



Atlas TC205 No-Touch Tire Changer

OPERATION MANUAL



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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

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CHAPTER 1 – INTRODUCTION

1.1 INTRODUCTION

Thank you for purchasing a product from the line of 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 machine in the box below. If there is any discrepancy between the data provided in this manual and that shown on the name plate fixed to the wheel balancer, the latter should be taken as correct.

LOGO		
Type:		
Volt	Amp	Kw
Ph	Hz	
Year of manufacturing:		

1.3 MANUAL KEEPING

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

- Keep the manual near the lift, 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 manual: it shall be given to the new owner if and when the machine is resold.

	<p>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.</p>
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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 touchless tire changer has been designed and manufactured exclusively for removing and mounting the tires from/onto rims from 10" to 30" and a maximum diameter of 1200mm.
- 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 GENERAL SAFETY PRECAUTIONS

- The machine should only be used by duly authorized and trained personnel.
- The machine should not be used for purposes other than those described in the instruction manual.
- Under no way should the machine be modified except for those modifications made explicitly by **THE MANUFACTURER**.
- Never remove the safety devices. Any work on the machine should only be carried out by specialist 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.
- The machine operator should avoid wearing clothes with flapping edges. Make sure that unauthorized personnel do not approach the machine during the work cycle.

2.3 SAFETY DEVICES

The tire changer has a number of safety devices designed to guarantee the upmost safety:

- **Pressure relief valve set at 130 bar \pm 10%.** This limits the pressure in the hydraulic line and ensures correct operation of the plant.
- **Pump motor overload cut-off** (inside the electric enclosure). This cuts if the motor overheats to prevent it from burning out.
- **Air relief valve set at 10 bar.** This limits the pneumatic pressure in the air tank and ensures the safety.

2.4 TECHNICAL SPECIFICATION

Handles rim from	10" – 30"
Max. tire diameter	1200mm
Tire width	75 - 500mm (3' - 20")
Rotating speed	6 – 13 rpm
Max spindle torque	1200 NM
Hydraulic pump motor	1.5kw
Gear-box motor	0.8kw/1.1kw (3 ph double speed)
	0.8kw (variable speed with inverter)

Power supply voltage	220V 380V 400V 3 Ph
	110V 220V 230V 1Ph
Max. hydraulic pressure	130 bar
Compressed air pressure	8 – 10 bar
Noise level in working condition	< 70 dB (A)

2.5 PRODUCT DESCRIPTION

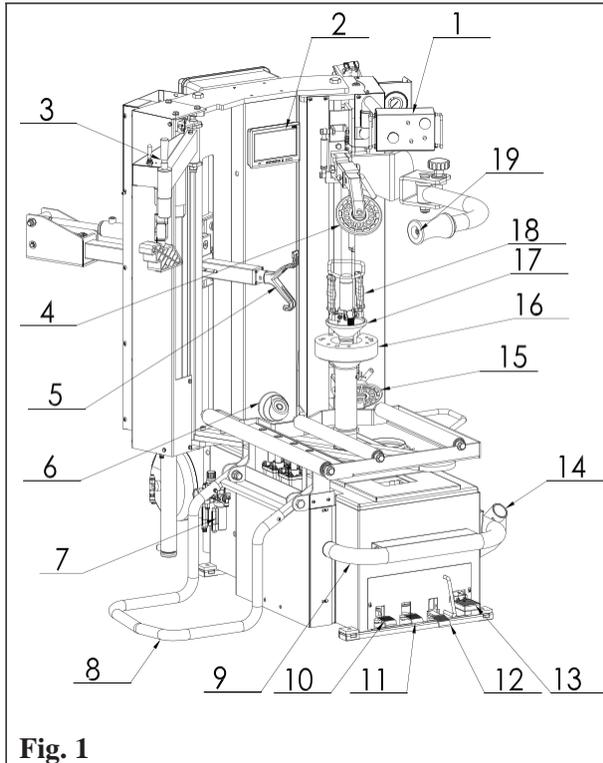


Fig. 1

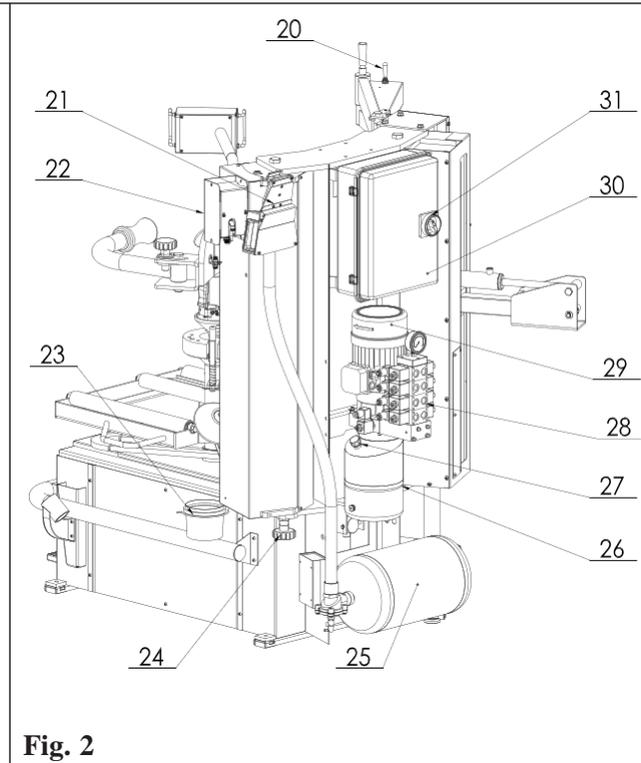


Fig. 2

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|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> 1. Control panel 2. Video monitor 3. Left press arm 4. Upper bead breaker disk 5. Tool head 6. Camera 7. Lubricator/filter 8. Wheel lift 9. Protection bar 10. Wheel lift control pedal 11. Tool head control pedal 12. Inflation pedal 13. Turntable rotation pedal 14. Central post storage 15. Lower bead breaker disk 16. Turntable | <ul style="list-style-type: none"> 17. Cone 18. Quick locking nut 19. Bead press roller 20. Reversible drop centre tool controller 21. Blasting assembly 22. Inflation pressure gauge 23. Grease cup 24. Arm tightening knob 25. Air tank for blasting 26. Hydraulic oil tank 27. Oil fill/level plug 28. Hydraulic valve group 29. Hydraulic unit motor 30. Electric box 31. Power switch |
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	<p>During all operations, keep hands and other parts of the body as far as possible from any moving part of the machine. Necklaces, bracelets and too large cloths, can be dangerous for the operator.</p>
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2.6 WARNING SIGNS

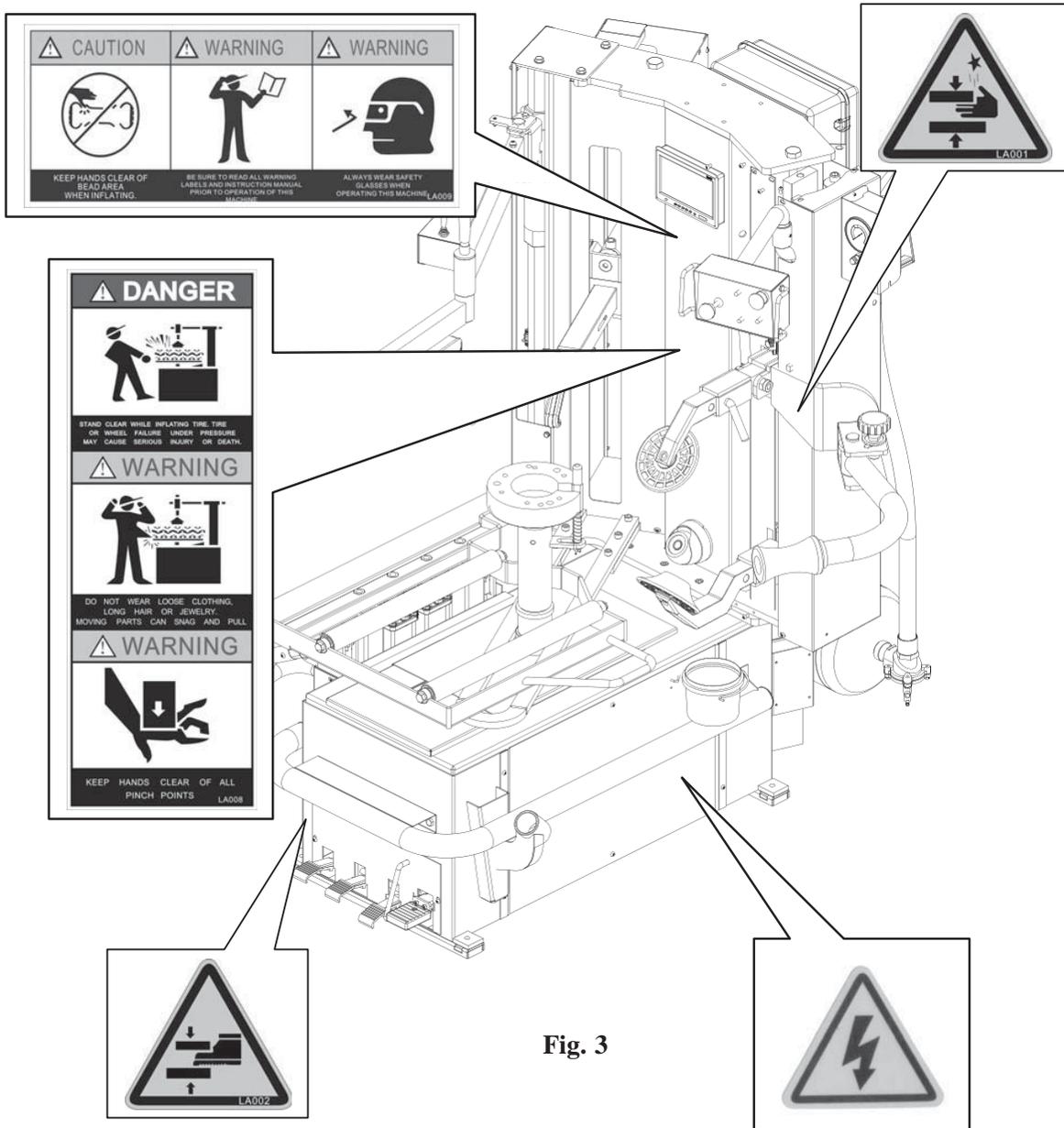


Fig. 3

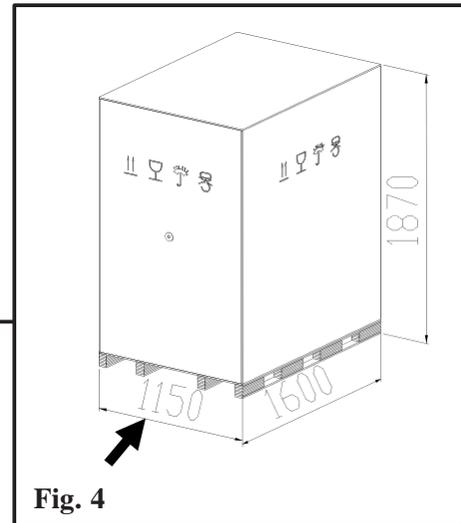
	<p>Unreadable and missing warning labels must be replaced immediately. Do not use and add any object that could prevent the operator from seeing the labels.</p>
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CHAPTER 3 – TRANSPORTATION AND UNPACKING

3.1 TRANSPORTATION

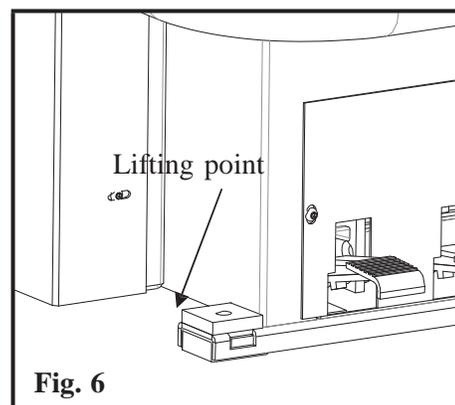
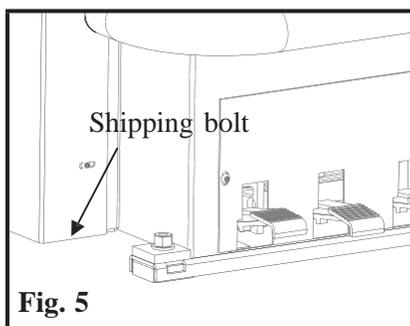
- The machine must be transported in its original packaging and kept in the position shown on the package itself.
- The packaged machine may be moved by means of a fork lift truck of suitable capacity. Insert the forks at the points shown in fig. 4.

Standard: 640Kg



3.2 UNPACKING

- Carefully remove the crate fasteners and use a lifting device to lift the crate off the machines.
- Carefully cut plastic wrapping off.
- Remove the accessories box from the package.
- Check that the equipment is in perfect condition, making sure that no parts are damaged or missing. If in double do not use the machine and contact your dealer.
- Carefully shipping bolts (ref. fig. 5) off the machine from the shipping pallet.
- Using adequately rated lifting straps, position the machine by lifting it from the lifting points indicated in the figure 6.



CHAPTER 4 – INSTALLATION

4.1 WORKING SPACE REQUIRED



When choosing the place of installation, make sure that it complies with the local safety regulations.

- The machine must be located on a flat floor of solid construction, preferably concrete. If the floor is uneven or broken, the machine will be not stable and the platform roller cannot move freely.
- 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 7-7A 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 following work environment conditions are applicable:
 - Relative humidity from 30-95% without condensation;
 - Temperature from 0-55°C.



These measurements are also the tire changer working area. Persons other than specially trained and authorized operators are extremely forbidden to enter this area.

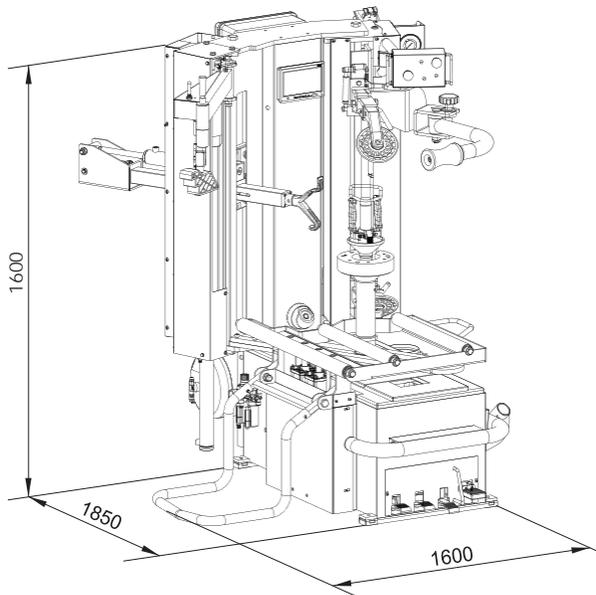


Fig. 7

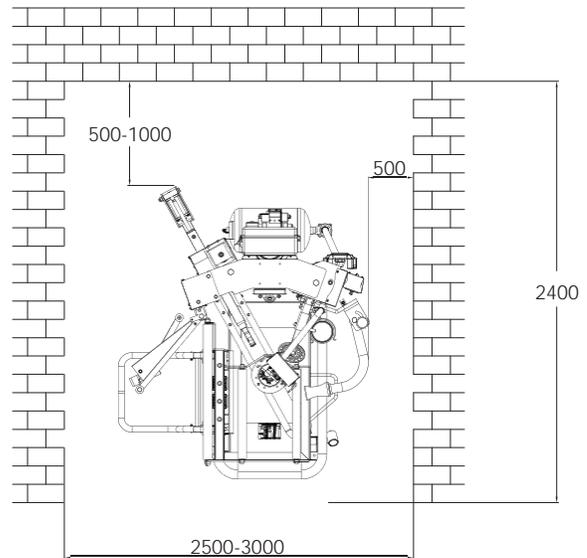
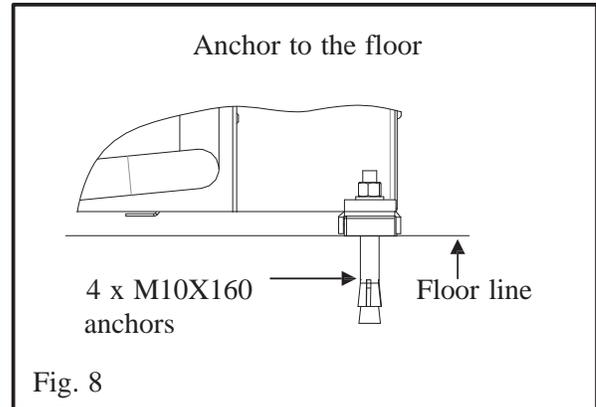


Fig. 7A

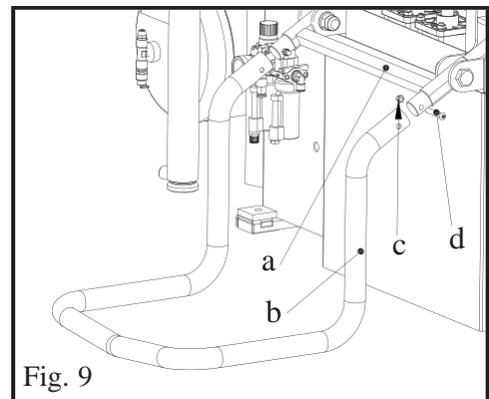
4.2 ANCHORING

It is not essential to anchor the machine to the floor, however, the floor must be smooth and level. When anchoring to a concrete floor use the mounting holes that are provided in the machine body. Make sure the machine is solid and level and supported evenly on all anchor points. Solid shims may be used if necessary. (ref. fig.8).



4.3 PARTS ASSEMBLY

- Bolt the wheel lift cradle (b) to the bracket (a) mounted on the body using the screws M8X45 (d) and nuts M8 (c) supplied with the machine. (ref. fig.9)
- Place the cones to the storage.
- Place the central post into the storage.



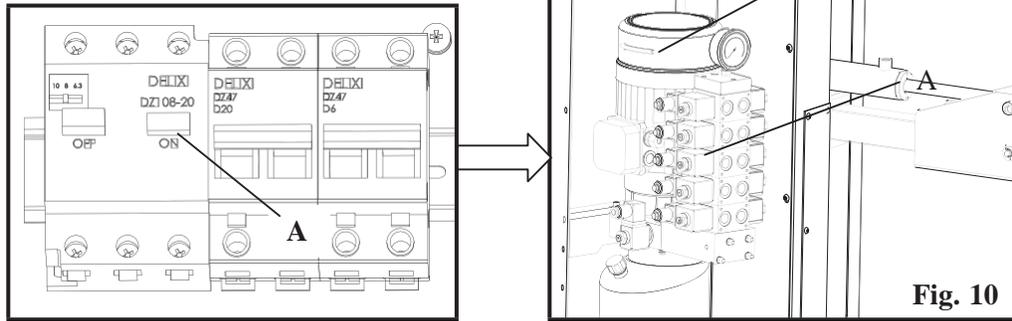
4.4 COMMISSIONING

	<p>Any electric connection job must be carried out by professionally qualified personnel.</p> <p>Make sure that the power supply is right.</p> <p>Make sure the connection of the phases is right. Improper electrical hook-up can damage motor and will not be covered under warranty.</p>
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- 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 attached in this manual.
- Connect the machine to the compressed air system by means of the air connection that protrudes from the rear section.

	<p>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.</p> <p>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.</p>
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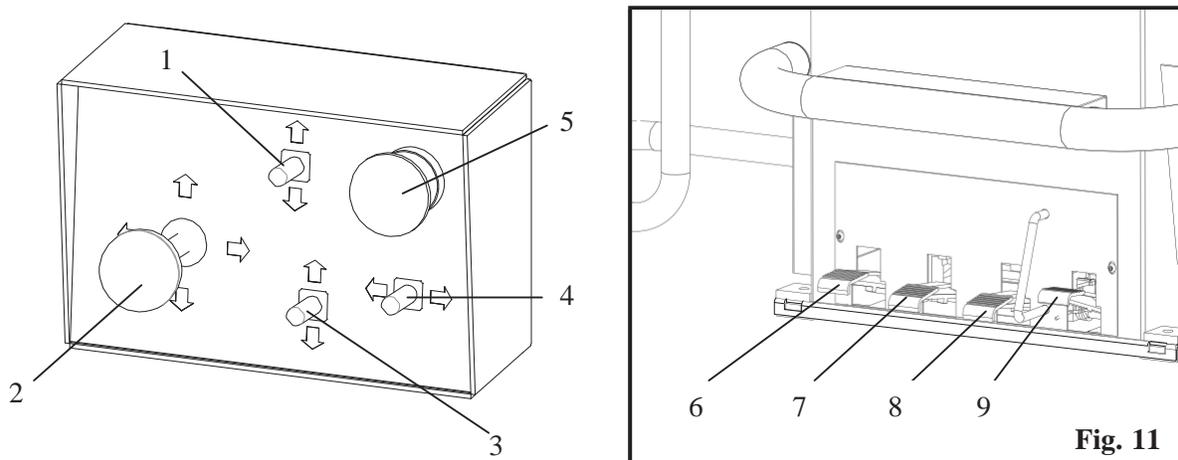
- Be sure to pour hydraulic oil to the oil tank *about 5 liters* (C-fig.10) with Esso Nuto H46 or similar hydraulic oil.
- Set the circuit breaker (A-fig.10) in the power box to set it in “On” position.
- Switch the power switch (B-fig.10) to the position “On” and check that the motor rotation corresponds to the indicating arrow (C-fig.10).
- If not, switch two wires in the plug.



4.5 CONTROLS

4.5.1 CONTROL PANEL AND PEDALS (ref. fig.11)

Figure 11- CONTROLS



1. Upper bead breaker disk controller

Move the upper bead breaker disk (4-fig.1) up or down.

2. Tool head control joystick

Move the tool head (5-fig.1) forward/backward and up/down.

3. Lower bead breaker disk controller

Move the lower bead breaker disk (15-fig.1) up or down.

4. Turntable controller

Move the turntable (16-fig.1) forward or backward.

5. Emergency stop knob

When pressed, the power is turned off.

6. Wheel lift control pedal

The wheel lift (8-fig.1) can be controlled in three ways:

- When it is depressed completely at the lowest position, the wheel lift will be raised to the top position.
- When it is depressed completely at the top position, the wheel lift will descend to the lowest position.
- By pulse-depressing the pedal, the wheel lift can be lowered slowly so as to get a required position.

7. Tool head rotation pedal

Whenever it is depressed, the tool head (5-fig.1) will rotate at 180 degrees.

8. Inflation pedal

The tire can be inflated by depressing this pedal.

9. Turntable rotation pedal

The turntable (16-fig.1) can be rotated in three ways:

- When it is depressed completely the turntable will rotate clockwise at the normal speed.
- When it is depressed at the half way, the turntable will rotate clockwise at the high speed.
- *For the type with the motor inverter, the turntable speed can be changed clockwise variably by depressing the pedal deeper continuously.*
- By lifting up the pedal by foot, the turntable will rotate counter clockwise.

	Turntable rotation can be stopped at any time by releasing your foot on the rotation pedal..
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4.5.2 BEAD BREAKER DISKS

Both the upper and lower bead breaker disks can be adjustable (ref. fig. 12).

- Both the upper and lower bead breaker disks are preset by the manufacturer in the extended position. This position is for the rim range from 10" to 18".
- To work for the rim range from 18"-30", adjust the bead breaker disks to the retracted position. Be sure to put the lock pins in places after adjustments.
- The upper bead breaker disk will flip up when it reaches to the highest position.
- To flip down the upper breaker disk, press it down manually when it is not at the highest position.
- The height for both upper and lower bead breaker disks can be controlled by the controllers (1-fig.11, 3-fig.11) on the control panel separately.

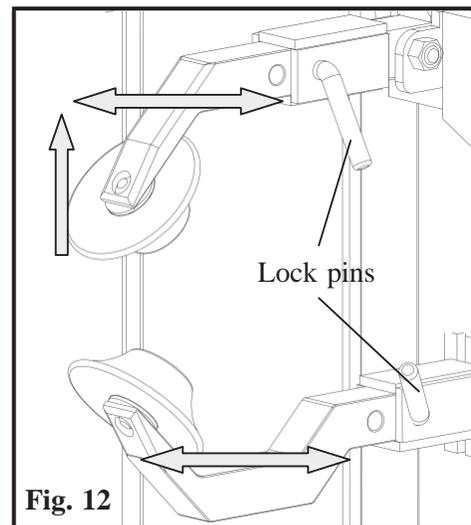
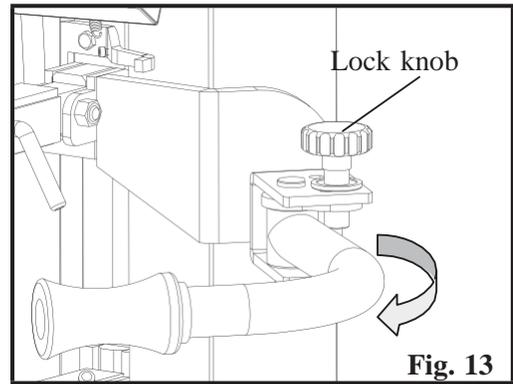


Fig. 12

4.5.3 BEAD PRESS ROLLER

The bead press roller helps press the hard top bead of tire to the drop center of the wheel during mounting and demounting:

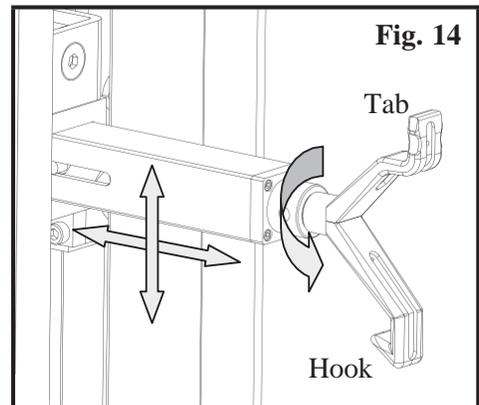
- The height of the bead press roller can be controlled by the same controller (1-fig.11) used for the upper bead breaker disk.
- It should be set at the same height as the top bead breaker disk.
- Unloose the lock knob and set the bead press roller arm to the desired position. (ref.fig.13)
- Secure the lock knob after adjustment.



4.5.4 TOOL HEAD

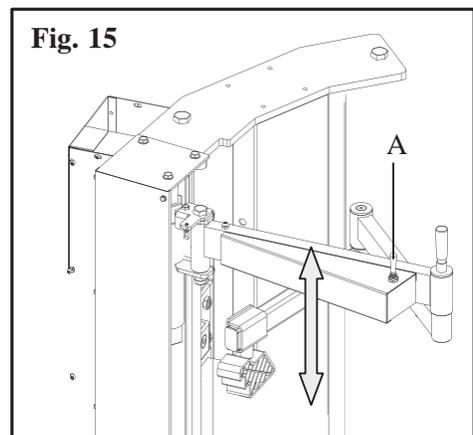
The tool head has two options: steel and plastic. It can be controlled in two ways.

- By controlling the joystick (2-fig.11) on the control panel, the tool head can be raised/lowered and extended/retracted (ref. fig.14).
- By depressing the pedal (7-fig.11), the tool head can be rotated 180 degrees to select either the hook or the tab. (ref. fig.14).



4.5.5 LEFT PRESS ARM

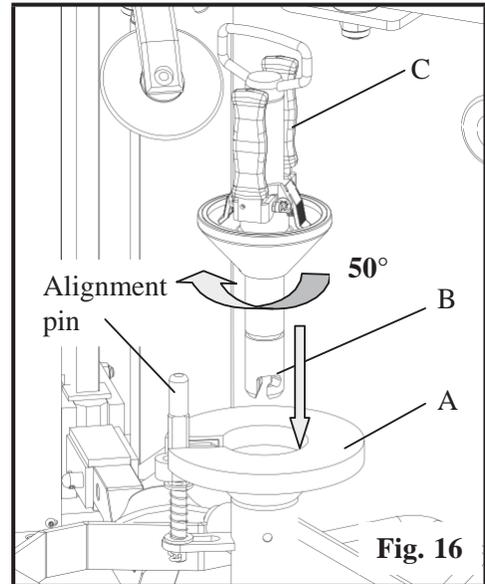
- The arm can be controlled pneumatically using its controller (A-fig.15).
- The tool can be adjusted to the desired length manually by unloosing the screw (B-fig.15). Be sure to tighten the screw after adjustment.



4.5.6 TURNTABLE ASSEMBLY

The turntable assembly is composed of three components: turntable (A-fig.16), central post (B-fig.16) and quick locking nut (C-fig.16).

- **The turntable** can be moved forward or backward by pressing the turntable controller (5-fig.11) left or right, and can rotate clockwise or counter clockwise by depressing or lifting up the turntable rotation pedal (9-fig.11). Pulse-press the pedal the turntable can rotate clockwise at a higher speed.
- **The alignment pin** is designed to align a lug hole on the wheel rim. (ref. fig.16)
- **The central post** is designed to be fixed into the turntable. Insert it to the turntable hole and lock it in the turntable by turning it clockwise at about 50 degrees. (ref. fig.16)
- **The quick locking nut** can be tightened by turning it clockwise.



4.5.7 INFLATION DEVICE

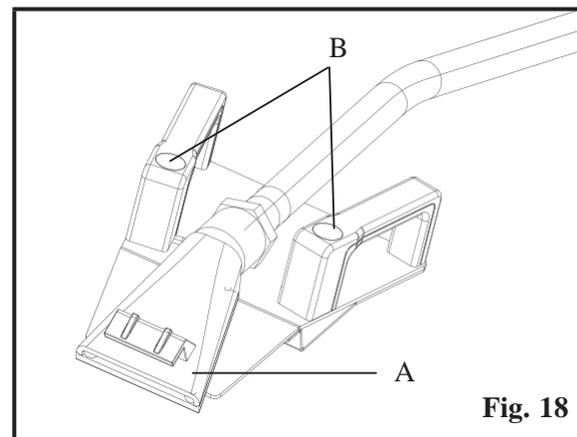
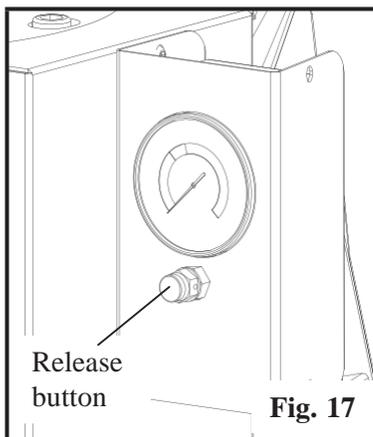
Inflation

- The tire inflation is performed by depressing the inflation pedal (8-fig.11) continuously.
- The pressure gauge (ref. fig.17) will register the air pressure of the tire being inflated.
- If the pressure in the tire being inflated is higher than required, the pressure can be released by pressing the pressure relief button on the gauge. (ref. fig.17)

Blasting

If requested, this tire changer can be equipped with the blasting device for supplying a powerful jet of air to seat the tire beads. This device can be performed as follows:

- Position the blasting nozzle (A-fig.18) towards to the rim center just under the rim lip.
- Depressing the inflation pedal and pressing the blasting buttons (B-fig.18) by hands. Make sure to hold the blasting handles firmly during this operation.



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, deflate the tire and take off all the wheel balancing weights.</p>
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The operation of the tire changer is divided into three parts:

- a) BREAKING THE BEAD b) REMOVING THE TIRE c) MOUNTING THE TIRE

	<p>Before any operation make sure to remove the old wheel balancing weights and check that the tire is deflated.</p>
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5.1 BREAKING THE BEAD

5.1.1 PREPARATION BEFORE BREAKING THE BEAD

- Check that the tire is deflated. If not, deflate it.
- Take off all the wheel balancing weights.
- Move the upper bead breaker disk to the highest position.
- Move the lower bead breaker disk to the lowest position.
- Move the bead press roller am out of the way.
- Move the assist tool arm out of the way.
- Retract the tool head and raise it to the highest position.
- Roll the tire onto the wheel lift.
- Depress the lift pedal to raise the tire up to the full height. (ref.fig. 19)
- Slip the tire over the turntable.
- Pulse-depress the pedal to lower the tire onto the turntable slowly and align a lug hole on the rim with the alignment pin on the turntable so that the pin goes into the lug hole.
- Depress the pedal to lower the wheel lift to the lowest position.
- Select the cone that best fits the central hole of the rim. Slide the cone onto the centering post with the small end towards the central hole of the rim.
- Install the centering post into the turntable through the central hole of the rim. Lock the post by turning it clockwise at about 50 degrees.
- Install the quick locking nut to the central post. Tighten it securely. (ref. fig.20)
- Turn on the video monitor.



Fig. 19

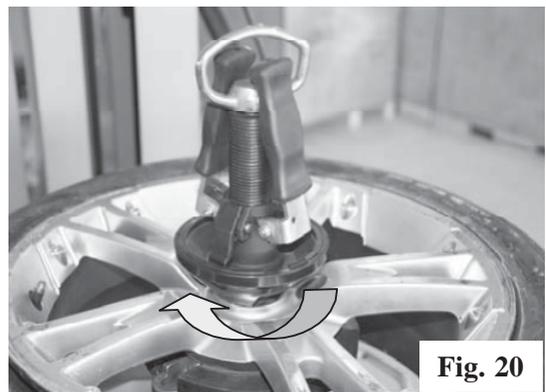


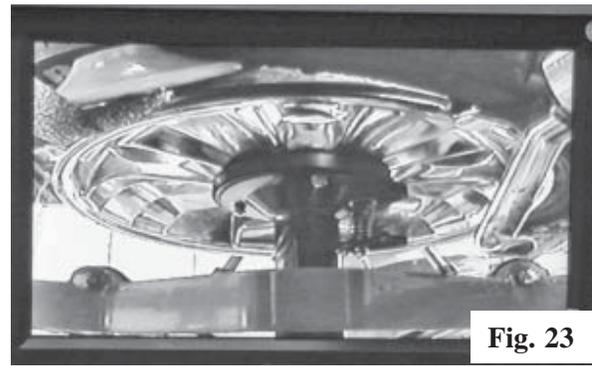
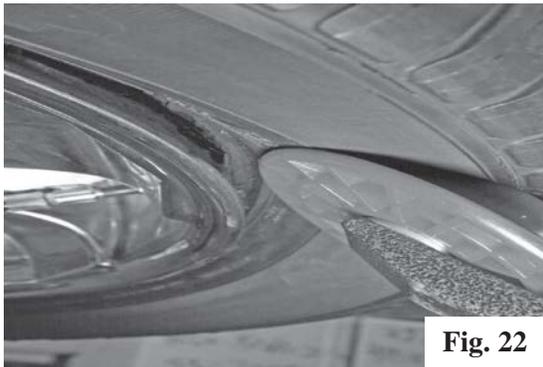
Fig. 20

5.1.2 BREAKING THE BEAD

	<p>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.</p> <p>During bead breaking operations NEVER touch the side of the tire.</p>
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	<p>Chains, bracelets, loose clothing or foreign objects in the vicinity of the moving parts can represent a danger for the operator.</p>
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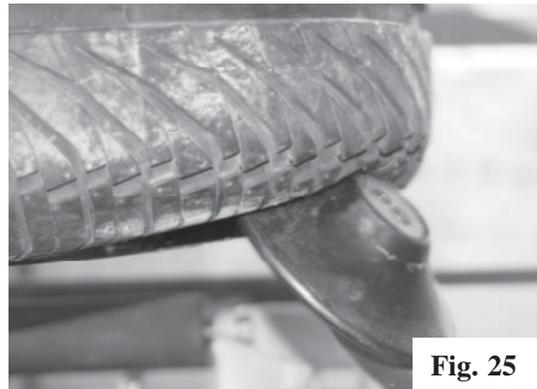
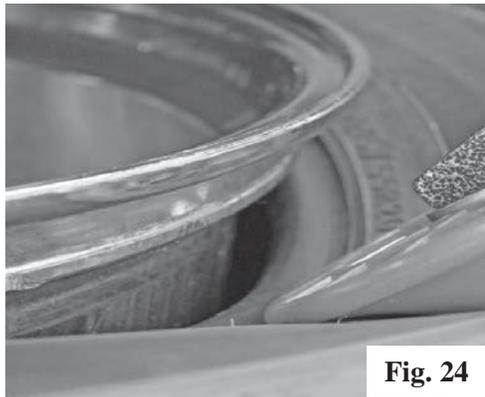
- Lower the upper bead breaker disk about 20mm from the highest position and flip down the upper bead disk to the working position
- Lower the upper bead breaker disk to within about 20mm over the rim.
- Bring the upper bead breaker disk to within 3mm - 6mm of the rim edge by operating the controllers on the control panel to move turntable and the upper bead breaker arm. (ref.fig.21)
- Raise the lower bead breaker disk, by pressing up its controller on the control panel, to the position where just can begin to break the lower bead. (ref.fig.22).
- Use the video monitor to assist in positioning the lower bead breaker disk. (ref. fig.23)



	<p>The camera angle of view can be adjusted by rotating its bezel so as to view the lower bead breaking operation.</p>
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- Lubricate the tire beads with the special grease in order to avoid damaging them and to facilitate the breaking operations.
- Depress the turntable rotation pedal to rotate the turntable clockwise.
- Pulse-press the upper bead breaker disks controller down and the lower bead breaker disk controller up in small increments when the tire rotates to begin the breaking operations.
- Keep moving the upper bead breaker disk down until the upper bead goes into the rim's drop center. (ref. fig.24)

- Keep moving the lower bead breaker disk up until the lower bead goes into the rim's drop center. (ref. fig.25)



- Rotate the turntable until breaking both the upper and lower beads completely.
- Bring the turntable back 6mm away from the rim by operating the controller.
- Raise the upper bead breaker disk out of way.

5.1.3 BREAKING THE TUBE TYPE TIRE

	Warning: Unscrew the bush which fixes the valve when deflating the tire so that the valve, coming in the inside of the rim, is not an obstacle during bead breaking.
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- Follow all the steps described previously for breaking tube type tire.
- Stop disk movement as soon as the bead has loosened to avoid damaging the tube.

5.2 REMOVING THE TIRE

	Make sure that the rim is firmly fixed to the clamps. Failure to use the grease could cause serious damage to the tire bead.
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	NEVER keep your hands under the tire.
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	Demounting and mounting are always done with the clockwise turntable rotation. Counter clockwise rotation is used only to correct operator's errors or if the turntable stalls.
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5.2.1 REMOVING THE UPPER BEAD

- Set the tool head hook pointing down.
- By operating the joystick, bring the hook of the tool head to within 10mm over the rim.
- Lubricate the tire beads with the special grease in order to avoid damaging them and to facilitate the removing operations.
- Operate the joystick to lower the hook of the tool head down and in until the bead pops under the hook. (ref. fig.26)

- Operate the joystick to move the tool head backward to pull the bead out 3mm – 5mm of the rim.
- To facilitate the removing operation, if necessary, move the lower bead breaker disk up to lift the lower bead about 10mm – 50mm up.
- Operate the joystick to move the tool head up to lift the bead up 5mm – 15mm over the rim. (ref. fig.27)



Fig. 26



Fig. 27

- Depress the turntable rotation pedal to rotate the turntable clockwise.
- Keep rotating the tire until the upper bead pops off the tire.

5.2.2 REMOVING THE LOWER BEAD

- Move the tool head up and retract the tool head in by operating the joystick.
- With the tool head retracted fully and the tab side being up, move the tool head down to its lowest position.
- Position the lower bead breaker disk to bring the lower bead up. (ref. fig. 28)
- Raise the lower bead breaker disk by operating the controller until the lower bead is in the drop center of the rim.
- By operating the joystick, extend the tool head to within 10mm -15mm from the rim edge.
- Use the video monitor to assist in positioning the tool head tab under the tire.
- Raise the tool head tab until the lower bead is 10mm – 20mm above the upper lip of the rim. (ref. fig. 29)
- Depress the turntable rotation pedal to rotate the turntable clockwise until the lower bead is off the rim. (ref. fig. 30)

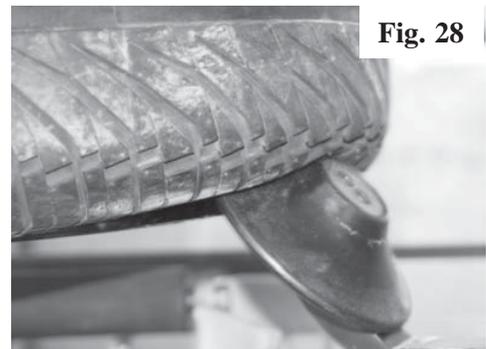


Fig. 28



Fig. 29

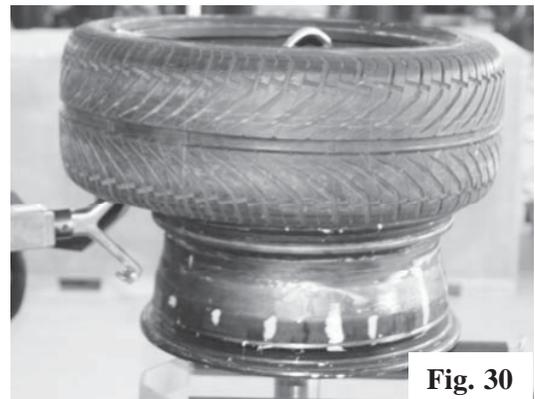


Fig. 30

5.2.3 REMOVING THE TUBE TYPE TIRE

	<p>Rotate the turntable only a short distance at a time so as to stop the removing operation when you suspect the tube could be pinched. Demount the upper bead and remove the tube before demounting the lower bead.</p>
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- Follow the steps described previously for removing tube type tire.
- After the upper bead is demounted, remove the tube and demount the lower bead.

5.3 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 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.</p> <p>Pay attention to alloy rims, internal micro-cracks are not visible to naked eye. This can compromise the rim and can also be a source of danger especially during inflation.</p> <p>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 diameters of both.</p>
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	<p>Keep your hands clear of the tire while the turntable is rotating.</p>
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5.3.1 PREPARATION BEFORE MOUNTING THE TIRE

- Move the upper bead breaker disk to the highest position.
- Move the lower bead breaker disk to the lowest position.
- Move the bead press roller arm out of the way.
- Move the assist tool arm out of the way.
- Retract the tool head and raise it to the highest position.
- Make sure the rim is fixed on the turntable firmly.
- Set the tool head tap pointing down by pressing the tool head pedal.
- Lubricate the tire beads with the special grease.

5.3.2 SEATING THE LOWER BEAD (ref. fig. 31)

- Place the tire on the rim.
- Lower the tool head to push the tire until the lower bead is below the top edge of rim.
- Rotate the turntable clockwise until the lower bead drops below the top edge of the rim completely.
- For some tires with the stiff sidewall, if necessary, use the upper bead breaker disk to push down the tire for facilitating the operation.



Fig. 31

5.3.3 SEATING THE UPPER BEAD (ref. fig.32)

- Lower the tool head with the tab side down to bring the upper bead below the upper rim edge.
- Lower the upper bead breaker disk on the upper bead.
- For some tires with the stiff sidewall, if necessary, position the bead press roller to press the upper bead into the drop center of the rim.
- Lower the bead pressing tool on the left press arm with the “mouth” side facing the rim and ahead of the bead press roller.
- Keep lowering the left press arm until the upper bead is below the drop center of the rim.
- Rotate the turntable clockwise until the upper bead drops below the upper rim edge. Pay attention to pulse-press the turntable rotation pedal in the last 1/3 circumference of the rim to inspect the operation.
- Move the upper bead breaker disk to the highest position.
- Move the lower bead breaker disk to the lowest position.
- Move the bead press roller arm out of the way.
- Move the left press arm out of the way.



Fig. 32

5.3.4 MOUNTING THE TUBE TYPE TIRE

- Follow the steps described previously for seating the lower bead of the tube type tire.
- Round out the tube with a small amount of air. Lubricate the tube with the grease.
- Insert the tube into the tire. Pay attention not to pinch the tube.
- Seat the upper bead refer to the steps described previously for seating the upper bead. It is advised to stop the turntable rotation periodically so as to inspect the operation to avoid the tube getting pinched.

CHAPTER 6 – INFLATING

	<p>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.</p>
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	<p>A bust tire can cause serious injury or even death of the operator.</p> <p>Check carefully that the wheel rim and the tire are of the same size.</p> <p>Check the state of wear of the tire and that it has no defects before beginning the inflation.</p> <p>Inflate the tire with brief jets of air, checking the pressure after every jet.</p> <p>All our tire changers are automatically limited to a maximum inflating pressure of 3.5 bar (51 psi). In any case NEVER EXCEED THE PRESSURE RECOMMENDED BY THE MANUFACTURER.</p> <p>Keep your hands and body as far away as possible from the tire.</p>
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6.1 INFLATING TIRE USING AIRLINE GAUGE

The tire changer is 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.
- Seat the beads with short jets of air by depressing the inflation pedal.
- Continue to inflate the tire with short jets of air and constantly checking the pressure between until the required pressure has been reached.
- If the pressure in the tire being inflated is higher than required, the pressure can be released by pressing the pressure relief button on the gauge.

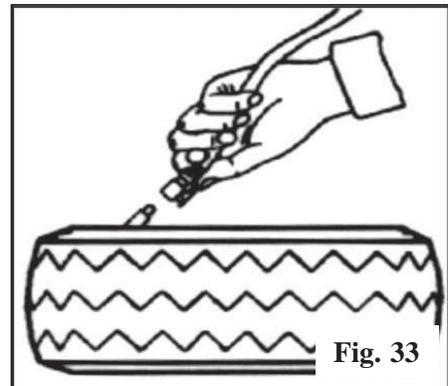


Fig. 33

6.2 INFLATING TIRES WITH BLASTING SYSTEM (optional)

The blasting inflation system provides a powerful jet of air to seat the tire beads.

	<p>During this phase of work the level of noise can reach 85db (A). It is advisable to use a noise protection.</p>
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- Make sure that the tire rim is fixed on the turntable securely
- 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.
- Take the blasting assembly from its store.

- Position the blasting nozzle towards to the rim center just under the rim lip. (ref. fig.33)
- Depressing the inflation pedal and pressing the blasting buttons by two hands. Make sure to hold the blasting handles firmly during this operation.
- 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. A strong jet will be released through the nozzles into the tire and this will help the bead seal.
- Continue to inflate the tire with short jets of air by depressing the inflation pedal and constantly check the pressure between air jets until the required pressure has been reached.



Fig. 34

	<p>EXPLOSION HAZARD!</p> <p>Never exceed 3.5 bar (51 psi) when seating beads or inflating tires.</p> <p>If a higher inflating pressure is required remove the wheel from turntable and continue the inflating procedure inside a special protection cage (commercially available).</p> <p>Never exceed the max. inflating pressure given by the tire manufacturer.</p> <p>ALWAYS keep hands and body back from inflating tire.</p> <p>ONLY special trained personnel are allowed to perform these operations. Do not allow other persons to operate or to stay near the tire changer.</p>
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CHAPTER 7 - ORDINARY MAINTENANCE

7.1 GENERAL WARNINGS

	<p>Unauthorized personnel may not carry out maintenance work.</p> <p>Before carrying out any maintenance work, make sure to disconnect the electric and pneumatic supplies</p>
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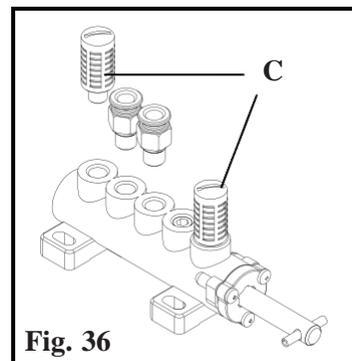
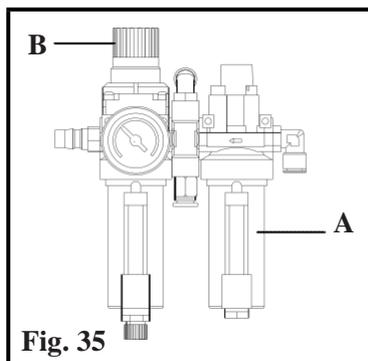
- Regular maintenance as described in the manual is essential for correct operation and long lifetime of the tire changer.
- If maintenance is not carried out regularly, the operation and reliability of the machine may be compromised, thus placing the operator and anyone else in the vicinity at risk.
- Defective parts must be replaced exclusively by expert personnel using the manufacturer's parts.
- Removing or tampering with safety devices is extremely forbidden.

	<p>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.</p>
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7.2 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.
- Be sure the rod of the hydraulic cylinders is always clean and not damaged since this may result in leakage from seals and, as a consequence, in possible malfunctions.
- Check the oil level in the hydraulic power unit. Use the dipstick under the reservoir cap. If necessary top up with Esso Nuto H46 or similar hydraulic oil. Change the hydraulic oil at one year intervals.
- Check the oil level in the lubricator (A-fig.35) at least once a month. If the oil level is below the middle of glass cup, add the oil SAE30.
- Check function of the inflation pressure regulator (B-fig.35) 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.36), or replace if it is damaged.



7.3 ADJUSTMENT OPERATIONS

Carry out the following operations if necessary

Motor drive belt

In the event of a loss of power, check that the drive belt is tight as follows

- Remove the side cover of the body.
- Check the drive belt for cracking and wear. Replace it necessary,
- Adjust the drive belt tension properly by unloosing or tightening the screw (D-fig.37) then secure the nut (E-fig.37).

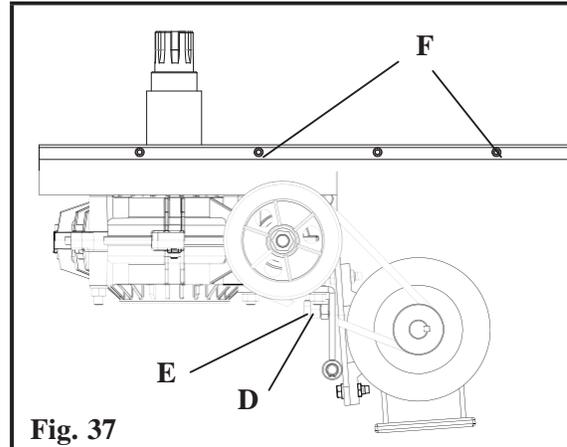


Fig. 37

Turntable slide

In the event that the turntable does not move smoothly or vibrates during the movement, do as follows:

- Remove the side cover of the body.
- Adjust the screws (F-fig.37) along the slide properly so as to make the turntable movement smoothly.

Bead breaker disk slides

In the event that a bead breaker disk does not move smoothly or vibrates during the movement, do as follows:

- Remove the cover of the arm.
- Unloose the lock nuts (H-fig.38).
- Adjust the screws (G-fig.38) properly by so as to make the arm movement smoothly.
- Secure the lock nuts (H-fig.38) after adjustment.
- Both bead breaker disk slides have the same adjustment procedure.

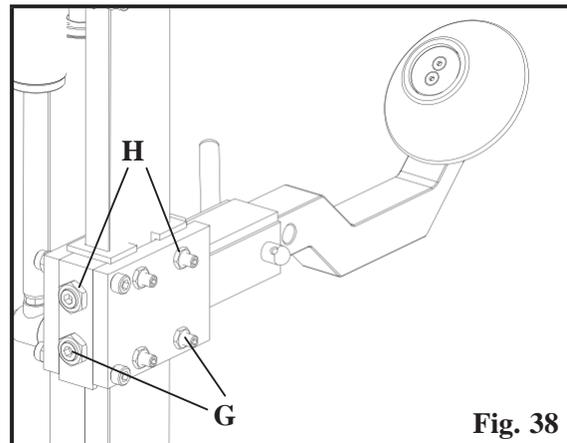


Fig. 38

Tool head slide

In the event that the tool head does not move smoothly up/down or vibrates during the movement, do as follows:

- Remove the cover of the arm.
- Unloose the lock nuts (I-fig.39).
- Adjust the screws (J-fig.39) properly by so as to make the arm movement smoothly.
- Secure the lock nuts (I-fig.39) after adjustment.

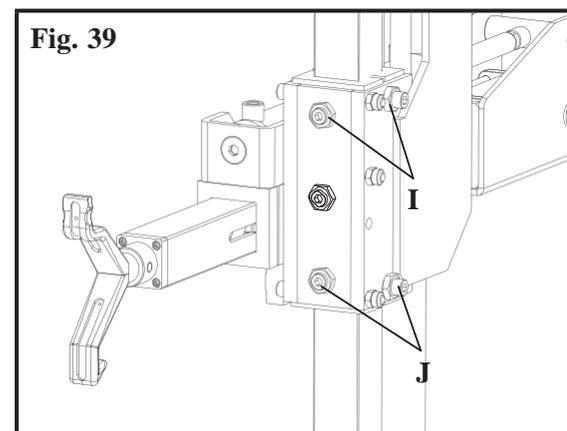


Fig. 39

Tool head limit switch

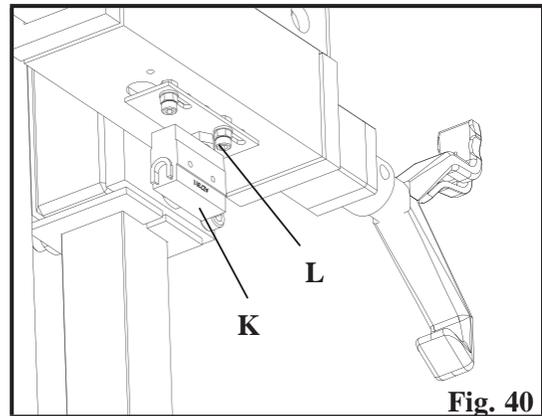
When the tool head is changed from the steel to the plastic or vice versa, the tool head position must be adjusted as follows:

- Mount an empty rim onto the turntable.
- Lower the upper bead breaker disk to within about 20mm over the rim.
- By operating the controllers on the control panel to move turntable and the upper bead breaker arm, bring the upper bead breaker disk to within 3mm - 6mm of the rim edge.
- Rotate the tool head to make the tab point up.
- Operate the tool head controller to see if the distance of the tab side of the tool head is within 3mm – 6mm to the rim edge. If not, make the limit switch adjustment.



Make sure to switch off the power while performing the limit switch adjustment.

- Turn off the power switch.
- Unloose the screws (L-fig.40) and move the limit switch (K-fig.40) forward or backward as required.
- Tighten the screws (L-fig.40) after adjustment.
- Turn on the power switch.
- Operate the tool head to see if the tap side of the tool head is within 3mm – 6mm to the rim edge. If necessary, repeat the above adjustment procedure until the desired distance is obtained.



CHAPTER 8 - TROUBLE SHOOTING

A list of possible troubles and solutions is given below:

TROUBLE:	POSSIBLE CAUSE:	SOLUTION:
After having switched on the power switch, the pilot lamp does not light on and no control can function.	The power plug is not inserted.	Insert the plug correctly in its socket.
	No power from the mains electric supply.	Reset the mains electric supply.
After having switched on the power switch, the pilot lamp light on but the motor on the hydraulic power pack does not function.	The circuit breaker is not switched on.	Switch on the circuit breaker.
	The magneto-thermic switch for motor protection is working.	Call for technical assistance.

	<p>If, despite of the above mentioned indications, the tire changer does not work properly, do not use it and call for technical assistance.</p>
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CHAPTER 9 –STORING AND SCRAPPING

9.1 STORING

If the machine has to be stored for a long time (3-4 months) you have to:

- Low down all tool holding arms.
- Disconnect the machine from all power sources.
- Grease all the parts that could be rusty, including the tool holding arm slides and tools.
- Empty oil/hydraulic fluid reservoirs.
- Wrap the machine in a sheet of protective plastic to prevent dust from reaching the internal working parts.
- If the machine has to working again after a long storing period, it is necessary to fill the oil into the reservoirs again.

9.2 SCRAPPING A MACHINE

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.

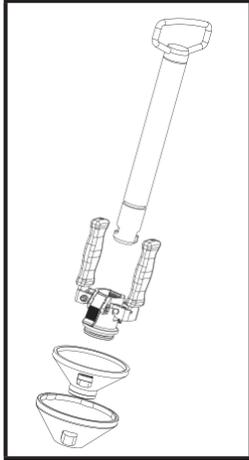


If this machine catches fire, use dust or CO2.

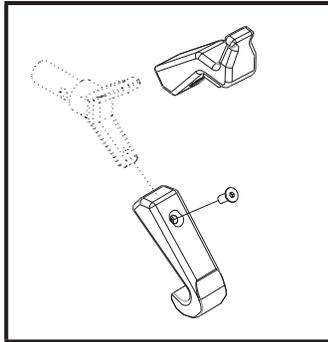
CHAPTER 10 – ACCESSORIES

10.1 STANDARD ACCESSORIES

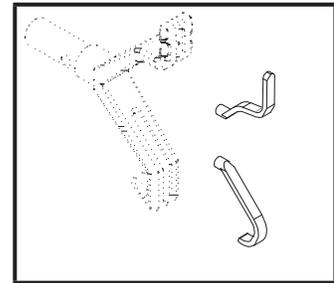
The following standard accessories are supplied with the tire changer in the accessory box:



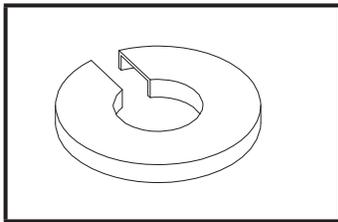
C107010001 Central post
C107010100 Quick locking nut
C107010003 Cone
C107010004 Cone protection



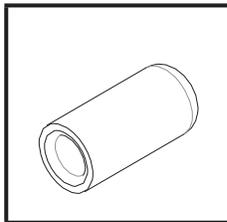
C103000013 Nylon demounting head
C103000014 Nylon mounting head
0207023 Screw M8X20 (Nr.2)



C103000015 Plastic insert
C103000016 Plastic insert



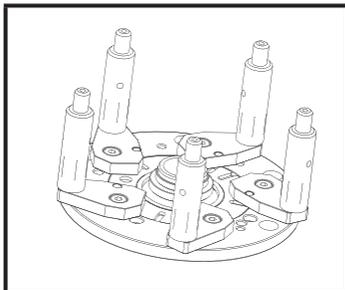
C107000005
Turntable protection



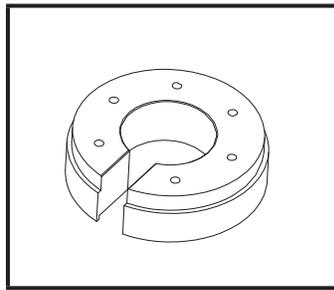
C107000006
Alignment pin protection

10.2 OPTIONAL ACCESSORIES

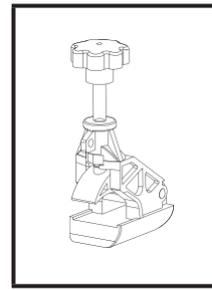
If requested, the manufacturer can supply the following optional accessories:



C107030000
Universal flange



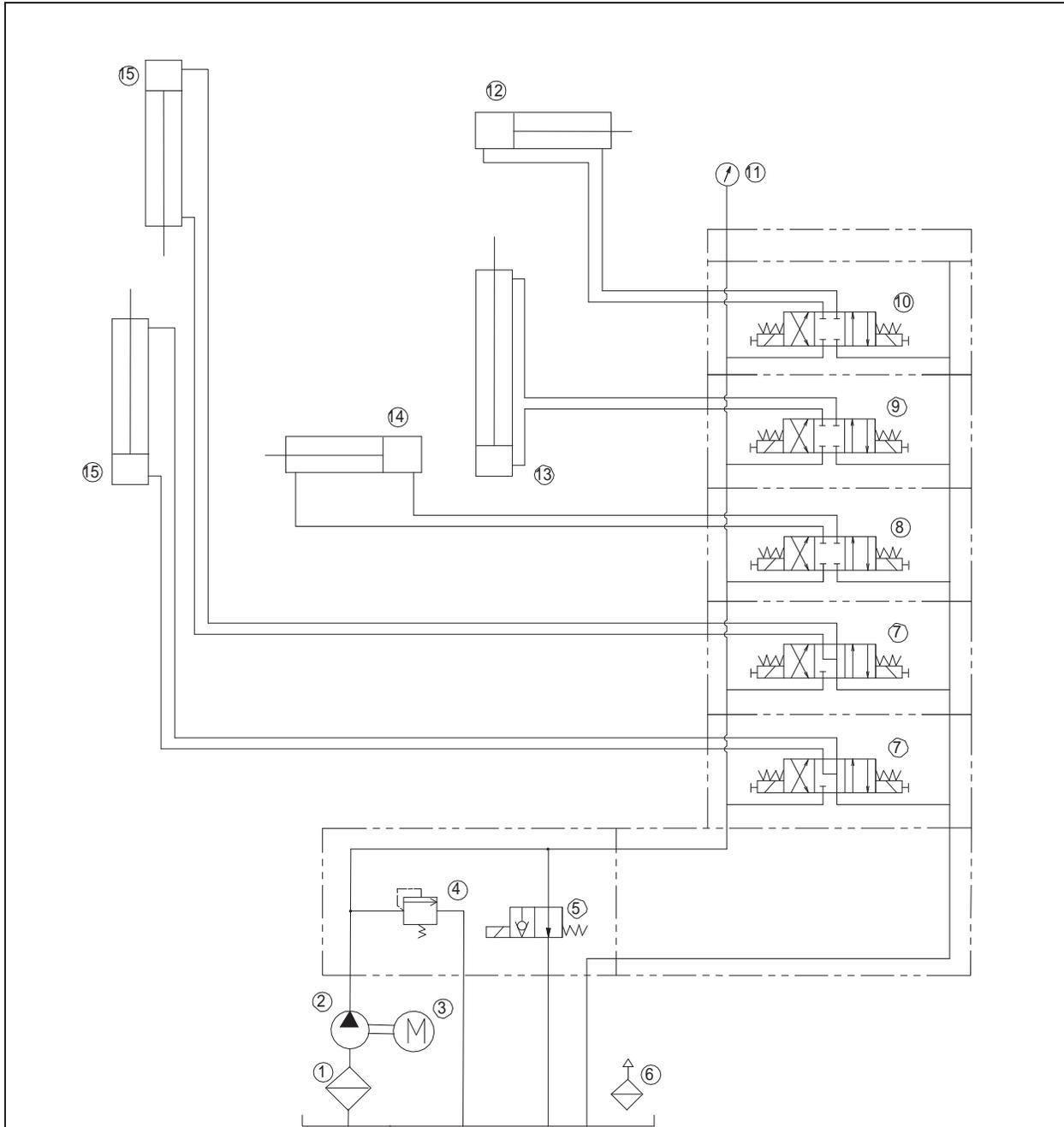
C107000008
Turntable height extension



C107040000
Special assist tool

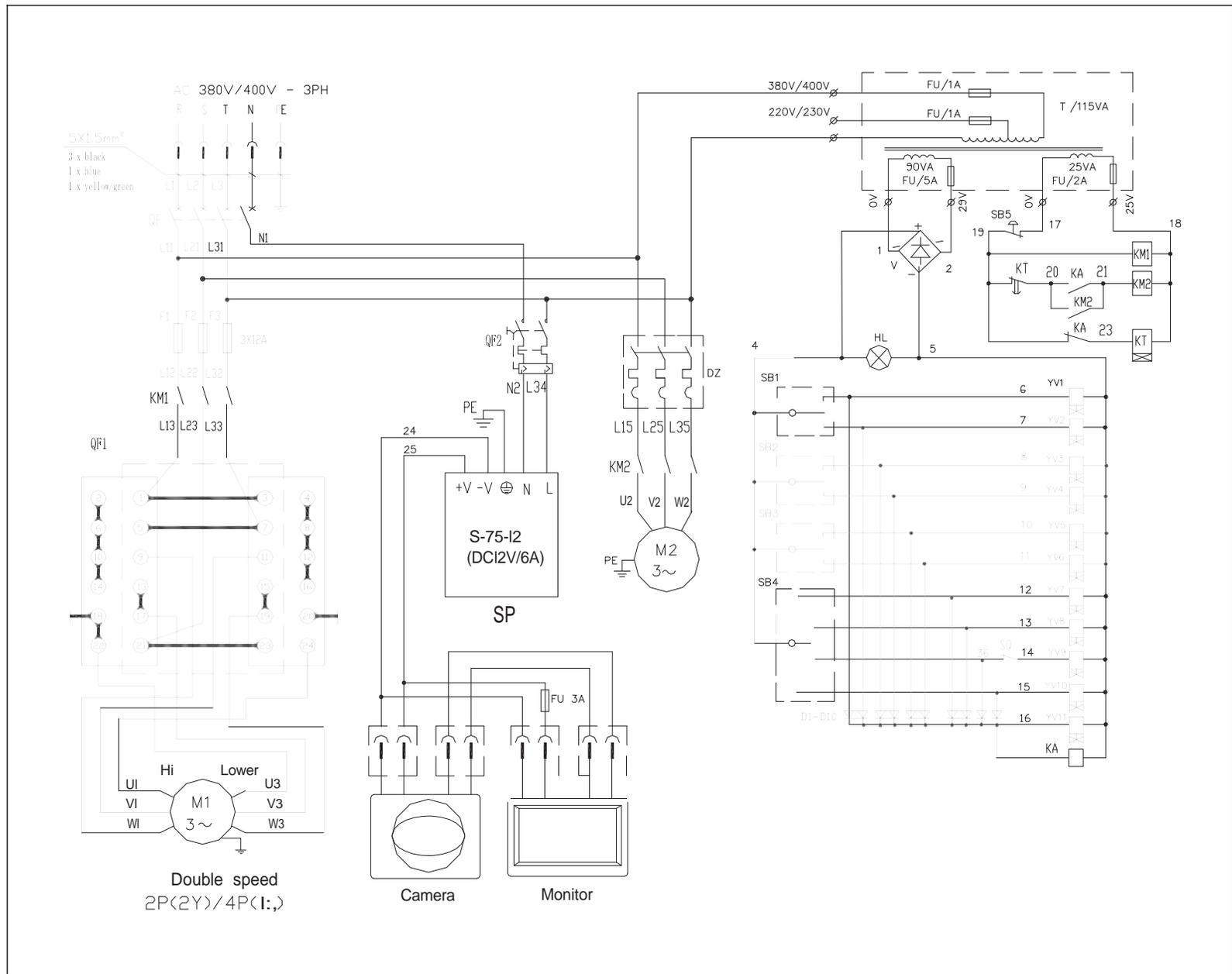
CHAPTER 11 – HYDRAULIC, ELECTRIC AND PNEUMATIC SCHEMES

HYDRAULIC SCHEME



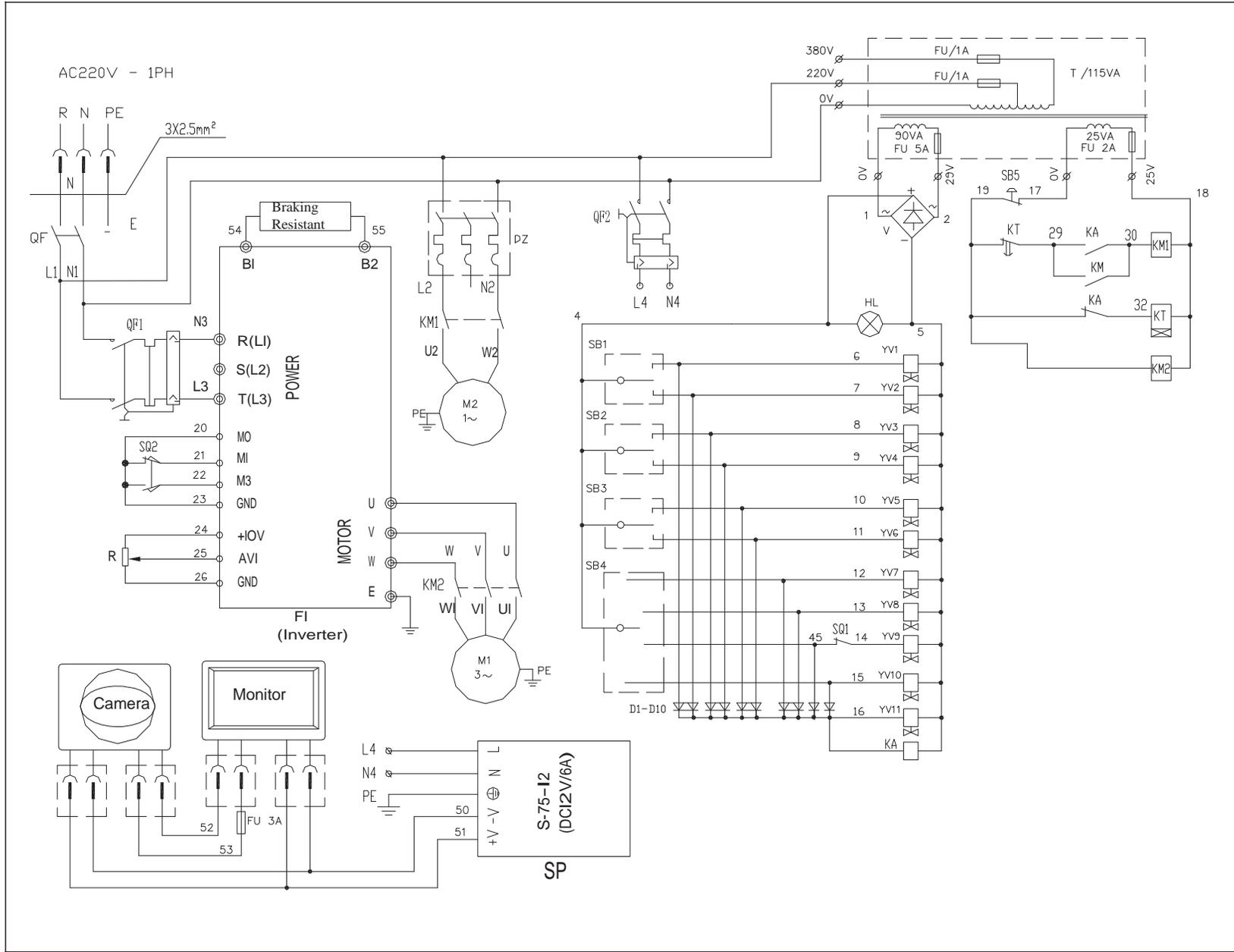
1	Oil filter	9	Solenoid valves-tool head up/down cylinder
2	Gear pump	10	Solenoid valves-tool head forward/backward cylinder
3	Hydraulic pump motor	11	Pressure gauge
4	Pressure relief valve	12	Tool head forward/backward cylinder
5	Circuit exhaust solenoid valve	13	Tool head up/down cylinder
6	Air filter	14	Turntable cylinder
7	Solenoid valves-bead breaker cylinders	15	Bead breaker cylinders
8	Solenoid valves-turntable cylinder		

ELECTRIC SCHEME - 380V/400V-3PH (double speed)



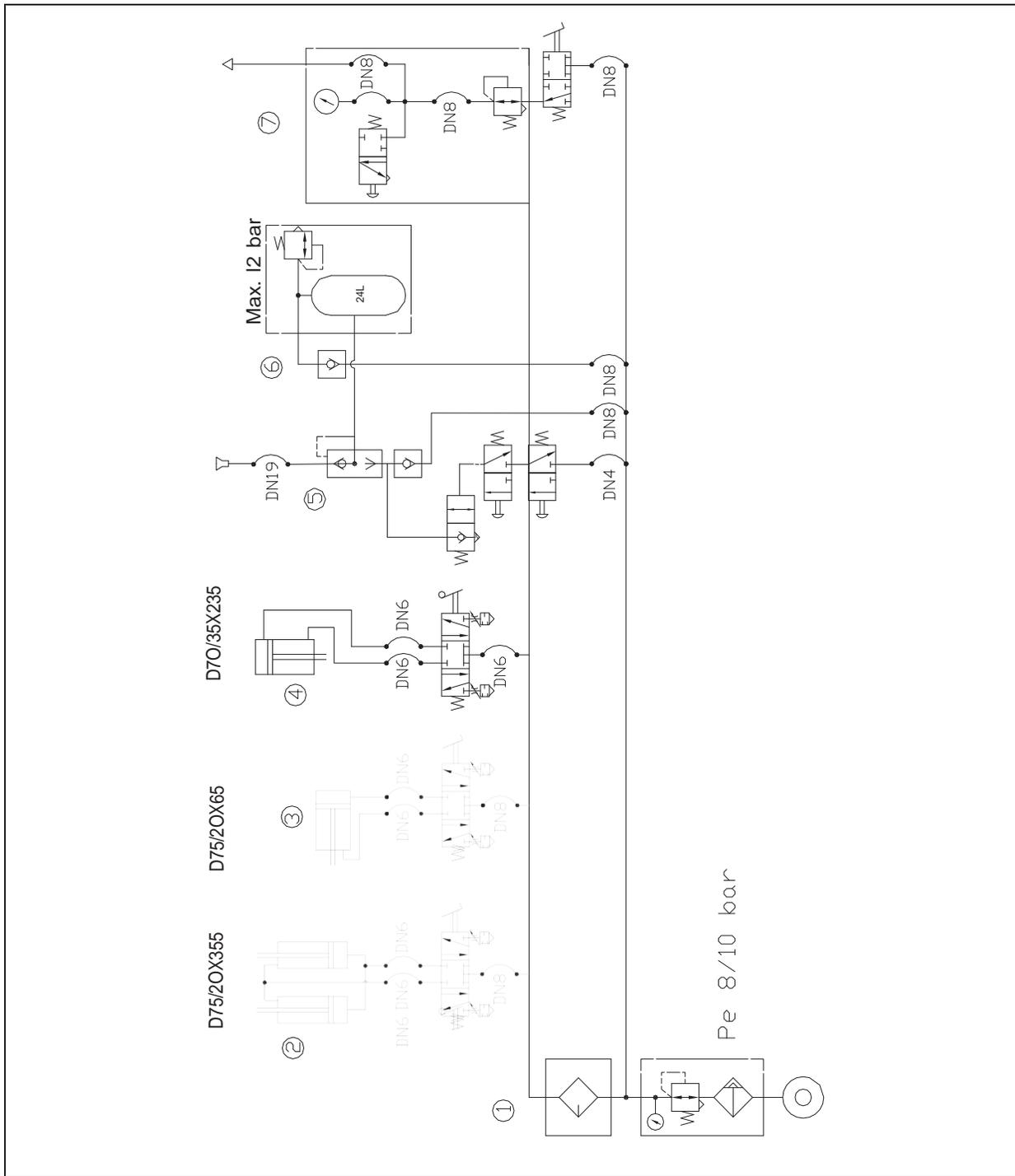
QF	Power on/off switch
QF1	Pole change switch
QF2	Switching power supply on/off switch
SP	Switching power supply
DZ	Circuit breaker
M1	Gear box motor
M2	Hydraulic pump motor
T	Transformer
KM1 – KM2	Contactors AC
KT	Time relay
KA	Intermediate relay
V	Rectifier
SB1	Upper bead breaker controller
SB2	Lower bead breaker controller
SB3	Turntable controller
SB4	Tool head controller
SB5	Emergency knob
Y1	Solenoid valve – upper bead breaker up
Y2	Solenoid valve – upper bead breaker down
Y3	Solenoid valve – lower bead breaker up
Y4	Solenoid valve – lower bead breaker down
Y5	Solenoid valve – turntable forward
Y6	Solenoid valve – turntable backward
Y7	Solenoid valve – tool head up
Y8	Solenoid valve – tool head down
Y9	Solenoid valve – tool head forward
Y10	Solenoid valve – tool head backward
Y11	Circuit exhaust solenoid valve
SQ	Limit switch – tool head
D1 - D10	Diodes
HL	Pilot lamp

ELECTRIC SCHEME - 220V/230V-1PH (with motor inverter)



QF	Power on/off switch
QF1	Inverter on/off switch
QF2	Switching power supply on/off switch
SP	Switch power supply
R	Potentiometer
KA	Intermediate relay
F1	Motor inverter
DZ	Circuit breaker
M1	Gear box motor
M2	Hydraulic pump motor
T	Transformer
KM	Contactactor AC
KT	Time relay
V	Rectifier
SB1	Upper bead breaker controller
SB2	Lower bead breaker controller
SB3	Turntable controller
SB4	Tool head controller
SB5	Emergency knob
Y1	Solenoid valve – upper bead breaker up
Y2	Solenoid valve – upper bead breaker down
Y3	Solenoid valve – lower bead breaker up
Y4	Solenoid valve – lower bead breaker down
Y5	Solenoid valve – turntable forward
Y6	Solenoid valve – turntable backward
Y7	Solenoid valve – tool head up
Y8	Solenoid valve – tool head down
Y9	Solenoid valve – tool head forward
Y10	Solenoid valve – tool head backward
Y11	Circuit exhaust solenoid valve
SQ1	Limit switch – tool head
SQ2	Limit switch – turntable pedal
D1 - D10	Diodes
HL	Pilot lamp

PNEUMATIC SCHEME



1	Air power supply
2	Wheel lift
3	Too head rotation
4	Assist tool
5	Blasting inflation system
6	Air tank
7	Inflation

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