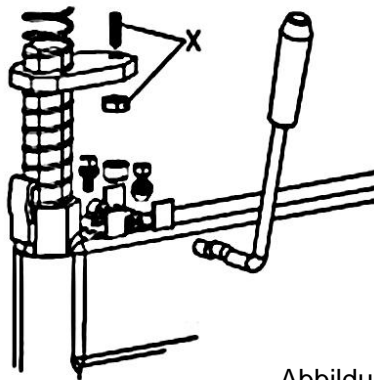
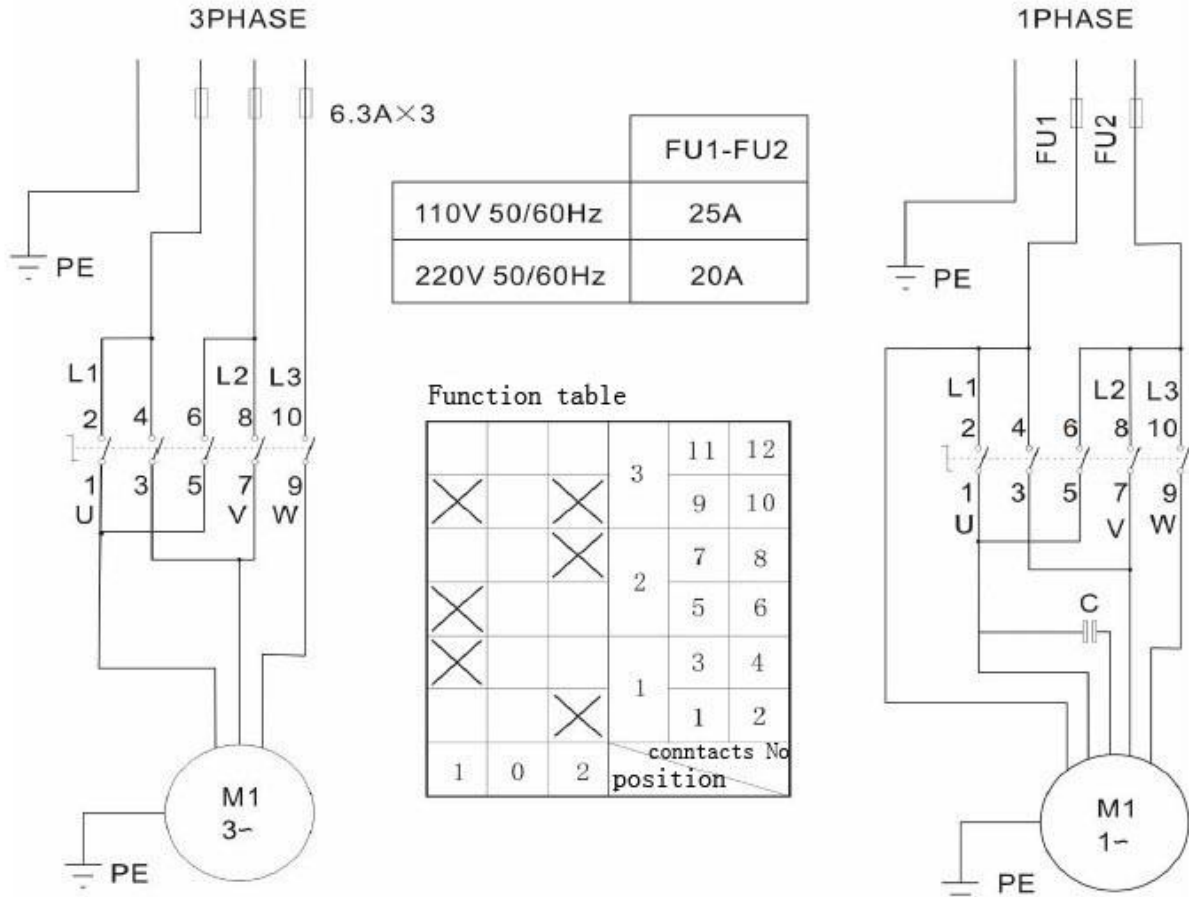


Abbildung 18

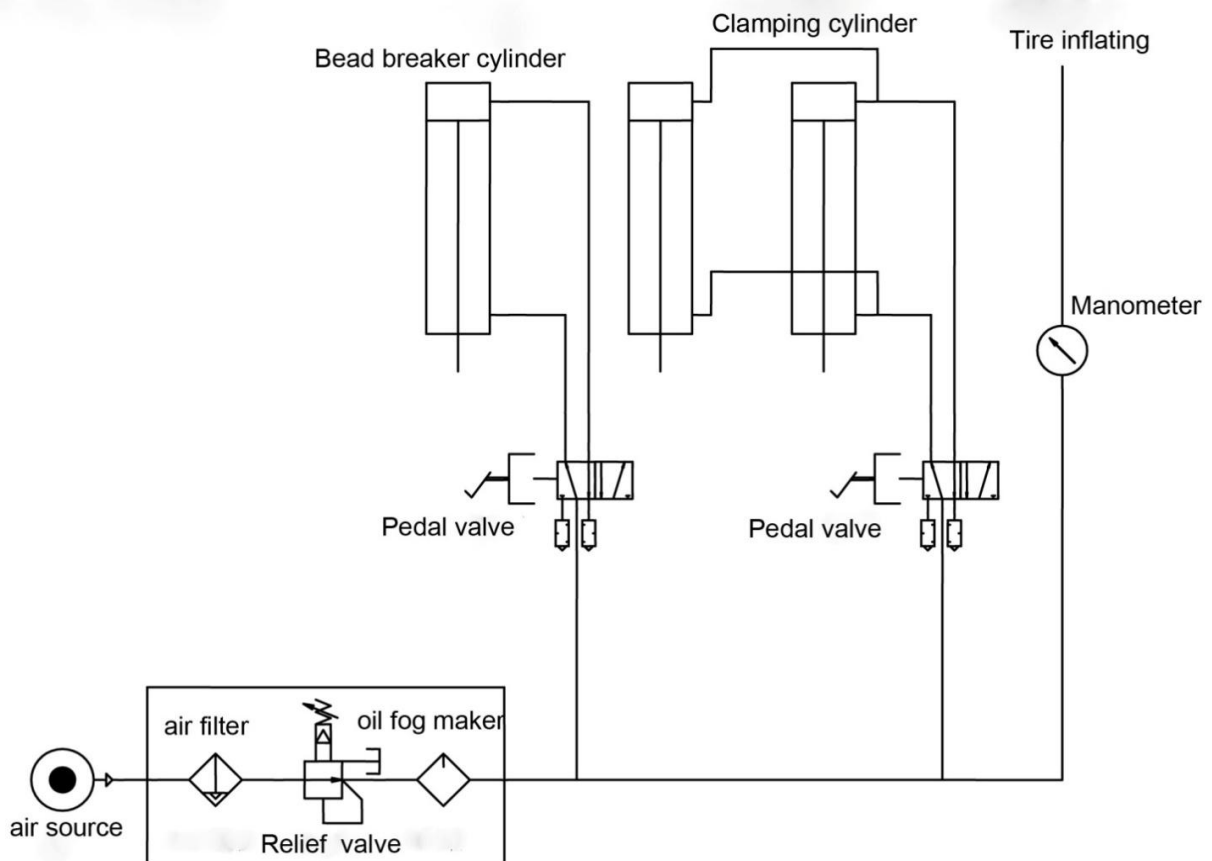
15. Troubleshooting

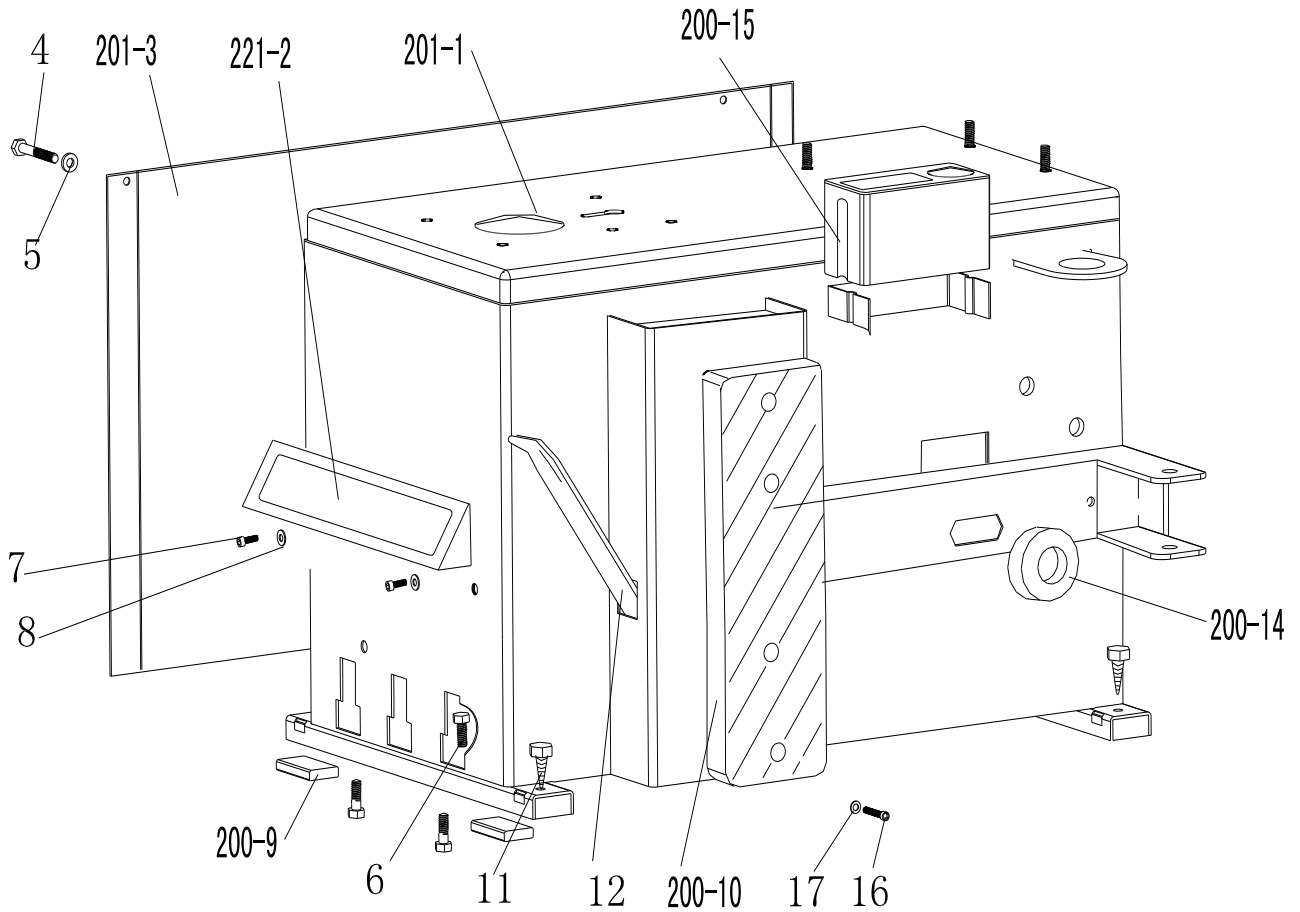
Problem	Reason	Solution
The turntable turns in only one direction	Switch malfunction	Check connections
		Replace
Turntable does not turn	Motor is defect, drive belt is loose or damaged	Replace defect parts
		Adjust belt
The claws are not locking	Leakage in air system	Check connections
	Cylinder is defect	Replace defect parts
The mounting head is touching the rim	Wrong setting on the adjustment plate	Adjust
		tighten screws
The bead breaker does not return to start position	Pedal spring is broken, blocked silencer valve	Replace
		Clean or replace
Bead breaker too weak	Insufficient pressure	Check air connections

Circuit diagram

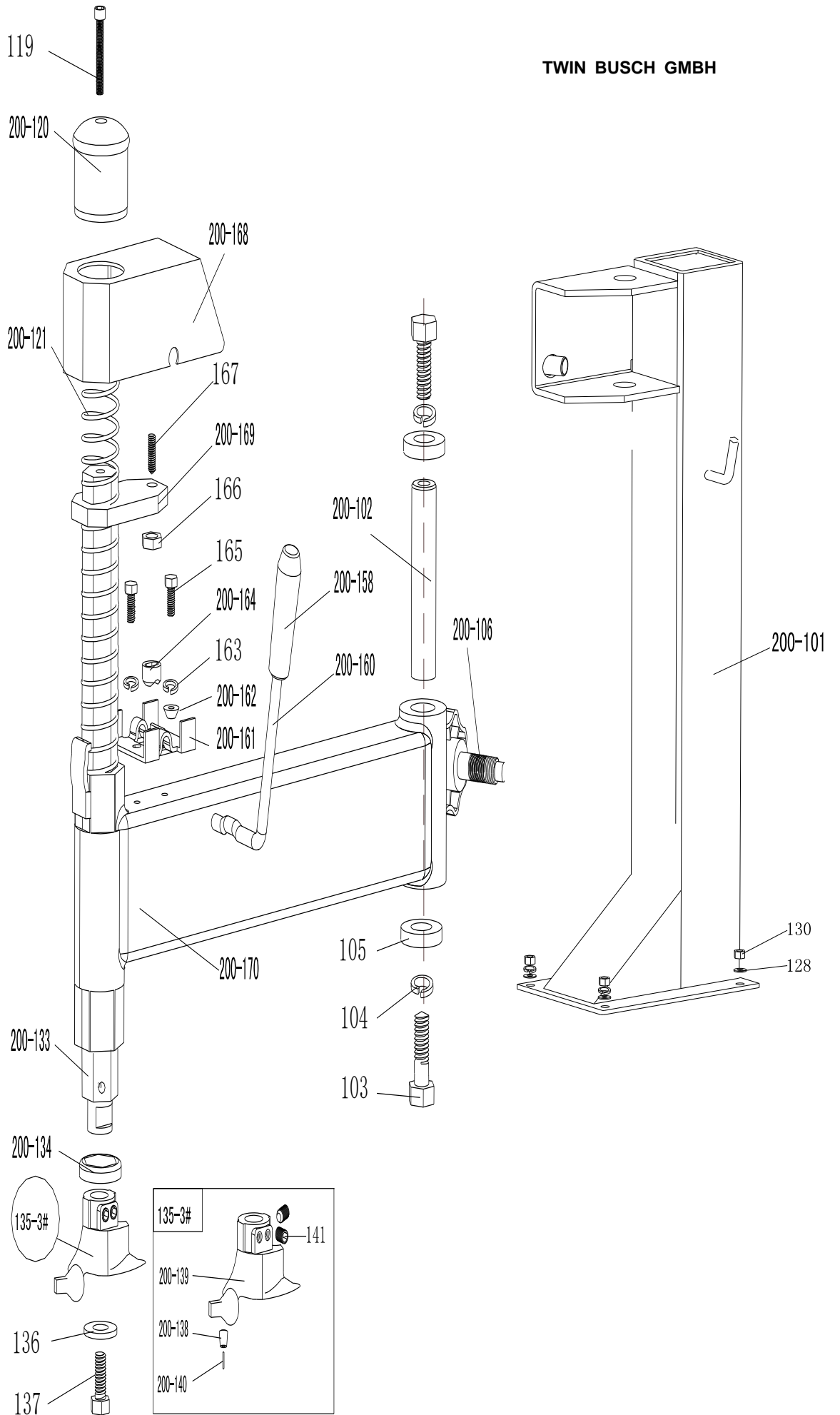


Pneumatic Plan

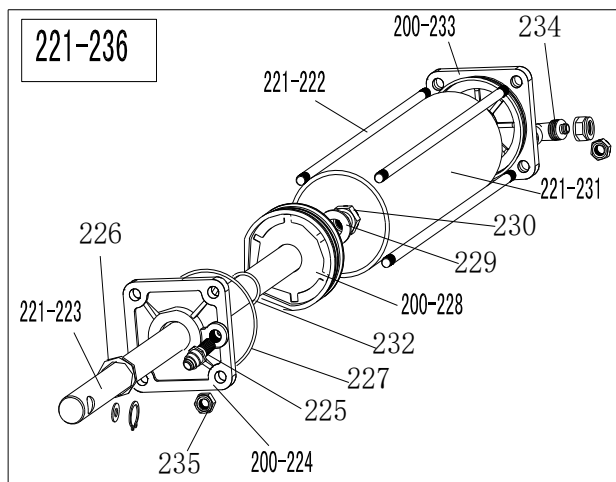
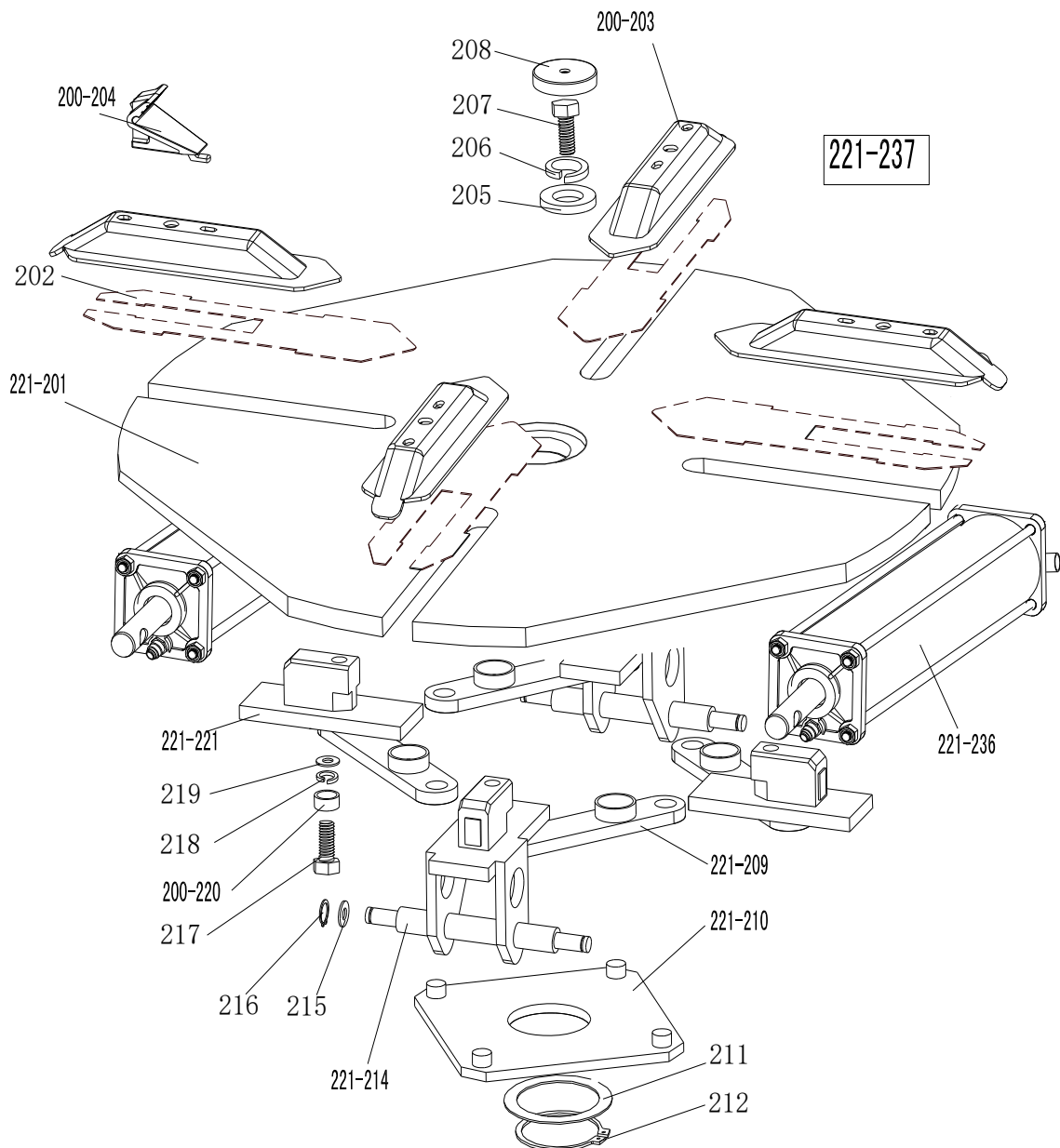




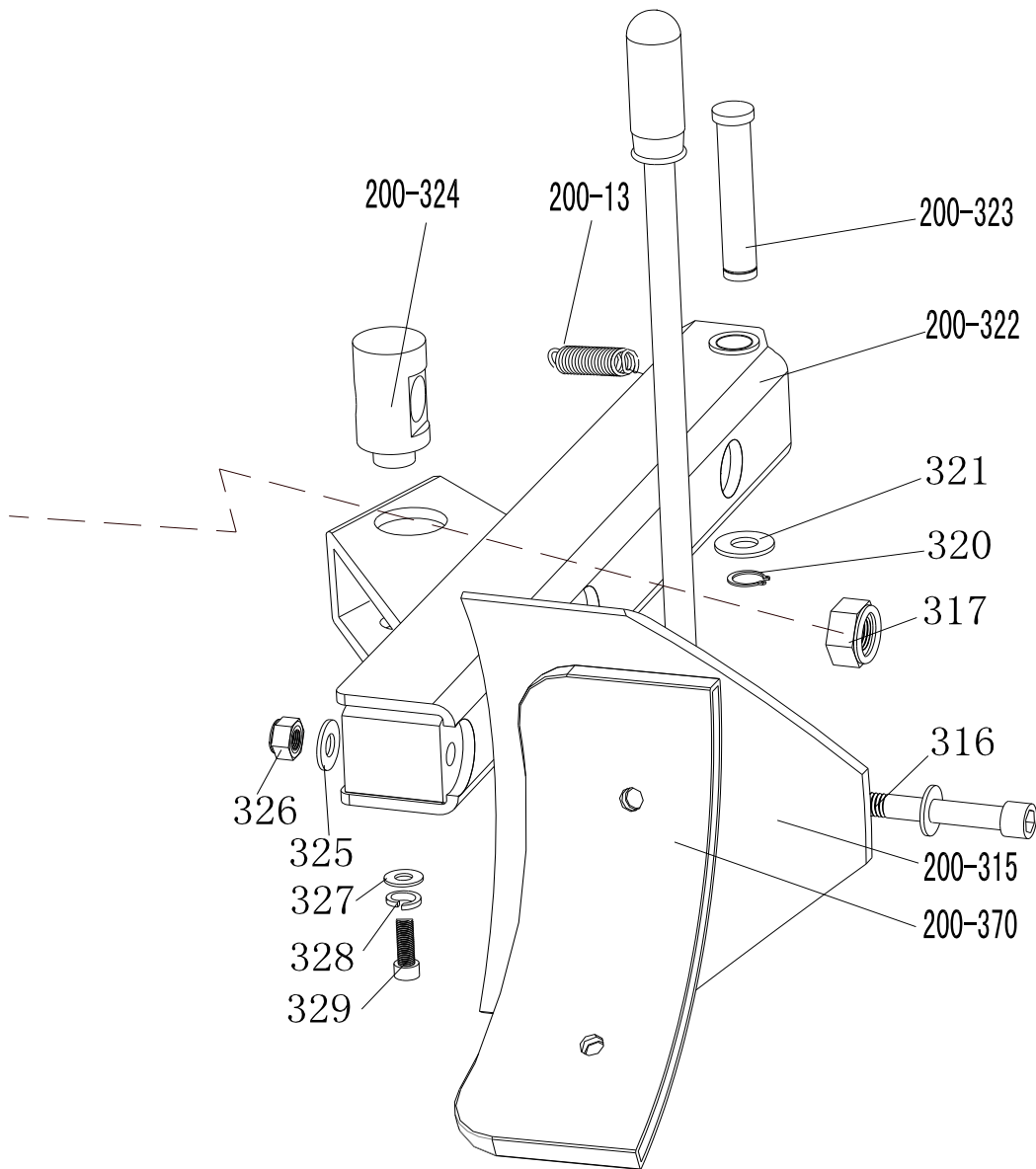
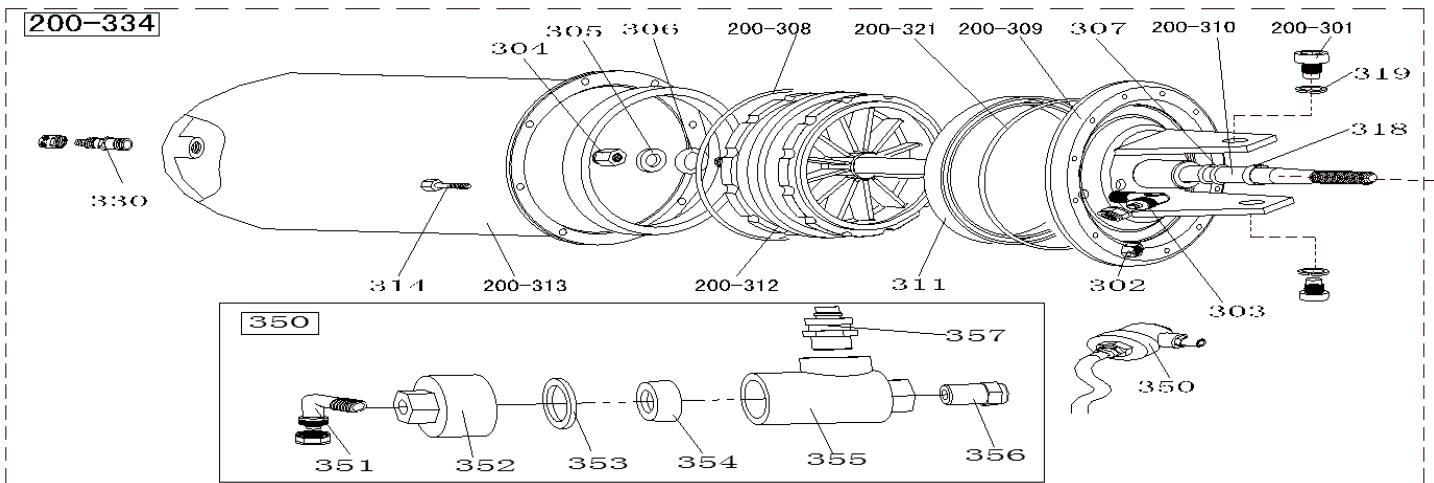
Art.-Nr./N.	Name in Englisch	Bezeichnung
TW-01-201-1	Machine body	Gehäuse
TW-01-221-2	Pedal front cover	Pedalabdeckung
TW-01-201-3	Left cover	Seitenwand
TW-01-24	Hex socket head bolt M6 x 10	Innensechskant-Schraube M6 x 10
TW-01-25	Flat washer $\varnothing 6 * 14 * 1,2$	Unterlegscheibe $\varnothing 6 * 14 * 1,2$
TW-01-26	Outer hex bolt M8 x 25	Sechskant-Schraube M8 x 25
TW-01-27	Inner hex bolt M8 x 20	Innensechskant-Schraube M8 x 20
TW-01-28	Flat washer $\varnothing 6 * 14 * 1,2$	Unterlegscheibe $\varnothing 6 * 14 * 1,2$
TW-01-200-9	Rubber foot buffer	Gummifuß
TW-01-200-10	Bead breaker buffer	Felgenanschlag, Gummi
TW-01-211	Grounding screw M6 x 40	Erdungsschraube M6 x 40
TW-01-212	Lifting lever	Montageeisen
TW-01-200-14	Bead breaker arm rubber	Gummipuffer, Abdrückzyl
TW-01-200-15	Oil-water box	Box für Montagepaste
TW-01-216	Hex socket head bolt M8 x 20	Innensechskant-Schraube M8 x 20
TW-01-217	Flat washer $\varnothing 8 * 17 * 1,5$	Unterlegscheibe $\varnothing 8 * 17 * 1,5$



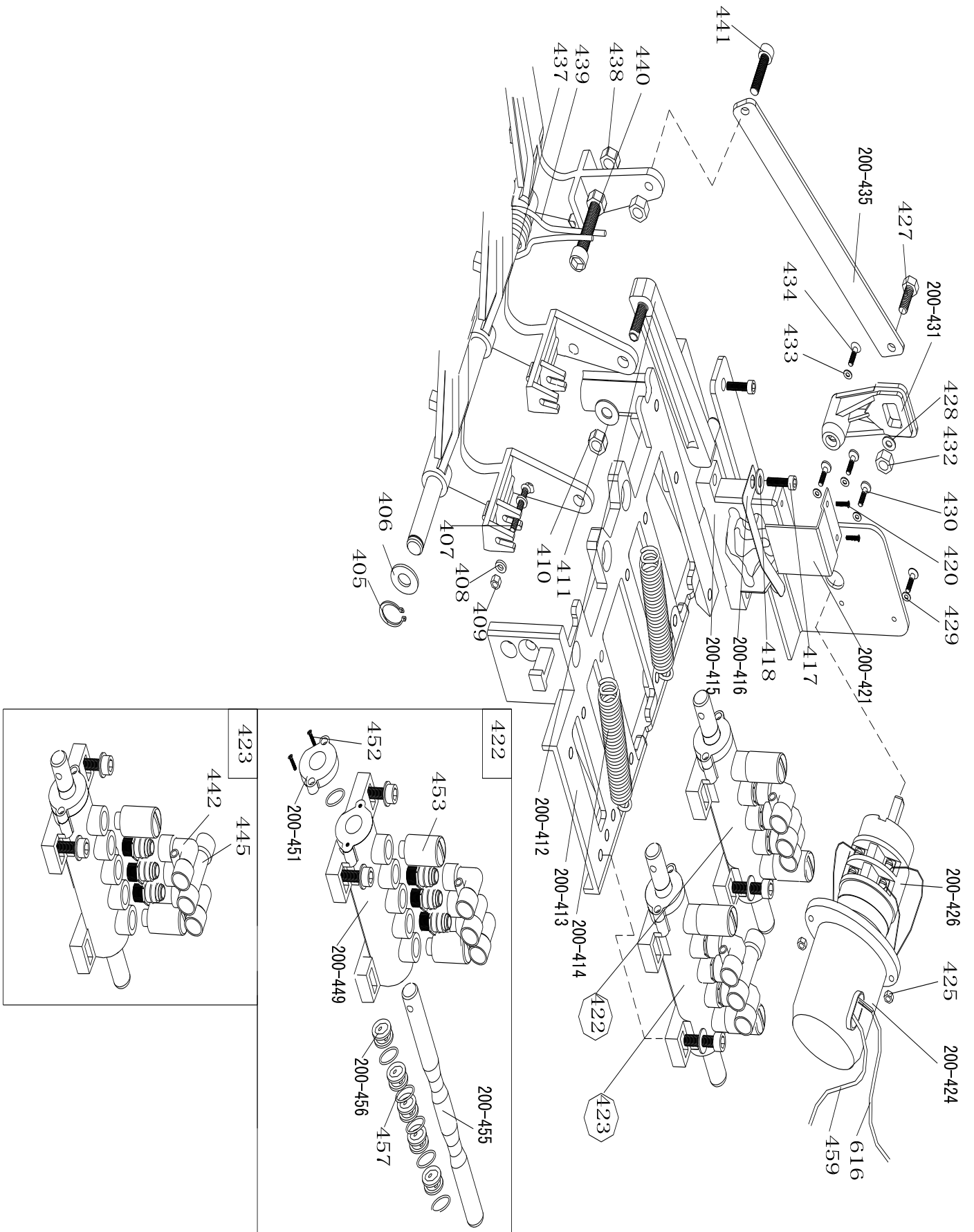
TW-01-200-101	Square column	Montagearm, Säule
TW-01-200-102	Swing arm pin	Bolzen v. Montagearm
TW-01-103	Outer hex bolt M14 x 30	Außensechskant-Schraube M14 x 30
TW-01-104	Spring washer Ø14	Unterlegscheibe Ø14
TW-01-105	Big washer	große Scheibe
TW-01-200-106	Column adjustment handle	Einstellschraube, Montagearm
TW-01-119	Hex socket head bolt M10 x 50	Innensechskant-Schraube M10 x 50
TW-01-200-120	Vertical arm cap 200	Kappe / Anschlag f. Feder
TW-01-200-121	Vertical arm spring	Feder v. Montagearm
TW-01-128	Flat washer Ø10 x 2	Unterlegscheibe Ø10 x 2
TW-01-130	Self locking nut M10	selbstsichernde Mutter M10
TW-01-200-133	Vertical arm 200	Montagearm 6-Kant
TW-01-200-134	Vertical arm washer	Armanschlag, Gummi
TW-01-135B#	complete mount/demount head	Montagekopf
TW-01-136	Mount/demount head flat washer	Unterlegscheibe
TW-01-137	Outer hex bolt M10 x 25	Außensechskant-Schraube M10 x 25
TW-01-200-138	Mount/demount head pulley	Rolle v. Montagekopf
TW-01-200-139	Mount/demount head 3#	Montagekopf Variante 3
TW-01-200-140	Hex round pin	Achse/Stift f. Rolle
TW-01-141	Hex socket head bolt M12 x 16	Innensechskant-Schraube M12 x 16
TW-01-200-158	Locking handle cover	Verriegelung, Griff
TW-01-200-160	Locking handle	Verriegelung, Hebel
TW-01-200-161	Locking plate	Halterung
TW-01-200-162	Locking block cover	Verriegelungs-Deaktivierung
TW-01-163	Spring washer Ø8	Federscheibe Ø8
TW-01-200-164	Eccentric shaft nut	Verriegelungswelle-Exzenter
TW-01-165	Outer hex bolt M8 x 25	Außensechskant-Schraube M8 x 25
TW-01-166	Nut M12 x 1,75 x 7	Mutter M12 x 1,75 x 7
TW-01-167	Hex socket head bolt M12 x 30	Innensechskant-Schraube M12 x 30
TW-01-200-168	Locking plate cap	Abdeckung
TW-01-200-169	Hex locking board 200	Riegelplatte
TW-01-200-170	Swing arm 70	Schwenkarm 70



TW-01-221-201	Turntable assembly	Spannteller, Komplet
TW-01-202	Jaw sliding plate (optional)	Gleitplatte (optional)
TW-01-200-203	Jaw cap assembly	Spannklaue-Schlitten
TW-01-200-204	Jaw	Spannklaue
TW-01-205	Big washer	große Scheibe
TW-01-206	Spring washer	Federscheibe
TW-01-207	Outer hex bolt	Außensechskant-Schraube
TW-01-208	Turntable cap	Drehscheibe-Kappe
TW-01-221-209	Connection rod assembly	Strebe/Anlenkung
TW-01-221-210	Square turntable	Drehplatte/Anlenkung
TW-01-211	Square turntable washer	Unterlegscheibe
TW-01-212	Snap ring	Sicherungsring
TW-01-221-214	Jaw slide guide with pin	Gleitführung mit Zylinderanlenkung
TW-01-215	Flat washer	Unterlegscheibe
TW-01-216	Snap ring	Sicherungsring
TW-01-217	Outer hex bolt	Außensechskant-Schraube
TW-01-218	Teeth locking washer	Zahnsicherungs-Schraube
TW-01-221-237	Complete square turntable	Anlenkung, Komplet
TW-01-219	Flat washer	Unterlegscheibe
TW-01-200-220	Connection rod nut	Mutter
TW-01-221-221	Jaw slide guide without pin	Gleitführung ohne Zylinderanlenkung
TW-01-221-222	Threaded connection rod	Bolzen
TW-01-221-223	Clamping cylinder piston rod	Spannzylinder-Kolbenstange
TW-01-221-224	Clamping cylinder cover without handle	Spannzylinder-Deckel
TW-01-225	Straight union	Geradever-Schraubung
TW-01-226	V-seal	V-Dichtung
TW-01-227	O-seal	O-Dichtung
TW-01-200-228	Clamping cylinder piston	Spannzylinder-Kolben
TW-01-229	Flat washer	Unterlegscheibe
TW-01-230	Nut	Mutter
TW-01-221-231	Clamping cylinder barrel 360	Spannzylinder-Rohr 360
TW-01-232	O-seal	O-Dichtung
TW-01-200-233	Clamping cylinder cover with handle	Spannzylinder-Deckel mit Halter
TW-01-234	Union	Verschraubung
TW-01-235	Self-locking nut	selbstschliessende Mutter
TW-01-221-236	Complete clamping cylinder	Spannzylinder, Komplet

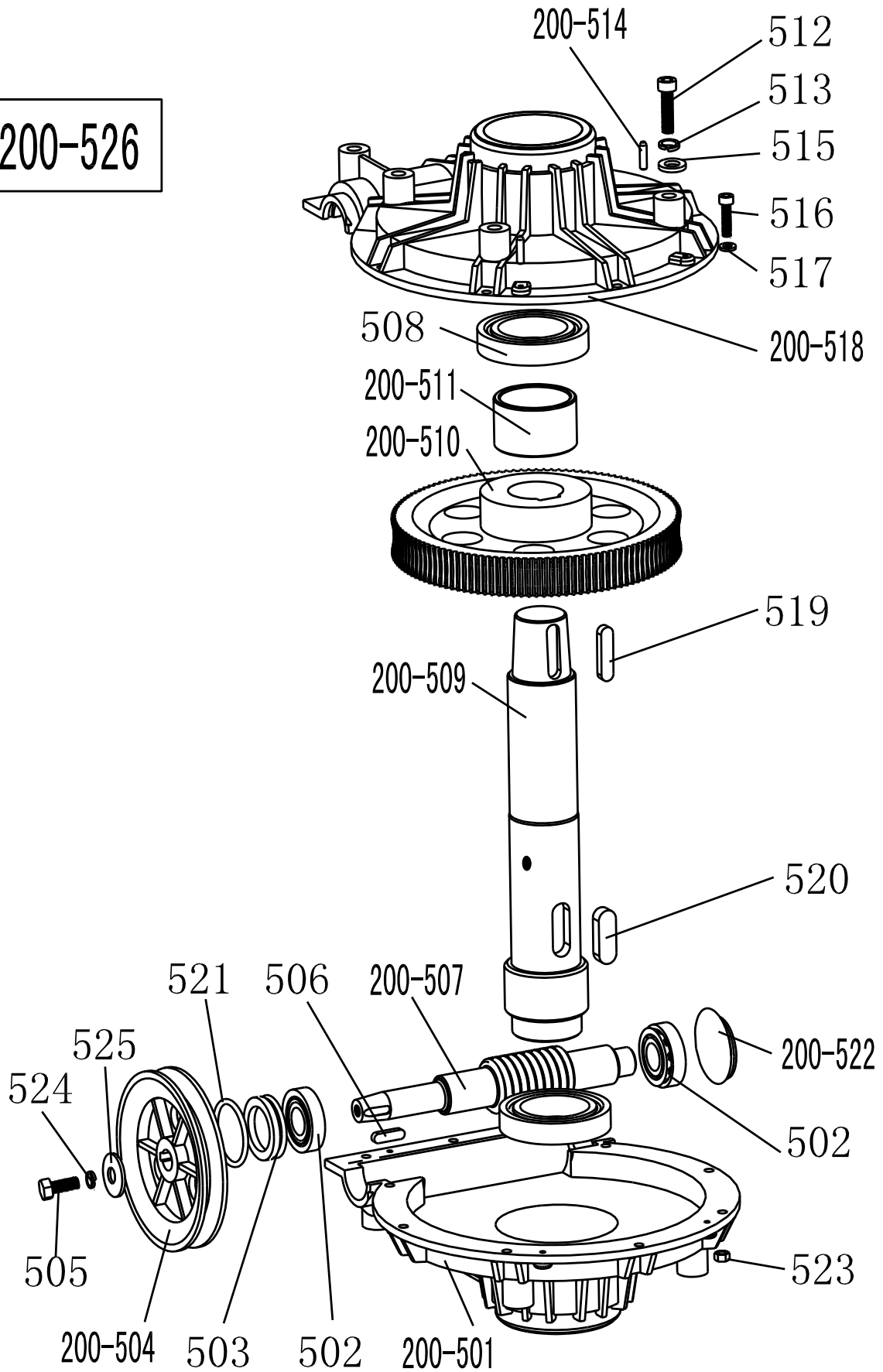


TW-01200B01	Hex socket head Bolt M14 x 30	Innensechskant-Schraube M14 x 30
TW-01B02	Self-locking nut M6	selbstsichernde Mutter M6
TW-01B03	Union (90°) 1/4 - Ø8	Verschraubung (90°) 1/4 - Ø8
TW-01B04	Nut M16 * 1,5	Mutter M16 * 1,5
TW-01B05	Flat washer Ø16 * 28 * 2	Unterlegscheibe Ø16 * 28 * 2
TW-01B06	O-seal Ø16 * 2,65	O-Dichtung Ø16 * 2,65
TW-01B07	O-seal Ø20 * 2,65	O-Dichtung Ø20 * 2,65
TW-01200B08	O-seal 180 x 5	O-Dichtung 180 x 5
TW-01200B09	Bead breaker cylinder cover assembly	Abdrückzylinder-Deckel
TW-01200B10	Bead breaker cylinder piston rod	Abdrückzylinder-Kolbenstange
TW-01B11	V-seal 185 x 168 x 11,5	V-Dichtung 185 x 168 x 11,5
TW-01200B12	Bead breaker cylinder piston	Abdrückzylinder-Kolben
TW-01200B13	Bead breaker cylinder barrel	Abdrückzylinder-Topf
TW-01B14	Hex socket head Bolt M6 x 16	Innensechskant-Schraube M6 x 16
TW-01200B15	Bead breaker shovel assembly	Abdrückschaufel, komplett
TW-01B16	Hex socket head Bolt M12 x 90	Innensechskant-Schraube M12 x 90
TW-01B17	Self-locking nut M16 * 1,5	selbstsichernde Mutter M16 * 1,5
TW-01B18	Guide belt	Führungsband
TW-01200B70	Bead breaker shovel protection cover (optional)	Abdrückschaufel, Schutzabdeckung (optional)
TW-01200B13	Bead breaker arm spring	Abdrückarm-Feder
TW-01B19	Spring washer Ø14	Federscheibe Ø14
TW-01B20	Snap ring Ø16	Sicherungsring Ø16
TW-01B21	Flat washer	Unterlegscheibe
TW-01200B21	O-seal Ø173,4 x 5,3	O-Dichtung Ø173,4 x 5,3
TW-01200B22	Bead breaker arm 200	Abdrückarm 200
TW-01200B23	Bead breaker pin	Abdrückarm-Bolzen
TW-01200B24	Bead breaker cylinder rotating pin	Abdrückzylinder-Belenk
TW-01B25	Flat washer Ø12 * 24 * 2	Unterlegscheibe Ø12 * 24 * 2
TW-01B26	Self-locking M12	selbstsichernde Mutter M12
TW-01B27	Flat washer Ø8 * 30 * 3	Unterlegscheibe Ø8 * 30 * 3
TW-01B28	Spring washer Ø8	Federscheibe Ø8
TW-01B29	Outer hex bolt M8 x 20	Außensechskant-Schraube M8 x 20
TW-01B30	Straight union 1/8 - Ø8	Geradever-Schraubung 1/8 - Ø8
TW-01200B34	Complete bead breaker cylinder	Abdrückzylinder, komplett
TW-01B50	Bead breaker cylinder exhaust valve	Abdrückzylinder-Ventil
TW-01B51	Union (90°) 1/8 - Ø8	Verschraubung (90°) 1/8 - Ø8
TW-01B52	Bead breaker cylinder exhaust valve cover	Abdeckung für Abdrückzylinder-Ventil
TW-01B53	Seal washer	Dichtungsscheibe
TW-01B54	Bidirectional seal	Dichtung
TW-01B55	Bead breaker cylinder exhaust valve barrel	Abdrückzylinder-Ventil Ausgang
TW-01B56	Muffler	Schalldämpfer
TW-01B57	Straight union 1/4 - Ø8	Geradever-Schraubung 1/4 - Ø8

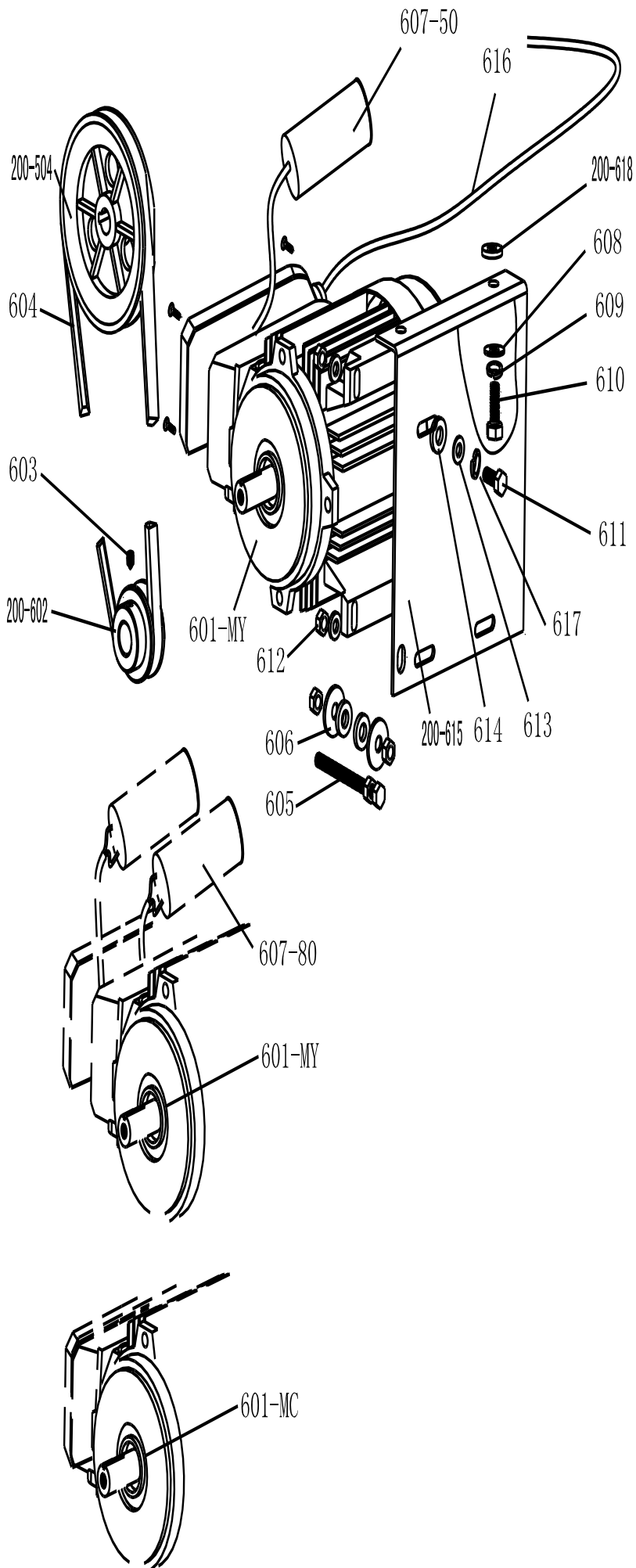


TW-01200401	Reverse switch pedal	Umkehrschalter pedal
TW-01221402	5-way valve pedal (right)	5-Wege-Ventil pedal (rechts)
TW-012405	Snap ring Ø12	Sicherungsring Ø12
TW-012406	Flat washer Ø12 * 24 * 2	Unterlegscheibe Ø12 * 24 * 2
TW-012407	Cross head screw M4 x 30	Kreuzschlitz-Schraube M4 x 30
TW-012408	Flat washer Ø4	Unterlegscheibe Ø4
TW-012409	Self-locking nut M4	selbstsichernde Mutter M4
TW-012410	Self-locking nut M8	selbstsichernde Mutter M8
TW-012411	Flat washer Ø8 * 17 * 1,5	Unterlegscheibe Ø8 * 17 * 1,5
TW-01200412	Cam connection rod	Raststange
TW-01200413	Pedal support board	Pedalstützbrett
TW-01200414	Pedal spring	Pedal Feder
TW-01200415	Cam	Rastblock
TW-01200416	Cam washer	Biegefeder
TW-012417	Hex socket head bolt M6 x 20	Innensechskant-Schraube M6 x 20
TW-012418	Flat washer Ø6 * 12 * 1	Unterlegscheibe Ø6 * 12 * 1
TW-012420	Cross head self tapping screw	Kreuzschlitz-blechschraube
TW-01200421	Cam cover	Abdeckung
TW-012422	Complete 5-way valve for clamping cylinder, without valve rod	Komplett 5-Wege-Ventil für Schliesszylinder, ohne Ventilstange
TW-012423	Complete 5-way valve for bead breaker cylinder, without valve rod	Komplett 5-Wege-Ventil für Abdrückzylinder, ohne Ventilstange
TW-01200424	Reverse switch cover	Umkehrschalterabdeckung
TW-012425	Nut M4	Mutter M4
TW-01200426	Reverse switch	Umkehrschalter
TW-012427	Hex socket head bolt M6 x 20	Innensechskant-Schraube M6 x 20
TW-012428	Flat washer Ø6 x 12 x 1	Unterlegscheibe Ø6 x 12 x 1
TW-012429	Flat washer Ø4	Unterlegscheibe Ø4
TW-012430	Cross-round head screw M4 * 16	Rundkopfschraube mit Kreuzschlitz M4 * 16
TW-01200431	Reverse switch handle	Umkehrschalterhebel
TW-012432	Self-locking nut M6	selbstsichernde Mutter M6
TW-012433	Flat washer Ø3	Unterlegscheibe Ø3
TW-012434	Cross head screw M3 x 18	Kreuzschlitz-Rundkopfschraube M3 x 18
TW-01200435	Pedal connection rod	Pedalverbindungsstange
TW-01200437	Pedal front shaft	Pedalachse
TW-012438	Nut M8	Mutter M8
TW-012439	Pedal twist spring	Pedal Drehfeder
TW-012440	Hex socket head bolt M8 x 50	Innensechskant-Schraube M8 x 50
TW-012441	Hex socket head bolt M8 x 20	Innensechskant-Schraube M8 x 20
TW-012442	Quick union 1/8 - Ø8	Schnellverschraubung 1/8 - Ø8
TW-012445	T-union 1/8 - 2 * Ø8	T-Verschraubung 1/8 - 2 * Ø8
TW-01200449	5-way valve (left)	5-Wege-Ventil (links)
TW-01200451	5-way valve cover	5-Wege-Ventilabdeckung
TW-012452	Cross head screws T2,9 * 14	Kreuzschlitz
TW-012453	Muffler 1/8"	Schalldämpfer 1/8"
TW-01200455	5-way valve rod	5-Wege-Ventilstange
TW-01200456	5-way valve rod spacer	Abstandhalter für 5-Wege Ventilstange
TW-012457	O-seal 12 * 20 * 4	O-Dichtung 12 * 20 * 4
TW-012459	Power supply cable	Stromversorgungs-Kabel
TW-0124616	Motor cable	Motor-Kabel
TW-01200480	Complete 3-pedals assembly 200	Pedalblock 3er, komplette Konsole

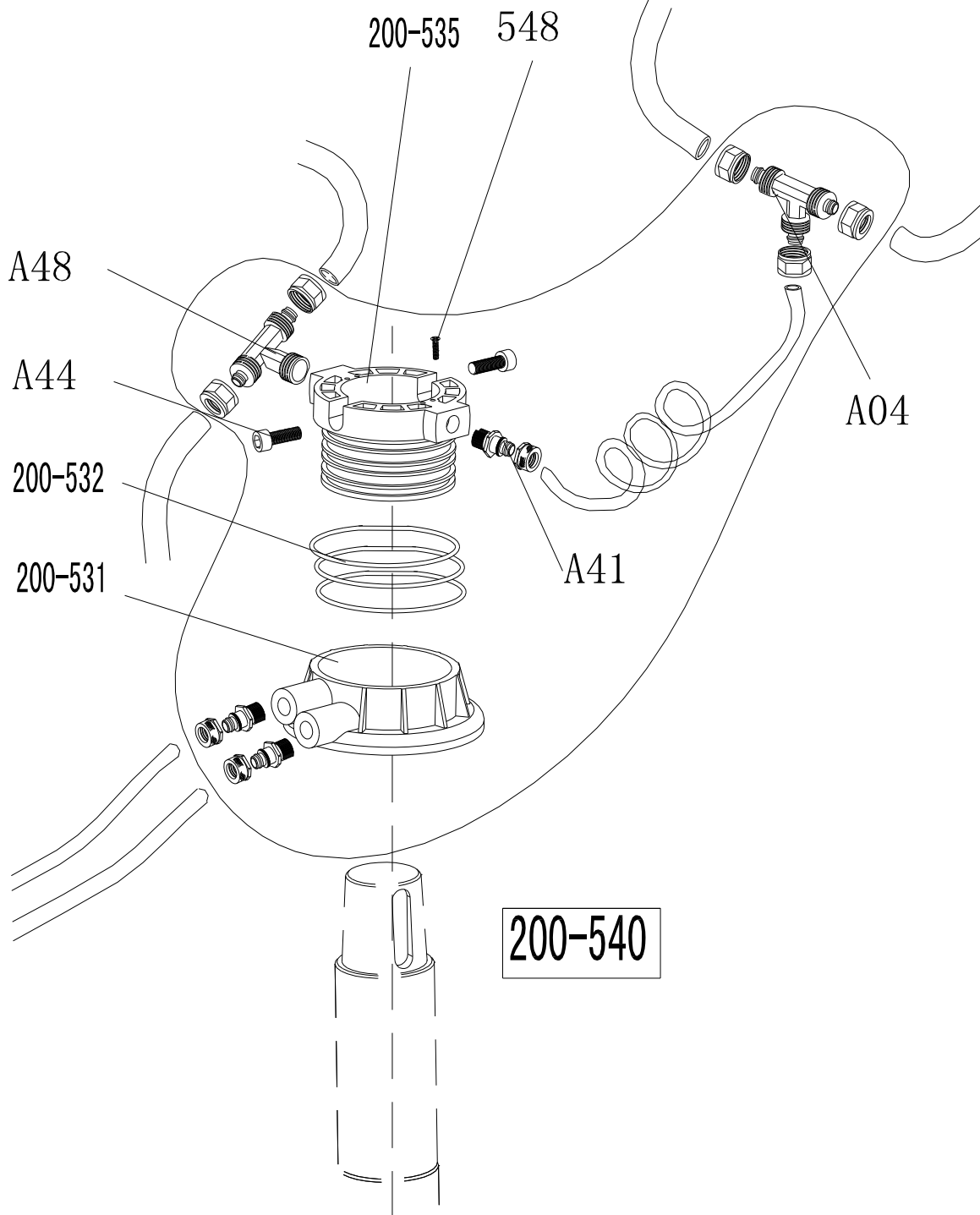
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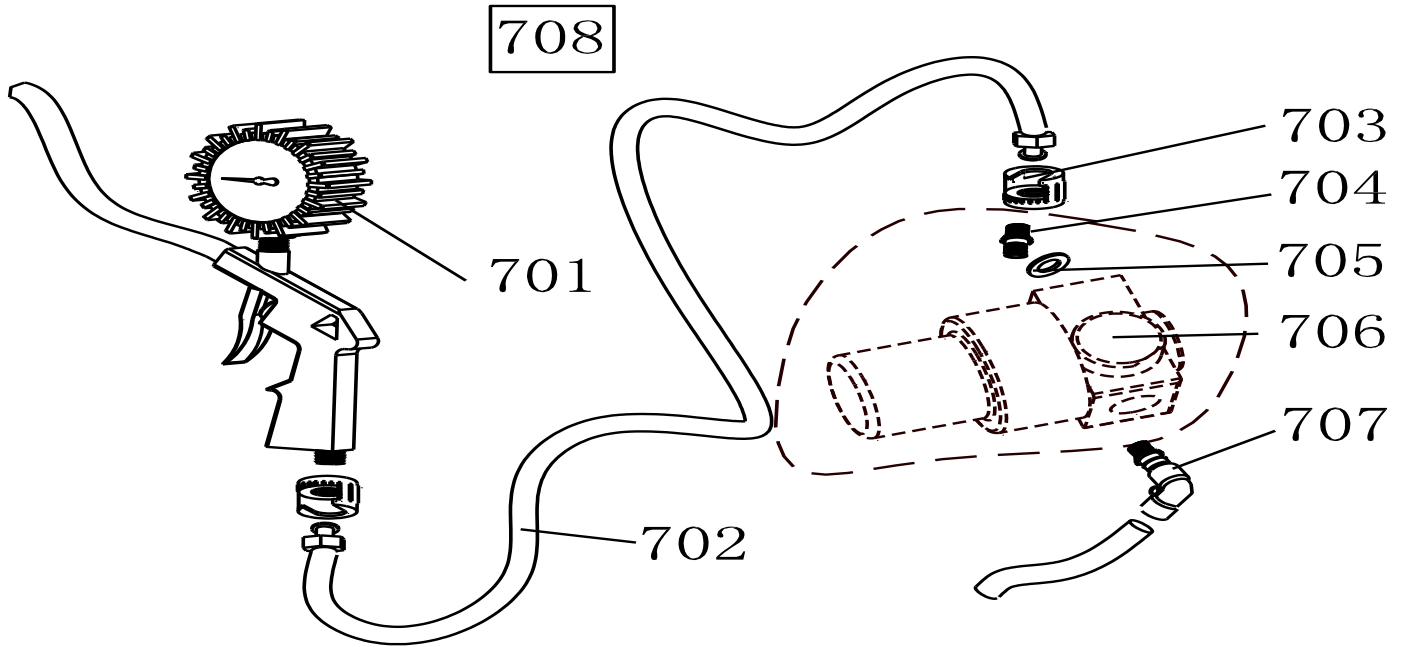
TW X -01 E 200 E 501	Gear box lower cover	Getriebe, Untere Abdeckung
TW X -01 E 502	Bearing 30204	Kugellager 30204
TW X -01 E 503	Gear box seal 20 * 35 * 8	Getriebe Dichtung 20*35*8
TW X -01 E 200 E 504	Gear belt pulley	Zahnriemen-Scheibe
TW X -01 E 505	Outer hex bolt M8 x 25	Außensechskant-Schraube M8 x 25
TW X -01 E 506	Key washer 6 x 20	Außensechskant-Schraube 6 x 20
TW X -01 E 200 E 507	Worm rod	Schneckenantrieb
TW X -01 E 508	Bearing 6010	Kugellager 6010
TW X -01 E 200 E 509	Worm gear shaft	Schneckenrad-Welle
TW X -01 E 200 E 510	Worm gear	Schneckenrad
TW X -01 E 200 E 511	Worm gear shaft spacer	Schneckenrad-Welle Abstandshalter
TW X -01 E 512	Outer hex bolt M10 x 55	Außensechskant-Schraube M10 x 55
TW X -01 E 513	Spring washer 10	Federscheibe 10
TW X -01 E 200 E 514	Pin 6 x 20	Stift 6 x 20
TW X -01 E 515	Flat washer 10 * 20 * 2	Unterlegscheibe 10 * 20 * 2
TW X -01 E 516	Hex socket head bolt M6 x 20	Innensechskant-Schraube M6 x 20
TW X -01 E 517	Flat washer 6 * 14 * 1,2	Unterlegscheibe 6 * 14 * 1,2
TW X -01 E 200 E 518	Gear box upper cover	Getriebe obere Abdeckung
TW X -01 E 519	Key washer 10 x 40	Passfeder
TW X -01 E 520	Key washer 14 x 40	Passfeder
TW X -01 E 521	O-seal 27,8 * 3,1	O-Dichtung 27,8 * 3,1
TW X -01 E 200 E 522	Oil resistant seal	Ölabdichtung
TW X -01 E 523	Self-locking nut M6	selbstsichernde Mutter M6
TW X -01 E 524	Spring washer 8	Federscheibe 8
TW X -01 E 525	Flat washer 8 * 30 * 3	Unterlegscheibe 8 * 30 * 3
TW X -01 E 200 E 526	Complete gear box	Getriebe, Komplet



TW-01-001601MC	Motor 220V	Motor 220V
TW-01-001601MY	Motor belt pulley	Motor Riemenscheibe
TW-01-001602	Motor belt pulley	Motor Riemenscheibe
TW-01-001603	Hex socket head bolt M8 x 12	Innensechskant-Schraube M8 x 12
TW-01-001604	Tyre changer belt A-28	Antriebsriemen
TW-01-001605	Outer hex bolt M8 x 65	Außensechskant-Schraube M8 x 65
TW-01-001606	Flat washer Ø8 x 30 x 3	Unterlegscheibe Ø8 x 30 x 3
TW-01-001607B0	Capacitor 80µf, 110V	Kondensator 80µf, 110V
TW-01-001607B0	Capacitor 50µf, 220V	Kondensator 50µf, 220V
TW-01-001608	Flat washer Ø10 x 20 x 2	Unterlegscheibe Ø10 x 20 x 2
TW-01-001609	Spring washer Ø10	Federscheibe Ø10
TW-01-001610	Outer hex bolt M10 x 25	Außensechskant-Schraube M10 x 25
TW-01-001611	Outer hex bolt M8 x 35	Außensechskant-Schraube M8 x 35
TW-01-001612	Nut M8	Mutter M8
TW-01-001613	Flat washer Ø8 x 22 x 2	Unterlegscheibe Ø8 x 22 x 2
TW-01-001614	Motor rubber washer	Motorgummi-Scheibe
TW-01-001615	Motor support	Motorhalterung
TW-01-001616	Motor cable 5 x 1,0	Motorkabel 5 x 1,0
TW-01-001617	Spring washer Ø8	Unterlegscheibe Ø8
TW-01-001618	Motor rubber buffer	Motorgummi-Auflage



TW-01-A04	T-union 3 * Ø8	T-Verschraubung 3 * Ø8
TW-01-A44	Hex socket head bolt M6 x 16	Innensechskant-Schraube M6 x 16
TW-01-A48	Quick T-union	Schnellverschraubung
TW-01-200-531	Rotating valve casing	Dreh-Ventil-Gehäuse
TW-01-200-532	O-seal 9,9 x 2,62	O-Dichtung 9,9 x 2,62
TW-01-200-535	Rotating valve mandrel	Dreh-Ventil-Spindel
TW-01-537	Hose 5,5 * Ø8	Schlauch 5,5 * Ø8
TW-01-A41	Straight union 1/8 - Ø8	Geradeverschraubung 1/8 - Ø8
TW-01-548	Hex socket head bolt M4 x 6	Innensechskant-Schraube M4 x 6
TW-01-200-540	Complete rotating valve	Luftverteilventil, komplett



TW-01701	Inflating gun indicator	Manometer
TW-01702	Rubber connection hose	Druckluftschlauch
TW-01703	Notch nut	Mutter f. Druckluftleitung
TW-01704	Straight union 1/4 - 1/4	Geradeverschraubung 1/4 - 1/4
TW-01705	Flat washer Ø13	Unterlegscheibe Ø13
TW-01706	Pressure adjustment valve	Druckregelventil
TW-01707	Quick union 1/4 - Ø8	Schnellverschraubung 1/4 - Ø8
TW-01708	Complete inflating gun	Reifenfüller komplett
TW-01810	Complete oil fogger	Wartungseinheit komplett



The company

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

declares hereby, that the **vertical tyre changer**
TW X-11, TW X-19
(TW 1259, U259)

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).

EG-directive(s)

2006/42/EC machine

Applied harmonized standards and regulations

EN 60204-1/A1:2009 part 1 Safety of machinery - Electrical equipment of machines

CE Certificate

CE-C-0225-14-10-01-2A

date of issue: 20.03.2014
place of issue: London
technical file no.: TF-C-0225-14-10-01-2A

Certification body

CCQS UK Ltd.,
Level 7, Westgate House, Westgate Road,
London W5 1YY UK
Notified Body Appointment No. 1105

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

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



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Authorized signatory: Michael Glade
Bensheim, 08.12.14 Qualitätsmanagement



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