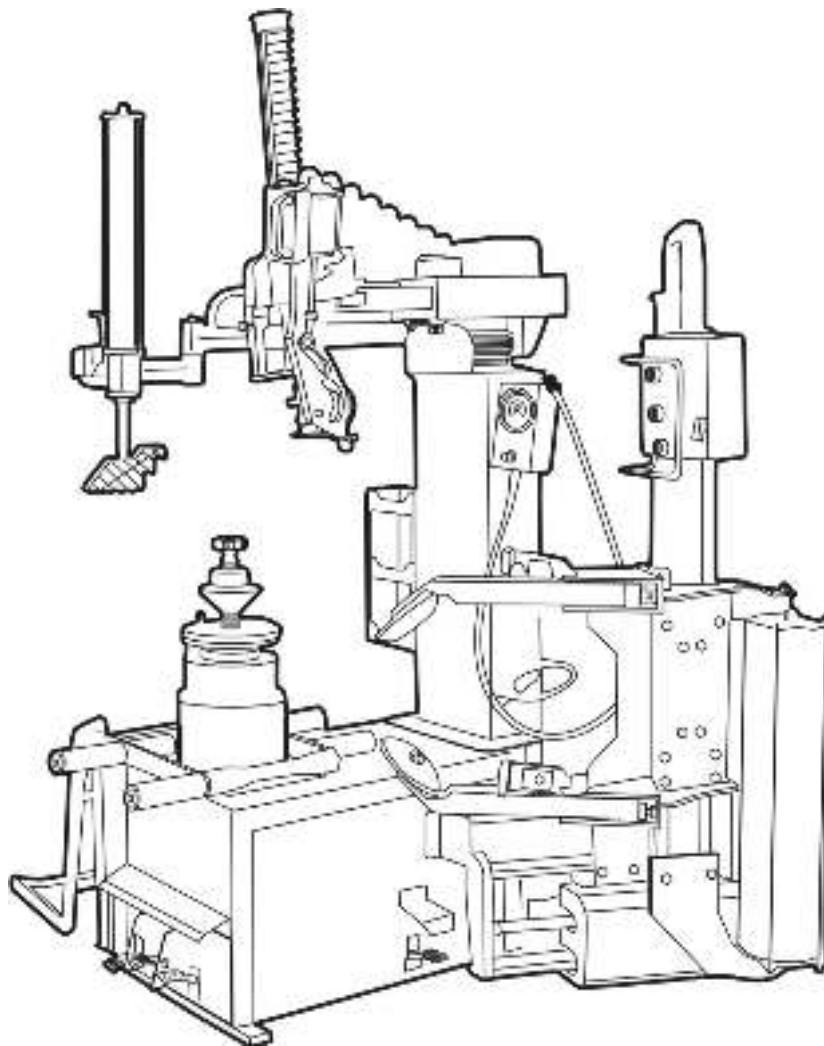


**USE
AND
MAINTENANCE
MANUAL**




LEVERLESS TIRE CHANGER


X-618



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

	WARNING: before operating the machine, read carefully chapter 7 “installation” where all proper operations for a better functioning of the machine are shown.
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CHAPTER 1 – INTRODUCTION

1.1 INTRODUCTION

Thank you for purchasing a product from the line of Automatic 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 MACHINE 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. For clarity and convenience, we have inserted the data of your tire changer in the box below. 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.
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- 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.

1.5 SCRAPPING

When your machine's working life is over and it can no longer be used, it must be made inoperative by removing any connection to power sources.

These units are considered as special waste material, and should be broken down into uniform parts and disposed of in compliance with current laws and regulations.

If the packing are not polluting or non-biodegradable, deliver them to appropriate handling station.

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

CHAPTER 2 – GENERAL INFORMATION

2.1 INTENDED USE

- This automatic tire changer has been designed and manufactured exclusively for removing and mounting tires from/onto rims from 12" to 30" and a maximum diameter of 1200 mm.
- 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 AND CONTROLS

- (1) Leverless mounting/demounting tool
- (2) Locking button
- (3) Up/down command for mounting /demounting device
- (4) Bead depressor
- (5) Bead depressor up/down command
- (6) Horizontal arm swing pedal
- (7) Wheel lifter pedal
- (8) Turntable rotation pedal
- (9) Integrated wheel lifter
- (10) Inflation pedal
- (11) Upper bead breaker
- (12) Lower bead breaker
- (13) Inflation pressure gauge
- (14) Deflation button
- (15) Clamping device
- (16) Turntable
- (17) Horizontal arm
- (18) Mounting bar
- (19) Bead breaker locking selector
- (20) Clamping device command
- (21) Bead breaker over-stroke command
- (22) Bead breaker up/down command
- (23) Bead breaker forward/back command

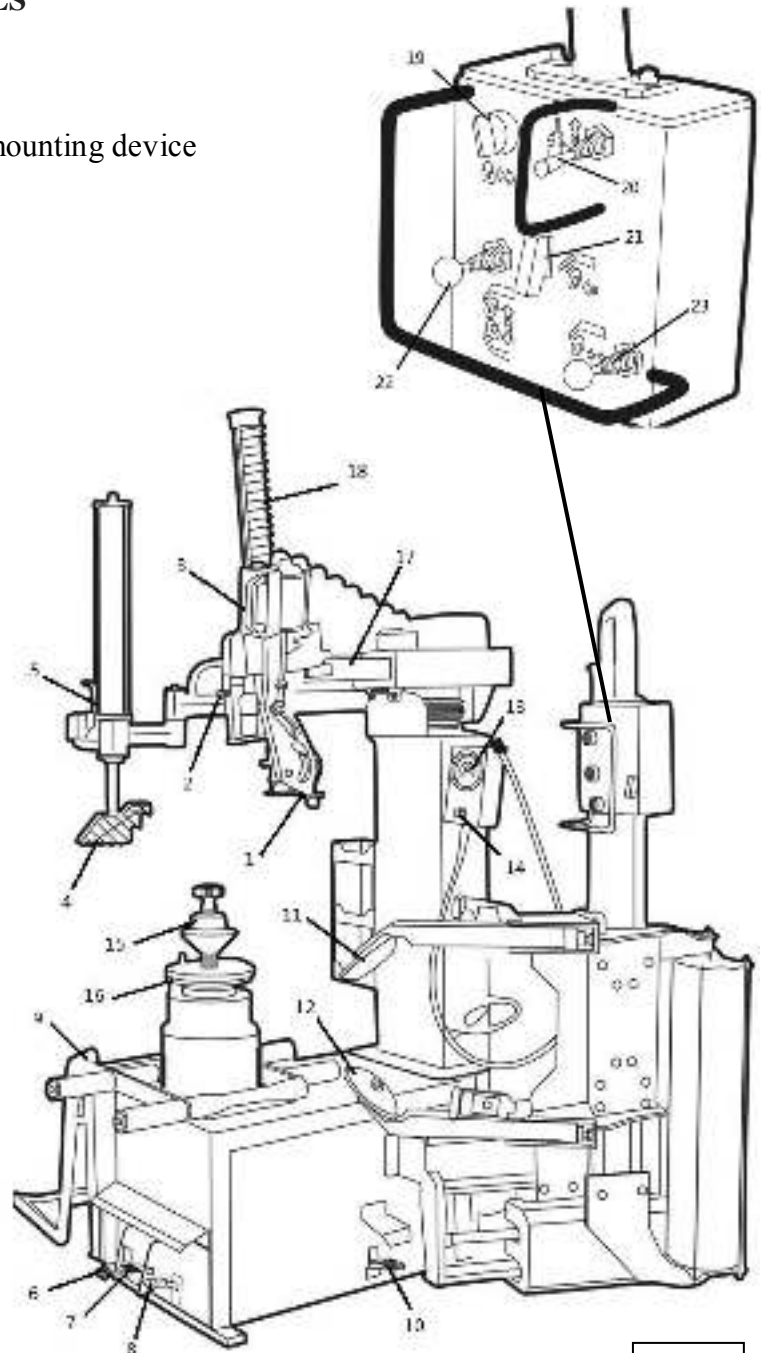
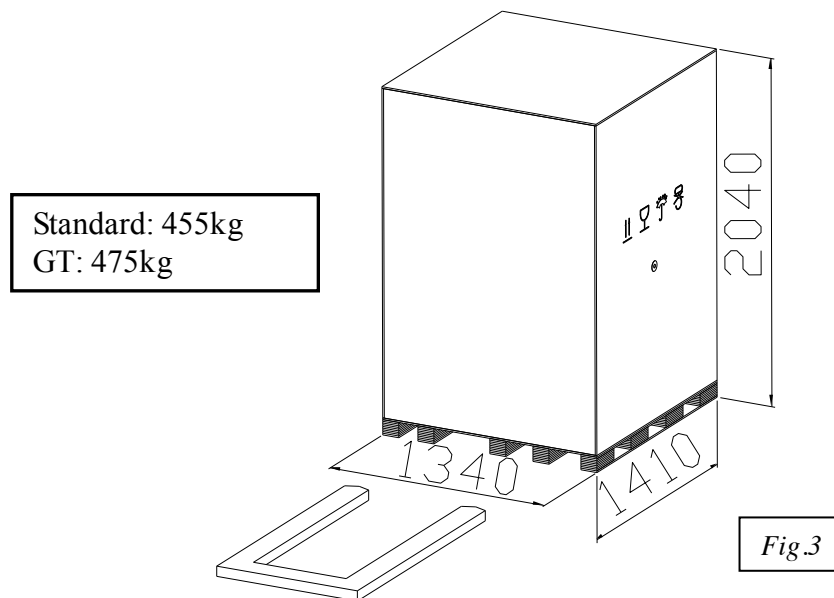


Fig. 1

CHAPTER 3 – TRANSPORTATION, UNPACKING AND 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.



3.3 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.



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.

3.4 SCRAPPING

When your machine's working life is over and it can no longer be used, it must be made inoperative by removing any connection to power sources.

These units are considered as special waste material, and should be broken down into uniform parts and disposed of in compliance with current laws and regulations.

If the packing are not polluting or non-biodegradable, deliver them to appropriate handling station.

CHAPTER 4 – 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 with electric motor cannot be used in explosive atmospheres, unless it is a proper version.

- The place of installation must also provide a safety area at least *500mm* free away from a square space shown in picture 4 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 protective shelter.

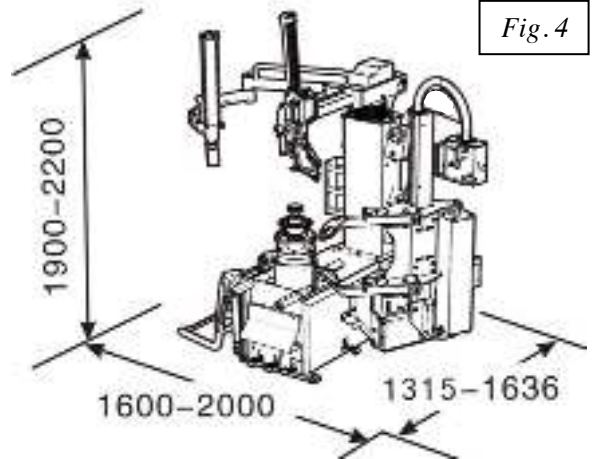


Fig. 4

4.2 POSITIONING

- Position the machine on a flat, smooth and non-slippery ground.
- The machine must not necessarily be anchored to the ground. But, if you prefer to do so, drill 100 mm deep holes in the ground by the 4 holes of the machine bed using a 10-mm bit for concrete of suitable length. Insert suitable metal anchor dowels in the holes drilled and secure firmly.
- The place where the machine is installed must be equipped with an electrical safety system with efficient earthing and also supplied with appropriate differential 16A circuit breaker.
- The place of installation must avail of a pneumatic connection with minimum working pressure of 8 bar.
- If necessary, the operator can adjust the control panel to his convenient position (ref. fig. 5).

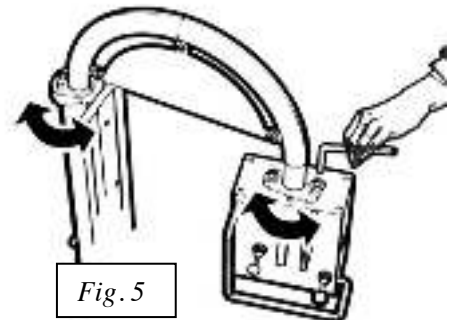


Fig. 5

4.3 CONNECTION TO POWER SUPPLY



Any electric connection job must be carried out by professionally qualified personnel.

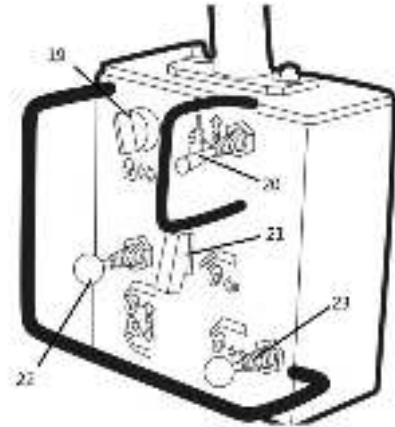
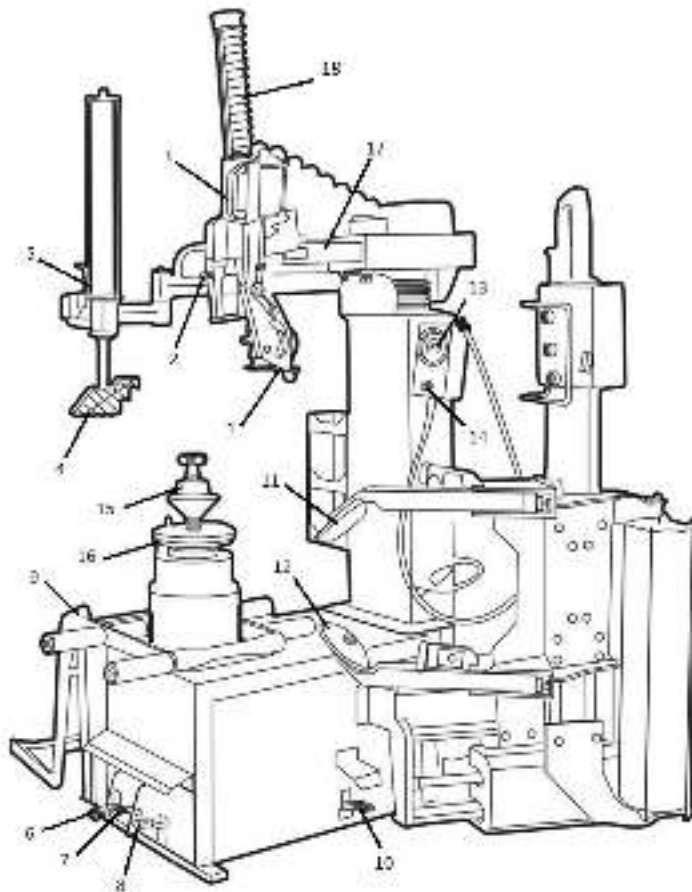
Make sure the connection of the phases is right. Improper electrical hook-up can damage motor and will not be covered under warranty.

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.

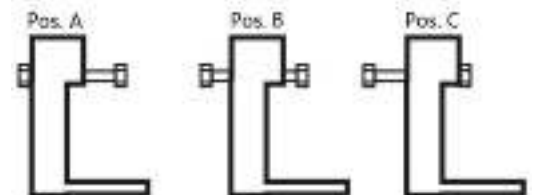
- Connect the machine to the electric mains. Check to make sure the characteristics of your systems correspond to those required by the machine.
- Connect the machine to the compressed air system by means of the air filter/lubricator that protrudes from the rear section.

4.4 OPERATING TESTS

	The testing procedure must be performed without using a tire, making sure that no other parts of the machine interfere with the movements.
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Locking button (2)



- Set the button (2) in “Pos. A”, the mounting bar (18) and the horizontal arm (17) is locked. The mounting tool (1) positions itself automatically at the correct distance from the rim.
- Set the locking button in “Pos. B”, the arm is unlocked and the mounting tool goes down onto the rim or reaches the minimum working height.
- Set the button in “Pos. C”, the arm is unlocked and the mounting tool goes up to the out-of-work position.
- Operate the command (5) to move the bead depressor (4) upwards or downwards.
- Depress the pedal (6), the horizontal arm (17) can swing out of the working position. Depress it again, the horizontal arm can swing back to the working position.
- Depress the pedal (7) to raise the wheel lifter (9) off the ground to the same level as the spindle flange. Release it to lower the lifter down to the ground.

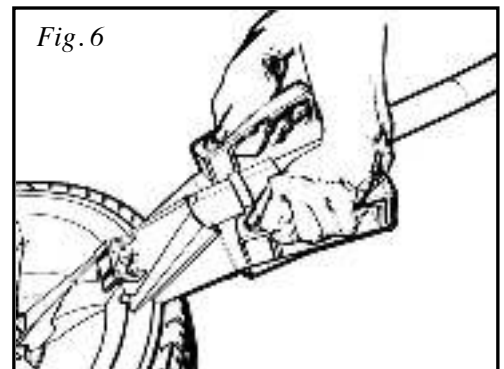
- Depress pedal (8), the turntable (16) should turn in a clockwise direction. Lift it up, the turntable should turn in an anticlockwise direction. If the turntable turns in the opposite direction to that shown, reverse two of the wires in the three-phase plug.
- Depress the pedal (10) to start inflating the tire. The inflating pressure is shown on the gauge (13).
- To deflate the tire, push the deflation button (14).
- Set the selector (19) to the unlocking position, push the command (23) leftwards or rightwards to move the bead breaker carriage forwards or backwards.
- Set the selector (19) to the locking position to block the function of command (23) and active the “over-stroke” function, push the command (21) to move the bead breaker carriage forwards about 20cm. Release the command, the carriage moves back to the initial position automatically.
- Operate the command (20) to lock or unlock the clamp device (15).
- Operate the command (22) to move the bead breaker carriage upwards or downwards.

4.5 GT SYSTEM TEST (if available)



NEVER point the nozzle at people. Make sure to hold the handles of nozzle firmly. Failure to do so can be dangerous.

- Press the blasting buttons by hands (ref. fig.6), a powerful jet of air can be come out of the nozzle.
- If it does not work well, check the connection line.



CHAPTER 5 – OPERATION

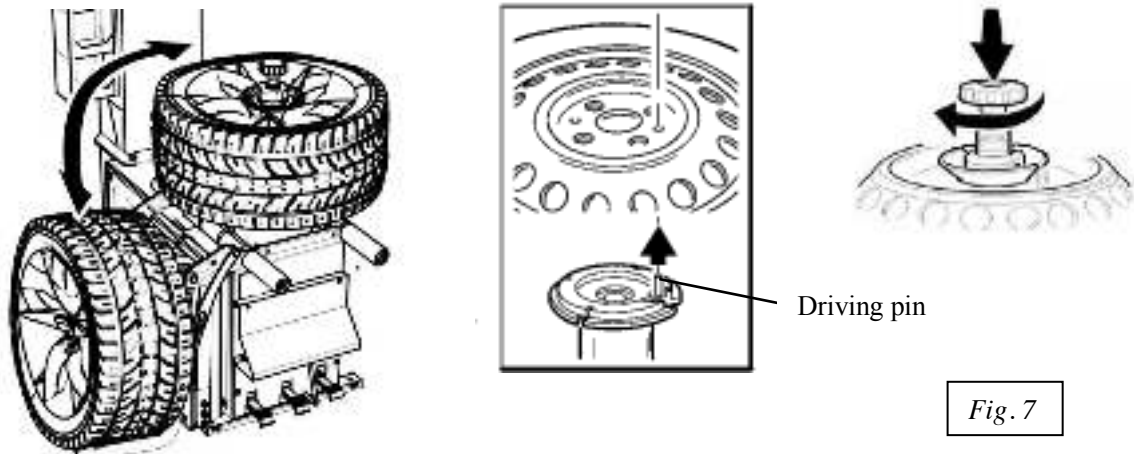
	<p>Do not use the machine until you have read and understood the entire manual and the warning provided.</p> <p>Before carrying out any operation, make sure to deflate the tire and take off all the wheel balancing weights.</p>
--	--

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

	<p>To mount/demount a tire with the ally rim, it is suggested to use the proper cone protection and the turntable protection.</p> <p>For the wider wheel, the turntable extension should be used.</p> <p>To mount/demount the tire without central hole, the universal adaptor should be ordered.</p>
--	--

5.1 CLAMPING THE WHEEL

- Check to make sure that the tire is deflated and all balancing weights are taken off.
- Check to make sure there is no pressure sensor, otherwise check its state of efficiency using a special tester.



- Place the wheel onto the wheel lifter. Make sure the worker area is free of any object.
- Raise the wheel lifter with the wheel to the full height.
- Slip the wheel onto the top of turntable with help of rollers.
- Lower the wheel lifter so that the wheel can be positioned on the center of the turntable and in the meantime and align the driving pin with one of the wheel lug holes so that the pin goes into the lug hole
- If necessary, select the cone that best fits the center hole in the wheels. Slide the cone onto the center post of the clamping device with the small end towards the central hole of the rim.
- Install the clamping device into the turntable through the central hole of the rim. Turn it clockwise at about 45° to the locking position.
- Tighten the clamping device by pushing its command.

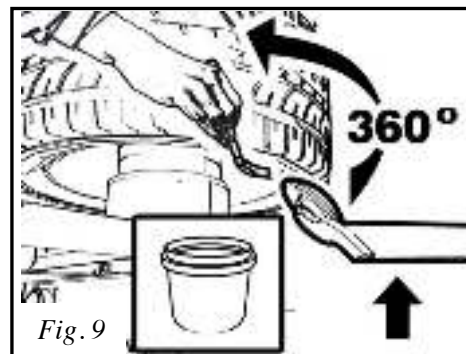
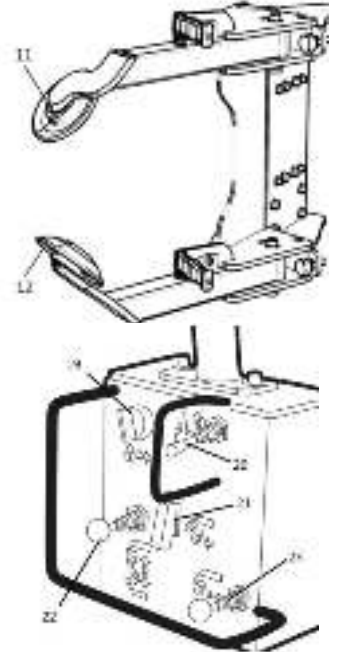
5.2 BREAKING THE BEAD



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


During bead breaking operations NEVER touch the side of the tire by hands.


- Bring the lower breaker disc (12) out of working position.
- Set the selector (19) to the unlocking position.
- Move the upper bead breaker disc (11) within 3mm - 6mm of the rim edge above the tire by operating the command (23).
- Set the selector (19) to the locking position.
- Lower the upper bead breaker disc by operating the command (22) until it touches the tire. At same time start to rotate the turntable clockwise.
- Keep pushing down the command (21) so that the upper bead breaker disks goes down in small increments when the tire rotates to begin the breaking operations.
- Once the bead breaker disc has created enough space, start to lubricate carefully with the special grease on both the rim and the tire bead (ref. fig.8).
- Keep turning the turntable (counter-clockwise rotation is suggested in this procedure) until the upper bead goes into the rim's drop center and then keep pushing the command (21) until the upper bead of tire is come out of the rim completely.
- Bring the upper breaker disc out of working position.

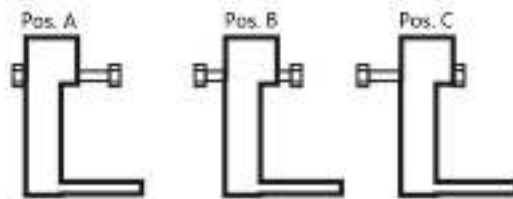
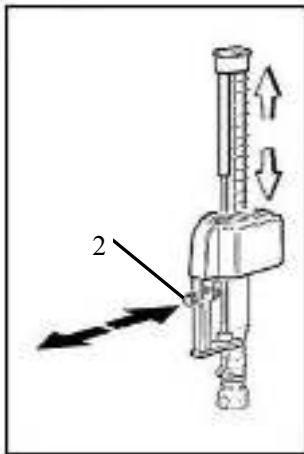


- Set the selector (19) to the unlocking position.
- Move the lower bead breaker disk (12) within 3mm - 6mm of the rim edge under the tire by operating the command (23).
- Set the selector (19) to the locking position.
- Raise the lower bead breaker disc by operating the command (22) until it touches the tire. At same time start to rotate the turntable clockwise.
- Keep pushing down the command (21) so that the lower bead breaker disks goes down in small increments when the tire rotates to begin the breaking operations.
- Once the bead breaker disc has created enough space, start to lubricate carefully with the special grease on both the rim and the tire bead (ref. fig.9).
- Keep turning the turntable until the lower bead goes into the rim's drop center and then keep pushing the command (21) until the lower bead of tire is come out of the rim completely.

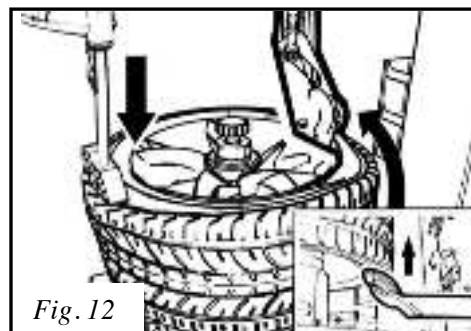
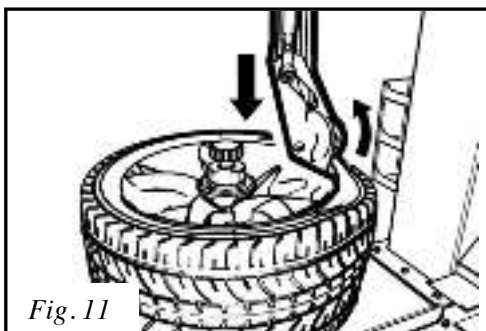
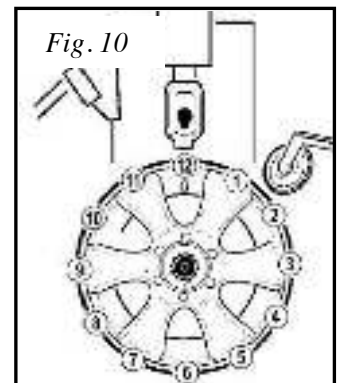
5.3 REMOVING THE TIRE

	<p>This procedure could set the operator at risk of hand crushing between rim and mounting head. Never keep your hands onto the wheel.</p> <p>Never stand besides the tire changer when the arm is swinging.</p>
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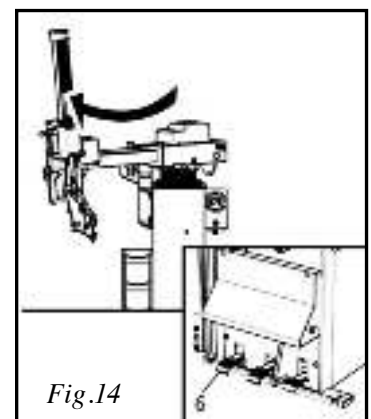
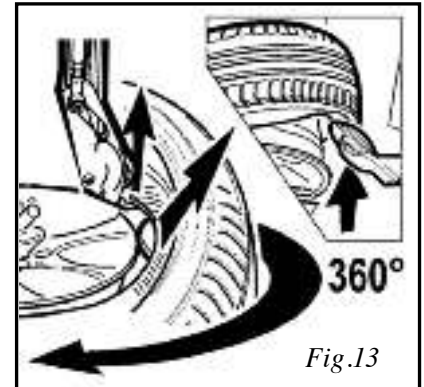
	<p>Demounting and mounting are always done with the clockwise rotation. Counter clockwise rotation is used only to correct operator's errors.</p>
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- Make sure to rotate the turntable until the valve at 1 o'clock (ref. fig.10) so that the valve cannot be damaged during the demounting procedures.
- Make sure that the horizontal arm is in the working position.
- Set the locking button (2) in "Pos. B", the horizontal arm is unlocked and the mounting tool goes down onto the rim or reaches the minimum working height.
- Set the button (2) in "Pos. A" to lock the mounting bar and the horizontal arm. The mounting tool positions itself automatically at about 2mm from the rim.
- Press the command (3) to insert the mounting hook between the upper bead and the rim (ref. fig.11). Position it on the top part without forcing the tire excessively. If it is difficult to attach the the hook to the tire bead, rotate the turntable until the hook attaches the tire bead correctly.
- With the mounting hook inserted between the bead and the rim, lift the tire bead up by raising the command (3). To facilitate moving the tire with stiff sidewall, it is suggested to press the tire in the opposite position of the tool with help of the bead depressor and the upper bead breaker disk (ref. fig.12).



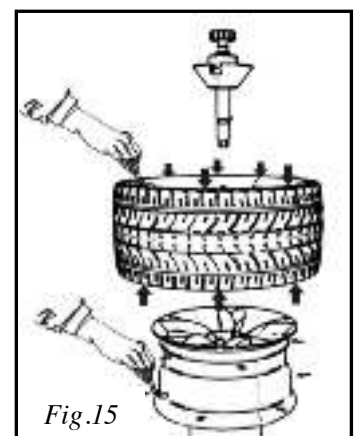
- Rotate the turntable 360° in a clockwise direction until the upper bead is completely separated from the rim. To remove the tire with stiff sidewall, it is advisable to rotate the turntable in the slow mode (if the double speed mode is available with the machine).
- Rotate the turntable until the valve at 1 o'clock.
- Insert the mounting hook between the lower bead and the rim (ref. fig.13).
- Position the lower bead breaker disc in the bottom of the tire and lift the lower bead upwards until it is raised about 10mm beyond the upper edged of the rim (ref. fig. 12).
- Raise the mounting hook so that the lower bead is in the demounting position.
- Rotate the turntable 360° in a clockwise direction until the lower bead is completely separated from the rim. To remove the tire with stiff sidewall, it is advisable to rotate the turntable in the slow mode (if the double speed mode is available with the machine). Pay attention that the tire is not strained excessively during the last removing phase.
- Swing the horizontal arm out of working position by depressing its pedal (ref. fig.14). Make sure nobody stands besides the machine during arm swinging.
- Remove the tire just remounted.
- After completing the removing procedure, bring the lower bead breaker disk out of the working position.



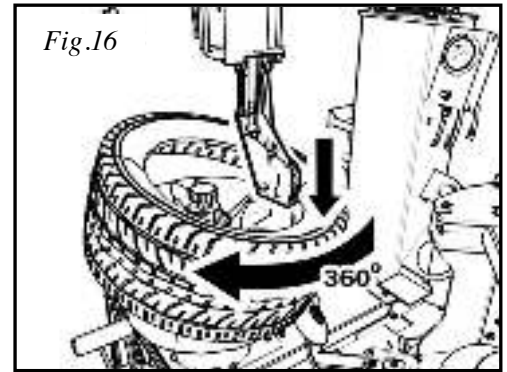
5.4 MOUNTING THE TIRE

	<p>It is utmost important to check the tire and rim to prevent tire explosion during the inflating operations. Before beginning mounting operation, make sure the tire and cord fabric are not damaged.</p> <p>Make sure the diameter of the rim and tire are exactly the same.</p> <p>Keep hands and other parts of the body as far as possible from the tool arm when the spindle flange is turning.</p> <p>Never stand besides the tire changer when the arm is swinging.</p>
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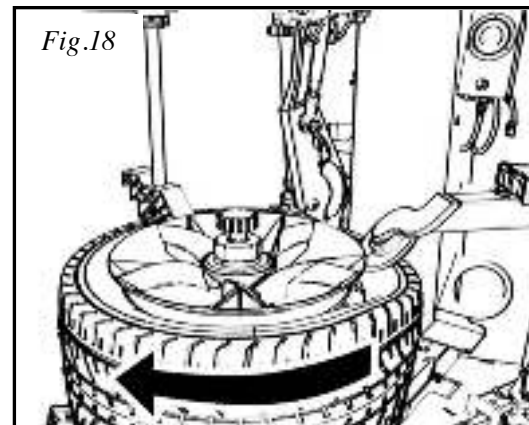
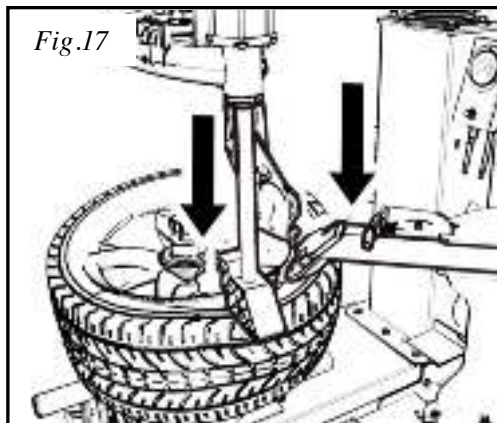
- Lock the rim on the turntable.
- With the special grease carefully lubricate the whole inner surface of the rim and the tire beads, both externally and internally around the circumference for thickness of 30mm at least (ref. fig.15).
- Place the tire horizontally on the rim.



- Lower the mounting tool so that the rear section of the mounting head rests on the rim edge (ref. fig.16).
- Position the tire tilted towards to 3 o'clock position (ref. fig.15).
- Manually press the upper bead of the tire in 5 o'clock position and meanwhile rotate the turntable in a clockwise direction until the lower bead drops below the top edge of the rim completely.
- Make sure the upper bead does get in between the rim and the upper bead breaker disk.
- Make sure the tire and the rim rotate together as one.



- Press the upper bead of tire with the upper bead disc by approximately 30mm (ref. fig.17). Make sure the upper bead
- Press the upper bead in 5 o'clock position with the press tool of the press arm (ref. fig.17).
- Rotate the turntable in a clockwise direction until the upper bead drops below the top edge of the rim completely (ref. fig.18).



- Swing the horizontal arm out of working position. Make sure nobody stands besides the machine during arm swinging.
- Bring the bead breaker disks out of the working position.
- Bring the mounting tool out of working position.

CHAPTER 6 – INFLATING



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

▲ DANGER



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.

The tire changer is automatically limited to a maximum inflating pressure of 3.5 bar (51 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.



If the tire bead fails to fit in place during inflation at the maximum pressure of 3.3 bar, it is needed to repeat the bead breaking and lubricating procedure of the tire itself and then try inflating again.

6.1 INFLATING TIRE USING AIRLINE GAUGE

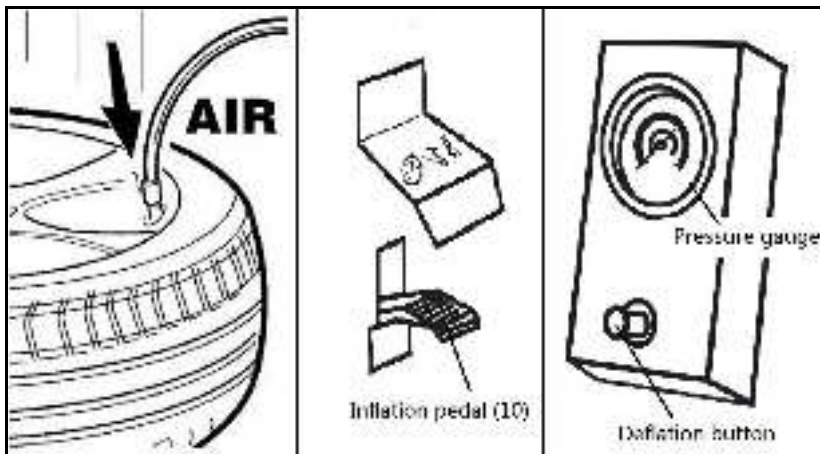




Fig.19

- 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.
- Depress and release the inflation pedal (10) continuously and check the pressure on the gauge frequently until the tire bead seats completely on the rim.
- Continue inflating until the pressure reaches that recommended by the tire manufacturer. Always inflate in short blasts and always check the pressure while inflating.
- If the inflated pressure exceeds the value recommended by the tire manufacturer, press the deflation button to deflate the tire.

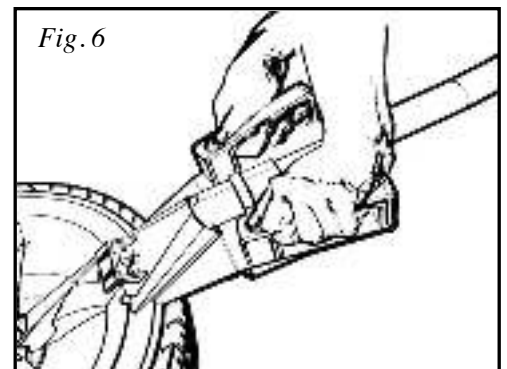
6.2 INFLATING TIRES WITH GT SYSTEM (optional)

The GT inflation system (supplied at a special request) provides a powerful jet of air to seat the tire beads.

⚠ DANGER	ONLY special trained personnel are allowed to perform these operations. Do not allow other persons to operate or to stay near the tire changer.
	Never exceed 3.5 bar (51 psi) when seating beads or inflating tires. Never exceed the max. inflating pressure given by the tire manufacturer. Make sure to hold on the inflating handles firmly while doing the quick blaster.

	During the phase of quick blasting, the level of noise can reach 85db (A). It is advisable to use a noise protection. NEVER point the nozzle at people. Make sure to hold the handles of nozzle firmly. Failure to do so can be dangerous.
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- Lock the wheel on the turntable.
- 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 and release the pedal (10) continuously and check the pressure on the gauge frequently until the tire bead seats completely on the rim.
- If the bead of the tire is not well seated due to a strong bead, position the blasting nozzle towards to the rim center just under the rim lip then press the buttons (ref. fig.6) all the way down: a strong jet will be released through the nozzles in the slides and this will help the bead seal. Make sure to hold the blasting handles firmly during this operation.
- Continue inflating by pressing the pedal (10) until the pressure reaches that recommended by the tire manufacturer. Always inflate in short blasts and always check the pressure while inflating.
- If the pressure exceeds the value recommended by the tire manufacturer, press the deflation button to deflate the tire.



CHAPTER 7 – ACCESSORIES

7.1 STANDARD ACCESSORIES

The following accessories are supplied with the tire changer as standard in the accessory box:

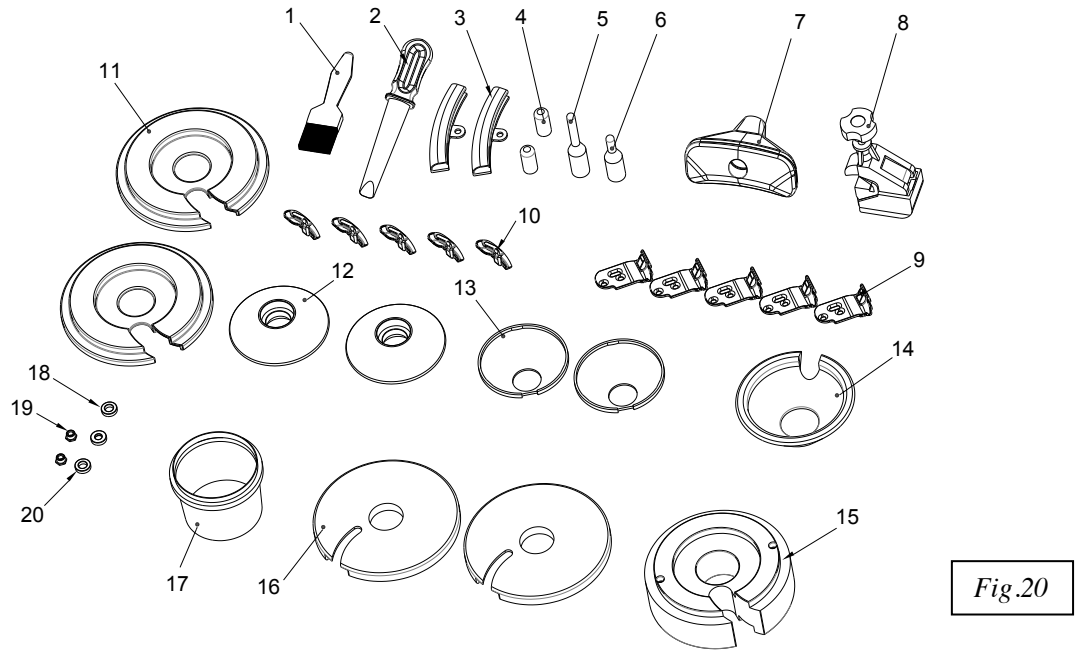


Fig.20

Item	Part number	Description	Q'ty
1	0511063	Grease brush	1
2	0604092	Plastic lever	1
3	0604085	Rim protection	2
4	C107000006	Driving pin protection	2
5	C33A500007	Driving pin 124	1
6	C33A500008	Driving pin 85	1
7	YCP-3008404A	Bead press tool	1
8	0604083	Hand free clamp	1
9	C01C700006	Tool protection 2	5
10	C01C700011	Tool protection 1	5
11	C34A500002	Turntable protection 1	1
12	C34A440003	Bead breaker disc	2
13	C33A540003	Cone protection	2
14	C33B540007	Cone	1
15	C33P500004	Turntable extension	1
16	C33A500002	Turntable protection 2	2
17	YC1-4299984	Grease cup	1
18	C01C700007	Roller	1
19	C01C700014	Bearing inner bush	2
20	C01C700015	Bearing outer bush	2

7.2 OPTIONAL UNIVERSAL FLANGE

The universal flange C107030000 can be supplied by the manufacturer if requested for clamping the wheel without the central hole but with 4-5-6 lug holes, or for clamping the wheel with back to front channel.

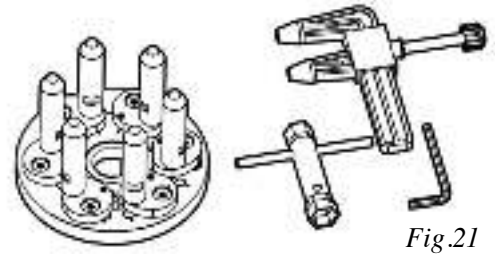


Fig.21

7.2.1 CLAMING WHEEL WITHOUT CENTRAL HOLE

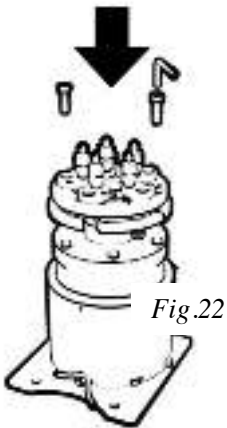


Fig.22

- Fit the flange onto the turntable. Make sure to position it properly. Secure the flange using two bolts supplied (ref. fig.22).

- Choose the lug pattern on the flange according to wheel lugs. **Note:** The cam beside the number 4, 5, 6 should be fixed forever. To accommodate the wheel, only other cams need to be adjusted.

- With the caliper supplied, measure the distance between 2 adjacent lugs on the wheel and tighten the knob to fix this measurement (ref. fig. 23).

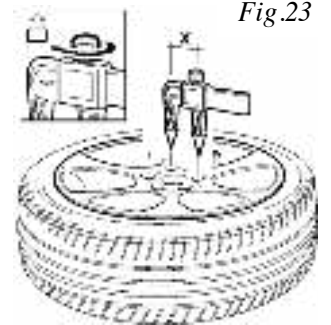


Fig.23

- Use the caliper with the lug measurement fixed to align the distance between each 2 adjacent lug-nuts on the cams of flange (ref. fig.24). **Note:** To align perfectly, make sure to eliminate the play between the fixing screws and cam holes by pushing each came toward one side.

- Tighten the screws of cams securely.

- Remove the lug-nuts from the thread pins.

- Mount the wheel onto the turntable.

- Fit the lug-nuts onto the thread pins. Secure nuts using the wrench supplied (ref. fig. 25).



Fig.24



Fig.25

7.2.2 CLAMING WHEEL WITH BACK TO FRONT CHANNEL

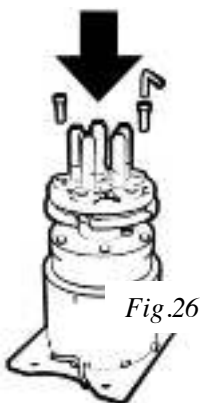


Fig.26

- Fit the flange onto the turntable and secure it using two bolts supplied (ref. fig.26). Make sure to position it properly.

- Choose the lug pattern on the flange according to wheel lugs. **Note:** The cam beside the number 4, 5, 6 should be fixed forever. To accommodate the wheel, only other cams need to be adjusted.

- With the caliper supplied, measure the distance between 2 adjacent lugs on the wheel and tighten the knob to fix this measurement (ref. fig. 23).

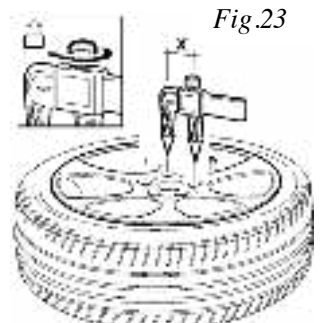


Fig.23



- Use the caliper with the lug measurement fixed to align the distance between each 2 adjacent pins on the cams of flange (ref. fig.27). **Note:** To align perfectly, make sure to eliminate the play between the fixing screws and cam holes by pushing each came toward one side.
- Tighten the screws of cams securely.
- Mount the wheel onto the turntable.
- Clamp the wheel using the clamping device (ref. fig. 28).

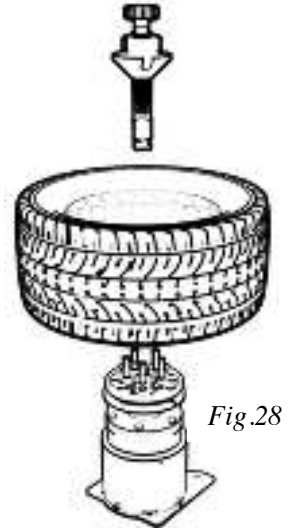


Fig.28

7.2.3 CLAMING WHEEL WITH FLANGE OPPOSITE

For the wheel not possible to be clamped with the cones, it can be clamped by placing the flange in the opposite way.

- Put the wheel onto the turntable.
- To align the pins on flange following the procedures described in the chapter 7.2.2.
- Fit the flange onto the holes of the wheel (ref. fig.29).
- Clamp the wheel using the clamping device (ref. fig.29).



Fig.29

CHAPTER 8 – MAINTENANCE

8.1 GENERAL WARNINGS



Unauthorized personnel may not carry out maintenance work.

Before carrying out any maintenance work, make sure to disconnect the electric and pneumatic supplies

- 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.
- Defective parts must be replaced exclusively by expert personnel using the manufacturer's parts.
- Removing or tampering with safety devices is extremely forbidden.

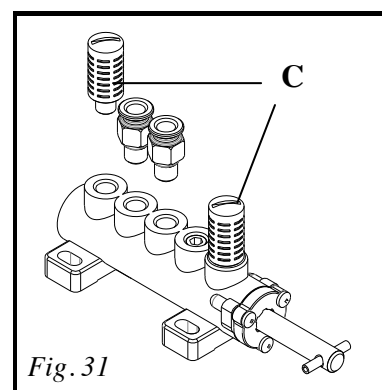
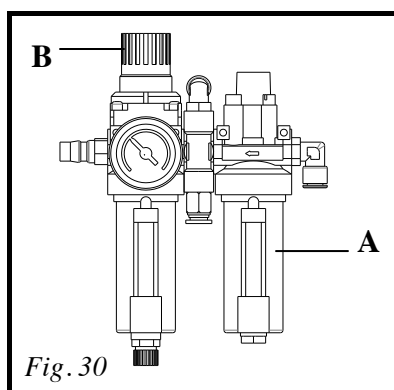


In particular the Manufacturer shall not be held responsible for complaints deriving from the use of spare parts made by other manufacturers or for damage caused by tampering or removal of safety systems.

8.2 ROUTINE MAINTENANCE

To ensure that this tire changer works perfectly over the years, carry out the routine maintenance schedule described below:

- The tire changer has to be properly cleaned at least once a month using self-cleaning clothes. Lubricate all pivot pins and the sliders at least once a week.
- Check the oil level in the lubricator (A/fig.30) at least once a month. If the oil level is below the middle of glass cup, add the oil SAE30.
- Check function of the pressure regulator (B/fig.30) at least once a month. Be sure the pressure regulator should never be adjusted to exceed 10 bars.
- All air silencers should be removed and cleaned properly by a jet of compressed air every three months (ref. C/fig.31), or replace if it is damaged.
- In the event of a loss of power, check that the drive belt is tight. Adjust its tension if necessary.

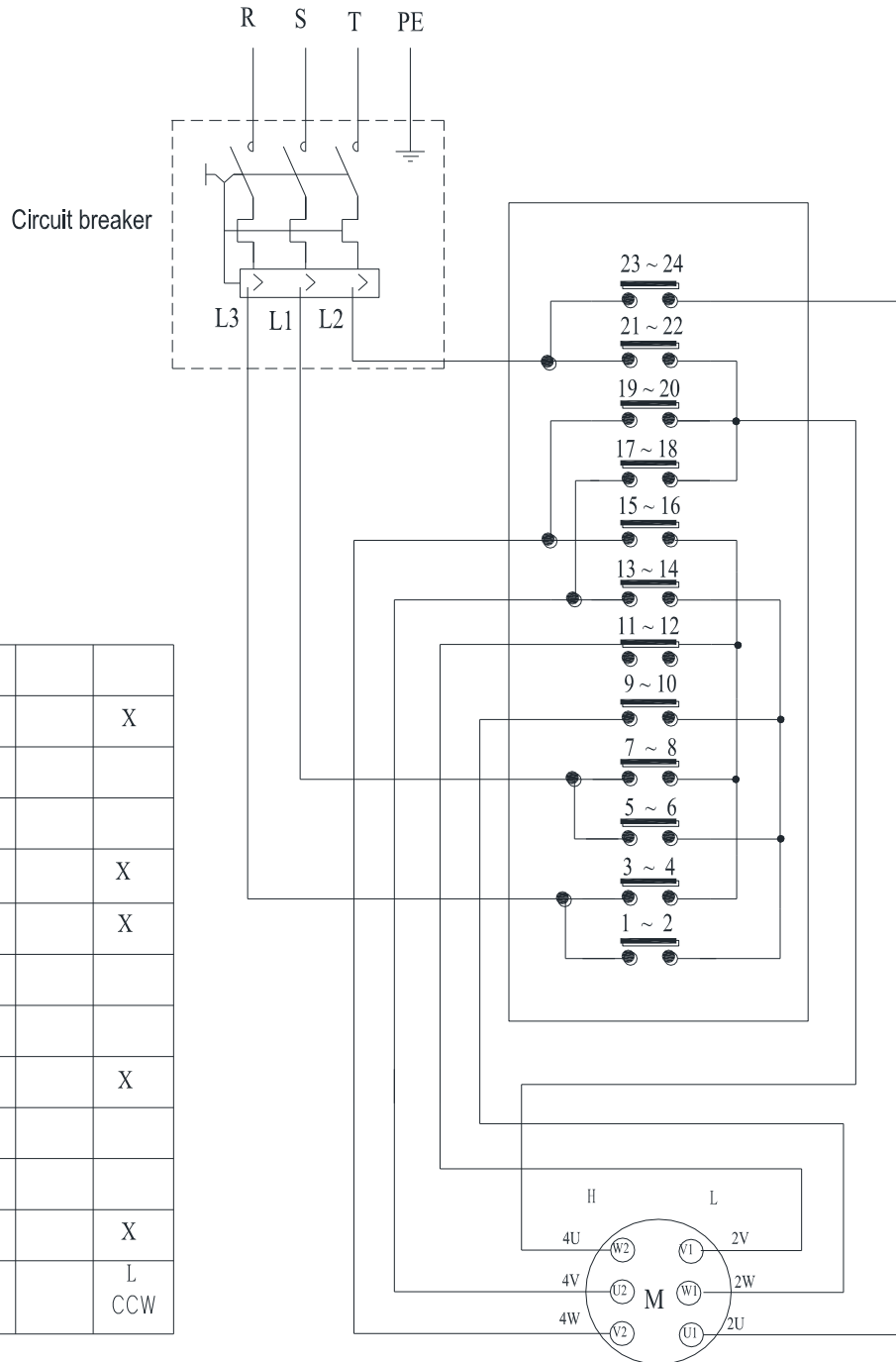


CHAPTER 9 – TROUBLE-SHOOTING

TROUBLE:	POSSIBLE CAUSE:	SOLUTION:
Turntable rotates only in one direction.	Reverser broken	Replace the reverser
Turntable does not rotate.	No electric power	Check the machine is plugged in the power
	Motor pulley loosen	Secure the pulley
	Belt loosen or broken	Tension the belt or replace
	Reverser broken	Replace the reverser
	Motor faulty	Check for loose wire in the motor, plug or socket. Replace motor
Turntable rotates continuously	Reverser broken	Replace the reverser
	Pedal spring broken	Replace the spring
Turntable rotates but the wheel stays still	Wheel is not locked well.	Check and lock the wheel well
The bead breaker disc does not move or moves very slowly	No air supply	Check the line pressure
	Control valve disconnected or broken	Check or replace the valve
	Silencer obstructed	Clean the silencer or replace it
	Cylinder seal broken	Replace the seal
	Distributing valve broken or malfunction	Check and replace the valve if necessary
The bead breaker disc moves correctly but does not make the over stroke movement	No air supply	Check the line pressure
	Control valve disconnected or broken	Check or replace the valve
	Silencer obstructed	Clean the silencer or replace it
	Cylinder seal broken	Replace the seal
	Distributing valve broken or malfunction	Check and replace the valve if necessary
	Over stroke command faulty	Replace the command
The tool touches the rim during the tire removing or mounting operations	Locking plate incorrectly adjusted or defective	Adjust or replace locking plate
The tool does not move vertically	No air supply	Check the line pressure
	The fitting disconnected	Reconnect the fitting correctly
	Control valve disconnected or broken	Check or replace the valve
	Silencer obstructed	Clean the silencer or replace it
	Cylinder seal broken	Replace the seal
The wheel lifter does not move or moves very slowly	No air supply	Check the line pressure
	Control valve disconnected or broken	Check or replace the valve
	Silencer obstructed	Clean the silencer or replace it
	Cylinder seal broken	Replace the seal
The wheel lifter does not stop its stroke	Control valve disconnected or broken	Check or replace the valve

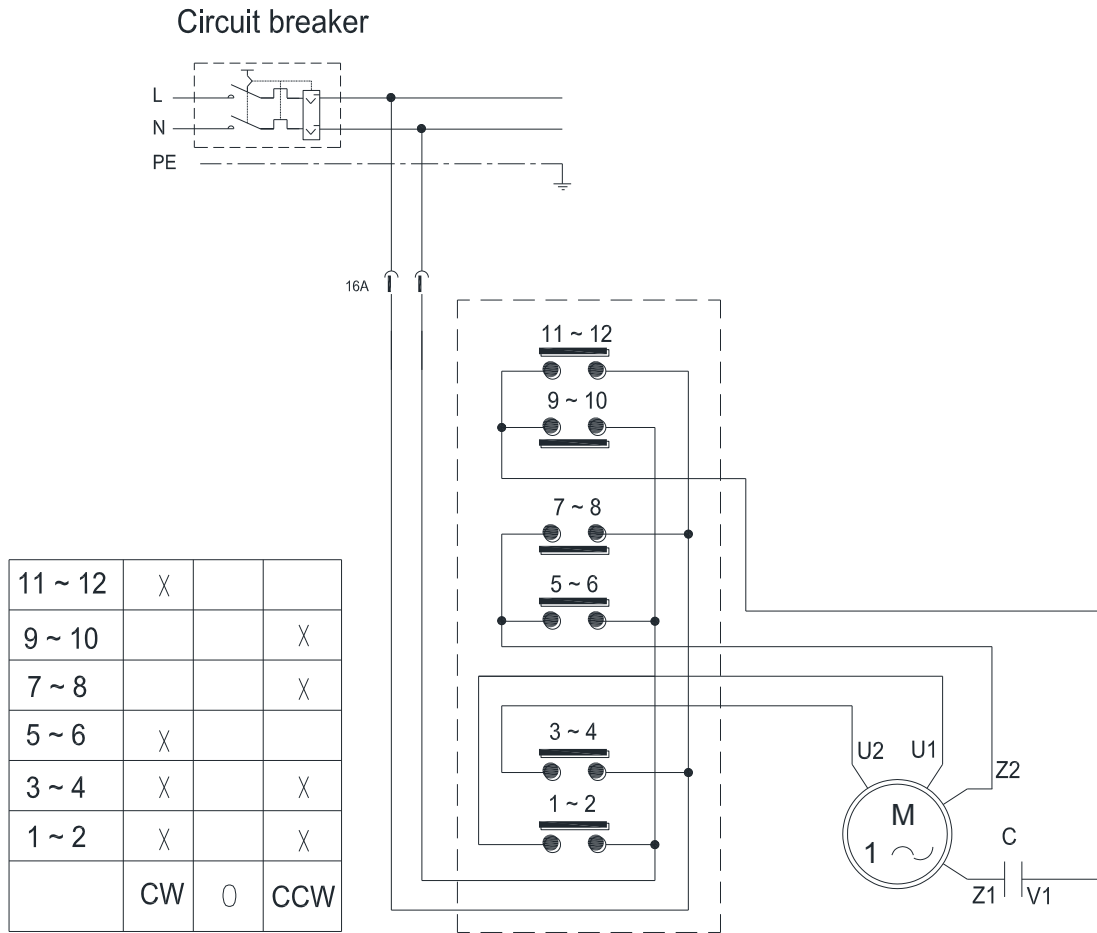
CHAPTER 10 – ELECTRIC AND PNEUMATIC DIAGRAM

220V/230V/380V/400V – 3PH (DOUBLE SPEED)

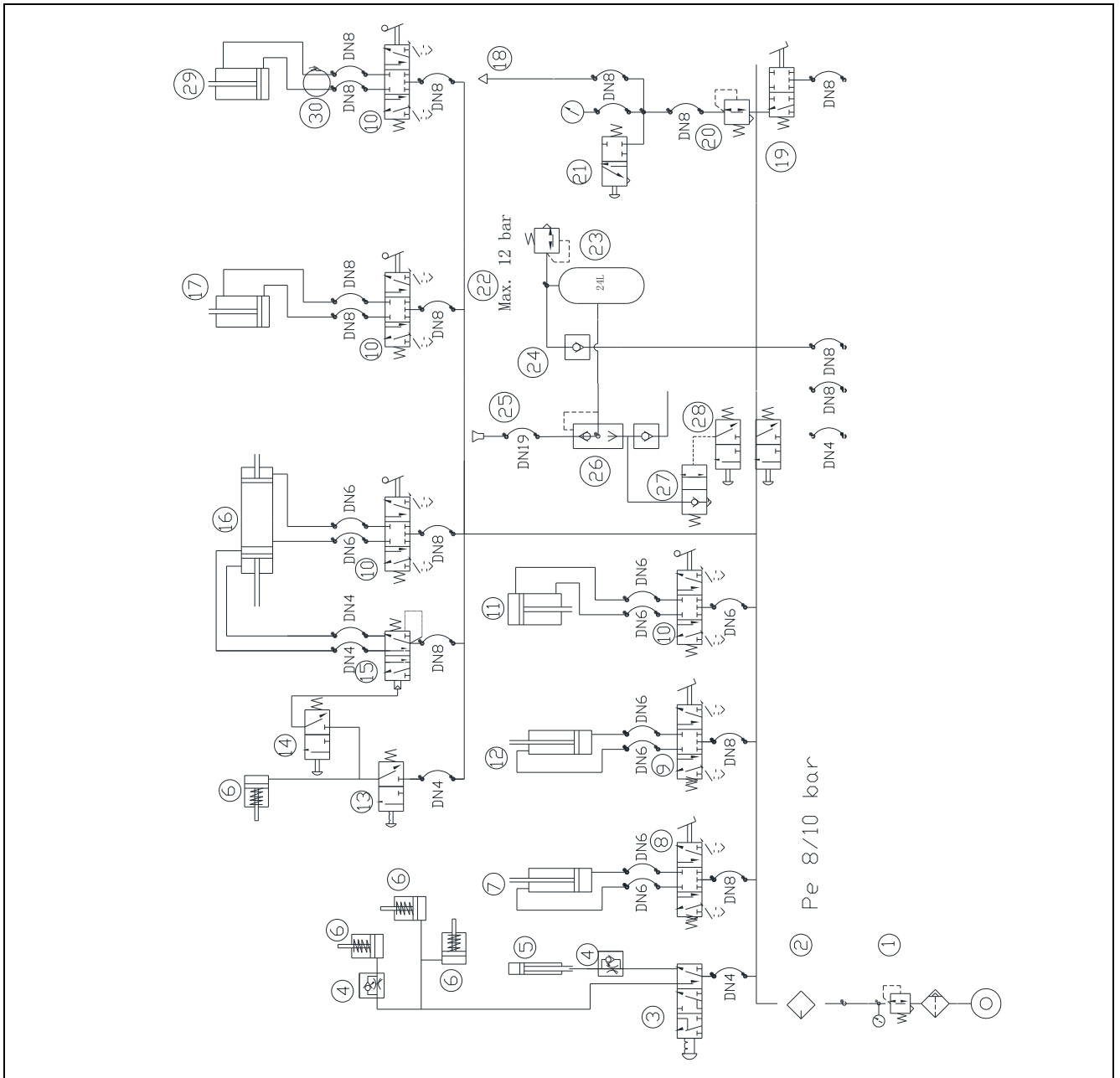


23 ~ 24	X			
21 ~ 22		X		X
19 ~ 20	X			
17 ~ 18	X			
15 ~ 16		X		X
13 ~ 14		X		X
11 ~ 12	X			
9 ~ 10	X			
7 ~ 8				X
5 ~ 6	X	X		
3 ~ 4	X	X		
1 ~ 2				X
	H CW	L CW		L CCW

220V/230V – 1PH



PNEUMATIC SYSTEM DIAGRAM



1	Filter regulator	16	Bear breaker horizontal cylinder
2	Lubricator	17	Bear breaker vertical cylinder
3	Arm locking control valve	18	Inflation nozzle
4	Flow regulator	19	Inflation control valve
5	Mounting head cylinder	20	Inflation regulator 3.5 bar
6	Locking cylinder	21	Deflation valve
7	Arm swinging cylinder	22	Safety valve 12 bar
8	Arm swinging pedal	23	Air tank
9	Wheel lifter pedal	24	One way valve
10	Control valve	25	GT blasting nozzle
11	Left helper cylinder	26	GT valve
12	Wheel lifter cylinder	27	One way safety valve
13	Bead breaker locking selector	28	GT blasting button
14	Bead breaker over-stroke command	29	Clamping cylinder
15	Air distribution valve	30	Rotation union