INSTALLATION & OPERATION MANUAL

Atlas TC211

Electric/Pneumatic Wheel Clamp Tire Changer

Atlas Automotive Equipment
www.atlasautoequipment.com
(866) 898-2604

Read this entire manual before operation begins.

Record below the following information which is located on the serial number data plate.

Serial No. _____
Model No. _____
Date of Installation _____

Contents

IMPORTANT SAFETY INSTRUCTIONS
Please read carefully

When using your garage equipment, basic safety precautions should always be followed, including the following:

1. Read all instructions.
2. Do not operate equipment with a damaged cord or if the equipment has been dropped or damaged – until it has been examined by a qualified service person.
3. Do not let a cord hang over the edge of the table, bench, or counter or come in contact with hot manifolds or moving fan blades.
4. If an extension cord is necessary, a cord with a current rating equal to or more than that of the equipment should be used. Cords rated for less current than the equipment may overheat.
   Care should be taken to arrange the cord so that it will not be tripped over or pulled.
5. Always unplug equipment from electrical outlet when not in use. Never use the cord to pull the plug from the outlet. Grasp plug and pull to disconnect.
6. Let equipment cool completely before putting away. Loop cord loosely around equipment when storing.
7. To reduce the risk of fire, do not operate equipment in the vicinity of open containers of flammable liquids (gasoline)
8. Keep hair, loose clothing, fingers, and all parts of body away from moving parts.
9. To reduce the risk of electric shock, do not use on wet surfaces or expose to rain.
10. Use only as described in this manual. Use only manufacturer's recommended attachments.
11. ALWAYS WEAR SAFETY GLASSES. Everyday eyeglasses only have impact resistant lenses, they are not safety glasses.

SAVE THESE INSTRUCTIONS

- Maximum setting of input pressure regulator is 8 bars.
- Maximum input pneumatic pressure for the tire changer is 8 bar for model ATTC211 and 10 bar for other models.

Printing Characters And Symbols

Throughout this manual, the following symbols and printing characters are used to facilitate reading:

	Indicates the operations which need proper care
	Indicates prohibition
	Indicates a possibility of danger for the operators
BOLD TYPE	Important information

Introduction

1.1 Introduction

Thank you for purchasing from the line of Atlas tire changers. The machine has been manufactured in accordance with the very best quality principles. Follow the simple instructions provided in this manual to ensure the correct operation and long life of the machine. Read the entire manual thoroughly and make sure you understand it.

1.2 Tire Changer Identification Data

A complete description of the “Tire Changer Model” and the “Serial number” will make it easier for our technical assistance to provide service and will facilitate delivery of any required spare parts. If there is any discrepancy between the data provided in this manual and that shown on the plate fixed to the tire changer, the latter should be taken as correct.

LOGO

Type:

Volt	Amp	Kw
Ph	Hz	

Year of manufacturing:

Air supply: 8-10 bar (115 – 145 PSI)

1.3 Manual Keeping

For a proper use of this manual, the following is recommended:

- Keep the manual near the machine, in an easily accessible place.
- Keep the manual in an area protected from the damp.
- Use this manual properly without damaging it.
- Any use of the machine made by operators who are not familiar with the instructions and procedures contained herein shall be forbidden.

This manual is an integral part of the product: it shall be given to the new owner if and when the machine is resold.

The illustrations have been made out of prototypes pictures. It is therefore possible that some parts or components of standard production differ from those represented in the pictures.

1.4 General Safety Precautions

The tire changer may only be used by specially trained and authorized expert personnel.

- Any tampering or modification to the equipment carried out without the manufacturer's prior authorization will free him from all responsibility for damage caused directly or indirectly by the above actions.
- Removing or tampering with safety devices immediately invalidates the guarantee.
- The tire changer comes complete with instruction and warning transfers which are designed to be long-lasting. If they should for any reason be damaged or destroyed, please ask immediately for replacements from the manufacturer.

TO THE READER

Every effort has been made to ensure that the information contained in this manual is correct, complete, and up-to date. The manufacturer is not liable for any mistakes made when drawing up this manual and reserves the right to make any changes due the development of the product, at any time.

General Information

2.1 Intended Use

- This Semi-automatic tire changer has been designed and manufactured exclusively for removing and mounting tires from/onto rims from 10” to 24” and a maximum diameter of 40”.
- In particular the manufacturer cannot be held responsible for any damage caused through the use of this tire changer for purposes other than those specified in this manual, and therefore inappropriate, incorrect and unreasonable.

2.2 Description

G) Clamps

I) Mounting head

K) Locking lever

M) Mounting bar

N) Horizontal arm

P) Vertical arm

Q) Air supply

R) Bead breaker

S) Wheel support

T) Bead lifting lever

U) Clamp control pedal

V) Clamp control pedal

Y) Turntable

Z) Reverser control pedal

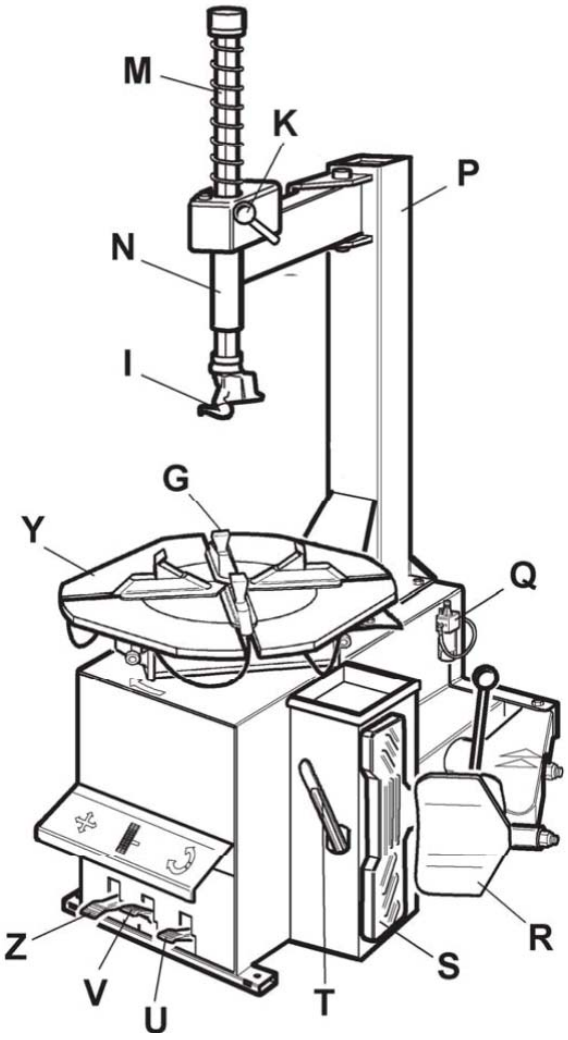


Fig. 1

2.3 Danger Warning Signs

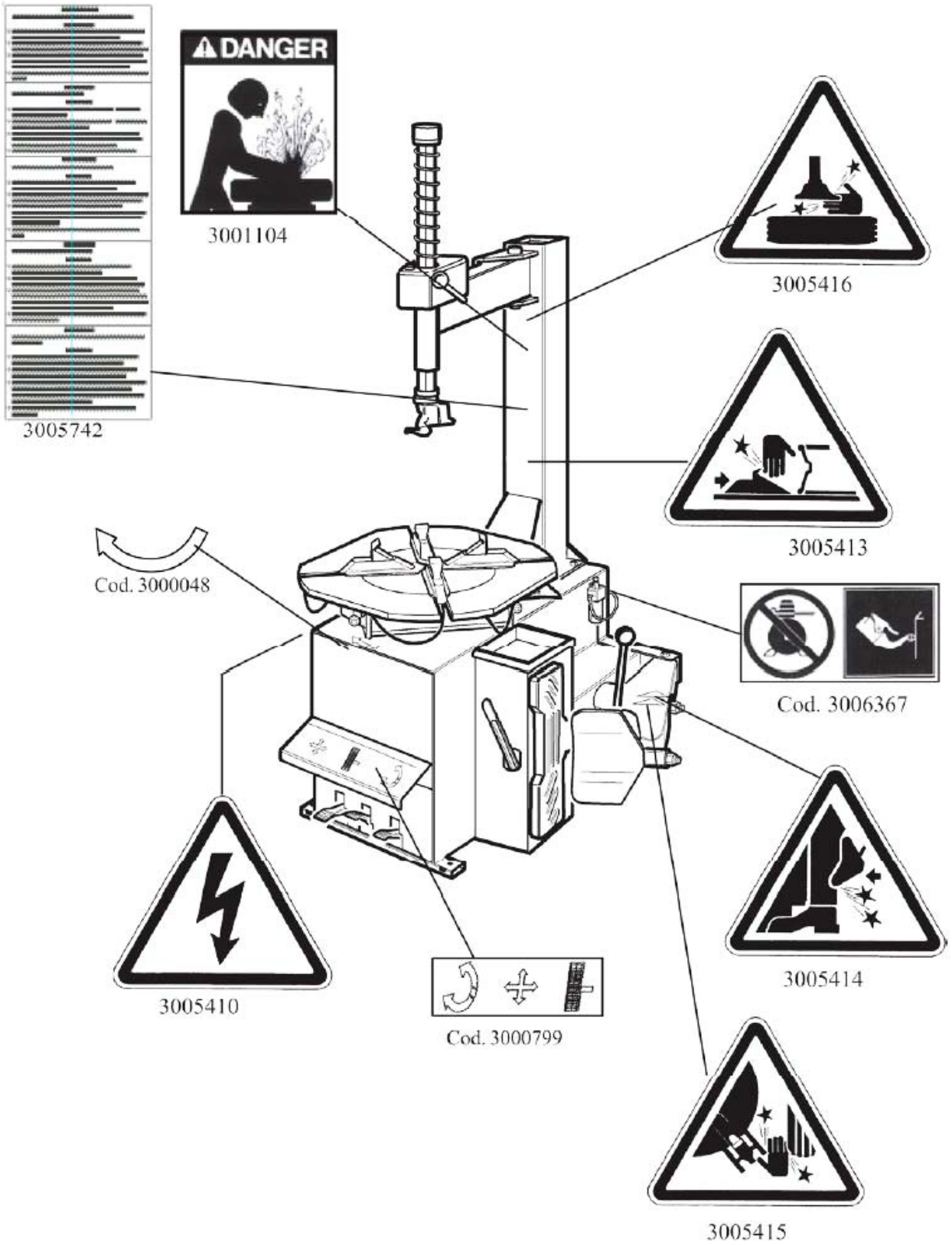


Fig. 2

2.4 Technical Specification

External locking rim dimension	10” – 18”
Internal locking rim dimension	12”- 20”
Max tire diameter	39” (1000mm)
Max tire width	13” (330mm)
Force on bead breaker blade (10 bar)	5500 lb
Working pressure	10 bar (145 psi)
Inflating pressure device max.	7 bar (101 psi)
Power supply voltage	110V/60Hz/1PH
Motor power	1.1kw
Rotating speed	7
Max spindle torque	1200 NM
Dimension	43 3/4” X 36 1/2 X 67 3/4”
Net weight	500 lb
Noise level in working condition	< 70 dB (A)

Transport, Packing, Storage

3.1 Transportation

- The tire changer must be transported in its original packaging and kept in the position shown on the package itself.
- The packaged machine may be moved by means of a fork lift truck of suitable capacity. Insert the forks at the points shown in figure 3.

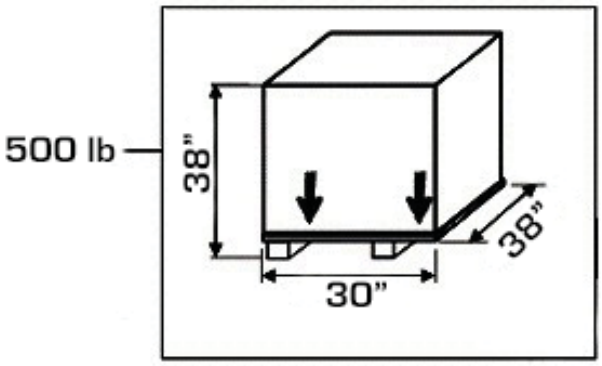


Fig. 3

3.2 Unpacking

- Remove the protective cardboard and the nylon bag.
- Check that the equipment is in perfect condition, making sure that no parts are damaged or missing. Use Fig. 1 for reference.

If in doubt do not use the machine and contact your retailer.

3.3 Storage

In the event of storage for long periods of time, be sure to disconnect all sources of power and grease the clamp sliding guides on the turntable to prevent them from oxidizing.

Installation

4.1 Space Required

When choosing the place of installation be sure that it complies with current safety at work regulations.

- The tire changer must be connected to the main electric power supply and the compressed air system. It is therefore advisable to install the machine near these power sources.
- The place of installation must also provide at least the space shown in pictures 4 - 4/A so as to allow all parts of the machine to operate correctly and without any restriction.
- If the machine is installed outside it must be protected by a lean-to.

The tire changer with electric motor cannot be used in explosive atmospheres, unless it is a proper version.

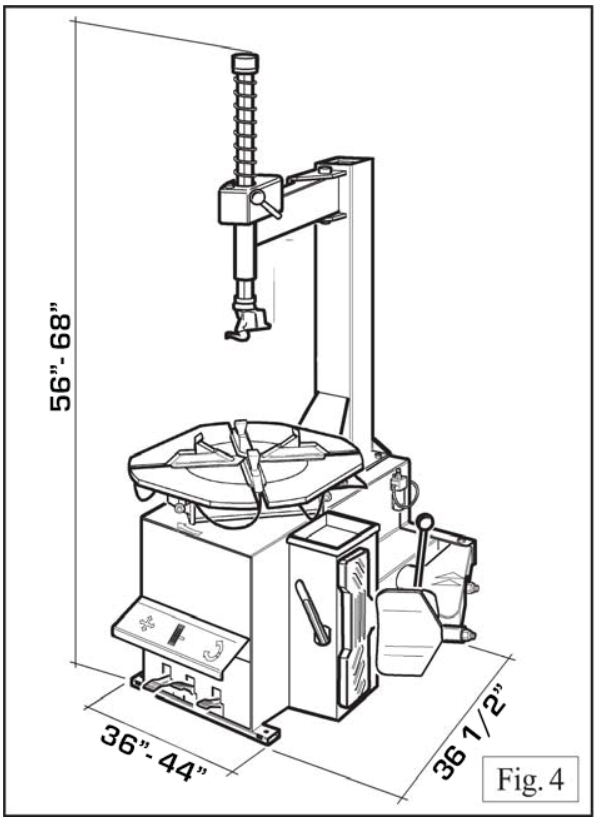


Fig. 4

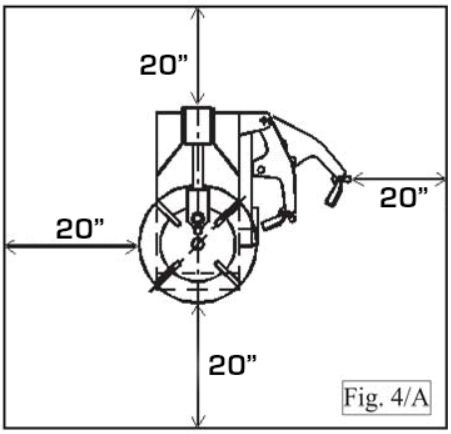


Fig. 4/A

4.2 Positioning And Parts Assembly

4.2.1 Arm assembly

- Unscrew the pallet fixing screws and set the tire changer on the floor.
- Unscrew the 4 screws from the body, set the vertical arm into the proper seat and fix the screw again (Fig. 5/a).
- Make sure the horizontal arm is on the vertical arm's support and the pin is locked with nuts and washers as shown in Fig. 5/b.

Before connecting all the power sources ALWAYS check your installations. They must exactly correspond to those requested by the machine.

- Connect the machine to the compressed air network (Fig. 5/d)
- Mount the bead breaker arm as shown in Fig. 5/e:
  - Set the arm "a" into the proper seat, set the screw into the hole and screw the nut WITHOUT TIGHTENING.
  - Set the pivot pin "b" into the hole on the arm and let the cylinder's shaft pass through the pin's hole. Screw two nuts WITHOUT TIGHTENING.
  - Set the spring by hooking it at the indicated points.
- Screw the bead breaker arm's screw as indicated in Fig 5/f
- Screw the nut as indicated in Fig 5/g

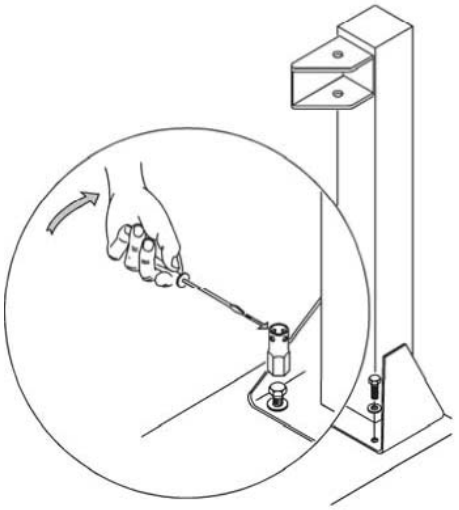


Fig. 5/a - Abb. 5/a

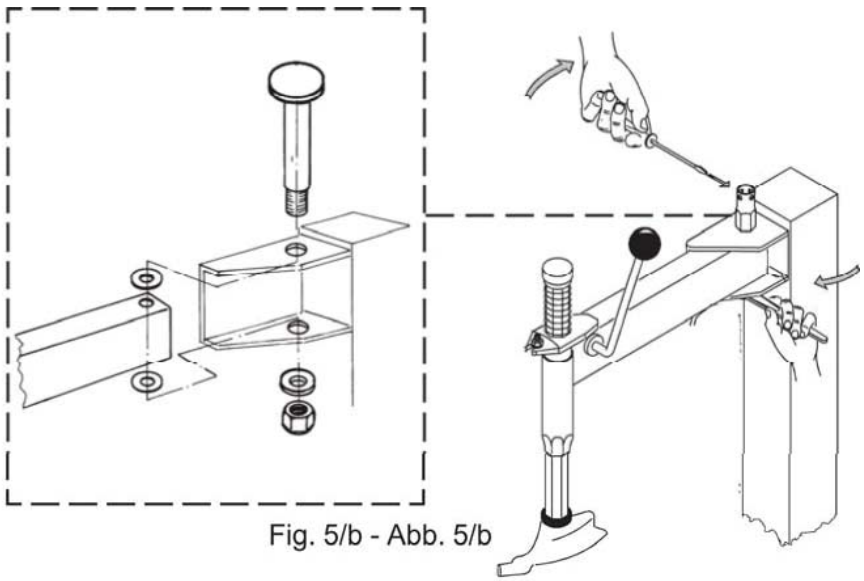


Fig. 5/b - Abb. 5/b

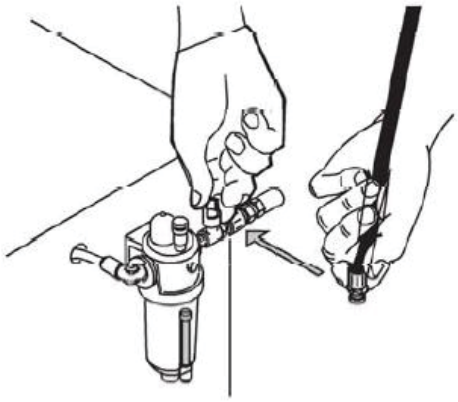
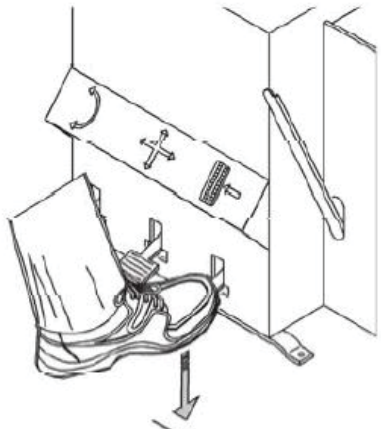


Fig. 5/c - Abb. 5/c



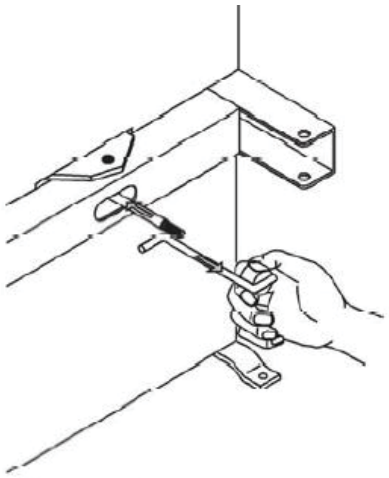


Fig. 5/d - Abb. 5/d

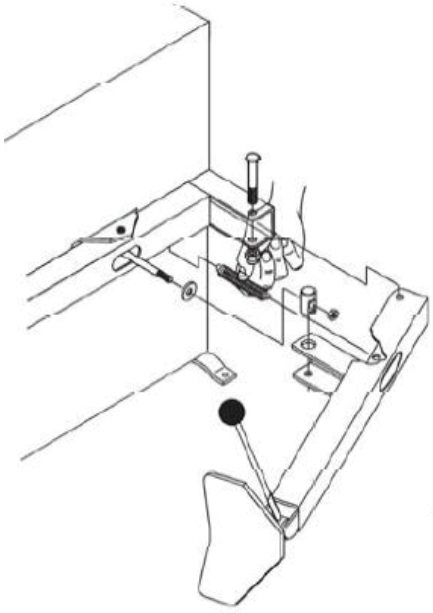


Fig. 5/e - Abb. 5/e

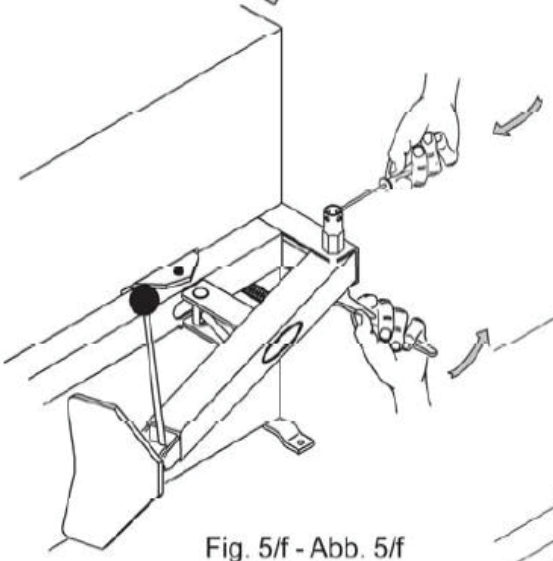


Fig. 5/f - Abb. 5/f

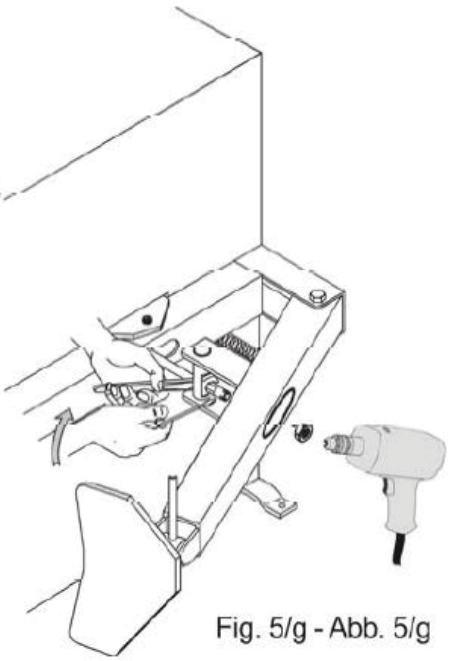


Fig. 5/g - Abb. 5/g

4.2.2 Mounting and connecting the GT tank (optional)

- Fix the tank on the back side of the machine body through the proper screw. Fig. 10.
- Demount the side panel.
- Route the hose (2), situated inside the machine body, through the hole on the back side of the body.
- Tighten the hose (2) to the bank through the proper union.

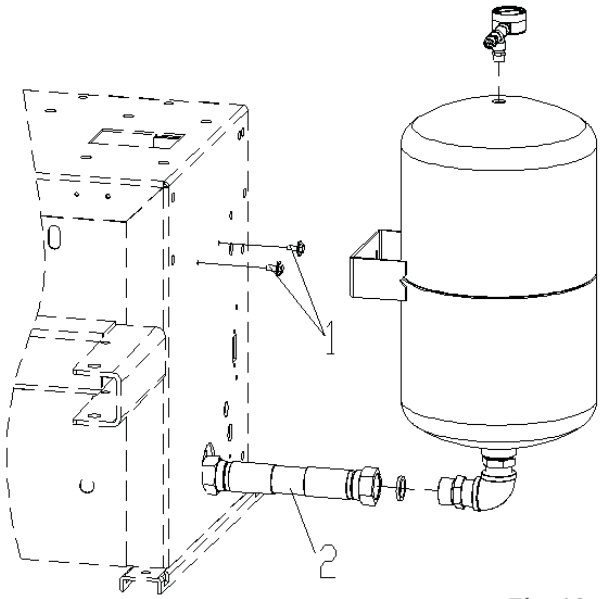


Fig. 10

4.2.3 Mounting and connecting the manometer

- Fix the manometer to the vertical arm through the proper screw. Fig. 11.
- Route the connecting spiral hose through the small hole on the back side of the machine body.
- Connect the rilsan hose to the union of the pressure limiting device, situated on the inflating pedal.

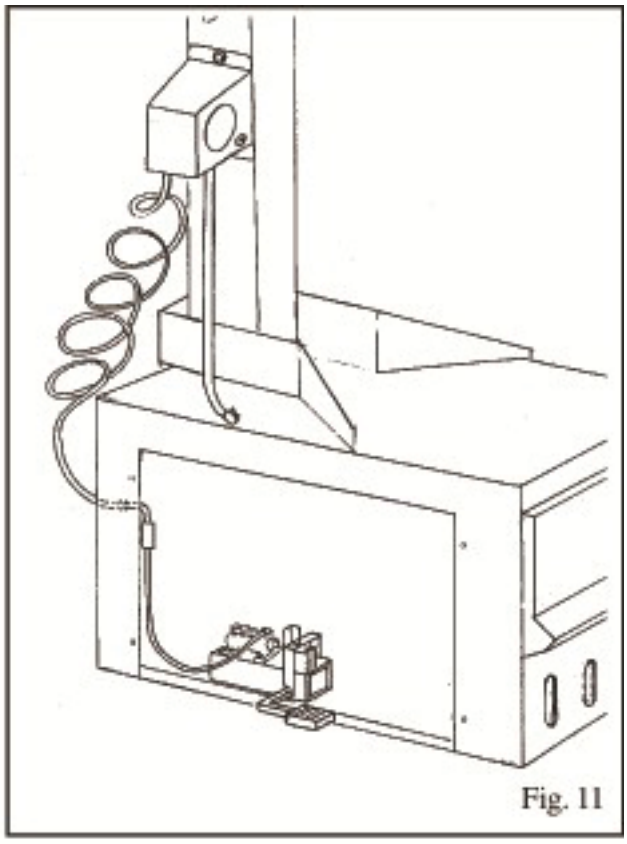


Fig. 11

4.3 Commissioning

Any electric connection job must be carried out by professionally qualified personnel.
Make sure that the power supply is correct.
Make sure the connection of the phases is correct. Improper electrical hook-up can damage motor and will not be covered under warranty.

- Check to make sure the characteristics of your systems correspond to those required by the machine. If you have to change the machine's operating voltage, make the necessary adjustments to the terminal board referring to the electric diagram in chapter 9.
- Connect the machine to the compressed air system by means of the air connection (Q) that protrudes from the rear section.

Connect the machine to the electric network, which must be provided with line fuses, a good earth plate in compliance with regulations in force and it must be connected to an automatic circuit breaker (differential) set at 30 mA.
Should the tire-changer be lacking in electric plug, the user must set one, which is at least 16 A and which conforms to the voltage of the machine, in compliance with the regulations in force.

4.4 Operating Tests

- When pedal (Z) is pressed down the turntable (Y) should turn in a clockwise direction. When the pedal is pulled up the turntable should turn in an anticlockwise direction.

If the turntable turns in the opposite direction to that shown, reverse two of the wires in the tree-phase plug.

- Pressing the pedal (U) activates the bead breaker (R); when the pedal is released the bead breaker returns to its original position.
- Pressing the pedal (V) opens the four clamps (G); when the pedal is pressed again they close.
- Pressing the trigger on the airline gauge cause air to be released from the head.

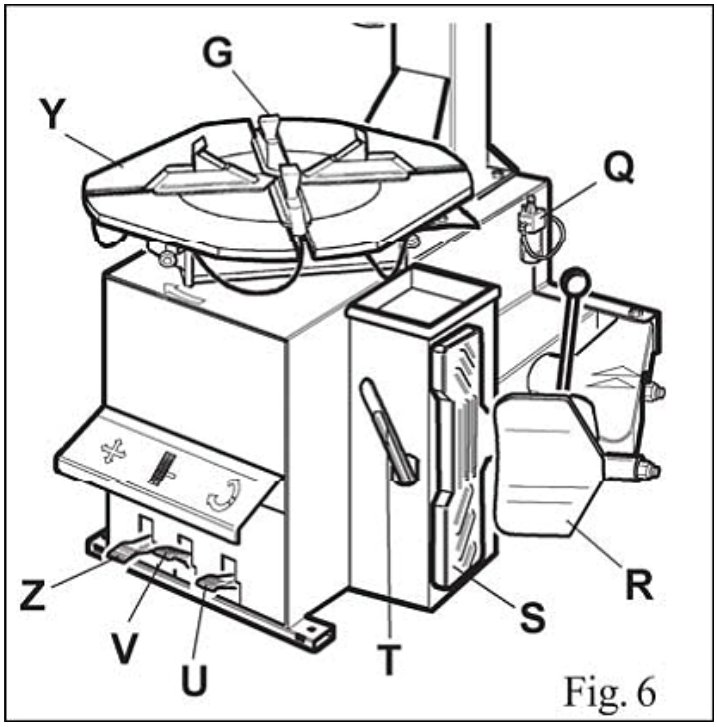


Fig. 6

4.4.1 GT System (Optional)

Do NOT LEAN on the turntable during this operation. Possibly dirt and dust on turntable could offend the operator's eyes. For the same reason, be carefully as not to accidentally push the inflating pedal while working.

- When the pedal located on the left side of the machine body is pushed down to its intermediate position (B), air is released from the airline gauge.
- When the pedal (C) is pushed down completely, air is released from the airline gauge with a powerful jet from the nozzles located on the turntable clamps.

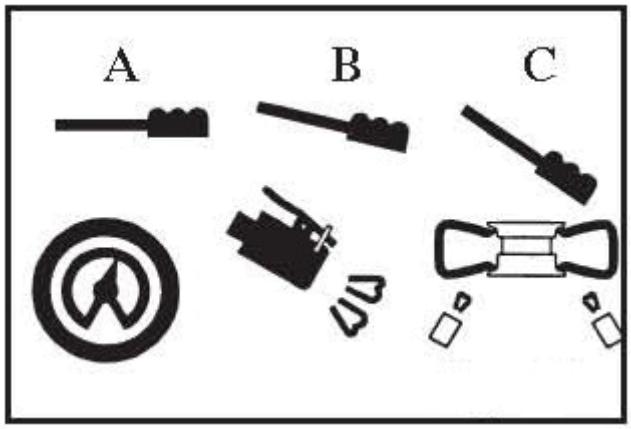


Fig. 13

Operation

Do not use the machine until you have read and understood the entire manual and the warning provided.
Before carrying out any operation, deflate the tire and take off all the wheel balancing weights.

The operation of the tire changer is divided into three parts:

A) Breaking The Bead B) Removing The Tire C) Mounting The Tire

It is advised to equip the tire changer with the pressure regulator.

5.1 Breaking The Bead

Bead breaking must be done with the utmost care and attention. When the bead breaker pedal is operated the bead breaker arm moves quickly and powerfully. Anything within its range of action can be in danger of being crushed.

- Check that the tire is deflated. If not, deflate it.
- Close the turntable clamps completely.

Bead breaking with the clamps in open position can be extremely dangerous for operator's hands.
During bead breaking operations NEVER touch the side of the tire.

- Position the wheel against the rubber stops on the right side of the tire changer (S).

- Position the bead breaker (R) against the tire bead at a distance of about 1 cm from the rim (fig. 8). Pay attention to the blade, which must operate correctly onto the tire and not onto the rim.
- Press down the pedal (U) to activate the bead breaker and release it when the blade has reached the end of its travel or in any case when the bead is broken.
- Rotate the tire slightly and repeat the operation around the entire circumference if the rim and from both sides until the bead is completely detached from the rim.

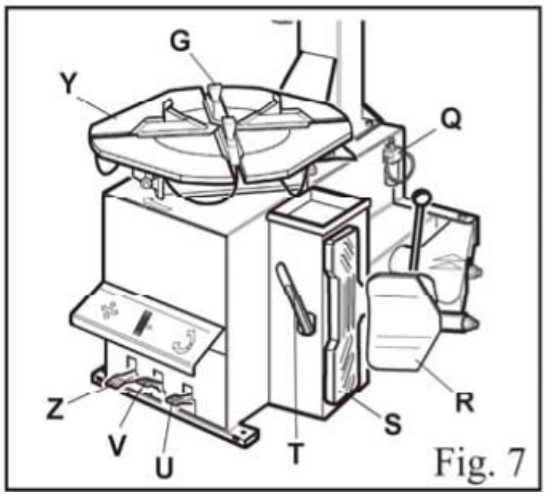


Fig. 7

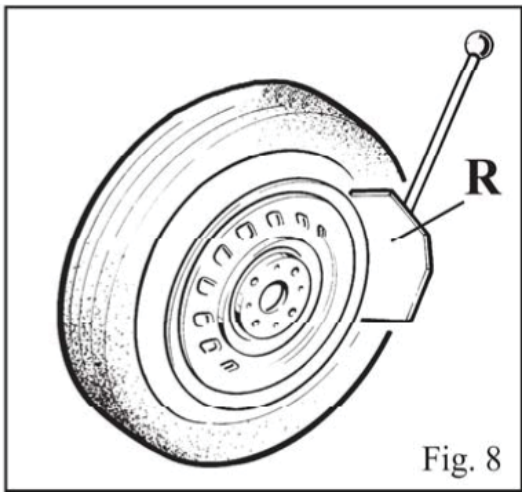


Fig. 8

5.2 Removing The Tire

Before any operation make sure to remove the old wheel balancing weights and check that the tire is deflated.

During arm tilting make sure that nobody stands behind the tire changer.

- Spread the supplied grease (or grease of a similar type) onto the tire bead.

Failure to use the grease could cause serious damage to the tire bead.

During rim locking NEVER keep your hands under the tire. For a correct locking operation, set the tire exactly in the middle of turntable.

OUTER LOCKING

- Position the clamps (G) according to the reference mark on the turntable (Y) by pressing pedal (V) down to its intermediate position.
- Place the tire on the clamps and keeping the rim pressed down, press the pedal (V) as far as it will go.

INNER LOCKING

- Position the clamps (G) so that they are completely closed.
- Place the tire on the clamps and press the pedal (V) to open the clamps and thereby lock the rim.

Make sure that the rim is firmly fixed to the clamps.

Never keep your hands on the wheel: the arm recovery to “working position” could set the operator at risk of hand crushing between rim and mounting head.

- Lower the mounting bar (M) so that the mounting head (I) rests against the edge of the rim and lock it using the lever (K). This will lock the arm in both vertical and horizontal direction and move the mounting head (I) of about 2 mm from the rim.
- With the lever (T) inserted between the bead and the front section of the mounting head (I), move the tire bead over the mounting head.

In order to avoid damaging the inner tube if there is one, it is advisable to carry out this operation with the valve about 10 cm right of the mounting head. (Fig. 16)

- With the lever held in this position, rotate the turntable (Y) in a clockwise direction by pressing pedal (Z) down until the tire is completely separated from the wheel rim.
- Remove the inner tube if there is one and repeat the operation for the other bead.

Chains, bracelets, loose clothing or foreign objects in the vicinity of the moving parts can represent a danger for the operator.

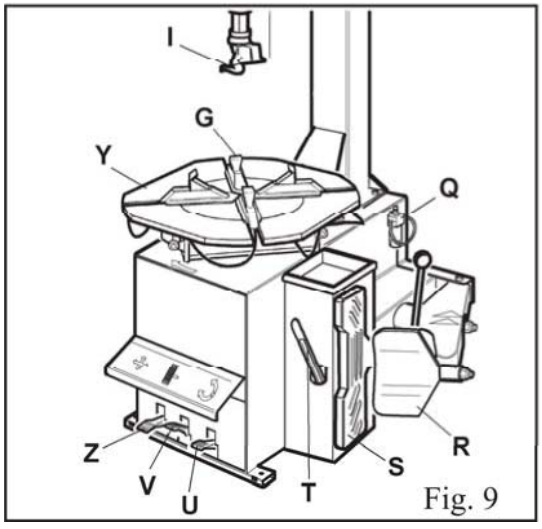


Fig. 9

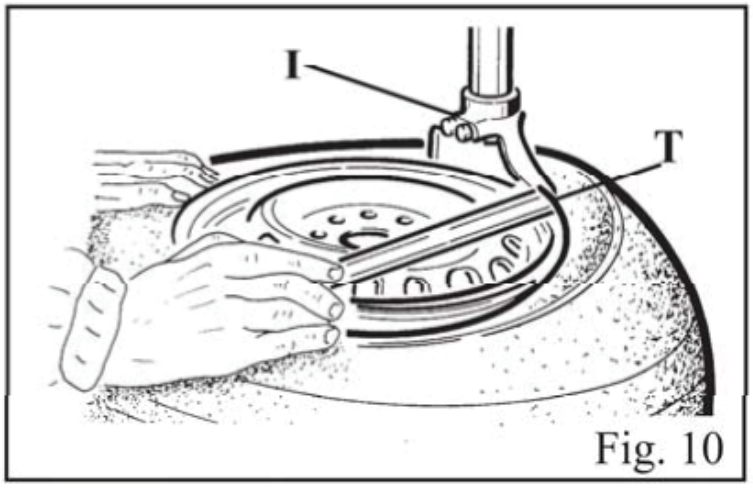


Fig. 10

5.3 Mounting The Tire

It is of utmost importance to check the tire and rim to prevent tire explosion during the inflating operations. Before beginning mounting operation, make sure that:

- **The tire and cord fabric are not damaged. If you note defects DO NOT mount the tire.**
- **The rim is without dents and is not warped. Pay attention to alloy rims, internal micro-cracks are not visible to the naked eye. This can compromise the rim and can also be a source of danger especially during inflation.**
- **The diameter of the rim and tire are exactly the same. NEVER try to mount a tire on a rim if you cannot identify the diameter of both.**

- Lubricate the tire beads with the special grease in order to avoid damaging them and to facilitate the mounting operations.

During rim locking NEVER keep your hands under the tire. For a correct locking operation set the tire exactly in the middle of turntable.

- For 10 to 20 inch wheels lock the rim using the inner part of the clamps.
- For 12 to 22 inch wheels lock the rim using the outer part of the clamps.

When working with rims of the same size it is not always necessary to lock and unlock the mounting bar; you only need to tilt and return the ram (P) with the arm and the bar locked in their working positions.

Never keep your hands onto the wheel: the arm recovery to “working position” could set the operator at risk of hand crushing between rim and mounting head.

- Move the tire so that the bead passes below the front section of the mounting head and is brought up against the edge of the rear section of the mounting head itself.

- Keeping the tire bead pressed down into the wheel rim channel with your hands, press down on the pedal (Z) to rotate the turntable clockwise. Continue until you have covered the entire circumference of the wheel rim (Fig. 12).

To prevent industrial accidents, keep hands and other parts of the body as far as possible from the tool arm when the table top is turning.

- Insert the inner tube if there is one and repeat the same operations to mount the upper side of the tire.

Demounting and mounting are always done with the clockwise turntable rotation. Anticlockwise rotation is used only to correct operator's errors or if the turntable stalls.

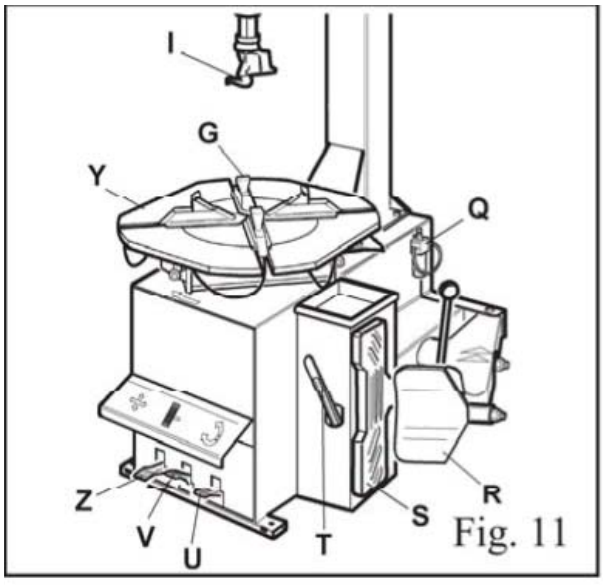


Fig. 11

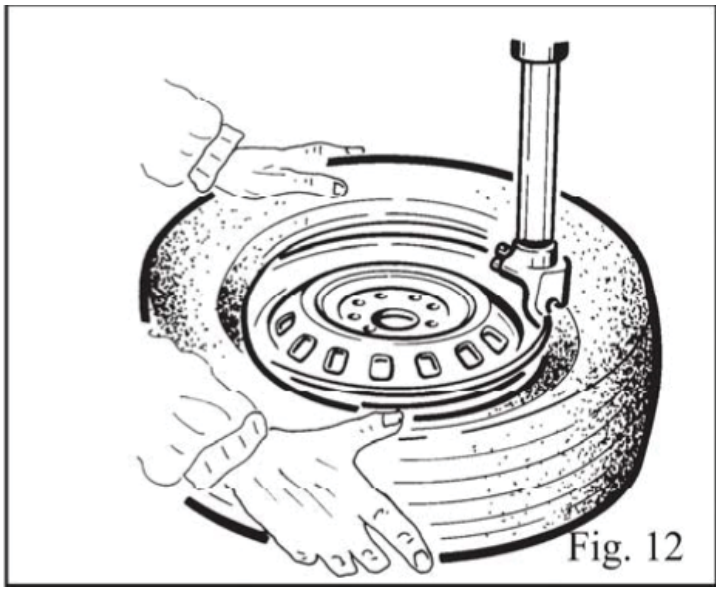


Fig. 12

Inflating

The greatest attention is called for when inflating the tires. Strictly keep to the following instructions since the tire changer is NOT designed and built to protect operator (or anyone else in the vicinity of the machine) if the tire bursts accidentally.

A bust tire can cause serious injury or even death of the operator.
Check carefully that the wheel rim and the tire are of the same size.
Check the state of wear of the tire and that it has no defects before beginning the inflation.
Inflate the tire with brief jets of air, checking the pressure after every jet.
All Atlas tire changers are automatically limited to a maximum inflating pressure of 7 bar (101 psi). In any case NEVER EXCEED THE PRESSURE RECOMMENDED BY THE MANUFACTURER.
Keep your hands and body as far away as possible from the tire.

6.1 Inflating Tire Using Airline Gauge

In the standard version our tire changer are supplied with an airline gauge. To inflate a tire proceed as follows:

- Connect the airline gauge to the tire valve.
- Make a last check to be certain that tire and rim diameter correspond.
- Check to be certain that rim and beads are sufficiently lubricated. If necessary lubricate some more.
- Seat the beads with short jets of air. Between air jets, check the air pressure on the inflator gauge.
- Continue to inflate the tire with short jets of air and constantly checking the pressure between until the required pressure has been reached.

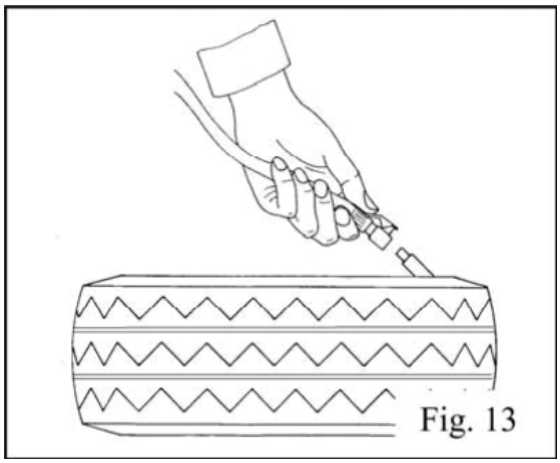


Fig. 13

EXPLOSION HAZARD!
Never exceed 7 bar (101 psi) when seating beads or inflating tires.
If a higher inflating pressure is required remove the wheel from turntable and continue the inflating procedure inside a special protection cage (commercially available).
Never exceed the maximum inflating pressure given by the tire manufacturer. ALWAYS keep hands and body back from inflating tire.
ONLY specially trained personnel are allowed to perform these operations. Do not allow other persons to operate or to stay near the tire changer.

6.2 Inflating Tires With GT System (Optional)

The GT inflating system facilitates inflation of tubeless tires to a powerful jet of air from the nozzle positioned on the clamps.

During this phase of work the level of noise can reach 85db (A). It is advisable to use a noise protection.

- Lock the wheel on the turntable and connect the inflating head to the tire valve.
- Make a last check to be certain that tire and rim diameter correspond.
- Check to be certain that rim and beads are sufficiently lubricated. If necessary lubricate some more.
- Press the pedal down to intermediate position (B – Fig. 21)

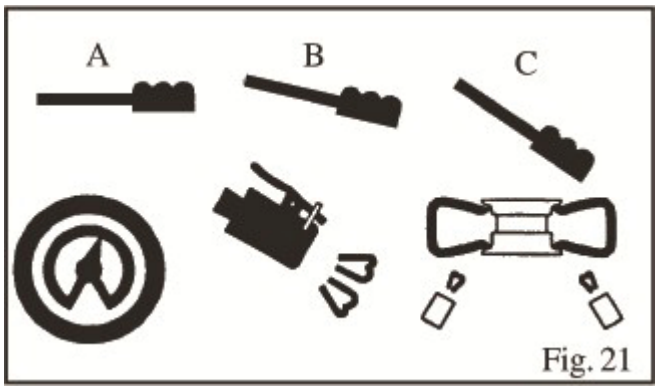


Fig. 21

- If the bead of tire is not well seated, due to a strong bead, lift tire manually until the upper bead seats against the rim, then press pedal all the way down (C-Fig. 21). A strong jet will be released through the nozzles in the slides and this will help the bead seal.
- Release the tires; set the pedal in the intermediate position (B – Fig. 21) and continue to inflate the tire with short jets of air and constantly checking the pressure between air jets until the required pressure has been reached.

Maintenance

7.1 General Warnings

Unauthorized personnel may not carry out maintenance work.

Regular maintenance as described in the manual is essential for correct operation and long lifetime of the tire changer.

If maintenance is not carried out regularly, the operation and reliability of the machine may be compromised, thus placing the operator and anyone else in the vicinity at risk.

Before carrying out any maintenance work, disconnect the electric and pneumatic supplies. Moreover, it is necessary to break the bead without load 3-4 times in order to let the air in pressure go out of the circuit.

- Defective parts must be replaced exclusively by expert personnel using the manufacturer's parts.
- Removing or tampering with safety devices (pressure limiting and regulating valves) is extremely forbidden.

In particular the Manufacturer shall not be held responsible for complaints deriving from the use of spare parts made by other manufacturers or for damage caused by tampering or removal of safety systems.

7.2 Maintenance Operations

- Clean the turntable once a week with diesel fuel so as to prevent the formation of dirt, and grease the clamp sliding guides.

- Carry out the following operations at least every 30 days:
  - Check the oil level in the lubricator tank. If necessary, fill up by unscrewing the reservoir F. Only use ISO VG viscosity ISOHG class oil for compressed air circuit. (Fig. 14)
  - Check that a drop of oil is injected into the reservoir F every 3-4 times the pedal U is pressed down. If not, regulate using the screw D (fig. 14)

- After the first 20 days of work, re-tighten the clamp tightening screws on the turntable slides (Fig. 15).
- In the event of a loss of power, check that the drive belt is tight as follows.

Before any operation disconnect the electric power supplies.

- Remove the left side body panel of the tire changer by unscrewing the four fixing screws.
- Remove the drive belt by means of the special adjusting screw X on the motor support (Fig. 16).
- If necessary to adjust the vertical arm locking plate because the tool does not lock or it does not rise from the rim of 2mm necessary for working, adjust nuts as shown in Fig. 17.

For cleaning or replacing the silencer for opening/closing clamps, see Fig 18 and proceed as follows:

1. Remove the left side panel of the machine body by unscrewing the four fixing screws.
2. Unscrewing the silencer put on the pedal system, on the clamp opening/ closing pedal.
3. Clean by a jet of compressed air or, if damaged, replace by referring to the spare parts catalogue.

For cleaning or replacing the silencer of bead breaker, see Fig. 19 and proceed as shown on previous point 1 and 3.

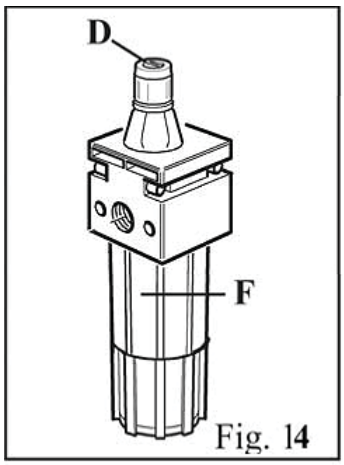


Fig. 14

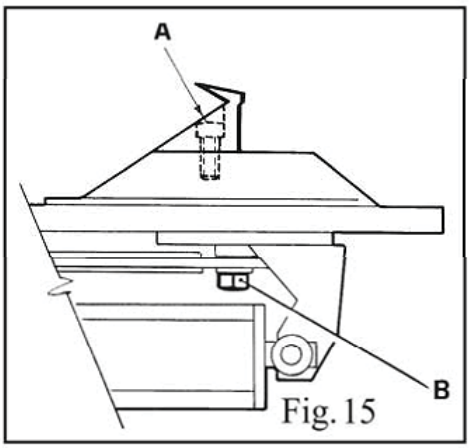


Fig. 15

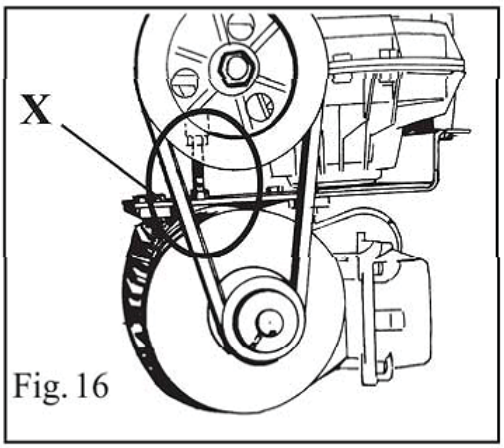


Fig. 16

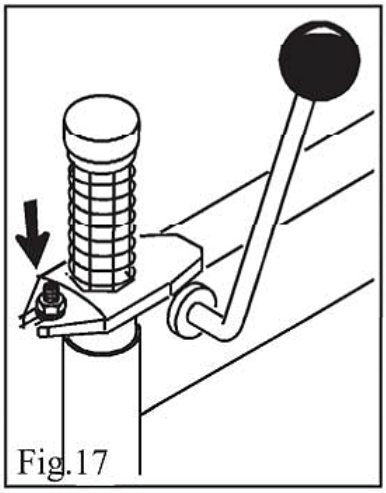


Fig.17

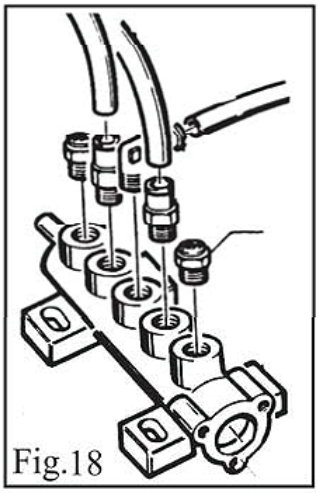


Fig.18

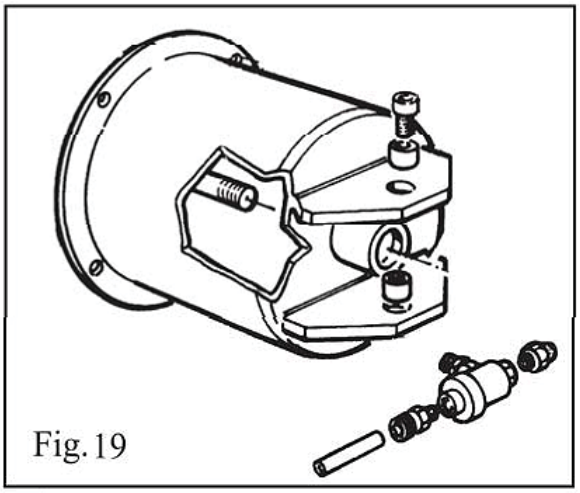


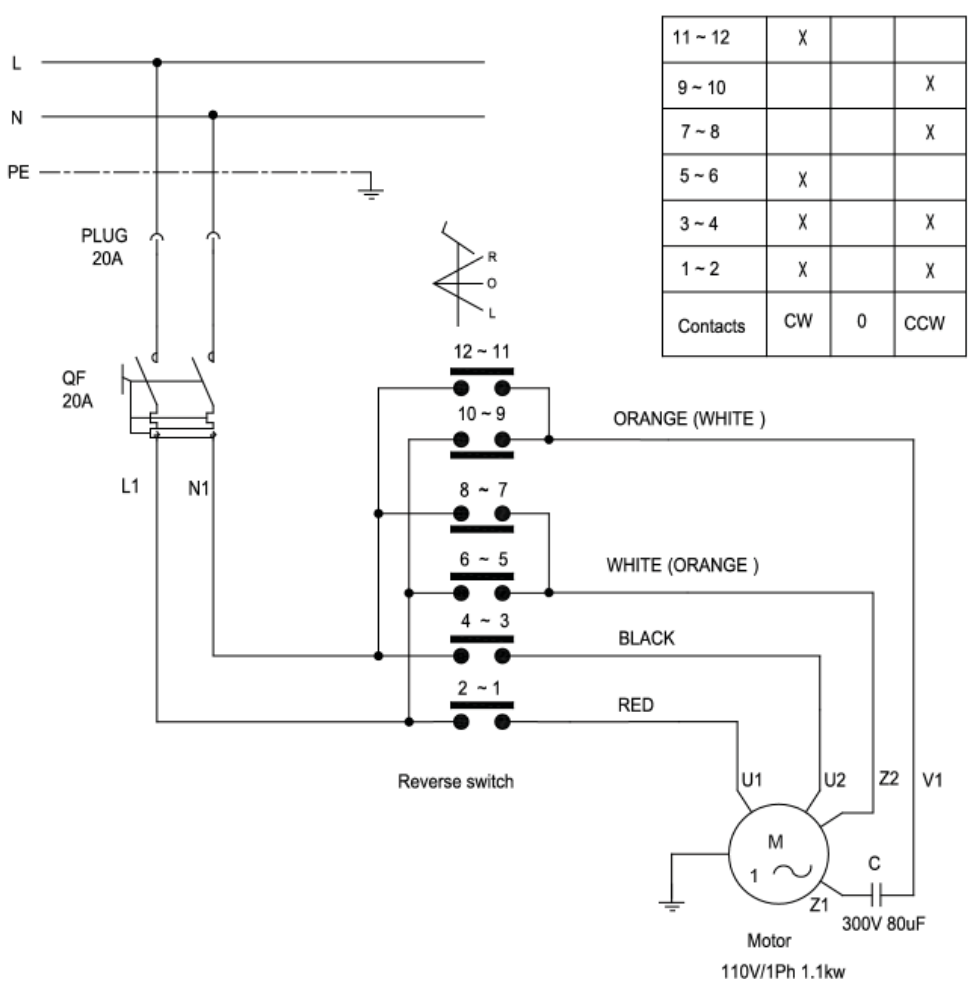
Fig. 19

Trouble-Shooting

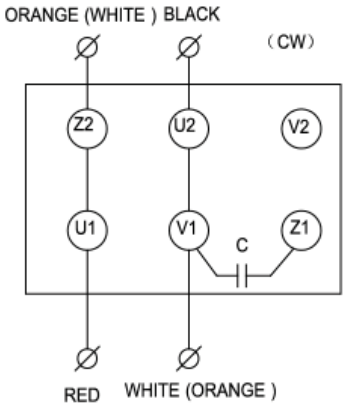
TROUBLE:	POSSIBLE CAUSE:	SOLUTION:
Turntable rotates only in one direction.	Reverser broken	Replace reverser
Turntable does not rotate.	Belt broken	Replace
	Reverser broken	Replace reverser
	Problem with motor	Check for loose wire in the motor, plug or socket.
		Replace motor
Turntable locks	Belt loose	Adjust the belt tension (chap. 7 Fig. 24)
Clamp slow to open or close	Silencer clogged	Clean or replace silencer
Turntable does not lock the wheel rim correctly	Clamps worn	Replace clamps
	Turntable cylinder(s) defective	Replace cylinder gasket
The tool touches the rim during the tire removing or mounting operations	Locking plate incorrectly adjusted or defective	Adjust or replace locking plate (chap 7 – Fig 25)
	Turntable locking screw loose	Tighten screw
Pedal lock out of working position	Return spring broken	Replace spring
Bead breaking operation difficult	Silencer clogged	Clean or replace silencer (chap 7 – Fig. 27)
	Bead breaker cylinder gasket broken	Replace gasket

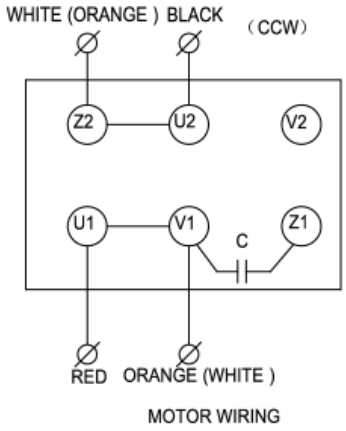
Electric / Pneumatic Diagrams

110V/220V/230V – 1PH



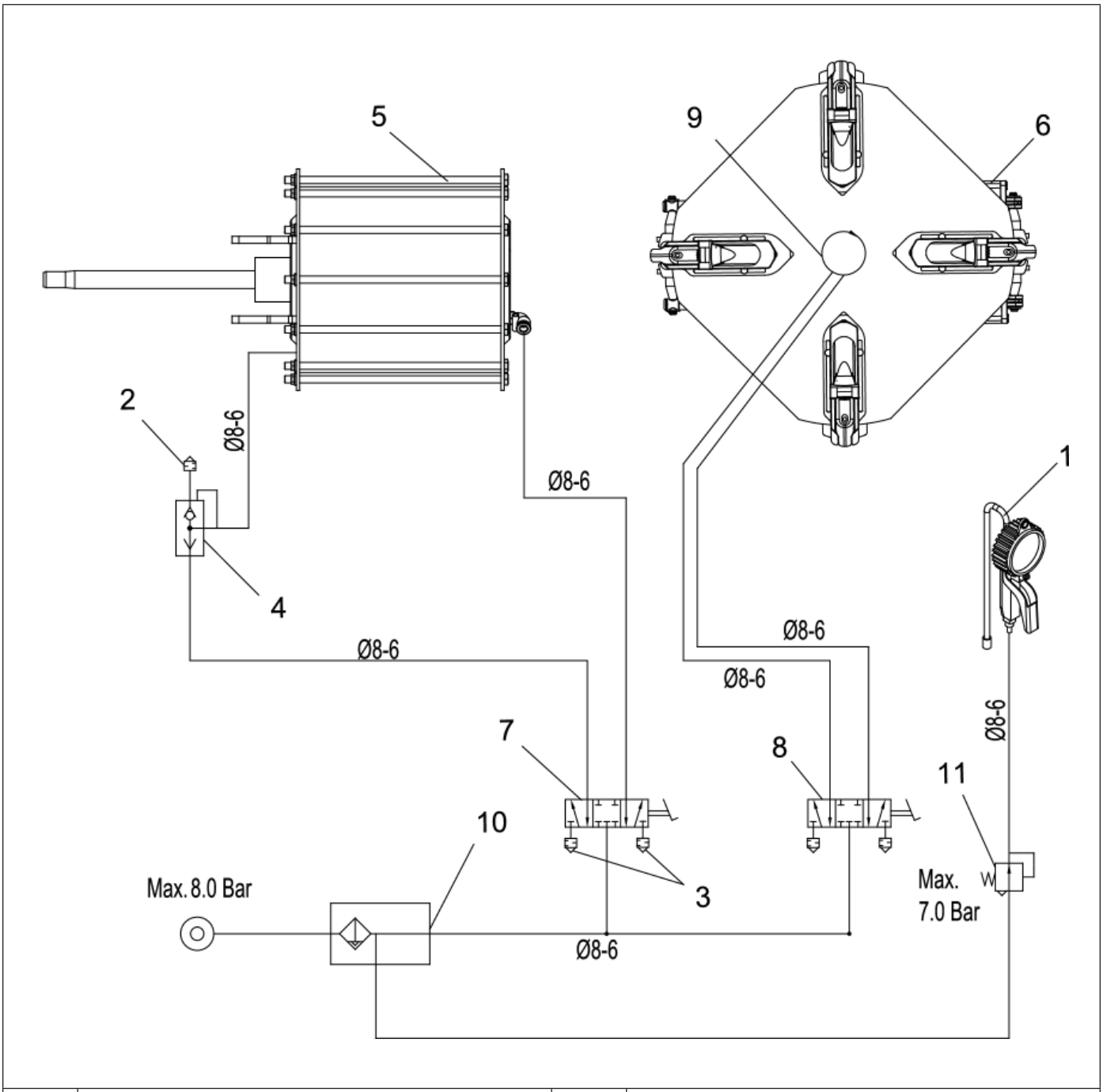
11 ~ 12	X		
9 ~ 10			X
7 ~ 8			X
5 ~ 6	X		
3 ~ 4	X		X
1 ~ 2	X		X
Contacts	CW	0	CCW





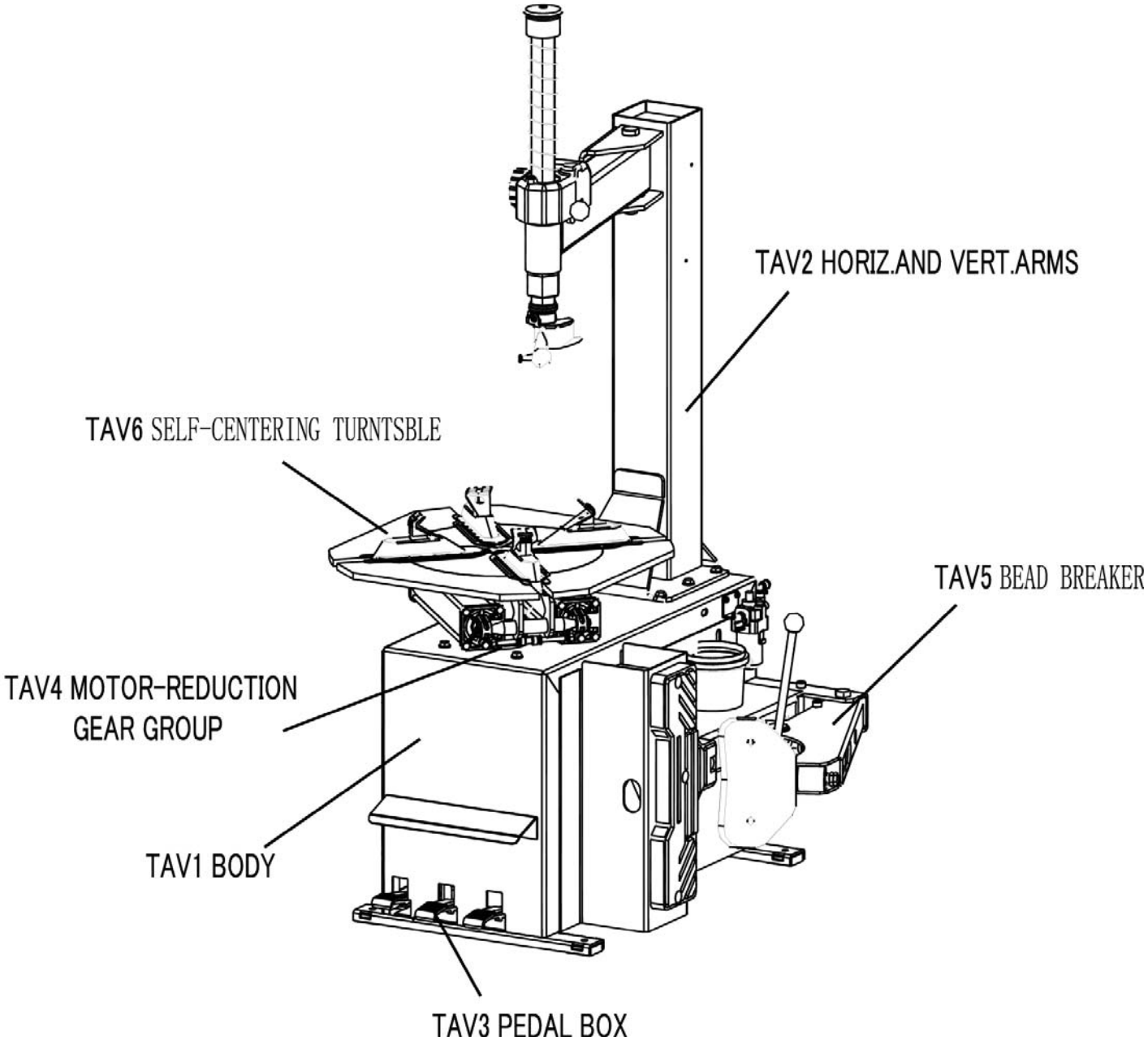
MOTOR WIRING

Standard Pneumatic System Diagram

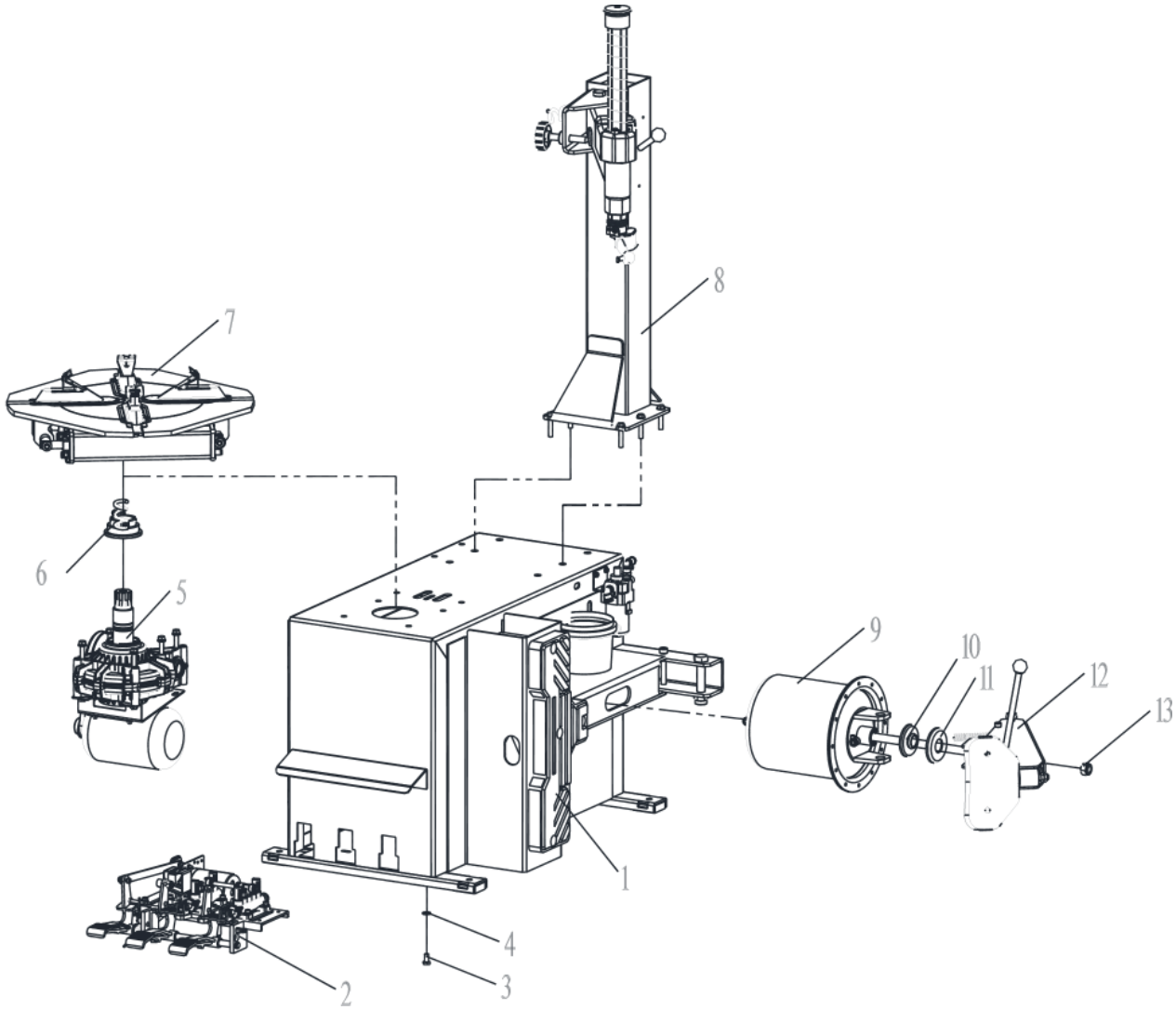


1	Inflating gauge	7	Bead breaking valve
2	Silencer 1/4”	8	Turntable valve
3	Silencer 1/8”	9	Rotation union
4	Quick relief valve	10	Lubricator
5	Bead breaker cylinder	11	Pressure regulator
6	Turntable cylinder		

Parts Catalogue

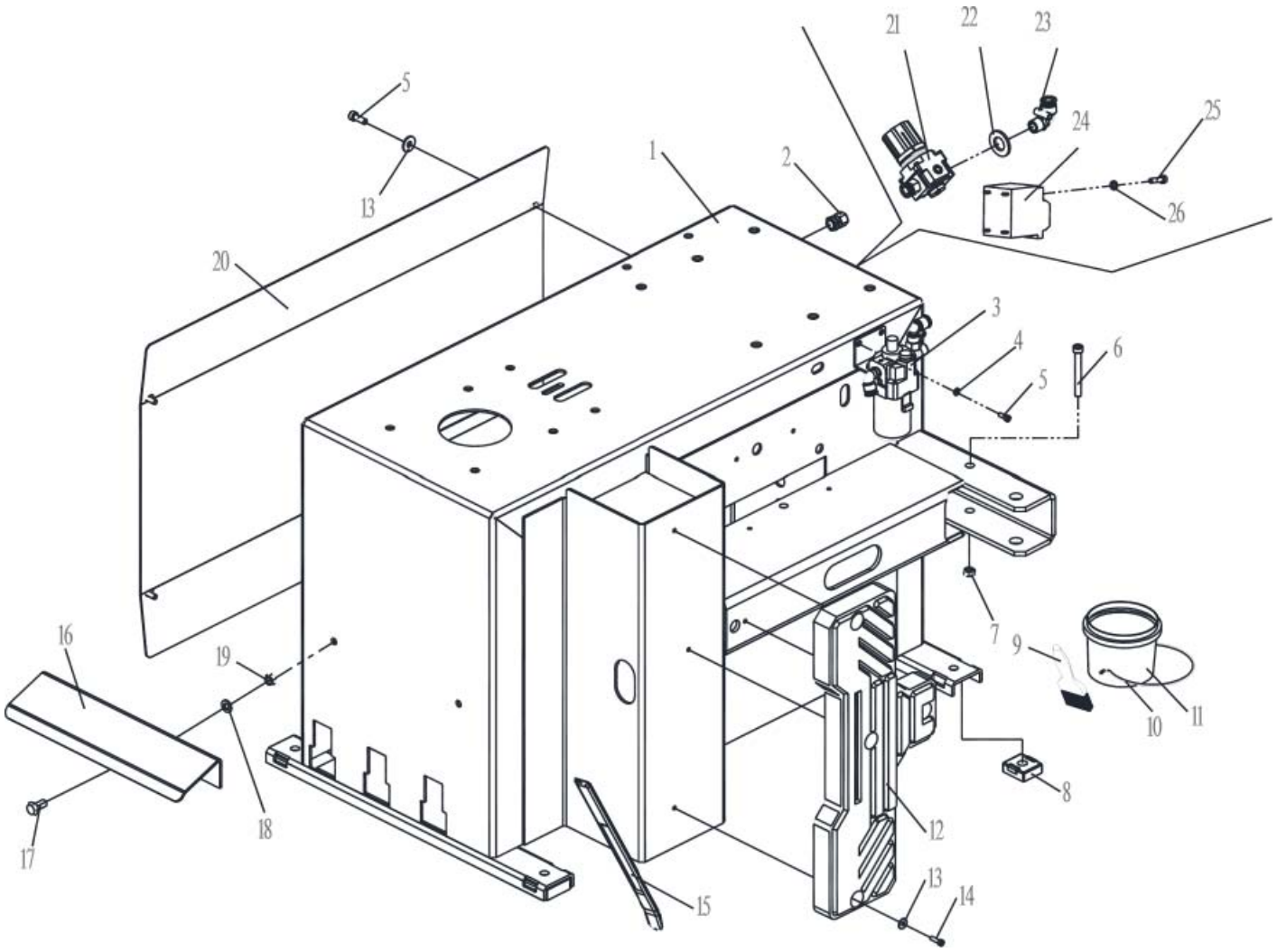


Tire Changer Assembly



Item	Part Number	Description	Qty
1	C20A100000	Shell	1
2	YC1-2015861	Pedal control unit	1
3	0201026	Screw M8X16	3
4	0205008	Washer D.8 - GB/T97.1	3
5	C20A200000	Motor – Reduction gear group	1
6	YC1-2003000	Rotation union	1
7	C20B500000	Turntable	1
8	C20A300000	Horiz. And vert. Arms	1
9	C20A400000	Bead breaker cylinder	1
10	106B-3006001	Shock absorber	1
11	106B-3006002	Absorber protection	1
12	YC1-2006001	Bead breaker arm assembly	1
13	0204009	Self-locking nut M18	1

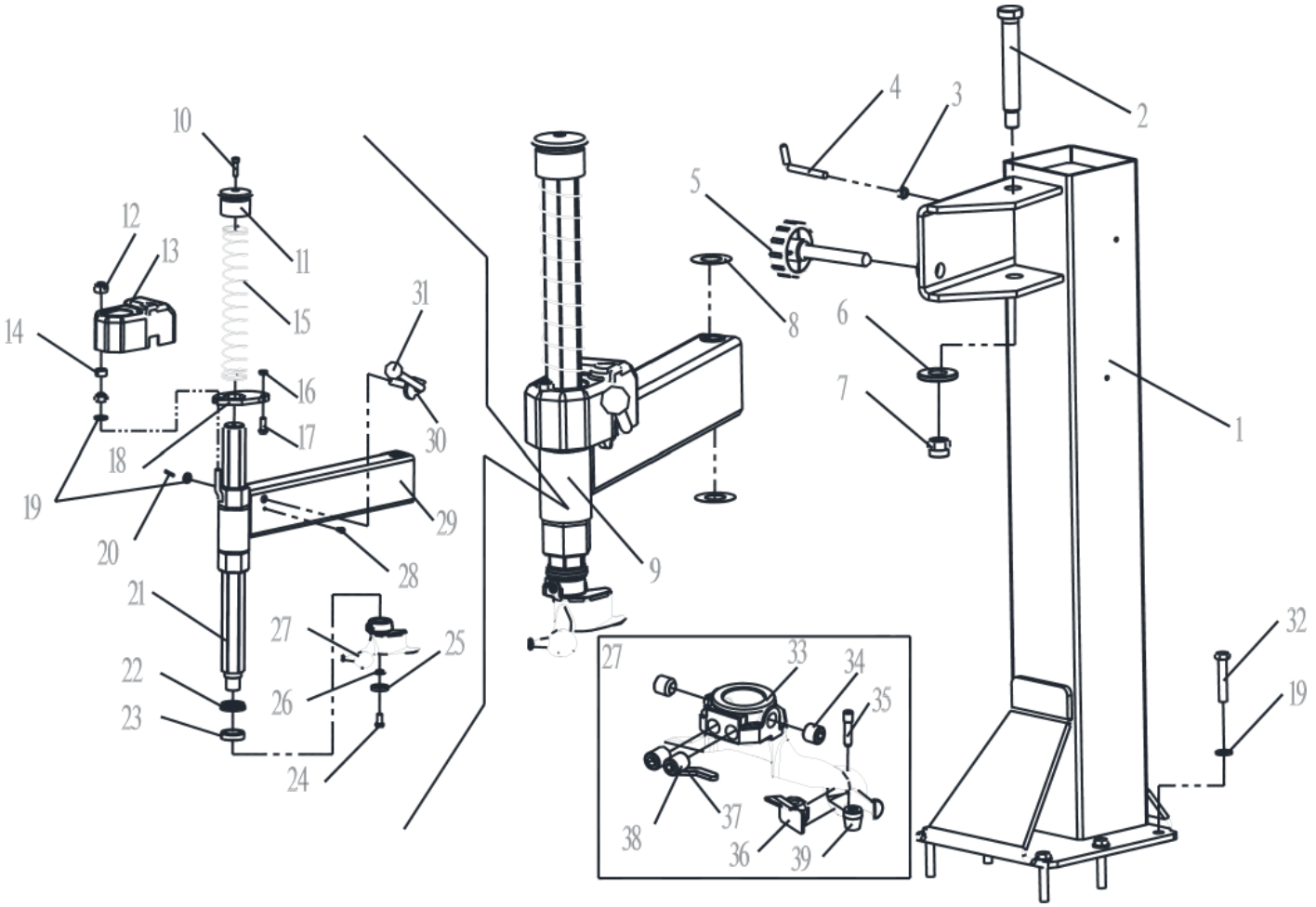
Body



Item	Part Number	Description	Qty
1	C20A100100	Shell	1
2	0508012	Cable relief	1
3	C20A110000	Lubricator unit	1
4	0205006	Washer D.6 - GB/T97.1	2
5	0202032	Screw M6X16 - GB/T70.1	6
6	0202067	Screw M10X85 - GB/T70.1	1
7	0204005	Self-locking nut M10 - GB/T889.1	1
8	YC1-3002099	Plastic foot	4
9	0511063	Grease brush	1
10	YC1-3000069	Spring	1
11	YC1-4299984	Grease cup	1
12	YC1-3002102	Wheel support	1

Item	Part Number	Description	Qty
13	0205007	Washer D.6 - GB/T96	8
14	0202033	Screw M6X20 - GB/T70.1	4
15	0511165	Bead lifting lever	1
16	C20A100002	Front panel	1
17	0201026	Screw M8X16 - GB/T5783	2
18	0205008	Washer D.8 - GB/T97.1	2
19	0203029	Nut M8 - GB/T6170	2
20	C20A100001	Side cover	1
21	C00AQ59000	Safety valve unit 3.5bar	1
22	0205013	Washer D.12 - GB/T97.1	1
23	0306032	90° quick union 8-1/4	1
24	0501084	Breaker	1
25	0202003	Screw M3X12	2
26	0205001	Washer D.3 - GB/T97.1	2

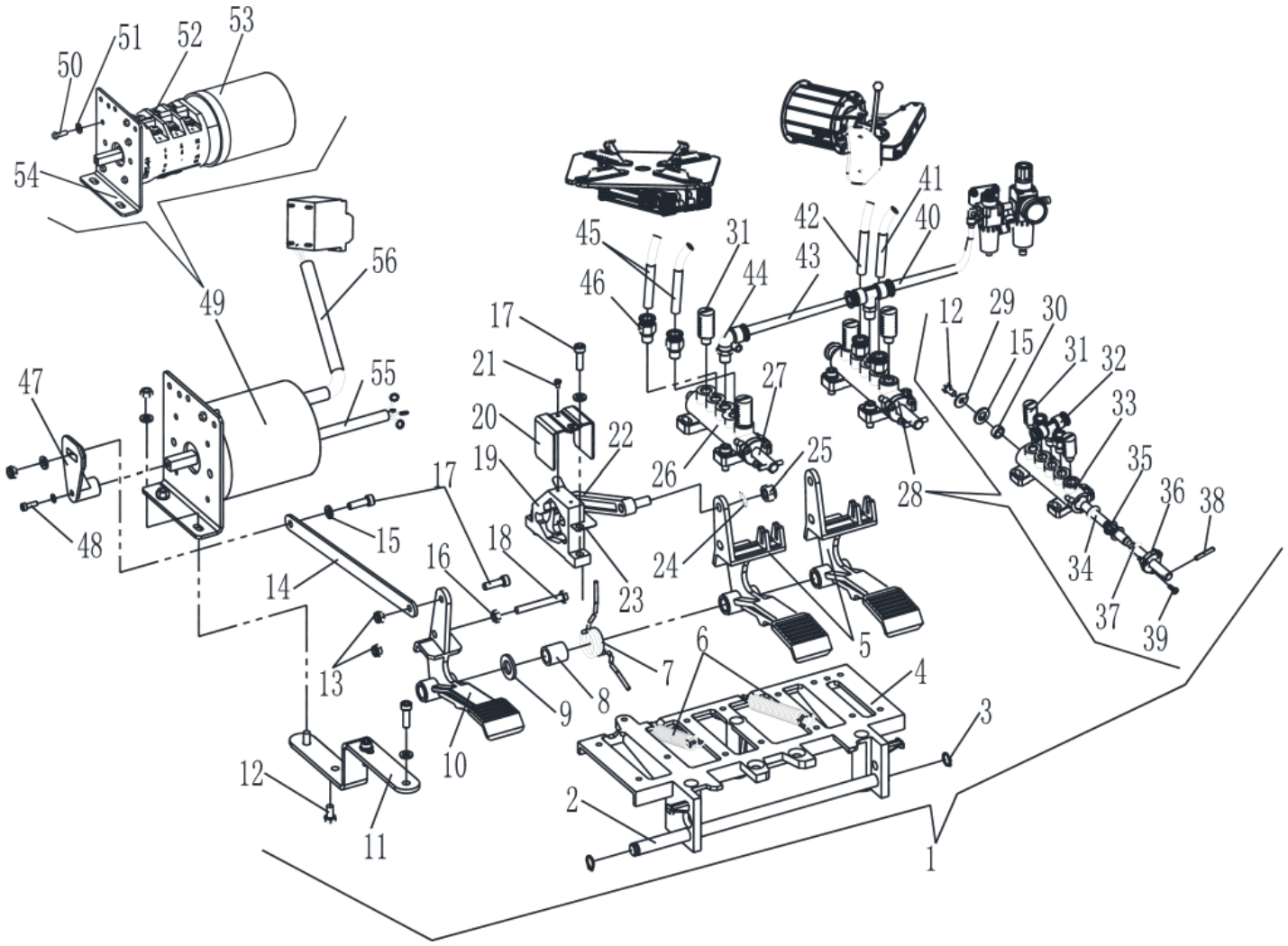
Horiz. And Vert. Arms



Item	Part Number	Description	Qty
1	YC1-2412123	Vertical post	1
2	YC1-3015565	Pivot	1
3	0203004	Nut M6 - GB52	1
4	YC1-3012978	Inflator hook	1
5	YC1-2004002	Hand wheel	1
6	YC1-3007352	Washer	1
7	0204008	Self-locking nut M16 - GB/T889.1	1
8	YC1-4397898	Steel shim	4
9	C20A300100	Working arm assembly	1
10	0202049	Screw M8X30 - GB/T70.1	1
11	YC1-3001759	Arm knob	1
12	0204005	Nut M10 - GB/T889.1	2
13	YC1-3012631	Arm frame	1

Item	Part Number	Description	Qty
14	YC1-3012632	Rubber spacer	1
15	YC1-3005407	Spring	1
16	0204012	Nut M10 - GB/T6172.1	1
17	0201064	Screw M10X25 - GB/T5783	1
18	YC1-3015567	Arm locking plate	1
19	0205011	Washer D.10 - GB/T97.1	8
20	0213003	Elastic pin 4X25 - GB/T879.1	1
21	C20A300101	Hexagonal arm	1
22	YC1-3002601	Shock absorber	1
23	YC1-3002602	Shock absorber protection	1
24	0201062	Screw M10X20	1
25	YC1-4295805	Spherical washer	1
26	YC1-4295804	Conical washer	1
27	C20A300200	Mounting tool unit	1
28	0202030	Screw M6X10 - GB/T70.1	1
29	YC1-2415589A	Horizontal arm	1
30	YC1-2407085	Arm locking lever	1
31	YC1-4299952	Ball	1
32	0201055	Screw M10X55 - GB/T5782	6
33	C20A300201	Mounting tool	1
34	0209020	Screw M12X12 - GB/T80	2
35	0215031	Shaft	1
36	C20A300202	Plastic insert	1
37	C20A300203	Plastic insert	1
38	0209015	Screw M12X16 - GB/T80	2
39	0215032	Peak roller	1

Pedal Box

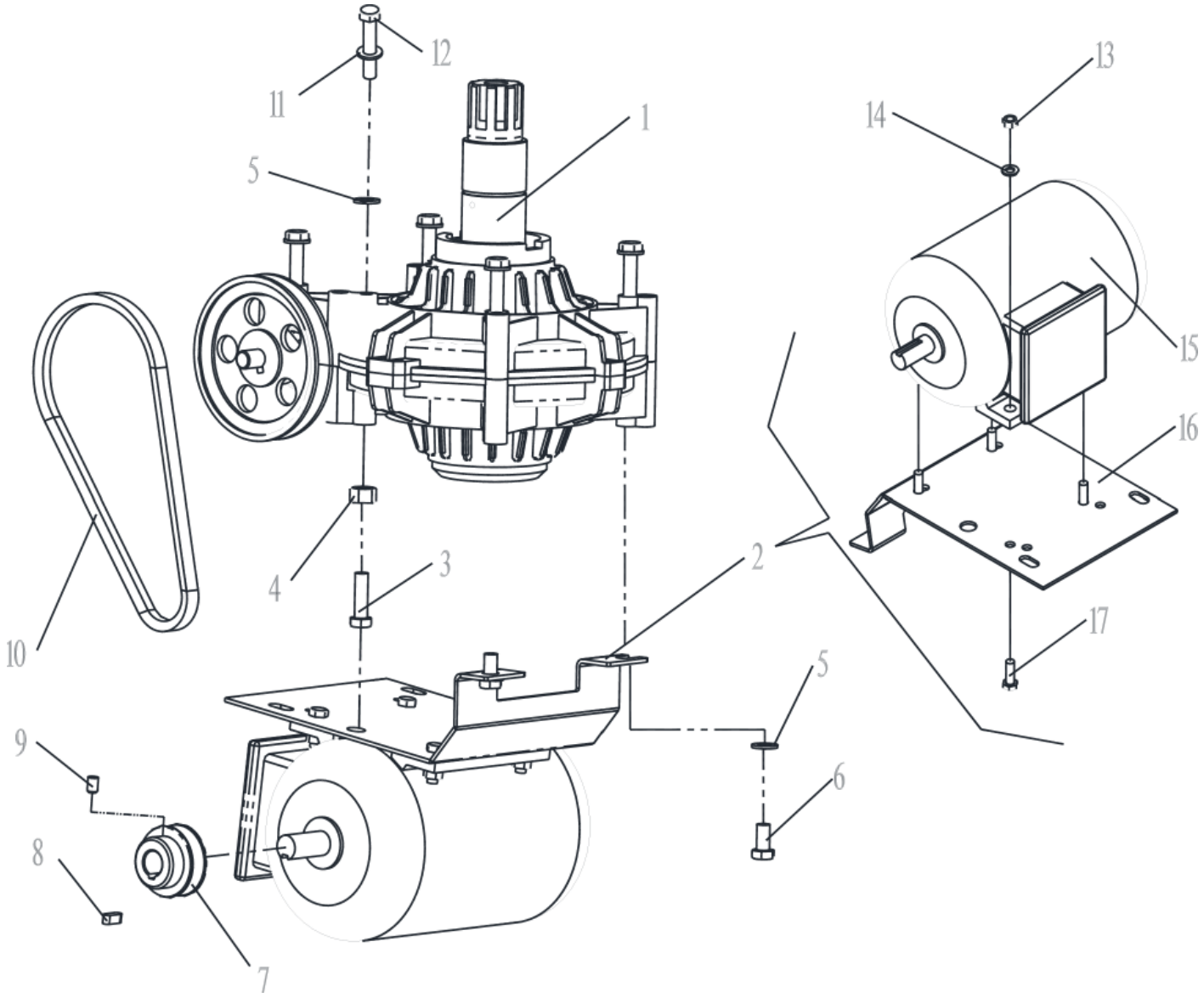


Item	Part Number	Description	Qty
1	YC1-2015861	Pedal control unit	1
2	YC1-3003094	Pedal alignment pin	1
3	0212001	Seeger D.12 - GB/T894.1	2
4	YC1-3002161	Pedal box base	1
5	YC1-3002159	Pedal B	2
6	YC1-3013333	Pedal return spring	2
7	C00A000001	Spring	1
8	YC1-3007953	Bush	1
9	0205013	Washer D.12 - GB/T97.1	1
10	YC1-3002157	Pedal A	1
11	YC1-3015342	Support	1
12	0201011	Screw M6X12	3

Item	Part Number	Description	Qty
13	0204003	Nut M6 - GB/T889.1	3
14	YC1-3015341	Connection rod	1
15	0205006	Washer D.6 - GB/T97.1	12
16	0203004	Nut M6 - GB52	3
17	0202033	Screw M6X20 - GB/T70.1	10
18	0201016	Screw M6X50 - GB/T5782	1
19	YC1-4299913	Double cam	1
20	YC1-3099910	Connection rod guide	1
21	0207034	Self-tapping screw ST2.9X6.5 - GB/T845	2
22	YC1-4299912	Connection rod	1
23	YC1-4299911	Forked leaf spring	1
24	0215019	Washer D.8 - GB/T860	2
25	0204004	Nut M8 - GB/T889.1	1
26	YC1-2002529	Turntable valve unit	1
27	YC1-3002442	Valve pin 1	1
28	YC1-2006297	Bead breaking valve unit	1
29	0205007	Washer D.6 - GB/T96	1
30	YC1-4197629	Nylon washer	1
31	0306059	Silencer 1/8	4
32	0306023	Quick T union 8-1/8	1
33	YC1-3001583	Valve body	2
34	YC1-3007598	Valve pin 3	1
35	YC1-3001584	Valve spacer	10
36	YC1-3001585	Valve flange	2
37	YC1-4299000	O-ring 17X4	12
38	0213003	Elastic pin 4X25 - GB/T879.1	2
39	0207032	Self-tapping screw ST3.5X13 - GB/T845	6
40	0306097	Rilsan hose 8X5 L=1000	1
41	0306097	Rilsan hose 8X5 L=700	1
42	0306097	Rilsan hose 8X5 L=800	1
43	0306097	Rilsan hose 8X5 L=70	1
44	0306033	90° quick union 8-R1/8	1
45	0306097	Rilsan hose 8X5 L=850	2

Item	Part Number	Description	Qty
46	0306045	Quick union 8-1/8	4
47	YC1-3000175	Reverser lever	1
48	0202004	Screw M4X12 - GB/T70.1	1
49	YC1-2002002	Reverser assembly	1
50	0201004	Screw M4X12 - GB/T5781	4
51	0211016	Washer D.4 - GB/T862.2	2
52	0505066	Reverser	1
53	YC1-3015344	Reverser cover	1
54	YC1-3015340	Reverser support	1
55	0506032	Power connection cable	1
56	0506030	Power connection cable	1

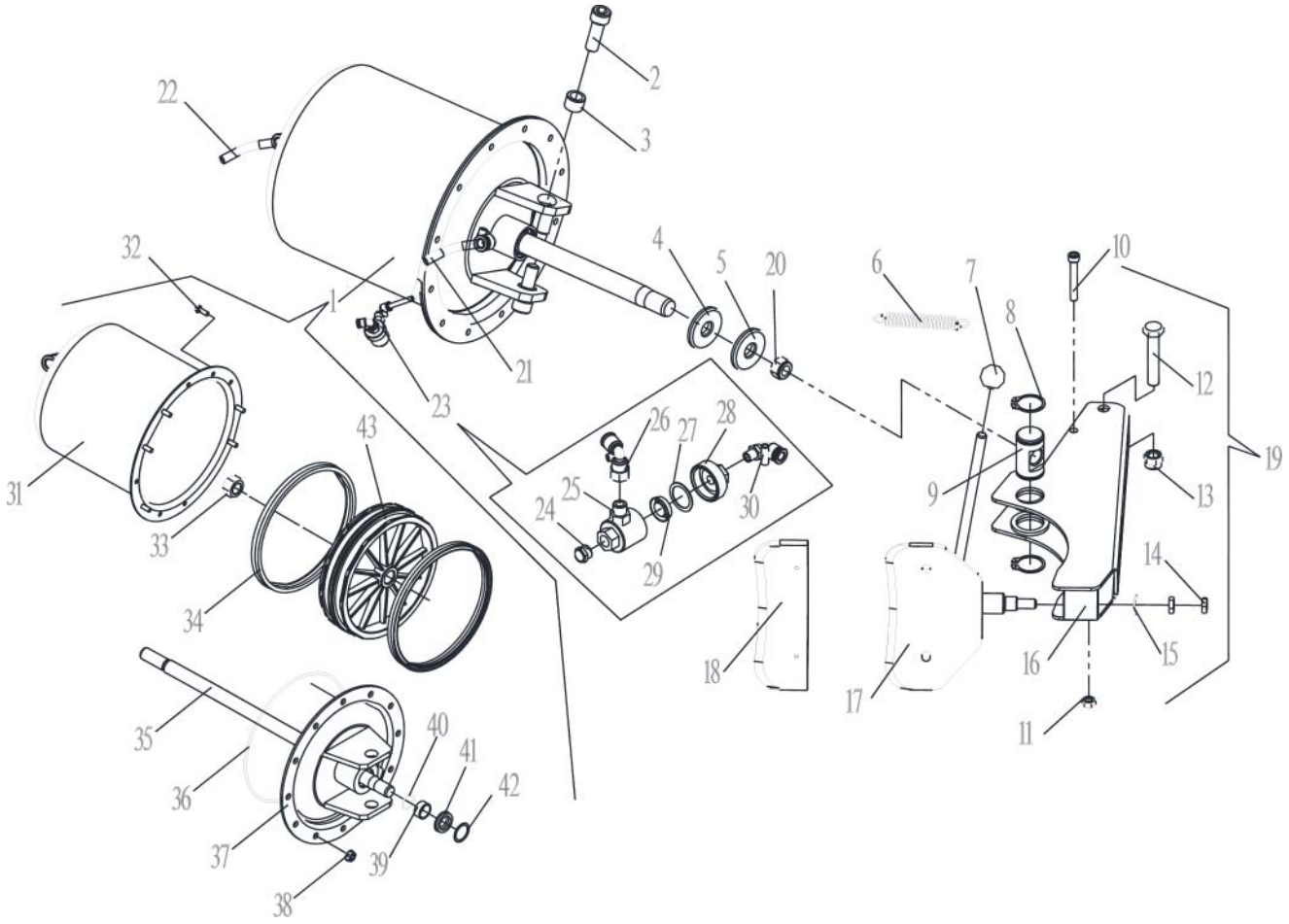
Motor - Reduction Gear Group



Item	Part Number	Description	Qty
1	C20A200100	Reduction gear unit	1
2	C20A200200	Motor unit	1
3	0201051	Screw M10X45	1
4	0203009	Nut M10 - GB52	1
5	0205011	Washer D.10 - GB/T97.1	8
6	0201062	Screw M10X20 - GB/T5783	2
7	YC1-3000166	Motor pulley	1
8	202W-ZYDJPJ	Tab 6X30 - GB/T1096	1
9	0209009	Screw M8X16 - GB/T80	1

Item	Part Number	Description	Qty
10	0511052	V belt A580	1
11	0208007	Washer D.10 - GB/T93	6
12	0201069	Screw M10X55 - GB/T5780	6
13	0203029	Nut M8 - GB/T6170	4
14	0205008	Washer D.8 - GB/T97.1	4
15	0509097	Motor 110V/60Hz/1PH/1.1KW	1
16	C20A200201	Motor support	1
17	0201038	Screw M8X25 - GB/T5783	4

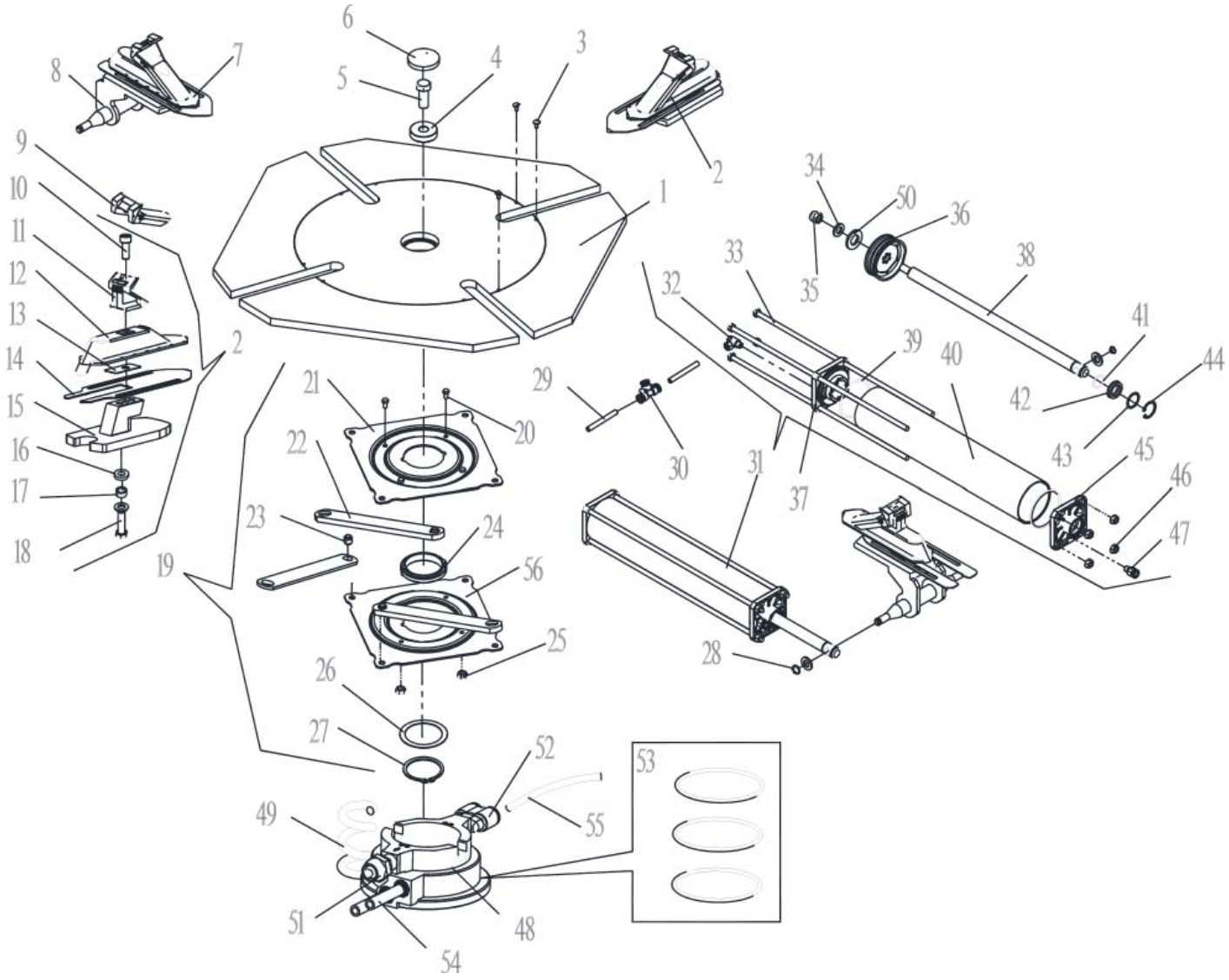
Bead Breaker



Item	Part Number	Description	Qty
1	C20A400000	Bead breaker cylinder	1
2	0202071	Screw M12X35 - GB/T70.1	2
3	YC1-3015573	Bush	2
4	106B-3006001	Rubber stroke limiter 1	1
5	106B-3006002	Rubber stroke limiter 2	1
6	YC1-3000114A	Arm spring	1
7	YC1-4299952	Knob	1
8	0212008	Seeger D.40 - GB/T894.1	2
9	YC1-3008990	Pivot pin	1
10	0202057	Screw M10X70 - GB/T70.1	1
11	0204005	Self-locking nut M10 - GB/T889.1	1
12	0201099	Screw M16X90 - GB/T5782	1
13	0204008	Self-locking nut M16 - GB/T889.1	1
14	0204013	Nut M14 - GB/T6172.1	2

Item	Part Number	Description	Qty
15	0211015	Elastic washer D.14 - GB/T955	2
16	YC1-2415574	Bead breaker arm	1
17	YC1-2412271	Bead breaker plate	1
18	YC1-3013240	Protection cover	1
19	YC1-2006001	Bead breaker arm assembly	1
20	0204009	Self-locking nut M18 - GB/T889.1	1
21	0306097	Rilsan hose 8X5 L=700	1
22	0306097	Rilsan hose 8X5 L=750	1
23	C02AQ00100	Quick relief valve unit	1
24	0306086	Silencer G1/4	1
25	C02AQ00101	Valve body	1
26	0306039	90° quick union 8-1/4 female	1
27	C02AQ00103	Seal	1
28	C02AQ00102	Valve flange	1
29	C02AQ00104	Sealing ring	1
30	0306033	90° quick union 8-R1/8	1
31		Cylinder liner 186	1
32		Screw M6X16 - GB/T5783	24
33		Nut M18X1.5 - GB/T6171	1
34		Seal 186X12X9	2
35		Cylinder shaft L=489	1
36		O-ring 180X3	1
37		Cylinder flange	1
38		Self-locking nut M6 - GB/T889.1	24
39		Bush 23X20X20	1
40		O-ring 20X3.55	1
41		Scraper 20X30X7	1
42		Seeger D.30 - GB/T893.1	1
43		Piston 186	1

Self-Centering Turntable

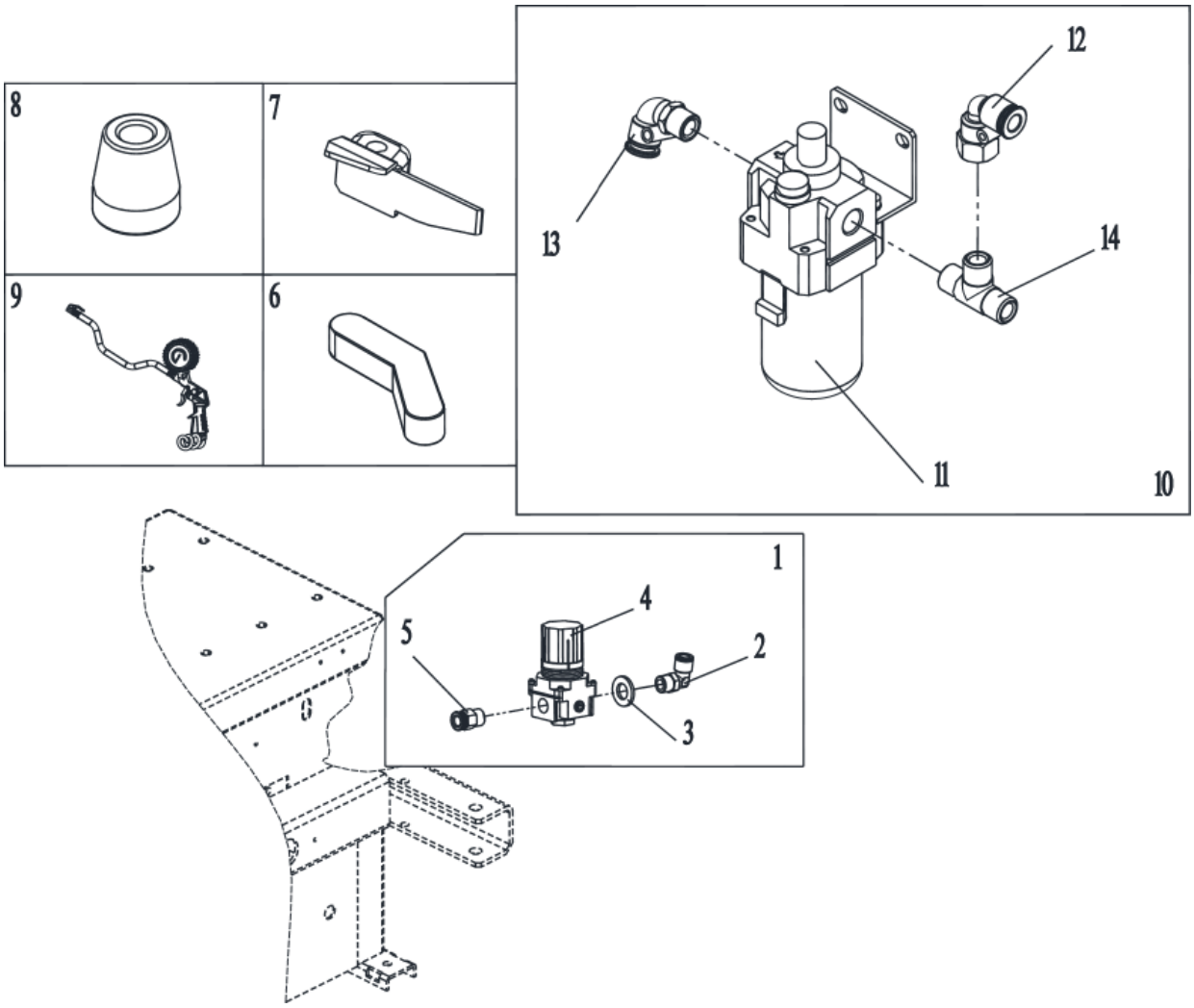


Item	Part Number	Description	Qty
1	C20B500100	Turntable	1
2	YC1-2015755	Slide guide assembly	2
3	0215027	Rivet 5.05×15.5	8
4	YC1-3009778	Washer	1
5	0201100	Screw M16X1.5X40 - GB/T5786	1
6	YC1-3000062	Turntable cap	1
7	YC1-2015756	Slide guide assembly	2
8	YC1-2415756	Slide guide	2
9	YC1-3001468	Clamp cover	4
10	0202055	Screw M10X1.25X25 - GB/T70.1	4

Item	Part Number	Description	Qty
11	YC1-3002297	Oversize clamp	4
12	YC1-3006255	Slide	4
13	YC1-3015858	Spacer	4
14	YC1-3015169	Turntable plate	4
15	YC1-2412860	Slide	2
16	YC1-3006879	Spacer	4
17	YC1-3006880	Connection rod spacer	4
18	0201143	Screw M12X45	4
19	C20A510000	Turntable flange assembly	1
20	0201011	Screw M6X12	4
21	C20A510001	Upper turntable flange	1
22	C20A510002	Connection rod	4
23	YC1-3006878	Pin	4
24	YC1-3007420	Flange bush	1
25	0203004	Nut M6 - GB52	4
26	YC1-3006869-A	Turntable flange spacer	1
27	0212011	Seeger D.65 - GB/T894.1	1
28	0212001	Seeger D.12 - GB/T894.1	4
29	0306097	Rilsan hose 8X5 L=140	1
30	0306022	Quick T union D.8 (Plastic)	1
31	C00AQ370000	Turntable cylinder	2
32	0306016	Union Φ8 G1-8	2
33	0201195	Screw M8X332	8
34	0205013	Washer D.12 - GB/T97.1	10
35	0204007	Nut M12 - GB/T889.1	2
36	YC1-4198856	Piston	2
37	YC1-3015023A	Back flange	2
38	C00AQ370002	Piston rod	2
39	0606007	O-ring 75X3.1 - GB/T1235	4
40	C00AQ370001	Cylinder liner	2
41	0606004	O-ring 20X2.75 - GB/T3452.1	2
42	0606016	Scraper 20X30X7	2
43	YC1-4398146	Washer	2

Item	Part Number	Description	Qty
44	0211004	Seeger D.30 - GB/T893.1	2
45	YC1-3015024A	Front Flange	2
46	0204025	Nut M8 - GB/T6177.1	8
47	0306045	Quick union 8-1/8 (Plastic)	2
48	YC1-2003000	Rotation union	1
49	0306103	Spiral hose 8X5	1
50	YC1-4198857	Washer	2
51	0306069	Rotation union 8-1/8	1
52	0306001	Quick T union 8-1/8	1
53	0309066	O-ring 60X2.65	3
54	0306097	Rilsan hose 8X5 L=1000	2
55	0306097	Rilsan hose 8X5 L=350	2
56	C20A510003	Lower turntable flange	1

Inflator+Lubrication Group



Item	Part Number	Description	Qty
1	C00AQ59000	Safety valve unit 3.5bar	1
2	0306037	90° quick union 8-1/4	1
3	0205013	Washer D.12 - GB/T97.1	1
4	0306327	Pressure regulator	1
5	0306044	Quick union 8-1/4	1
6	YC1-3013650	Plastic insert	5
7	YC1-3006689	Plastic insert	5
8	0215032	Peak roller	1
9	YC1-2001000	Inflating gun	1
10	C20A110000	Lubricator unit	1
11	0306187	Lubricator	1
12	0306039	90° quick union 8-1/4	1
13	0306032	90° quick union 8-1/4	1
14	0306077	G1/4	1

Warranty

This item has a one (1) year LIMITED warranty.

Atlas® Automotive Equipment warrants the equipment to the original purchaser against defects in material or workmanship under normal use for a period of one year from the date of purchase. This warranty shall be limited to the replacement of materials or parts found defective, at the discretion of Atlas® Automotive Equipment and/or its authorized distributors. This limited one (1) year warranty DOES NOT apply to normal wear items (turntable jaws, belts, gauges, plastic jaw protectors, etc.). The limited one (1) year warranty does not include a labor warranty. Warranties do not apply to items that have been abused or misused.

Returned goods must be authorized to be returned (in writing) by Atlas® Automotive Equipment and/or an authorized distributor and must be prepaid to a designated location. All returns may be subject to a 15% handling and restocking charge. Returned goods must be in like-new condition complete with warranty and original shipping papers.

Customer's Responsibilities

- Shall ensure that all air operated components are properly maintained
- Shall ensure components are powered by well lubricated and moisture free compressed air (if a suspected defective part has not been properly lubricated it will not be covered under warranty)
- Shall establish procedures to periodically maintain and inspect the equipment
- Shall ensure that your wheel balancer is protected by a surge protector
- Shall ensure that all equipment shall have adequate amperage service

THIS WARRANTY IS EXCLUSIVE AND IS LIEU OF ALL OTHER WARRANTIES EXPRESSED OR IMPLIED INCLUDING ANY IMPLIED WARRANTY OR MERCHANTABILITY OR ANY IMPLIED WARRANTY OF FITNESS FROM A PARTICULAR PURPOSE, AND ALL SUCH IMPLIED WARRANTIES ARE EXPRESSLY EXCLUDED.

THE REMEDIES DESCRIBED ARE EXCLUSIVE AND IN NO EVENT SHALL THE MANUFACTURER, NOR ANY SALES AGENT OR OTHER COMPANY AFFILIATED WITH IT OR THEM, BE LIABLE FOR SPECIAL CONSEQUENTIAL OR INCIDENTAL DAMAGES FOR THE BREACH OF OR DELAY IN PERFORMANCE OF THIS WARRANTY. THIS INCLUDES, BUT IS NOT LIMITED TO, LOSS OF PROFIT, RENTAL OR SUBSTITUTE EQUIPMENT OR OTHER COMMERCIAL LOSS.

For warranty assistance, please call 866-898-2604. Please have your invoice number ready so that we may be able to serve you better. Warranty procedures cannot be initiated without an invoice number corresponding to the product serial number.

For further product and distributor information, please visit www.atlasautoequipment.com